Ministry of Environment

BUILDING RESILIENCE OF VULNERABLE COMMUNITIES TO CLIMATE VARIABILITY IN RWANDA'S CONGO NILE DIVIDE THROUGH FOREST AND LANDSCAPE RESTORATION

Annex 6: Environmental & Social Management Framework (ESMF)

September 2023

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EXECUTIVE SUMMARY

This document presents an Environmental and Social Management Framework for the proposed Green Climate Fund (GCF) project that aims to restore forest and landscape elements in Rwanda's Congo-Nile Divide to increase vulnerable community resilience to climate variability. The objective of the project is to change degraded and vulnerable land in the western portion of Rwanda, which is currently unable to sustain livelihoods, to a climate resilient landscape providing ecosystem services and simultaneously allowing small hold farmers to continue with their livelihoods.

The Ministry of Environment (MoE) is accredited by the GCF to carry out funded activities that fall within Environmental and Social Risk Categories B and C. The MoE and its key partners (WCS, REMA) evaluated the potential social and environmental risks, following GCF requirements by screening against social and environmental standards including the GCF risk factor assessment checklist. For all project components, disproportionate benefit distribution to some groups and not others including women, youth, historically marginalized people and Rwanda's poverty categories (Ubudehe) C, D, and E is a risk. Such power differentials could exacerbate exposure to sexual abuse, exploitation and harassment (SEAH), a risk that may affect all project components if unmitigated. The project may cause social risks including loss of access to lands due to new land classifications or stricter implementation of land use and park laws, displacement of informal land occupants due to afforestation/reforestation, and loss of access to land for food production. The potential for invasive species spread in the reforestation/afforestation components, water usage during increased seedling production at nurseries, terrace stabilization for planting, loss of topsoil to erosion during planting, disturbance to wildlife during afforestation or reforestation, modification of water flow and topsoil that could increase exposure to disease, increased human-wildlife interactions with increased tree cover and fruit trees, air quality impacts from cookstove production at scale and supply chains impacts for livelihoods interventions all have associated environmental and social risks to be thoroughly vetted as specific sites and beneficiaries are identified

The project is preliminarily assessed as having moderate environmental and social risk, equivalent to GCF's category B (https://www.greenclimate.fund/documents/screening-categorizing-activities). The risks and impacts are considered moderate to limited, and the magnitude of the risks and impacts expected were low to moderate. The expected risks and impacts are also few in number and appear to be contained completely within the footprint of the project area (CND) and the implementation zone of all the activities. Any potential negative impacts are also determined to be reversible, and readily mitigated through generally accepted mitigation measures. Specifically, these mitigating measures include stakeholder engagement for determining distribution of benefits and determining mitigation as needed for access restrictions, a clear process and oversight for strict adherence to national labor and safety rules including SEAH, and training on invasive species to mitigate potential spread of invasives or other pests and pathogens in the course of the forestry work. Mitigating steps will also include the establishment of a project level GRM and clear communication with all stakeholders and project beneficiaries on how to access the system and file a grievance as needed.

That said, specific impacts may be revealed during project implementation once sites and program specific details are confirmed. For that reason, this document is an ESMF for the AE to guide the final review of environmental and social impacts.

After providing a brief introduction of the project and baseline conditions in Chapter 2, Chapter 3 presents the relevant policy and regulatory framework in Rwanda and identifies gaps and implications for the project to align with and ensure compliance with the GCF's environmental & social safeguards and policies together with good global practice. Chapter 4 further discusses drivers of current forest and landscape risks in relation to the potential project risks, then details the issues and potential impacts raised by the stakeholders during consultation in Chapter 5. Potential environmental and social risks known at this planning stage are presented in Chapter 6 with recommendations for potential mitigation needs. Chapter 7 introduces the Environmental and Social Management Framework that will provide the procedure for the detailed ESIA/ESMP that shall be prepared later as much of the project activities/sub-activities will only be fully specified during the project implementation through a process of consultation and coordination with various government agencies and other stakeholders. Chapter 8 details the subproject activities to be screened in project implementation. Chapter 9 provides additional details on the project-wide partial environmental and social impact assessment results, summarizing the key environmental and social impacts and the feasibility of related mitigation measures. Chapter 10 details the expected screening process to be undertaken by the PMU during project implementation as the subprojects are clearly defined and target locations selected. Chapter 11 provides a brief outline of the monitoring and evaluation to oversee this work. Chapter 12 provides an overview of the Stakeholder Engagement Plan that is detailed in Annex 7 of the proposal. Chapter 13 is the original social and environmental screening submitted to GCF detailing a Category B project. Chapter 14 gives guidance for participatory workshops that will address Access Restrictions risks and benefits generated by the Project.

1. INTRODUCTION

The goal of the Project on Building Resilience of Vulnerable Communities to Climate Variability in Rwanda's Congo Nile Divide Through Forest and Landscape assumes that if Rwanda's Congo Nile Divide (CND) landscape of native forests and neighboring farmlands is effectively managed for climate resilience then the CND will comprise an interconnected and interdependent set of globally significant, species-rich natural forests in a matrix of sustainable farmlands: assuring vital ecosystem services and improving livelihoods for vulnerable people and the nation at large and contributing importantly to the conservation of biodiversity, the national economy, and mitigation of GHGs because building the capacity and management of integrated, climate-resilient forest and farming systems will ensure natural forest perpetuity and break and reverse the climate change-induced intensifying cycles of drought, flooding, and landslides that leads to degradation of livelihoods and resultant increased pressure on forest resources. The Project has three strategic interventions directly targeting vulnerabilities within climate impact chains. Component (1) Mainstreaming Climate Adaptation into Integrated Land Use Planning will lead to enhanced adaptive capacity of both ecosystems and rural populations, by strengthening coordination among sectors and integrating climate resilience considerations into planning and development. Component (2) Forest and Landscape Management and Restoration will implement targeted interventions that integrate climate change awareness and adaptation into national forest park planning, policies and management, as well as restore degraded areas within those parks in which the suite of activities will also identify priority areas outside of parks – in remnant natural stands, around wetlands, and along streams – for protection and restoration as "stepping stones" and linkages for long term climate change connectivity. Component (3) will enhance climate adaptation through activities that will demonstrate, incentivize, facilitate, and support actions that maintain and recover ecosystem services, benefit from forest functions and provide alternative on- and off-farm based incomes that reduce pressure on forests. Project Management, Monitoring and Evaluation (M&E), which will include activities to ensure the project maintains social and environmental safeguards throughout the life of the project.

Rwanda has a comprehensive and progressive institutional framework and has established agencies to work cross-sectorally to support implementation of this project, notably the Ministry of the Environment (MoE) which is the Accredited Entity and the Rwanda Forestry Authority (RFA), as Executing Entity. These groups will be supported by the National Steering Committee. The project overall recognizes the importance of engaging multiple stakeholders and has established mechanisms including regular cross-sectoral planning meetings and the Joint Action Development Forums (JADF), and consultative platforms used for promoting cooperation between the private sector, civil society and the public sector. Furthermore, Rwanda has established national councils for women and youth which will serve as entry points for engaging these key stakeholders and beneficiaries in the project implementation. The combined capacity of these organizations will ensure an efficient, inclusive and equitable implementation of the proposed project.

This Environmental and Social Management Framework lays out the overarching project and potential environmental and social risks considered in the formulation of the proposal and expected to be encountered during the implementation of the project. It will ensure

that during implementation, all site-specific environmental and social risks are evaluated and that there are sufficient safeguards to implement the Building Resilience of Vulnerable Communities to Climate Variability in Rwanda's Congo Nile Divide Through Forest and Landscape Restoration proposal in an environmentally and socially sustainable manner and in full compliance with Rwanda's and the GCF's environmental and social safeguards.

The specific objectives of the ESMF during project implementation are: (i) to assess the potential environmental and social impacts within the specific project site districts, whether positive or negative, and propose mitigation measures which will effectively address the impacts; and (ii) to inform the project preparation process of the potential environmental and social impacts of different alternatives, and relevant mitigation measures (including implementation requirements) that will ensure compliance with E&S aspects of the proposal.

The ESMF is based on existing policy frameworks, the Conservation International GCF Environmental and Social Management Framework, the United Nations Development Programme GCF ESMF, the IUCN ESIA for the Rural Green Economy and Climate Resilient Development Project, other projects and literature from Rwanda as well as input from the initial scoping field mission carried out in June 2021 and stakeholder consultations and focus groups carried out in July and August 2021. It is also based on a review of the planned project activities as well as the socio-economic review of project interventions and issues raised during the stakeholder consultations. The ESMF provides a step-by-step screening assessment for understanding the risks associated with the Environmental and Social Standards in light of the extent of the impact, duration, magnitude of the consequence and the likelihood of occurrence. Avoidance and mitigation measures are proposed and will be refined during project implementation to meet GCF's environmental and social safeguards and further indicate how mitigation steps will modify the risk assessment to minimize negative impacts of the project.

2. PROJECT DESCRIPTION

The Congo-Nile Divide (CND) separates the drainage basin of the Congo and Nile Rivers and contains Rwanda's only remaining montane forests. These forests are enclosed within the three national parks in this region, Volcanoes National Park (VNP), Gishwati-Mukura National Park (GMNP), and Nyungwe National Park (NNP). Montane forests provide valuable ecosystem services for the country, such as regulating climate through the capture and creation of rainfall, regulation of water flow, erosion, and flood control, offering wood fuel for energy and timber, supporting Rwanda's ecotourism sector, and controlling atmospheric pollution. These ecosystem services are increasingly important due to rises in the severity and unpredictable nature of weather events in the CND, placing 2.3 million smallholder farmers and rural citizens at risk of natural disasters and economic shocks.

The Rwandan Ministry of Environment (MoE), in collaboration with the Wildlife Conservation Society (WCS), has developed a

program to increase the resilience of livelihoods, decrease CO_2 emissions, and increase the integrity and extent of forest ecosystems in the CND. The Green Climate Fund (GCF) approved this concept in 2020, provided funding for the MoE and WCS to design the full proposal in 2021 and revise according to GCF feedback in 2022.

2.1 Project Goal and Components

The project aims to improve the resilience of vulnerable communities to climate variability and shocks by increasing the extent and integrity of natural forests and by strengthening the capacity for climate-responsive forest and landscape management. The project will change degraded and vulnerable land in the western portion of Rwanda, which is currently unable to sustain livelihoods, to a climate resilient landscape providing ecosystem services and simultaneously allowing small hold farmers to continue with their livelihoods and move towards better food and water security.

The theory of change for this Project is founded on several key principles (Figure 1). Central to all, the CND represents a complex landscape – a geospatial mosaic of forest and farming patches, each dependent on the other. These coupled, biological and socio-economic systems are under great strain due to intense land pressure, which has resulted in a negative cycle of natural resource degradation that undermines the well-being of both natural and socio-economic systems. The advent of climate change is a forceful driver that intensifies this cycle of degradation, with the resultant loss of key ecosystem services that importantly link forests and people. This cycle must be disrupted in order to chart a path toward climate resilience for natural and human systems. The approach to be taken by this Project is therefore based on principles of ecosystem-based adaptation: that healthy and resilient ecosystems form an essential foundation for adaptation to climate challenges. Climate-aware management of both natural and human-dominated ecosystems – interacting and integrated at a landscape level – can break the cycle of degradation and instead lead to a positive sequence of mutually reinforcing, climate-smart, sustainable, and resilient benefits.

In sum, the goal statement of the Project is:

IF Rwanda's CND landscape of native forests and neighboring farmlands is effectively managed for climate resilience

THEN the CND will comprise an inter-connected and inter-dependent set of globally significant, species-rich natural forests in a matrix of sustainable farmlands: assuring vital ecosystem services and improving livelihoods for vulnerable people and the nation at large and contributing importantly to the conservation of biodiversity, the national economy, and mitigation of GHGs

BECAUSE building the capacity and management of integrated, climate-resilient forest and farming systems will ensure natural

forest perpetuity and break and reverse the climate change-induced intensifying cycles of drought, flooding, and landslides that leads to degradation of livelihoods and resultant increased pressure on forest resources.

The status and future of the CND's forests and people are tightly intertwined: both heavily dependent on the natural resources and processes that provide a foundation for their ability to thrive. They represent ecological and socio-economic systems that are importantly coupled in a complex landscape, linked in particular by the ecosystem services that flow throughout these systems (hydrological and microclimate regulation, soil conservation, nature-based tourism). At present these services, and the consequent relationships between forests and people -- especially those who are most vulnerable in Rwandan society -- are deeply strained[1]. Forests have been reduced in extent, fragmented, and degraded by fire[2], overuse of resources[3], and introduction of exotic species[4]. The sharply-sloped rural lands of the CND have been farmed more and more extensively and intensively on steeper and steeper slopes[5,6], and throughout riverine bottomlands, further reducing tree cover outside forest blocks: thereby further compromising the ability of the land to retain soils[7], avoid flooding[8], provide consistent and healthy water, ameliorate microclimate, store carbon[9], and remain productive. The coupling of these stressed systems has led to a negative feedback cycle of insecurity and constrained the well-being of farmers. Having little access to alternative sources of livelihoods or capital to enable change[10], smallholder farmers have consequently increased pressures on natural forests for land, fuel, and other forest resources. Such pressures in turn cause further forest loss and degradation and decline in biodiversity – reducing their ability to provide essential ecosystem services to people living in the landscape and across the nation, including tourism revenues and employment that are of national import. Thus, these systems are caught in a negative cycle that has proven difficult to break, despite significant sector-specific efforts. One such pressure – demand for fuelwood – is quite substantial given that a recent Government of Rwanda census found that 77% of Rwandan households use wood as their primary fuel for cooking[11].

With the advent of climate change, these already strained systems are showing clear signs of breakdown. Increased variability in

1 Bagstad, K.J., 2019. Towards ecosystem accounts for Rwanda: Tracking 25 years of change in flows and potential supply of ecosystem services. British Ecological Society.

2 Masozera, A.B., Mulindahabi, F., 2007. Post-Fire Regeneration in Nyungwe National Park, Rwanda. Wildlife Conservation Society.

3 Republic of Rwanda, 2011. Green Growth and Climate Resilience: National Strategy for Climate Change and Low Carbon Development.

4 USAID, 2019. Rwanda Tropical Forests and Biodiversity Analysis.

5 Camberlin, P., 2018. Climate of Eastern Africa. In Oxford Research Encyclopedia of Climate Science.

6 Seimon, A., 2022. An Overview of Climate Change and its Impacts along the Congo-Nile Divide in Rwanda.

7 World Bank, 2019. Rwanda Systematic Country Diagnostic.

8 Karamage, F., et al., 2017. Modeling Rainfall-Runoff Response to Land Use and Land Cover Change in Rwanda (1990–2016). Water 2017, 9(2), 14.

9 Mugabowindekwe et al, in review

10 Clay N., King B., 2019. Smallholders' uneven capacities to adapt to climate change amid Africa's 'green revolution': Case study of Rwanda's crop intensification program. World Dev.

11 Government of Rwanda, 2021. Rwanda Household Survey 2019/2020. National Institute of Statistics of Rwanda.

the timing and intensity of rains along with rising temperatures are causing increased landslides[12] and soil erosion, increased desiccation and drought, and unpredictable timing for agricultural plantings and harvest[13]. This is reducing farm productivity and security, driving even greater pressures on the remaining forested estate, thereby compromising further the essential ecosystem services that are necessary to such well-being. At a larger scale, climate-induced forest degradation and decline of biodiversity in the CND compromise national-level benefits of water provision and quality[1], nature-based tourism, the supply of hydroelectricity,[7], and carbon storage.[10]

This context calls for new mechanisms of land-use planning and management that are based on consideration of the CND as a landscape, consisting of an inter-dependent mosaic of forests and farms, the management of each determining the health of the whole. Focusing on this larger scale, with coordination across geographic and sectoral boundaries, while mainstreaming climate risks into management planning will be key – and the foundation for a paradigm shift. Use of this framework to design and apply practical, precedent-setting Project actions in-forest and on-farm is expected to shift mindsets and management systems. This, in combination with establishing durable sources of financing, is thereby intended to shift the natural and human ecosystems themselves toward sustainable climate resilience.

2.1.1 Component 1: Mainstreaming Climate Adaptation into Integrated Land Use Planning

There is an urgent need for more effective collaboration among Rwandan government agencies, civil society, private sector, and diverse partners to balance difficult-yet-inevitable land use trade-offs that will have profound impacts on the climate resilience of both natural systems and people. The GoR recognizes that a piecemeal approach to decision making has exacerbated competition over scarce land resources and reduced the adaptive capacity of both ecosystems and rural populations[14]. Rwanda's Baseline Climate Change Vulnerability Index (2015) recommends establishing a multi-ministry technical climate resilience coordinating committee, including NGOs. In 2017 the MoE developed the Strategic Programme for Climate Resilience (SPCR), to focus on three cross-cutting priorities to achieve climate change resilience: (a) technical capacity building and strengthening institutional coordination; (b) integrated land use and spatial planning; and (c) climate services and disaster risk management. The SPCR is a key step towards ensuring inter-ministerial and multi-sectoral collaboration and integration of climate resilience considerations into development plans and actions. However, there remains a need to comprehensively implement the strategy and mainstream climate change adaptation at the sub-national level, engaging a diverse set of actors and sectors and empowering women to provide input into decision making at district and community levels.

12 Uwihirwe, J., et al., 2020. Landslide precipitation thresholds in Rwanda. Landslides.

13 World Bank; CIAT. 2015. Climate-Smart Agriculture in Rwanda. CSA Country Profiles for Africa, Asia, and Latin America and the Caribbean Series. Washington D.C.: The World Bank Group.

14 National Land Use Management Plan.

This project component will address themes (a) and (b) of the SPCR and have the following Outputs, as detailed in the overall proposal and the feasibility study:

- **Output 1.1:** Landscape-wide land-use plan developed for climate-resilient livelihoods and forest ecosystems, integrating district strategies.

  Activity 1.1.1. Synthesize and disseminate information on value of natural forests and ecosystem services

  Activity 1.1.2. Develop climate-resilient landscape land-use plan

- **Output 1.2:** Local and national institutional capacities strengthened to integrate biodiversity and climate risks into land use planning and management

  Activity 1.2.1 Create interagency taskforce institutionalizing integrated landscape planning and policy

  Activity 1.2.2 Build capacity for spatial planning in national agencies re climate change

  Activity 1.2.3 Develop an effective forest monitoring system to underpin forest management decisions

2.1.2 Component 2: Forest and Landscape Management and Restoration

The GoR has prioritized forest management and restoration - including natural forests in protected areas - as a key component of climate change adaptation strategies for the CND landscape (ROAM 2014). Natural forests with the national park system have been generally well protected and managed in recent years, earning high marks for biodiversity conservation while also developing a high quality – and quite lucrative – set of ecotourism attractions. Current park management plans, however, include little attention to the potential effects of projected climate change. Outside of parks, few areas with natural forest cover remain and forest management and restoration approaches are not being implemented at the scale required to significantly improve forest climate resilience. Where forests are restored, most use exotic species and mono-specific plantations that are generally incompatible with mixed agricultural uses; they are also vulnerable to diseases and pests with climate warming.

In this component, targeted interventions will integrate climate change awareness and adaptation into national forest park planning, policies and management, as well as restore degraded areas within those parks. These efforts will help sustain the forests' rich biodiversity, the lucrative tourism revenues that flow into local and national economies, and the ecosystem services needed for climate resilience of vulnerable communities. This suite of activities will also identify priority areas outside of parks – in remnant natural stands, around wetlands, and along streams – for protection and restoration as "stepping stones" and linkages for long term climate change connectivity.

This component will have the following outputs as detailed in the project proposal and the feasibility study:

- **Output 2.1**: Protected Area management effectiveness improved re climate risks and adaptation

  Activity 2.1.1 Facilitate revision of PA management plans to address climate risks

  Activity 2.1.2 Establish long-term plans for CND financial sustainability post-GCF

  Activity 2.1.3 New fire management curriculum developed and operationalized

- **Output 2.2:** Natural forest cover restored, biodiversity connections established

  Activity 2.2.1 Secure key remaining natural areas outside PAs

  Activity 2.2.2 Restore natural forest cover in and outside Protected Areas including riparian linkages

  Activity 2.2.3 Promote silvopastoralism with indigenous trees around Gishwati

2.1.3 Component 3: Enhancing Climate Adaptation through Resilient Livelihoods

Increasing the extent of protective forests, enhancing and restoring forest plantations, and increasing agroforestry tree cover are key steps to restoring ecosystem function and services identified in the National Forest Policy Report (NFPR 2017), especially (i) reducing the risk of flooding, landslides and soil erosion from extreme climate events, (ii) increasing long-term supply of wood fuel resources (the energy source for 99% of Rwandans). Together with the fuel efficient cookstoves, these trees will provide a sustainable source of fuelwood and reduce the amount of time women spend collecting fuelwood, enabling them to participate in other economic activities and programmatic opportunities.

In working to develop a comprehensive land use plan that incorporates climate adaptation, and while ensuring Rwanda's forest ecosystems are strengthened through forest management and restoration, attention must be paid to people who live next to the forests and those who are the most prone to causing degradation of these forest systems. In particular, this includes people who either do not have access to land or whose land holdings are insufficient to meet their daily needs. These people are most likely to enter into and unsustainably use protected and protective forests to help meet their daily needs. Thus, this project component targets these vulnerable households--youth, people from historically marginalized groups, and farmers with insufficient holdings--to build their

capacity in financial literacy and enterprise, in order to strengthen their resilience to economic and climate shocks.

Also, in order to maximize the opportunities from improved silvicultural practices, it is necessary to improve business practices and market linkages for farming communities. More specifically, linking farmers to local and national wholesale traders will enable them to sell their produce more efficiently, maximizing profit and reducing wastage. To facilitate these linkages, this component will also build the business capacity and market linkages necessary to support the transition of farmers and their communities away from unsustainable practices that magnify their vulnerability to climate change and towards more secure livelihoods and expanded income opportunities. This includes building capacities and market value chains for livelihoods that do not depend on traditional smallholder farming.

This component will yield three Outputs as described in the project proposal and feasibility study.

- **Output 3.1:** Farming methods enhance productivity, reduce erosion and flooding risks, contribute to ecosystem services, and support connectivity

  Activity 3.1.1 Restore high slope areas (>55%) as protective forests

  Activity 3.1.2 Develop on-farm agroforestry for high-caloric and indigenous tree species

- **Output 3.2:** Rural livelihoods generate alternative incomes & reduce pressure on forests

  Activity 3.2.1 Develop forestry and agroforestry-related value chains for market access

  Activity 3.2.2 Facilitate and scale up climate-resilient value chain products

  Activity 3.2.3 Facilitate access to input & output markets for vulnerable farmers

  Activity 3.2.4 Scale up use and sales of fuel-efficient cookstoves

- **Output 3.3**: Financial services & private sector investment increased

  Activity 3.3.1 Facilitate access to finance & private sector investments

  Activity 3.3.2 Set up and support savings & loan groups, enhance asset-building

  Activity 3.3.3 Build the capacity of financial institutions to serve targeted value chains and communities

  Activity 3.3.4 Facilitate learning & knowledge sharing

2.2. Project Theory of Change and Project-Wide Outcomes and Activities

The components are anticipated to lead to the Project's overall outcomes and outputs presented in the figure below.

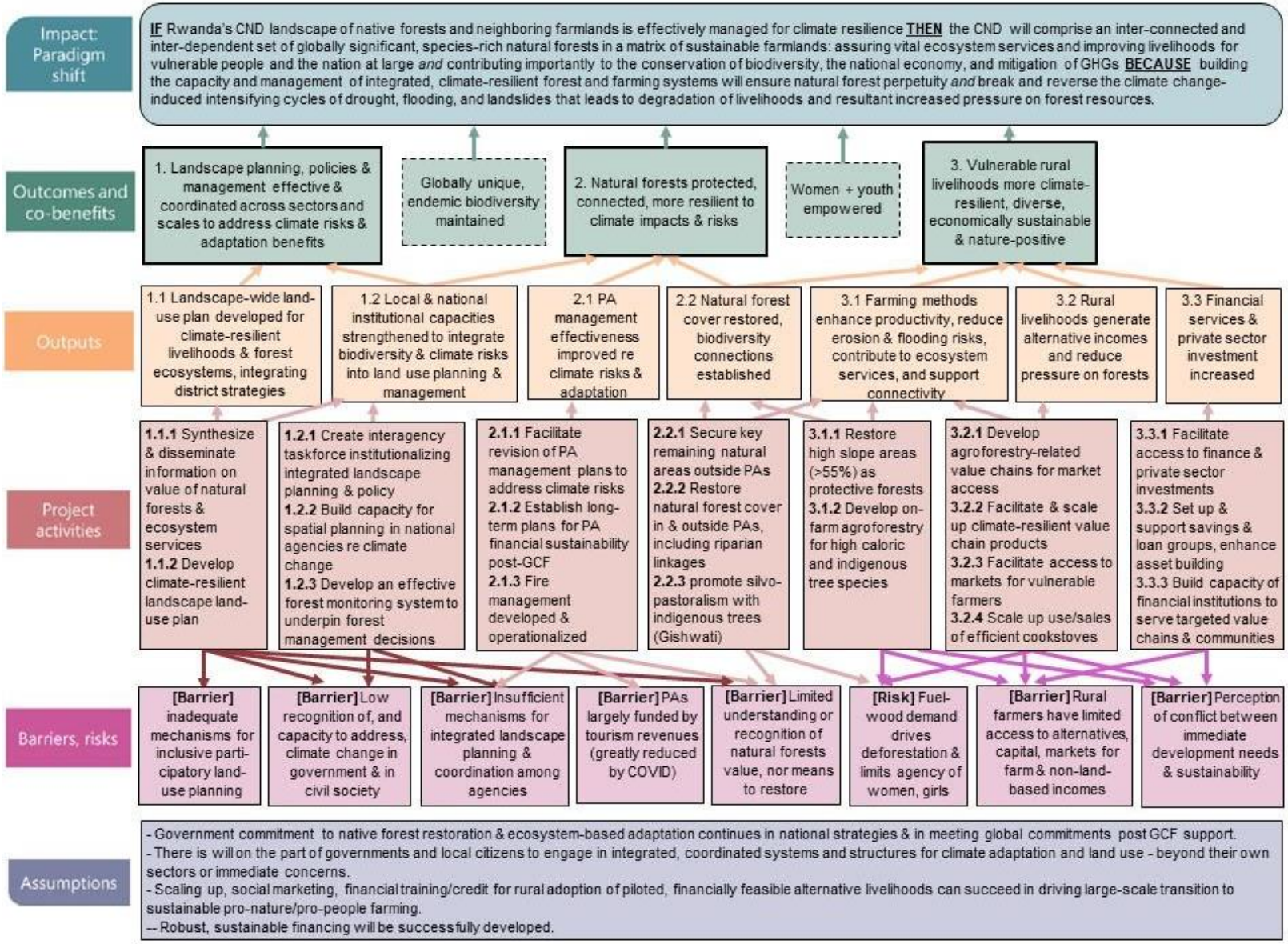

Figure 1: Project Theory of Change

Table 1. Project-Wide Outcomes, Components, Outputs and Activities

Project-wide Outcomes	Components	Outputs	Activities
• Strengthened institutional, regulatory systems, and capacity to promote climate resilience • Strengthened awareness of climate threats and risk reduction processes • Improved resilience of ecosystems and ecosystem services • Strengthened adaptive capacity and reduced exposure to climate to climate risks	**Component 1: Mainstreaming Climate adaptation into integrated land use planning**	1.1 Landscape-wide land-use plan developed for climate-resilient livelihoods & forest ecosystems, integrating district strategies	1.1.1 Synthesize & disseminate information on value of natural forests & ecosystem services
			1.1.2 Develop climate-resilient landscape land-use plan
		1.2 Local & national institutional capacities strengthened to integrate biodiversity & climate risks into land use planning & management	1.2.1 Create interagency taskforce institutionalizing integrated landscape planning & policy
			1.2.2 Build capacity for spatial planning in national agencies re climate change
			1.2.3 Develop an effective forest monitoring system to underpin forest management decisions
	Component 2: Forest and landscape management and restoration	2.1 PA management effectiveness improved re climate risks & adaptation	2.1.1 Facilitate revision of PA management plans to address climate risks
			2.1.2 Establish long-term plans for PA financial sustainability post-GCF
			2.1.3 New fire management curriculum developed and operationalized in PAs
		2.2 Natural forest cover restored, biodiversity connections established	2.2.1 Secure key remaining natural areas outside PAs
			2.2.2 Restore natural forest cover in & outside PAs
			2.2.3 Promote indigenous tree planting on farms & along altitudinal & riparian linkages
	Component 3: Enhancing climate adaptation through promotion of resilient livelihoods and climate-smart farming methods	3.1 Farming methods enhance productivity, reduce erosion & flooding risks, contribute to ecosystem services, and support connectivity	3.1.1 Develop on-farm agroforestry plans, incentives, capacities for high caloric agroforestry tree species & short term crops
		3.2 Rural livelihoods generate alternative incomes & reduce pressure on forests	3.2.1 Develop agroforestry-related value chain for markets access
			3.2.2 Facilitate & scale up capacity, value addition & marketing of select climate-resilient value chain products

Project-wide Outcomes	Components	Outputs	Activities
			3.2.3 Facilitate access to input & output markets for vulnerable farmers
			3.2.4 Scale up use/sales of fuel-efficient cookstoves
		3.3 Financial services & private sector investment increased	3.3.1 Facilitate access to finance & private sector investments
			3.3.2 Set up & support savings & loan groups, enhance asset-building
			3.3.3 Build capacity of financial institutions to serve targeted value chains & communities

2.3. Project Roles - Execution and Oversight

Rwanda has a comprehensive and progressive institutional framework and has established agencies to work cross-sectorally to support implementation of this project. The Rwandan Ministry of the Environment (MoE) is accredited by the GCF to carry out funded activities that fall within Environmental and Social Risk Categories B and C. The Rwanda Forest Authority (RFA) will be the Executing Entity. All work will be coordinated by the Project Management Unit situated within the MoE and supported by other relevant government agencies including the National Land Authority (NLA) and the Rwanda Water Board (RWB) within MoE.

As the AE, MoE will: i) ensure that the project is executed in accordance with GCF standards; ii) supervise, oversee and manage the implementation of project interventions; iii) report on Project progress; and iv) ensure that Project activities are well coordinated and aligned with countries' national priorities. The PMU will manage, monitor and report on day to day implementation of the EE. The EE will execute the tasks within the overall project management structure: a) implementing day-to-day activities as per the project work plan and budget, including the Environmental and Social Management Plan; b) undertaking procurement activities; c) managing contracts of suppliers and services providers; d) hiring and managing project staff relevant to the EE-managed project areas including those that will be in charge of ESS ; e) implementing activities as per the project work plan; and f) carrying out financial and technical monitoring of activities, including the achievement of outputs and outcomes the EE are in charge of.

Rwanda recognizes the importance of engaging multiple stakeholders and has established mechanisms including regular cross-sectoral planning meetings and the Joint Action Development Forums (JADF), and consultative platforms used for promoting cooperation between the private sector, civil society and the public sector. Furthermore, Rwanda has established national councils for women and youth which will serve as entry points for engaging these key stakeholders and beneficiaries in the project implementation. The combined capacity of these organizations will ensure an efficient, inclusive and equitable implementation of the proposed project.

The MoE, WCS, RFA and REMA screened the project against its potential social and environmental risks, and against social and environmental standards, consistent with GCF guidance. Overall, the program was assessed as having moderate environmental and social risk, equivalent to category B of the GCF.

To implement environmental and social safeguards and ensure compliance with all GCF policies and the policies of the AE and EE, the following positions will be hired:

Environmental and Social Management (ESS) Specialist (PMU): Oversees the environmental and social safeguards implementation for the entire project, conducts further screening on all sub-components, ensures all project staff are appropriately trained on environmental and social safeguards implementation, liaises with specific staff to meet these obligations.

Gender & Youth Specialist (PMU): Oversees all gender and youth components of the project, trains staff on gender responsive approaches to community engagement and project development, ensures all staff are trained on survivor-centered approaches and liaises with Human Resources and Administration and the ESS Specialist to train all staff on SEAH.

Monitoring & Evaluation Specialist (PMU and RFA): Responsible for monitoring and evaluating the implementation of environmental and social safeguards. Liaises with the ESS Specialist to develop indicators and monitor for the life of the project.

Community Engagement Specialists (RFA): Conducts all on-the-ground engagement with local people in the CND, in this role will be responsible for collecting information relevant to the evaluation screening of the sub-components and will need to use their advantage of being in the communities very frequently to review compliance with environmental and social safeguards; these individuals will be responsible for ensuring local access to the GRM system.

Ecosystem landscape restoration specialist and Forest Specialist (RFA): these individuals with training in ecology and forestry will support implementation of environmental safeguards. They will receive training on Invasive Species Management and Surveillance, and be responsible for

Human Resources & Administration Officer (RFA): Responsible for training employees on the Code of Conducts for respective organizations, screening employees for minors, SEAH infractions, involvement in other prohibited activities (money laundering, terrorism), and will ensure all labor laws are followed. Will liaise with the ESS Specialists on the development of a Security and Risk Management Plan.

Logistics and Procurement Officer (RFA): Will liaise with the ESS Specialist and be responsible for supply chain management and carbon contributions to minimize environmental impact of the project.

2.4. Rationale for the Partial ESMF

As proposed, the environmental and social risk category for the project is likely **Category B or 'moderate risk" according to GCF classification.** The Ministry of Environment (MoE) is accredited by the GCF to carry out funded activities that fall within Environmental and Social Risk Categories B and C. The MoE and its key partners (WCS, RFA) partially screened the project for potential social and environmental risks, following GCF requirements. All preliminary potential negative impacts for activities and sub-activities were determined to be minimal, reversible and readily mitigated through generally accepted mitigation measures and standard international practices, thus in the low to moderate categories. While the impacts will occur within the Congo Nile Divide project area boundary and implementation zone, the specific locations and communities affected by project activities will be determined in project implementation thus an Environmental and Social Management Framework has been developed for a more thorough screening of all activities by the AE/EE.

The key project potential risks are summarized in section 6 as part of this Environmental and Social Management Framework (ESMP). Section 10t set outs the steps for the AE/EE to follow in project implementation to further define, in the exact locations and in close consultation with communities and other stakeholders, specific impacts for the five sub-projects/activities associated with this project and provide the steps for designing appropriate mitigation measures in line with the requirements under the government of Rwanda procedures and the GCF environmental and social safeguards for category B projects.

2.5 Project Context

2.5.1 Project Geographic Location

The project will focus on the Congo Nile Divide, an area of 4.446 km^2 that overlaps three Provinces (Western, Southern, Northern) and 10 Districts (Karongi, Musanze, Ngororero, Nyabihu, Nyamagabe, Nyamasheke, Nyaruguru, Rubavu, Rusizi, Rutsiro)[15]. The Rwanda portion of the CND (Figure 2 and Figure 3) runs from the Virunga Mountains and Volcanoes National Park (VNP) on the border with Uganda in the North, down through Gishwati Mukura National Park (GMNP), to the south end of Lake Kivu and Nyungwe National Park (NNP) on the southern border with Burundi.

15 PPF Interim Report 2021



Figure 2: Project location and geographical context (PPF Interim Report 2021)

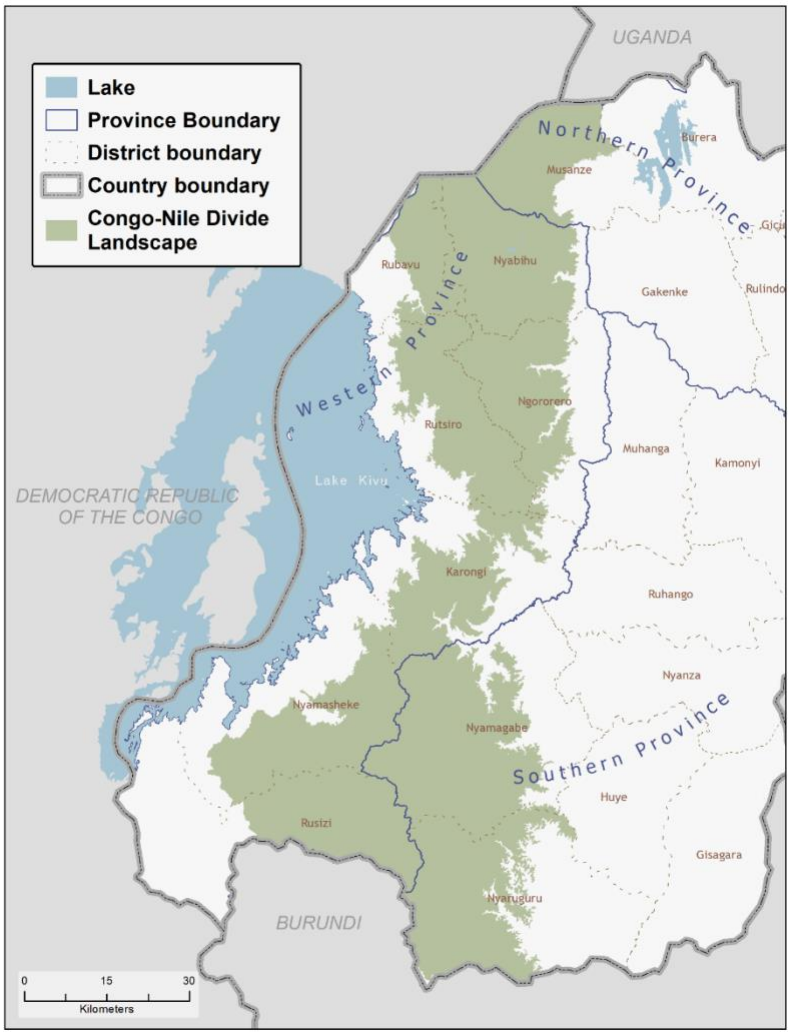

Figure 3: Congo-Nile Divide Landscape and Location

The climate of western Rwanda and its CND landscape features conditions highly supportive of tropical montane forests, rich biodiversity and human activities alike. Despite being located deep in the tropics just south of the equator, the elevated terrain of the CND corridor, mostly above 2,000 meters, ensures relatively cool temperatures through the year (**Figure 4**).

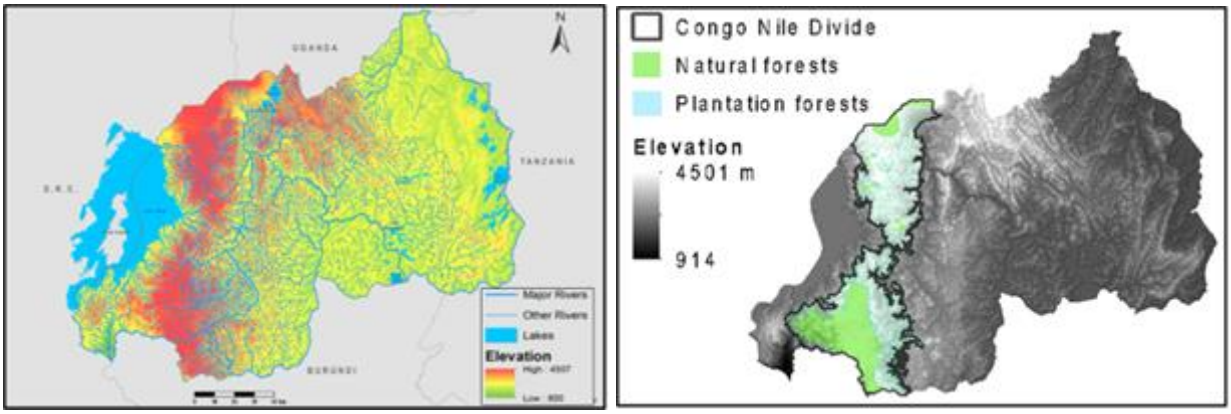

*Figure 4: (**left**) Topographic map of Rwanda with riverine drainage channels overlaid. Source: Rwanda Atlas (2019)[16]; (**right**) Congo Nile Divide, identified by the 1,900 m elevation contour and showing the presence of natural and plantation forests. Source: CND project team.*

Prior to landscape conversion for agricultural purposes, continuous dense forest cover yielded augmentation of precipitation through fog interception in tree canopies, and near-daily cloud immersion sustained cloud forest ecosystems and species assemblages. The forests also maintained slope stability in steep terrain and yielded percolation and groundwater recharge rather than direct runoff of heavy precipitation. Such conditions are now constrained to within the CND's protected forests within national parks, covering just 30% of the CND landscape and just 5% or Rwanda's total land surface. These are Rwanda's only remaining montane forests, yet represent 58.7% of national carbon stocks[17], and are imperiled by intense population pressures, with approximately 32.4% of the country's population residing within the CND landscape.

16 Vital Signs, 2019: Rwanda Atlas. Environment, Agriculture and Livelihood Options. Vital Signs and WCS Rwanda. Link.

17 Mugabowindekwe, Maurice and 21 coauthors: Nation-wide mapping of tree level carbon stocks in Rwanda. Manuscript in review (Oct 2022). Link.

2.5.2 Land Use and Vegetation Cover

The core ecosystem of the Congo Nile Divide (CND) is the Afromontane Rain Forest, which is the most extensive montane forest type in the landscape. Originally it covered 418 524 ha of the CND (Table 2 and Figure 5), but nationally there has been a 77% loss of Afromontane Rain Forest in the country (Figure 6). Most of the remaining extent of approximately 96 402 ha are restricted to Protected Areas, with very little remaining intact outside of the PAs. Given this high level of loss, Afromontane Rain Forest is classified as Endangered under the IUCN Red List of Ecosystems. Furthermore, the ecosystem is under-represented in the PA network – it is classified as Moderately Protected, and very little habitat remains in an intact state outside of the PAs. It is therefore critical to protect and restore what little montane forest is remaining in the Congo Nile Divide, to at least approach the 30% post 2020 CBD target as closely as possible.

Although there are other important Afroalpine ecosystem types in the CND, notably Afroalpine Mountain Bamboo, Afroalpine Mountain Vegetation, Hagenia Forest, Mixed Forest and Afroalpine Herbaceous Mountain Vegetation, these are largely conserved within the Volcanoes National Park (VNP) and hence are classified as Least Concern and all are Well Protected, apart from the Afroalpine Mountain Bamboo, which is Vulnerable. At the lower altitudes, numerous threatened ecosystems that are under-represented in the PA network occur, but these ecosystems are peripheral to the CND and are not the focus of Rwanda's CND project.

Table 2. Ecosystem types of the Congo Nile Divide (CND), showing key metrics of original and remaining extent.

Biome	Ecosystem Type	National Extent					CND Extent	
		National Extent (Original Extent) (ha)	Intact Extent (ha)	% Loss	Intact in PA (ha)	% of National PA Target	Extent in CND (Original Extent) (ha)	% of National Extent in CND
Core CND Ecosystem								
Montane Woodland	Afromontane Rain Forest	550 967	126 413	77.1	96 403	58.3	418 524	76
Afroalpine Mountain	Hagenia Forest	6 318	6 185	2.1	6 130	323.4	6 202	98.2
Humid Savanna	Evergreen Semi-evergreen Riverine Highland Savanna	37 295	5 228	86	104	0.9	36 676	98.3
Humid Savanna	Evergreen Semi-evergreen Humid Savanna	2 254	551	75.6	0	0	2 222	98.6
Afroalpine Mountain	Neoboutonia Forest	972	933	3.8	629	216.1	972	100
Humid Savanna	Transitional Humid Forest	102 736	17 475	82.9	9 213	30	102 736	100
Afroalpine Mountain	Afroalpine Mountain Bamboo	14 020	6 214	55.6	4 864	116	14 020	100
Afroalpine Mountain	Mixed Forest	546	542	0.5	535	327.4	546	100
Afroalpine Mountain	Afroalpine Mountain Vegetation	1 537	1 532	0	1 530	332.7	1 537	100
Humid Savanna	Dawei and Strychnos Scrub Forest	22 365	4 270	80.8	99	1.5	22 365	100
Afroalpine Mountain	Afroalpine Herbaceous Mountain Vegetation	606	603	0	584	323.2	606	100
Peripheral to CND								
Wetland	Miscanthus and Cyperus Wetland	110 182	92 078	16.4	42 199	127.7	9	0
Highland Plateau	Evergreen Semi-evergreen Arid Plateau	128 739	7 824	93.9	23	0.1	1 194	0.9
Wetland	Mixed Vegetation Wetland	14 932	6 673	55.3	1 660	37.1	1 393	9.3
Highland Plateau	Transitional Savanna Forest	421 785	11 589	97.3	828	0.7	53 214	12.6
Lake	Lake	144 352	143 399	0.7	15 364	35.5	20 184	14
Wetland	Other Wetland Vegetation	43 745	8 239	81.2	1 439	11	10 910	24.9

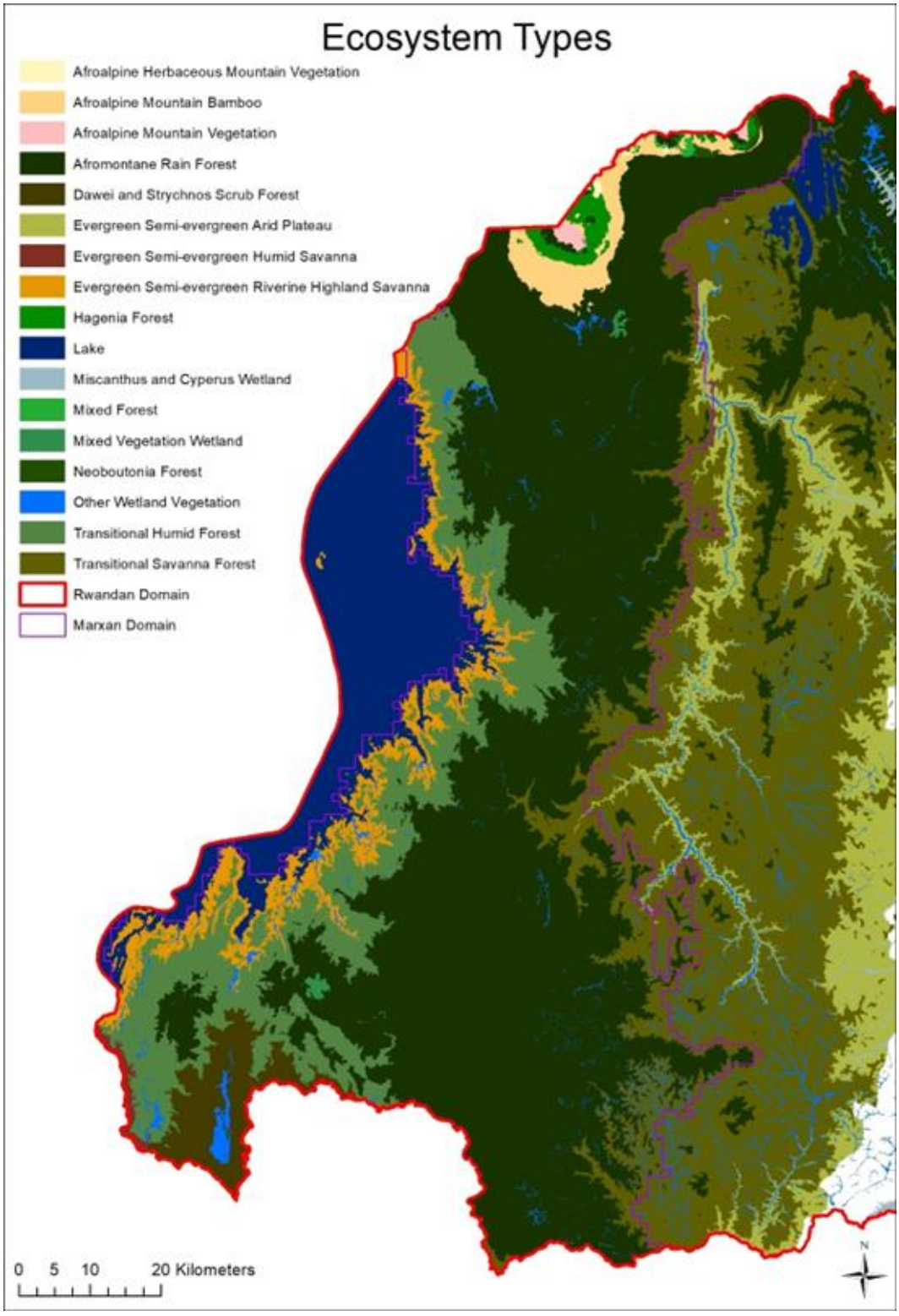

Figure 5. The ecosystem map for the Congo Nile Divide showing the historical extent of ecosystem types. Data from the Rwanda draft ecosystem map (SANBI, 2022).

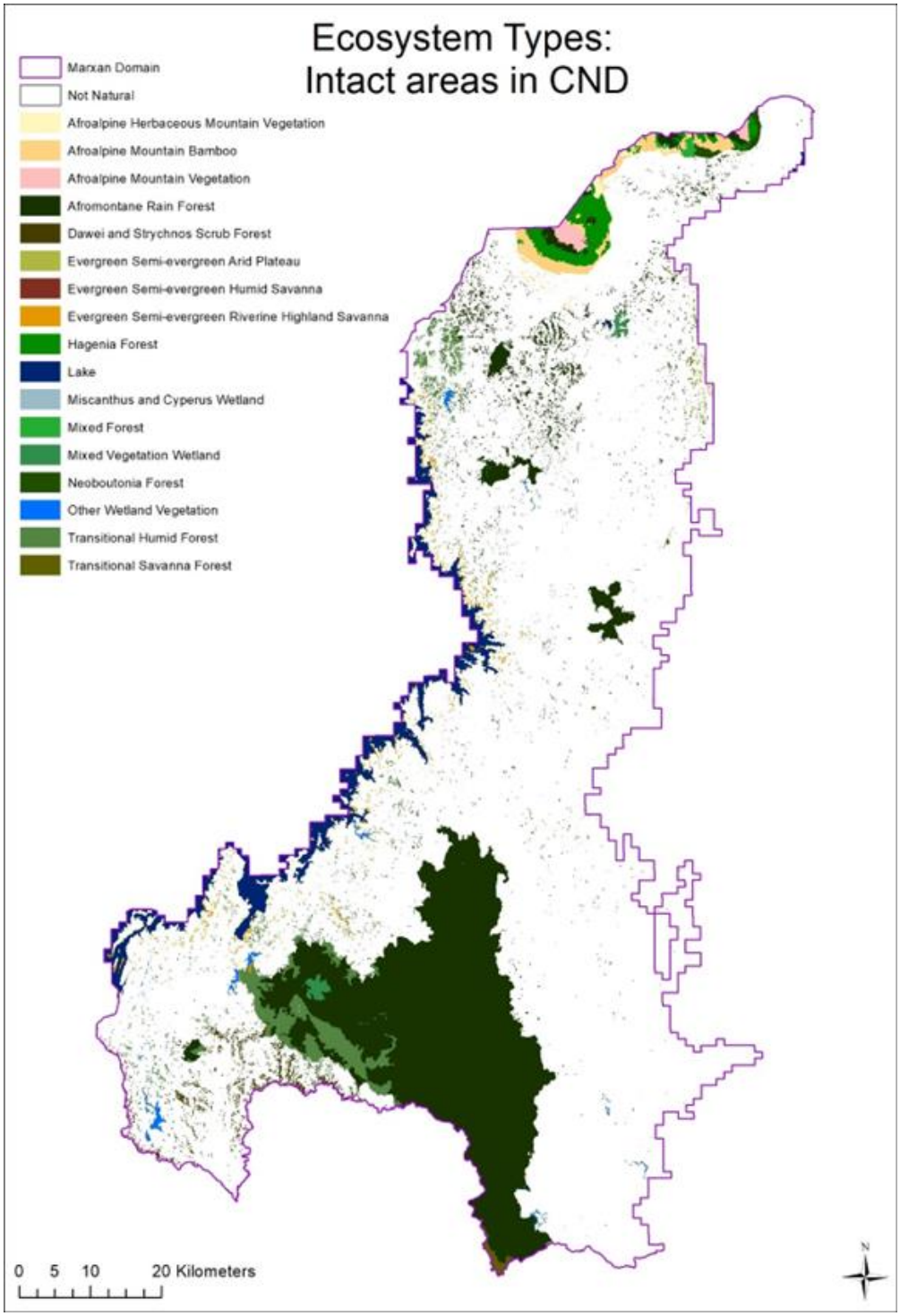

Figure 6. Remaining intact areas of each ecosystem type in the Congo Nile Divide.

