# GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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## General Project Information

| Project Title |
| --- |
| Building Community Resilience and Transforming Livelihoods through Systems-based Adaptation and Integrated Resource Management in Rwanda's Southern Province |

| Region | GEF Project ID |
| --- | --- |
| Rwanda | 11446 |
| Country(ies) | Type of Project |
| Rwanda | FSP |
| GEF Agency(ies): | GEF Agency ID |
| UNDP | 9674 |
| Executing Partner | Executing Partner Type |
| Rwanda Environment Management Authority (REMA) | Government |
| GEF Focal Area (s) | Submission Date |
| Climate Change | 10/18/2023 |

| Project Sector (CCM Only) |
| --- |
| Climate Change Adaptation Sector |

| Taxonomy |
| --- |
| Focal Areas, Land Degradation, Sustainable Land Management, Income Generating Activities, Sustainable Livelihoods, Restoration and Rehabilitation of Degraded Lands, Sustainable Pasture Management, Improved Soil and Water Management Techniques, Land Degradation Neutrality, Land Productivity, Food Security, Climate Change, Climate Change Adaptation, Climate resilience, Livelihoods, Least Developed Countries, Ecosystem-based Adaptation, Community-based adaptation, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Stakeholders, Indigenous Peoples, Type of Engagement, Participation, Partnership, Consultation, Information Dissemination, Civil Society, Community Based Organization, Non-Governmental Organization, Local Communities, Private Sector, SMEs, Individuals/Entrepreneurs, Beneficiaries, Communications, Awareness Raising, Gender Equality, Gender Mainstreaming, Women groups, Gender results areas, Access to benefits and services, Participation and leadership, Capacity Development, Integrated Programs, Food Systems, Land Use and Restoration, Comprehensive Land Use Planning, Landscape Restoration, Food Security in Sub-Sahara Africa, Integrated Land and Water Management, Small and Medium Enterprises, Resilience to climate and shocks, Land and Soil Health, Capacity, Knowledge and Research, Enabling Activities, Knowledge Exchange, Learning, Theory of change, Adaptive management, Knowledge Generation |

| Type of Trust Fund | Project Duration (Months) |
| --- | --- |
| LDCF | 72 |
| GEF Project Grant: (a) | GEF Project Non-Grant: (b) |
| 18,048,624.00 | 0.00 |
| Agency Fee(s) Grant: (c) | Agency Fee(s) Non-Grant (d) |
| 1,624,376.00 | 0.00 |

| Total GEF Financing: (a+b+c+d) | Total Co-financing |
|---|---|
| 19,673,000.00 | 67,100,000.00 |
| PPG Amount: (e) | PPG Agency Fee(s): (f) |
| 300,000.00 | 27,000.00 |
| PPG total amount: (e+f) | Total GEF Resources: (a+b+c+d+e+f) |
| 327,000.00 | 20,000,000.00 |
| Project Tags | |
| CBIT: No NGI: No SGP: No Innovation: No | |

## Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”.(max. 250 words, approximately 1/2 page)

**General Note to Reviewer: Revisions made to the PIF are highlighted in blue**

**General Note to Reviewer: 2nd Round Revisions made to the PIF are highlighted in Magenta**

1. Communities in Rwanda are highly exposed to the impacts of climate change, primarily due to a high reliance on rainfed agriculture, which sustains over 70% of the population. Observed climate trends and future climate projections indicate a decrease in rainfall during the 'long rains season' (March to May), as well as increased rainfall intensity during the 'short rains season' (September to December)[1],[2]. Further to this, average annual temperatures in Rwanda have increased by ~1.5°C in recent decades and are projected to increase further under future climate scenarios[3]. These shifts in climate conditions are expected to result in longer hot spells, increased evapotranspiration, changes in humidity and changes in water availability and runoff, with subsequent increases in the frequency and intensity of extreme climate events, such as floods, droughts and landslides[4]. As a result of these changing climate conditions, Rwandan communities' food and livelihood security is being threatened by crop failures and decreased agricultural productivity. Climate vulnerability is particularly heightened in the country's Southern Province, where high poverty rates, steep topography and poor soil quality amplify communities' risk.