3. INSTITUTIONAL, REGULATORY FRAMEWORK FOR SOCIAL AND ENVIRONMENTAL MATTERS

This section of the ESIA/ ESMP outlines the:

- Existing multilateral agreements, policies, legislations, institutional requirements that this project will trigger.
- Gaps
- Institutional arrangements that would hinder or guide the project development.

The **Rwanda Vision 2050** sets a new pathway that will lead the country to the living standards of upper middle-income countries by 2035, and high-income countries by 2050. The Rwanda Vision 2050 has overarching objectives of promoting Economic Growth and Prosperity, and a High Quality of Life for Rwandans with project-related specific targets aimed at well-being, reliance on the National Land Use and Development Master Plan and per capita energy consumption from sustainable sources. The Rwanda Vision 2050 will be achieved within a larger institutional and regulatory framework for social and environmental matters consisting of multilateral agreements, the constitution, national policies, legislation and institutions.

3.1. Multilateral Environmental Agreements

The Republic of Rwanda is party to numerous Multilateral Environmental Agreements that provide clear guidance on the governments international obligations for environmental action

United Nations Framework Convention on Climate Change (IEA ID# 3126). *Entered into Force 11-16-1998.* The ultimate objective of the Convention is to stabilize greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system." It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner." It binds member states to act in the interests of human safety even in the face of scientific uncertainty.

Protocol To The United Nations Framework Convention On Climate Change – The Kyoto Protocol (IEA ID# 3273). *Entered into Force 2-16-2005***.** The international treaty that aimed to reduce the emission of gasses that contribute to global warming and called for the reduction of the emission of six greenhouse gasses in 41 countries plus the European Union to 5.2 percent below 1990 levels with a commitment period. Parties must submit a National Determined Contribution. Rwanda updated this contribution in May 2020 to serve as a blueprint for advancing targeted and measurable climate action in key sectors while also guiding coordinated response for government and international organizations, NGOS, civil society and community-based organization. The detailed assessment identified a total emissions reduction potential of approximately 4.6 million tCO_2. The document further details the adaptation contribution by sector including Land and Forestry through Development of Agroforestry and sustainable agriculture, promoting afforestation/reforestation of designated areas, improving the forest management for degraded forest resources, integrated approach to planning and monitoring for sustainable land use management.

The Convention on Biological Diversity (IEA ID# 3128). *Entered into Force 8-27-1996.* The international legally-binding treaty has three main goals: conservation of biodiversity; sustainable use of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources. Parties to the agreement adopted the Strategic Plan for Biodiversity as a framework for action by all countries and stakeholders to safeguard biodiversity and the benefits it provides to people. Rwanda developed a National Biodiversity strategy and Action Plan (2016) that put forth the principles, priorities and targets for the Action Plan and requires the mainstreaming of biodiversity into all sectors. Such provisions extend to the importance of indigenous species in agroforestry and afforestation programs.

African Convention on the Conservation of Nature and Natural Resources. *Entered into force 3-5-1980. Revision 7-23-2016.* The objectives are to enhance environmental protection, to forest the conservation and sustainable use of natural resources, and to harmonize and coordinate policies in these fields while recognizing the right of all peoples to a satisfactory environment favorable to their development and the duty of States to ensure that developmental and environmental needs are met in a sustainable, fair and equitable manner. Parties shall take effective measures to prevent land degradation, as is being experienced in the CND, and shall adopt measures to improve soil and combat erosion, as is exacerbated by the effects of climate change.

Convention For the Protection of the World Cultural And Natural Heritage (IEA ID# 2812). *Entered into Force 3-28-2001.*This convention links the concepts of nature conservation and the preservation of cultural properties while recognizing the way in which people interact with nature, and the fundamental need to preserve the balance between the two. This project will include areas in and around Nyungwe National Park currently being considered for World Heritage nomination.

Convention To Combat Desertification In Those Countries Experiencing Serious Drought And/Or Desertification, Particularly In Africa (IEA ID# 3188). *Entered into Force 9-6-2001.* This is the only binding international agreement linking environment and development to sustainable soil management. While the convention focuses specifically on arid, semi-arid and sub-humid and dry areas, where some of the most vulnerable ecosystems are located, the effects of climate change can drastically impact where those regions are by exacerbating the impacts of desertification. The convention emphasizes the important role played by women in regions affected by desertification or drought and the importance of ensuring, at all levels, the full participation of women and men in programs to combat desertification and effects of drought. In this spirit, thus recognizing the importance of full participation of women and men in this project to achieving resilience to climate change.

Treaty on the Conservation and Sustainable Development of the Forest Ecosystems of Central Africa (IEA ID# 4396). *Entered into Force 3-12-2014.* Parties of this convention, as relevant to the proposed project, must undertake conservation and sustainable management of forests and management of the environmental in national priorities, adopt measures aimed at putting forest conservation and sustainable management actions in line with development programs of other sectors such as reforestation, step up efforts to increase the rapid participation of rural populations in the planning and sustainable management of ecosystems, and involve business operators in the sustainable management and conservation of forest ecosystems.

International Plant Protection Convention (1979 Revised Text) (IEA ID# 2905). *Entered into Force 8-26-2008*. Aims to secure coordinated, effective action to prevent and to control the introduction and spread of pests of plants and plant products. The Convention extends beyond the protection of cultivated plants to the protection of natural flora and plant products. It takes into consideration both direct and indirect damage by pests, so it includes weeds. It also covers vehicles, aircraft and vessels, containers, storage places, soil and other objects or material that can harbor or spread pests. For a project with efforts on working with nurseries and transporting trees to remote parts of the CND, the care and management to protect plants from the spread of invasive species is of utmost importance.

The Sustainable Development Goals (SDGs) adopted in September 2015. These 17 Global Goals are a universal call to action to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity. These are designed to promote good health and well-being, gender equality, sustainable communities and climate action among others.

African, Regional/East African and International Regulatory Framework Linkages

- African Union Agenda 2063
- The East African Community (EAC) Vision 2050 adopted in February 2016, focuses on environment protection by prioritizing development enablers which are integral to long-term transformation, value addition and acceleration of sustained growth.
- The EAC Climate Change Policy (2010) guides Partner States on the preparation and implementation of collective measures to address climate change in the EAC region
- The EAC Climate Change Master Plan (2011–2031) ensures that "The People, the Economies and the Ecosystems of the EAC Partner States are climate resilient and adapt accordingly to Climate
- Multilateral Environmental Agreements (MEAs) - Climate change-related MEAs.

3.2. National policies, legislation, and institutions

The government of Rwanda (GoR) has invested significantly in developing an institutional and policy-enabling environment for climate change adaptation through both national and sectoral development and regional strategies as well as policies and planning documents. These include:

Constitution of the Republic of Rwanda of 2003 - revised in 2015 - is the overarching framework which guides environmental and social policy in Rwanda and the key sections to note being:

- Article 22 on "Right to a clean environment": Everyone has the right to live in a clean and healthy environment.
- Article 53 on "Protection of the environment": Everyone has a duty to protect, safeguard and promote the environment. It also indicates that the State ensures the protection of the environment. Lastly, it stipulates that a law determines modalities for protecting, conserving and promoting the environment.

In conjunction with Rwanda Vision 2050, the GoR has the **National Strategy for Climate Change and Low Carbon** Development. The National Strategy guides the process of mainstreaming climate

resilience and low carbon development into key sectors of the Rwanda economy. The strategy has set a vision for Rwanda to be a developed climate resilient, low carbon economy by 2050. Strategic objectives are to achieve:

- Energy Security and a Low Carbon Energy Supply.
- Sustainable Land Use and Water Resource Management that results in Food Security.

Relevant ministry: Ministry of Finances and Economic Planning

Relevance to project: Two programs of the Climate Change and Low Carbon strategy are relevant to this project:

Programme 4: Integrated Approach to Sustainable Land use Planning & Management which emphasis on employing integrated approach to planning, improving use of spatial data and establishing national information sharing policy.

Programme 12: Sustainable Forestry, Agroforestry and Biomass Energy which involves promoting afforestation/ reforestation of designated areas, employing improved forest management for degraded forest resources, and promoting improved cookstoves.

National Strategy for Transformation, 2017-2024, (NST1) sets out Rwanda's development targets and integrates a number of long-range global and regional commitments, including: the Sustainable Development Goals (SDGs); the Africa Union Agenda 2063 and its First 10-Year Implementation Plan 2014-2023; The East African Community (EAC) Vision 2050; and obligations from the COP 21 Paris Agreement on Climate Change. Increasing climate resilience in agriculture and human settlements and targeting public works schemes to areas most at risk from climate change are key areas of focus in the strategy. In the medium-term, the National Strategy for Transformation, NST-1/Seven Years Government Program (2017-2024) sets the priority for a Green Economy approach in its Economic Transformation Pillar that promotes "Sustainable Management of Natural Resources and Environment to Transition Rwanda towards a Green Economy". Sustainably exploiting natural resources and protecting the environment and reducing the dependence on wood as fuel are also priorities.

Relevant ministry: Ministry of Finances and Economic Planning

Relevance to project: Project envisions activities to transition toward a green economy (e.g. modern beekeeping, energy efficient stoves).

The **Green Growth and Climate Resilience Strategy** (GGCRS) developed in 2011 provides the country's roadmap for becoming a climate-resilient, low carbon economy by 2050. GGCRS's strategic objectives include the achievement of sustainable land use and water resource management, and reduced vulnerability to climate change. Among the Strategy's Programmes of Action are an Integrated Approach to Land Use Planning & Sustainable Land Use Management and Sustainable Forestry, Agroforestry and Biomass.

Relevant ministries: Ministry of Finances and Economic Planning and Ministry of Environment.

Relevance to project: Project envisions activities to transition toward a green economy (e.g. modern beekeeping, energy efficient stoves)

The Rwandan Environmental **Law N°48/2018 of 13/08/2018** sets out the general legal framework

for environment protection and management in Rwanda. It also constitutes the environment as one of the priority concerns of the Government of Rwanda. The fundamental principle on national environmental protection policy develops national strategies, plans and programs, aiming at ensuring the conservation and use of sustainable environmental resources. Chapter V of this Law on environment in Rwanda regulates Environmental Assessment studies. Further to this law, through the Ministerial Order No 001/2018 of 25/04/2018, a list of all the projects that must be subjected to mandatory EIA has been put in place under article 3 and 4 of this ministerial order.

In 2006, REMA developed the EIA regulations, which provide guidelines and requirements for EIA in Rwanda. Projects with identified adverse impacts on environment call for a full EIA process for mitigation measures and thus the **Ministerial Order No 001/ 2019 of 15/04/2019** establishing the list of projects that must undergo environmental impact assessment, instructions, requirements and procedures to conduct environmental impact assessment.

Rwanda Sectoral Analysis - Nationally Appropriate Mitigation Actions (NAMAs) (2015) has identified seven priority sectors: agriculture, buildings, energy, industry, land use, land change and forestry, transport, and waste. Within these, increasing the basic productivity of Rwanda's forests is a priority. As land for afforestation is a very scarce resource in Rwanda, the NAMA has prioritized forest management for multiple purposes and advocates for the creation of new plantations to achieve a national tree/forest cover of 30%, with particular attention to steep slopes in order to combine protective and productive functions. Within the Housing/Building Sector the NAMA highlights the use of efficient cookstoves, LED lighting, and solar water heaters along with Off-Grid Solar PV Mini-Grids.

Relevant ministry: Ministry of Environment

Relevance to project: Project envisions activities to establish new forest plantations, improve management of existing forest plantations and promote the use of energy efficient cooking stoves.

National Adaptation Programmes of Action to Climate Change, NAPA – Rwanda (2006) articulates priorities in vulnerable economic sectors and strategies and priority actions of adaptation to climate change. The six NAPA priorities are: 1) an Integrated Water Resource Management (IWRM); 2) setting up an early warning hydro-agro meteorological information system and rapid intervention mechanisms; 3) promotion of non-agricultural income generating activities; 4) promotion of intensive agro-pastoral activities; 5) introduction of climate-resilient species; and 6) development of firewood alternative sources of energy.

Relevance to project: Project envisions activities to improve forests as a means for adaptation to climate change (e.g. reforestation).

National Strategy for Agroforestry: In 2010, the Government of Rwanda committed to restoring the ecological health of two million hectares of land, essentially representing the whole country. This commitment was the first of its kind in Africa, and a foundational commitment to the Bonn Challenge, a global target to restore 150 million ha of degraded land by 2020.

The National Strategy for Agroforestry (2018-2027) has been recently developed with the support of FAO. Its aim is to create a roadmap for promoting leadership and synergies in agroforestry and engaging coordinated actions to increase the adoption of agroforestry technologies at Rwanda's agricultural landscapes and watersheds.

Relevance to project: Project will contribute to these targets through the agroforestry activities and by empowering women and youth through Agroforestry Development.

National Land Policy (2019): The National Land Policy envisions a nation with efficient land use planning and management for sustainable development and sets in motion the policies and frameworks for implementing land use planning.

Relevant ministry: Ministry of Environment

Relevance to project: Integrating climate change impacts into land use planning is a major component of the project.

Rwanda's National Forest Policy (2018) and Forestry Sector Strategic Plan (FSSP 2018- 2022): The National Forest Policy highlights the dissemination of productive and resilient agroforestry systems (tree density target of 50 tree/ha in 2022) as a key pillar of its strategy. The main objectives of the FSSP are to: 1) enhance the capacity of forest institutions and actors to match the requirements for Sustainable Forest Management (SFM); 2) ensure Sustainable Forest Management through the establishment and implementation of integrated forest management plans at all levels; 3) encourage private sector to increase their investment in forestry sector; 4) develop and implement appropriate regulatory instruments to ensure sustainable and efficient biomass supply; 5) enhance biodiversity and ecosystems services and values in accordance with national and international agendas; 6) ensure active participation of stakeholders in Sustainable Forest Management; and 7) enhance the adoption of Agroforestry and Trees Outside Forest (TOFo) techniques that contribute to overall forest resources and agriculture productivity. Additionally, this Forest Policy emphasizes the importance of agroforestry in soil protection, a key component of the proposed project.

Relevant ministry: Ministry of Environment

Relevance to project: Project will contribute to these targets through the agroforestry activities and by building the capacity to produce forest tree seedlings and restoring degraded forests.

The National Land Use and Development Master Plan (NLUDMP 2020-2050)

NLUDMP recommends preserving 1,389 km² of natural forests and all existing 3,873 km² of forest plantations and foresting 1,554 km² of bare high slopes. In parallel, the plan will preserve 497 km² of wooded savannah and 7 km² of shrublands. All bodies of water and their buffer zones, and the protected wetlands and their buffer zones, will be fully protected. The NLUDMP also specifies consolidation of scattered housing, decreasing the size of rural residences to accommodate consolidation and a reorganization of the Imidugudu system for housing in rural settlements. The NLUDMP also sets out gross boundaries and sizes for proposed settlements while the National Land Authority (NLA) will hone these boundaries during implementation. Urban settlement patterns as specified in the NLUDMP will need to be consulted in the process of reforestation and afforestation activities.

Relevant ministry: Ministry of Environment

Relevance to project: The project will contribute to achieve key specific targets of the NLUDMP including:

- Preservation current extent of natural forests (1,389 km²)

- Preservation all existing forest plantations (3,873 km²)
- Reforestation of 1,554 km² of bare land with slope >55%

The National Environment and Climate Change Policy (2019): Reaffirms Rwanda's commitment to address climate change and the potential hardships; Calls for Rwanda to mainstream the environment and climate-proofing agenda into national development; Encourages novel partnerships across institutions from civil society and the public and private sectors to achieve climate related policy goals and the seven objectives involving green economic transformation, protection of natural resources, predictability of climatic events, climate change adaptation, mitigation, and response, improving environmental well-being, strengthening environmental and climate change governance, and promoting green investment.

Relevance to project: Project envisions partnerships across government, civil society, NGOs, and private enterprise to achieve the seven objectives.

As part of this **Policy, Rwanda's Nationally Determined Contribution** (NDC) is built on the **Green Growth and Climate Resilience Strategy** (GGCRS) and focuses on adaptation and mitigation. The NDC puts a strong emphasis on sustainable forestry, agroforestry, and biomass energy as one of the programmes under which specific actions are implemented to achieve direct and indirect mitigation benefits. Additional measures include agroecology techniques; improving soil conservation and land husbandry (terraces and agroforestry); increasing irrigation and water management including rainwater harvesting; afforestation through enhanced germplasm and technical practices in planting and post-planting processes; improved forest management for degraded forest resources; and sustainable use of biomass fuels through the increased uptake of improved cookstoves and biogas.

Relevant ministry: Ministry of Environment

Relevance to project: Project activities will contribute to the NDC (agroforestry, afforestation and reforestation).

The purpose of the **Law governing biological diversity in Rwanda (N° 064/2021 of 14/10/2021)** is to conserve, manage, protect and promote biological diversity. This law (Chapter II) details the establishment of conservation areas, protected areas, national parks and strict nature reserves. It also specifies land use within the protected areas as well as the prohibited activities within the protected areas. Management of such areas, including designation of boundaries and buffer zones, may be further detailed in other specific laws (e.g., Law N°45/2015 Establishing the Gishwati-Mukura National Park, see below). Chapter III specifies the authorities responsible for the management of biological diversity. This Law also prohibits alteration and alienation of any portion of a national park or a strict nature reserve, except in accordance with relevant laws (art. 7). In addition, introducing an alien species into the country is prohibited, unless a special permit is issued by a competent authority for purposes of research, conservation or for such other reasons upon prior impact assessment on biological diversity (art. 14). The law punishes with a fine any person who trespasses in a protected area and the fine is multiplied by five in case such fault is committed by a company, a cooperative or any other organization whether national or international (art. 55).

Relevant ministry: Ministry of Environment

Relevance to project: Project activities will take place in and around conservation and protected areas thus close coordination with the responsibility authorities specified in law will be important. It also indicates processes for coexistence of humans and wildlife, creating a framework for community health and safety on this issue.

Other key Environment and Natural Resources Sector Policies and Strategic Plans: Urbanization and Human Settlements Policy (2002); The National Land Policy (2004); National Policy for Water Supply and Sanitation (2010); The Mining Policy (2010); National Policy for Water Resources Management (2011); The National Biodiversity Policy (2011);Environmental and Climate Sub-Sector Strategic Plan (2013/14 2017/18); Water Resources Management Sub Sector Strategic Plan (2011-2015); Water, Climate and Development Program (2013); National Decentralization Policy (2012); National Land Use and Development Master Plan (2020); Strategic Plan for the Transformation Agriculture in Rwanda (2009); National Sustainable Tourism Master Plan (2015); Strategic Plan for the Environment and Natural Resources Sector 2018-2024; and individual District Development Plans and Integrated Development Program (IDP) Village Model.

The Law of 2018 and the Ministerial Order of 2019 replace the Law on Environmental Protection, Organic law 08/2005 of 08/04/2005, and the ministerial order on Environmental Impact Assessments (EIA) (003/2008, 004/2008) and the General Guidelines and Procedure for EIA. These determine the legal framework for environmental and social impact assessments. The Law on Environmental Protection determines the modalities of protecting, conserving, and promoting the environment in Rwanda. The Rwanda Environment Management Authority (REMA) is the public establishment with legal personality and authority to implement the articles of this law. Under article 67 of the organic law 04/05, every project shall be subjected to environmental impact assessment (EIA), before obtaining authorization for its implementation. This applies to programmes and policies that may affect the environment. They further establish the list of activities or programmes that must undergo environmental impact assessment before commencement. The three components under the proposed project fit the description of projects that require EIAs, hence the commissioning of this ESIA study.

NATIONAL PARKS RELATED LEGAL FRAMEWORK

The Congo-Nile Divide (CND) separates the drainage basin of the Congo and Nile Rivers and contains Rwanda's only remaining montane forests. These forests are enclosed within the three national parks in this region, Volcanoes National Park (VNP), Gishwati-Mukura National Park (GMNP), and Nyungwe National Park (NNP). The law n° 064/2021 of 14/10/2021 governing biological diversity defines the national park as "natural, semi-natural or developed areas, fresh or sea waters protected by the State to conserve large-scale ecological processes, along with the complement of species and ecosystems"

The same law in its article 6 highlights that "A protected area is established in accordance with relevant laws". It is within the above context that the three national parks that are concerned by the project zoning have all been established by laws. The establishing laws provides also for a buffer zone whose use and management are conducted in accordance with the laws in force, determining the use of land, environment and forests.

A. LAW Nº45/2015 OF 15/10/2015 ESTABLISHING THE GISHWATI-MUKURA NATIONAL PARK

This Law establishes the Gishwati-Mukura National Park. It also determines its boundaries, surface and buffer zone. The law determines that Gishwati-Mukura National Park consists of Gishwati reserve with an area of one thousand five hundred seventy hectares (1,570Ha) and the Mukura reserve with an area of one thousand nine hundred eighty eight hectares (1,988 Ha); the total area is three thousand five hundred fifty eight hectares (3,558Ha). The park is further surrounded by a buffer zone on a total surface area of nine hundred sixty two hectares (962 Ha) of which two hundred sixty-six hectares (266 Ha) are for Gishwati buffer zone and six hundred ninety six hectares (696 Ha) are for Mukura buffer zone. The boundaries for the park and buffer zone as well as the map for the park are described in the annexes to the law.

B. LAW N° 22/2005 OF 21/11/2005 ESTABLISHING THE NYUNGWE NATIONAL PARK

This law establishes the Nyungwe National Park. The law that clearly determines the size and boundaries of the park and specific forests covered by the park. Nyungwe National Park constitutes the Nyungwe National Reserve with an area of one hundred and one thousand and one, five hundred and fifteen hectares and fifty nine acres (101,515. 59 ha), Cyamudongo Natural Forest with an area of four hundred and thirty hectares and thirty eight acres (430.38 ha) and Gisakura Natural Forest with an area of eleven hectares and seventy acres(11.70 ha). The total area is equivalent to one hundred and one thousand and nine hundred fifty seven and sixty seven acres (101,957.67 ha). The law further, in its article 2, establishes a buffer zone of Nyungwe National Park with an area of ten thousand and eighty five hectares and twenty two acres (10,085. 22 ha).

C. VOLCANOES NATIONAL PARK (VNP)

The Volcanoes National Park was established by the decree of 26 November 1934. The boundaries of the park and buffer zone have been revised from time to time. The park currently covers 160 sqm.

DISTRICT LAND USE PLANNING LEGAL FRAMEWORK

The development of land use plans at district level is enabled and guided by national laws and other instruments such as guidelines.

A. LAW N°24/2012 OF 15/06/2012 RELATING TO THE PLANNING OF LAND USE AND DEVELOPMENT IN RWANDA

The law in its article 8 provides that “Without prejudice to what is stipulated in the master plan at the national level, every District shall prepare specific master plans based on the District development plan. Every District shall also prepare an urban development plan and specific plans, subject to the adoption of the District Council”.

From the paragraph above, it is clear that the district has a legal mandate to develop master plans.

B. NATIONAL LAND USE AND DEVELOPMENT MASTER PLAN (2020-2050)

The national land use and development master plan aims at finding solutions to land users' issues as well as showcasing orientations and measures for implementing the vision 2050 goals. It produces the best land use balance sheet for the country. It covers the prime land use consumers, including but not limited to agriculture, industry, settlement, forestry and Roads. The plan shall be referred to and customized when districts are developing their own plans.

C. RWANDA NATIONAL LAND USE PLANNING GUIDELINES

The guidelines were published in 2017 by the Ministry of Environment in Rwanda. The document's objective is to guide efficient land use and management and to standardize land use plans preparation and development in Rwanda at national, City of Kigali and District levels.

3.3. Social Policy Framework

Social Protection Sector Strategic Plan (SP-SSP) 2018/19 – 2023/24

The first National Strategy for Transformation (2018-2024) has reaffirmed social protection's central role within Rwanda's strategy for eradicating extreme poverty by 2024 and delivering high standards of living by 2050. The updated National Social Protection Policy (2018) has also reconfirmed Rwanda's commitment to the progressive development of an inclusive and comprehensive social protection system grounded in positive values of inclusive development, self-reliance, citizen participation, service delivery excellence, and national solidarity. The Policy proposes a more comprehensive vision for social protection that encapsulates social security, short-term social assistance, social care services, and targeted livelihood and employment support. The Government of Rwanda created a classification system of all Rwandans based on socio- economic status called **Ubudehe**. It plays a central role in determining the flow of government resources aimed at social protection. Under this policy there are five new categories in which Rwandans are classified depending on their socio-economic status. Ubudehe categorisation ranges from the very poor to the richest people. **Category E** (special category) is the category of households expected to benefit from full state social protection - this includes people who are out of the labor force as a result of age, major disabilities or incurable diseases and they own no other assets, nor do they have other sources of livelihoods. This may include households where the head of household is over 65 with no income sources or the head of household is under 18 and lacking income. This category can also include households headed by someone pursuing studies. **Categories C & D** include self-reliant households that benefit from social protection interventions and multi-sectoral interventions and have to sign performance contracts (Imihigo) for graduation within a period of 2 years. **Category D** has households that earn less than Rwf45,000 per month (casual workers) and in rural areas they own less than half a hectare. **Category C** consists of households earning between Rwf45,000 and Rwf65,000 per month and in rural areas own between .5 to 1 hectare. Categories **A & B** include households with diverse life choices and are self-reliant who spur community empowerment and graduation from poverty. Some of the highest district rates of households in categories **C, D, & E** of Ubudehe are in the Congo Nile Divide Region. For example, the Nyamasheke district has a poverty rate of 69% (of which 45% is extreme poverty) and the districts of Karongi, Rutsiro, and Ngororero have a rate of over 45%. The districts of Ruzizi and Rubavu are below the national average with

33% and 35% of the population being poor[18].

Relevant ministries: Ministry of Local Government and Ministry of Finances and Economic Planning.

Relevance to project: Project envisions an inclusive approach targeting Category c,d,e groups.

The Rwanda Labor Code, N° 66/2018 of 30/08/2018 and associated Ministerial Orders on Occupational Health and Safety. This Code and the associated Orders address health and safety issues in Rwanda including assurances that employers provide access to a first aid box in the workplace, clarity on evacuation procedures in the event of an emergency, directors to the nearest health care facility. The regulations also ensure adequate protection equipment, training of staff on the correct use of all equipment and similar measures to improve worker skills to execute their jobs safely. The laws also provide for a labor inspection system where inspectors may enter a work site at any time to secure social security and safety at work including the control of child labor and as needed conflict resolution between workers and employers.

Relevant ministries: Ministry of Public Service and Labor, Ministry of Disaster Management and Refugees, Ministry of Infrastructure, Ministry of Natural Resources and Environment, and Ministry of Health

Relevance to project: Project will adhere to international social standards for labor and safety as envisioned through this code and order.

National Policy on the Elimination of Child Labor. This policy serves to eliminate and prevent child labor in hazardous work situations, rehabilitate children withdrawn from forced labor, raise awareness of the exploitation of child labor and understand what contributes to child labor.

Relevant ministry: Ministry of Public Service and Labor

Relevance to project: Project will adhere to international social standards for labor and safety as envisioned through this policy.

3.4. Economic Development Policy Framework

The National Strategy for Transformation (NST1) (i.e., the Seven Year Government Programme [7YGP]) functions as the transition from Vision 2020 towards Vision 2050[19].

The NST 1 is a continuation of the Economic Development and Poverty Reduction Strategy (EDPRS 2), and its purpose is to accelerate the transformation and economic growth with the private sector at the helm. NST1 will provide the foundation and is based on three pillars:

- Economic Transformation
- Social Transformation
- Transformational Governance

18 National Institute of Statistics of Rwanda (2018). Fifth Integrated Household Living Conditions Survey (EICVM) 2016/2017, December 2018

19 http://ipar-rwanda.org/what-we-do/research-policy-analysis/ongoing-research-projects/article/vision-2020-assessment-and-mid-term-evaluation-of-national-strategy-for

The strategy will also prioritize the following cross-cutting areas: Capacity Development, HIV/AIDS and Non-Communicable Diseases, Disability and Social Inclusion, Environment and Climate Change, Regional Integration and International Positioning, Gender and Family Promotion, Disaster Management.

Relevant ministry: Ministry of Finances and Economic Planning

Relevance to project: Project envisions equitable labor conditions that will move Rwanda toward the Green Economy.

Strategic Plan for the Transformation of Agriculture in Rwanda Phase III (PSTA III) - Under this National agricultural transformation plan also running a similar period as the EDPRS, soil conservation and land husbandry is emphasized by various land protection structures such as (i) scaling up terraces on slopes to cover 91% by 2017 and (ii) use of agroforestry by 90% of farmers by 2017. PSTA III also emphasizes the need for irrigation and water management as a means of climate resilient agriculture for higher production, which shall involve hydrological information for watershed management to create warning systems and improve hydrological monitoring networks for better predict seasonal flows including floods and droughts and small-scale shortages. Components 2 and 3 of the projects will address concerns mentioned in the PSTA III.

Relevant ministry: Ministry of Agriculture and Animal Resources

Relevance to project: Project envisions activities to improve land cultivation (e.g. radical terraces, agroforestry)

International Performance Standards on Environmental and Social Safeguarding and Sustainability (FONERWA's ESMF&RPFs), the following international standards apply:

- The World Bank Groups (WBG) International Finance Corporation (IFC) Environmental and Social Performance Standards.
- World Bank Group Environmental, Health and Safety (EHS) Guidelines (General and Sector Specific).
- FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT).
- UN Basic Principles and Guidelines on Development-based Evictions and Displacement, ILO Core Labor Standards.
- KfW's Environmental and Social Due Diligence (ESDD) and Climate Assessment.
- Safeguarding against Sexual Exploitation and Abuse and Sexual Harassment (SEAH) through a Code of Conduct that explicitly indicates zero-tolerance for gender-based violence shared with all personnel and training for all employees on the Code of Conduct.

3.5. Gap Assessment

This section compares the environmental and social safeguards policies and standards of the GCF/ international good practice standards and Government of Rwanda's (GoR's) policies and legislation and recommendations on how to strengthen these.

Table 2: Comparative table of Government policies related to environmental and social safeguards, gaps and recommendations

GCF	International Good Practice Environmental and Social standards	Government of Rwanda	Gaps & Recommendations
Project Categorisation A/ B/ C	Overall, the program was assessed as having moderate environmental and social risk, equivalent to category B of the GCF.	The Rwanda Environment Management Authority (REMA) is the public establishment with legal personality and authority to implement the articles of this law. Under article 67 of the organic law 04/05, every project shall be subjected to environmental impact assessment (EIA), before obtaining authorization for its implementation. This applies to programmes and policies that may affect the environment. The ministerial order N° 004/2008 of 15/08/2008 establishes the list of activities or programmes that must undergo environmental impact assessment before commencement. The three components under the proposed project fit the description of projects that require EIAs mentioned in Annex 2 of this ministerial order, hence the commissioning of this ESIA study.	The national law and respective EIA regulation focus primarily on projects where major risks are expected. In order to ensure that also minor and moderate environmental and social risks are identified this aligns with international standards and GCF policy.
Assessment and management of environmental and social risks and impacts	Clarifies that indirect impacts on E&S must be accounted for in the Impact Assessment.		
Labor and working conditions	ILO sets a high standard for due diligence in labor and working conditions especially pertaining to, the risks of forced labor, harmful child labor and risks related to gender based violence and sexual exploitation, abuse and harassment.	Rwanda has implemented the National Policy and regulations on Occupational Safety and Health as well as labor and working conditions that are consistent with ILO labor standards. This includes provisions to prevent child labor, which are not proportionate to his/her capacity, are harmful health wise (e.g., nocturnal, laborious, unsanitary, or dangerous) or constraint his/her education and morality. OHS regulations ensure the screening of safety issues, assessment of work safety during project preparation, design, and construction supervision. OSH issues are routinely included into the environmental monitoring process during implementation of agriculture sector programs	As precautionary measure, all sub-projects and associated hiring processes will be screened on risks related to labor and working conditions.

GCF	International Good Practice Environmental and Social standards	Government of Rwanda	Gaps & Recommendations
Resource efficiency and pollution prevention	International good practice sets out the standards for resource use efficiency, pollution prevention and management throughout the project life cycle.	Article 6 of the law N° 18/2016 of 18/05/2016 governing the preservation of air quality and prevention of air pollution in Rwanda prohibits the emission of chemicals, materials, gas or hazardous substances or mixtures containing gaseous and toxic substances. Law N° 064/2021 of 14/10/2021 governs biological diversity in Rwanda. Chapter 4 of this Law was entirely dedicated to the protection and conservation of biological diversity. It prohibits the introduction of invasive species into the country and obliges anyone to combat such species. Any introduction is subject to prior EIA. Invasive species are listed down and established conditions to be respected when conducting activities involving such species.	As a precautionary measure, all sub-projects will be screened on resource efficiency and pollution prevention.
Community health, safety and security	International best practices indicate a need to minimize habitat modifications that could inadvertently exacerbate the effects of climate change, promote the spread of disease, or increase human-wildlife conflicts.	National Land Use Planning Guidelines encourage activities that establish disaster preparedness to mitigate forest fires, landslides, mudflows, rock falls, flash floods, diseases and pests. Rwanda has developed a National Risk Atlas based on a comprehensive and nationwide assessment of the existing risks with the view of developing comprehensive disaster risk profiles. The Ministry of Health has a Neglected Tropical Diseases Strategic Plan 2019-2024 in line with Sustainable Development Goals, Vision 2020 and 2050 and the National Strategy for Transformation. Activities will need to minimize exposure of beneficiaries and workers to diseases such as soil transmitted helminthiasis (STHs).	As precautionary measure, all sub-projects will be screened on community health and safety risks
Land acquisition and involuntary	Standard on Involuntary Resettlement and Access	The Law N° 32/2015 of 11/06/2015 Relating to Expropriation in the Public Interest governs involuntary land acquisition and resettlement	The Project may cause loss of access to lands due to new land classifications or stricter

GCF	International Good Practice Environmental and Social standards	Government of Rwanda	Gaps & Recommendations
resettlement	Restrictions applies to projects that require (1) resettlement of communities or (2) restricting peoples' access to areas and/or the use of natural resources and such restrictions would negatively impact peoples' livelihoods. Require Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), IPP Framework (if applicable)	but makes no provisions for involuntary restriction of access to resources and land use.	implementation of land use and park laws, displacement of informal land occupants due to afforestation/reforestation, and loss of access to land for food production. .
Biodiversity conservation and sustainable management of living natural resources	Provisions relevant for the project: • ESIA/targeted assessment and mitigation needed for following risk issues: - development of (even small) infrastructure or activities that may cause disturbance to specific elements of biodiversity / areas of high biodiversity value. - introduction or reintroduction of species	The national environmental protection system emphasizes the protection, maintenance and rehabilitation of natural habitats through a set of laws, Avoiding such sensitive areas is the top priority of the EIA, and where inevitable, special assessments are mandatory and necessary mitigation or offset measures are to be developed in the environmental management plan. The Law on Governing Biodiversity in Rwanda (Law N° 064/2021 of 14/10/2021) determines modalities for management and conservation of biological diversity in Rwanda with a component on monitoring the conservation status of Rwanda's biodiversity and promoting biodiversity research. It prohibits activities involving the use of invasive species and sets an obligation to control such species to minimize harm to biodiversity.	The Interventions supported under the project are expected to have positive impacts on biodiversity. Risks related to invasive species are governed by the national legislation.

GCF	International Good Practice Environmental and Social standards	Government of Rwanda	Gaps & Recommendations
	where risks are identified that species develop invasive characteristics. - when affecting traditional use systems. • Forest restoration projects need to maintain or enhance biodiversity and ecosystem functionality. • Plantation projects need to demonstrate that they are environmentally appropriate, socially beneficial and economically viable. • Where biocides are unavoidable, need of an appropriate pest management planning process, including risk assessment and disclosure of a Pest Management Plan, where relevant.	Law n°005/2016 of 05/04/2016 governing seeds and plant varieties in Rwanda, Law n°16/2016 of 10/05/2016 on Plant Health Protection in Rwanda; and Ministerial Order No. 007/11.30 of 11/04/2017 determining the requirements for a person to be granted a license for importing and exporting seeds.	
Indigenous peoples	International standards recognize multiple terms may be used that characterize	The 2003 post genocide constitution prohibits all forms of discrimination based upon ethnicity, while guaranteeing all people equal rights yet Rwanda recognizes historically marginalized people	Pay particular attention to the needs of vulnerable/ historically marginalized groups (i.e., women, youth, those below the poverty

GCF	International Good Practice Environmental and Social standards	Government of Rwanda	Gaps & Recommendations
	distinct social groups with different language or cultural practices from mainstream society, particular ties to the land, and history of marginalization or lack of empowerment.	who may fit some of these characteristics.	line, landless) with a specific screening of such individuals during subproject specification.
Cultural heritage	Not triggered by the project but processes are in place for Chance find.	Not applicable to the project as the project does not involve any infrastructure work that might affect unknown, buried resources nor does it involve benefit sharing related to cultural resources or access restrictions to such resources.	Chance Find Procedures are in place

4. DRIVERS OF THE CURRENT FOREST AND LANDSCAPE ELEMENTS IN RWANDA'S CONGO-NILE DIVIDE AND POTENTIAL PROJECT RISKS

4.1. Background

Natural forests of the CND are the only remaining montane forests in Rwanda and are home to threatened and endemic species such as chimpanzees, golden monkeys, owl faced monkeys, and mountain gorillas. These forests are also critical for the ecosystem services and products (e.g., erosion control and flood prevention) that they provide to the region's vulnerable communities and the national economy. They have been identified as an essential tool for ecosystem-based adaptation (EbA) in Rwanda's Green Growth and Climate Resilience Strategy (GGCRS 2011). Most importantly, they regulate Rwanda's climate by capturing and creating rainfall[20], which is crucial for Rwanda's rainfed agriculture. These forests are affected by numerous drivers of change and any interventions to address such drivers and the current conditions may result in other potential risks.

4.2. Drivers of Declining Forests

Limited land area

Despite the socioeconomic importance of Rwanda's forests, since independence, the forest cover of Rwanda has been shaped by several socioeconomic factors including the dense and rapidly increasing population, poor management, and the country's food and energy needs.

Major land uses in the CND region include natural forests, planted forests, tea plantations, pasturelands, subsistence agriculture, and settlements. 27% of the project area is protected as Volcanoes National Park (163 km²), Gishwati-Mukura National Park (32 km²), and Nyungwe National Park (1,025 km²). Forest plantations are dominated by species of Pinus, Eucalyptus, Alnus, and Acacia. Tea is a high value export commodity and strategically important industry and vehicle for green growth in the western region of Rwanda. The cool climate of the western highlands of the CND region provides the growing conditions for excellent tea, which is known worldwide for its strength and brightness. The Rwandan government has established an objective to increase tea production from 24,000 ha to 35,000 ha.

Smallholder farming is the dominant form of land use in the project area. Most rural households grow beans, maize, Irish potatoes, and sweet potatoes in higher altitudes and sorghum, banana, cassava, and beans at lower altitudes.

Most smallholders keep livestock, primarily for manure, although livestock is also used for meat and dairy products, especially around Gishwati-Mukura National Park. Cultivation takes place in some very steep hills, and many areas of the CND are affected by land degradation and are suffering soil loss. The highest soil erosion risk in Rwanda is concentrated in the CND as compared to the rest of the country.[21] Details of these trends can be found in the Annex 2 of the Feasibility Report.

Changing climate

Climate change is now further degrading Rwanda's fragmented forests by changing their species

20 Seimon, A. (2012). Climatology and Potential Climate Change Impacts in the Nyungwe Forest National Park, Rwanda. Technical Report, New York, NY: WCS.

21 CROM 2018

composition, structure, functional processes, and disturbance regimes and, as a result, is diminishing the ecosystem services these forests provide (FAO 2017) to vulnerable communities. The resilience of forests, i.e., their ability to withstand environmental and climatic shocks, is directly related to their size and connectivity. Climate change is therefore endangering the forest ecosystems and landscapes that are critical for building climate resilience for the 2.3 million people in the CND region. Most of the people in the CND are smallholder farmers living on steep slopes without access to irrigation. Their adaptive capacity is low because their crop yields and livelihoods are vulnerable to rainfall variability and because high population density severely limits their options for relocation in the event of disaster. This is particularly true for women who, until very recently, had fewer land rights than men. The increasing frequency of extreme rainfall events due to climate change – combined with forest loss and degradation - is increasing the loss of lives and property from landslides.[22,23] The CND is the part of Rwanda most vulnerable to floods and landslides[24], and the risk is now escalating due to climate change. For example, a dramatic increase in heavy rains and landslides occurred from 2000-2018 that affected more than 30,000 people in the CND, killing at least 502 and destroying homes of more than 29,750 people. Twenty- nine of these landslides dammed rivers, resulting in loss of fertile soils and pollution of rivers with agrochemicals. The CND loses an average of 1.5 million tons of fertile soil per year from heavy rainfall due to climate change, landslides, and erosion.[25]

Annex 2.1 details the current known and anticipated risks of climate change in the CND with some of these summarized here:

- Temperature increase is already ongoing and likely irreversible throughout the CND region for several decades to come. However, local impacts can be ameliorated considerably, to the benefit of biodiversity and ecosystem services, by restoring forest cover and augmenting moisture retention in the landscape, which both serve to promote increased cloud cover and generate localized cooling.
- Warming is causing uphill displacements of a wide range of organisms and ecological processes -- and possibly even entire montane ecosystems -- with the rate of ascent directly proportional to the magnitude of warming trends. With approximately +2.6°C of warming over 20th century baseline conditions almost certain to occur by mid-century, this translates to a vertical increase on the order of 473 meters from thermal conditions experienced in the recent past prior to anthropogenic climate warming.
- Precipitation seasonality may change, upending annual climatological patterns with potential to disrupt biodiversity, environmental systems and agricultural practices in fundamental ways. This possibility is raised by novel simulations of rainfall along the CND performed for the EAGLE project at ultra-high resolution, which show the total disappearance of the mid-year dry season by the period 2055-64, and sustained thereafter. This requires further investigation and examination of current trends, but the possibility that this may come to pass behooves serious

22 Bizimana, H., & Sönmez, O. (2015). Landslide Occurrences in the Hilly Areas of Rwanda, Their Causes and Protection Measures. Disaster Science and Engineering, 1, 1-7.

23 Nsengiyumva, J. B., Luo, G., Nahayo, L., Huang, X., & Cai, P. (2018). Landslide Susceptibility Assessment Using Spatial Multi-Criteria Evaluation Model in Rwanda. International Journal of Environmental Research and Public Health, 15, 243. https://doi.org/10.3390/ijerph15020243

24 Assessment of climate change vulnerability in Rwanda - 2018", Rwanda Environment Management Authority, Kigali, 2019

25 Nsengiyumva et al. 2018

consideration by environmental planners.

- Precipitation intensity changes, whereby a warming climate will have the consequence of increasing short-period rainfall rates and individual storm totals, especially for the fraction of higher-end events that can cause flash flooding and promote landslides. This is certain to occur, is probably already discernible, and likely to amplify very significantly over time as warming progresses.
- Cloud base altitude, which is highly influential in montane forest ecology and species composition, is likely already elevated above recent past conditions due to conversion of forests to agricultural lands, and certain to rise further in proportion to the degree of warming over coming decades. Ecosystems and species assemblages in the lower reaches of protected forests may already be out of balance with this important environmental variable, and this imbalance will only increase over time, promoting rapid species turnovers, enhancing potential for invasives, and act as a strong driver of upward range extensions.
- Fog interception by vegetation also augments montane forest precipitation by an estimated 10%, so rising cloud bases will act to remove this important hydrological input too. Highland forest loss therefore represents a local loss to the ecosystem service of rainwater provision (by about 10%) that could be partially restored through reforestation.
- It is unclear if wildfire risk is or is not increasing significantly, but can likely be managed through enhanced vigilance during drought events.

Without strategic actions to confront mounting stresses borne by climate change interacting with unsustainable land-use practices, the CND would doubtless undergo a profound transformation over coming decades with significant loss of biodiversity and ecosystem services, reducing agricultural potential, severe hazards to humanity and loss of livelihoods. Temperature increase and loss of fog immersion will cause desiccation of the lower margins of protected forests promoting die-offs, arrival of pests, pathogens and invasive species, and increasing fire ignition potential. Current cultivation practices of both subsistence crops and valuable cash crops like tea and coffee will be drawn uphill, adding to pressure to convert protected forests to farmland.

Whereas climatic changes will act as inexorably mounting stressors, unsustainable land surface conversion and land use practices will greatly exacerbate their impacts. The steep hillsides that characterize much of western Rwanda will experience intensifying erosion and risk of landslides, while built infrastructure such as road and bridges will be overwhelmed since they were engineered to withstand rainfall intensities expected under past climatic conditions that are sure to be exceeded, and with increasing frequency, as time progresses and temperatures steadily increase. Precipitation intensity will increase for short-period rainfall rates and individual storm totals, especially for the fraction of higher-end events that can cause flash flooding and promote landslides. This is certain to occur, is probably already discernible, and likely to amplify very significantly over time as warming progresses. This ties directly to landslides in particular, which already cause high mortality and significant destruction each year, and the CND's elevated vulnerability due to high topographic relief and deforested slopes makes this hazard of paramount concern to address

Significant temperature increases are almost certain to continue for decades to come, and will have mounting impacts on both natural and human systems along the CND, and some are already

discernible. Over equatorial Africa, observed environmental lapse rates feature temperature decreases by approximately 5.5 C per kilometer of elevation increase[26], so 2 C of warming expected by mid-century translates to a vertical rise on the order of 473 meters, promoting large uphill displacements of a wide range of organisms, ecological processes, cultivars and human activities. While temperatures over the CND region are not expected to rise to levels for heat stress to elevate mortality[27] or reduce labor productivity, the indirect effect of rising temperatures through increased disease incidence is substantial[28].

Western Rwanda is the most productive region in the country for the cultivation of both tea and coffee, where conditions are optimized on the CND's sloping terrain. Both are cash crops with high export value, and are the target of active expansion through both governmental programs and private enterprise. Intensifying environmental stresses from climate change particularly due to thermal increases and the arrival of invasive pests from lowland regions, present challenges both for current plantings and in planning for expansion to new areas; the same concerns apply to other cultivars.

Cloud base altitude, which is highly influential in montane forest ecology and species composition, is likely already elevated above recent past conditions due to conversion of forests to agricultural lands, and certain to rise further in proportion to the degree of warming over coming decades. Ecosystems and species assemblages in the lower reaches of protected forests may already be out of balance with this important environmental variable, and this imbalance will only increase over time, promoting rapid species turnovers, enhancing potential for invasives, and act as a strong driver of upward range extensions. Rising cloud bases in concert with warming temperatures also increase drying of vegetation, enhancing wildfire risk during rain-free periods. Fog interception by vegetation also augments montane forest precipitation by an estimated 10%, so rising cloud bases will act to remove this important hydrological input too. Highland forest loss therefore represents a local loss to the ecosystem service of rainwater provision that could be partially restored through reforestation.

Such challenges highlight how essential highland forests are to the climatic resilience of CND communities, for the ecosystem services and products they provide for both the region's vulnerable communities and the national economy. They also recharge aquifers; regulate water flow; control flooding; retain soil; provide wood fuel energy and timber; underpin the country's tourism, which provides the largest contribution to Rwanda's foreign exchange earnings[29]; and provide wider benefits of atmospheric pollution control that sustain the country's economy and the wellbeing of its people[30].

Forest conversion to farmland in the CND highlands has until recently served as a release valve for

26 Camberlin, P., 2018. Climate of Eastern Africa. In Oxford Research Encyclopedia of Climate Science. Link

27 Asefi-Najafabady, S., K. Vandecar, A. Seimon, P. Lawrence and D. Lawrence, 2018: Climate change, population and poverty: vulnerability and exposure to heat stress in East Africa. Climatic Change, 148, 561-573.

28 World Bank, 2022: Rwanda Country Climate and Development Report. World Bank, Washington DC. Link

29 Rwanda Development Board 2017 Annual Report Link

30 Andrew, G. and Masozera, M., 2010. Payment for ecosystem services and poverty reduction in Rwanda. Journal of sustainable development in Africa, 12(3), pp.122-139.

lowland population pressure at the expense of drastically reduced national carbon stocks, diminished resilience to climate change, enhanced potential for destructive outcomes, reduced ecosystem service provision and disrupted biological connectivity. The resultant loss of ecosystem services and functioning and intensifying environmental stresses borne by climate change now require redirection towards forest restoration and other actions to ensure a sustainable future. Safeguarding the Congo-Nile Divide's remaining highland forests, and setting long-term goals of reforesting functional linkages connecting them, therefore serve Rwanda's national long-term interests on lessening the severity of impacts of climate change and sustaining critical ecosystem services both locally and downstream, while contributing to global efforts to draw down greenhouse gas concentrations.

Finally, beyond actions to address hazards and stresses outlined above, the CND landscape would benefit from expansion of meteorological monitoring and climatological data collections. The present network of formal monitoring sites in western Rwanda is concentrated along the Lake Kivu shoreline and riverine corridors east of the CND. This highlights a need and opportunity to expand monitoring with real-time reporting in most vulnerable areas such as high relief terrain prone to landslides, and near ridgelines where precipitation receipt is maximized.

Population density

The basic demographic features described in the 2012 Thematic Report on Population Size, Structure and Distribution (NISR 2012b) have informed the design of the present project and the trends and tendencies identified there have continued unabated, increasing the urgency of taking steps to make rural production systems more resilient. In 2012, the total population of Rwanda was found to be 10.52 million people, of which 52% were women and 48% were men. At that time, the country was experiencing an annual population growth rate of 2.6%, since 2002. By 2012, this had resulted in a mean population density of 415 inhabitants/km², up from 321, in 2002.[31] By 2016, based on this growth rate, Rwanda's population was estimated to have grown to 12.72 million with a mean density of 495 inhabitants/km², the highest density in Africa (Imasiku and Ntagwirumugara 2020; by comparison the mean population of Eastern Africa is 59.2 per km^2).[32]

Not surprisingly in the context of rapid population growth, Rwanda's population is young. In 2012, half the population was 19 years of age or younger, and this continued to be the case in 2019. Conversely, less than three percent of the population was 65 or older in 2012, and this remained the case in 2019.[33,34] See Figure 7, below. This has important consequences, which may be seen when one notes the national dependency ratio – the number of people who are theoretically of inactive economic age that need to be supported by those who are of an economically active age.

31 National Institute of Statistics of Rwanda (NISR). 2012a. Thematic Report: Agriculture. Third Household Living Conditions Survey (EICV3). Ministry of Finance and Economic Planning (MINECOFIN).

32 United Nation. World Population Prospects: The 2015 Revision. Population Division. 2015. Available online: http://esa.un.org/unpd/wpp/

33 National Institute of Statistics of Rwanda (NISR). 2012b. Thematic Report: Population Size, Structure and Distribution. Rwanda Fourth Population and Housing Census. Ministry of Finance and Economic Planning (MINECOFIN).

34 Imasiku, K. and E. Ntagwirumugara. 2020. An Impact Analysis of Population Growth on Energy-Water-Food-Land Nexus for Ecological Sustainable Development in Rwanda. Food and Energy Security 9(1): e185. https://doi.org/10.1002/fes3.185

Nationally, in theory, every 100 people of economically active age need to support 93 economically inactive people. Broken down by urban versus rural populations, every 100 economically active people in urban areas must support 67 economically inactive people, while every 100 economically active people in rural areas must support another 100 economically inactive people [35] This is, of course, a fiction in the sense that whether people are classified as being at an economically active or economically inactive age does not reveal much about the productive roles they actually play.

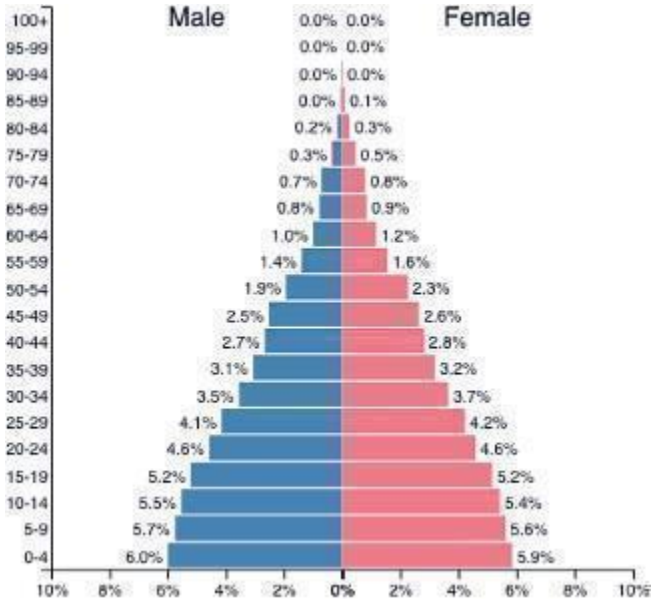

Figure 7. Rwanda Population Distribution, by Age, 2019[36]

However, in the context of the population growth Rwanda has experienced, and continues to experience, and the large number of young people that make up the population, the concept does provide insight into the importance of expanding economic opportunities, especially for youth in rural areas. Similarly, in the context of Rwanda's population being 53% women, coupled with the National Gender Policy to address women's rights, expanding economic opportunities to women of all ages and socio- economic classes is particularly important for the long-term success of any new projects.

Population Density in the CND

The CND overlaps three Provinces (Western, Southern, Northern) and 10 Districts (Karongi, Musanze, Ngororero, Nyabihu, Nyamagabe, Nyamasheke, Nyaruguru, Rubavu, Rusizi, Rutsiro)[37]. The population of the CND is mostly in the north with a few larger settlements scattered throughout surrounded by a mostly rural farming and pastoral landscape.

35 NISR 2021b.

36 Source: Population Pyramids of the World, Population Pyramid.net.35

37 PPF Interim Report 2021

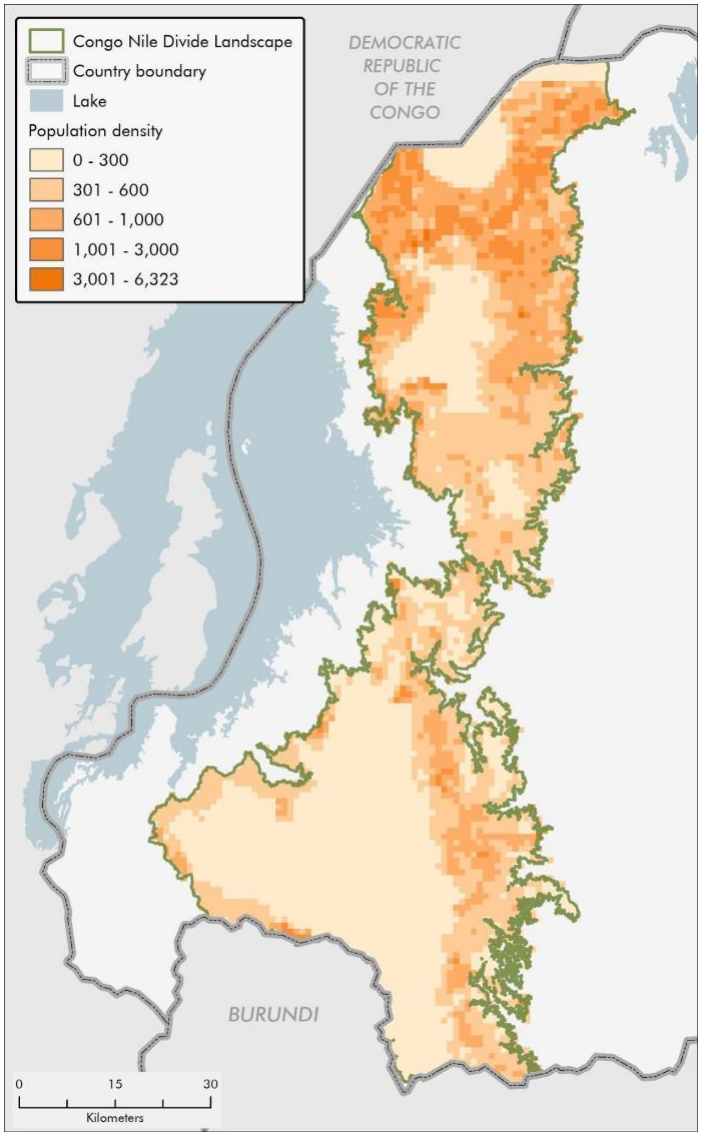

Figure 8. Population density per square kilometer for the Congo Nile Divide. Data sourced from the (WorldPop, 2020).

Table 3 provides an overview of population distribution in the CND by district. Population density ranges from 281 people per km^2 in Rutsiro to 1,039 people per km^2 in Rubavu.

Table 3. Population distribution in the CND by district (National Institute of Statistics, 4th Census, 2012).

Area	Population (2012)	Population density (2012)	Male (2012)	Female (2012)	% of total population (2012)
Whole Country	10,537,222	416	5,074,942	5,462,280	100
CND (Total)	3,477,128	474 people/km^2 (mean)	1,643,392	1,832,402	32.4
Musanze	368.267	694	174.399	193.868	3.4
Rusizi	400,858	418	192,528	208,330	3.8
Rutsiro	324,654	281	154,044	170,610	3.0
Nyamagabe	341,491	313	161,219	180,272	3.2
Nyabihu	294,740	555	137,799	156,941	2.7
Karongi	331,571	334	155,887	175,684	3.1
Ngororero	334,413	493	154,827	179,586	3.1
Rubavu	403,662	1039	194,989	208,673	3.8
Nyaruguru	294,334	291	139,279	155,055	2.7
Nyamasheke	383,138	325	178,421	203,383	3.6

Source: NISR, 2012

One outcome of Rwanda's population growth is that demographic pressure on land and natural resources limits options for changing patterns of land use, to make rural production systems ecologically more resilient and generate new economic opportunities, in important ways. Rwanda has about 1.4 million hectares of arable land, which accounts for about 52 percent of the country's

surface area. However, the actual area cultivated is greater than 1.6 million hectares, due to non-arable areas that are used for pasture, the expansion of peasant agriculture onto areas that are not suitable for cultivation and the expansion of farms onto partially cultivated marshlands. The result is that about 70 percent of Rwanda's land area is used for some form of agriculture. This creates pressure at the nexus where management of energy, food, water, and land intersect so that any action that might potentially be undertaken in one area will have important consequences that must be accounted for and addressed in the other areas.[38]

The scarcity of land for agriculture in rural Rwanda is reflected in the country's land distribution. In rural Rwanda, 83 percent of households have landholdings that are less than 0.9 hectares in area. This fragmentation is even more pronounced in the project area, with 88 percent of households in Southern and Western Provinces having landholdings smaller than 0.9 hectares (NISR 2012a). See Table 3 below.

Table 3: Distribution of Cultivated Land by Land Size, urban/rural population, province and quintile. Source: NISR 2012a, p. 3, Table 2.2)

EICV3	Mean size of cultivated land (ha)	Median size of cultivated land (ha)	Size of cultivated land				Total	No.of HHs cultivating land for crop production (000s)
			<0.3 ha	0.3-0.9 ha	0.9-3 ha	>=3 ha		
All Rwanda	0.59	0.33	45.8	37.6	14.7	1.9	100.0	2,095
Urban	0.46	0.15	67.3	21.1	9.0	2.6	100.0	219
Rural	0.60	0.35	43.3	39.5	15.4	1.8	100.0	1,875
Kigali City	0.58	0.10	70.3	19.4	7.7	2.6	100.0	124
Southern Province	0.55	0.29	51.2	36.4	10.5	2.0	100.0	533

38 Imasiku, K. and E. Ntagwirumugara. 2020.

EICV3	Mean size of cultivated land (ha)	Median size of cultivated land (ha)	Size of cultivated land				Total	No.of HHs cultivating land for crop production (000s)
			<0.3 ha	0.3-0.9 ha	0.9-3 ha	>=3 ha		
Western Province	0.48	0.28	52.1	35.9	10.5	1.5	100.0	508
Northern Province	0.52	0.33	46.0	39.7	13.5	0.8	100.0	404
Eastern Province	0.78	0.51	28.3	43.1	25.8	2.8	100.0	525
Q1	0.37	0.23	61.6	31.1	6.6	0.6	100.0	376
Q2	0.49	0.33	45.5	41.6	12.4	0.5	100.0	405
Q3	0.54	0.36	42.1	41.6	15.2	1.0	100.0	438
Q4	0.67	0.41	38.6	40.5	18.3	2.6	100.0	467
Q5	0.83	0.38	43.5	32.0	20.0	4.5	100.0	409

The conversion of forest land in Western Rwanda has been an important manifestation of the pressures of population on energy, food, water, and land. Between 1986 and 2006, the region lost approximately 19 percent of its initial forest cover. The pace of forest conversion then peaked between 2010 and 2014. The primary causes were the expansion of pastureland and the expansion of public infrastructure, in particular the expansion of electricity into rural areas, which created a large demand for poles. However, the area under forest cover has actually increased by about 17 percent between 1986 and 2019, as a result of fast-growing tree species for fuelwood and timber and the incorporation of tree crops into what were previously annual crop farming systems. The growth of tea plantations has also contributed to increases in the amount of land under forest cover. Thus, increased forest cover is a manifestation of practices that have contributed to farming expanding beyond Rwanda's base of arable land and masks a loss of resilience as people face the impacts of climate change.

Presence of Historically Marginalized Groups, Migrants, Refugees and Pastoralists

Within the CND, the Gishwati Forest Reserve supported two indigenous populations until the 1980s: Bagogwe pastoralists and Batwa hunter-gatherers. The World Bank Gishwati-Kigali-Butare Agro-sylvo-pastoral project in the early 80s initiated massive forest clearing and conversion to pasture lands and tree plantations, driving these groups into much smaller remnant patches. This process was accelerated by former government officials after the World Bank canceled the project under heavy criticism[39]. The Bagogwe were among the first victims of the Rwandan genocide and have no current presence in Rwanda[40]. The remaining historically marginalized groups (formerly Batwa) today live in small settlements completely outside the forest with other groups. In Rwanda today the Batwa number 25000-30000 or 1% of the population and have loosely organized associations with one representative in the government[41]. Given the history of the group and of Rwanda as a nation, these communities are among the most impoverished as they previously used forest resources and pottery, and have gradually transitioned away from those resources as the conservation status of remaining natural forests in the CND has changed from forest reserve to national parks. Historically marginalized groups tend to be extremely disadvantaged in mainstream society and the cash economy, and have little opportunity or standing to make claims to historical land areas without being fully recognized as a distinct group. There are ongoing government efforts in the region to integrate historically marginalized into the local communities as no forest or land remains for more traditional lifestyles and a major effort of the government is to target vulnerable and historically marginalized to build more sustainable livelihoods despite a difficult history. Under the current systems, these groups are considered part of categories c,d, and e.

Women Face Vulnerabilities in Rwandan Society

Since 1994, Rwanda has made significant progress in empowering women and countering the numerous inequities and discrimination to which women were historically subjected. Today Rwanda has one of the most progressive, gender equitable policy frameworks of any country in Africa, and has established and funded the Ministry of Gender and Family Promotion and the Gender Monitoring Office to oversee the implementation of these gender progressive policies.

There is no single definition nor understanding of gender equality and women's empowerment, and the meaning, and reality of these terms differs across communities and cultures and over time. That said, the Government of Rwanda holds the simple belief in the fundamental equality of all people. In a just society, men and women of all ages, at a minimum, should have the same rights to self-determination, should be equally represented at all levels of political leadership, and should not be subject to discrimination or gender-based violence.

Despite these commitments, the reality on the ground is that of a large discrepancy among women's attainment in education, poverty levels, ability to control assets, and exposure to gender-based violence (see ANNEX 8 for details). That said, rural women continue to play a vital role in ensuring the wellbeing and security of their families. But being the caretaker of the family is getting harder for women as farmland becomes increasingly scarce, as soil erosion and declining soil fertility lowers crop yields, and as fuelwood, fodder and clean water take ever longer to find and carry

39 Bankrolling Disasters. 1986. Sierra Club; Weber & Vedder. 2001. In the Kingdom of Gorillas.

40 Des Forges, A. 1999. Leave none to Tell the Story

41 International Work Group on Indigenous Affairs. Accessed at https://www.iwgia.org/en/rwanda/3592-iw-2020-rwanda.html (last visited 29 October 2022)

home. Changes in rainfall timing and intensity, driven by climate change, will further exacerbate the challenges women will face to meet the needs of their families. This is especially true given the gender stereotyping still prevalent in rural Rwanda.

Women's ability to make decisions within both their own households and broader Rwandan society is further hampered by GBV. The effects of a longstanding patriarchal regime in the country has created and perpetuated the notion that men must be dominant and women must be submissive. Women break these gender norms by asserting their right to be involved in decision-making, and this can be seen as diminishing their husband's masculinity, which can result in violent retribution. In 2010, around 57% of Rwandan women reported experiencing GBV from their partner, and women who bring in more money tend to experience higher levels of GBV (RWAMREC, 2010). This suggests that increasing women's opportunities to make decisions and earn their own income will have a very limited effect on female empowerment until GBV is addressed. Engaging men and boys in gender equality advocacy and action highlights that GBV is not only a women's issue, and is believed to be successful in reducing the prevalence of GBV (UNDP, 2018).

4.3. Ecosystem Services Linking Biophysical and Social Environments

The ecosystem services attributed to these forests, and relied on by the local communities, include and are not limited to; services, natural products and processes as well as personal and social use of natural habitats. Ecosystem services are generally divided into 4 categories:

- Natural products (provisioning services) from ecosystems, such as;
    - Food (Crops and livestock, wild fish, wild foods).
    - Biological raw materials (timber, wood products, fibres).
    - Medicines.
    - Fresh water.
    - Pastures.
    - Biomass fuels.
- Natural functions (regulating services) controlling natural processes, including;
    - Climate.
    - Carbon storage.
    - Disease and erosion control.
    - Biodiversity maintenance.
    - Flood attenuation.
    - Water flow regulation.
    - Sediment trapping.
    - Groundwater recharge and discharge.
    - Maintenance of vegetation.
    - Waste (nitrate and phosphate), toxicants, and gas assimilation.
    - Pollination.
- Social benefits (cultural services) are the non-material benefits obtained from ecosystems, such as;
    - Recreation.
    - Spiritual values.
    - Aesthetic enjoyment.
- Furthermore, supporting services are included as the natural processes that maintain the

other ecosystem services, including;

- Nutrient cycling and maintenance of biogeochemical processes and the transfer of chemicals through water through the ecosystem.
- Primary production (i.e., photosynthesis).

In the case of the forests these act as natural carbon sinks and can have direct benefits to the surrounding communities if the Rwanda Government has not used this as part of their national declaration, by leveraging such programmes as;

- REDD+ projects are playing an important role by implementing site-based activities that directly engage local communities to stop deforestation and forest degradation effectively. While government strategies and programs provide the legal and policy frameworks for addressing deforestation and degradation, projects are able to work deeply in a particular place with local communities to address site-specific drivers of deforestation and degradation, driving finance to these critical high-threat areas and the communities that depend on them.
- Quantification of net greenhouse gas (GHG) emission reductions and removals from project activities that prevent conversion of forest to non-forest.

Combined with the details presented in the climate vulnerability assessment and summarized above in section 4.2, the potential for loss of ecosystem services and increased vulnerability to climate changes will be cyclical if not addressed with immediate actions to increase forest cover.

4.4 Socio-economic Status -- Rwanda

Rwanda has undergone several development phases starting from the aftermath of the genocide against the Tutsi in 1994 which focused on recovery; the early 2000s, when the Vision 2020 was elaborated and gave a blueprint for a new Rwanda embarking on economic development aspirations, and, post-2010, a period that intensified efforts to lay foundations for sustained growth by investing in human capital, developing basic infrastructure, and expanding access to various services.

Since 2000, Rwanda has experienced a rapid socio-economic and demographic transformation. The real gross domestic product (GDP) during the period 2007-2017 rose from RWF 3.26 trillion to RWF 6.69 trillion, or by an average of 7.45% per year[42]. Poverty declined from 77% in 2001 to 55% in 2017, while life expectancy at birth improved from 29 in the mid-1990s to 69 in 2019. The maternal mortality ratio has fallen from 1,270 per 100,000 live births in the 1990s to 290 in 2019. The official inequality measure, the Gini index, declined from 0.52 in 2006 to 0.43 in 2017[43]. Also, in 2015, the NISR reported the working population (16 years and above) in Rwanda to be 6.4 million, with females representing 54% and males 46%.

Agriculture is an important sector of the Rwandan economy and contributed 26% to the national GDP in 2020[44] with almost 90% of households practicing traditional subsistence agriculture, mainly

42 NISR, 2018

43 https://www.worldbank.org/en/country/rwanda/overview

44 NISR, 2021

on narrow plots of land exhausted by continuous utilization. This sector employs over 64% of the working population and is characterized by low productivity and low economic value[45]. The majority of Rwandan households are reliant on agriculture for food and income.

The services and tourism sector is a major driver of economic growth in Rwanda, contributing 15.1% to GDP in 2019. Key growing service areas include banking, insurance, and transport. Services exports grew by 10% per annum between 2009 and 2014. The travel sector (including tourism) has steadily increased its share of total services exports in recent years. In 2019, tourism revenues amounted to US$498 million (17% increase from 2018) constituting 50.1% of all service exports.

Despite solid progress since 2000, poverty remains widespread and pervasive. Overall, 38.2% of the population lives in poverty and 16% in extreme poverty[46]. Rwanda's poverty profile indicates that women are more affected by poverty than men, with 47% of female-headed households poor compared with 44.9% of all households. As in many countries, poverty has important geographical dimensions. Rural households are more than twice as likely to be in poverty and extreme poverty than urban households. Table 4 shows the percentage of population living in poverty and extreme poverty conditions for 2016/2017.

Table 4. Poverty and extreme poverty in Rwanda[47]

Location	Poor [%]	Extreme poor [%]
Nationally		
Country-wide	38.2	16
Area of residence		
Urban	15.8	5.9
Rural	43.1	18.1
Province		
Kigali city	13.9	4.2
Northern Province	42.3	17.4
Southern Province	41.4	16.9
Eastern Province	37.4	15.3

45 Idem

46 National Institute of Statistics (NISR), 2017. The Fifth Integrated Household Living Conditions Survey (EICV5), 2016/2017.

47 National Institute of Statistics (NISR), 2017. The Fifth Integrated Household Living Conditions Survey (EICV5), 2016/2017.

Location	Poor [%]	Extreme poor [%]
Western Province	47.1	21.6

4.4. Socio-economic Status – CND

Districts of the Western and Southern Provinces in the CND region have the highest rates of poverty and extreme poverty in the country (Figure 9). Some of these districts also have high levels of stunting prevalence.[48]

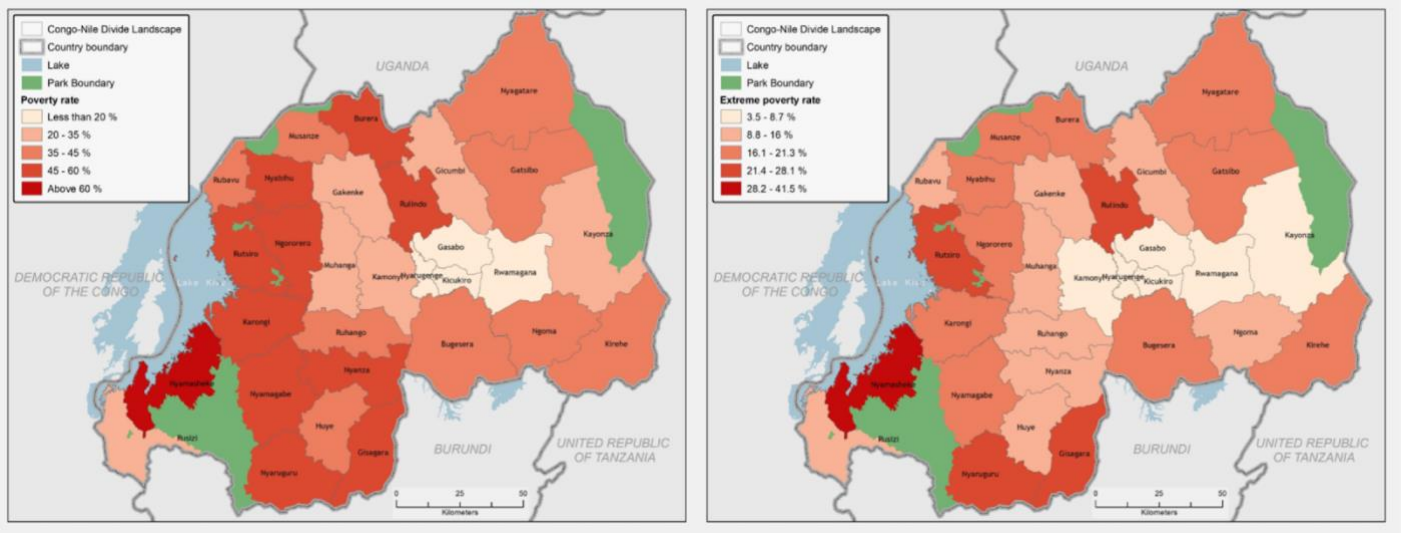

Figure 9. Poverty and extreme poverty rates by district 2017[49]

Major economic activities in the CND region include tourism, agriculture and mining. Major crops include coffee and tea, banana, maize, beans, cassava and sweet potatoes. Most rural households are smallholder subsistence farmers growing beans, maize, Irish potatoes, and sweet potatoes in higher altitudes and sorghum, banana, cassava, and beans at lower altitudes. Primary cash crops include tea and coffee; cultivation of crops for export is increasing and tea plantations are in expansion. Some commercial enterprises, such as the tea industry, engage local farmers through out-grower schemes. Farmers also form cooperatives to collect, wash and sell coffee, including specialty Arabica Bourbon coffee. Climate model projections suggest that suitable areas for production of Arabica coffee in Rwanda are likely to decline by as much as 50%.

Livestock as an alternative source of household income and food is kept by more than 80% of households in the CND region. The livestock consists mainly of cows, goats, pigs, sheep, poultry, and rabbits.

48 Rwanda Nutrition Situation Analysis and Policy Implications

49 National Institute of Statistics of Rwanda (NISR), EICV5_Environment and Natural Resources Thematic Report, December 2018

4.6 Land Tenure and Land Use

The Constitution of the Republic of Rwanda recognizes state and private property and grants every citizen the right to private property, whether held individually or in association with others. The state has the authority to grant rights to land, including private ownership rights, and to establish laws governing land acquisition, transfer, and use. State land is classified as public or private; public land cannot be alienated. Customary land (and collective customary land) is no longer recognized in Rwanda, which makes it unique among sub-Saharan African countries. Instead, land is held by individuals and families (GOR Constitution 2003, rev 2015).

In 1999, the Government of Rwanda adopted the Succession Law, which established equal inheritance rights for women and men[50]. Following adoption of the 2004 National Land Policy, which laid the foundation for land tenure reform, the 2005 Organic Land Law (OLL) outlined procedures for land tenure and titling, registering land and administering land titles, and guidance for land use and development[51].

The Rwanda Land Dashboard (https://rwandalanddashboard.rlma.rw/o45@d) is an interactive national land data visualization platform and provides data on land ownership. Rwanda is primarily used for farming and/or livestock development. Based on the National Land Use and Development Master Plan 2020-2050, 41.6% of the country's land area is used for agriculture, although only 31.9% is highly suitable for agriculture. 27.5% of the land cover is forest, however only 19% is natural forest; the remainder is area surface for forestry. The growing population combined with strong reliance on agriculture make land one of the scarcest resources in Rwanda. The majority of Rwandan households cultivate at least one parcel of land, and most of them are directly reliant on agriculture as their main or only source of income, especially in rural areas (94%) in 2016/17[11].

While the Rwanda Land Dashboard and other surveys of land ownership do not allow for extraction of data to the precise CND boundaries, data is available at the provincial level. Land scarcity is a severe problem in the Western Province (which broadly overlaps with the CND), with average land size per household being only 0.4ha, and over 60% of farmers cultivating an area of less than 0.3ha[52]. Without agricultural productivity improvements (e.g. terracing, agroforestry activities), producing a sufficient amount of food and fuelwood on such small land parcels is extremely difficult, leading to substantial pressure on natural and plantation forests. Similarly, small landowners are highly susceptible to climate-worsened natural disasters such as landslides, as a single event can lead to complete loss of crops for a household.

50 Daley, Dore-Weeks, & Umuhoza. (2010). Ahead of the Game: Land tenure reform in Rwanda and the process of securing women's land rights. Journal of East African Studies, 4 (1): 131-152. http://dx.doi.org/10.1080/17531050903556691

51 Gillingham, P.; Buckle, F. Rwanda land tenure regularisation case study. Evidence on Demand, UK (2014) 40 pp. [DOI: http://dx.doi.org/10.12774/eod_hd.march2014.gillingham]

52 EICV 5 report 2016/17

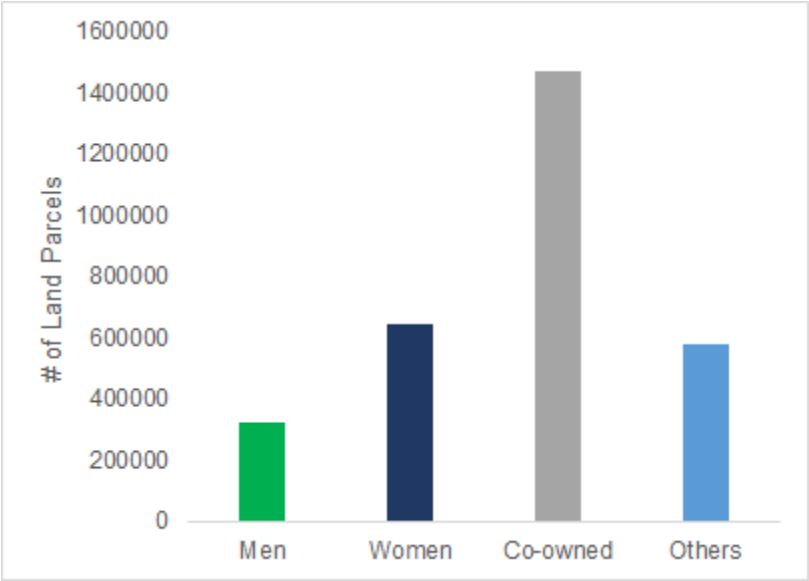

Figure 10. Land parcel ownership statistics in the Western Province. Source: Rwanda Land Dashboard (https://rwandalanddashboard.rlma.rw/o45@d)

In the Western Province, the vast majority of land parcels are co-owned by both men and women (Figure 10). Of parcels owned by a single person, women own around double the number of land parcels compared to men (Figure 5). About 80% of crop growers have ownership rights over their land and can use it as a guarantee for a loan. The Northern Province has the highest percentage with 89% of households having land rights and the possibility to use it as a guarantee. The other three provinces have similar levels of land rights: Southern Provinces: 77%; Eastern Province: 78%; Western Province: 81%.

The Land Law N° 27/2021 of 10/06/2021 classifies land as either individual land or state land. Individual (i.e., private) land can be obtained under principles of customary law or under formal law. State land includes: (1) state land in the public domain (e.g., lake shores, national parks, roads, tourist sites), which generally cannot be alienated; (2) state land in the private domain of the state.

The National Land Policy of 2004 provides that: (1) all Rwandans will enjoy the same rights of access to land; (2) all land shall be registered and land shall be alienable; (3) consolidation of household plots is encouraged; and (4) land administration shall be based on a title deeds registration system (GOR Land Policy 2004).

Land use is largely influenced by a number of factors, the main ones being climate, socioeconomic (culture, and population growth, conflict and resettlement), and government policies. Almost 47.2% of the country's land is used for agriculture, with 12,433 km² under cultivation (NLUDMP 2020-2050). The country has 2,068 km² of wetlands, of which about 62% is cultivated[53]. The trend in recent decades has been the expansion of settlements and infrastructure areas and thus loss of agriculture pasture, forestland, and woodlots[54].

53 National Land Use and Development Master Plan (2020-2050)

54 Rwanda Environment Management Authority (REMA), 2009. Rwanda: State of Environment and Outlook Report 2009. Kigali: Rwanda Environment

Land Use and Degradation in the Congo Nile Divide Region -- Project Area

Major land uses in the CND region include natural forests, planted forests, tea plantations, pasturelands, subsistence agriculture, roads and public facilities and urban and rural settlements. 27% of the project area is protected as Volcanoes National Park (VNP) (163 km²), Gishwati-Mukura National Park (GMNP) (35.58 km²), and Nyungwe National Park (NNP) (1,019 km²). Forest plantations are dominated by species of Pinus, Eucalyptus, Alnus and Acacia. Tea is a high value export commodity and a strategically important industry and vehicle for green growth in the western region of Rwanda. The cool climate of the western highlands of the CND region provides the growing conditions for excellent tea, which is known worldwide for its strength and brightness. The Rwandan government has established an objective to increase tea production from 24,000 ha to 45,000 ha through the expansion of out-grower programmes linked to privately owned tea processing factories[55]. The targeted areas for tea expansion in the CND region are in Nyaruguru, Karongi, and Nyamasheke districts where climate, soil, altitude, rain and other conditions are suitable for tea growing[56]. It has been estimated that 6,300 ha of forest plantations will have to be established to meet the energy needs of 21,000 ha of tea plantations[57]. The targeted growth in tea production, increasing population, land scarcity and competing demand for land by various industries are likely to put additional pressure on forest ecosystems and the services they provide in the CND.

Also, given the fact that targeted areas for tea expansion overlap with priority areas for landscape restoration and high biodiversity value, it is obvious that without cross-sector linkages and better land use planning these priorities may be in conflict and dramatically reduce the effectiveness of any one alone. Within the context of a particularly 'human-dominated' landscape, such as Rwanda, it is key to identify large-scale, cross-sectoral opportunities (agriculture, forestry, tourism, and climate change) to safeguard remaining natural ecosystems for their ecological, social and economic benefits.

Management Authority-Republic of Rwanda

55 Strategic plan for Agriculture Transformation 2018-2024

56 https://naeb.gov.rw/index.php?id=47&type=rss

57 Personal communication from the Director of Nyabihu Tea Factory

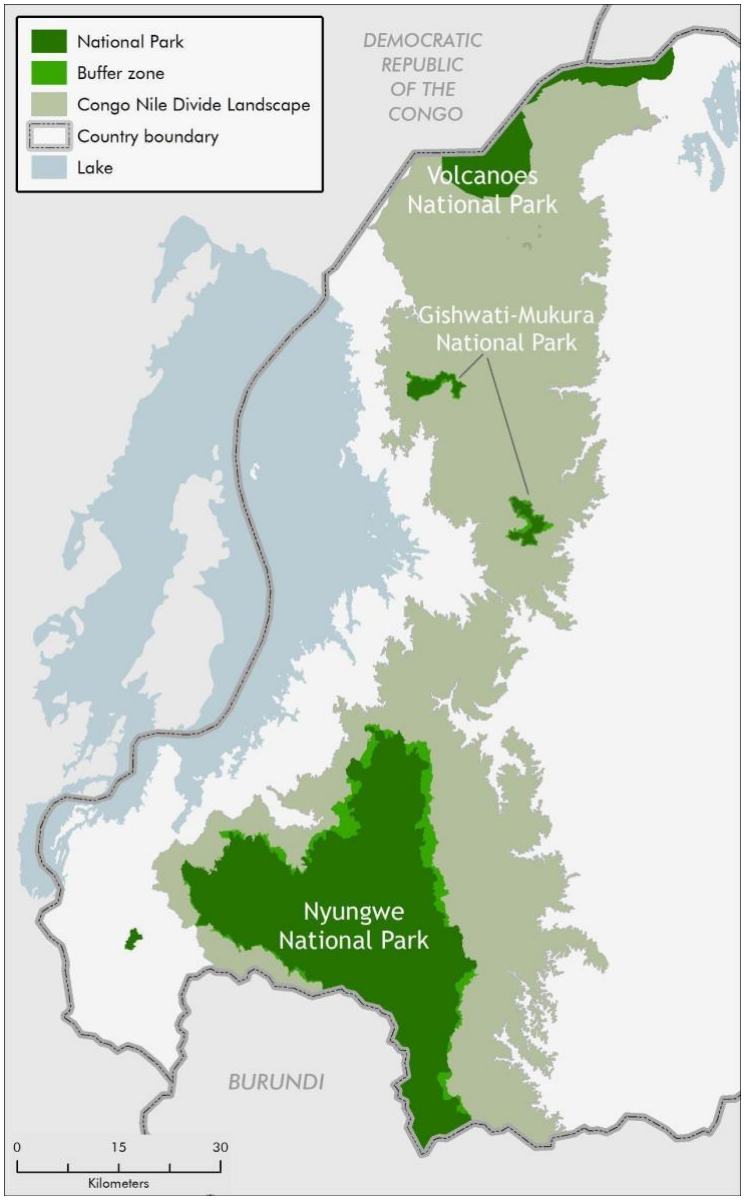

Figure 11. Map of national parks and their buffer zones within the CND Landscape.

The Upgraded Seasonal Agricultural Survey (USAS) in 2020 estimated that the area of agricultural land in the 10 districts of the CND is 385,000 hectares (52% of total land area). In the 2019/2020 agricultural year, the total physical crop area under cultivation was estimated at 328,000 hectares. The area under permanent crops increased from 123,000 ha in season A to 133,000 ha in season B. These estimates include the total area of all CND districts, rather than the precise CND boundaries, as data is collected at the district level. However, the patterns are likely to be very similar within the CND boundaries.

Smallholder farming is the dominant form of land use in the project area. Most rural households grow beans, maize, Irish potatoes, and sweet potatoes in higher altitudes and sorghum, banana, cassava, and beans at lower altitudes. Most smallholders keep livestock, primarily for manure, although livestock is also used for meat and dairy products, especially around Gishwati-Mukura

National Park. The project area has distinct characteristics of land fragmentation. In 10 districts of the CND region in the Western, Northern, and Southern provinces, 40-50% of farmers have farmland covering less than 0.2 ha. Extremely small farms are concentrated in the Western Province (31% of national total). In Rubavu district, Western Province, almost 70% of farmers have plots smaller than 0.2 ha[58].

Cultivation takes place in some very steep hills and many areas of the CND are affected by land degradation and are suffering soil loss. The National Land Use and Development Master Plan 2020-2050 prioritizes forest conservation, rather than agriculture, on slopes >55%, and these areas should be reforested or afforested to increase ecosystem services.

The highest soil erosion risk in Rwanda is concentrated in the CND[59]. Figure 10 below shows that the CND has predominantly high erosion risks with the top three categories most represented. (i) High erosion risk with 25-50 t/ha/year, (ii) Very high erosion risk with 50-100 t/ha/year, and (iii) Extremely high erosion risk with more than 100 t/ha/year. The extremely high erosion risk category covers 33,154 ha, the Very high risk covers 65,922 ha, while the high covers 61,472 ha. Table 5 below shows the risk categories and their corresponding areas per district in the CND.

Table 5. Soil erosion risk categories per district in the CND[16]

Soil Erosion Risk	Extremely high (ha)	High (ha)	Very high (ha)	Total (ha)
KARONGI	2,900	7,946	5,761	16,607
MUSANZE	1,033	2,728	2,548	6,309
NGORORERO	5,665	10,102	10,829	26,596
NYABIHU	2,271	8,989	6,733	17,993
NYAMAGABE	4,447	10,686	12,729	27,863
NYAMASHEKE	2,831	3,152	3,448	9,432
NYARUGURU	4,996	8,121	8,444	21,560
RUBAVU	1,598	2,206	2,243	6,047
RUSIZI	7	379	55	441
RUTSIRO	7,406	7,163	13,132	27,701
Grand Total	33,154	61,472	65,922	160,548

58 NISR, EICV4 2013/2014

59 MOE (2020). Rwanda Erosion Control Mapping

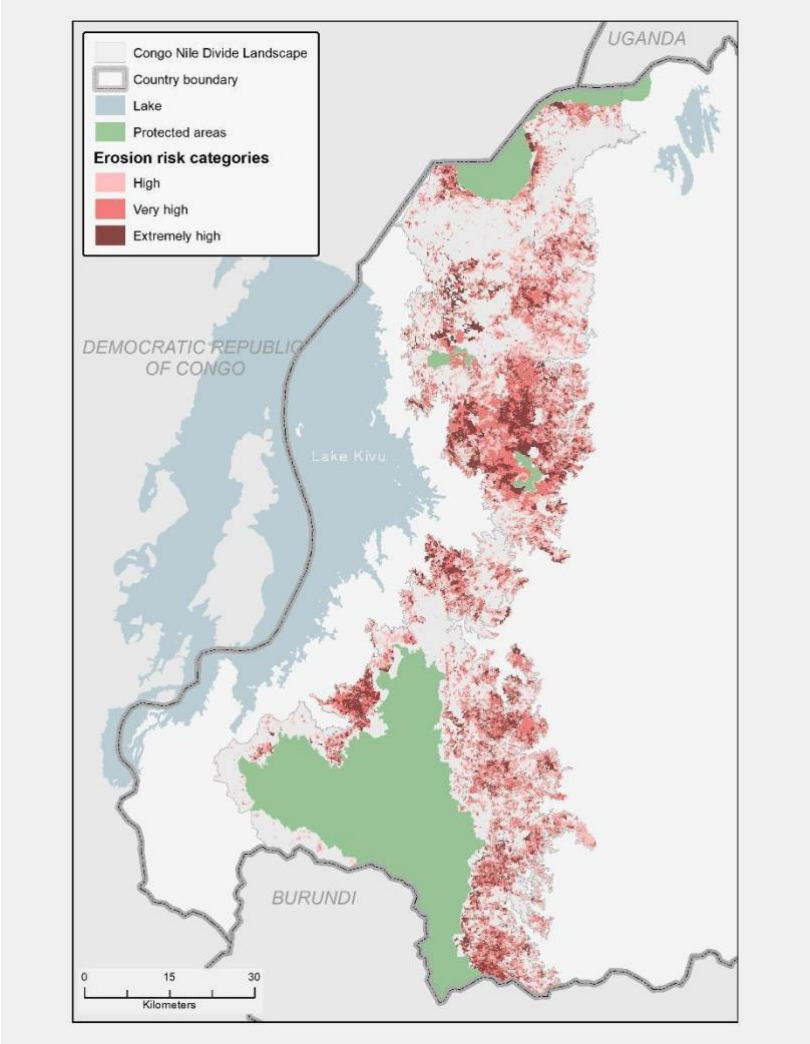

Figure 12. Top three erosion risks categories in the CND (High: 25-50 t/ha/year; Very high: 50-100 t/ha/year; Extremely high >100 t/ha/year). Source: Erosion Control Mapping Report 2020.

4.7 Forest Status in the Congo-Nile Divide

The natural forests of Rwanda's CND are critical for the ecosystem services and products they provide for both the region's vulnerable communities and the national economy. They have been identified as an essential tool for ecosystem-based adaptation (EbA) in Rwanda's Green Growth and Climate Resilience Strategy[60]. Most importantly, they regulate Rwanda's climate by capturing and creating rainfall[61], which is crucial for Rwanda's rain-fed agriculture. These also recharge

60 Republic of Rwanda. 2011. Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development.

61 Seimon, A. 2012. Climatology and Potential Climate Change Impacts of the Nyungwe Forest National Park, Rwanda. WCS Technical Report, Wildlife Conservation Society, New York, USA

aquifers; regulate water flow; control flooding; retain soil; provide wood fuel energy and timber; underpin the country's tourism, which provides the largest contribution to Rwanda's foreign exchange earnings[62]; and provide wider benefits of atmospheric pollution control that sustain the country's economy and the wellbeing of its people[63].

However, over the past 45 years, the CND's natural forests have been depleted and degraded, primarily through land conversion for agriculture and over harvesting of fuelwood. Since 1962, VNP has lost nearly half of its natural forest; NNP has lost more than 13%, mainly from catastrophic wildfire; GMNP has lost 95%[64]. In 2019, forests of any type covered around 27% of the CND (169,197 ha), an increase from 23% (144,792 ha) in 1986. While overall forest cover has increased since the mid 1980s (Arakwiye et al. 2021), almost all of this gain is made up of patchy monocultures of *Eucalyptus* and *Alnus* species, valued for timber and wood by-products but with relatively low potential to provide other ecosystem services compared to native tree species. This situation highlights the need for an integrated approach to afforestation and reforestation to ensure the sustainable provision of diverse ecosystem services[65].

In the CND, almost all intact native forest is with the National Parks and some small Protected Forests, with almost all tree cover outside of these protected areas consisting of plantations of non-native tree species. Despite covering a large total area, more than half of these plantations are smaller than 0.25ha, and over 70% are smaller than 0.5ha. The vast majority of plantations in the CND are made up of Pinus patula and Eucalyptus spp., representing 45% and 38% of all plantations, respectively[66]. Around 60% of these plantations are owned by private smallholders, and the majority of these are extremely degraded, with average stocking rates of 37 m^3/ha (compared to >200m^3/ha in well managed forests)[67]. District owned forests are also very degraded, while state forests and those owned by private institutions are generally well-managed and productive (Table 4). One of the major reasons behind such severe forest degradation in the CND is that most forests are owned by individual smallholders, who do not have investment capacity or access to microfinance facilities in order to renew degraded plantations. This, coupled with an extremely high demand for woodfuel, means that existing plantations are heavily exploited and often harvested far too early, further driving degradation. While forests managed by private institutions are generally much more productive, the average size of smallholder owned plantations is too small to be financially attractive for sale/concession to forestry institutions (NB - a more detailed analysis of forest status in the CND is provided in section 6).

62 RDB 2017

63 Stainback A. and M. Masozera. 2010. Payment for ecosystem services and poverty reduction in Rwanda. Journal of Sustainable Development in Africa. 12(3).

64 Weber, Masozera, & Masozera, 2005.Biodiversity Conservation in Rwanda. Collected works of the Protected Areas Biodiversity Conservation Project.

65 Arakwiye, Bernadette, John Rogan, and J. Ronald Eastman. "Thirty Years of Forest-Cover Change in Western Rwanda during Periods of Wars and Environmental Policy Shifts." Regional Environmental Change 21, no. 2 (March 8, 2021): 27. https://doi.org/10.1007/s10113-020-01744-0.

66 Rwanda National Forest Inventory 2015

67 Rwanda National Forest Inventory 2015

Table 6. Characteristics of forest ownership categories in the CND.

Ownership Category	% of Forest Cover	Characteristics
State Forest	26.9	State forest plantations are large (average size of 31ha), and generally well managed in the CND, with average stocking rates of 193 m^3/ha. This is the highest productivity for forests across all of Rwanda.
District Forest	2.2	Average size of district forests is 2.2 ha in the CND. They are generally degraded and extremely under-stocked (around 5.84 m^3/ha, compared to an ideal rate of 60-80m^3/ha). Boundaries of district forests are poorly delineated and they are frequently subject to pruning and early harvesting due to high demand for woodfuel in surrounding communities.
Private - Smallholder	67.6	Small-holder private plantations have average size 0.25 - 2 ha. They are under-stocked (around 35 m^3/ha49) while the average standard for small private plantations dominated by a coppicing regime should be around 70 m^3/ha. Small holders individually don't have investment capacity and don't have access to micro-finance facilities, explaining why plantations are not renewed and over time become less productive.
Private - Institutional	3.3	Institutional private plantations are well managed in the CND, with average stocking rates of 193 m^3/ha.

Beyond forest plantations, many farmers in the CND also incorporate agroforestry trees on their cropland. Farm woodlots are often the only viable option for farmers with steep and highly degraded land, and given that the CND is mainly characterized by such land, the majority of on-farm trees are present in woodlots. On more gently sloping land, planting trees on hedgerows enables farmers to control soil erosion, as trees are planted along contour lines. However, agroforestry trees are often subject to the same issues as district and privately owned forest plantations, driven primarily by overharvesting for fuel wood. Approximately 86% of primary energy in Rwanda comes from biomass, and modelling conducted as part of Rwanda's Biomass Energy Strategy shows that demand for woodfuel was 6.5 million tonnes higher than available sustainable production in 2018[68]. Similarly, the United Nations Framework Convention on Climate Change (UNFCCC) estimates the non- renewable fraction of the biomass at 98% in Rwanda, pointing to a very high unsustainable harvest of biomass[69]. This level of demand results in overharvesting of both natural and planted forests, which leads to deforestation and forest degradation as well overexploitation of trees and shrubs on agricultural land.

68 Rwanda Biomass Energy Strategy 2019

69 Word Bank Documents and Reports, Rwanda Improved Cook stoves Project, The World bank Project, 2016 Project ID P158411

4.8 Forests and Climate Vulnerability in the Congo-Nile Divide

The forest fragments outside national parks in the CND are too small and functionally inadequate to provide the regulating, provisioning and supporting services that are essential for vulnerable communities in the CND. Climate change is now further degrading Rwanda's fragmented forests by changing their species composition, structure, functional processes, and disturbance regimes and, as a result, is diminishing the ecosystem services these forests provide[70] to vulnerable communities. The resilience of forests, i.e., their ability to withstand environmental and climatic shocks, is directly related to their size and connectivity.

Climate change is therefore endangering the forest ecosystems and landscapes that are critical for building climate resilience for the 2.3 million people in the CND region. Most of the people in the CND are smallholder farmers living on steep slopes without access to irrigation. Their adaptive capacity is low because their crop yields and livelihoods are vulnerable to rainfall variability and because high population density severely limits their options for relocation in the event of disaster. This is particularly true for women who, until very recently, had fewer land rights than men. The increasing frequency of extreme rainfall events due to climate change – combined with forest loss and degradation - is increasing the loss of lives and property from landslides[71]. The CND is the part of Rwanda most vulnerable to floods and landslides[72], and the risk is now escalating due to climate change. For example, a dramatic increase in heavy rains and landslides occurred from 2000-2018 that affected more than 30,000 people in the CND, killing at least 502 and destroying homes of more than 29,750 people. Twenty-nine of these landslides dammed rivers, resulting in loss of fertile soils and pollution of rivers with agrochemicals. The CND loses an average of 1.5 million tons of fertile soil per year from heavy rainfall due to climate change, landslides and erosion[73].The risk of this damage is expected to increase with climate change unless actions are taken to decrease vulnerability of CND forests and communities

Climate change – i.e., changes in the timing of seasonal precipitation, increased extreme rainfall events and droughts - is responsible for a series of cascading effects that negatively impact the physical structure and functioning of forests, substantially reducing critical ecosystem services and ultimately diminishing the resilience of vulnerable communities. More intense and prolonged droughts significantly increase the vulnerability of forests to catastrophic fire, further degrading the integrity of remaining forests. For example, during prolonged droughts, wild honey collection, a traditionally important activity, has caused catastrophic forest fires, further degrading the integrity of remaining forests in Nyungwe National Park. The natural forests that burn are susceptible to invasion of often non-native plants (e.g., ferns) that dramatically inhibit natural forest recovery processes. If burned areas don't recover to forest, this further dries out the forest, creating negative feedback loops that increase the risk of more fires, insect damage and soil erosion. Warmer

70 FAO 2017

71 Bizimana and Somnez. 2015. Landslide Occurrences in The Hilly Areas of Rwanda, Their Causes and Protection Measures. DISASTER SCIENCE AND ENGINEERING p. 1-7, 1(1), 2015

72 MIDIMAR 2012. Republic of Rwanda: Disaster high risk zones on floods and landslides. Available online: http://www.preventionweb.net/files/28208_highriskzonesreportfinalpublication.pdf

73 Nsengiyumva et al. 2018. Landslide Susceptibility Assessment Using Spatial Multi-Criteria Evaluation Model in Rwanda. https://www.researchgate.net/journal/International-Journal-of-Environmental-Research-and-Public-Health-1660-4601

temperatures are also decoupling the relationship between insects and their pollination of flowering plants.