2. To improve community climate resilience in Rwanda’s Southern Province, the project will introduce an integrated approach to landscape management that will strengthen food and livelihood security under future climate conditions by building resilience across various sectors, landscapes and value chains. This integrated approach will respond to capacity needs for implementing national climate strategies at the local level, thereby enhancing the enabling environment for climate change adaptation within communities. Technical assistance and capacity building will be provided to local communities and stakeholders — with a focus on women and historically marginalised communities — to support improved water and land resources management. This assistance will be underpinned by a sustainable finance model that secures private-sector partnerships and investments into climate-resilient value chains and systems that will sustain climate-resilient livelihoods in the future. These investments will not only focus on scaling up adaptation finance and promoting the adoption of novel adaptation technologies, but will also ensure long-term sustainability, strengthen value chains and facilitate the replication of project interventions beyond the initial areas of implementation. To achieve long-term sustainability of the project objectives, the preferred solution will prioritise community ownership of project interventions. To this end, the overarching objective of the project is to enhance climate change resilience for communities in Rwanda’s Southern Province through sustainable livelihoods, integrated land management and improved access to finance.

3. This project will lay the foundation for Rwanda's role in the Long-Term Vision on Complementarity, Coherence and Collaboration between the GCF and GEF, also known as the LTV[5]. Given the state of climate vulnerability in Rwanda, there is a need to coordinate climate investments in a manner that supports major initiatives with tangible climate benefits, to enhance the resilience of at-risk populations, while avoiding scattered and uncoordinated initiatives whose impacts are not traceable. By contributing to GEF-GCF partnerships and streamlining knowledge-sharing and public and private investments, the project will generate long-lasting adaptation outcomes and impacts Adaptation benefits delivered by the proposed project will include: i) reduced vulnerability and increased resilience resulting from improved landscape management, livelihood security and improved access to finance; ii) the mainstreaming of climate change adaptation into local-level plans and policies; and iii) an enhanced enabling environment for effective and integrated adaptation, supported by capacity-building initiatives and the establishment of private-sector partnerships for sustainable finance. These adaptation benefits are closely aligned with the objectives of the LDCF[6].

4. The proposed project will also deliver the following global environmental benefits: i) biodiversity benefits, including the sustainable use of natural forests; ii) climate change mitigation benefits, including increased use of renewable energy, improved energy efficiency and improved carbon stocks in forests and agriculture; iii) benefits of reducing land degradation, such as the improved provision of agro-ecosystem and forest ecosystem goods and services; and iv) sustainable forest management benefits, which will be achieved via a reduction in forest loss and forest degradation, improved maintenance of the range of environmental services and products derived from forests; and v) the development of sustainable livelihoods for local communities and forest-dependent peoples.

5. To ensure alignment with the GEF-8 strategy for investing in nature and systems transformation, the project design encompasses several GEF-8 programming themes, including: i) agriculture, food security and health; ii) water; and iii) nature-based solutions. Moreover, in accordance with the GEF-8 Climate Change focal area priorities, the project will foster climate-resilient development pathways in Rwanda by supporting improved landscape management and sustainable, climate-resilient livelihoods.

6. Finally, the proposed project is aligned with Rwanda's strategic frameworks, particularly Vision 2050 and the Green Growth and Climate Resilience Strategy. The project prioritises value chain development, market access enhancement and the integration of water management and circular agriculture systems into local-level development plans, supporting national objectives in poverty reduction, sustainable land management and forest resource conservation. The project will also advance green investments and private sector engagement, in line with the Nationally Determined Contribution's emphasis on private-sector participation in climate initiatives. Additionally, the project incorporates gender-responsive approaches, consistent with Rwanda's focus on gender mainstreaming in climate policies. In these ways, the proposed project presents a multifaceted approach to climate change adaptation, sustainable development and resilience-building, in accordance with Rwanda's existing legal and intuitional frameworks.