Pollination is an ecosystem service provided by natural forests that positively benefits adjacent agricultural production. As forests and associated pollination services decline, smallholder agricultural production, and associated livelihoods, in adjacent areas will be negatively impacted. In addition, as already limited forests decline from these drought-associated impacts, during extreme rainfall events, adjacent communities are increasingly at risk from flooding, landslides and soil erosion. Loss of soil fertility through drought and flooding on steep slopes, forces farmers to convert more forests to farmland in order to maintain crop yields. To disrupt the cascading impacts of climate change on vulnerable communities, interventions must be designed to both manage existing forests for climate resilience and to restore natural and protective (plantation) forests.

Given the loss of forest, the predicted intensification of that loss due to climate change, and the dire need for communities to benefit from the ecosystem services indicated above, this project seeks to target interventions for the CND in the places that have the greatest potential to deliver the greatest benefits. The targeted locations and appropriate interventions are based on land classifications status in the region and prevailing socio-economic conditions as well as willingness to participate on the part of the communities.

4.9 Land Classification Status: Boundaries of Parks, Natural Forests, Private Lands

Based on the Rapid Systematic Conservation Plan (Annex 2.2), the Congo Nile Divide has four major landscape categories of attention for the project, that each require specific project interventions. Each of the spatial planning categories were further split into areas referred to as "Landscape Implementation Sectors" (Figure 13). The landscape categories and implementation areas (sectors) are defined and explained below. Of note, the map analysis depicts some level of improved connectivity via patches of protective forest and riparian strips, as well as overall improved species composition and tree coverage (within mixed agroforestry systems). It does not imply a continuous natural forest corridor; as this potential no longer exists, and its creation would not be possible in this highly used landscape without unacceptable impacts on livelihoods.

The four major landscape categories are:

Core Protected Area (PA) Nodes and their Buffers: National Parks comprise the "Core PA Nodes" that need to be secured and well managed, which include Volcanoes, Gishwati-Mukura and Nyungwe National Parks. Priority activities include strengthening PA management and sustainability, rehabilitation and restoration of natural forests, other conservation-oriented land use activities that reduce stress on PAs and natural forests (e.g. improved wood stove efficiency to reduce pressure on natural forests) and supporting sustainable biodiversity compatible activities (e.g. improved beekeeping). These nodes also include buffer areas around the National Parks.

Stepping Stones: These are priority nodes outside of the current National Parks that are critical for maintaining landscape connectivity, comprising small, isolated patches of forest, at Dutake and Karehe-Gatuntu Protected Forests and the extensive Gishwati Pastures. These areas would be a

sensible focus for some (patches of) forest restoration and protection, beekeeping and energy efficient stoves. The Gishwati Pastures are a focus for agroforestry on pastoral land to increase the coverage of native trees to secure reasonable landscape connectivity for forest species.

Landscape linkages: These are key landscape linkages and knickpoints in the farming landscape that require afforestation on steep slopes and riparian areas to link the CND at a landscape scale. Compatible land use activities include agroforestry, increasing the use of native species, reforesting steep slopes, beekeeping and energy efficient stoves.

Broader Farming Mosaic: These are broader areas of moderate priority where conservation interventions can support broader sustainable landscapes and ecosystem service delivery but are likely to be beyond the scope of most project interventions except for those linked to land use planning.

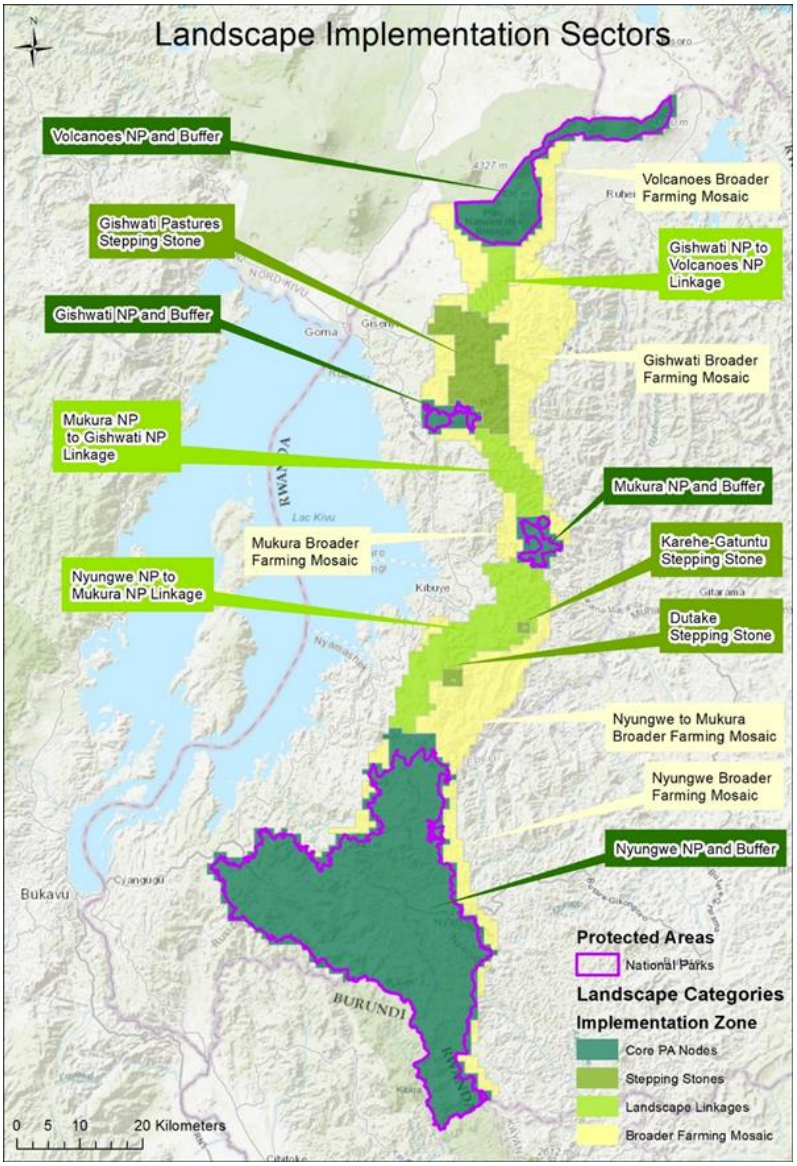

Figure 13. The four major landscape categories (Core PA Nodes, Stepping Stones, Landscape Linkages and the Broader Farming Mosaic) were split into specific areas to aid prioritization and description.

How these major landscape categories intersect with the socio-economic status of the communities and the prevailing land tenure conditions on the ground will be critical to understanding for project implementation including maximizing benefits of the project and reducing risks to the communities.

4.10 Land Tenure and Conflicting Land Claims

Given the history of violent conflict, the Rwandan Constitution of 2003, the National Land Policy of 2004 and the Organic Land Law of 2005 all incorporated land ownership and gave it a formal legal basis. Prior to the land reforms of 2004, most land in Rwanda had been acquired for a limited tenure through different practices such as inheritance, leasing, borrowing, gifting, informal occupation, and government land allocation. The land policy commits Rwanda to a comprehensive programme of land registration, in order to provide land users as a whole with more certain rights and thereby promote the investment of labor and capital in increased productivity, and the sustainable development and management of land resources.

The Ministerial Order No.002/2008 defines modalities for land registration including the establishment of a Register of Land Titles, procedures for the registration of titles to land and other interests in land, transfers of title to land and other transactions related to land, and related matters. It provides for two types of certificates of land rights – the Certificate of Registration of Conditional Freehold Title or Freehold Title and a Certificate of Registration of Emphyteutic Lease. The Ministerial Order No.001/2008 determines the requirements and procedures for land lease. 2 Several other laws and implementation orders related to land transactions and registration are available for specific land transactions (e.g. Law relating to expropriation in the public interest or Law creating and organizing condominiums and setting-up procedures for their registration).

Previously many of the conflicting land use tenure claims were related to land ownership among men and women. Men had 100% right to the land even if the couple was legally married. The land reform in Rwanda comprised a series of initiatives that aimed to tackle the emerging uncertainties about land ownership. In 2009, the government began its Land Tenure Regularisation programme to allocate title to every plot of land and create an all-encompassing national land registry to deal with the conflicting claims. It was meant to implement the new laws and “provide for full equal rights to both wife and husband and to all children, through the systematic land registration process…, which means a process of regularizing the ownership of existing land for the existing landowners”. In the current law, legally married couples have 50-50 interest in land ownership. The current structure also improves the possibilities among the young girls, in that they now have a right to inherit their parents property. Issues still remain regarding the de facto practice as evidenced in the focus groups held during project preparation. These issues will be thoroughly screened planting and livelihood activities commence in project implementation. Especially as future conflicts may center on issues around whether the husband or the wife has the right to harvest trees or not or who decides to plant which tree species. Men and women view the value of trees differently thus these decisions could have implications for livelihoods as well as well-being of the women who may be subject to gender based violence (see details in Annex 8).

4.11 Project Level Potential Risks

The proposed project is timely given the upward population growth trends creating increased pressure on forest, soil resources and land management; the socio-economic environment wherein rural communities may be stuck in poverty traps yet the overall economic growth trends in the country offer opportunities for innovative strategies to be scaled across a region like the *Congo Nile Divide*; and the environmental and climate trends indicate that acting now at a regional scale will have lasting positive impacts on the natural resources and land management stewardship of Rwanda. That said, any large-scale project will have potential environmental and social risks and impacts. Documentation for the feasibility of proposed project activities is found in the Feasibility Report (Annex 2) and the Value chain analysis Report (Annex 2.3). The major anticipated negative impacts of the proposed activities and sub-activities include but are not limited to the risks described below.

The influx of funds and activities combined with power dynamics for access to those benefis will create the possibility of ***disproportionate benefit distribution*** to some groups and not others including women, youth, historically marginalized people, and Rwanda's poverty categories. Associated with this risk is the possibility of increased gender-based violence and/or discrimination given the target of the benefits will be women, youth and historically marginalized communities including sexual exploitation, abuse and harassment (SEAH). These risks have been detailed in the gender analysis and action plan (ANNEX 8) indicating the prevalence of gender-based violence (GBV) in the country and the proposed project site despite strong laws against it; cycles of poverty continue to create environments that foster GBV and the project could contribute to that if adequate preventive measures are missing. As noted in the feasibility study (ANNEX 2) terraces can reduce soil erosion and are important in the reforestation/afforestation process. While it is imperative the steep slopes that have experienced severe deforestation across the CND are stabilized through afforestation and reforestation efforts to secure ecosystem benefits, the planting process poses some risks. The stabilization of terraces for planting risks ***erosion, topsoil loss and terrace collapse*** due to deteriorating conditions and improper long-term maintenance that has led to destabilization of the soil. Combined with extreme weather events such work during the course of the project could pose risks to the communities.

As demonstrated in the Rapid Systematic Conservation Plan (Annex 2.2) and the Climate Vulnerability Assessment for the CND in Rwanda (Annex 2.1), afforestation/reforestation in this region is imperative for restoring climate resiliency. With afforestation/reforestation activities expected during project implementation combined with stricter enforcement of land use, there is a risk of ***displacing informal land occupants*** currently occupied/encroached public land (protected forest and riparian lands). Small landholdings (av. 0.30 ha) under cultivation may be reduced because of the proposed tree planting/afforestation resulting in a ***potential loss of food production*** in these areas especially as the fruit trees planting and other improved agroforestry livelihood activities will take time (i.e., the trees need time to grow) to improve food supplies.

Logging as well as forest product harvesting on private land (i.e. the small landholdings) is allowed. Landowners need to obtain a permit from the district officials to ensure immature trees are not

logged. It is possible under this project, ***stricter enforcement of the permitting*** will occur as all stakeholders are made more aware of the impending climate vulnerabilities and dangers to communities of harvesting young trees leaving slopes open to erosion and landslides.

Poaching, logging are not permitted in national parks. The Rwanda Development Board (RDB) is the government agency in charge of PAs management. RDB has law enforcement and community based conservation departments in charge of preventing illegal activities. Illegal tree cutting is monitored and of limited impact. The extent to which specific protected forests targeted for project activities are accessed presently will be reviewed in consultation with stakeholders and community members during project implementation recognizing that as RDB personnel become more aware of the importance of protecting the forests for ecosystem services that will ultimately benefit communities there may be ***stricter enforcement of rules and regulations*** which may cause difficulties for accessing needed resources as the benefits from livelihoods projects are realized slowly overtime.

Forest product harvesting is not allowed inside protected areas but activities such as beekeeping are allowed in the buffer zones of protected areas. Similarly recreation will be allowed in restored riparian lands. Legal logging of exotic species occurs in the Nyungwe Park buffer zone..The government has established a revenue sharing scheme where 10% of tourism revenues are invested in community development projects. Income generated will also be shared with communities through the revenue sharing scheme. This project will promote community-based tourism development as a livelihood project. To successfully operate the shared revenue approach there may be ***stricter enforcement of rules*** related to forest product harvesting required, however there may be additional issues related to the ***equitable distribution of tourism revenues*** among community development projects that benefit women, youth and historically marginalized people.

As the project will focus on improving land use including working with relevant Ministries on land classification, it is likely that there will be: 1) a change in rules of access or changes in land classification (resulting from the adoption of new land use plans, or park management plans), and/or 2) stricter implementation of land use and park laws. Both scenarios could facilitate a ***potential loss of access to land*s** (open-access lands, pastures, and forests) of traditional users. Additionally as agroforestry and livelihood activities are initiated there may be a wait time while slower growing fruit trees or native species mature and produce food, fodder, and fuelwood.

With an emphasis on reforestation, afforestation, and agroforestry, there is a need for increased production of seedlings. Seedling production may be associated with ***increased use of water*** that could divert this resource from other uses by local communities. Seedling production may also require the inputs of ***fertilizers and pesticides***. Additionally given that seedlings will be grown in highly dense numbers in central locations and then transferred and planted across the landscape there is a risk of ***inadvertently introducing pests, pathogens or invasive species*** that hitchhike on the small seedlings.

Earth moving activities such as terrace stabilization, tree planting and fern removal may increase ***exposure to vector borne diseases*** due to ecological changes from modification/enhancements of habitat. Such activities may also disturb wildlife

Extensive livelihood activities with the objective to scale the activities and make sustainable through increased value chains will create ***potential risks along the supply chain***. These include

sustainable sourcing of raw materials, waste by-products including, but not limited to, CO_2 emissions from transport of materials or final products to destinations in the CND, and materials from production of stoves and modernization of beekeeping activities.

The AE/EE will hire over 6500 direct workers, consultants, and contracted workers to perform the project related activities. The work requires low skill, manual labor thus there may be risks associated with attracting child labor (prevented through national laws), exposure to dangers in the work environment including steep slopes, inclement weather, snake bites, insect bites, exposure to vector born disease, injuries due to falls or contact with equipment, exposure to improperly treated water and/or waste disposal in the work camps, exposure to SEAH. These details and safety measures will be screened on project implementation according to the parameters set forth in section 10.2 of this document. National laws are in place to protect workers from these occupational risks and additionally the AE/EE will have required training as well as emergency management plans. Additional workers will be hired through subcontractors and all requirements for labor and working conditions safety will flow-through on those contracts and be emphasized during project implementation. The PMU will provide oversight on these risks.

5. STAKEHOLDER CONSULTATIONS: ISSUES, NEEDS, RISKS AND VULNERABILITIES

5.1. Method and Approach

WCS gathered the necessary stakeholder input to design the proposal and start developing baselines for the project itself. A mixture of methods and approaches was used to review issues, needs and vulnerabilities, including document review of reports, policies, plans, and strategies (i.e., The Rwanda Vision 2050[74], Green Growth and Climate Resilience Strategy[75], National Strategy for Transformation[76], LAFREC Annual reports[77], key data from the National Institute of Statistics of Rwanda, Ubudehe, National Strategy on Agroforestry[78], etc.). Census information and other public records were used to determine the populations impacted by the proposed work. This includes understanding the population by sector, the number of women-headed households, and statistics related to labor and income generation. The Stakeholder Consultations work includes semi-structured and informal one-on-one interviews with key informants with National level stakeholders, District level stakeholders, the NGO community, and academics. It also includes Focus Groups with community level stakeholders including farmers, landowners, women, youth, landless/poor representing Categories C, D, and E, and the historically marginalized. The focus groups served to aid in the understanding of the extent of engagement in proposed project activities and how those activities might affect the indicated groups.

A list of the broad description of project stakeholders consulted can be found in Annex 7.

74 Republic of Rwanda. 2020. Rwanda Vision 2020. Ministry of Finance and Economic Planning

75 Republic of Rwanda. 2011. Green Growth and Climate Resilience: National strategy for Climate Change and Low Carbon Development. Ministry of the Environment.

76 Republic of Rwanda. 2017. 7 Years Government Programme: National Strategy for Transformation (NST1), 2017- 2024

77 Republic of Rwanda. 2014. Landscape approach to forest restoration and conservation project (LAFREC). Environmental and Social management framework and social assessment.

78 MINILAF, 2018. National Agroforestry Strategy and Action Plan 2018-2027. Ministry of Lands and Forestry (MINILAF)

Focus Group at the Community Level: Focus groups were conducted between August 4 and August 21, 2021, in the local language of Kinyarwanda by WCS staff and were supervised by the component leads. All WCS staff conducting the focus group received the minimum standards training as specified under the WCS Institutional Review Board (IRB) as well as training in social safeguards and facilitating focus group discussions. Where feasible, the meetings were recorded for internal use only. In addition to the focus group facilitator, each focus group had at least two additional WCS staff to take notes and support the facilitation as needed. All WCS staff participating in the focus groups had their Covid-19 vaccines.

Participants of the focus groups were selected by partner organizations, and WCS staff with long-term presence in the Congo-Nile Divide, including Forest of Hope, IGCP, WCS-Nyungwe, and Lafrec. These organizations have strong working relationships with the communities and have an existing level of trust between community members and the partners, thereby providing more open discussions with our field teams. In instances where there were no partner activities, WCS engaged with the selected Sector governments to provide participant groups, such as sector-level members of the women's council. Each of the 24 focus groups had 5-10 participants who were selected to ensure a broad coverage of local community diversity and to hit the target groups (i.e., farmers, landowners, women, youth ages 18-24, poor, and historically marginalized) (Table 4). All focus groups had at least 50% women participants except for three which had 3:4, 2:4, and 2:3 ratios of women to men participants. They lasted two hours in length. The specific locations of the focus groups were determined by the partner organization and were conducted outside in accordance with the Government of Rwanda's Covid guidelines.

Mixed focus groups included members of all groups - farmers, landowners, women, youth, poor households, and historically marginalized. We included mixed groups with men and women on the recommendations of the local NGOs, to facilitate discussions across gender, and to observe what differences might exist in the presence of men and in the groups solely focused on women.

Additional focus groups were conducted targeting youth, historically marginalized, or women in these sites.

In Gishwati, three focus groups were conducted with women, a mixed group of women, men, youth, and historically marginalized living near the forest in Ruhango sector, and five focus groups of individuals living farther away from the forest in Ruhango and Sovu sectors. These included three mixed groups of men and women and two youth groups. In Mukura, one mixed group of men and women and youth in a community of Mukura sector near the forest were engaged and three focus groups in cells farther from the forest in Mukura and Gitesi sectors. These groups included one with historically marginalized peoples, one with women, and one mixed. In Nyungwe, three focus groups were conducted, one with women and two mixed in Ruheru and Cyato sectors living in cells near the park and four other focus groups in a community in Ruheru and Musebeya sectors farther from the forest, with women, youth, historically marginalized, and one mixed of women, men, and youth. In Volcanoes, five focus groups were conducted in Gataraga and Shingiro sectors near the forest with two mixed groups of women, men, youth, a group of historically marginalized people, a group of women, and a group of youth.

Table 7. Focus groups conducted in communities near and far from protected forests

	Focus Group Participants in Near and Far Communities							
Protected Area	**Near***				**Far****			
Nyungwe	mixed - 2x	women			mixed	women	hm***	youth
Gishwati	Mixed	women	hm		mixed - 3x	youth - 2x		
Mukura	Mixed				mixed	women	Hm	
Volcanoes	mixed -2x	women	hm	youth				

*Near cells in Cyato, Gataraga, Shingiro, Ruhango, Mukura, and Ruheru sectors.
**Far cells in Ruheru, Musebeya, Gitesi, Ruhango, Sovu sectors.
***hm=historically marginalized.

Stakeholder interviews at national level: The project coordinator and project assistant, both WCS staff with CITI training completed, met with representatives of each ministry and government agency involved in natural resources management in Rwanda as well as NGOs, bilateral and multilateral agencies supporting forest and landscape restoration projects or programmes in Rwanda. The Ministry of Environment wrote a letter of support requesting key stakeholders to meet WCS staff involved in the design of this project and share any information and data relevant to the GCF CND project. WCS staff did follow up phone calls and emails to request the appointment with each government agency and NGO representative. Due to COVID restrictions all these meetings were conducted virtually. In some cases, WCS staff met a group of technical staff from the same agency/ministry to discuss this project and learn about similar projects being implemented. From these meetings we asked for information/contacts of other key stakeholders we should meet. In total we interviewed 21 national level stakeholders including three women.

Stakeholder interviews with NGOs/Academics: We used a similar approach with the (MOE) letter of support. We recruited individuals already known to us in the NGO and academic sector working or doing research related to the project components. We used snowball sampling to request names of additional individuals who are knowledgeable about the proposed components of our project. A letter/email was sent to each institution requesting to meet a representative to discuss this project

and identify areas of synergies/complementarities as well as lessons learned in the implementation of similar projects. For the NGOs we met first with the Rwanda Environmental Forum (RENGOF) which is an umbrella organization representing all NGOs working in the environmental sector. During the meeting we were introduced to representatives of these NGOs and set up a calendar for follow up meetings with each NGO. In total we interviewed 23 academic and NGO stakeholders including eight women.

Workshops at district level: Four district workshops were conducted in the Congo Nile Divide landscape in Nyamasheke, Rutsiro, Nyabihu, and Musanze. Participants included the executive committee of the districts and the Joint Action Development Forum (JADF). JADF is a multi-stakeholder platform composed of representatives from the public sector, private sector, and civil society at the district level. It was put in place to facilitate and promote full participation of citizens in the decentralized and participatory governance and improve service provision processes. Recruitment was simply the regular attendees of the JADF meetings. Workshops were conducted by WCS staff in Kinyarwanda, and the project assistant assisted in taking notes from the workshops. The main purpose was to present project objectives, activities, and expected outcomes and get feedback on the interests and expectations from local communities on this project. Before the presentation of the project's objectives, each district presented its district development strategy (DDS) to help understand the district's priorities and identify potential synergies with the GCF project under development.

Analysis: All notes from the focus groups, interviews, and workshops were documented and distributed to the core project team developing the GCF proposal. At this stage, the team has qualitatively reviewed the scripts for overarching general themes and for specific issues that will guide the project activities and sub-activities to be more inclusive, more likely to be implemented over the long-run, and ultimately more effective as part of the overall project. Sections 4.2-4.6 contain summaries based on climate-related themes to highlight potential environmental and social impacts to consider over the life of the project and indicate ways that may mitigate those impacts based on stakeholder engagements to date.

5.2. Community Experiences with Ecological Changes and Climate Events

In discussions with community members, many indicated experiencing ecological changes and climate events. In some instances, the rains have been heavy, irregular, and destructive. These rains now occur when they are not expected, for example in May when normally the dry season starts or in August when it is supposed to be a dry season. This year, one community noted that it rained from June to mid-August and there was no dry season. The results of these rains have created disasters in the form of landslides and floods resulting in death, both from landslides and from lightning strikes, as well as hailstorms that destroy all crops. In addition, the rains result in higher-than-normal soil erosion, loss of organic matter when the fertile soil is washed away into the stream and reduced agricultural yield over time. Typically, farmers expect rains to begin in September. This is also no longer the case. In recent years, the dry season extends to September and sometimes to October resulting in a much longer dry season.

5.3. Identified Socio-economic Impacts of Changing Climatic Conditions

Communities indicated several socio-economic changes stemming from changing climate conditions. Notably, the longer dry season and unpredictable rains have reduced agricultural yield

significantly. Some water sources and streams have dried up while other sources' water flow has been reduced significantly during the longer dry periods. In some instances, farmers delay farming activities when the dry season is longer than expected. Organic manure is scarce due to reduced organic sources from the forest and reduced livestock (because of poverty and lack of fodder). This, plus the planting of monocultures and over-tilling, led to soil nutrient depletion and reduced crop yields. For example, harvests of Irish potatoes and maize have been reduced considerably. Areas where a farmer used to harvest 100 Kg now produce hardly 20 Kgs. Likewise, an investment of Frw10,000 in agriculture yields Frw 2,000. With little return, people cannot apply for a loan to invest in agriculture.

These changes are leading to rampant malnutrition and extreme poverty, and farmers can barely meet their own families' needs. In places near Volcanoes National Park management of water flows from the park is a considerable issue to address and impacts communities very differently, with some having access to the water and some unable to access these flows. Impacts from a lack of water particularly affect women and children who then need to travel farther to search for potable water.

5.4. Human Behavior as a Contributing Factor to Ecosystem Degradation

Numerous issues have been identified as contributing to ecosystem degradation. These include deforestation, short-term economic gains, lack of joint planning across multiple sectors, and lack of input to projects from intended beneficiaries.

Deforestation seems to be the biggest contributing factor to ecosystem degradation. It is human behavior driven to the extremes because of poverty, hunger, and the exacerbating effects of climate change. The ecosystem impacts of deforestation are multiplied as heavy rains wash away soils not held in place by trees. The human impacts produce a cycle of poverty where a family may have food but cannot cook for lack of wood; children spend more time searching for firewood, and they arrive at school late or miss school or drop out because they cannot study when they are hungry. The options for families fade and other social ills prevail. Deforestation has led to increased law enforcement by local governments to prevent people from stealing resources. Some turn to neighbors' woodlots which creates conflicts between citizens. When children or women are caught cutting or pulling tree branches illegally the family may be fined an exorbitant amount of money and in some cases imprisoned if it is a public forest or if the private owner presses charges against them. Due to human activities many species have disappeared including animals (e.g., duikers) and plants (e.g., Myrianthus *spp.*, Symphonia *globulifera*, Podocarpus *spp*) some of which can no longer survive in this changing climate. Quality wood products are increasingly difficult to access, including furniture, wood for stables, poles, stakes for climbing beans as well as firewood. The hunt for these items contributes to more ecosystem degradation as families are forced to cut whole trees rather than only take the dead and down branches.

A contributing factor to deforestation stemming from human behavior is the desire for short term economic gains. This has been particularly emphasized among youth (considered as ages 18-24) and the historically marginalized. For example, trees are often harvested prematurely for charcoal or other livelihood needs before the trees can reach their full potential. The overall lack of trees and wood forces people to collect twigs, litter, and grass for cooking thus removing the organic layer that would otherwise aid tree growth. When those resources are lacking, some very impoverished

families collect anything to burn including sacks, old/unused plastics, shoes, and anything else that might be available leading to potential health concerns and contaminant pollution from volatile and dangerous organic chemicals (e.g., dioxin and furans) that become persistent pollutants in the environment. Notably, we heard evidence of individuals continuing to illegally use protected forest resources due to the lack of resources available elsewhere.

Many projects have been conducted in the CND by numerous Ministries and NGOs; however, conditions seem to continue to deteriorate. Through workshops, interviews, and focus groups we repeatedly heard of the need for better coordination across projects. In some situations, there may be progress on one front (environmental improvement) but that improvement is then negated by another project that constructs a road through the environmental improvement area. These types of mismatches of geography and project implementation result in little progress. A master land-use plan at the sector level would greatly improve coordination.

Another contributing factor to environmental degradation from human behavior is the challenge of designing projects without adequate input from project beneficiaries. This leads to further environmental degradation because, for example, a project may implement a cookstove activity to build and distribute stoves, but the stoves do not meet the needs of the population intended to be served. One cookstove project designed cookstoves that could not hold big pots or more than one pot at a time. As a result, families either did not use the cookstove from the project; thereby creating waste or used the cookstove in addition to the traditional 3-stone stoves; thereby increasing demand for fuelwood[79,80]. With input from the beneficiaries, these types of mistakes could be avoided when the people who need to adopt such technologies say what they actually need. Another example is the planting of trees that are not adapted to the local area. Projects may do this out of convenience, but the result is that community members do not realize the intended benefits and continue with their traditional approaches to fuelwood collection, further degrading the forests.

5.5. Current Adaptation Measures and Preferred Future Strategies

The project team received numerous recommendations from the four district workshops for preferred implementation strategies and best practices for adapting to the conditions within the CND. Participants noted many projects that have been initiated in the general region and felt confident their recommendations could help improve long-term implementation effectiveness. A summary of these recommendations includes:

- Ensuring that joint planning on the use of land resources occurs at the lowest level.
- Enabling communities to identify vulnerabilities, needs, and preferences.
- Having communities lead the village spatial planning efforts.
- Creating a process for communities to identify the most vulnerable beneficiaries to ensure equitable distribution of benefits.
- Defining communities' roles and responsibilities clearly and communicating those roles and responsibilities to them.

79 Gunther, M. These cheap, clear stoves were supposed to save millions of lives. What happened? (October 29, 2015) The Washington Post.

80 Hanna, R. E. Duflo, and M. Greenstone. 2016. Up in Smoke; The influence of household behavior on the long-run impact of improved cooking stoves. American Economic Journal: Economic Policy 8(1):80-114

- Consulting citizens, including women and youth, about the tree species to be planted noting particularly the benefits of and high demand for fruit trees.
- Respecting local conditions in project implementation to ensure activities fit the local climate and growing conditions with consideration of the agricultural calendar for distribution and planting of trees, the types of species that will thrive and recognizing that some bees produce less honey in the cold.
- Being aware of the counter effects of pesticides on bee production; e.g., Irish Potato farmers use a pesticide that kills honey bees, and as the soils lose nutrients to erosion more farmers apply chemicals in hopes of increasing crops.
- Providing technical support for at least three years post tree planting to ensure proper management of the trees and to promote tree survival.

Preferred future strategies must also pay close attention to the needs of historically marginalized communities. These communities are the most impoverished as they previously used forest resources and have gradually transitioned away from those resources as law enforcement has increased and aid projects have provided some temporary relief; there are sustained efforts to lift these communities out of poverty with mixed success. There is interest among historically marginalized people in several areas including beekeeping, pottery, tourism, and agriculture. For beekeeping, some have worked with traditional methods; however, they lack land to keep bees and lack funds to buy modern equipment. Historically marginalized people are known for their talents in local arts and the crafting of pottery from clay, however this livelihood activity requires access to both clay and firewood. These talents could be directed into cookstove production, and that may need to be considered. Historically marginalized people are very knowledgeable about navigating the forest, climbing mountains, locating snares, and tracking poachers. Such talents could be directed and cultivated into forest rangers or tourism guides. Although not traditionally farmers, some historically marginalized people are interested in farming activities; however, again, they lack the land resources or cash for purchasing land. In this regard, elements of this project that enable historically marginalized communities to work could be beneficial. Of note, historically marginalized children have few options for school given the destitution experienced by the families and the constant need to search for food. However, in the instances when they do attend school they are unable to learn the ways of the forest as other members of their families have thus potentially losing one future economic option as a ranger or gorilla tracker for tourism. These insights gleaned from the focus groups with historically marginalized communities should be considered in the project development stage and integrated, as possible, into the overall project implementation.

Men in the CND are positioned to be significantly more involved in programs that result in monetary benefits, such as fern clearing, casual labor, and plantation projects. Although under Rwanda law, sons and daughters receive equal inheritance rights (Law/nº 22/99 of 12/11/1999) the PPF focus groups highlighted that due to cultural practices, parents favor sons in land inheritance, leaving young women in a position where they depend on marrying a man to gain access to farmland; without a formal marriage, these women have no land tenure. Broadly, these gender and social norms leave most women with little decision-making power and no real control over assets. The threat of sexual and gender based violence (SGBV) at the household level where women try to assert independence and achievement is high. For this project, the implications are that trees

planted by women become men's property; money gained in employment (tree planting, nursery maintenance) or through farmland production (fruit trees, honey, etc) are ultimately controlled by men; and women shouldn't participate in activities without a husband's permission. Although this seems bleak, this situation is not universal. The 24 CND community focus groups held in the PPF highlighted that many households decide together on how money should be spent; land tenure is broadly seen as joint ownership; and men realize the impact of dwindling fuelwood resources on women and girls. Gender equity is not yet universal and rural culture has a long trajectory to achieving it. Annex 8 details additional findings pertaining to gender specific issues assessed in the project development thus far.

WCS notes that in project implementation, the project would invite communities to help define those roles and responsibilities such that ownership of the project activities will be at the local level rather than a top-down approach. The project will ensure the participation of women, youth, and historically marginalized groups during this process as we have done in the focus groups and workshops to date to promote gender equality and social inclusion in all discussions.

5.6. Decision Making and Culturally Appropriate Communication Systems

Workshops, interviews, and focus groups revealed some considerations for improving the decision making and culturally appropriate communication systems for the proposed project. At a high level these include much more community engagement on everything from land-use planning to selection of tree species that are important to local farmers and residents; clear awareness building processes that are tailored to different groups' needs for establishing nurseries, beekeeping, care and long-term management of trees, and most importantly awareness that trees provide more than just tangible resources but that they are crucial for ecosystem services, and that historically marginalized people will need to be included in the project with special consideration for how to engage and communicate with them about the project and their involvement in it.

Of note, the focus groups with historically marginalized groups indicated that historically marginalized communities have been excluded from past project efforts. They felt that local leaders in the area decide who can participate in projects, and they perceive that they have been deliberately excluded from such projects. They do not receive any information on projects and feel there is a real need for advocacy and representation to local leaders. In some cases, the failure to include historically marginalized communities disproportionately impacts women, for example one community is all women with only two men. Based on our field work the historically marginalized epitomize the poverty trap cycle. They have no land and no resources. They lack food and must send their children to look for food, and, therefore, they cannot attend school. It is perceived that historically marginalized people do not work, but they cannot because they are simply trying to survive. They have no access to savings and loans groups because of poor understanding about the system. These findings indicate an important need for communication systems that include the historically marginalized and underscore the importance of working with this community as it comprises mostly women and youth.

Repeatedly in the focus groups and interviews, participants noted the importance of finalizing rural land-use plans and then communicating those plans as well as the specific meaning of those plans to the communities. Some of the interesting and innovative approaches for communication to and among communities of the CND include the following:

- Initiate a radio program that provides information to communities on climate change.
- Reward/incentivize and publicly champion farmers who have adopted trees on farm.
- Designate farm facilitators (lead farmers) who can help ensure participation and input from many local farmers and community members.
- Promote farmer to farmer learning through exchange visits to areas where similar projects have been successful.
- Create demonstration plots to aid in the exchange visits.
- Establish local nurseries run by local companies/cooperatives to facilitate access and also improve farmer to farmer communication.
- Build a network of technical capacity providers to ensure communication with farmers/managers of the planted trees over the long-term to ensure the trees survive.

6. PRELIMINARY EVALUATION OF ENVIRONMENTAL AND SOCIAL IMPACTS / RISKS OF THE PROPOSED PROJECT

6.1. Basis for the Environmental and Social Impacts

WCS gathered the necessary stakeholder input (see Annex 7) to design the proposal and start developing baselines for the project itself. We used a mixture of methods and approaches to review issues, needs and vulnerabilities, including document review of reports, policies, plans, and strategies

This preliminary ESIA is based on existing policy frameworks, the IUCN ESIA for the Rural Green Economy and Climate Resilient Development Project and literature from Rwanda as well as input from the initial scoping field mission carried out in June 2021 and stakeholder consultations and focus groups carried out in July and August 2021. The ESIA is also based on a thorough review of the planned project activities as well as the socio-economic review of project interventions and issues raised during the stakeholder consultations.

The impacts of these strategic interventions have been assessed using the environmental/ social impact assessment (ESIA) methodology. The methodology's specific objectives being to:

(i) Assess the potential environmental and social impacts within the specific project site districts,

(ii) Determine whether positive or negative,

(iii) Propose mitigation measures which will effectively address the impacts; and

(iv) Inform the project preparation process of the potential environmental and social impacts of different alternatives, and relevant mitigation measures (including implementation requirements) that will ensure compliance with E&S aspects of the proposal.

To understand the goal of the programme better two key biophysical components need to be understood and context is provided in the following two sections

This section describes the process used to make predictive assessments of possible impacts of the individual and collective activities and sub-activities of the proposed project. It is based on the baseline environmental and social information reviewed in existing literature, project documents from similar projects in Rwanda and elsewhere and the consultations with stakeholders through interviews and focus groups. The assessment is organized around the three main components of the project:

1. Mainstreaming climate adaptation into integrated land use planning
2. Managing and restoring the forest landscape
3. Value chain investments and reducing deforestation and empowering women through adoption of fuel efficient cookstoves

This further considers the intended activities and outcomes. The impacts of sub-activities are considered as a whole and provided as one score per activity. The process considered both

the positive and negative potential impacts of each sub-activity. Strategies for reducing or mitigating negative impacts are detailed in the Environmental and Social Management Plan (Section 9+).

6.2. Analysis of Status and Relative Consequence of Impacts

We adopted an approach employing specific criteria and methods for the assessment.[81] The full assessment included an indication of the positive and negative components of the activities and sub-activities, the significance of the impacts, the consequence of the impact should it come to pass, the probability that the impact will occur, the duration for which the impacts would last occur, and the overall significance. We repeated the assessment given the anticipated mitigation measures to be used during project implementation. Table 5 contains the impacts summarized at the subcomponent level for unmitigated and mitigated impacts to demonstrate the anticipated effect of mitigation.

Below we describe the approach for assessment in detail with the caveat that all assessments, whether described in narrative text or assigned as a number are qualitative assessments based on the available information at the time of preparing this assessment. These results are subject to change based on the evolution of the project and the specific activities as they are implemented in the field.

Text evaluations

Positive/Negative impacts: described in narrative within the table.

Kind of impact - indicates the extent to which the impacts will be 'direct', 'indirect', or 'cumulative'.

Probability: indicates the likelihood of the impact being realized during the project implementation period and is defined as 'definitely not' and 'probably not', = LOW, 'probably' and 'very probably', = MEDIUM and 'definitely' = HIGH

Confidence of Assessment: signals how the assessor rates their ability to make an informed determination of the impacts based on the quality of the information contributing to the impact assessment, indicated as 'low,' 'medium,' or 'high.'

Numerical evaluations

Extent of impact: 0=None, 1=Local, 2=Regional, 3=National, 4=International.

Intensity or magnitude of the impact: 0= None, 1 = negligibly altered natural and/or social functions, 2 = modified natural and/or social functions, 3 severely altered natural and/or social functions).

Duration: 0 = None, 1 = up to 2 years, 2 = 2 to 15 years, 3 = More than 15 years.

Consequence: A summative result based on extent of impact, intensity of magnitude of the impact, and the duration.

(0-1) not significant, no influence on decisions, (2-3) low, small impact with no meaningful

81 Conservation International (2020) Ecosystem-Based Adaptation and Mitigation in Botswana's Communal Rangelands, Annex 6: Environmental and Social Impact Assessment and Environmental and Social Management Plan. Green Climate Fund.

influence on decisions (4-5) medium, should influence decisions (6-7) high, will impact decisions (8-9) very high, will impact decisions and must be fully vetted prior to implementation.

The consequence was then aligned as follows to place within the GCF Categories for risk, thus Consequence and Risk are similarly scored:

(0-3): LOW (C) (4-7): MEDIUM (B) (8-9): HIGH (A)

We recognize that these evaluations are largely subjective and may evolve as new information about the project, project location, project beneficiaries, and overall project implementation emerge.

Table 8. Environmental and Social Impact Assessment of Risks and Mitigation Measures

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	Mitigated	
PO #1 - Landscape planning, policies and management effective and coordinated across sectors and scales to address climate risks and adaptation benefits.				
1.1. Landscape-wide land-use plan developed for climate-resilient livelihoods and forest ecosystems, integrating district strategies.	This component involves support for inter-ministerial planning support and coordination with thorough consultations that include women and vulnerable groups. Insufficient consultations could result in unequal distribution of benefits. Potential lack of skills could lead to lack of project uptake and also missing the integration of concerns from historically marginalized people, women and youth on changes to the land use plan thus leading to the potential for access restriction to critical resources.	Likelihood: Low Consequence: Medium Risk: Medium	Likelihood: Low Consequence: Low Risk: Low	Stakeholder Engagement Plan Grievance Redress Mechanisms Continually update the comprehensive list stakeholders and add missing individuals/groups/organizations Stakeholder consultation will engage communities and, as part of that process, women and vulnerable communities will be consulted. Hire several community engagement staff whose job it will be to ensure inclusivity of project activities and to ensure communication with community members and especially women, youth, historically marginalized and categories C,D,E are tailored to the appropriate level for improved understanding. The entire project is designed to be inclusive of all partners and take into consideration the needs of women, youth, historically marginalized, and category c,d,e populations. These groups will be prioritized in the planning processes and their needs considered in the implementation stages, especially in terms of receiving benefits from the project activities. Some of these benefits should be monitored (for example using the basic necessities survey) to understand how livelihoods are impacted in the duration of the project. Process Framework will be used in the case of access restrictions due to changes in land use.

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	**Mitigated**	
1.2 Local and national institutional capacities strengthened to integrate biodiversity and climate risks into land use planning and management	This activity principally involves provision of technical advisory services and capacity building for spatial planning, data synthesis and analysis. Potential lack of skills or lack of uptake could lead to lack of actions to protect the slopes from further erosion and further degrade environmental conditions. If the capacity to conduct spatial planning lacks a lens for vulnerable communities the ultimate distribution of benefits from the benefits of improved environments could disproportionately favor some groups over others.	Likelihood: Low Consequence: Medium Risk: Medium	Likelihood: Low Consequence: Low Risk: Low	Train all staff working on inclusive approaches in climate planning to understand and demonstrate the specific modeled climate risks on historically marginalized communities and Categories c, d, e people.

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	Mitigated	
PO #2 - Natural forests are protected, connected, more resilient to climate impacts and risks.				

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	**Mitigated**	
2.1 Protected Area management effectiveness improved re climate risks and adaptation	Park staff unaware of potential risks to local communities of management changes Park staff untrained on SEAH Benefits from the efforts are disproportionately distributed among communities Park staff unaware of inclusive and equitable practices in community engagement especially on fire management Lack of expertise in human-wildlife conflicts Park managers lack expertise in fire management posing additional risks to communities	Likelihood: Medium Consequence: Medium Risk: Medium	Likelihood: Low Consequence: Medium Risk: Medium	Train new units within each National Park on social safeguards including GRM, consent and Access Restrictions Mitigations as well as equitable inclusion of communities in CND land use planning and SEAH. Ensure selection of communities is representative of broad target audience and minimizes overlap with existing projects Develop integrated forest fire management plans and firewise outreach and awareness raising in communities. Integrate components of community safety, labor and emergency response and preparedness plans within each NP to facilitate safe working environments and respond to accidents associated with fire management

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	**Mitigated**	
2.2 Natural forest cover restored, biodiversity connections established	Increase potential human-wildlife conflicts Risk of erosion and sediment movement during rainfall events while planting is taking place. Increased exposure to vector borne disease while working the land. Reforested areas may be illegally exploited for timber and firewood. People may be excluded from areas previously used during restoration activities. Exacerbating gender inequities in income if women are not well represented among laborers hired for planting. Invasive species may be introduced from seedlings Laborers may fall while working on steep slopes or cut themselves while handling sharp tools. Appropriate representation of local communities in identification of specific sites for afforestation is required.	Likelihood: Medium Consequence: Medium Risk: Medium	Likelihood: Low Consequence: Medium Risk: Medium	Train staff on inclusive processes for conducting computer review of the locations selected as the focus - the communities who can participate in follow-on project activities. The distribution of these sites may diminish participation by some groups such as women, youth, historically marginalized and categories c,d,e. Care will be taken to ensure the final project sites not only work for assisted natural regeneration but that those individuals selected to engage in fern clearing activities represent the target groups. Access Restrictions Mitigation Process is established and available as needed. Assessments of local use of areas slated for improvements to natural forest will be important. Train on labor and safety standards along with an emergency preparedness and safety plan for all country programs, these will be tailored to each sites. All laborers will have access to GRM. Protective forests will not be established on land where food is being produced. On farm afforestation will not involve the acquisition of lands, land rights or land-use rights through expropriation or other compulsory procedures and will comply with the legal system in Rwanda. Communities will be engaged as part of the planning and afforestation processes and. where appropriate, agreements will be developed on land rights and responsibilities.

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	Mitigated	
				The project will be working with government agencies and local partners to have a participatory stakeholder engagement and equitably distribute the benefits of the project to multiple groups. GRM will be available for those feeling excluded from being beneficiaries Environmental Management Plan will be followed for the selection of species and the management of those species should exotic/invasive be inadvertently transplanted. The Environmental Management process will ensure that not only does the project have proper care and management of exotic or invasive tree species but that any nursery activities are conducted to eliminate the possibility of invasive pathogens catching a ride to the remote communities. Periodic monitoring of the nurseries will ensure such species are not present.
PO #3: Vulnerable rural livelihoods are more climate-resilient, diverse, economically sustainable and nature-positive.				
3.1 Farming methods enhance productivity, reduce erosion and flooding risks, contribute to ecosystem services, and support connectivity	Benefits of farming enhancements may be unevenly distributed among community members; including being non-inclusive of historically marginalized groups Seedling production may divert water from other uses. Seedling production may involve pesticides and fertilizers.	Likelihood: High Consequences: High Risk: High	Likelihood: Medium Consequences: Medium Risk: Medium	Stakeholder Engagement Plan Consultation with environment management specialists to train nursery managers on BMPs for water, invasive species identification and minimizing use of pesticides and fertilizers. The project will be working with government agencies and local partners to equitably determine the beneficiaries of farming improvements. All workers involved in planting will be trained on

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	Mitigated	
	Seedling production and distribution may enable invasive species to hitch rides into remote areas of CND and infect other trees. Increased exposure to vector borne illnesses while working on planting and moving soil/water. Failure to gain proper consent for terracing work and harvesting of manure and pressure from family members to gain access to the financial benefits that contracted people gain. Terrace stabilization may result in environmental impacts including the removal of topsoil for terracing, soil loss due to erosion during construction, slope destabilization, moving manure or other nutrient-rich soils to enrich terraced soils and potential CO_2 outputs in the supply chain for materials to build the terraces.			labor safety and also how to protect from increased exposure to disease. All project beneficiaries will have access to GRM. The project PMU will ensure the contracted firm has a trained engineer who will oversee construction of terraces to ensure best practices are followed to minimize soil erosion and the possibility of collapse.

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	**Mitigated**	
3.2 Rural livelihoods generate alternative incomes & reduce pressure on forests	Training and capacity building in resilient livelihoods and value-added production will improve overall well-being and reduce dependence on land. Benefits may be disproportionately distributed among groups, especially if inherent biases exist in markets, banking and other sectors that need to be engaged to realize this component Improving women's livelihoods and income generation could cause retaliatory behavior in male family members. Increased risk of bee stings Clean and efficient cooking energy technologies promoted through support to technical schools and communities to transition/reduce biomass fuel consumption. Adoption of fuel efficient cookstoves has potential to improve air quality within households, especially for women and children, as well to reduce the amount of time spent collecting fuelwood. Materials sourced for the stoves may be from non-sustainable sources.	Likelihood: High Consequences: High Risk: High	Likelihood: Low Consequences: Medium Risk: Medium	The project will work with government and civil society partners who focus on domestic violence, root causes, and preventative measures; social marketing campaigns directed at men regarding benefits of women entrepreneurs. Social marketing campaigns may include engaging with local community leaders, religious leaders, women's groups to raise awareness on the benefits of women's livelihoods including messaging on gender-based violence (GBV) and intimate partner violence (IPV) prevention. Deliver intensive promotion campaign to stimulate adoption of livelihoods activities Identify beneficiaries and deliver stoves to individual households Build capacity of existing and new cooperatives to upgrade stoves to Tier 2 Identify and prioritize types of viable enterprises (value chains) to be supported ProvideTechnical skills training (supply chain development, tourism, modern beekeeping, cookstove distribution, technical repair/maintenance, etc) Implement enterprise development Careful planning and stakeholder consultations will be undertaken prior to the site selection for livelihoods activities to ensure that any temporary interruption to livelihoods is minimized and to ensure that households have appropriate training on

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	Mitigated	
	CO_2 waste by-products from production and delivery of stoves. Lack of adequate training/equipment and/or cultural sensitivity reduces adoption of new livelihoods opportunities, Too many beekeepers could flood the market and income targets not met. Training and capacity building may not result in long term uptake of new endeavors. Production of stoves may generate waste and other supply chain issues Currently there is a demographic bias towards males and towards people over age 35 in beekeeping activities in all 3 areas. Risk of time constraints preventing women and youth participation (e.g., little time available in household time budgets, school).			livelihoods adoption Consultation with environment management specialists to ensure sustainably-sourced supply chains and production minimize unwanted by-products or environmental impacts. The project will be working with government agencies and local partners to equitably distribute the stoves and target livelihoods activities. GRM will be available for those feeling excluded from being beneficiaries

Project Outputs	Potential Impacts	Significance		Avoidance/ Mitigation Measures
		Unmitigated	**Mitigated**	
3.3 Financial services & private sector investment increased	Benefits may be disproportionately distributed among groups, especially if inherent biases exist in markets, banking and other sectors that need to be engaged to realize this component	Likelihood: High Consequences: High Risk: High	Likelihood: Low Consequences: Medium Risk: Medium	Establish savings and loans groups Training of savings and loan groups on gender equity and inclusion principles as well as SEAH to prevent issues related to power dynamics of delivering benefits. The project will engage with a men's NGO as well as community and religious leaders to roll out programming for men as allies in women's economic empowerment and sexual/gender-based violence reduction programming. Overarching social behavior change communications strategy and materials will be developed to overcome barriers and enhance motivations for women, youth and marginalized people to participate in program activities. Informational campaigns on equity (land rights, access to resources, and decision-making) and programmatic opportunities to showcase the benefits of everyone (women, young men/women, marginalized) participating in programming to improve lives.

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK FOR SUB-PROJECTS/SUB-ACTIVITIES

7.1. General Assessment

The Environmental and Social Management Framework for a GCF project describes the roles and responsibilities and the processes to manage environmental and social risks and impacts including, where appropriate transboundary risks and impacts, including screening, preparation, implementation and monitoring of subprojects" (Environmental and Social Policy March 2018.) Although the preliminary assessment of the overall risk of the project, as defined through the risk screening detailed in Table 5 and aligning with the mitigated risk is Category B, once the specifications of the project are detailed in the implementation phase, each sub-project will need to be assessed against the screening criteria set forth in this framework and subsequent mitigation measures will need to be put into place.

Table 9 indicates which of the World Bank ESS Safeguard Policies might be triggered by the proposed work in this GCF project. We have conducted a partial review of all component activities and sub-activities and used the results of stakeholder consultation discussions, focus groups, and workshops as evidence of potential environmental and social impact concerns. Bi-annual reviews of environmental and social impacts are included as part of the monitoring and management plan to provide insights as to whether these impacts are realized or mitigated while the project. Based on the assessment, all Safeguard Policies are triggered by the proposed Activities and Sub-activities including the Gender Policy as required by GCF except for ESS 7 and ESS 8. That said, the major anticipated negative impacts of the Activities and Sub-Activities include issues such as the disproportionate distribution of benefits to some groups and not others including women, youth, historically marginalized, and categories c,d,e groups, the potential for these unequal power balances to create environments where SEAH is prevalent, the potential dangers involving the safety of laborers planting trees, raising bees, and producing stoves; the potential for the forestry/agroforestry related activities to introduce pest species/diseases that could negatively impact production and forest health, and the issues related to the supply chain for stove productive and distribution. In only one instance might access restrictions be an issue depending on whether local communities illegally access the areas that currently are overtaken by ferns and are slated to undergo major fern removal - during removal people will not be able to access resources found in those areas. All of these potential negative impacts are relatively low risk and full mitigation is expected with the proposed and existing safeguards measures detailed in this Environmental and Social Management Plan that includes the creation of specific and more detailed Environmental and Social Impact Assessments and Management Plan for five Subjects/SubActivities.

Table 9. Environmental and Social Safeguards triggered

Safeguard Policies Triggered by the Project	Yes	No	TBD
Assessment and management of environmental and social risks and impacts The project involves activities related to building the resilience of communities in the face of climate change with activities focused on land restoration work including afforestation and agroforestry efforts as well as livelihood activities to indirectly support these land restoration projects beekeeping and energy efficient stoves. The scope and scale of the project will create environmental and social risks to be assessed and monitored over the life of the project. These include but are not limited to some of the following issues: a) A risk that targeted groups will not be willing to change, to adapt or change behaviors to meet the expected outcomes of the project. For example, the scoping field trip identified resistance to using native species and a strong desire for non-native Eucalyptus trees. Given this demand, the project will need to review options for tree species and potential environmental and social impacts of those choices. b) In the context of afforestation/reforestation and agroforestry activities, existing and new nurseries will supply necessary trees and shrubs to the project area, the potential for exotic and/or invasives pests and pathogens will need to be monitored to prevent local outbreaks that could cause deleterious impacts to agroforestry and ecological systems. These nurseries may also increase their use of water which may divert the resources from others in nearby areas, such risks will need to be considered and mitigated. c) Agroforestry involving the stabilization and possible construction of radical terracing will introduce several manageable environmental and social threats. Removal of topsoil to create and/or stabilize the terraces will need to be carefully managed as nutrient rich top soils are important for farming and during the construction of terracing the top soils will be subject to erosion once removed and placed out of the way while the terraces are being built. During the construction/reconstruction processes, when the topsoil is removed, the hill slopes will be particularly vulnerable to erosion and potentially landslides. Terraces must be planned and constructed under the direction of a trained engineer otherwise the terraces may be prone to collapse. Once construction is completed topsoil will need to be replaced and also augmented. This augmentation may require additional manure inputs or inputs of fertile soils, presumably these will be from offsite. Acquisition of offsite materials potentially introduces a social risk that farmers providing those nutrient rich soils and/or manure are not adequately compensated. An additional social risk is the selection of landowners for the agroforestry/terracing component to ensure that the benefits do not disproportionately favor one group over another. d) Social risks of climate change exist yet little is known about the extent to which affected peoples connect their behaviors with the changes in forest resources and exacerbated weather-related impacts. To fully build resiliency in the region, the project will need to understand the perceptions of climate change risks and build that understanding into social marketing campaigns that reduce the potential for further social risks. Clear understanding of these cycles and feedback will be needed to mitigate environmental and social risks. e) Changes in forest resources and weather-related events may cause unequal impacts across the intended audiences. These impacts may be positive or negative. When disproportionate	[x]	[ ]	[ ]

Safeguard Policies Triggered by the Project	Yes	No	TBD
negative impacts accrue to women, youth, historically marginalized, and category c, d, e populations, the risks will need to be understood and mitigated. As such if projects should be implemented, there will need to be a determination of whether the intended benefits go to those in most need. The scoping field work revealed that although the project intends to have women plant and own trees, the de facto practice is that men will govern the uses and reap the benefits of any trees planted or that men will require women purchase the stoves. Such social considerations and risks will need to be integrated into programming and mitigated as project implementation occurs. f) Given the potential changes in land classification associated with component 1, access restrictions will need to be considered. g) As earth moving/water flow altering projects are initiated there will be increased potential for exposure to disease/vector borne illnesses. Such activities may also disturb wildlife. h) Increasing forest cover and presence of fruit trees on the landscape may increase the potential for human-wildlife interactions that turn negative with crop loss or other damage. i) Given the focus on value chain additions and work on livelihoods related issues, the environmental risks related to the supply chain will need to be additionally reviewed.			
Labor and working conditions This ESS will be triggered as the AE/EE will hire over 6500 people as direct workers, contracted workers and consultants to assist with tree planting and fern removal and other afforestation/reforestation activities. Further subcontractors will hire and organize production teams, either regionally or locally, to scale livelihoods activities. Much of this work will be overseen by project staff and hired through a subcontractor. Dangers include but are not limited to the potential for sexual abuse, exploitation and harassment (SEAH) in the hiring process or while working, forced labor, child labor, and exposure to occupational health and safety risks. These risks include safety of laborers removing ferns and planting trees on steep slopes, exposure to potential disease vectors in standing water or soil and large scale fabrication of stoves, risks using the machinery in the production of stoves, exposure to bees in honey production as well as other similar risks. To secure proper labor and working conditions and ensure the safety of all work, any subcontracted groups will be trained on acceptable ESS standards. A Code of Conduct and all policies pertaining to worker safety and security will be reflected in subcontracting documents. Any risks related to the field work will need to be adequately addressed, and emergency field plans will need to be clear for all work in the forests, on steep slopes, especially if people are working in isolation. The application of labor and working condition standards will extend to cooking stove production, the development of tree nurseries to meet demands for afforestation and reforestation work, and as necessary bee keeping and other livelihoods activities.	[x]	[ ]	[ ]

Safeguard Policies Triggered by the Project	Yes	No	TBD
Resource efficiency and pollution prevention management Pesticides and fertilizers may be used in the production of seedlings. Production and potential transportation of cookstoves will need to be monitored for resource efficiency and pollution prevention management. Depending on the type of stoves and desired production, the project may trigger a need to monitor pollution at the stove manufacturing sites. If the production facilities are located inside the CND, the project will need to consider the transit of raw materials into the region and the management of post-production waste. If production is outside the region, the project will need to consider the impacts of transporting finished stoves and the resources required to achieve this mission. Core to this component will be understanding the CO_2/waste production associated with stove fabrication and transportation. Supply chain issues will also apply to other livelihoods activities developed in consultation with project beneficiaries. These details will need to be determined in the development phases or within the first year of the project. Soil erosion and loss of topsoil from the stabilization/construction of terraces will need to be addressed to improve resource efficiency.	[x]	[ ]	[ ]
Community health, safety, and security The project has several activities that will involve community engagement and exposing to risk. Earth moving activities such as terrace stabilization and tree planting may increase exposure to vector borne diseases. Afforestation/reforestation may attract wildlife into areas with more people increasing the potential for negative human-wildlife interactions. Afforestation and reforestation may involve planting on steep slopes, in some cases where landslides have occurred, and in slippery conditions, and building and installation of new cook stoves will require skills and safety briefings to do so safely. Those fabricating the cookstoves will need safety protections (ESS 2), and households using the new cookstoves will need training on how to do so safely. The project will need to consider whether households that adopt the new technologies will be at higher risk of theft. Additionally, bee keeping is a planned project, and there are safety concerns related to farming bees - all involved will need to be adequately trained on safety procedures. All proposed activities involve travel and field components for project staff, GoR staff, subcontractors, and civil society organizations as well as local partners. These actions require the frequent updating of locally relevant Emergency Preparedness and Safety plans complete with risk mitigation strategies.	[x]	[ ]	[ ]
Land acquisition, restrictions on land use and involuntary resettlement Land classification processes could result in changes that affect resource access due to existing land use, occupancy, and land tenure in the CND especially among farmers, settlers, and traditional uses of the land and forest. These may be due to 1) a change in rules of access or changes in land classification (resulting from the adoption of new land use plans, or park management plans), and/or 2) stricter implementation of land use and park laws. Both scenarios could facilitate a potential loss of access to lands (open-access lands, pastures, and forests) of traditional users.Additionally the project is about planting trees either on government lands or on private agricultural plots. These trees will be able to be accessed by those who plant the trees or others depending on the arrangements in the proposal. If slower growing fruit trees or native species with less utility compared to Eucalyptus are pursued, then the project may need to consider options for ensuring families and communities have access to the resources they need while those trees are	[]	[ ]	[x]

Safeguard Policies Triggered by the Project	Yes	No	TBD
growing. Access restriction mitigations will be incorporated into the project implementation should those issues arise.			
Biodiversity conservation and sustainable management of living natural resources This ESS addresses the threats that a project could have on biodiversity conservation and sustainable management of living natural resources. The aim of this project is to improve communities' resilience to climate change through practices such as afforestation, reforestation, and improvements of livelihoods with activities that will reduce pressure on already depleted forest resources. No modifications to large natural habitats are anticipated except for improving natural forest cover. Activities and sub-activities related to afforestation/reforestation and agroforestry may result in non-native plants (e.g., fruit trees, Eucalyptus spp.) to be planted to meet local demand and provide necessary resources. Additionally, nursery seedling production may inadvertently impact biodiversity and sustainable management of living natural resources should alien or invasive pests and/or pathogens be introduced. Impacts of tree and plant selection as well as management of nurseries for alien, invasive pests and pathogens is an environmental risk for the planned project activities.	[ ]	[ ]	[X]
Indigenous people/ Sub-Saharan African historically underserved traditional local communities Rwanda being a nation with a single/common culture, tribe, language and with a national constitution that recognizes all Rwandans are born and remain equal in rights and freedom (article 16 of Rwandan Constitution, 2015), Indigenous Peoples are not recognized as such. That said there are historically marginalized groups as well as categories c,d, e, groups that may meet the GCF criteria that includes acting as a distinct social group outside of mainstream society, having a distinct culture and language, among other characteristics. Thus far these characteristics have not been observed however as the project specific sites are selected a screening will be conducted to evaluate the characteristics of historically marginalized and categories c, d, e, people. As needed additional planning will be conducted should distinct groups be located in the project areas. Even with these precautions, the project intends to adopt strong stakeholder engagement practices and will implement consent processes with local communities as well as provide a grievance redress process should complaints arise during the project.	[ ]	[ ]	[x]
Cultural heritage The proposed afforestation work for this project will be on steep slopes in mountainous areas. Most of these areas have no human settlements. We do not anticipate issues with disturbing cultural sites. There is always the possibility of finding a cultural heritage site during the implementation of the project, we will detail chance find procedures to be in place to cover such instances.	[ ]	[ ]	[x]

Safeguard Policies Triggered by the Project	Yes	No	TBD
Financial intermediaries AE and EE in accepting funds from GCF will act as financial intermediaries of the project given that some project activities will be conducted directly by the AE and EE, and some project activities will be subcontracted to other civil society organizations. As such activities of the implementing organizations will need to be subject to environmental and social risk assessments. While most of those activities and sub-activities have been defined for the current project, the specific contractor will need to be reviewed for adherence to environmental and social safeguards that meet GoR, GCF and International Standards.	[X]	[ ]	[ ]
Stakeholder engagement The nature of the proposed project involves a high level of stakeholder engagement for the duration of the project. A clear stakeholder engagement plan as well as a grievance redress process needs to be put in place for all projects. See section 10.9 in this Annex for Grievance Redress Mechanism and section 12 for stakeholder engagement process overview with the details described in Annex 7 of the proposal. The project approach to stakeholder engagement exceeds global standards in that it uses a consent process with all local communities regardless of status.	[X]	[ ]	[ ]
GCF Gender policy Annex 8 provides a detailed assessment of gender and youth engagement in the project including the potential for gender related impacts and exposure to gender-based violence. From the field scoping visit we have learned of clear gender disparities for control of and benefits from planted trees. Despite what appears to be government policies, de facto on the ground practices indicate that if a woman plants a tree, her husband will own the tree, determine how to manage the tree, and receive the benefits from harvesting parts of the tree. This is also true with respect to livestock and cash crops. Women will only be able to make money if the program is operated as part of a cooperative or there is clear separation from land production (i.e., not part of the farm or livestock production). If women are favorably promoted in these programs and for women to gain access to the programs will create power imbalances whereas SEAH could occur. Women are also potentially at a disadvantage for the beekeeping programs due to cultural traditions. First women will need the approval of men to participate in such activities. Second, wearing of pants is unacceptable thus making women prone to stings. Additionally, should cooperatives be an option, the project will need to consider where and how women will obtain funds for the often-required initial investment into a cooperative. The structure of any cooperatives will need to consider access by women and historically marginalized groups. The field visit also revealed that women are more interested in energy-efficient cooking stoves than men, however men are less willing to pay for the stoves which would require women to obtain adequate funds. Noteworthy and in need of review for the specific districts, a higher percentage of women are employed in agriculture and forestry compared to men, this could indicate that adverse impacts due to climate change may affect women more than men. In all components of the project, it is essential that gender issues are addressed as per recommendations of the gender analysis	[X]	[ ]	[ ]

Safeguard Policies Triggered by the Project	Yes	No	TBD
assessment and management plan (Annex 8). Gender mainstreaming is a primary focus for the outcomes of this project and thus planned project activities must abide by the GCF gender policy.			

8. DEFINITION OF SUB-PROJECT/ACTIVITY

8.1 Definition of Sub-project/Unit of Activity

Sub-project includes any unit of activity or collection of activities of the larger project that is implemented in pursuit of the stated component outputs. Sub-projects may be more clearly defined and specifications articulated in the project implementation phase. Based on the current iteration of the proposed activities we expect the following sub-project/groupings of activities to each require a separate ESIA/ESMP. This may be modified during program implementation.

1. Land-use Plan Development: 1.1.2. Develop Climate-Resilient Landscape Land Use Plan and 2.2.1 Secure key remaining natural areas outside PAs
2. Afforestation/Reforestation: 2.2.2.Restore natural forest cover in and outside PAs including riparian linkages, 2.2.3. Promote silvo-pastoralism with indigenous trees in Gishwati Pasture Stepping Stone Areas, 3.3.1 Restore high slope areas as protective forests.
3. Agroforestry: 3.1.2. Develop on-farm agroforestry for high caloric and indigenous tree species, 3.2.1. Develop agroforestry related value chain for markets access, 3.2.2. Facilitate and scale up capacity, value addition and marketing of select climate-resilient value chain products, and 3.2.3. Facilitate access to input & output markets for vulnerable farmers.
4. Cookstoves: 3.2.4. Scale up marketing, production, sales, and use of fuel-efficient cookstoves.
5. Financing Mechanisms: 3.3.2. Set up & support savings & loan groups, enhance asset building, and 3.3.3. Build capacity of financial institutions to serve targeted value chains & communities.

GCF requires that the highest risk category of the component sub-project will be considered as the overall risk category of the program. GCF will require the intermediaries, in this case the PMU, to manage the environmental and social risks associated with the supported activities. In this regard, the intermediaries will review all subprojects and delegated activities, identify where the entities and GCF could be exposed to potential risks, and take necessary actions, including the development and implementation of an environmental and social management system to oversee and manage these risks. As risks are determined through consultations other aspects of the overall project may need to change to meet the stated outputs.

8.2 ESIA Requirements and Disclosures

Disclosure of relevant project information helps project affected people and other stakeholders understand the risks, impacts and opportunities of the project. The AE/EE will provide project affected people and other stakeholders with access to relevant information on: (i) the purpose, nature, and scale of the project and each subproject; (ii) the duration of proposed project and subproject activities; (iii) any risks to and potential impacts on such communities and relevant mitigation measures; (iv) the envisaged stakeholder engagement process; and (v) the grievance mechanism. Depending on the scale of the project/subprojects and significance of the risks and impacts, relevant document(s) to be disclosed as part of stakeholder engagement could range from full Environmental and Social Assessments and Action Plans (i.e., Stakeholder Engagement Plan, Voluntary Resettlement Action Plans, Emergency Preparedness Plans, Community Health and Safety Plans, Process Frameworks, Indigenous Peoples Plans, etc.) with easy-to-understand summaries of key issues and commitments. These documents could also include the AEs environmental and social policy and any supplemental measures and actions defined as a result of independent due diligence. Disclosure also includes ongoing reporting to project-

affected people and other relevant stakeholders.

Exclusion List

The project/subprojects will need to avoid activities that:

1. Contravene major international and regional conventions on environmental issues;
2. Propose to create or facilitate significant degradation and/or conversion of natural habitats of any type (forests, wetlands, grasslands, coastal/marine ecosystems, etc.) including those that are legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, recognized as protected by indigenous and local communities, or have significant negative socioeconomic and cultural impacts that cannot be cost-effectively avoided, minimized, mitigated and/or offset;
3. Involve adverse impacts on critical natural habitats, including forests that are critical natural habitats, including from the procurement of natural resource commodities, except for adverse impacts on a limited scale that result from conservation actions that achieve a net gain of the biodiversity values associated with the critical natural habitat;
4. Propose to carry out unsustainable harvesting of natural resources -animals, plants, timber and/or non-timber forest products (NTFPs)- or the establishment of forest plantations in critical natural habitats;
5. Propose the introduction of species that can potentially become invasive and harmful to the environment, unless there is a mitigation plan to avoid this from happening;
6. Involve involuntary resettlement, land acquisition, and/or the taking of shelter, natural resources and other assets belonging to local communities or individuals; through coercion and/or undue influence;
7. Contravene major international and regional conventions on human rights, including rights specific to Indigenous Peoples or those meeting the characteristics of distinct social groups.
8. Propose activities that result in the exploitation of and access to outsiders to the lands and territories of indigenous peoples in voluntary isolation and in initial contact;
9. Propose the use and/or procurement of materials deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international phase-outs or bans, such as: a. ozone depleting substances, polychlorinated biphenyls (PCBs) and other specific, hazardous pharmaceuticals, pesticides/herbicides or chemicals; b. wildlife or products regulated under the Convention on International Trade in Endangered Species or Wild Fauna and Flora (CITES);
10. Propose the use and/or procurement of pesticides and hazardous materials that are unlawful under national or international laws, the generation of wastes and effluents, and emissions of short- and long-lived climate pollutants;
11. Involves the removal, alteration or disturbance of any non-replicable or critical cultural heritage, or the use of any intangible cultural heritage without the Free, Prior and Informed Consent of the communities who it belongs to;
12. Include the use of forced labor, trafficking in persons, and child labor. Child labor includes both (i) labor below the minimum age of employment and (ii) any other work that may be hazardous, may interfere with the child's education, or may be harmful to the child's health or to the child's physical, mental, spiritual, moral, or social development; and
13. Involve the design and construction of new dams or rehabilitation of existing dams or financing agriculture and water resource management infrastructure that are highly dependent on the performance of dams that potentially affect their performance.

9. PARTIAL SOCIAL AND ENVIRONMENTAL IMPACTS AND FEASIBILITY ASSESSMENT OF RELATED MITIGATION MEASURES

The section contains the partial Environmental and Social Impact Assessment of *Building Resilience of Vulnerable Communities to Climate Variability in Rwanda's Congo Nile Divide through Forest and Landscape Restoration,* a project to increase climate resilience of vulnerable rural communities in the Congo Nile Divide by building capacity for integrated landscape planning and management through forest and landscape restoration and reducing demand for fuelwood.

The proposed project is timely given the upward population growth trends creating increased pressure on forest, soil resources and land management; the socio-economic environment wherein rural communities may be stuck in poverty traps yet the overall economic growth trends in the country offer opportunities for innovative strategies to be scaled across a region like the *Congo Nile Divide*; and the environmental and climate trends indicate that acting now at a regional scale will have lasting positive impacts on the natural resources and land management stewardship of Rwanda. That said, any large-scale project will have potential environmental and social risks and impacts, thus this document includes the Environmental and Social Management Plan for managing these risks.

The major anticipated negative impacts of the proposed activities and sub-activities include but are not limited to:

- disproportionate distribution of project benefits
- potential for gender based violence
- risks related to labor, working conditions, and community health and safety
- introduction of invasive species and pests on planted seedlings
- water use at nurseries diverting from other uses
- use of pesticides and fertilizers in seedling production
- destabilization and erosion during construction/reconstruction of terraces
- land classification that impact access and introduce restrictions
- increased exposure to disease/vector borne illnesses
- potential for negative human-wildlife interactions
- environmental risks related to the supply chain

Furthermore there may be risks that planting trees will materially reduce the current land that is utilized by smallholder farmers and further raise tensions between poor rural communities and protected and non-protected forests. Other risks could be identified in the planned environmental and social screening during project implementation.

Positive impacts could include the communities stewarding/ harnessing the carbon cycle and or reducing greenhouse gases by sequestering carbon (i.e., conserving indigenous trees, increasing soil organic carbon, practicing regenerative agriculture); conservation of the landscape and natural resources including wildlife that is critically important for the expansion of the tourism sector; utilizing efficient cook stoves to reduce deforestation; improving ecosystem services include the many that forests provide from retention of water and fog to longer term slope stabilization.

The potential negative impacts identified thus far are relatively low risk and full mitigation is expected with the proposed and existing safeguards measures detailed in this Environmental and Social Management Plan. The measures are in turn aligned with the Rwanda National Laws, the policies and practices of the GCF and the EE. Mitigating measures include; a commitment to stakeholder engagement, a process of consent, training on SEAH, establishing a grievance redress mechanism,

adhering to the labor and safety laws of all three organizations who abide by international good practices, having training on invasive species management, oversight of the supply chain, and practices to reduce use of chemicals and production of waste including carbon.

If the data has or is not accounted for under Rwanda's nationally determined contribution (NDC) to the United Nations; this Project could consider the following potential risks mitigation: trading of carbon units/carbon credits and the monetary benefits directed back into the rural communities who are custodians of the land and resources; provide alternative livelihood through compensation, simultaneously practicing regenerative farming i.e., increasing the yield of existing soils, and investigating opportunities such as ecosystem restoration implementing cook stove initiatives, biochar investigations the integrated landscape planning and management through forest and landscape restoration and reducing demand for fuelwood.

Detailed social and environmental impacts based on current project scope and scale along with expected mitigation measures included in the project design are described in Table 7. Feasibility of the measures is presented along with the implementation responsibility, schedule and budget. The project expects to use $778,652 towards managing environmental and social risks.

Table 10. Key social and environmental impacts, mitigation measures and implementation.

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
1.1 Landscape-wide land-use plan developed for climate-resilient livelihoods & forest ecosystems, integrating district strategies	Not doing consultation with certain stakeholders could lead to negative social impacts especially for target groups including women, youth historically marginalized, and category c,d,e populations. If training is not inclusive or is not conducted at the correct level for adult learners of varied backgrounds the project may miss opportunities for better integration of community ideas/opinions into project interventions. Negative impacts may occur if climate impacts of vulnerable groups are not considered. Noninclusive approach	Stakeholder Engagement Plan Grievance Redress Mechanisms We have a comprehensive list stakeholders and will continually add missing individuals/groups/organizations Stakeholder consultation will engage communities and, as part of that process, women and vulnerable communities will be consulted. We have planned to hire several community engagement staff whose job it will be to ensure inclusivity of project activities and to ensure communication with community members and especially women, youth, historically marginalized and categories C,D,E are tailored to the appropriate level for improved understanding. The entire project is designed	Staff will actively seek out underrepresented groups and with the assistance of local partners we will effectively engage them using the local language to terms that they understand. Feasibility is high given the extent of stakeholder engagement especially with government partners on the project. Such work will lead to a more sustainable project.	Responsibility of AE and EE staff to continually ask about additional stakeholders who need to be part of the discussions and to tailor interventions that can be effectively communicated. As part of this they will need to proactively consider the needs of women, youth, historically marginalized and categories c,d,e populations. New positions of Community Engagement Specialists (CES) at each forest area - up to 2 per forest - will facilitate the identification of underrepresented groups.	For the duration of the project; the first year will set the stage for demonstrating how effective, just and equitable inclusion can happen for the duration of the project. All GRM, FPIC processes will be established and communicated in the first 6 months of the project to all staff and partners. Annually there will be refresher training on these topics as needed.	$271,152

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
	to livelihoods planning. Changes in land use classification may have impacts on communities access to resources Livelihoods activities that benefit landholders are not the priority categories of women, youth, historically marginalized and categories c,d,e. Elite capture of livelihoods benefits.	to be inclusive of all partners and take into consideration the needs of women, youth, historically marginalized, and category c,d,e populations. These groups will be prioritized in the planning processes and their needs considered in the implementation stages, especially in terms of receiving benefits from the project activities. Some of these benefits should be monitored using the basic necessities survey to understand how livelihoods are impacted in the duration of the project.				
1.2 Local & national institutional capacities strengthened to integrate biodiversity & climate risks into land use planning & management	Failure to properly train on inclusion techniques for spatial planning may result in disproportionate distribution of benefits that favor some communities over others especially with regard to access to resources.	Train all staff working on spatial modeling to understand and demonstrate the specific modeled climate risks on historically marginalized communities and Categories c, d, e people.	Staff can be trained to consider the specific risks to vulnerable groups.	AE will assume responsibility for training.	Year 1	$43,526

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
2.1 PA management effectiveness improved re climate risks & adaptation	Disproportionate distribution of benefits that favor some communities over others Potential for increased human-wildlife interactions as better management is put into place. Potential for enforcement of protected areas management to create conflicts with local settlers and farmers.	Train new units within each National Park on social safeguards including GRM, consent and Access Restrictions Mitigations as well as equitable inclusion of communities in CND land use planning and SEAH.	Given the close coordination with government it will be feasible to understand what projects are operating in the region and how prior project benefits have been distributed Feasibility is strong if these government and civil society groups are willing to work in more remote, less populous, regions of the country, social marketing will ensure more sustainability with a focus on behavior change, attention to markets and economic analysis will provide market opportunities for income generation of honey products.	AE and EE staff will address needs for women, build access to markets, and conduct social marketing aimed at men. New positions of Community Engagement Specialists (CES) at each forest area - up to 2 per forest - will facilitate meetings and communication of important messages to communities. Labor and Safety Coordinator will be on hand to oversee working conditions in the field.	Year 1 Duration of project	$87,430

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
2.2. Natural forest cover restored, biodiversity connections established	Benefits of the project are disproportionately distributed across groups depending on where forests/connections are restored. Restored areas may have additional use restrictions depending on land use classifications Workers could be exposed to a myriad of hazards from landslides, snake bites, extreme temperatures, injuries from tools etc. while working. Seed nurseries for indigenous trees could become infested with invasive pests or pathogens thus potentially spreading those across the landscape Seedling production may divert water from other uses Seedling production	Train staff on an inclusive process for conducting computer review of the locations selected as the focus - the communities who can participate in follow-on project activities. The distribution of these sites may diminish participation by some groups such as women, youth, historically marginalized and categories c,d,e. Care will be take to ensure the final project sites not only work for assisted natural regeneration but that those individuals selected to engage in fern clearing activities represent the target groups. Access Restrictions Mitigation Process is established and available as needed. Assessments of local use of areas being restored will be important. Train on labor and safety standards along with an emergency preparedness and safety plan for all country programs, these will be tailored to each sites. All	This project will emphasize the use of native species with high benefits to local people. Given the lack of local seedlings for native species, one mitigating measure will be to supply nurseries	Project staff and where applicable local partners who may be overseeing workers. Project staff and where applicable local partners who may be overseeing workers. New positions of Community Engagement Specialists (CES) at each forest area - up to 2 per forest - will facilitate any needed Access Restrictions Mitigations processes Hire an Invasive Species Specialist Consultant to train nursery managers how to recognize and manage invasive species.	Years 2-4 (3 years) Years 2-4 (3 years)	$138,600

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
	may require fertizilzers and pesticides Increased forest cover may lead to more human-wildlife interactions and conflicts	laborers will have access to GRM. Raise awareness on human-wildlife conflict mitigation processes				
3.1 Farming methods enhance productivity, reduce erosion & flooding risks, contribute to ecosystem services, and support connectivity	Potential for elite capture if those consulted are not inclusive of all groups including women, youth, historically marginalized, and category c,d,e populations. Seedlings from nurseries may potential insect diseases or other invasive pathogens that could disrupt rural agriculture Seedling production may use too much water Desirable species may be exotic or invasive, There will be a lag time between planting and usability of shrub and	Stakeholder Engagement Labor and Working Conditions Management Environmental Management Plan GRM Project staff will be working with government agencies and local partners to have a participatory stakeholder engagement and equitably distribute the benefits of the project to multiple groups. GRM will be available for those feeling excluded from being beneficiaries Environmental Management Plan will be followed for the selection of species and the management of those	Distribution of project benefits may not satisfy all, a grievance process will be established, engagement with communities will ensure best distribution of benefits. Agroforestry and afforestation efforts that involve exotic/invasive species that may have disproportionate impacts on people. Forest management practices can help mitigate negative	Project staff and partners will work to ensure benefits of the project are equitably distributed Project staff, GoR Ministries of Forestry and Agriculture, Local NGOs familiar with the tree species will be responsible for ensuring the environmental impacts of tree and plant selection are mitigated. AE and EE staff and where applicable local partners who may be overseeing workers will ensure safety of workers.	Year 1-2 for selecting species and ensuring equitable distribution of benefits. Duration of project when trees are being planted for ensuring safety of those planting trees. Years 3-4 for construction of terraces.	$120,310

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
	tree species. Injuries using tools for clearing and planting. Disproportionate distribution of benefits particularly as historically marginalized, categories c,d,e and women tend to own less land. Terrace construction/stabilization can result in loss of topsoil, soil erosion, and danger to workers of hill slumping during terrace construction Nutrient rich soil or manure harvested elsewhere to enrich terraces may result in soil erosion at the supply site. Landowners provide nutrient rich soils should be equitably compensated	species should exotic/invasive be deemed the most desirable and cost effective by local communities The Environmental Management process will ensure that not only does the project have proper care and management of exotic or invasive tree species but that any nursery activities are conducted to eliminate the possibility of invasive pathogens catching a ride to the remote communities. Periodic monitoring of the nurseries will ensure such species are not present. Environment Management Specialist will oversee construction of terraces to ensure best practices are followed. All laborers will have access to GRM. Ensure selection of communities is representative of broad target audience and minimizes overlap with existing projects	impacts. Stakeholder engagement as well as GRMs are standard approaches will be used at all sites. High confidence in being able to engage a diverse group to identify sub-areas for agroforestry. Feasible to monitor nurseries for invasive species Terraces are being constructed/stabilized in a country where best practices are widely known, the project will adopt and implement best practices. An environment management specialist will oversee the process to ensure minimal erosion, saving of topsoil and equitable	The Invasive Species Specialist Consultant will train project staff to be responsible for trainings on invasive species. MoE and other agencies with knowledge of terracing will be consultant throughout the construction process.		

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
		Project staff will be working with government agencies and local partners to equitably distribute the benefits of the project to multiple groups. GRM will be available for those feeling excluded from being beneficiaries	distribution of benefits to those providing supplies.			
3.2 Rural livelihoods generate alternative incomes & reduce pressure on forests	Disproportionate distribution of benefits particularly as historically marginalized and categories c,d,e may lack adequate access to adoption campaigns. Supply chains will need to be managed for potential pollution and CO_2 emissions related to transportation of raw materials and finished products into and around CND. Workers could be injured during production without	Project staff will be working with government agencies and local partners to equitably distribute the livelihoods activities. GRM will be available for those feeling excluded from being beneficiaries All laborers will have access to GRM. Labor and working conditions will be properly revied and SEAH training will be required of all workers The project will work with government and civil society partners who focus on	Not everyone will be satisfied but we will have a process for addressing complaints and for ensuring best distributing of benefits All feasible and effective as these are standard approaches.	Project staff, GoR and civil society partners will work to ensure benefits of the project are equitably distributed. Project staff and where applicable local partners who may be overseeing stove production. Staff time and GoR time to determine sites and plan where stove distribution will focus in conjunction with access to forest resources being	Years 2-5	$78,522

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
	adequate oversights and safety procedures in place. Improving women's livelihoods and income generation could cause retaliatory behavior in male family members, lack of adequate training/equipment and/or cultural sensitivity reduces adoption of new livelihoods opportunities, too many beekeepers floods the market and income targets not met.	domestic violence, root causes, and preventative measures; social marketing campaigns directed at men regarding benefits of women entrepreneurs. Social marketing campaigns may include engaging with local community leaders, religious leaders, women's groups to raise awareness on the benefits of women's livelihoods including messaging on gender-based violence (GBV) and intimate partner violence (IPV) prevention. The project will conduct extensive groundwork to ensure livelihoods options could be met and will provide expected income. Integrate components of community safety, labor and emergency response and preparedness plans within each NP to facilitate safe working environments and respond to accidents associated with fire management and/or		improved through the project. Labor and Safety Lead for the project, plus labor and safety overseers in the field, and the time for training of all workers. Environmental Management Officer will assist with understanding and mitigating the production chains in stove production. Behavior Change Specialist will build a campaign to assist with uptake of the project by women and assist with equitable distribution of benefits.		

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
		beekeeping incidences.				
3.3 Financial services & private sector investment increased	Men retaliate on women and youth leaders in private homes who have access to additional resources leading to an increase in domestic violence. Women, youth and historically marginalized are equipped with the skills but unable to access the resources given structural and cultural gender and social inclusion barriers.	The project will engage with a men's NGO as well as community and religious leaders to roll out programming for men as allies in women's economic empowerment and sexual/gender based violence reduction programming. Overarching social behavior change communications strategy and materials will be developed to overcome barriers and enhance motivations for women, youth and marginalized people to participate in program activities. Informational campaigns on equity (land rights, access to resources, and decision-making) and programmatic opportunities to showcase the benefits of everyone	These activities are in line with Rwanda's National Gender Policy. Details of activities to address social inclusion are detailed in ANNEX 8	Project Staff, Gender Lead, Government of Rwanda Staff, NGO partners will carry the responsibility of ensuring gender equity and social inclusion across the project activities related to access to financing and promotion of value chains.	Duration of Project	$39,112

Outputs	Social and Environmental Impacts	Mitigation Measures Included in Project Design	Feasibility, Effectiveness and Sustainability	Implementation Responsibility	Schedule	Budget*
		(women, young men/women, marginalized) participating in programming to improve lives.				

*An additional 203,072 will be allocated to the ESMP process distributed across all sub-component projects.

10. ENVIRONMENTAL AND SOCIAL SCREENING ASSESSMENT

10.1. ESS 1. Assessment and Management of Environmental and Social Risks and Impacts

The Environmental and Social Impact Framework provides guidance for the PMU to conduct a full assessment of the potential environmental and social impacts that may arise in the course of implementation. The proposed project includes a number of subprojects and their specific activities and locations that remain to be fully defined and assessed. These include:

- Land Use Classification Areas
- Fire Management Interventions
- Promotion of Tree Nurseries
- Rehabilitation of forest lands in NNP (4500 ha), Gishwati (500 ha) and along riparian areas (1,500 ha)
- Distribution of fodder trees
- Management determination of high slope/fragile environments
- Restoration of 2,500 ha of public and private lands
- Restoration of 1,000 ha of pasture lands
- Agroforestry activities including supply chain management
- Stabilization of Terraces
- Rural Livelihoods pilot and scaling of
    - Forestry and Agroforestry work on Macademia Nuts, Avocado, French Beans and Chilis
    - Modern beekeeping
    - Ecotourism in Gishwati & Mukura
    - Farmer business development
    - Ecological cookstoves

The project activities, once fully defined through the land-use classification exercises and in consultations with the communities, will be screened for risks and appropriate assessment and management measures will be adopted. The initial screening of each activity will follow Table 10.1.1. using the same analysis as described in section 6.2. The screening will be based on appropriate work through additional screenings covering other Environmental and Social Standards (ESS 2-8).

Where the screening of the fully defined project components identifies potential social and environmental risks that could be categorized as High Risk, these components will be redesigned to eliminate and/or minimize such risks. Project components that may still present High Risks after redesign will be excluded. Project components with low-moderate risks will be subject to mitigation measures that will be defined in explicit site-specific management plans for that project component. These may include, but are not limited to:

- Stakeholder Engagement Plan
- Livelihood Action Plan
- Indigenous Peoples Plan
- Biodiversity Management Plan
- Cultural Heritage Management Plan

The targeted assessments/site-specific assessments/comprehensive Environmental and Social Impact Assessment (ESIA) will be undertaken once project activities/sub-projects and sites are fully defined. The assessment(s) will be conducted in a manner consistent with national regulations and the GCF and lead to the development of appropriately scaled management measures and plans to address the identified risks and impacts. The required social and environmental assessments and adoption of appropriate mitigation and management measures will be completed, disclosed, and discussed with stakeholders prior to implementation of any activities that may cause adverse social and environmental impacts.

The Project Management Unit (PMU) will screen for the potential environmental and social risks and impacts of a proposed subproject and activities. The process will help the PMU to identify the relevant Environmental and Social Standards (ESS), establishing an appropriate E&S risk rating for these subprojects and specifying the type of environmental and social mitigations required.

Environmental and Social Impact Screening Assessment

Each of the five subprojects/activities will be screened for environmental and social impacts using the following process;

Step 1, Using the screening documents in 10.2-10.8, conduct an initial screening of each project and identify potential risks.

(1) Gender (10.1.2.)
(2) Vulnerable Persons (10.1.3.)
(3) Human Rights (10.1.4.)
(4) Labor (10.2)
(5) Resource Efficiency and Pollution Control (10.3)
(6) Community Health, Safety and Security (10.4)
(7) Land acquisitions, Use Restrictions, and Involuntary Displacement (10.5)
(8) Biodiversity Conservation and Sustainable Use of Natural Resources (10.6)
(9) Presence of and Risks to Historically Marginalized Persons (10.7)
(10) Cultural Heritage (10.8)

Step 2, Ensure all sub-project activities are cross-checked with the exclusive list in Section 9.

Step 3, Place each risk Table 10.1 and in consultation with local government and stakeholders rank each risk based on the following process. **(See instructions for Step 3)

Step 4, Moderate and High Risks consult the relevant section on additional management plans or materials needed to document appropriate mitigation.

Step 5, Develop those materials in collaboration with local governments and relevant stakeholders.

Step 6, Combine into a single Environmental and Social Management Plan for each sub-project/sub-activity with appropriate management measures for implementation and compliance monitoring.

Step 7, Translate and disseminate in accordance with GCF rules and best practices.

:

**Step 3 Instructions for Risk Ranking

Text evaluations

Positive/Negative impacts: described in narrative within the table.

Kind of impact - indicates the extent to which the impacts will be 'direct', 'indirect', or 'cumulative'.

Probability: indicates the likelihood of the impact being realized during the project implementation period and is defined as 'definitely not' and 'probably not', = LOW, 'probably' and 'very probably', = MEDIUM and 'definitely' = HIGH

Confidence of Assessment: signals how the assessor rates their ability to make an informed determination of the impacts based on the quality of the information contributing to the impact assessment, indicated as 'low,' 'medium,' or 'high.'

Numerical evaluations

Extent of impact: 0=None, 1=Local, 2=Regional, 3=National, 4=International.

Intensity or magnitude of the impact: 0= None, 1 = negligibly altered natural and/or social functions, 2 = modified natural and/or social functions, 3 severely altered natural and/or social functions).

Duration: 0 = None, 1 = up to 2 years, 2 = 2 to 15 years, 3 = More than 15 years.

Consequence: A summative result based on extent of impact, intensity of magnitude of the impact, and the duration.

(0-1) not significant, no influence on decisions, (2-3) low, small impact with no meaningful influence on decisions (4-5) medium, should influence decisions (6-7) high, will impact decisions (8-9) very high, will impact decisions and must be fully vetted prior to implementation.

The score for Consequences aligns to the GCF Categories for risk as follows:

(0-3): LOW (C) (4-7): MODERATE (B) (8-9): HIGH (A)

These evaluations are largely subjective and may evolve as new information about the project, project location, project beneficiaries, and overall project implementation emerge.

Table 10.1.1. ESS 1: Screening & Impact Assessment for Sub-Projects and Activities							
Sub-Project/Activity Title:							
Location(s) of Sub-Project/Activities:							
Name of Project Reviewer:							
Date of Review:							
Rate each identified impact listed using the following scales:							
Potential Negative Impacts	**Kind of Impacts** (Direct, Indirect, Cumulative)	**Extent of impacts** (0 = None, 1=Local, 2=Regional, 3=National, 4=International)	**Intensity or magnitude of the impacts** (0= None, 1 = negligibly altered natural and/or social functions, 2 = modified natural and/or social functions, 3 severely altered natural and/or social functions)	**Duration** (0 = None, 1 = up to 2 years, 2 = 2 to 15 years, 3 = More than 15 years)	**Consequence** - (0-1) not significant, no influence on decisions, (2-3) low, small impact with no meaningful influence on decisions (4-5) medium, should influence decisions (6-7) high, will impact decisions (8-9) very high, will impact decisions and must be fully vetted prior to implementation	**Probability** (Definitely Not, Probably Not, Probably, Very Probably, Definitely)	**Confidence** (Low, Medium, High)
Will this sub-project potentially generate adverse gender-related impacts including gender-based violence?						**Yes ☐ No ☐**	
Please list and evaluate all potentially adverse gender-related impacts including gender-based violence, *(add new rows for each risk)*:							
[insert and rate adverse gender-related impacts							

including gender-based violence]							
Will this sub-project potentially affect vulnerable groups?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks of affecting vulnerable groups, *(add new rows for each risk)*:							
[insert and rate impacts affecting vulnerable groups]							
Will this sub-project potentially affect distinct social or cultural groups including those who self-identify as a distinct group; have a collective attachment to geography – including seasonal use and occupation; have customary systems distinct or separate from mainstream society; or have a distinct language or dialect?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks affecting these distinct social or cultural groups, *(add new rows for each risk)*:							
[insert and rate impacts impacting distinct social or cultural groups]							
Will this sub-project potentially undermine human rights?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks of undermining human rights, *(add new rows for each risk)*:							
[insert and rate impacts undermining human rights]							
Will this sub-project potentially cause physical or economic displacement?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks relating to physical or economic displacement, *(add new rows for each risk)*:							
[insert and rate impacts relating to physical or economic displacement]							

Will this sub-project have potential risks to community health, safety and security?						**Yes ☐ No ☐**	
Please list and evaluate all potential community health, safety and security risks, *(add new rows for each risk)*:							
[insert and rate impacts related to community health, safety and security risks]							
Will this sub-project have potential risks to labor and working conditions?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks related to labor and working conditions, *(add new rows for each risk)*:							
[insert and rate impacts related to labor and working conditions risks]							
Will the sub-project generate resource inefficiencies, pollution, waste, chemicals or GHG emissions?						**Yes ☐ No ☐**	
Please list and evaluate all potential risks related to resource efficiency, pollution, wastes, chemicals and GHG emissions, *(add new rows for each risk)*:							
[insert and rate impacts related to risks in resource efficiency, pollution, wastes, chemicals and GHG emissions]							
Will the sub-project generate risks to cultural heritage						**Yes ☐ No ☐**	
Please list and evaluate all potential risks to cultural heritage, *(add new rows for each risk)*:							
[insert and rate impacts related to risks to cultural heritage]							

Will the project generate other environmental or social risks?						**Yes ☐ No ☐**	
Please list and evaluate any other environmental or social risks that may result from this subproject, *(add new rows for each risk)*:							
[insert and rate impacts from other environmental or risks identified above]							

Project Risk [based on the highest risk category]	**Low ☐ Moderate ☐ High ☐**
Indicate the required sub-project specific management measures/plans.	☐ Stakeholder Engagement Plan ☐ Resettlement Action Plan ☐ Process Framework for Access Restrictions Mitigations ☐ Indigenous People's Plan ☐ Cultural Heritage Management Plan ☐ Biodiversity Management Plan
Summary of main findings: **[indicate the main risk issues, assessments, plans to address risks, mitigation measures, and implementation timeframe]**	

10.1.2. Gender Related Impacts including Gender-Based Violence.

The project will target women and youth as beneficiaries thus the influx of opportunities, resources, and support may create an environment in which power differentials lead to gender-related issues, including gender-based violence (GBV). Gender-based violence is any harm or potential harm perpetrated against an individual or group on the basis of gender. Gender-based violence has many expressions, including physical, sexual, psychological and economic, which can be underpinned by legal, social and institutional norms and systems. Examples include but are not limited to: physical assault; sexual violence including sexual exploitation/abuse, forced prostitution and rape; domestic violence; trafficking; early/forced marriage; female genital mutilation; honour killings; property grabbing; and widow disinheritance.[82]

To minimize the potential for gender-related impacts and gender-based violence, the PMU will hire a gender specialist as well as community engagement specialists who will be trained in gender-related issues, prevention of SEAH, gender-responsive programming and survivor-centered approaches. Given that specific locations and beneficiaries will be determined during full implementation, each subproject will be screened for the potential for adverse gender-related impacts (including gender-based violence).

Table 10.1.2. Adverse gender-related impact screening

Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:

(a) the sub-project does not discriminate against women or other groups based on gender regarding access to resources, services, or benefits provided by the project;

(b) the sub project avoids activities that inadvertently create, exacerbate or perpetuate gender-related inequalities or have adverse impacts on women or girls;

(c) the sub-project minimizes any risks from activities that have adverse impacts on the livelihoods, rights or other situations of women and girls including their ability to use, develop or protect natural resources;

(d) the sub-project takes into account the different roles and positions of women and men in accessing environmental goods and services to recognize gender equality and gender equity in project activities.[83]

(e) the sub-project does not aggravate risks of gender-based violence (including sexual exploitation, abuse or harassment – SEAH)

(f) The sub-project has processes and oversights in place to ensure persons employed or engagement

82 Castañeda Camey, I., Sabater, L., Owren, C. and Boyer, A.E. (2020). Gender-based violence and environment linkages: The violence of inequality. Wen, J. (ed.). Gland, Switzerland: IUCN. 272pp

83 Equality refers to providing the same benefits regardless of gender, and equity ensures resources required may differ based on circumstances and are thus allocated appropriately to provide equal outcomes.

by the AE/EE or through third parties to perform project tasks to prevent gender-based violence?
• **NO (to any of the above)** • **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the adverse gender-related impacts and gender-based violence and add all potential impacts to the screening and impact assessment table in section 10.1.

10.1.3. Vulnerable Groups

The Congo-Nile Divide contains a high number of categories c,d, and e persons who are vulnerable to the current structure of society in Rwanda. As sub-project details are determined, each should be specifically screened to ensure that risks to groups made vulnerable are avoided and/or fully mitigated.

Table 10.1.3. Adverse impacts to vulnerable groups screening
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that: (a) the site has been assessed for the presence of vulnerable or disadvantaged groups or individuals (including persons with disabilities); (b) the sub-project leads have considered and understand the livelihoods conditions and needs of any vulnerable or disadvantaged groups in the sub-project area; (c) any sub-project risks and negative impacts, both material and non-material, do not fall disproportionately on vulnerable or disadvantaged groups; (d) any sub-project changes to land use, land classifications and/or tenure arrangements do not disproportionately affect vulnerable or disadvantaged groups including people who may be internally displaced into the project area;

(e) the project does not discriminate against vulnerable or disadvantaged groups with regards to access to resources, services, or benefits provided by the project?
• **NO (to any of the above)** • **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the status of adverse impacts to vulnerable groups and add all potential impacts to the screening and impact assessment table in section 10.1.

10.1.4. Human Rights

The project is committed to environmental and social enhancement including the promotion of livelihoods activities that will benefit vulnerable groups such as women, youth, historically marginalized groups as well as categories thus human rights issues are not expected to be an issue. That said, human rights issues may arise in the course of any project thus due diligence must be conducted. Each sub-project will be subject to a human rights screening as specific sites, targeted beneficiaries and other particulars are determined in consultation with communities and stakeholders. Human rights issues will be further screened within the individual ESS components, sections 10.2 – 10.8. Mitigation of any issues arising related to human rights may be submitted through the project level GRM (section 10.9) or directly to the Independent Redress Mechanism of the GCF (section 10.9). Finally, the Government of Rwanda has the National Commission for Human Rights whose overall mission is to promote and protect Human Rights, this commission is set up to investigate and provide oversight for human rights related abuses and thus the project will fall under its purview should any issues be raised.