[1] Netherlands Commission for Environmental Sustainability. 2015. Climate Change Profile – Rwanda. Available at: https://ees.kuleuven.be/klimos/toolkit/documents/687_CC_rwanda.pdf

[2] Ministry of Environment .2018. Third National Communication under the United Nations Framework Convention on Climate Change. Available at: https://unfccc.int/sites/default/files/resource/nc3_Republic_of_Rwanda.pdf

[3] Henninger, S. 2009. Urban climate and air pollution in Kigali, Rwanda. In The 7th International Conference on Urban Climate (Vol. 29, pp. 1038-1041)

[4] Umugwaneza A, Chen X, Liu T, Li Z, Uwamahoro S, Mind'je R, Dufatanye Umwali E, Ingabire R & Uwineza A. 2021. Future Climate Change Impact on the Nyabugogo Catchment Water Balance in Rwanda. *Water*, 13(24):3636. Available at: https://doi.org/10.3390/w13243636

[5] More information on the LTV can be found here: https://www.greenclimate.fund/document/towards-long-term-vision-complementarity-gef-and-gcf-collaboration

[6] NDC Partnership. 2023. Least Developed Countries Fund (LDCF). Available at: https://ndcpartnership.org/knowledge-portal/climate-funds-explorer/least-developed-countries-fund-ldcf#:~:text=Objective%201%3A%20Reduce%20vulnerability%20and,and%20integrated%20climate%20change%20adaptation

# Indicative Project Overview

## Project Objective

Enhancing climate change resilience for communities in Rwanda's Southern Province through sustainable livelihoods, integrated land management and improved access to finance

## Project Components

### 1. Creating an enabling environment for improving climate resilience through a systems-based approach to ensure climate risk reduction

| Component Type | Trust Fund |
|---|---|
| Technical Assistance | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 600,000.00 | 2,230,536.00 |

Outcome:

**1. Community-level empowerment for developing and implementing gender-responsive climate resilient strategies.**

Output:

**1.1. Community trainings, workshops, and awareness campaigns delivered in a gender-responsive manner to improve capacity for implementing climate change adaptation strategies for sustainable natural resource management and improved livelihoods at a local level**
**1.2. Community-led organisations, including Private Forestry Management Units (PFMUs) and special consideration for women-led groups, strengthened to deliver Farmer-to-Farmer learning and uptake of climate-resilient livelihoods introduced under Outcome 3**
**1.3. Gender responsive adaptation plans developed for the target districts to inform the on-the-ground interventions under Component**

### 2. Enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods at community, district and provincial levels

| Component Type | Trust Fund |
|---|---|
| Investment | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 5,850,000.00 | 21,747,749.00 |

Outcome:

**2.** Water resource management techniques are improved to be climate resilient

Output:

**2.1.** Improved irrigation technology and techniques introduced to facilitate more efficient hillside agricultural activities

**2.2.** Rainwater harvesting and water storage infrastructure enhanced to ensure enough water resources to meet community needs over the dry season

**2.3.** Degradation of riverbanks and wetlands reduced by protecting buffer zones

## 2. Enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods at community, district and provincial levels

| Component Type | Trust Fund |
|---|---|
| Investment | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 5,540,000.00 | 20,595,251.00 |

Outcome:

3. Land management enhanced through sustainable livelihood options and restoration interventions

Output:

**3.1.** Circular agriculture systems that combine livelihood options with sustainable land management techniques introduced

**3.2.** Pressure on forest resources reduced by promoting improved cookstoves and biofuel options

**3.3.** Degraded forests and mining areas brought under restoration using indigenous species
**3.4.** Progressive terracing techniques scaled up to reduce erosion and surface water runoff through improved water infiltration and reduced flood impacts during the wet season

## 3. Leveraging sustainable finance through private sector investments

| Component Type | Trust Fund |
|---|---|
| Investment | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 4,640,000.00 | 17,250,295.00 |

Outcome:

**4.** A sustainable finance mechanism is available to enable long-term investments in adaptation solutions in Rwanda Southern Province, and at national level

Output:

**4.1.** Operationalisation of private sector engagement interventions under existing Ireme Invest and Community Adaptation Fund (CAF) facilities of FONERWA

**4.2.** Linkages established between communities and extension services, CBOs and private sector enterprises to strengthen and improve access to high value markets

**4.3.** Partnerships between sustainable community livelihoods and larger corporations – including commercial agriculture, agro-processing, insurance and ecotourism companies – to link community suppliers with expanded buying potential

**4.4.** Technical assistance provided to private sector stakeholders to ensure sustainability and scalability of private sector engagement facility across Rwanda

## 4. Knowledge management and information dissemination to facilitate national-level information exchange and scaling-up

| Component Type | Trust Fund |
|---|---|
| Investment | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 199,166.00 | 742,546.00 |

Outcome:

**5.** Increased awareness of gender-inclusive climate resilience adaptation strategies and dissemination of knowledge products for scaling up results

Output:

**5.1.** Information exchange platforms established for gender-inclusive the dissemination of knowledge products generated under project interventions to enable community reporting, landscape-level monitoring and upscaling of interventions across Rwanda

## M&E

| Component Type | Trust Fund |
|---|---|
| Technical Assistance | LDCF |
| GEF Project Financing ($) | Co-financing ($) |
| 360,000.00 | 1,338,385.00 |

Outcome:

Output:

## Component Balances

| Project Components | GEF Project Financing ($) | Co-financing ($) |
|---|---|---|
| 1. Creating an enabling environment for improving climate resilience through a systems-based approach to ensure climate risk reduction | 600,000.00 | 2,230,536.00 |
| 2. Enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods at community, district and provincial levels | 5,850,000.00 | 21,747,749.00 |
| 2. Enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods at community, district and provincial levels | 5,540,000.00 | 20,595,251.00 |

| | | |
|---|---|---|
| 3. Leveraging sustainable finance through private sector investments | 4,640,000.00 | 17,250,295.00 |
| 4. Knowledge management and information dissemination to facilitate national-level information exchange and scaling-up | 199,166.00 | 742,546.00 |
| M&E | 360,000.00 | 1,338,385.00 |
| **Subtotal** | **17,189,166.00** | **63,904,762.00** |
| Project Management Cost | 859,458.00 | 3,195,238.00 |
| **Total Project Cost ($)** | **18,048,624.00** | **67,100,000.00** |

Please provide justification

## PROJECT OUTLINE

### A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

**Geographical and physical context**

**1 Rwanda is a landlocked country in central-east Africa, located ~120 km south of the equator and covering an area of 26,338 km$^2$. Four other countries border Rwanda: i) Uganda to the north; ii) Tanzania to the east; iii) Burundi to the south; and v) the Democratic Republic of the Congo to the west and northwest (Figure 1). Many of Rwanda's boundaries are demarcated by geographical features. The Akagera River outlines the eastern border, and the Ruhwa and Akanyaru Rivers are the southern borders. Lake Kivu and the Rusizi River mark the western boundary, and a series of volcanoes form the northwest perimeter.**