Table 10.1.4. Screening for impacts to Human Rights
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(a) the sub-project will not lead to adverse impacts on the enjoyment of human rights (civil, political, economic, social or cultural) of individuals or groups including through measures that reduce the

level or effectiveness of the protection of rights by governments and agencies or that weaken the respect of the rights by other stakeholders (e.g., replacement of customary authorities and institutions by protected area officials, affecting the traditional systems of political representation, authority and decision-making and therefore the political rights of communities etc.);

(b) the sub-project avoids project activities that affect individual's or groups' ability to fulfill economic and social rights, i.e., the rights that guarantee the ability of people to meet their basic needs (e.g. health or education, drinking water, productive resources, sources of income, subsistence);

(c) the sub-project avoids or property mitigates restrictions in availability, quality of and/or access to services or resources essential to meet the basic needs, in particular for vulnerable groups or individuals, including persons with disabilities;

(d) the sub-project avoids activities that lead to a deterioration of procedural rights; that is any activity that leads to exclusion of individuals or groups from participating in decisions that may affect them (e.g., on natural resource management, land use etc.) or that affects their ability to access information that is important for their informed participation;

(f) the sub-project avoids unjustified preferential treatment of individuals or groups in terms of access to resources or services provided by the project;

(g) sub-project activities are not subject to elite capture that leads to discrimination of vulnerable people, or formal or de facto restriction or exclusion of groups from access to such resources or services;

(h) the sub-project does not contribute to discrimination on the grounds of ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographic origin, property, birth or other status including as an indigenous person or as a member of a minority;

(i) the sub-project will not perpetuate or aggravate any history of human rights conflict or injustice in the project area/s, including evictions and failure to compensate people for their land and/or assets when the protected area was established?

- **NO (to any of the above)**
- **TO BE DETERMINED (TBD)**
- **YES (to all of the above)**

If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the status of human rights related issues and add all potential impacts to the screening and impact assessment table in section 10.1.

10.2. ESS 2. Labor and Working Conditions Risk Management Plan and Screening Assessment

During project implementation the AE/EE will finalize the information contained in this section to facilitate planning and implementation of the project. This section identifies the labor requirements and risks associated with the project, and will help the AE/EE to determine the resources necessary to address project labor issues through a Labor and Working Conditions Risk Management Plan (LWCRMP). This is a living document, which will be reviewed and updated throughout development and implementation of the project. Where national law addresses these labor requirements, it is noted in the text without duplication of materials. An up-to-date version of the LWCRMP will be shared with project-related parties, including but not limited to staff of the project implementing unit, contractors and sub-contractors and project workers, to have a clear understanding of what is required on a specific labor issue. The plan notes where information will be collected as part of the project implementation labor screening. The LWCRMP will be guided by two primary components – international good practice and supporting Rwandan government policies.

To assure compliance with the labor and workplace safety regulations, prior to recruitment of workers field team coordinators will be trained in labor and workplace safety to ensure workers are protected from sickness, disease and injury arising from their employment. The Project Management unit (PMU) will be responsible for coordinating these trainings for all project executing entities This individual will oversee site level labor and safety representatives who are either directly employed by the project or the point people within subcontracts to oversee all labor and safety related issues. The purpose of these positions will be to oversee the implementation of labor and safety requirements, extend a clear grievance process to all workers including a clear approach for how to lodge grievance concerns as well as a process for airing and resolving grievances, oversee updates to the emergency preparedness and safety plan at each local site, conduct periodic site visit to ensure compliance, and other duties as assigned. This head labor and safety officer will work closely with the project leadership and GoR to ensure compliance on all labor and safety related applicable laws and policies.

The scope of application of ESS2 to specific workers associated with the GCF funded activities depends on the type of employment relationship between the EA/EE and the project workers for all subprojects. ESS2 applies to project workers including full-time, part-time, temporary, seasonal and migrant workers (Table 10.2.1).[84]

84 Migrant workers are workers who have migrated from one country to another or from one part of the country to another for purposes of employment.

Table 10.2.1. Definitions of Workers

Direct worker: A direct worker is a worker with whom the AE/EE has a directly contracted employment relationship and specific control over the work, working conditions, and treatment of the project worker. The worker is employed or engaged by the AE/EE, paid directly by the AE/EE, and subject to the AE/EE's day-to-day instruction and control. Examples of direct workers may include persons employed or engaged by the AE/EE's project implementation unit to carry out design and supervision, monitoring and evaluation, or community engagement in relation to the project.

Consultants: Consultants are subject matter experts, hired either directly or through 3rd party with little supervision from the AE/EE. The terms and conditions of consultant work is often part-time over a set period, with lump sum payments upon contract signing and completion of deliverables. Consultants may be foreign or nationals.

Contracted worker: A contracted worker is a worker employed or engaged by a third party to perform work or provide services related to the core functions[85] of the project, where the third party exercises control over the work, working conditions, and treatment of the project worker. In such circumstances, the employment relationship is between the third party and the project worker, even if the project worker is working on an ongoing basis on project activities.

Community worker: Projects may include the use of community workers in a number of different circumstances, including where labor is provided by the community as a contribution to the project, or where projects are designed and conducted for the purpose of fostering community-driven development, providing a social safety net or providing targeted assistance in fragile and conflict-affected situations. Given the nature and objectives of such projects, the application of all requirements of ESS7 may not be appropriate. In all such circumstances, the EA/EE will require measures to be implemented to ascertain whether such labor is or will be provided on a voluntary basis as an outcome of individual or community agreement. Based on the nature and risk of the community work, the AE/EE will determine which requirements of ESS7 apply.

Community contracts: Projects may involve involving conservation agreements, incentives/cash transfer agreements, payments for environmental services programs, etc, and should include contract clauses related to wages or payments, insurance and basic safety and health on the worksite (medical kit, protective clothing, etc.), and access to grievance redress mechanism.

Primary supply worker: A primary supply worker is a worker employed or engaged by a primary supplier, providing goods and materials to the project, over whom a primary supplier exercises control for the work, working conditions, and treatment of the person. As part of the definition, there is a requirement that the goods or materials be provided directly to the project for its core functions on an ongoing basis. This means that second, third, and further levels of the supply chain (sometimes referred

85 Core functions of a project constitute those production and/or service processes essential for a specific project activity without which the project cannot continue.

to as Tier 2 and Tier 3 suppliers) are not covered by ESS2.

Where **government civil servants** are working in connection with the project, whether full-time or part-time, they will remain subject to the terms and conditions of their existing public sector employment agreement or arrangement, unless there has been an effective legal transfer of their employment or engagement to the project. ESS2 will not apply to such government civil servants, except for the provisions protection of the workforce and occupational health and safety.

1. Overview of Labor Use on the Project

Number of Project Workers:

Under this project EE/EA will employ existing technical staff (with skills required for the project implementation) and support staff as well as consultants (National, regional, or International). Staff will be involved in the project implementation full time or on a part time basis mostly for the civil servants at the central and local government levels. Vacant positions will be filled in the first quarter of the project implementation. Terms and conditions of these direct workers will be guided by Rwanda Labor Law.

A detailed list of potential project workers is hereunder:

	Direct Workers		Consultants		Contracted workers	
	Skilled	Semi-skilled & Unskilled	National	International	Skilled	Semi-skilled & Unskilled
RFA	37	1	19	44		22,592
PMU	5	1				

The project will recruit semi-skilled and unskilled workers from local communities for restoration activities. Some will be hired directly by RFA others by RFA hired contractors and employed on contractual basis and they will be paid fully based on wage agreement in their contracts.

The estimates are based on prior experience with other government work.

Other Characteristics of Workers:

- Apart from some highly specialized skills that might need to be sourced outside the country, most of the labor force will be sourced nationally following requirements of national legislation. All semi-skilled and non-skilled labor will be locally hired with a rationale to empower local communities economically while preserving social cohesion. All the workers will be directly hired without any intermediaries whatsoever. For the time being, the total number of contractors is not known yet since national procurement laws allow a contractor to be awarded more than one

contract and subsequently the number of potential sub-contractors is not known as well, as their recruitment remain at the discretion of respective contractors. However, the LWCRMP will continuously be updated as the project gains more clarity in terms of labor needs throughout implementation.

- The recruitment of project workers will be free from any kind of discrimination as provided for by the Law regulating Labour in Rwanda especially in its article 9 stipulating that “An employer must give employees equal opportunities at the workplace”. “An employer is prohibited from discriminating employees on basis of ethnic origin, family or ancestry, clan, skin color or race, sex, region, economic categories, religion or faith, opinion, fortune, cultural difference, language, physical or mental disability or any other form of discrimination. Every employer must pay employees equal salary for work of equal value without discrimination of any kind”. The same provision of the law will also be applicable in case of any labor influx occurrence.

- Project staff will work with local authorities and community representatives to set criteria that maximize participation of as many households as possible in the project implementation such as selecting maximum one person per household to be hired.

- Most of the work performed under this project demands a low level of professional skills especially for non-skilled labor hence there is a risk that this increases the likelihood to attract underage children and enhance school drop out in the community.

- Within the framework of prohibiting child labor this project will conform to article 6 of the labor law that sets the minimum age of employment at 16 and prohibits the employment of underage children in dangerous environments. Article 7 prohibits any form of forced labour, article 8 prohibits sexual harassment in workplace. Sexual harassment in any form against supervisee is prohibited. It is prohibited to dismiss an employee for having reported or testified on sexual harassment committed by his/her supervisor. If there is tangible evidence that an employee has resigned due to sexual harassment committed against him/her by his/her supervisor, his/ her resignation is considered as unfair dismissal. All project workers will sign a Code of Conduct.

- Apart from foreign consultants who might be contracted to perform specific duties that might require special expertise that cannot be sourced locally, in this project, the likelihood of migrant workers is very low. Nevertheless, in the event of their employment, provisions of the law regulating labor in Rwanda and other relevant laws on these matters shall be applied, especially article 12 the Law N° 66/2018 of 30/08/2018. Foreign consultants will be governed by the law N°57/2018 of 13/08/2018 on Immigration and Emigration in Rwanda which provides for the matters relating to residence permit for foreign employees.

Wages: The common practice all over the country in the absence of a law on minimum wage sets daily wage for non-skilled labor between 1500-2000 RWF and 5000-7000 RWF for semi-skilled laborers. Therefore, unless better wages are negotiated between the EE or the contractor and workers, the EE and contractors will comply with the common practice. In all cases, the most current local wages in reference to others ongoing or recently completed projects of the same caliber will be used as reference while negotiating and during monitoring of compliance by the labor inspectors and ESF teams. The law also allows collective bargaining and where employees will deem it necessary it will be done. In ensuring full compliance with the law in this regard, the

EE and contractors will be required to furnish Districts with copies of contracts for all its workforce. Contractors will not be allowed to deploy any employee to work in the project if such copy of employment of that employee has not been handed to the District's labor inspector.

Migrant Workers: If it is very unlikely that migrant workers (either domestic or international) will work on the project. Nevertheless, in the event of their employment, provisions of the law regulating labour in Rwanda and other relevant laws on these matters shall be applied especially article 12 the Law N° 66/2018 of 30/08/2018. Foreign consultants will be governed by the law N°57/2018 of 13/08/2018 on Immigration and Emigration in Rwanda which provides for the matters relating to residence permit for foreign employee.

2. Assessment of Key Potential Labor Risks

Project activities: The subprojects activities will include the following that will be specified in the project implementation phase. Subprojects pertaining to livelihood activities are the least well defined as the specific sites and applications will be determined in consultation with the project stakeholders and communities during project implementation

- Fire Management Interventions
- Promotion of Tree Nurseries
- Distribution of fodder trees
- Rehabilitation of forest lands in NNP (4500 ha), Gishwati (500 ha) and along riparian areas (1,500 ha) - This activity will involve the hiring of 3000 direct workers to cut invasive ferns from the forest and replant with native vegetation. They will work on steep slopes with sharp tools and likely camp in the forest. The work will be open to men and women thus issues related to gender-based violence/SEAH could apply and are addressed in Annex 8.
- Restoration of 2,500 ha of public and private lands
- Restoration of 1,000 ha of pasture lands
- Agroforestry activities including supply chain management
- Stabilization of Terraces
- Rural Livelihoods pilot and scaling of
    - Forestry and Agroforestry work on Macademia Nuts, Avocado, French Beans and Chilis
    - Modern beekeeping
    - Ecotourism in Gishwati & Mukura
    - Farmer business development
    - Ecological cookstoves

The details of these activities will be specified during project implementation.

Key Labor Risks:

During project implementation, the labor risks will be detailed; at present the expected risks include:

- The conduct of work under hazardous conditions on steep slopes, in mountainous areas

exposed to the elements while using sharp tools. Some of the locations will be remote and distant from any medical facilities. Although less remote, the planting of fruit trees on agroforestry targeting areas could expose workers to similar issues. Stabilization of terraces for planting will be hazardous especially if compounded by inclement weather conditions. Teams will need to be ready for emergencies related to injuries from contact with equipment or falling objects, slips and falls, overexertion, insect bites, snake bites, general transportation and/or motor vehicle accidents going to and from worksites, and possibly exposure to harmful substances including the inhalation of phytotoxins from ferns. For workers camping in remote areas there may be a risk of exposure to improper waste disposal at camping sites. Additionally more serious emergencies might include exposure to slope slumping or landslides, floods, and forest fires. Modernizing beekeeping could result in bee stings, production of cook stoves may involve working with tools that could cause harm.

- Although unlikely, child labor or forced labor, is an issue especially given the low skills required for the positions. The Rwanda Government prevents such activities and the screening as well as training and management should minimize the chance of this risk. Such practices are noted given the recently reported on child labor abuses in the tea sector[86]
- As the project is targeting women, youth and historically marginalize groups as beneficiaries there are risks of discrimination and gender-based violence on sites, these will be addressed through the training of local teams and sensitization to SEAH.
- Possible accidents or emergencies may occur on any of the project activities. ESS4 will provide for emergency management plans that will apply to all worksites and be available to project workers, subcontractors and others involved in the project in case of emergencies. The emergency management plan will also cover the implementation of occupational health and safety requirements.

Steps to reduce risks include:

- Select team leaders and train them in first aid and safety.
- Training participants in safety measures, SEAH as well as victim-centered responses to SEAH incidences, and First aid
- Provide first aid kits to teams
- Develop and communicate evacuation plan
- Develop and communicate code of conduct
- Train staff on park rules and regulations
- Always have drinking water boiled (that kills phytotoxins)
- Provide masks to community workers
- Workers will be required to have health insurance
- Training in restoration techniques
- Employer to pay social security contributions for all workers
-

3. Brief Overview of Labor Legislation: Terms and Conditions

The principal legislation governing labor and working conditions in Rwanda is the Rwanda Labor Code, 2009 and associated Ministerial Orders on Occupational Health and Safety. This Code and the associated Orders address these major employment areas:

1) Fundamental Rights
2) Employment contract, apprenticeships, and internships
3) General working conditions
4) Salary
5) Occupational health and safety
6) Associations of employees and association of employers
7) Labor disputes
8) Right to strike and lockout
9) Labor organs
10) Declaration made by an enterprise
11) Offenses and their penalties, administrative misconduct, and related sanctions
12) Administrative misconduct and its sanctions
13) Miscellaneous transitional and final provisions
14) Specific health and safety issues in Rwanda are cover under these rules including:
    - assurances that employers provide access to a first aid box in the workplace,
    - clarity on evacuation procedures in the event of an emergency, directions to the nearest health care facility.
    - adequate protection equipment,
    - training of staff on the correct use of all equipment and similar measures to improve worker skills to execute their jobs safely.

To avoid any type of discrimination, the Rwandan law requires employers not to base their decisions on personal characteristics unrelated to inherent job qualifications. The Rwandan constitution itself provides that all individuals have the right to equal pay for equal work without discrimination. Employers/companies are also obliged to take active measures to prevent any harassment within the workplace. Special measures of protection or assistance are a must for disabled workers and vulnerable groups such as women. Failure to abide by these standards may result in civil or even criminal sanctions. Workers are allowed to sue their exploitative employers (Law N° 66/2018 of 30/08/2018 regulating labor in Rwanda).

Rwandan law requires the employer/company to take proactive efforts to protect workers from injury and illness. Before the start of activities, the employer/company must identify potential hazards and adequate responses to eliminate all avoidable risks to employees' health and well-being (Law N° 66/2018 of 30/08/2018 regulating labor in Rwanda).

Employers must provide, at their own expense, first aid kits in case of emergencies or accidents. There is an Order of Minister which determines the conditions for occupational health and safety and another one that sets modalities of establishing and functioning of occupational health and safety committees (Ministerial Order N°01 of 17/05/2012 & Ministerial Order N°02 of 17/05/2012). For some specific forms of employment, the law requires the employer to pay for insurance fees

so that in case of sickness, injury or death the insurance company will cover the risk (Law N° 66/2018 of 30/08/2018 regulating labor in Rwanda).

This is particularly relevant for this project, given the nature of activities that it entails and the risks that may be attached to them.

The laws also provide for a labor inspection system where inspectors may enter a work site at any time to secure social security and safety at work including the control of child labor and as needed conflict resolution between workers and employers.

Rwandan standards apply to all workers engaged with a company or project, even if they are engaged through a third party. The Rwandan law prohibits labor abuses like child labor, forced labor and discrimination.

4. Responsible Staff

To be completed during project implementation, this section will identify the functions and/or individuals within the project responsible for (as relevant):

- engagement and management of project workers
- engagement and management of contractors/subcontractors
- occupational health and safety
- training of workers
- addressing worker grievances

In some cases, this section will identify functions and/or individuals from contractors or subcontractors, particularly in projects where project workers are employed by third parties.

5. Age of Employment

The concerns related to child labor are further elaborated in the National Policy on the Elimination of Child Labor. This policy serves to eliminate and prevent child labor in hazardous work situations, rehabilitate children withdrawn from forced labor, raise awareness of the exploitation of child labor and understand what contributes to child labor.

The employer has the obligation to ensure children under 16 are not engaged in exploitative work relationships or any work that would interfere with the child's education. An Order of the Minister in charge of labor establishes the list of light works which a child aged between 13 and 15 years is allowed to perform.

As the project details are determined this section will further detail

- The minimum age for employment on the project
- The process that will be followed to verify the age of project workers
- The procedure that will be followed if underage workers are found working on the project
- The procedure for conducting risk assessments for workers aged between the minimum age and 18

6. Terms and Conditions

To be completed once the details of subprojects are finalized.

- Specific wages, hours and other provisions that apply to the project
- Maximum number of hours that can be worked on the project
- Any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions
- Other specific terms and conditions

7. Grievance Mechanism

In addition to being made aware of and having access to the overall project level Grievance Redress Mechanism which will be shared during onboarding and training of all staff, Rwanda has specific processes for addressing labor disputes.

Art. 102 of Law N° 66/2018 of 30/08/2018 regulating labor in Rwanda provides that when there is any individual labor dispute between a worker and an employer, the concerned party can request the employees' representatives to settle it amicably. Where the employees' representatives fail to settle the dispute, the concerned party refers the matter to the Labor Inspector for an out of court settlement. When conciliation efforts fail, the dispute may be taken before the competent court. When all the steps referred to above are not followed, the court may declare the claim inadmissible. This means that a worker must go through the non-court processes first before going to the courts.

8. Contractor Management

During project implementation, this section will detail:

- The selection process for contractors.
- The contractual provisions that will put in place relating to contractors for the management of labor issues, including occupational health and safety.
- Describe any insurance
- The procedure for managing and monitoring the performance of contractors.

9. Community Workers

During project implementation, this section will detail:

Where community workers will be involved in the project, the conditions of work, and measures to check that community labor is provided on a voluntary basis. This section should also provide details of the type of agreements that are required with community members and how they will be documented.

10. Primary Supply Workers

During project implementation, this section will be included:

If a significant risk of child or forced labor or serious safety issues in relation to primary suppliers has been identified and will detail a procedure for monitoring and reporting on primary supply workers.

11. Screening Assessment for Labor and Working Conditions

For each working arrangement, the AE/EE will review the Labor and Working Conditions using the following screening to be completed by the Human Resources & Administration Officer in collaboration with the ES Safeguards Specialist :

Table 10.11.1. ESS 2: Screening for Labor and Working Conditions Risks

Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:

(a) the fundamental rights of workers, consistent with the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work are respected and protected;

(b) written labor management procedures are established in accordance with applicable national laws;

(c) workers are provided with clear and understandable documentation of employment terms and conditions, including their rights under national law to hours of work, wages, overtime, compensation and benefits;

(d) workers are provided regular and timely payment of wages; adequate periods of rest, holiday, sick, maternity, paternity, and family leave; and written notice of termination and severance payments, as required under national laws and the labor management procedures;

(e) decisions relating to any aspect of the employment relationship, including recruitment, hiring and treatment of workers, are made based on the principles of non-discrimination, equal opportunity and fair treatment, and not on the basis of personal characteristics unrelated to inherent job requirements;

(f) appropriate measures are in place to prevent harassment, intimidation, and exploitation, and to protect vulnerable workers, including but not limited to women, children of working age, migrants and persons with disabilities;

(g) workers who participate, or seek to participate, in workers' organizations and collective bargaining, do so without interference, are not discriminated or retaliated against, and are provided with information needed for meaningful negotiation in a timely manner;

(h) forced labor and child labor are not used in connection with the project or program;

(i) occupational health and safety (OHS) measures are applied to establish and maintain a safe and healthy working environment, including supply chain workers;

(j) workers are informed of applicable grievance and conflict resolution systems provided at the workplace level; and

(k) workers may use these mechanisms without retribution, and the grievance and conflict resolution systems does not impede access to other judicial or administrative remedies available under the law or through existing arbitration procedures, or substitute for grievance systems provided

through collective agreements?
• **NO (to any of the above)** • **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the status of labor and working conditions and add all potential impacts to the screening and impact assessment table in section 10.1.

10.3. ESS 3. Resource Efficiency and Pollution Control and Screening Assessment

The environmental risks on biodiversity conservation and sustainable management of living natural resources and the contribution of the project to resource inefficiencies and pollution are relatively minor. The aim of this project is to improve communities' resilience to climate change through practices such as afforestation, reforestation, and the increased use of energy efficient cooking stoves to relieve stress on already depleted forest resources. No modifications to large natural habitats are anticipated that would result in negative consequences for natural resources and the living environment. Overall, the expectation is that the project will improve natural forest cover and ecological function.

Activities and sub-activities related to afforestation/reforestation and agroforestry include several environmental risks within the nursery management, during reforestation/afforestation efforts, and in the livelihood enhancement components.

With regard to production of seedings in nurseries, there are three possible issues to assess within the scope of resource efficiency and pollution control. First nursery seedling production may require significant use of water and all nursery activities should be assessed for adequate water availability and in terms of whether the water being used for such activities is diverted from other uses, not only from an environment perspective but also in terms of whether water diversion prevents access to water resources by communities or vulnerable groups. Second, related again to nursery seedling production, the nurseries should be assessed regarding their use of pesticides and fertilizers ensure these will not contaminate ground soil or water sources nearby and that all workers handling those chemicals are following proper safety precautions. Third, nursery and seedling production could inadvertently impact biodiversity and sustainable management of living natural resources should alien or invasive pests and/or pathogens live on the seedlings in the nursery and then be transported to targeted reforestation and afforestation areas across the Rwandan landscape.

For the reforestation and afforestation efforts, there may need to be reinforcement of terraces on steep hillsides which could result in the loss of topsoil, increased soil erosion as well as slope destabilization, including collapse and landslides, in the short term while trees are growing and beginning to confer their stabilization benefits. Further the needed soil enrichment for successful planting may result in disturbing and moving nutrient rich soil and/or manure for other locations to the target reforestation/afforestation areas. This could have implications for soil management in the supply zone. Other risks include non-native plants (e.g., fruit trees, Eucalyptus spp.) being planted given the need to meet local demand and provide necessary resources to ensure livelihoods needs are met.

Activities and sub-activities related to the production of cookstoves may result in the opportunity for some resource efficiency considerations and pollution control. Specifically, with the intended production of 1000 cookstoves, care will be given to promoting the sustainable use of raw materials in the production process. In addition, depending on the location of production centers, CO_2 emissions related to the transport of raw materials and/or finished cookstoves will need to be addressed.

As a result of these risks, the AE/EE will need to dedicate an Environmental and Social Safeguards Specialist who will collaborate with the Ecosystem landscape restoration specialist, Forest Ecologist and the Forest Specialist to further review resource efficiency and pollution control risks during project implementation related to:

1) the management of nurseries for alien, invasive pests, and pathogens
2) the management of nurseries for use of pesticides and fertilizers
3) the management of nurseries for water use and water availability
4) the impacts of tree and plant selection should some species be non-native,
5) the impact of terrace stabilization and soil enrichment processes needed to make steep slopes suitable for reforestation/afforestation processes that may result in the potential for soil loss, erosion and slope destabilization during the planting and early growth process.
6) the sustainable use of raw materials in the cook stove production process, and
7) the mitigation of CO_2 emissions related to the transport of raw materials or cookstoves to CND and individual households.

Detailed management targets and timelines for achieving those targets will be determined upon the screening assessment recommended below and before the commencement of each activity.

Screening Assessment for Resource Efficiency and Pollution Control

For each working arrangement, the AE/EE will review the Resource Efficiency and Pollution Control issues using the following screening to be completed by the ESMS compliance officer:

Table 10.3.1. ESS 3: Screening for Resource Efficiency and Pollution Control Risks

Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:

(a) project activities minimize the releasing of pollutants (chemicals and other hazardous materials including pesticides and fertilizers used by nurseries) to the environment due to routine or non-routine circumstances (e.g. accidental releases) with the potential for adverse local, regional, and/or transboundary impacts;

(b) project activities avoid significant amounts of waste or wastewater or generate hazardous waste and also avoid the inappropriate disposal of waste;

(c) project activities using chemicals or other hazardous materials have adequately managed the risks and that no substances, chemicals or hazardous materials subject to international bans, restrictions or phase-outs due to high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential depletion of the ozone layer will be applied;

(d) project activities involving or leading to a significant consumption of energy, water or other resources will be managed to ensure resources are used efficiently;

(e) project activities minimize soil erosion, slope destabilization, increase of soil sediments in local water sources;

(e) project activities avoid significant increases of greenhouse gas emissions or substantial reduction of carbon pools (e.g., through the loss in vegetations cover or below and above ground carbon stocks);

(f) project activities will use sustainably sourced materials for construction, building, fabricating or other such activities that involve scaling of production (e.g., production of cookstoves, sourcing materials to reinforce terraces in afforestation projects)

- **NO (to any of the above)**
- **TO BE DETERMINED (TBD)**
- **YES (to all of the above)**

If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the status of resource efficiency and pollution control and add all potential impacts to the screening and impact assessment table in section 10.1.

10.4. ESS 4. Community Health, Safety, and Security Management Plan

During implementation of all project activities, numerous community health, safety and security issues will be important to assess as the particular details of the risks are further discussed and determined in consultations with communities. These risks include increasing the exposure to vector-borne diseases, the potential for increased forest fires, increasing possibility of human-wildlife conflicts, and with the influx of outside funding and working opportunities the possibility that sexual abuse, exploitation, and harassment (SEAH) could take place, especially harming women and vulnerable communities.

The ground interventions (e.g., reforestation, afforestation, removal of ferns) may alter the ecological balance in the target areas where the work will be conducted. This disturbance, in turn, may increase the population of certain disease vectors, pests, and/or poisonous species, exposing the local population and workers to health and safety hazards. Vectors are living organisms that can transmit infectious diseases between humans or from animals to humans. Every year there are more than 1 billion cases and over 1 million deaths globally from vector-borne diseases[87], such as malaria, dengue, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease, yellow fever, Japanese encephalitis and onchocerciasis. Many of these vectors are bloodsucking insects, which ingest disease-producing micro-organisms during a blood meal from an infected host (human or animal) and later inject it into a new host during their subsequent blood meal. Mosquitoes are the best-known disease vector. Others include ticks, flies, sandflies, fleas, triatomine bugs, and some freshwater aquatic snails. The risks of vector-borne diseases can be increased by creating suitable habitats for vector growth and reproduction, and where an existing disease burden already exists. Stagnant/still water bodies represent a key habitat for vectors such as the above listed insects. This could occur in this project when earthen materials will be moved and rearranged to facilitate slope stabilization and reforestation/afforestation activities. If standing water areas are creating in this process, it could lead to the spread of vector-borne diseases to the surrounding communities.

Table 10.4.1. Vector-borne diseases

Primary vector	Disease	Environmental driver / Habitat
Mosquitoes:	• Chikungunya • Dengue fever • Rift Valley fever	Standing, stagnant water in pools, puddles and containers provide suitable

87 WHO, 2020, Vector-borne disease factsheet. Available at https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases

Aedes spp.[88]	• Yellow fever	breeding habitats for mosquitoes; dams and irrigation scheme
Mosquitoes: *Anopheles* spp.[89]	• Malaria	Standing, stagnant water in pools, puddles, containers, dams and rivers; dams and irrigation schemes
Sandflies[90]	• Leishmaniasis • Sandfly fever (phelebotomus fever)	Deforestation, construction of dams and irrigation schemes
Aquatic snails[91] *Schistosoma* spp.	• Schistosomiasis (bilharziasis)	Pools and slow-moving rivers and streams; dams and irrigation schemes

To limit exposure to vectors, terraces need to be well-drained and watering of newly planted trees needs to take care not to leave standing/stagnant water.

Given the climate trajectory of Rwanda, the entire CND landscape may become increasingly susceptible to forest fires due to changes in precipitation as well as the role of fog. Fog is a function of forest canopy, without which the hydrological function of fog ceases to increase water retention in the landscape. Depending on the project sites in relation to ongoing deforestation, some areas may also become more susceptible to forest fires due to increasing dryness. Additionally it is possible, although unlikely, that the planting of trees will provide additional fuel in a dry period that could contribute to future fires. Many of the planned activities will include integrated forest fire management approaches recognizing that this is a substantial threat as the climate warms

The project may also exacerbate existing land conflicts affecting the security of project personnel and communities. As described in section 4.10, tenure claims can lead to tensions among community and family members, given the type of work to be done will provide multiple benefits to the community, we expect these conflicts to be minor with the appropriate community engagement in place to describe the activities and long-term benefits. The focus on fruit trees, while critical for food production and value-chain additions, may inadvertently increase the potential for human-wildlife interactions, both to direct physical interactions that could result in loss of crops or physical injury as well as creating an interface for zoonoses to pass from animals to humans and vice versa.

88 Demenou M. WHO. Risk Assessment of Yellow fever Virus circulation in Rwanda. WHO (2014). Available at: https://rbc.gov.rw/IMG/pdf/rwanda_yellow_fever_assessment_report.pdf

89 Hakizimana E, Karema C, Munyakanage D, Githure J, Mazarati J, Tongren J,Takken W, Binagwaho A, Koenraadt C, Spatio-temporal distribution of mosquitoes and risk of malaria infection in Rwanda, (2018). Available at: https://www.sciencedirect.com/science/article/pii/S0001706X17311026

90 Sunyoto T, Verdonck K, el Safi S, Potet J, Picado A, Boelaert M (2018) Uncharted territory of the epidemiological burden of cutaneous leishmaniasis in sub-Saharan Africa—A systematic review.

91 Isabwe A, Ruberanziza E, Mupfasoni D, Ruxin j, Clerinx J, White PT. POTENTIAL FOR TRANSMISSION OF SCHISTOSOMIASIS IN KAYONZA DISTRICT. Rwanda Medical Journal (2012). Available at: http://www.bioline.org.br/pdf?rw120020

Finally, as the reforestation and afforestation operations are underway, there may be a potential that community members must forego food production in some areas due to planting. It is important to note that all project activities will be subject to consultations with communities and voluntary participation by landowners/small landholders, hence the issue of loss of food production areas will be carefully understood by all prior to planting activities begin. Of note, the temporary loss will be lifely off-set by increases in food production of high value crops in the future.

The risks on community health, safety and security resulting from migrant labor are minor as the project will hire mostly residents from surrounding communities. The possibility of migrant workers will be more closely examined during the ESIAs conducted as part of the sub-project evaluation during project implementation.

10.4.1. Indicative Measures to Address Potential Risks to Community Health, Safety and Security

Although the specific details of each project activity and location will be determined in project implementation, the AE/EEcan plan for a minimum of the following measures to take in order to reduce risks to community health, safety and security:

- Complete an Emergency Preparedness Plan for each subproject/activity
- Train all staff and workers on how to protect oneself from water-borne/vector-based diseases
- Provide SEAH Training for all staff and project workers
- Share human-wildlife conflict mitigation strategies with beneficiaries of fruit trees/afforestation activities
- Develop integrated forest fire management plans that include training on forest fire prevention and management as well as a 'firewise' awareness program for communities.

10.4.2. Screening Assessment for Community Health, Safety and Security

The risks detailed above and the generic measures are the basis for assessing the risks and potential impacts on community health, safety and security of detailed project activities that will be fully determined during project implementation. All subprojects/activities shall be screened for ESS4 issues and ES assessments, if required, shall cover ESS4 issues.

ESS 4: Screening for Community Health, Safety and Security Risks
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(a) project activities minimize increasing exposure of communities to security and safety risks, in

particular for vulnerable groups, through direct and indirect impacts when operating in areas of conflict or post-conflict (civil war, inter-ethnic conflict etc.) or areas affected by organized poaching, drug cultivation or trafficking, organized crime or trafficking in persons or illegal migration;

(b) project activities minimize the possibility inadvertently exacerbating existing conflicts or generating conflicts within or between communities including through unfair distribution of project benefits, weakening community institutions, disrupting social interactions or the risk of inadvertently escalating personal or communal conflicts and violence;

(c) project activities that support PA management and/or provide support for law enforcement activities have all of the following in place:

1. A clear understanding for who is responsible for law enforcement in the project area wherein it is known whether any community organizations or private companies are providing law enforcement support;

2. If park rangers or other law enforcement personnel carry firearms in the course of their duty there has been adequate training on firearm safety, rights-based approaches to law enforcement and SEAH;

3. There is clear understanding of any conflicts between the management of the protected area/s and local people that have happened in the last 5 year over a variety of many types of issues including, but limited to poaching, logging, disputes over access rights, and artisanal mining.

4. Have there been any formal complaints, investigations or press reports relating to law enforcement activities in the project area? In addition to local knowledge of the site, please also conduct a web search and check sites of the Office of High Commissioner on Human Rights (OHCHR) regional or national office.

(d) any risk of injury or loss of life or assets (e.g., crops, livestock) among people, especially vulnerable and/or forest-dependent groups), triggered by an increase of human wildlife conflicts that may be elicited directly or indirectly from project activities and which might escalate into conflicts (e.g., retaliatory killings) have been considered and management mitigation measures have been planned and will be implemented;

(e) project activities minimize risk that activities will inadvertently affect provisioning and regulating of ecosystem services including risks of increasing communities' exposure to natural hazards or disasters (e.g., by exacerbating floods due to cleared vegetation for project construction or by changing flows into water infrastructure or adding fuel that could increase forest fires.) especially given any current or projected impacts from climate change;

(f) if project activities lead to accidents and exposure of communities to hazardous substances, including accidents involving vehicles and equipment and risks related to infrastructure built by the project, in particular in areas subject to natural hazards (floods, hurricanes, earthquakes, etc.)

there are emergency and management procedures in place to address such issues;

(g) project activities that exacerbate community exposure to health and safety risks including by triggering water-born or -based diseases (e.g. through creation of stagnant water bodies, livestock affecting quality of potable water), increasing the spread of other vector-borne diseases or communicable infections (e.g. by failure to provide precautionary measures during epidemics or seasonal diseases) or through reduction in local air quality (e.g. through generation of dusts, burning of wastes, or burning fossil fuels and other materials in improperly ventilated areas) have been assessed and management mitigation measures implemented?

- **NO (to any of the above)**
- **TO BE DETERMINED (TBD)**
- **YES (to all of the above)**

If NO or TBD, please provide details here including how compliance will be achieved or what processes will be used to determine the community health, safety and security and add all potential impacts to the screening and impact assessment table in section 10.1.

10.4.3. Emergency Response and Preparedness Plan

Upon the completion of screening for each of the proposed activities and as specifics of the GCF activities, locations, hazards in those locations and emergency services available at each site become available, the project team will update these files into a comprehensive Emergency Response and Preparedness Plan that will be based on GoR OHS and international good practice. At a minimum the plan will include specific information for each field location:

1) An overview of the Emergency Response process
2) Clear emergency contacts and protocols to notify and follow in the event of an emergency
3) Trained response teams within the core project team to address emergencies resulting from the potential hazards as they arise. These response teams will be especially trained on a victim-centered approach in which the victims wishes, safety, and well-being take priority in all matters and procedures.
4) Full recognition of the potential hazards that may include, but are not limited to:
    a) Uncertainty of safety procedures
    b) Trouble/accidents with vehicles
    c) Lack of adequate first aid

d) Slips/falls
e) Exposure to cold/hot weather
f) Working alone
g) Sexual abuse, exploitation, and harassment
h) Use of tools
i) Lifting
j) Camp/remote field site hazards
k) Food storage
l) Human-wildlife interactions (domestic and wild)
m) Susceptibility to vector-borne diseases
n) Snakes
o) Getting lost
p) Interactions with humans
q) Insect/bee stings
r) Landslides
s) Fire, flood, and other natural disasters
t) Volcanoes
u) Covid

5) Process for evacuations
6) Evacuation routes and meeting points in the event of an emergency warranting such actions.

10.5. ESS 5 Land Acquisition and Involuntary Resettlement

According to the partial ESIA, the project does not foresee any resettlement., As the project will focus on improving land use including working with relevant Ministries on land classification, it is likely that there will be: 1) a change in rules of access or changes in land classification (resulting from the adoption of new land use plans, or park management plans), and/or 2) stricter implementation of land use and park laws. Both scenarios could facilitate a *potential loss of access to land*s (open-access lands, pastures, and forests) of traditional users. Additionally as agroforestry and livelihood activities are initiated there may be a wait time while slower growing fruit trees or native species mature and produce food, fodder, and fuelwood. Access issues may arise for farmers who may be potentially unable to realize timely benefits from trees, especially when the trees planted are slow-growing native species – this would apply to the efforts to plant fruit trees. The project also intends to restore riparian lands to minimize soil erosion, runoff of pesticides, fertilizers and other non-point sources of contaminants into streams, rivers, lakes, wetlands and marine habitats. Rwanda land law determines the size of the buffer zone, defined as 50 meters for lakes, and between one to ten meters for rivers, depending on the river's width. There is a possibility that some of the riparian areas have been used by community members illegally. This could result in relocating their activities. These informal land occupants may have been overlooked in the initial consultations with communities and mapping exercises for the project activities and depending on their situation could be displaced as a result of the afforestation and reforestation activities.

There could be additional specifications of the project that involve changes in land classification under component 1. The development of land use plans at district level is enabled and guided by

national laws and other instruments such as guidelines, specifically that every district shall prepare an urban development plan that shall customize and reference the National Land Use and Development Master Plan. Depending on the nature of how districts change land use classifications and subsequent enforcement of the categories, people living in the region may have restrictions on resources they have typically had access to regardless of a lack of entitlement. The project will aim to integrate climate change into the planning process and that integration component will include an inclusive and participatory approach with affected communities with specific attention to historically marginalized groups, women, youth and categories c,d,e peoples.

Previously many of the conflicting land use tenure claims were related to land ownership among men and women. Men had 100% right to the land even if the couple was legally married. The land reform in Rwanda comprised a series of initiatives that aimed to tackle the emerging uncertainties about land ownership. In 2009, the government began its Land Tenure Regularisation programme to allocate title to every plot of land and create an all-encompassing national land registry to deal with the conflicting claims. It was meant to implement the new laws and "provide for full equal rights to both wife and husband and to all children, through the systematic land registration process…, which means a process of regularising the ownership of existing land for the existing landowners". In the current law, legally married couples have 50-50 interest in land ownership. The current structure also improves the possibilities among the young girls, in that they now have a right to inherit their parents property. Issues still remain regarding the de facto practice as evidenced in the focus groups held during project preparation. These issues will be thoroughly screened planting and livelihood activities commence in project implementation. Especially as future conflicts may center on issues around whether the husband or the wife has the right to harvest trees or not or who decides to plant which tree species. Men and women view the value of trees differently thus these decisions could have implications for access to resources and livelihoods as well as the well-being of women who may be subject to gender based discrimination and/or violence (see details in Annex 8).

During project implementation closer scrutiny of specific recommended changes will reveal the possibility of restriction of access among farmers and settlers, including informal settlers/occupants on public lands and other traditional users of open-access lands and forest resources and at that time mitigations will be consider and evaluated through the process framework as proposed in this section. In the unlikely event of informal settlers/occupants needing to be resettled, the ESS consultant in close consultation with the PMU, the AA and the EE will develop a Resettlement Action Plan (see 10.5.3.).

Table 10.5.1. ESS 5: Screening for Land Acquisitions, Use Restrictions and Involuntary Resettlement[92]

92 The term **"involuntary resettlement"** refers to project-related land acquisition and restrictions on land use which have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement (World Bank ESS5)

Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(a) The sub-project activities will not involve resettling people or communities involuntarily and/or acquiring their land (e.g. for the creation of a strict nature reserve or reducing the threat of wildlife related incidents for communities living in reserves): (b) The sub-project avoids activities that involve or lead to forced eviction[93]; (c) The sub-project avoids activities that might cause economic displacement by restricting peoples' access to land or natural resources where they have recognized rights (legally or customarily defined)? This could include restrictions related to establishing new protected areas (PA) or extending the area of an existing PA, improving enforcement of PA regulations (e.g., training guards, providing monitoring and/or enforcement equipment, providing training/tools for improving management effectiveness), constructing physical barriers that prevent people accessing certain places; changing how specific natural resources are managed to a management system that is more restrictive.
• **NO (to any of the above)** • **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, a participatory process framework will need to be completed see 10.5.1 below and briefly describe activities that require resettlement and/or indicate the project activities that (might) involve restrictions and the respective land or resources to be restricted including communal property and natural resources (e.g., aquatic resources, timber and non-timber forest products, medicinal plants, hunting and gathering grounds, and grazing and cropping areas). add all potential impacts to the screening and impact assessment table in section 10.1.

10.5.1. Process Framework Guidelines

Process Frameworks can follow a variety of guidelines. For this GCF, a participatory process

93 It is important to understand that Involuntary resettlement is different from **"forced eviction";** the latter being defined as the permanent or temporary removal against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection (WB ESS5). Forced evictions is an extreme form of involuntary resettlement and "constitutes a gross violation of human rights, in particular the right to adequate housing" (Commission on Human Rights, Resolution 1993/77).

framework as described by the World Bank in the materials for ESS 5 is recommended (Table 10.5.1.). For each sub-project in which the screening yields a no or to be determined, the ESS will need to complete the process framework guidelines and where appropriate implement the Access Restrictions Mitigation Process described in 10.5.2. and Section 14.

Table 10.5.1.1. Process Framework Guidelines

The participatory processes by which the following activities will be accomplished:

(a) **Project components will be prepared and implemented.** The document should briefly describe the project and components or activities that may involve new or more stringent restrictions on natural resource use. It should also describe the process by which potentially displaced persons participate in project design.

(b) **Criteria for eligibility of affected persons will be determined**. The document should establish that potentially affected communities will be involved in identifying any adverse impacts, assessing the significance of impacts, and establishing the criteria for eligibility for any mitigating or compensating measures necessary.

(c) **Measures to assist affected persons in their efforts to improve their livelihoods or restore them, in real terms, to pre-displacement levels, while maintaining the sustainability of the park or protected area will be identified.** The document should describe methods and procedures by which communities will identify and choose potential mitigating or compensating measures to be provided to those adversely affected, and procedures by which adversely affected community members will decide among the options available to them.

(d) **Potential conflicts or grievances within or between affected communities will be resolved**. The document should describe the process for resolving disputes relating to resource use restrictions that may arise between or among affected communities, and grievances that may arise from members of communities who are dissatisfied with the eligibility criteria, community planning measures, or actual implementation.

Additionally, the process framework should describe arrangements relating to the following:

(e) **Administrative and legal procedures**. The document should review agreements reached regarding the process approach with relevant administrative jurisdictions and line ministries (including clear delineation for administrative and financial responsibilities under the project).

(f) **Monitoring arrangements.** The document should review arrangements for participatory monitoring of project activities as they relate to (beneficial and adverse) impacts on persons within the project impact area, and for monitoring the effectiveness of measures taken to improve (or at minimum restore) incomes, livelihoods and living standards.

10.5.2. Access Restrictions Mitigation Process

Physical and economic displacement should be treated as a last resort and, when it is undertaken, must be carried out according to the highest international standards. In practice, this means abiding by the United Nation's Guiding Principles on Internal Displacement (E/CN.4/1998/53/Add.2) and current best practices in the field (e.g., World Bank Environmental Social Standards 5). All sub-projects will employ a step-by-step method for evaluating activities, the benefits and risk to communities of those activities and the potential restrictions on resource access followed by a mitigation plan as needed that receives support from the community and has clear designation of responsibility for implementation. All Access Restrictions Mitigations must have consent for inclusion in the project. Should consent or access restrictions mitigations not be equitably addressed, the Grievance Redress Mechanism (GRM) is available for submission of complaints.

During project implementation, as specifics of each sub-project activity are determined, potential impacts from access restrictions will be identified and potential mitigation measures will be analyzed and considered. This exercise should be implemented using community engagement techniques with emphasis on strong facilitation skills that focus on identifying conflicts and building consensus. The Environmental and Social Specialist will be specifically skilled in building the capacity of project staff on the ground to identify and address risks in a fair and equitable manner in collaboration with local stakeholders. The community engagement specialists along with the ESS will implement an Access Restrictions Mitigation Process that can be adjusted to the local social and cultural context as deemed necessary by project implementation. An indicative outline the AE/EE can follow for participatory workshops in which access restrictions and mitigations can be discussed is presented in section 14 of this Annex. Depending on the local governance structures where the project activities will take place, there may be situations in which local rights holders are making decisions about access to resources under their rightful tenure. There may also be situations where local legal frameworks dictate entitlements for use restrictions. These legal frameworks will be part of the process framework for the sub-project.

The Access Restriction Mitigation Process involves a minimum of three steps. First the project staff will identify the potential activities for which restricted access to natural resources may occur. Staff will then determine the potential benefits and risks from the project proponent's perspective. Second, project staff will consult the community stakeholders about their perceived benefits or risks given the activity and potential access restrictions. Third, should large unmitigated risks exist or disagreements regarding the potential risks and benefits, project staff and community stakeholders will use consensus-building processes to determine the best solution for a mitigation process, assign those responsible to carry out that process and continue to work with the communities on their management objectives.

The process framework implementation assumes that the initial internal review considers all prior disclosures of relevant and easily accessible information for the project including, but not limited to consultations with other government or NGO staff who have participated in implementing access restrictions and addressed mitigations in nearby areas. The next steps assume the local teams have conducted a thorough stakeholder identification and analysis process. Affected stakeholders will be consulted in the second phase and third phases of the three-step process.

Vulnerable groups may be difficult to engage and it is incumbent upon the local teams to select equitable approaches and work with local partners to engage these groups. Through the process of engaging communities, rights and entitlements will be clarified and participatory consensus building processes will be employed to reach amenable mitigation resolution. Given that process frameworks to address access restrictions on use will be part of a larger participatory approach espoused by this GCF project, issues regarding the process framework including any socially and culturally inappropriate approaches will be flagged by constituents through the grievance redress mechanism or other of the many planned interactions with local communities. Finally, where mitigations are proposed, free, prior and informed consent processes will be followed to ensure documentation of consent is completed prior to commencing the mitigation work.

10.5.3. Resettlement Action Plan (RAP)[94]

1. When is a resettlement action plan needed?

For all subprojects/activities that involve involuntary resettlement or the displacement of informal land occupants, a Resettlement Action Plan is required. This action plan will be developed during project specification as informal occupants are identified. As of this writing, no physical displacement is anticipated based on consultations with communities where project activities will take place. .

2. What is the purpose of the resettlement action plan?

The purpose of a resettlement action plan is to specify all resettlement arrangements and the measures for avoiding, minimizing or compensating losses or other negative social impacts resulting from resettlement. It establishes the basis for the agreement with the affected parties.

3. What should a resettlement action plan entail?

A resettlement action plan should include the eight components described below.

a. Introduction:

- Project description and rationale for resettlement;
- Actions taken to avoid and minimize the need for resettlement;
- Participatory process used to consult and negotiate with affected parties.

b. Legal framework:

- Review and list all policies, laws and regulations relevant to land acquisition and resettlement activities associated with the project, including legal mandates and authorities;
- Identify aspects where the IUCN Standard is more stringent than the legal framework of the host country, in particular on issues regarding compensation (e.g., guidelines and instruments to be used in the assessment of impacts, definition of eligibility, selection of measures and allocation of compensation); emphasize establish the need for projects to comply with the most stringent standard;

[94] IUCN, 2018. Guidance Note – Standard on Involuntary Resettlement and Access Restrictions

• Describe entitlement policies for each category of impact and method of valuation used for affected structures, land, trees, and other assets.

c. Resettlement and relocation:

• Definition of baseline:

o Location and extent of resettlement, number of affected people and process of resettlement (based on a census) and establishment of cut-off date;

o Assessment of environmental, social and economic feasibility and suitability of resettlement and of social and environmental impact of the resettlement process;

o Identification of people and groups eligible for assistance depending on formal or customary land rights;

• Procedures and mechanisms for procurement and development of land and facilities needed for resettlement and relocation;

• Precise schedule of land acquisition for the resettlement process, resettlement and relocation arrangements, and other significant changes in access and use.

d. Compensation and livelihood restoration and enhancement:

• Independent assessment of all impacts and losses that may be generated by the project's resettlement activity, based on a census and inventory of affected assets, socio-economic studies and identification of affected sectors, groups and communities;

• Criteria for eligibility (based on legal and non-legal rights) and definition of cut-off date of census and inventory establishment;

• Participatory identification of negative livelihood impacts including impacts on cultural use and values of land and resources, social livelihood aspects and indirect impacts; comparison of quality of livelihoods between original settlement and proposed resettlement;

• Participatory identification of the overall compensation, restoration and enhancement strategy to be considered;

• Specific measures envisaged and assessment of their expected impacts and benefits;

• Provisions for livelihood protection and enhancement;

• Provisions for training, capacity-building and institutional strengthening and for technical assistance and transfer of technology;

• Provisions for monetary and/or in-kind compensation;

• Synthesis of provisions in form of an entitlement matrix.

e. Implementation arrangements:

• Current institutional arrangements related to the resettlement process, strengths and weaknesses;

• Roles and responsibilities in resettlement process and for implementing agreed measures for compensation and livelihood restoration and enhancement;

• Schedule of and responsibilities for compensation payments, and methods to effect, receive, document, verify and audit payment;

• Arrangements for sustainability and implementation beyond project time frame;

• Detailed resettlement implementation plan and linkages with work plan of the project.

f. Budget and financial arrangements:

• Detailed costing of resettlement action plan

• Financing plan and approach for ensuring financial sustainability of activities that

extend beyond the project life.

g. Monitoring and evaluation:

- Monitoring plan including indicators and targets, responsibilities and institutional arrangements, schedule of data gathering and reporting, process for feedback and integration of results in planning and implementation decisions, and arrangements for end-of-process evaluation;
- Stakeholder participation in monitoring and evaluation;
- Mechanism for adaptive process management, if needed.

h. Grievance mechanism:

- Local provisions, regulations and practices for conflict resolution and grievance;
- Process whereby affected people can appeal property and resource use valuations they consider unfair or inadequate;
- Process for registering and addressing grievances regarding resettlement or compensation provisions and the implementation of the provisions;
- Special provisions for women and vulnerable peoples to ensure equal access to grievance procedures;
- Mechanism for legal recourse.