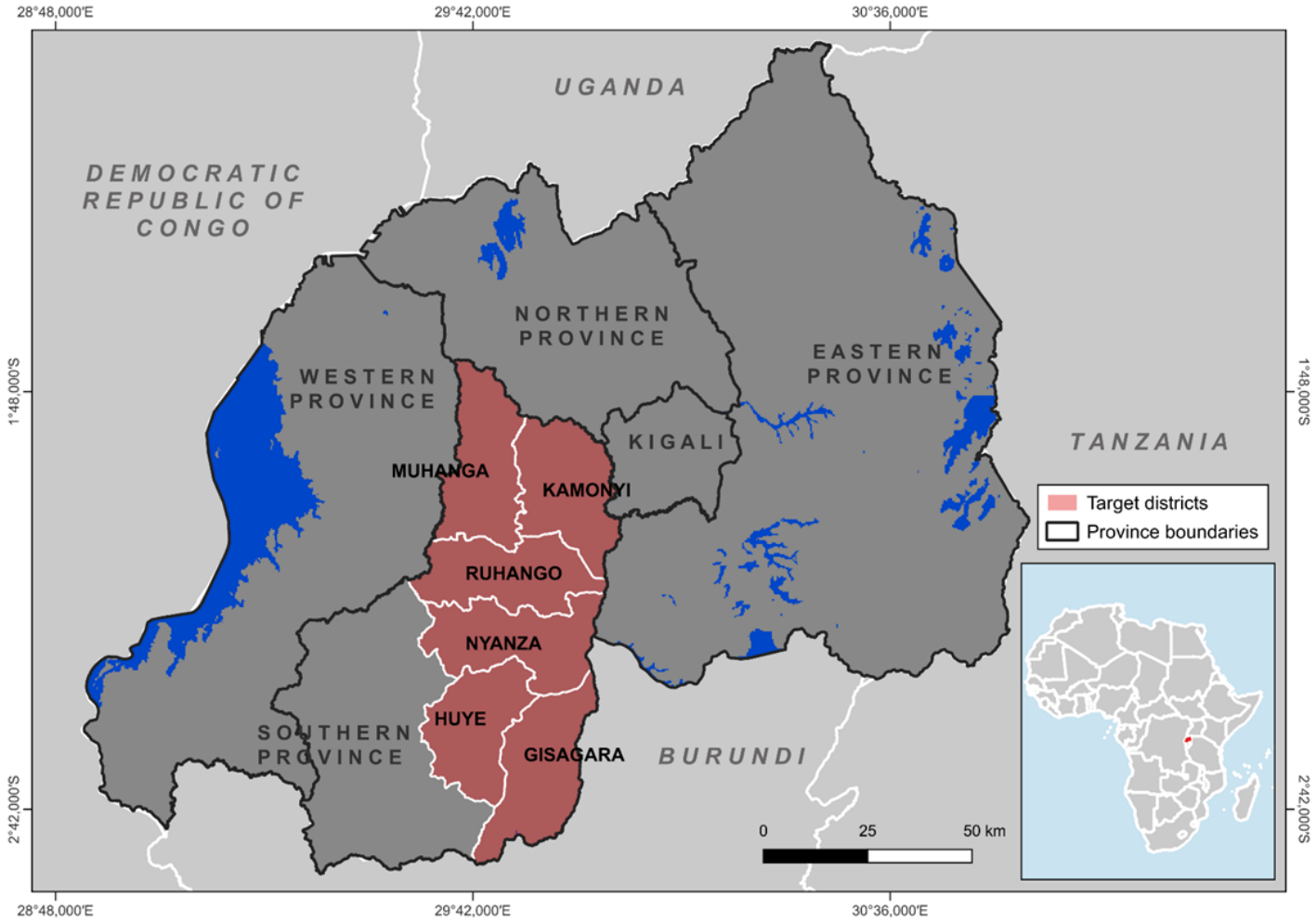

Figure 1. The geographical location of Rwanda in Eastern-Central Africa[1].

2 The proposed project will focus on Rwanda's Southern Province, where the topography features steep hills, plateaus, valleys, lakes and rivers. The elevation varies considerably, ranging from 887 to 2,938 metres above sea level (masl)[2]. In the Southern Province, the soil is predominantly characterised by metamorphic bedrock, which is poorer in quality than the soils in the northwestern and river valley areas enriched by volcanic material and alluvium[3].

### Governance and administrative overview

3 Rwanda is a unitary republic with a presidential system of government with three branches: the: i) executive, led by a president elected by popular vote; ii) legislature; and iii) judiciary[4]. Administratively, Rwanda has two tiers of governance: national and local[5]. At the national level, the government is divided into provincial administrative regions[6], which coordinate the planning, execution and supervision of decentralised services[7]. Locally, governments function at district, sector, cell and village levels[8]. Rwanda's five provinces are Western, Eastern, Southern, Northern and Kigali, the capital city. These five provinces are further divided into 30 districts, 416 sectors, 2,148 cells and 14,837 villages[9].[10]

### Socio-economic context

4 Rwanda has undergone considerable socioeconomic transformation since the 1990s, with its Human Development Index (HDI) value increasing from 0.250 in 1990 to 0.534 in 2021, marking the largest annual HDI growth globally[11]. Rwanda's population is

currently estimated to be 14 million people, with a yearly growth rate of 2.38%[12][13]. The Southern Province is home to 23% of the total population (3,002,699 people)[14]. Both nationally and within the Southern Province, women make up ~52% of the populace and men ~48%[15]. Rwanda's population density stands at ~530 persons/km$^2$ in 2023[16], making it Africa's most densely populated country. The Southern Province surpasses this with a density of 547 persons/km$^2$ [17]. Regarding spatial distribution, 72% of Rwandans live in rural areas and 28% in urban areas, with the Southern Province exhibiting the lowest urbanisation rates (15%)[18].

**Gender dynamics**

5 Rwanda has made considerable progress in addressing gender inequality over the years. In 2020, it scored 80% on the Global Gender Gap Index[19], making it the top-ranked Sub-Saharan African country[20]. Compared with other countries in the region, Rwanda has substantially reduced maternal mortality and adolescent birth rates[21]. Politically, women are well represented — holding 61% of parliamentary seats[22] — and the workforce, where they have slightly higher representation than men (0.3% more)[23]. However, gender disparities persist in some areas. In education, 16% of men, compared to 11% of women, have achieved some level of secondary schooling[24]. The labour law promotes equality[25], yet: i) men (65%) participate more in the workforce than women (51%)[26]; ii) female unemployment (19%) slightly exceeds that of males

**(16%)[27][27] and iii) men earn on average 475 Rwandan francs (RWF) per hour, while women earn 312.4 RWF[28][28]. Despite these economic inequalities, the poverty rates between genders are similar — at 47% for women and 44% for men[29][29] — and women form the backbone of Rwanda's economy, contributing up to 74% of its agricultural produce[30][30]. Most female agricultural workers (54%) participate in subsistence farming, whereas their male counterparts predominantly (56%) engage in market-oriented agriculture[31][31]. Their pivotal agricultural roles empower women to lead communities, effectively manage finances, operate agricultural equipment and secure land[32][32].**

**6 While the Rwandan government has achieved much gender equality at the national level, a gender gap exists in local leadership: 70% of district mayors, 84% of sector executive secretaries and 64% of cell executive secretaries are men[33][33]. The ability of the largely top-down national interventions to meaningfully transform a traditionally patriarchal society at the household level, therefore, remains uncertain. Traditional Rwandan culture designates men as household heads[34][34], evidenced by 50% of households being male-led compared to 20% being female-led[35][35]. Although legislation promotes joint spousal household leadership[36][36], societal perceptions tie women's value to domestic duties and motherhood[37][37], [38][38]. This cultural view of a woman's role contributes to the prevalence of gender-based violence, with higher instances of physical (37%) and sexual abuse (23%) against women than men[39][39].**

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**Economy**

7 Rwanda has a gross domestic product (GDP) of US$13.3 billion and a growth rate of 8% since 2022[40][40]. Despite recent economic growth, Rwanda is still classified as a low-income economy because its gross national income (GNI) per capita remained below US$1,135 in 2021[41][41]. In particular, income inequality continues to affect the country's population, with ~23% experiencing severe multidimensional poverty[42][42], [43][43]. On a provincial level, the Southern Province reports the highest incidence of poverty as compared with other areas of the country[44][44].