4. Further guidance

The AE and EE would generally stay away from implementing or supervising involuntary resettlement processes as these are complex and resource-intensive endeavors that will require additional expertise. Any physical displacement activities will need to be designed following the IFC Resettlement Handbook (2002) which is generally considered industry best practice[95].

[95] Handbook for preparing a resettlement action plan (English). IFC E&S Washington, D.C. : World Bank Group.http://documents.worldbank.org/curated/en/492791468153884773/Handbook-for-preparing-a-resettlement-action-plan

10.6. ESS 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources

The proposed project is primarily one of ecosystem enhancement to reduce the vulnerability of communities to climate changes in the region. The project will work on 3 types of land categories detailed in Section 2 of this Annex including: Core Protected Areas, Stepping Stones and Landscape Linkages, each requiring a nuanced approach to enhancing ecosystem services.

The mountain rain forests of the CND are recognized for their extremely high biodiversity across multiple taxa[96,97], including threatened and endemic species such as chimpanzees, golden monkeys, owl faced monkeys, and mountain gorillas, their critical ecosystem service functions[98,99], and their role as a primary driver of local and national development through world class tourism attractions[100]. The total number of mammal, bird, reptile, amphibian and plant species recorded from this landscape to date number 1,924, of which 213 species are endemic to the Albertine Rift and 43 species are threatened (CR, EN, VU) under the IUCN Redlist (2010). Yet these forests exist as an archipelago of natural conditions within a surrounding mosaic of intensive human settlement and landscape conversion for agriculture. These forest islands are now protected as the Volcanoes, Nyungwe, and Gishwati-Mukura National Parks.

Some of the current ecological issues facing the region are detailed in Annex 2.1 and include widespread conversion of forest to agriculture, resulting in the destabilization of soil making the entire region prone to landslides as well as increasing susceptibility to wildfires due to the loss of forest cover and mitigating impacts of forests on hydrologic cycles. Given the forest fragments interspersed with intensive human settlements some ecological imbalances and wildlife impacts exist and may be exacerbated by the project. One reports details 10 flowering plants species, 5 five species, and 5 insects that are recognized invasive alien species in Rwanda, many of which were introduced intentionally for economic reasons that are now have deleterious impacts on ecosystems and biodiversity[101]. Care will need to be taken that these and other IAS are not introduced as part of the project activities. Human-wildlife conflicts are also an issue among the human settlements in close proximity to forest fragments in the CND. In some instances the loss of crops has contributed to potentially significant dietary consequences for subsistence farmers[102]. These conflicts are recognized and through a tourism revenue sharing scheme started in 2005, 5% of total tourism revenues are diverted to compensate victims of human wildlife conflicts. Prime Minister's order n26/03 of 23/05/2012 determines the rates, calculation methods and criteria for

96 Plumptre, et al. 2016. Conservation Action Plan for the Albertine Rift. Wildlife Conservation Society

97 UN/CBD. 2020. Rwanda 6th National Report to the Convention on Biological Diversity

98 RDB. 2021. Rwanda Development Board Annual Report

99 Andrew, G., Masozera, M. 2010. Payment for Ecosystem Services and Poverty Reduction in Rwanda. Journal of Sustainable Development in Africa (V12, No.3)

100 RDB. 2021. Annual Report

101 BIOCEM-RD Ltd 2016. Study to assess the impacts of invasive alien species (flowering plants, fish and insects) in natural forests, agro-ecosystems, lakes and wetland ecosystems in Rwanda and develop their management plans. Rwanda Environment Management Authority

102 McGuinness, S. and D. Taylor. 2014. Farmers' perceptions and actions to decrease crop raiding by forest-dwelling primates around a Rwandan forest fragment.

determining compensation to the victim based on the damage incurred[103]. The wildlife damage compensation scheme is managed through a Special Guarantee Fund. Although not perfect, these systems are open to adaptive management and will be critical to promoting coexistence in a climate resilient CND[104].

The proposed interventions on protected forests will be restoration, as described below. The proposed interventions in the Stepping Stones and Landscapes Linkages (located outside of parks) will be local protection of small patches and riparian areas where natural conditions remain, supplemented with afforestation and agroforestry planting. Section 6 of the The Feasibility Study (Annex 2) details the assessment and justification for these activities and also details the biological pros and cons of these interventions. Below includes a brief summary of restoration and afforestation.

Restoration of Protected Areas

The project will involve significant interventions in the protected forests namely, the restoration of the 500 hectares of degraded forest in GMNP, and the fern removal covering 4,500 hectares of NNP. In GMNP, activities will consist of removing exotic species and restoring old mining sites in the park using indigenous species from the park and where possible the project will favor regeneration from tree seed banks. In Nyungwe NP, the area to be restored has been colonized by ferns following 1997 fires that destroyed 12% of the park. The activity will consist of cutting ferns and soil undisturbed to allow regeneration to happen naturally from the seed bank and from seed sources from neighboring intact habitats. This process is called assisted natural regeneration, which has been shown to be the most effective method for natural forest restoration in the CND, both in terms of biodiversity benefits and cost (see options analysis in Section 4 of Annex 2, the Feasibility Report). Multiple year research within both Nyungwe National Park and Gishwati-Mukura National Park has shown that assisted natural regeneration of natural forests is the most appropriate strategy for recovering biodiverse forests and associated functions in Western Rwanda. Assisted natural regeneration results in significantly increased tree densities (5,500 trees/ha vs 1,100 trees/ha), higher species richness, and higher average biomass in comparison to untreated areas[105],[106]. It is also much cheaper than active restoration efforts.

Assisted natural regeneration involves repeated cutting of exotic species (e.g., bracken fern) that are inhibiting natural recovery of indigenous forest species. Repeated cutting of the fern layer gives the opportunity for seedlings to grow taller than the fern layer and thus out-compete the ferns for light. It is not necessary to clear entire hill-slopes, but only carefully selected plots within the affected area, as native species will eventually grow tall enough to shade out uncleared fern

103 Banamwana, C., Dukuziyaturemye, P., G. Rwanyiziri. 2021. Evaluating the trend in managing human-wildlife conflicts in and around Akagera National Park, Rwanda.

104 Gloriose, U. 2019. Community perceptions of human-wildlife conflicts and the compensation scheme around Nyungwe National Park (Rwanda). International Journal of Natural Resource Ecology and Management 4(6):188-197

105 Masozera, A.B., Regeneration of Burned Forested Areas With Periodic Removal of Pteridium aquilinum. Wildlife Conservation Society Rwanda, 2004.

106 Arakwiye et al. (in prep). Early ecological outcomes of passive and active forest restoration approaches in Western Rwanda

areas. This is much more cost-effective than active restoration approaches (e.g., tree planting), as there are no costs associated with seedling production or tree planting, and any active restoration approach would first be required to clear ferns regardless.

The Wildlife Conservation Society (WCS) has been conducting assisted natural regeneration on a small scale in Nyungwe National Park since the mid-2000s, and has created a specialized technique to blend the treated area visually with the natural contours and conditions in the forest[107]. During studies done on assisted regeneration, plots appeared more natural when the plot size and shape is varied. As such, plots will be grouped into three size categories: a large plot of 750 m^2, a medium plot of 500 m^2, and a small plot of 250 m^2. Field teams will choose plot shape and orientation that blends with the natural landscape and at the same time that will minimize potential erosion (plots running along slope contours and not downhill). People hired from local communities will carry out the removal of bracken fern using machetes and other hand tools. Existing trees/saplings/seedlings will be protected throughout this process, and 2-5cm of detritus will be left to protect the soil. Since bracken fern is uniquely proficient in mobilizing mineralized nutrients such as inorganic phosphate, nitrogen, and potassium, the cut fronds will be left onsite to jumpstart the restoration of the nutrient cycling process. Restoration sites will be revisited and newly sprouted herbaceous vegetation removed every three months for a period of three years to ensure that new trees become established while keeping fern cover low.

Forest restoration is not expected to create adverse impacts to wildlife save for the minimal disturbance associated with planting. Planting may increase human-wildlife interactions for those working to restore the forest, which is covered in Section 10.2 under labor and working conditions and Section 10.4 under community safety.

Afforestation/Agroforestry of Stepping Stones and Linkages

Stepping stones are priority nodes outside of the current National Parks that are critical for maintaining landscape connectivity, consisting of small, isolated patches of forest, at Dutake and Karehe-Gatuntu Protected Forests and the extensive Gishwati Pastures. These areas would be a sensible focus for some (patches of) forest restoration and protection, and beekeeping. The Gishwati Pastures are a focus for agroforestry on pastoral land to increase the coverage of native trees to secure reasonable landscape connectivity for forest species.

Landscape linkages are knickpoints in the farming landscape that require afforestation on steep slopes and riparian areas to link the CND at a landscape scale. Compatible land use activities will include agroforestry, increasing the use of native species, reforesting steep slopes, and beekeeping.

The Congo Nile Divide - like elsewhere in Rwanda - is dominated by subsistence and rainfed agriculture. The current vegetation in this area comprises crops, forest plantations, natural forests and grazing lands. The main crops cultivated include maize, potatoes, climbing beans, cassava,

107 Masozera, A.B., E Nzakizwanayo, M Sindikubwabo, F Mulindahabi, I Munanura, N Blondel, A. J. Plumptre, and Michel Masozera. "Enhancing Post-Fire Regeneration in Nyungwe National Park through Manual Removal of Pteridium Aquilinum Ferns." Wildlife Conservation Society Rwanda, 2007.

banana and sweet potatoes, on small plots with average plot size of 0.5 ha[108]. There are also perennial crops like coffee, tea plantation and pyrethrum. There is a small amount of rangeland around Gishwati-Mukura, which is dominated by cattle in a free grazing system for milk and meat production. In general, land management in the CND is very poor, leading to low crop productivity and land degradation, particularly on steep slopes where severe soil erosion is common[109,110]. To combat this degradation, many farmers have adopted agroforestry - the practice of incorporating trees on cropland. Across the CND, agroforestry is currently practiced on over 60,000ha of land, with district development plans targeting a doubling of this number by 2024.

The average density of agroforestry trees in the Western Province is 32.3/ha, the highest of all Rwandan provinces and higher than the national average of 25.1 trees/ha[111]. These agroforestry trees produce an average of 9.3 m^3/ha of wood in the Western Province, making them a substantial source of woodfuel in the region. However, Rwanda's Biomass Energy Strategy shows that national woodfuel demand is around 5 times higher than supply, and identifies that increasing adoption of agroforestry practices is essential to reduce this supply-demand imbalance [112].

Adopting some form of agroforestry or growing trees on farms is practiced sporadically across the CND. Indeed, timber harvested from trees on agricultural land makes up around 29% of total timber production of the Western Province[113]. However, that large number is primarily due to the vast extent of agricultural land, with overall productivity of agroforestry systems often very low due to land degradation, soil erosion etc. Overall, a literature review, key informant interviews and focus group discussions identified four main challenges facing agroforestry adoption in the CND including 1) socio-economic limitations to adopting agroforestry; 2) access to diverse quality planting tree with no reliable supply of seedlings available and nurseries lacking capacity to improve their stock; 3) inadequate extension system for agroforestry thus leading to 2) farmers lacking the knowledge and capacity to implement alternative and more effective approaches in agroforestry.

The objective of this project is to promote agroforestry to reduce soil erosion and increase woodfuel supply, with a focus on indigenous species primarily. There are no intended major negative impacts from project interventions but a careful assessment of agroforestry species to be promoted on agriculture land will be carried out. Indigenous species are well suited to the climatic conditions of the CND, and pose no danger of negatively impacting natural forests, unlike exotic species. However, farmer preferences must also be considered, and demand for exotic species is high in the CND[114]. Recent restoration initiatives have demonstrated that species such as *Alnus acuminata*, while most preferred by local farmers for its agroforestry attributes, can become invasive when planned in the proximity of natural forests/national parks. The project will

108 Focus Group Discussions

109 Rwanda National Institute of Statistics, 2019. Seasonal Agricultural Survey Annual Report. Kigali, Rwanda.

110 Rwanda Ministry of Environment, 2019. Soil Erosion Control Mapping Report. Kigali, Rwanda.

111 Rwanda National Forest Inventory 2015

112 Rwanda Biomass Energy Strategy 2019

113 Republic of Rwanda. 2016. National Forest Inventory. Results.

114 Liyama, M., Mukuralinda, A., Ndayambaje, J. D., Musana, B. S., Ndoli, A., Mowo, J. G., Garrity, D., Ling, S., & Ruganzu, V. (2018b). Addressing the paradox–the divergence between smallholders' preference and actual adoption of agricultural innovations. International Journal of Agricultural Sustainability, 16(6), 472–485

implement an outreach and education program to promote the benefits of indigenous species, in order to ensure farmers understand the utility of indigenous species for agroforestry. When farmers are only interested in planting exotic species, the potential impacts of those species on natural forest will be assessed, and appropriate mitigation measures will be applied (e.g. heavy pruning to reduce risk of seed transmission). If mitigation of the risk is not possible (e.g. farms are very close to natural forest areas), those sites will not be targeted by the project. For example, field visits and focus group discussions have demonstrated that *Alnus Acuminata* has become established as an invasive species in Gishwati National Park. As such, the project will not promote *Alnus* around protected natural forests. The project will identify a certain perimeter under which this species and other invasive agroforestry species will be planted away from the national parks.

It is noted that seedling availability is limited in part because of poor nursery practices. Despite measures taken by the National Tree Seed Centre to supply quality tree seeds, an informal tree seed sector that does not consider the quality of tree seeds has rapidly developed to fill the growing demand for seedlings. Important quantities of seeds used in tree planting, forestry and agroforestry activities are currently taken from unknown sources, increasing risks of unwanted phenotypes, and inbreeding or species hybrids, which could lead to quality reduction in forests (e.g., increased sensitivity to pests and diseases) and therefore a potential reduction in productivity of forests or agroforestry systems[115].

Poor nursery practices, which are widespread throughout the CND, compound the use of poor-quality seeds to further inhibit agroforestry and forestry activities[116]. Most existing tree planting programmes rely on small tree nurseries with very limited resources for mass production of planting materials. More recently, the government has resorted to seedling production through small scale contractors. However, due to lack of sufficient resources and technical know-how, many seedlings currently produced under these contracts are of poor quality. These limitations also increase the potential for the introduction of invasive species, pests and pathogens from poorly managed nurseries. Thus while the proposed project will not eliminate that risk, i.e., seedlings could always inadvertently carry an invasive pest or pathogen into an otherwise healthy forest, the proposed interventions will likely reduce the overall potential for that to occur by introducing best management practices and training nursery managers on detecting and preventing the spread of such invasives.

The Feasibility Study (Annex 2) further details the potential species that will be used, as project implementation begins, consultations with communities and stakeholders will determine the final set of species for specific areas, depending on the need.

Afforestation efforts are not expected to create adverse impacts to wildlife save for the minimal disturbance associated with planting. Planting may increase human-wildlife interactions for those working on the agroforestry systems - these risks will be commensurate with what landowners may experience day-to-day without the influence of the project. Mitigation for potential human-wildlife interactions is covered in Section 10.2 under labor and working conditions and Section

115 MINILAF 2018. National Tree Reproductive Materials Strategy

116 MINILAF 2018. National Tree Reproductive Materials Strategy

10.4 under community safety.

Production of Cookstoves

Energy-efficient cookstoves are the best technology to help communities reduce pressure on forests and other natural resources. At the same time, scarcity of fuel, pollution of existing cooking methods, and cheaper, more widely available cookstoves are making the adoption of energy-efficient cook-stoves more feasible. The project will partner with Technical and Vocational Education and Training (TVET) and youth-led Small and Mid Sized Enterprises (SMEs) to develop a prototype of energy-efficient cookstoves, which youth-led SMEs will produce as social enterprise. With a business-like approach, this project responds to a demand for a durable, economical and efficient way of cooking for poor families in Rwanda. The project will ensure that these energy-efficient cookstoves are of superior quality and make business sense for participating SMEs to guarantee their uptake, scalability, and business sustainability. This will include a supply chain analysis to ensure the materials used to make the cookstoves are sustainably sourced and lead to minimal air pollution compared with the cooking methods presently in use both during production of the cookstoves and during usage by the individual households. For sustainable sourcing, the clay used in production should be harvested from rivers/riverbeds or other areas within minimal impacts to native fish and wildlife. The youth-led SMEs will receive business development services that will enable them to develop business plans and climate finance from existing schemes and programmes including Community Adaptation Fund (CAF).

The criteria for assessing the quality of cookstoves will include: energy-efficiency as compared to currently available cookstoves, at least Tier 2 for emissions; a lifespan of at least four years; and compatibility with rural settings.

We do not expect there to be adverse impacts to wildlife in the productive and use of cookstoves.

Table 10.6.1. ESS 6: Screening for Biodiversity Conservation and Sustainable Use of Natural Resources
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(a) for any aspects of the subprojects that occur in or near areas that are legally protected or unofficially proposed for protection, recognized for high biodiversity values by Indigenous Peoples or other local communities, or have been identified by authoritative sources for their high biodiversity value, the activities avoid *causing adverse impacts* to biodiversity and the integrity of the ecosystem;
(b) any subprojects in or near high biodiversity areas that include activities for infrastructure (e.g., watch tower, facilities, road access, small scale water infrastructure) or ecotourism activities and impacts from inadequate waste disposal, disturbance of nesting sites, slope erosion through hiking

trails etc. will avoid adverse impacts to biodiversity in the construction and use phases;

(c) for any aspects of the subprojects that occur outside high biodiversity values the activities avoid causing *significant adverse impacts* to biodiversity and the integrity of the ecosystem;

(c) any subprojects outside high biodiversity areas that include infrastructure or plantation development (even very small scale) or other activities (e.g., removal vegetation cover, creation of soil erosion and/or debris deposition downslope or other disturbances) avoid significant adverse impacts to biodiversity and the integrity of the ecosystem in the construction and use phases;

(d) all sub-projects that procure natural resource commodities from other geographies (supply chain) have minimized impacts to high biodiversity areas;

(e) sub-project activities will not introduce non-native species of flora and fauna (accidental or intentional);

(f) sub-project eliminate pathways for spreading invasive species (e.g. through the creation of corridors, import of commodities, tourism or movement of boots);

(g) sub-project activities will avoid negatively impacts on water dynamics or water flows through extraction, diversion or containment of surface or ground water (e.g., through dams, levees, reservoirs, groundwater extraction) or through other activities that affect the hydrological cycle, alters existing stream flow and/or reduces seasonal availability of water resources;

(h) sub-project activities avoid affecting the water quality of surface or ground water through contamination, increasing salinity, irrigation, agricultural run-off, water extraction practices, or the influence of livestock or other activities;

(i) sub-projects will avoid the application of pesticides, fungicides or herbicides even in the case of integrated pest management and production of seedlings;

(j) sub-projects avoid handling of or using genetically modified organisms/living modified organisms;

(k) sub-projects avoid unsustainable use of genetic resources from natural habitats

(l) sub-projects using genetic resources from natural habitats have measures in place for equitable access and benefit-sharing related to use of these resources;

(m) sub-projects minimize the potential for increasing incoming migration and population which could put a strain on the existing natural resource base;

(n) sub-projects avoid producing noise and vibration from construction and maintenance equipment, traffic and activities, which may disturb sensitive fauna receptors?

- **NO (to any of the above)**

• **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, please provide details here what processes will be used to avoid or mitigate impacts on biodiversity and conservation of sustainable resource use and add all potential impacts to the screening and impact assessment table in section 10.1.

10.7. ESS7 Indigenous Peoples

The post-genocide Constitution of Rwanda prohibits all forms of discrimination based on ethnicity and also prohibits the labelling of any group as "indigenous people" which connotes vesting the group with special rights. The ESS 7 and the IP Policy of the Green Climate Fund recognize the sensitivities of certain terms and consider the evaluation of the socio-cultural baseline an imperative step of the project. The purpose of doing so is to ensure safeguards from unintended impacts and ensure culturally appropriate benefits to relevant groups. Both the GCF (para 26) and AE (section 6.2) have responsibilities under the Indigenous Peoples Policy and the Operational Guidelines.

The GCF Indigenous Peoples Policy allows for the use of alternate terminologies and its requirements applies wherever the following characteristics can be found in a distinct social and cultural group: self-identification as a distinct group; collective attachment to geography – including seasonal use and occupation; customary systems distinct or separate from mainstream society; distinct language or dialect. Given the GCF Indigenous Peoples Policy and ESS 7, an initial socio-cultural assessment has been conducted on the landless/poor representing Categories C, D, and E, and the historically marginalized people in the CND for characteristics that may include these groups under the widely accepted international definition of Indigenous Peoples. As the post-genocide law prevents the collection and dissemination of data disaggregated by ethnicity, credible data are not available, however, over the last few years, there has been some recognition of some ethnic minorities characterized as Historically Marginalized People (HMPO) and known as Batwa in the past.

Within the CND, the Gishwati Forest Reserve supported two indigenous populations until the 1980s: Bagogwe pastoralists and Batwa hunter-gatherers. The World Bank Gishwati-Kigali-Butare Agro-sylvo-pastoral project in the early 80s initiated massive forest clearing and conversion to pasture lands and tree plantations, driving these groups into much smaller remnant patches. This process was accelerated by former government officials after the World Bank canceled the project under heavy criticism[117]. The Bagogwe were among the first victims of the

[117] Bankrolling Disasters. 1986. Sierra Club; Weber & Vedder. 2001. In the Kingdom of

Rwandan genocide[118]. The remaining historically marginalized groups (formerly Batwa, also called Twa or Pygmies of Central Africa) today live in small settlements completely outside the forest with other groups. In Rwanda today the Batwa number 25,000-30,000 or 1% of the population and have loosely organized associations with one representative in the government[119]. As identification with ethnic groups are banned, most Batwa fall into the groups considered "historically marginalized communities". Given the history of the group and of Rwanda as a nation, these communities are among the most impoverished as they previously used forest resources and pottery, and have gradually transitioned away from those resources as the conservation status of remaining natural forests in the CND has changed from forest reserve to national parks. Today historically marginalized groups tend to be extremely disadvantaged in mainstream society and the cash economy, and have little opportunity or standing to make claims to historical land areas without being fully recognized as a distinct group. There are ongoing government efforts in the region to integrate historically marginalized into the local communities as no forest or land remains for more traditional lifestyles and a major effort of the government is to target the historically marginalized to build more sustainable livelihoods despite a difficult history. As a result an explicit focus of this project targets the resilience of vulnerable communities such as women, youth, landless and categories C,D, and E including historically marginalized people.

Based on a partial review of the proposed project's intended target sites and 24 focus groups 4 exclusively with historically marginalized community members wherein representatives were selected via local community NGOs who seek to improve the lives of historical marginalized groups, we found no evidence of the groups in this region living as a distinct group or using a distinct language or customary systems separate from mainstream society. The assessment was inconclusive as to whether these groups self-identify into different subgroups within the local communities themselves.

The initial assessment also indicated there are no customary lands claimed by historically marginalized people in the project area. The project area does contain lands/resources that are commonly (including seasonally) used by the categories c, d and e and historically marginalized populations. Based on focus groups with a variety of community stakeholders, including historically marginalized groups, the seasonality of resource access impacts all people living in the CND, not only those in categories c,d,e, and historically marginalized populations.

Despite the policies and initiatives by the government and other entities or projects, including climate resilience in CND project, there are potential barriers to integrating categories c, d, e/vulnerable and/or historically marginalized into the project which are identified as follows: (1) Inadequate disaggregated data (2) Limited capacity and resources to analyze intersectionality[120] (3) Limited access to decision-making (esp. women) (4) Social inequality from increased long-

Gorillas.

[118] Des Forges, A. 1999. Leave none to Tell the Story

[119] International Work Group on Indigenous Affairs. Accessed at https://www.iwgia.org/en/rwanda/3592-iw-2020-rwanda.html (last visited 29 October 2022)

[120] the interconnected nature of social categorizations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage.

term poverty of historically marginalized people (5) Lack of promotion and protection of the historically marginalized peoples' rights, including land tenure. Thus, additional screening will need to ensure that project activities, including any changes in land classification, will not disproportionately impact historically marginalized groups and their access to resources.

As the project seeks to improve the lives of historically marginalized groups, especially women and youth the risks appear to be quite low. Systems will be in place during the project, including the hiring of an Environmental and Social Safeguards (ESS) Specialist and community engagement specialists to minimize risks as well including a commitment to stakeholder engagement, free, prior and informed consent and the setting up of a project level grievance redress mechanism. The project level grievance redress mechanism will be made available in a culturally appropriate manner as determined by the ESS Specialist and Community Engagement Specialists working with the local communities to establish the proper and accessible channels. Section 5 of this document details the results of focus groups with historically marginalized groups and details some of the concerns raised in that process.

Given that specific sites with the CND will be selected for project activities during project implementation, each sub-project will be subject to more in-depth screening for impacts to historically marginalized peoples, with particular attention to the GCF definition of Indigenous Peoples, during project implementation. The ESS and community engagement specialists, in coordination with district, sector, and local NGO leadership, will be responsible for conducting further screening, including additional focus groups and other in person participatory processes for an inclusive approach, and drafting plans for managing work in areas where these groups live and/or access resources as needed.

10.7.1. ESS 7: Screening for Presence of and Risks to Historically Marginalized Groups

Table 10.7.1. ESS 7: Screening for Presence of and Risks to Historically Marginalized Groups
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(a) Sub-project activities do not overlap with lands or territories claimed by historically marginalized, tribal peoples or other traditional peoples who identify as distinct groups;[121] (b) Sub-project activities do not affect the rights and livelihoods of historically marginalized who identify as distinct groups?

121 Alternate terminologies for Indigenous Peoples are common, the international definition requirements apply wherever the following characteristics can be found in a distinct social and cultural group: self-identification as a distinct group; collective attachment to geography – including seasonal use and occupation; customary systems distinct or separate from mainstream society; distinct language or dialect.

- **NO (to any of the above)**
- **TO BE DETERMINED (TBD)**
- **YES (to all of the above)**

If NO or TBD, an Historically Marginalized Peoples Plan will need to be completed see 10.7.2. below and briefly describe the distinct social/cultural group who will be impacted, the nature of the impacts, and add all potential impacts to the screening and impact assessment table in section 10.1.

10.7.2. Historically Marginalized Peoples Plan

The ESS and community engagement specialists will be responsible for drafting an *Historically Marginalized Peoples Plan*, noting that the plan is a different name given the Constitutional restrictions on recognizing Indigenous groups. The plans should, at a minimum, summarize the following information to a level of detail that is commensurate with the scope and scale of the sub-project activity:

1. Name of the groups affected and the geographical areas of their presence, including resource use and how these relate to the project's area of influence
2. Define the key characteristics that qualify the identified groups under the GCF policy including how the groups identify themselves and how the host country's Government refers to these groups.
3. Explain whether communities have traditionally lived in the project site or whether there are groups or some households who have moved from their traditional area to the project site to be in or near a protected area for economic reasons.
4. Indicate whether there is a risk that the project affects their livelihood through physical or economic displacement. Detail what those risks are as well as the potential impacts and also opportunities. If the sub-project location is near or in a protected area, distinguish between communities whose traditional resource use areas overlap with the PA, even before it was created, from those who have a recent history and presence there.
5. Indicate whether there is a risk that the project affects the groups' rights or livelihoods by using or commercially developing natural resources on lands and territories claimed by them, by affecting their traditional livelihood, their self-determination, cultural identity, values and practices, or their development priorities.
6. Indicate where there is a risk of affecting the cultural heritage of these groups by using or contributing to the commercialization of their traditional knowledge (including ecological) or practices.

7. Disclose if any of the groups are living in voluntary isolation and if so, how the project will respect their rights (paying attention to national laws on the matter) and avoid any negative impacts.
8. Explain whether and how legitimate representatives of the groups have been consulted to discuss the project and better understand potential impacts upon them.
9. Detail the process has been or will be started or implemented to achieve their free, prior and informed consent (FPIC) to activities that might affect them (positively or negatively).
10. Detail how the sub-project will consider opportunities to provide benefits for these groups and how those considerations are both culturally appropriate and gender inclusive.
11. Provide clear results of the consultations, FPIC and planned future engagement that will occur as part of implementing the sub-project activities.
12. Indicate how the grievance redress mechanism will be extended to this group and account for any customary dispute settlement approaches that may be already in use.
13. Describe how staff will monitor, evaluate and report on progress related to inclusive implementation of the sub-activities.
14. Detail the costs, budget, timetable and organizational responsibilities required for effectively implementing the sub-project activities in a way that adheres to the steps detailed in this plan.

10.8. ESS 8. Cultural Heritage

Prior to project implementation, the AE/EE is responsible for siting and designing project activities to avoid significant adverse impacts to cultural heritage. This should take place in close consultation with local communities who will be beneficiaries of the project activities. The activity level environmental and social screenings should help determine whether the proposed location of a project is in areas where cultural heritage is expected to be found, either during construction or operations.

In such cases, in line with ESS 8, the AE/EE will develop provisions for managing chance finds through a chance find procedure which will be applied in the event that cultural heritage is subsequently discovered. The AE/EE and any contractors will make sure not to disturb any chance find further until an assessment by competent professionals is made. Where necessary, this will include qualified experts, including the relevant government authorities and civil society organisations, as well as traditional knowledge holders and other people from the area who should be consulted on whether disclosure of information is desirable, since there are situations in which disclosure may compromise the safety or integrity of the cultural heritage in question and/or endanger the sources of information.

In the preliminary screenings of the potential sites, no areas of significant cultural heritage were noted. The proposed afforestation work for this project will be on steep slopes in mountainous areas. Most of these areas have little to no human settlement. We do not anticipate issues with disturbing cultural sites. There is always the possibility of finding a cultural heritage site during

the implementation of the project, here we detail chance find procedures to be in place to cover such instances.

Given that specific locations for project activities are to be determined in project implementation, each sub-subject will conduct a screening (Table 10.8.1) and additionally all sub-projects will use the Chance Find Procedure (Section 10.8.1)

Table 10.8.1. ESS 8: Cultural Heritage Screening
Do the EA/EE and relevant subproject leads have in place the necessary policies, procedures, systems and capabilities to ensure that:
(c) the sub-projects are not located in or near a site officially designated or proposed as a cultural heritage site (e.g., UNESCO World Cultural or Mixed Heritage Sites, or Cultural Landscapes) or a nationally designated site for cultural heritage protection; (d) the sub-project locations do not include important cultural resources such as burial sites, buildings or monuments of archaeological, historical, artistic, religious, spiritual or symbolic value; (e) the sub-project locations avoid any natural features or resources that are of cultural, spiritual, or symbolic significance (such as sacred natural sites, ceremonial areas, or sacred species; (f) the sub-project will not restrict users' access to cultural resources or natural features/sites with cultural, spiritual or symbolic significance; (g) the sub-project will avoid affecting in-tangible cultural resources such as values, norms or practices of local communities; (h) the sub-project will not promote the use of or the development of economic benefits from cultural heritage resources or natural features/sites with cultural significance to which local communities have recognized rights (legally or customarily defined)?
• **NO (to any of the above)** • **TO BE DETERMINED (TBD)** • **YES (to all of the above)**
If NO or TBD, please provide details here what processes will be used to avoid or mitigate impacts on cultural heritage and add all potential impacts to the screening and impact assessment table in section 10.1.

10.8.1. Chance Find Procedure

A Chance Find Procedure is a project-specific procedure which is to be followed if previously unknown cultural heritage is encountered during project activities. The Chance Find Procedure sets out how chance finds associated with the project will be managed. The procedure includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of WB ESS8 and national law; and to train project personnel and project workers on chance find procedures .

The Chance Find Procedure aims to:

- Protect physical cultural resources from the adverse impacts of physical investment activities and support their preservation;
- Promote the equitable sharing of benefits from the use of Physical Cultural Resources; and
- Raise awareness of all workers and management on site regarding the potential for accidental discovery of cultural heritage resources.

This Chance Find Procedure therefore intends to provide the AE/EE with an appropriate response in accordance with the relevant national legislation and international good practice. As such, all contracts for civil works will include this Chance Find Procedure.

For the Chance Find Procedure to be effective, the site manager must ensure that all personnel on any proposed development site understand the Chance Find Procedure and the importance of adhering to it if cultural heritage resources are encountered. In addition, training or induction on cultural heritage resources that might potentially be found on site should be provided by the AE/EE

Procedures for accidental discovery of cultural resources (chance finds)

This Chance Finds Procedure covers the actions to be taken if, in the course of doing work related to the GCF project, teams discover a heritage site or cultural resources. Steps include investigation and assessment by a professional archaeologist or other appropriately qualified person who can assist with the rescue or salvage operations for the cultural resource. The requirements of Government of Rwanda (2016) Law No. 28/2016 of 22/7/2016 on the Preservation of Cultural Heritage and Traditional Knowledge. Kigali: Government of Rwanda are reflected in this procedure.

If cultural resources (e.g. archaeological sites, historical sites, remains, objects, graveyards or

individual graves) are discovered when undertaking small-scale construction activities, civil works and/or renovation activities, the following procedures should be followed.

At Archaeological or cultural heritage sites:

The Institute of National Museums of Rwanda (INMR) is responsible for recovering these items.

1. Halt the construction activities around the chance find to avoid any (or further) damage;
2. Delineate and fence the discovered site or area and provide a 25-meter buffer zone around all sides of the find, in the case of removable antiquities or sensitive remains, security guards shall be present until the responsible local authorities and INMR authorities take over this portion of the site.
3. Report the discovery to the site supervisor or the Environmental Control Officer (or project equivalent) immediately who will in turn notify responsible local authorities and the General Authority of Antiquities within 24 hours or less;
4. Photograph the exposed materials, preferably with a scale (e.g. a file binder, coin, rules etc.) date stamp, and GPS location, and share the photographs with the appropriate national authorities;
5. Forbid any removal of the objects by the workers or other parties;
6. Note the type of archaeological materials thought to have been encountered, their location (GPS) and if possible, the depth below the surface the find occurred;
7. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard will be arranged until the responsible local authorities or the District/ Provincial Department of Culture, or the local Institute of Archaeology, if available, can take over;
8. Notify the responsible local authorities at the District level.
9. Responsible local authorities would oversee protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the INMR. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; these include the aesthetic, historic, scientific or research, social, and economic values;
10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the physical investment layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration, and/or salvage;
11. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the General Authority of Antiquities;
12. The mitigation measures could include the change of proposed Project design/ layout, protection, conservation, restoration, and/or preservation of the sites and/or objects;

13. Construction work at the site could resume only after permission is given from the responsible local authorities concerning safeguard of the heritage; and
14. The physical investment proponent is responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure that the adequate preservation actions are taken and hence the heritage sites protected.

II) For relocation of graves or religious artifacts:

The procedure shall comprise of:

1. Consultation with communities and designated government agencies on movement of cultural artifacts.
2. Families must be compensated for both the logistical and the ritual costs of exhuming family graves and transferring remains to a new site.
3. The articles 14,15, 16, 18, 19 of the law N°11/2013 of 11/03/2013 Determining The Organisation And Use Of Cemeteries should be followed in relocating any of the graves at the cemetery before construction can commence.
4. Relocation of artifacts and structures associated with religious worship can occur only after consultation with ritual practitioners (priests and spirit mediums) and must include compensation for associated rituals.

These procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the site supervisor shall monitor the above regulations.

10.9. Grievance Redress Mechanism

The project requires the set-up of a grievance mechanism based on international good practice and is independent of the governmental judicial procedures. The AE has this grievance process in place.

A grievance is any complaint, comment, question, concern, suggestion about the way a project is being implemented. It may take the form of specific complaints about impacts, damages or harm caused by the project, concerns about access to the project stakeholder engagement process or about how comments and concerns about project activities during construction or operation, or perceived incidents or impacts have been addressed. Grievances may also address more serious situations including but not limited to money laundering, gender-based violence (including SEAH), or other human rights-based violations or abuses. These complaints may pertain to the implementation of the project, specific workers on the project or the AE/EE directly. Given the scope and scale of the proposed project, the appropriate structure for handling grievances includes the AE GRM which is the umbrella structure as well as GRMs hosted by the EE that are independent of government judicial procedures, provide a survivor-centered process to accommodate serious grievances, facilitate access to the GCF's independent redress mechanism and where appropriate interface seamlessly with the AE GRM/government judicial procedures. For this project, the EE will have a survivor-centered project-level GRM process available to all project staff, participants and beneficiaries that will seamlessly integrate with that

system for sharing of grievances as appropriate.

All project staff, participants and beneficiaries will be made aware of the grievance process through public notices in the local language through mechanisms deemed appropriate through consultations with the stakeholders for distributing the information most effectively.

The AE project-level Grievance Procedure is described herein:

10.9.1. Project Level Grievance Mechanisms and Procedures

Introduction

The project aims to:

- Embody the principles of zero tolerance of corruption, transparency, social justice community engagement and empowerment.
- Fairly, ethically and impartially implement all its activities;
- Ensure that all community members are kept informed about the activities under the project and about opportunities for housing, for training and for “green” jobs;
- Ensure that all opportunities for investment in low carbon businesses are widely publicized and that all potential investors have an equal opportunity to submit proposals, have them properly and fairly evaluated and receive prompt feedback;
- Ensure that groups from the community who find it difficult to participate in economic activities are given equal access (women and youth);

It is essential that the communities affected by or with an opportunity to participate in the project have an understanding of the project objectives, how it will be implemented and who can participate. In the event that, during project implementation, there are perceived issues of unfairness, error or misapplication of the procedures by which the project will be implemented, it is essential that everyone affected has the opportunity to raise their concerns, and have them listened to, investigated and, if found to be correct, there is appropriate redress.

In order to achieve this, the project has designed a process for raising / submit grievances, first with the Grievance Redress Committee known as Community Coordination Committee (CCC), then after with the Project and the Ministry of Environment at Appeal or through complaints management system (Baza MoE). In any situation, the complainant may opt to submit the grievance to the Independent Redress Mechanism of the Green Climate Fund. All grievances will be handled with a survivor-centered and gender responsive approach.

Charters of Rights and Responsibilities

Charter of Rights and Responsibilities – Community Members

Rights

- All community members have the right to accessible information about the project, including:

    - The basis for access to housing made available under the project
    - The basis for access to jobs and job training under the project
    - The basis for applying for investment opportunities created under the project
- Everyone has the right to be treated with respect and to be free from discrimination based on sex, age, ethnicity, religion or ability;
- Everyone has the right to have any incorrect information about them or their household which may affect their access to opportunities under the project corrected within 10 working days of bringing it to the attention of the District;
- Everyone has the right to lodge a grievance of to appeal a decision in respect of the project of lodge a grievance;
- Everyone who lodges a grievance has a right to have the process explained to they fully and fairly and to receive assistance from the cell or sector office of the District;
- No-one who lodges or attempts to lodge a grievance should be pressured or prejudiced against as a result of this decision;
- Everyone has the right to receive a timely and fair response to their appeal or grievance if the project fails to uphold the above.

Responsibilities

- Everyone must provide accurate and complete information when applying for opportunities under the project;
- Selected participants for training have a responsibility to attend project training and sensitization sessions in full;
- Recipients of benefit under the project have a responsibility to use their benefit responsibly and comply with the requirements of the benefit;
- Everyone can report any breaches of these rights whether affecting themselves and/or their neighbors to the CCC members;
- Everyone must identify themselves when lodging a grievance;

Charter of Rights and Responsibilities – Potential Investors

Rights

- Every potential investor has the right to access information about investment opportunities through the media specified in the Public Procurement laws and regulations as a minimum;
- Every potential investor has the right to submit a proposal in accordance with the terms and conditions of the request for proposals;
- Every potential investor has the right to know the criteria which will be used to evaluate their proposal;
- Every potential investor has the right to have their proposal fairly evaluated according to the criteria published;
- Every potential investor has the right to receive a response to their proposal within the time frame published in the request.

Responsibilities

- When responding to an opportunity publicized under the project every potential investor must provide complete, accurate and clear information as requested;
- Every potential investor must observe the deadlines set for responses to opportunities publicized by the project
- Every potential investor has an obligation to bring to the attention of the authorities any knowledge in respect of a potential breach of the law and regulations by any other potential investor or group of investors.

The charter of rights and responsibilities will be publicly posted at sector and cell level administrative offices in all locations where the project is being implemented.

The project Executing Entity will also publicize information on the project and the grievance mechanism more broadly to communities through its website and various media outlets.

Information on the charter and grievance process will be provided in detail, repeated at different meetings and available through different channels, to try and reach as many community members as possible, particularly those who are most marginalized.

10.9.2. Grievances Handling Process

This section sets out how this mechanism will operate.

Organs involved in handling grievances (Organizational Structure)

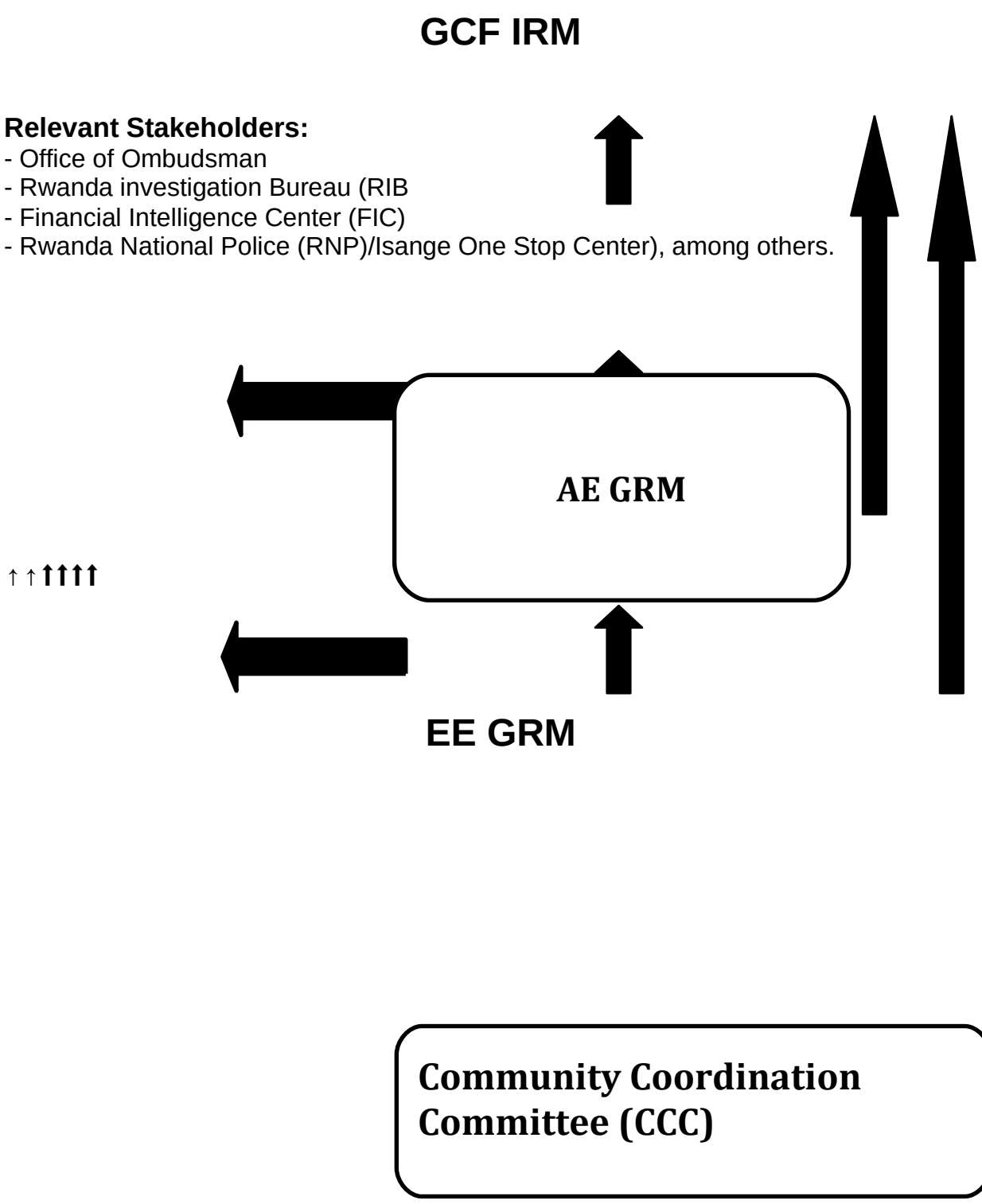

Figure 10.9.2.1 Stakeholders provide support to the AE GRM and EE Entity/Project level GRM, in their respective field depending on nature of the grievance. For instance, RNP through its Unity Isange One Stop Center may provide support in case of Gender Based Violence to assist the victims in getting the basic medical services and other facilitations; while Rib may provide support in investigation of other the prohibited practices that may be occurred in implementation of the project, among others. At any point, a grievance may be submitted to the GCF Independent Redress Mechanism, even bypassing the community coordination committee.

Accredited Entity GRM

Accredited Entity GRM has the following main responsibilities:

- Ensure coordination and management of complaints and grievances at Accredited level;
- Receives and resolves the complaints not resolved at project levels (EE Entities)
- Prepares documentation for complaint files/grievances to be considered by the National Steering Committee (NSC) meeting and communicated the results from the review by the NSC to the complainants
- Ensure capacity building of staff involving in complaints management and CCC Members and provided relevant materials and facilitations;
- Set a clear channel for reporting of grievances and whistleblowing and related facilitation tools;
- Ensure implementation and compliance with GCF relevant policies and local policies and laws;
- Seek support from relevant stakeholders, where necessary, depending on the nature of the grievance/complaints, including Office of Ombudsman, Rwanda Investigation Bureau (RIB), Financial Intelligence Center (FIC), Rwanda National Police (RNP)/Isange One Stop Center, among others.
- Enable transfer of grievances for review by the GCF Independent Redress Mechanism, where appropriate.

Executing Entity GRM

Accredited Entity GRM has the following main responsibilities:

- Ensure coordination and management of complaints and grievances at Executing Entity/Project level;
- Provide a survivor-centred process by which complaints can be received and addressed.
- Receives and resolves the complaints not resolved by the Community Coordination Committee (CCC);
- Review and compile reports from CCC on grievances and submit them to the Accredited Entity whilst ensuring a survivor-centred approach. This report contains also the grievances resolved at project level;
- Put in place clear mechanisms to ensure effective management of whistleblowing information and grievances in relation to Sexual Exploitation, Abuse and Harassment;
- Ensure capacity building of staff involving in complaints management and CCC Members;
- Seek support from relevant stakeholders, where applicable, depending on the nature of the grievance/complaints, including Office of Ombudsman, Rwanda Investigation Bureau

(RIB), Financial Intelligence Center (FIC), Rwanda National Police (RNP)/Isange One Stop Center, among others.

- Enable a transfer of grievances for review by the GCF Independent Redress Mechanism.

Community Coordination Committees (CCCs)

The Community Consultation Committees (CCCs) are proposed to ensure stakeholders engagement in the project implementation of the project and provide a platform for sector and community leaders to engage with farmers and other community members for each site as well as address issues of misinformation, exclusion from project opportunities, discrimination and inadequate communication.

The CCCs are inclusive enough to represent all categories of people at grass root level. These include the representatives from the local authority, CSOs, NGOs, Church Groups, Woman Forums, youth, people with disabilities/marginalised groups, among others.

a) Organization and composition of CCCs

The committee will be created at each sector or other determined area, depending on the nature of the project, where the project is being implemented. It will be composed of the following people representative from the categories of people mentioned above
The CCC will be chaired by the Chairperson Vice Chairperson and the Secretary.

b) Overall responsibilities of the CCCs

Particularly, the Community Coordination Committees (CCCs) members have mainly the following responsibility:

- To facilitate coordination of information of activities (such as surveys, and supervising documentation) for monitoring purpose in accordance with procedures put in place by the PROJECT;
- Support in the awareness among communities on the project activities before actual implementation to ensure inclusiveness and active participation of all categories of people;
- Provide public notice and full access to the project GRM system and variety of methods for submitting a grievance.
- Support in monitoring of project implemented activities and report to the project team on the key issues to be addressed;
- Provide survivor-center and gender responsive support for all GBV complaints.
- Support in resolving some informal grievances that may be raised during a community meeting at the village and cell level;
- Support and encourage community members to register a formal appeal to ensure that social justice prevails and that misappropriation of the procedures or areas where the procedure is not clear are formally documented and resolved;

- To be involved in monitoring and evaluation of PROJECT activities, in line with the philosophy of the Project in areas such as gender responsiveness and to promote the spirit of ownership among the communities;
- Document and report any allegations of bias or misuse of policy, procedure or law related to the PROJECT activities or allegations of corruption.

10.9.3. Grievances Process

This section describes how grievances are reported and followed up at different levels. The Project grievance mechanism can be expected to encounter a range of different issues.
Submitting a grievance/complaint is a request for a review of a decision made by the implementers of the activities driven directly by the **project**. If anyone (beneficiary or non-beneficiary) feels that a decision is incorrect or unfair they may make a complaint or lodge a grievance.

Grievances are about someone **being unhappy with some aspect of the project administration and management,** for example if a community member feels they have not been dealt with properly, that information given to them was not correct, or that there have been unacceptable delays.

A grievance can be made by an individual, a household, or a group/community - anyone can lodge a grievance it is their choice whether to make a formal or informal approach. Grievances may be raised **informally** or **formally (Table 10.9.2.1).**

Table 10.9.2.1 The main differences between informal and formal grievances

Type	**Informal**	**Formal**
Means of raising	Verbal	Written
Possible types of issue most suited to each type	● Requests for clarification of fact ● Requests of clarification of process ● Request for information	● Where previous responses have been wrong or inadequate ● Misinformation ● Lack of notification/ communication ● Exclusion from project opportunities ● Discrimination or unfairness

Point of entry	Community Coordination Committee members – In Verbal form	Community Coordination Committee members (in written form or electronically through Baza MoE)

Informal Grievance

The purpose of an informal grievance is not to trivialise the grievance but to provide an effective mechanism for quickly resolving simple issues. Lodging an informal grievance does not preclude lodging a formal grievance at any time in the future. The Community Coordination Committee may transform an informal grievance into formal grievance depending on its nature. It can also guide a community member to lodge a formal appeal to ensure that social justice prevails and that misappropriation of the procedures or areas where procedure is not clear are formally documented and resolved. The grievance mechanism is based and builds on existing service delivery and accountability mechanisms.

a) Role of the Community Coordination Committees

The Community Coordination Committee serves as the primary point of entry for informal grievances.

As indicated above informal grievances will be verbal and they may be raised at any time. The grievance will be resolved immediately, where possible, or discussed at the next Community Coordination Committee meeting or committee members may meet on an ad hoc basis to discuss informal grievances. The person lodging the informal grievance may come to the meeting or may rely on the Community Coordination Committee member to raise the issue on his or her behalf.

Once discussed, a response will be conveyed to the complainant verbally. The complainant has the right to formalise an informal grievance at any time, even if a verbal response has been provided by the Community Coordination Committee member. The Community Coordination Committee can redress the grievance immediately and if the Community Coordination Committee cannot answer the question, they can report to the project level for further action.

Formal Grievances

Formal grievances must be raised, in person by the complainant, and received by the Community Coordination Committees in written form or electronically through the Baza MoE system.

Grievances will be handled directly by the Community Coordination Committees, or reported to the Project level although they may consult and collaborate with local administrative institutions and other stakeholders.

At the highest level, the Ministry of Environment/Accredited Entity may resolve the grievances that are not resolved at the project level and in case of persistent dissatisfaction of the complainant, a grievance shall be subject to examination and final decision by the Project Steering Committee.

In all cases, the complainant shall be informed in writing of the outcome his/her claim/ grievance within 14 days If there is a delay in resolving the grievance of more than 30 days, the complainant shall likewise be informed.

a) Receiving grievances at CCCs level

Generally, the complaints are received by the community coordination committee at the local level. Specifically, the secretary of the committee or any other designated person receives and compiles all grievances received at CCC Level.

All grievances received by CCC members, may be manually reported to the Chairperson of the community coordination committee or through Baza MoE System.The chairperson of the CCC examines the grievances received for appropriate decisions. He/she may compile all the grievances received by CCC members and report them manually or through the Baza MoE system to the project management unit.

A grievance may be lodged by anyone on their own behalf or on behalf of someone else or a group of people. However, the person lodging the grievance must identify themselves through their national identify card and other identification information, including names, E- mail where possible, Gender/sex, Age/birth date, among others. The purpose of this is to ensure that there is a full audit trail of grievances so that the equity of the project can be reviewed later and that the adequacy of the response can be assessed. However, the complainant may choose to hide his/her identification through Baza MoE system or suggestion box.

Formal grievances are recorded on a form developed for that purpose or through Baza MoE system. Each recorded case should have a reference number in consecutive order for the purpose of easy tracking.

b) Formal Grievances sent to the Project level

All grievances and complaints which are received by the community coordination committee but when not resolved to the full satisfaction of the complainants or the grievances that the community coordination Committee deems to be in the scope of the project level, are submitted to the project level for further action and redress.

The project management unity examines the received grievance and finds appropriate response. In this regard, it may gather all relevant information and evidence on which it can base its decision. It may conduct field visits to hear the complainant and the community on the issue. It must take records of all information gathered and produce reports in accordance with the process set in the Baza MoE system.

All persons participating will use their best endeavours to assess and resolve the grievance fairly and will act without prejudice or bias.
In reaching its decision, the project management unit will:

- Refer to the policy and procedures of the GCF and the project documents together with the relevant local laws and regulations;
- Consult such experts as may be necessary to understand the situation
- Request such investigation of the grievance as may be necessary to establish the true position.

Once the project management unit has reached a decision, it will be recorded in the Grievance Register and the decision communicated by the management unit to the complainant. If the complainant is not satisfied by the decision, he/she can appeal his complaint at the Ministry Level.

c) Formal Grievances or Appeals sent to the Ministry/Accredited Entity

If the project level is unable to resolve a grievance or the complainant remains unsatisfied with the outcome, the grievance can be escalated to the Ministry of Environment/Accredited Entity for further review and consideration.

The Ministry of Environment/Accredited entity will:

- refer to the policy and procedures of the GCF and the project documents together with the relevant law and regulations;
- receive the original grievance forms together with notes of all actions taken to date and minutes of all meetings at which the grievance was discussed;
- ask any experts to provide expertise applicable/possible, and consult other relevant institutions and stakeholders;
- ask for additional investigation to be carried out.

After review of the case, the Ministry will:

- Take decision on the grievance examined;
- Communicate the decision to the complainant with a copy to the project management Unit and executing entity. The decision may be communicated to the complainant through Baza MoE system.

Generally, the Ministry of Environment prepares a compilation report with a complete list of all formal grievances received, their current status, decisions taken, and any actions taken or to be taken for learning or research purpose.

In case the complainant is not satisfied with the decision of the Ministry of Environment, he /she may lodge appeal of the decision to the project steering committee.

d) Formal Grievances or Appeals sent to the National Steering Committee

Where a grievance is unresolved by the Ministry of Environment or where a complainant is unsatisfied with the response received from the Ministry, the grievance may be passed to the National Steering Committee (NSC). It is expected that the NSC can resolve all grievances referred to it otherwise the grievances will be sent to the GCF Independent Redress.
The Ministry of Environment will submit to NSC the file and relevant documents in relation to the case appealed to the NSC.

The NSC will consider all grievance cases at its next meeting. In order to reach its decision, the NSC:

- Will refer to the policy and procedures of the NCF and the project together with the relevant law and regulations;
- Will receive the dossier and relevant documents in relation to the case under examination;
- May ask any experts to attend the meeting;
- May ask for additional investigation to be carried out.

Following the meeting, the NSC will:

- Decide and record the decisions about all grievances or appeals considered in its minutes, including redress and notes of investigations carried out and persons met;
- Request the Project Management Unit to implement the NSC decision and take appropriate measures to prevent similar cases recurring.

10.9.4. Gathering Information and Reporting

Gathering information and reporting at community level

Generally, the community beneficiaries of the project are the main sources of information on activities of the project implemented in their location/area. They are also the primary victims of the malpractices of grievances arising from those project activities.

In this framework, the Community coordination committee must create the room facilitating them to get information from the community through organizing and participating in different meetings with the community, common activities and field visits. They can also guide them on the use of available channels to be used in providing information and revealing/disclosing grievances and complaints such as through physical contact and verbal communication, using phones and complaint management system Baza MoE. Based on survivor-centered and gender-responsive approaches, the complainant may choose to bypass the government judicial process for GRM and directly lodge a complaint to the GCF IRM. The Community Coordination Committee will be trained on the process for directing complaints directly there.

For instance, in the construction of water tanks, a citizen beneficiary may not receive compensation in due time. If he/she raises her/his claim in the meeting, the community members may first inform the claimant of the process to resolve the complaints, and then report to the project team to find solution of the raised grievances.

All information gathered by a community coordination committee member is reported to the secretary of the committee for compilation.

The Chairperson of the community coordination committee, assesses all information and grievances received to find the ones that need response without waiting the meeting of the community coordination committee, others that need to be discussed in the community coordination committee meeting and the ones to be reported immediately to the project for further process and action.

In all ways, all information and grievances received, shall be recoded in accordance with the relevant templates or through the Baza MoE system whilst using a survivor-centered approach. The community must be encouraged and urged to report all malpractices and grievances to the community coordination committee members.

Reporting grievances and feedback through Baza MoE

Reporting grievances and information

"Baza MoE" is a system that helps in receiving and solving complaints/grievances in a quick and reliable way. It helps the beneficiaries and stakeholders of MoE and its affiliated agencies or projects implemented under MoE having the right channel to provide feedback, express their concerns or grievances linked to the Ministry's services and get appropriate and effective remedies/response. It also helps to provide information in relation to these services.

There are two ways of accessing the Baza MoE - the complaint management system:

a. Web application whereby one browses the following link: http://bazamoe.environment.gov.rw/
b. On mobile using an app called Baza MoE and USSD (*164#)

Generally, the user will fill in all about his personal information required and hit next to continue on complaint information.

User will fill all required fields on complainant information and other non-mandatory on his/her choice and hit next to fill all information about complaint information.

User will fill all required fields on complaint information and other non-mandatory on his/her choice and hit next to review all given information and submit his complaint, to the staff in charge of complaints.

Response and Feedback

The system itself contains automatic deadlines for staff involving in complaint management to react and respond on the complaints received, as follow:

- **Staff in charge of complaints management at project level** - after the complaint is submitted it becomes pending to the project level waiting for the response. The staff in charge of complaints at project level can login and respond to the complaint. Staff in charge of a project at project level can receive notification through e-mail or SMS when the new complaint is submitted and when he is asked to provide inputs. He can also see notification after three (3) days with no response provided from the reception of the complaint, and after five (5) days he/she received further notice requesting him to respond the complaint and a warning that after seven (7) days the system will notify and allow the complainant to escalate his/her complaint to the next level. This means that the staff at this level has at least seven (7) days to provide response or feedback to the complainant.

The same deadlines applied to the project manager when the complaint is escalated at his/her level.

- **Staff in charge of complaints management at MoE** – after the complaint is escalated from the complainant, it becomes pending to the MoE waiting for the response. Then staff in charge of projects at the MoE can login and respond to the complaint. This staff can receive notification for responding to the complaint in accordance with the same deadlines mentioned above.
- **Steering Committee:** When the complainant is not satisfied with response provided from staff in charge of projects at MoE and he/she escalates his/her complaint, then it becomes pending to the steering committee. The steering committee can login and provide on the response to the complainant. The User (Chairperson of the steering committee) at steering committee level can receive notification through e-mail and SMS when the new complaint is escalated to the steering committee and when the steering committee is asked to respond. He/she also receives notification after 15 days with no response from the reception of the complaint. In a few words, the steering committee has 15 days to respond to the complainant.

11. MONITORING & EVALUATION

As the Accredited Entity (AE), MoE on behalf of the Government of Rwanda, will oversee and monitor the management and implementation of the project. RFA will serve as the EE for the project through a project cooperation agreement (PCA) signed with MoE. MoE will enter into an MoU with RFA for the execution of the project. All work will be coordinated by the Project Management Unit (PMU) and supported by other relevant government agencies including the National Land Authority (NLA) and the Rwanda Water Board (RWB) within MoE.

The Monitoring and Evaluation (M&E) of the project outputs and project activities will be overseen by a national Monitoring and Evaluation (M&E) Specialist hired by the Project Management Unit (PMU) to work under the guidance of the Environmental and Social Management Framework (ESMF). The M&E Specialist will also be supported by EE-based M&E Specialists to develop practical guidelines for — and operationalize — a performance monitoring framework to track the project's progress towards achieving its targets. The responsibilities of the M&E Specialist are detailed in the proposal under the logical framework Section E.7 (Monitoring, reporting and evaluation arrangements).

The summary of project outputs and project activities are listed on Section E.6 of the main proposal (Project activities and deliverables). The executing entities and service providers responsible for the project outputs are listed on Table 2 (Summary of project outputs and executing entities which will deliver on them) of the main proposal. To ensure continued success and ongoing operation of this proposed project the following monitoring and evaluation will take place for all project components:

- Identify performance indicators at outcome levels, units of measurement, data sources, method of data collection, analysis and reporting
- Identify responsible stakeholders to collect data and frequency of data

collection

- Establish/ determine baselines available for monitoring
- Collect monitoring data
- Assess the capacity and skills of the project team to oversee monitoring system
- Conduct M&E training for project team and other stakeholders
- Produce periodic status reports
- Produce thematic/technical reports
- Mid-term external evaluation report
- Final external evaluation
- Produce lessons learned documenting best practices

In addition, the Environmental and Social Management Framework (ESMF) has been developed for the sub-projects and activities that will be further specified in project implementation. Specific to the ESMF, the M&E Specialist will need to work with the Environmental and Social Safeguards (ESS) Specialist to set a schedule for the full ESIA screening of subprojects and activities as described in the ESMF. The screenings must take place in consultation with relevant stakeholders and communities prior to the start of the start of the activities.

In addition, the M&E Specialist will need to develop performance indicators for the implementation of the following social safeguards as relevant to the overall project and the subproject and activities:

(i) Grievance Redress Mechanism (ii) Stakeholder Engagement (iii) Process of Consent (iv) Access Restrictions Mitigation Plan (iv) Labor and Working Conditions Risk Management plan (v) Emergency Response and Preparedness Plan (vi) Institutional Review Board (vii) Gender and Youth Action Plan. In Section G.1. of the main proposal, the summary of risks along with the mitigation factors/measure and management strategies are presented in detail.

12. STAKEHOLDER ENGAGEMENT PLAN

Stakeholder engagement is essential everywhere we work. Building relationships and transferring capacity is a core component of our approach to conservation. This project includes an initial identification of stakeholders and consultations in the development phase and will require continual engagement and adaptation over the course of implementing the core project activities. We envision actual engagement occurring in four phases:

1) Project Development
2) Initial Project Implementation
3) Component Activity Implementation
4) Post Project

Project Development Stakeholder Engagement Plan

During the project development phase, the Stakeholder Engagement Plan involved initial identification of stakeholder groups, identification of key informants for each stakeholder group, consultation with stakeholders on past projects, the current project concept, project activities, and best implementation practices for fair distribution of project benefits. See Annex 7 for a complete review of the stakeholder engagement process and results).

The initial identification of stakeholder groups involved internal discussions on who in the Congo-Nile Divide would be affected by or will affect the project. Brainstorming generated a list of stakeholders that were further sorted into least, moderate, or most affected by or affecting the project. Those groups both affected by and affecting the project were noted. To proceed with stakeholder engagement, we further identified which groups of stakeholders should be informed of, consulted with, involved in, or collaborated with about the project. We consolidated this list according to GCF guidelines as those to be informed, communicated with, or engaged
.

The project development stakeholder engagement plan identified 77 relevant stakeholders with 26 being affected by the project and 49 affecting the project. Of those ***affected by*** the project, 19 are the most affected, 6 are moderately affected and 1 will be least affected by the project. Many of those most affected will be from the local communities including - women headed households, youth headed households, single mothers, smallholder private forest owners, those making cookstoves, beekeepers, historically marginalized, nursery seedling providers, landless peoples, charcoal makers, etc. Of those ***affecting*** the project, 13 are most affecting and were typically Rwanda government ministries. Twenty were moderately affected including some civil society organizations, local and national media, legal and illegal miners, religious leaders, some government ministries less focused on forest natural resources, NGOs working in Rwanda, etc. Least affecting the project were 16 stakeholders including many global development organizations that take an interest in such projects that align or complement their mission or perhaps provide some resources yet observe from a distance. Based on the initial stakeholder analysis, we will inform 13 groups of the project and its progress. We will communicate with 29 groups about the details of the project and seek input on design and

implementation. We will engage directly with 35 mostly community member groups.

We then identified key informants for each stakeholder group and contacted those informants for stakeholder consultations. The consultations included one-on-one interviews over the phone and via zoom as well as in-person meetings as allowed by the Covid restrictions. Consultations also included small group meetings online and focus groups.

The initial stakeholder analysis involved only the project development team and further refinements were made during the stakeholder consultations and we expect additional refinements during the life of the project.

Initial Project Implementation Stakeholder Engagement Plan

To successfully implement the project, we will build on the relationships of the project team prior to the project and the relationships started during the project development phase. At this stage, stakeholder engagement will largely involve identifying those crucial natural or de facto leaders within the 'Engage' group who can serve to help the team mobilize efforts for project implementation. This may involve recruitment of new staff, development of communication systems across many stakeholders from ministries to Rwanda civil society members, creation of a task force/advisory board for the project, training project implementation including initial training for social safeguards.

Component Activity Implementation Stakeholder Engagement Plan and Metric

Specific engagement plans will be developed for all project subcomponents. Based on current knowledge at the time of submission, details expected types of engagement for each activity. Activities will be further divided into sub-activities during project implementation and specific details of which stakeholders will be engaged with which specific tool will be part of the adaptive management process for the entire project. As engagement needs evolve so too will the tools and approaches evolve to meet the needs of the project and deliver on expected outcomes. The columns 'Expected Frequency/Metric' and 'Responsible Implementer/Timing' will serve as the Metrics for evaluating stakeholder engagement. These columns will also evolve as project needs adapt.

All staff involved in the project will receive stakeholder engagement training, including gender training from GCF, as well as facilitation training. New positions supported by the project include up to two Community Engagement Specialists based around each forest. There will also be at least one Labor and Safety Officers based at each forest to manage the large number of contractor staff involved in the fern removal, tree planting, and stove production processes. These individuals will be largely responsible for day-to-day community engagement at each of the 8 communities (2 near and 2 far from the 2 major protected forests, Nyungwe, and Mukura-Gishwati). Stakeholder engagement with partners working nationally will be mostly conducted by core staff including, the project leader, country program leader, the local SSMT, the local Environmental Management Officer, and the local Labor and Safety Lead.

Post Project Stakeholder Engagement Plan

Any large effort should be adequately monitored, documented, evaluated, and the major outcomes shared back with those stakeholders involved in the process. Whilst these activities will occur throughout the duration of the project, specific efforts to engage stakeholders upon

completion of the project should be made to ensure continuation of project benefits and to potentially seed future necessary activities with adequate support. The Post Project Stakeholder Engagement Plan will involve sharing reports with stakeholders at all levels. Providing presentations on the completed project to stakeholders with adequate time for soliciting feedback and questions.

13. INITIAL ENVIRONMENTAL AND SOCIAL SCREENING ANALYSIS AND RESULTS

The focus of this project is on Building Resilience of Vulnerable Communities to Climate Variability in Rwanda's Congo Nile Divide through forest and landscape restoration and reducing demand for fuelwood. The project has three strategic interventions directly targeting vulnerabilities within climate impact chains. Component (1) Mainstreaming Climate Adaptation into Integrated Land Use Planning and Management will lead to enhanced adaptive capacity of both ecosystems and rural populations, by strengthening coordination among sectors and integrating climate resilience considerations into planning and development. Component (2) Landscape Management and Restoration will implement high priority actions to enhance the resilience of vulnerable communities by increasing the extent and integrity of forest ecosystems and landscapes and by reducing demand for wood fuel. Component (3) will focus on Project Management, Monitoring and Evaluation (M&E).

The MoE is accredited by the GCF to carry out funded activities that fall within Environmental and Social Risk Categories B and C. The MoE and its key partners (WCS, REMA) screened the project against its potential social and environmental risks, following GCF requirements. The program was screened against social and environmental standards, consistent with GCF guidance, including the GCF risk factor assessment checklist. Overall the program was assessed as having moderate environmental and social risk, equivalent to **category B** of the GCF. (https://www.greenclimate.fund/documents/screening-categorizing-activities).

Overall, the risks and impacts were considered moderate to limited, and the magnitude of the risks and impacts expected were low to moderate. The expected risks and impacts were also few in number, and were contained completely within the footprint of the project area (CND) and the implementation zone of all the activities. Any potential negative impacts were also determined to be reversible, and readily mitigated through generally accepted mitigation measures and good international industry practices.

The project is designed to empower local communities to use forest resources more sustainably. Community leaders and local authorities will be engaged in the project to mobilize community support. Adaptive capacity of both national park managers and smallholder farmers will be enhanced by the project.

The project is committed to full participation from all stakeholders in our work. The program is designed to host regular meetings with various stakeholders to ensure their engagement from the beginning and throughout the Project. The actual execution of the program on the ground will be designed collaboratively, with the communities. So far, a consultative workshop (24 May 2017) involving the NDA and other follow-up meetings and discussions were held with stakeholders.

The key project potential risks are summarized in the table below and the preparation of an Environmental and Social Impact Assessment (ESIA) and related Environmental and Social Management Plan (ESMP) during the PPF period will further define project impacts and appropriate mitigation measures in line with the requirements under the government of Rwanda procedures and the GCF environmental and social safeguards for category B projects.

The Program's environmental and social benefits are important. It will provide direct benefits to increase resilience of more than 1,254,242 people in the most vulnerable communities in the CND (4,446 km^2) and will generate mitigation benefits by delivering sequestration of around 250,841 t CO_2-eq during the 5-year Project period, which is about 0.9% of the 28.2M t CO_2 reduction targeted by Rwanda's vision 2050.. This will help to keep Rwanda in negative emissions through 2050.

Program Elements w/Potential for Impact	**Unmitigated Impacts**	**Pre-mitigation**	**Avoidance & Mitigation Measures**	**Post-Mitigation**
Subcomponent 1.1: Mainstreaming climate adaptation into district, regional and national land use planning frameworks				
	No adverse impacts are likely from this activity. This component involves support for inter-ministerial planning support and coordination.	Likelihood: Low Consequence: Low Risk: Low		Likelihood: Low Consequence: Low Risk: Low
Subcomponent 1.2: Enhance capacity for spatial planning and modelling				
	This activity principally involves provision of technical advisory services and capacity building for spatial planning. data synthesis and analysis. As such, this component is unlikely to have any significant impact	Likelihood: Low Consequence: Low Risk: Low		Likelihood: Low Consequence: Low Risk: Low
Subcomponent 2.1 Mainstreaming adaptation into forest management to ensure natural forest ecosystem resilience and continued provision of critical ecosystem services				

Program Elements w/Potential for Impact	Unmitigated Impacts	Pre-mitigation	Avoidance & Mitigation Measures	Post-Mitigation
Build capacity of RDB and national park managers to manage forests for climate resilience	This activity mainly involves technical capacity building and planning	Likelihood: Low Consequence: Low Risk: Low		Likelihood: Low Consequence: Low Risk: Low
Reduce the risk of fires from illegal honey harvesting within forest protected areas by promoting modern beekeeping among 4000 farmers surrounding the three CND national parks, focusing particularly on women and youth using approaches previously proven successful, to promote gender equity and to increase community support for forest conservation.	Preliminary stakeholder consultations among beekeepers have been conducted by WCS and partners with communities surrounding the 3 national parks targeted in this program. Currently there is a demographic bias towards males and towards people over age 35 in beekeeping activities in all 3 areas. The program aims to achieve appropriate representation of women and youth in modern beekeeping activities. There is a need to focus on strategies that empower women and youth and that recognize and address constraints to participation by women (e.g., little time available in household time	Likelihood: Moderate Consequence: Moderate Risk: Low	Early and ongoing engagement of community, using gender- and age-appropriate outreach strategies and materials. Adopt appropriate apiary practices and protective equipment.	Likelihood: Low Consequence: Moderate Risk: Low

Program Elements w/Potential for Impact	Unmitigated Impacts	Pre-mitigation	Avoidance & Mitigation Measures	Post-Mitigation
	budgets). MoE and EE recognize that gender is central and cross-cutting, and program strategies will focus on gender equality as a goal, and with a specific emphasis on women and youth positive impacts on improved equity between women and men are expected. There is potential for increased risk of bee disease and increased risk of stings.			
Clearing ferns in 6800 ha of Nyungwe NP to facilitate recolonization by forest pioneer species and re-establish the conditions for natural forest regeneration.	Overall, the activities are expected to have positive impacts on biodiversity (including endangered species) and ecosystem services. The fern clearing and natural forest regeneration will be restricted to a relatively small area (6800 ha), that represents less than 8% of the total area of Nyungwe National Park. Thus the area at risk of adverse impacts is limited	Likelihood: Moderate Consequence: Moderate Risk: Moderate	Fern removal will strictly adhere to previously tested and established protocols that have been reviewed and approved by RDB, the agency responsible for managing national parks. The activities will be conducted only within the area containing invasive ferns. The work will be undertaken outside of the season with greatest risk of	Likelihood: Moderate Consequence: Moderate Risk: Low

Program Elements w/Potential for Impact	Unmitigated Impacts	Pre-mitigation	Avoidance & Mitigation Measures	Post-Mitigation
	and contained. There is some potential risk of erosion and sediment movement during rainfall events while fern removal is taking place. Reforested areas may be illegally exploited for timber and fire wood. People may be excluded from a small portion of the national park during restoration activities. There is risk of exacerbating gender inequities in income if women are not well represented among laborers hired for fern removal. There is risk of laborers falling while working on steep slopes or of cutting themselves while handling sharp implements.		erosion. Erosion and sediment controls will be put in place. Careful planning and stakeholder consultations will be undertaken to ensure equitable representation of women among laborers and all laborers will receive adequate training and supervision to ensure there is no inadvertent trampling or cutting in sensitive natural habitats. They will also receive adequate safety training to minimize risk of injury to laborers. Timber harvesting is not permitted within the national park. Suitable management of recovering, reforested areas will be carried out by the national park and this program will ensure park staff receive suitable training and support.	

Program Elements w/Potential for Impact	Unmitigated Impacts	Pre-mitigation	Avoidance & Mitigation Measures	Post-Mitigation
Subcomponent 2.3: Agroforestry, On-Farm Afforestation, and Protective Forests				
Establish 2,500 ha of protective forests on slopes >55% and collaboratively develop, provide training and implement on farm afforestation plans for approximately 8,000 smallholder households (2,500 ha).	This activity will involve undertaking afforestation interventions. It will not require any land acquisition or resettlement. Appropriate representation of local communities in identification of specific sites for afforestation is required. Environmentally, the impacts include potential erosion and sediment movement during rainfall events while afforestation is taking place. In the long-term, these impacts will be mitigated by the value of afforestation interventions. This activity will involve the creation of jobs and temporary work opportunities for local communities. There is potential for social impacts, including pressure from family	Likelihood: Moderate Consequence: Moderate Risk: Moderate	Protective forests will not be established on land where food is being produced. On farm afforestation will not involve the acquisition of lands, land rights or land-use rights through expropriation or other compulsory procedures and will comply with the legal system in Rwanda. Communities will be engaged as part of the planning and afforestation processes and. where appropriate, agreements will be developed on land rights and responsibilities. All afforestation measures will be based on review of international best practices, which will be determined during the feasibility study, and with engagement of community.	Likelihood: Low Consequence: Moderate Risk: Low

Program Elements w/Potential for Impact	Unmitigated Impacts	Pre-mitigation	Avoidance & Mitigation Measures	Post-Mitigation
	members to gain access to the financial benefits that contracted people gain.		The program will ensure that people entering work opportunities are provided with training and advice to understand how to properly manage their activities, both individually and communally.	
Subcomponent 2.4: Reducing deforestation and empowering women through adoption of fuel efficient cookstoves				
Adoption of fuel efficient cookstoves by 37,400 smallholder farm households	Adoption of fuel efficient cookstoves has potential to improve air quality within households, especially for women and children, as well to reduce the amount of time spent collecting fuelwood. There is the potential for temporary interruption of existing livelihood activities for individuals who are currently operating in areas that are proposed for cookstove interventions.	Likelihood: High Consequences: High Risk: Moderate	Careful planning and stakeholder consultations will be undertaken prior to the site selection for cookstove activities to ensure that any temporary interruption to livelihoods is minimized and to ensure that households have appropriate training on installation and operation.	Likelihood: Moderate Consequences: Moderate Risk: Low

14. PARTICIPATORY GUIDANCE ON ACCESS RESTRICTIONS MITIGATION

What are Access Restrictions in Conservation?
Access restrictions occur when a conservation project creates a barrier to realizing social, economic, cultural or environmental benefits that were previously available.

When a conservation project requires or implies:

- restricting access to and/or use of natural resources by communities, groups or individuals living within or outside legally designated parks and protected areas (e.g., fishing, hunting wildlife, harvesting timber or non-timber forest products);
- restricting physical access to areas of occupation or use;
- restricting access to social services such as education or health services by prohibiting or limiting physical access to the places where those services occur; or
- changes in the use and management regimes of natural resources

In practice, access restrictions may occur when:

- protected areas are created or expanded
- there is a change in the management of a natural resource (e.g., lowering catch limits, creating a no hunting, fishing, or grazing area)
- individuals groups and communities can no longer access natural resources they previously use (e.g., animals, water, trees, medicinal plants)
- tourism practices are limited in certain places
- businesses are no longer allowed to operate within an area
- areas of cultural value are no longer accessible

These restrictions may be temporary, seasonal or permanent. Access restrictions may also be voluntary or involuntary. By voluntary, the restriction would be instigated by the community themselves or in close partnership with the community, there is no mechanism to force communities to agree, and the communities can withdraw their consent at any time.

What is the Access Restrictions Mitigation Process?
The Access Restrictions Mitigation Process is a participatory process undertaken with the affected peoples in which those affected have the opportunity to identify impacts, articulate risks and benefits of those impacts, consider who will be affected by the impacts and develop a plan for mitigating impacts. Depending on the scope and scale of a project, the mitigations may be built into the project design or they may be implemented by the community directly. The specifics of the process and the mitigation should be agreed upon by the affected people and built into project design and budget.

In the following pages, please find guidance for a participatory processes used for community-led or government-led conservation.

General Guidance for Running an Access Restrictions Mitigation Workshop for Community Management Conservation Efforts

December 2021

Instructions for Project staff are in italics.

MEETING SET UP – Prior to the meeting:

- *Have a list of all the potential restrictions that need to be discussed with the group*
- *Be sure to consult the spreadsheet and capture the Project Staffs perspective on the potential benefits, risks and possible mitigations.*
- *Invite people who will be knowledgeable of the benefits and risks.*
- *Complete an attendee list*
- *Make sure you have a way to capture what is being said, ideally there will be at least 2 staff present to help take notes and facilitate the discussion.*
- *If you anticipate agreements will be made, have a process for documenting consent.*

MEETING INTRODUCTION - *this is general info to introduce the topic*

Conservation projects may create impacts on communities and livelihoods. The creation or strengthening of all forms of conservation protection (fisheries regulations) may entail restrictions on fishing and access to or use of coastal and marine resources. These restrictions may be short or long term, and may impact some groups or households (e.g., artisanal fishers) more than others (pastoralists).

At the same time, conservation projects often improve access to resources in the long term and as a result provide opportunities to improve the rights and livelihoods of communities.

When there are restrictions or other adverse impacts on local communities, project staff need to prepare for those, otherwise it may cause backlash or resistance to conservation efforts in the future.

For locally managed conservation efforts it is important to realize your decisions can impact community members and to be clear about what options exist to reduce any negative impacts.

PURPOSE – *be sure to state a clear purpose and have a list of the restrictions to include in this statement.*

The purpose of this meeting is to consider XXXXXX restriction(s) that the community has proposed and have a discussion about the potential benefits, potential risks, and possible mitigations to reduce risks, if needed.

It is important to recognize that as a community your decisions may have negative impacts on some community members or resource users. The community needs to consider how to reduce those impacts through mitigation. By mitigation we mean steps YOUR COMMUNITY can take to

alleviate negative impacts of these restrictions on community members. Again, these are mitigations that your group will need to implement. You will need to consider the feasibility of the mitigation as well as how it will be funded if costs are involved. The Project may or may not have funds for mitigation and the staff are here to help you think through possibilities.

DESIRED OUTCOMES:

By the end of this meeting we hope you'll have a list of potential benefits and risks from your management actions as well as some ideas to consider as possible mitigation. We also hope that you will have an understanding that when communities make decisions there will be different impacts on different people and it will be important to think about those impacts and attempt to reduce any negative impacts.

By the end of this meeting we hope you'll have a decision on what mitigations will be implemented and clear indication of who will be responsible for that implementation.

Print the next pages for EACH access to be covered:

ACCESS RESTRICTION:_____

Facilitator Name:_____ Community Name:_____
Number of Participants:_____ Date of discussion/agreement:_____

GENERAL INFORMATION – *Facilitator to provide overview of what the access restriction is (What will be restricted and to what degree - e.g. how large an area it will impact and when the restriction is expected to go into effect - is it short-term, long-term, annually, etc.)*

BRAINSTORMING – *Once all are clear on the access restriction being discussed the brainstorming can begin. Be sure to use good facilitation skills to hear from everyone.*

BENEFITS

Please think about what benefits the community/resource users will experience as a result of [INSERT ACCESS RESTRICTION]?

Benefit	Who will benefit (e.g. whole community, specific group, part of a group - specify as needed)	Approximate number of beneficiaries

RISKS

Now please think about who might experience negative impacts from [INSERT ACCESS RESTRICTION]. What risks might this access restriction cause? Who will be impacted by the restriction?

- *Prompt the group to think about HOW MANY people will be impacted as well as BY HOW MUCH will these people be impacted.*
    - *For example, if they use an area to be restricted, do they use that area 100% of the time or 20% of the time and are there alternate sites that could provide similar resources (what area are those sites compared to the restriction)?*
    - *OR if they use an illegal fishing gear, do they have access to others, could they continue using that gear in another spot?*
- *Prompt the group to think specifically about risks to vulnerable groups (e.g., women, youth, elderly)*

Risk	Who will be impacted (specific group)	How many people approximately?	What percent of their resource access will be affected and why?

POSSIBLE MITIGATION

Given these potential benefits and risks, what type of mitigation may be necessary to reduce negative impacts? Please remember that these are mitigations that the community will need to fund and implement. We can brainstorm all mitigations first and then determine which ones would be feasible and cost-effective given the available resources.

- *Give the group reminders: if the community can partners with other organizations on mitigations, those can be listed*

- *Ask the group to think about alternatives if no money is available to support mitigation measures they propose.*

Mitigation *(brainstorm first all options in focal groups - then fill out rest of table as a full group)*	Can the community do this without additional finances or skills? *Yes / No*	*If finances or skills are needed* - what's needed and how much might this cost (cost per person)	*If finances or skills are needed:* Are there partners who can support this within the next one year?

AGREEMENT

If the group is ready to decide upon mitigation measures, have a process for documenting the agreement among the group members. Because Project staff may or may not be involved in the mitigation process and because this is the community deciding for themselves, consent is not needed but Project staff should keep track of the agreement and check back to see if implementation is happening.

	Response	Notes

Does the community feel that mitigation is needed? *Yes / No*		
If yes, What mitigations is the community ready and able to uptake? *List*		
Does the community want to move forward with [INSERT ACCESS RESTRICTION] considering benefits and risks and any possible mitigation? *Yes / No*		

MITIGATION PLANNING (if any mitigations decided on)?

Leader for implementing mitigations	
Date mitigations to be implemented by	
What will be recorded to demonstrate mitigations implemented?	

FACILITATOR: Take a picture with a flip chart indicating the following and ask everybody to raise hands if they agree:

- *We agree to move forward with [INSERT ACCESS RESTRICTION] considering the benefits and possible risks/mitigations.*

At the end of the meeting be sure to capture the general information you have collected and store for future reporting to the PMU as neeeded.

Access Restrictions Mitigation Process
Guidance for Running an Access Restrictions Mitigation Workshop for a Protected Area

December 2021

Instructions for project staff are in italics.

MEETING SET UP – Prior to the meeting:

- *Have a list of all the potential restrictions that need to be discussed with the group*
- *Be sure to consult the spreadsheet and capture **Project Staff' perspective** AND the Management Authorities' perspective on the potential benefits, risks and possible mitigations.*
- *Invite people who will be knowledgeable of the benefits and risks.*
- *Complete an attendee list*

If partners will complete these tables, please modify the forms. Remove facilitator name and type up instructions for the group prior to each table. Under general information, write a few sentences about what the access restriction planned is for reference. Remove the italicized text that is for project staff.

BACKGROUND

Conservation projects may create impacts on communities and livelihoods. The creation or strengthening of all forms of protected areas (MPAs, LMMAs) or enforcement of rules may entail restrictions on fishing and access to or use of coastal and marine resources. These restrictions may be short or long term, and may impact some groups or households (e.g., women head of households) more than others.

At the same time, conservation projects often improve access to resources in the long term and as a result provide opportunities to improve the rights and livelihoods of communities.

When there are restrictions or other adverse impacts on local communities project staff need to prepare for those, otherwise it may cause backlash or resistance to conservation efforts in the future.

PURPOSE – *be sure to have a list of the restrictions to include in this statement.*

The purpose of this meeting is to consider [insert list of access restriction] that the [insert PA name or other group name] has proposed and have a discussion about the potential benefits, potential risks, and possible mitigations to reduce risks if needed.

You will need one set of these tables for EACH access restriction being planned.

ACCESS RESTRICTION:_____
*Facilitator Name:*_____ PA Name:_____
Number of Participants:_____ Date of discussion/agreement:_____

GENERAL INFORMATION – *Facilitator to provide overview of what the access restriction is (What will be restricted and to what degree - e.g. how large an area it will impact and when the restriction is expected to go into effect - is it short-term, long-term, annually, etc.)*

BENEFITS
Please think about what benefits the community/resource users will experience as a result of [INSERT ACCESS RESTRICTION]?

Benefit	Who will benefit (e.g. whole community, specific group, part of a group - specify as needed)	Approximate number of beneficiaries

RISKS

Now think about who might experience negative impacts from [INSERT ACCESS RESTRICTION]. What risks might this access restriction cause? Who will be impacted by the restriction?

- *Prompt the group to think about HOW MANY people will be impacted as well as BY HOW MUCH will these people be impacted. Note that this will have to be explained with examples (e.g. see below)*
  - *For example, if they use an area to be restricted, do they use that area 100% of the time or 20% of the time and are there alternate sites that could provide similar resources (what area are those sites compared to the restriction)?*
  - *OR if they use an illegal fishing gear, do they have access to others, could they continue using that gear in another spot?*
- *Prompt the group to think specifically about risks to vulnerable groups (e.g., women, youth, elderly)*

Risk	Who will be impacted (specific group)	How many people approximately?	What percent of their resource access will be affected and why?

POSSIBLE MITIGATION

Given these potential benefits and risks, what type of mitigation may be necessary to reduce negative impacts? Please remember that these are mitigations that will need to be funded and implemented. We can brainstorm all mitigations first and then determine which ones would be feasible and cost-effective given the available resources.

- *Give the group reminders: if they can partner with other organizations on mitigations, those can be listed*
- *Ask the group to think about alternatives if no money is available to support mitigation measures they propose.*

Mitigation *(brainstorm first all options in focal groups - then fill out rest of table as a full group)*	Can the PA do this without additional finances or skills? *Yes / No*	*If finances or skills are needed* - what's needed and how much might this cost	*If finances or skills are needed:* Are there partners who can support this within the next one year?

AGREEMENT

If the group is ready to decide upon mitigation measures, have a process for documenting the agreement among the group members. Because project staff may or may not be involved in the mitigation process and because this is the community deciding for themselves, consent is not needed but project staff should keep track of the agreement and check back to see if implementation is happening.

	Response	Notes
Does the PA feel that mitigation is needed? *Yes / No*		
Does the PA plan for access restriction need to be discussed with the community? *Yes/No*		
Does the PA feel the community might feel mitigation is needed? *Yes/No*		
If yes, What mitigations is the PA ready and able to uptake? *List*		
Does the PA want to move forward with [INSERT ACCESS RESTRICTION] considering benefits and risks and any possible mitigation and how hte community might respond or be affected? *Yes / No*		

MITIGATION PLANNING (if any mitigations decided on)?

Leader for implementing mitigations	
Date mitigations to be implemented by	
What will be recorded to demonstrate mitigations implemented?	

15. Draft Terms of Reference

Title:	Environmental and Social Safeguards Specialist
Position Type	Full-Time
Reports to:	Project Management Unit
Location:	Kigali, Rwanda

Program Overview:

Rwanda's Congo-Nile Divide (CND), an area of 444,600 hectares, is a high-elevation landscape of remnant natural forest reserves embedded in a mosaic of intensively managed smallholder farms and commercial plantations. Extending along a north-south ridge with an altitudinal gradient from 1,900m to 4,507m, the CND separates the drainage basins of the Congo and Nile Rivers. It is part of the Albertine Rift, which is one of the most biologically rich regions in Africa and "one of the most important regions for conservation" on the continent, containing more than half of Africa's birds and 40% of its mammals. At its highest elevations, the region is crowned by the Volcanoes, Gishwati-Mukura, and Nyungwe National Parks, containing Rwanda's only remaining montane forests, one of the most biodiverse ecosystems on the African continent, with high levels of endemism (species found nowhere else on Earth) and dozens of threatened species, including populations of mountain gorillas and chimpanzees. Nyungwe has been recognized as one of the six highest priority protected areas in the Albertine Rift due to its high endemism and globally threatened species (Plumptre et al). Though covering barely 5% of the country, this archipelago of protected forests is of critical importance for:

- Its globally recognized high biodiversity values[...];
- Its role in Rwanda's acclaimed ecotourism offerings serving as the primary source of Rwanda's foreign revenue and as a major economic development driver[.];
- The ecosystem services provided for surrounding subsistence farmlands, as well as for commercial tea and coffee plantations offering employment opportunities for women while providing the 2nd and 3rd highest sources of foreign revenue[;]
- The regulation of water capture and release to growing urban centers on the CND periphery, the nation's extensive river network, and downstream hydroelectric operations; and
- The sequestration and storage of nearly 60% of Rwanda's national carbon stocks.

These values and services are already compromised by a combination of anthropogenic and climatic factors; they will be much more severely threatened by the potential negative feedback loops associated with projected climate change impacts. The Project will promote an ecosystem-based approach to forest protection and restoration, and will enhance the extent and resilience of forest ecosystems and species, including functionally linking currently isolated forest fragments.

Through these approaches, the Project will protect, restore and rehabilitate forest ecosystems, enhancing biodiversity and reducing key threats, while increasing the provision of critical ecosystem services to strengthen adaptation of vulnerable communities.

The CND landscape supports nearly one-third of Rwanda's population on barely one-fifth of its land base. Average population density is 736 people/km^2, with some districts now exceeding 1,000 people/km^2. The highest rates of rural poverty in the country are reported from the CND, including its most vulnerable subsistence farmers. While high rainfall has historically permitted generally sufficient food production, the region's rugged topography requires farming on extremely steep slopes. With more frequent extreme rainfall events in recent years, this agricultural landscape is recognized as the region of Rwanda most vulnerable to floods and landslides. Between 2013-2016 heavy rains generated landslides that killed at least 174 people and destroyed the homes of more than 5,000. Many of these landslides caused flooding of highly productive raised-bed cultivation systems in the CND's many valleys and surrounding bottomlands and many hectares of crops being washed away annually. An estimated 1.5 million tons of fertile soil are lost annually to erosion.

CND forests are essential to the region's climate resilience. Since independence, the total natural forest cover has declined 40%, from 219,000 ha to 130,700 ha, mostly from episodic planned excisions as well as uncontrolled incursions. The loss around the Gishwati and Makura core forest area has been most extreme. Of the original 32,098 ha in the 1980s, now only 3,460 ha remains as natural forest: almost a 90% loss (see Annex 2.2). In comparison, the Volcanoes and Nyungwe boundaries have been stable for decades. The recent creation of the Gishwati-Mukura National Park is an important step toward halting and partly restoring this forest, particularly for its land stabilization and other ecosystem services within the CND's most vulnerable lands and dependent communities.

IPCC models predict rising temperatures and increasingly intense precipitation events for the CND through the rest of this century. The rainfall implications are especially threatening for smallholders farming on steep, heavily deforested slopes, where they are most exposed to landslides, leading to loss of crops, homes and lives. Yet their adaptive capacity is low because crop yields are vulnerable to rainfall variability and because high population density severely limits their options for relocation in the event of disaster. This is particularly true for women who, until very recently, had fewer legal land rights than men. The expected 2°C increase in temperature would further result in a more than 470m rise in vegetation zone elevations, impacting traditional crop selection and management practices for future farmers. An increase of this scale would also dramatically alter the optimal ranges for tea and coffee production, introducing potential competition between these important export crops and alternative land uses.

This Project is designed to sustain and expand critical forest ecosystem functions in the CND, and ultimately enhance the resilience of the vulnerable communities who depend on them. This will be done by strengthening government capacity for spatial planning, resulting in institutional and regulatory policies to promote and integrate climate adaptation strategies, based on the latest science, through coordinated planning at the national and district levels. It will also protect, restore and expand natural forest in and around the core national parks; consolidate and expand some smaller but critical "stepping stones" of remaining natural habitat between these national parks (mainly small forest patches and wetlands/ riparian areas); improve the landscape linkage function of key high altitude landscape linkages between the protected areas, while at the same time securing ecosystem services through afforestation and improved native species mix for plantation forests on steep slopes; silvopastoral interventions on cultivated pasture; and agroforestry interventions in regenerative agricultural areas. Complementary activities will address key drivers of deforestation while creating alternative livelihood pathways for youth and

women through ecotourism and income-generating, climate-resilient crops, as well as strengthening supportive financial services.

Project interventions will include 10,000 ha of land (including both forest and silvopastoral sites) under improved, climate-resilient management; and improve agroforestry practices on 3,346 ha of on-farm plantations, directly benefiting 1,254,242 people (654,404 women) with more climate resilient livelihoods from reduced exposure to landslides, floods and soil erosion and more knowledge on climate risks, value of forests and forests ecosystems, climate adaptation options, access to indigenous and agroforestry quality materials and improved ecosystem services. The project will also indirectly benefit 9,260,745 people and create approximately 24,212 job opportunities in forest-dependent communities. The total mitigation impact from reduced deforestation, forest restoration introduction and adoption of improved cookstoves is estimated to be 1,204,448 t CO2-eq by 2043.

These activities will be implemented in collaboration with local communities throughout the region of the Congo Nile Divide and the project will adhere to the Green Climate Fund Environmental and Social Management System: environmental and social policy, GCF/B.19/06.

To fully implement the environmental and social management framework, the Project Management Unit seeks to hire an Environmental and Social SafeguardsSpecialist.

Position Objectives:

- Work in service of identifying, avoiding, managing and mitigating potential negative environmental and social impacts of the project work on relevant local stakeholders.
- Conduct a complete Environmental and Social Impact Assessment on defined project activities.
- Draft an Environmental and Social Management Plan for each activity as warranted.
- Support application and compliance of best practices for social safeguards, community engagement, and social sciences to improve conservation outcomes of the project.
- Monitor the implementation of social safeguards and other mitigation measures to improve long-term conservation outcome of the project.

Principal Responsibilities:

- Conduct complete Environmental and Social Impact Assessments on defined project activities and Draft Environmental and Social Management Plans as warranted by the Project Environmental and Social Management Framework.

- Collaborate with the PMU to identify the specific activities, locations, and program participants for 5 sub-components of the project, including:
  - Land-use Plan Development: 1.1.2. Develop Climate-Resilient Landscape Land Use Plan and 2.2.1 Secure key remaining natural areas outside PAs
  - Afforestation/Reforestation: 2.2.2.Restore natural forest cover in and outside PAs including riparian linkages, 2.2.3. Promote silvo-pastoralism with indigenous trees in Gishwati Pasture Stepping Stone Areas, 3.3.1 Restore high slope areas as protective forests.
  - Agroforestry: 3.1.2. Develop on-farm agroforestry for high caloric and indigenous tree species, 3.2.1. Develop agroforestry related value chain for markets access, 3.2.2. Facilitate and scale up capacity, value addition and marketing of select climate-resilient value chain products, and 3.2.3. Facilitate access to input & output

markets for vulnerable farmers.
    - Cookstoves: 3.2.4. Scale up marketing, production, sales, and use of fuel-efficient cookstoves.
    - Financing Mechanisms: 3.3.2. Set up & support savings & loan groups, enhance asset building, and 3.3.3. Build capacity of financial institutions to serve targeted value chains & communities.

- Conduct complete Environmental and Social Impact Assessments on each of the five sub-components including a screening for potential risks, a rating of those risks, and the consideration of mitigation opportunities. The materials can be outlined as follows for each sub-component
    - Project Description
        - Project Context
        - Geographic, Environmental, Social
        - Legal and Institutional Framework
        - Including De facto decision-making processes at the site and local level.
        - Legal Gap Analysis (Laws & Policies Vs. Funder Standards, usually WB ESS)
    - Baseline Data
        - Assessment of quality and extent of available data, identification of data gaps and resulting uncertainties.
        - Description of current and proposed development activities in the project area, but not connected to the project.
    - Environmental and Social Risks and Impacts
        - Description of relevant environmental impacts
        - Description of relevant social impacts
    - Risk Assessment
        - Evaluation of risks
        - Determination of overall risk
    - Measures to mitigate risks and impacts
    - Appendices

- Develop an Environmental and Social Management Plan to detail the ways in which the project will mitigate any potential adverse impacts.
    - Specific details on mitigation needed for each sub-project on gender related issues, impacts to vulnerable groups, and potential human rights abuses, as applicable.
    - Specific details for managing labor for each applicable sub-projects in which staff will be hired.
    - Specific details for managing resource efficiency and pollution on applicable sub-projects.
    - Emergency Management Plan for each applicable sub-project
    - Access restrictions mitigation plan for each applicable sub-project in which physical or economic displacement may occur
    - Specific details on additional management of biodiversity and sustainable management of living natural resources for each sub-project, as applicable.
    - Historically Marginalized Groups Plan, as applicable.

- Embed environmental and social safeguards into all aspects of project activities and implementation.
    - Participate in social safeguards training to align knowledge and implementation plan

with that of the AE and EE.
    - Train project leadership, staff, and partners on hired community engagement specialists on social safeguards implementation.
    - Deliver training, on a regular basis as needed, to leadership to sensitize regarding environmental and social safeguards; to community engagement specialists to develop skills for implementation of safeguards in the field; and to other project personnel to understand their obligations to reduce negative impacts and human rights abuses during project implementation.
    - Support teams on the implementation of environmental and social safeguards for all project components and activities.

- Establish a project-level independent Grievance Redress Management System,
    - Oversee GRM design, public notice, internal management and monitoring at all project sites.
    - Coordinate independent review and investigation process supported by individuals not involved in the implementation of the GCF project nor part of the Rwanda judicial system.
    - Align project-level GRM with existing GRM processes within the AA, the EE and the Green Climate Fund.

- Lead on monitoring and reporting of compliance with Environmental and Social Management Plan.
    - Track the implementation of environmental and social safeguards for the duration of the project.
    - Develop site-level monitoring systems to ensure staff have up-to-date training.
    - Ensure all safeguards and mitigation activities encompass best practices in diversity, equity and gender inclusion aligning with international standards, those required by Green Climate Fun, the AA and the EE.
    - Contribute to all reporting requirements related to environmental and social safeguards.

Qualifications:

- Post graduate qualification or equivalent in environmental science or social sciences
- At least 5 years of experience implementing and monitoring social safeguards for projects in the Global South
- Familiarity with the World Bank Environmental and Social Performance Standards;
- Effective interpersonal and communications skills, including writing, editing, and the ability to work sensitively and productively with a diverse team;
- Ability to develop and maintain productive working relationships with a diverse set of internal and external partners;
- Ability to organize multiple priorities and tasks;
- Desire to work in a fast-paced, dynamic environment, adjusting to changing program priorities and responding to opportunities;
- Strength in working both independently and as a member of a team;
- Written and spoken fluency in English, Kinyarwanda, and French language skills are highly desirable.

Application Process:

TBD