8 There are three main economic sectors in Rwanda: the service, agricultural and industry sectors, which contribute 47%, 25% and 21% to the country's GDP, respectively[45][45]. Of these three sectors, the agricultural sector employs the largest proportion of the active population (70%)[46][46]. Moreover, the agricultural sector has played a crucial role in reducing poverty by ~45% since 2013, lifting 1.7 million people above the poverty line since 2018[47][47].

9 Rwanda's agriculture sector is categorised as crop agriculture and animal husbandry based— with the former accounting for 63% of private household income[48][48]. Crop cultivation dominates the landscape in Rwanda, occurring on 81% of total agricultural land[49][49]. Horticulture is an important agricultural sub-sector practised by 51% of private households, particularly in the Northern and Southern provinces[50][50]. In terms of specific crops, beans, maize, cassava, fruits (Bananas, Pineapple, Avocado, Mango, Passion fruit, papaya, guava) (pls list types), sweet potato, bananas, sorghum, vegetables, Irish potato, yams, taro, soybeans, wheat and rice are cultivated in Rwanda. Beans, cassava, and sweet potato are most prevalent in the Southern Province[51][51]. Coffee and tea are major cash crops, totalling 19,467 and 35,626 tonnes of produce in 2021,

respectively[52]. Rainfed production systems are the most common, with less than 6% of all cultivated land irrigated[53]. This dependence on rainfed systems highlights the need for improved water and land management strategies to support agricultural productivity. The country's hilly terrain creates further challenges for agricultural, forestry, and agroforestry practices, as it limits the expansion of agricultural land[54]. Consequently, despite government interventions to bolster productivity, Rwanda experiences shortages in domestic staple food production, leading to a reliance on imports[55].

10 The Southern Province's socio-economic context largely mirrors the national context. Agriculture is pivotal to the province's economy, with ~87% of households engaged in this sector[56]. Reflecting the national trend, crop agriculture is the dominant agricultural form, with ~76% of Southern Province households practising crop cultivation, which is surpassed only by the Northern Province at ~77%[57]. Distinctive attributes of the Southern Province include its premium dairy production[58] and artisanal and small-scale mineral mining. Rwanda has emerged as one of Africa's fastest-growing economies, focusing on business-friendly policies, technological innovation and private sector growth. The Southern Province reflects some of these national advancements, particularly in agribusiness development, farming input distribution and post-harvest processing[59].

### Climate baseline

11 Rwanda is located near the equator and falls within the tropical rain belt[60]; however, as a result of its high elevation, with altitudes ranging between 950 and 4,500 masl[61], climate trends within the territory do not follow conventional patterns[62].

**Instead, Rwanda is characterised by a predominantly temperate climate[63]63, with a mean annual temperature of 19°C and mean annual precipitation of 1,170mm[64]64. As shown in below, the country can be further divided into four distinct climatic regions: i) the eastern lowlands; ii) the central plateau; iii) the western highlands; and iv) the regions surrounding Lake Kivu. summarises the baseline (1901–2020) rainfall and temperature conditions associated with each climate zone[65]65.**

[Please note that it was not possible to save Figure 2 on the portal. Kindly refer to the attached word version of the PIF document uploaded to the Roadmap Section.]

**Figure 2. Four primary climate regions in Rwanda[66]66**

**Table 1. Mean annual rainfall and temperature trends within the four climate regions of Rwanda[67]67**

| Climate region | Mean annual rainfall (mm) | Mean annual temperature (°C) |
|---|---|---|
| Eastern lowlands | 700–1,100 | 20–22 |
| Central plateau | 1,100–1,300 | 18–20 |
| Western highlands | 1,300–1,600 | 10–18 |
| Lake Kivu | 1,200–1,500 | 18–22 |

12 **The Southern Province of Rwanda encompasses both the central plateau and western highland climate types. This region has a mean annual temperature of ~19°C and a mean annual precipitation of 1266 mm. The average monthly precipitation and temperature trends for the Southern Province are shown in below[68]68.**

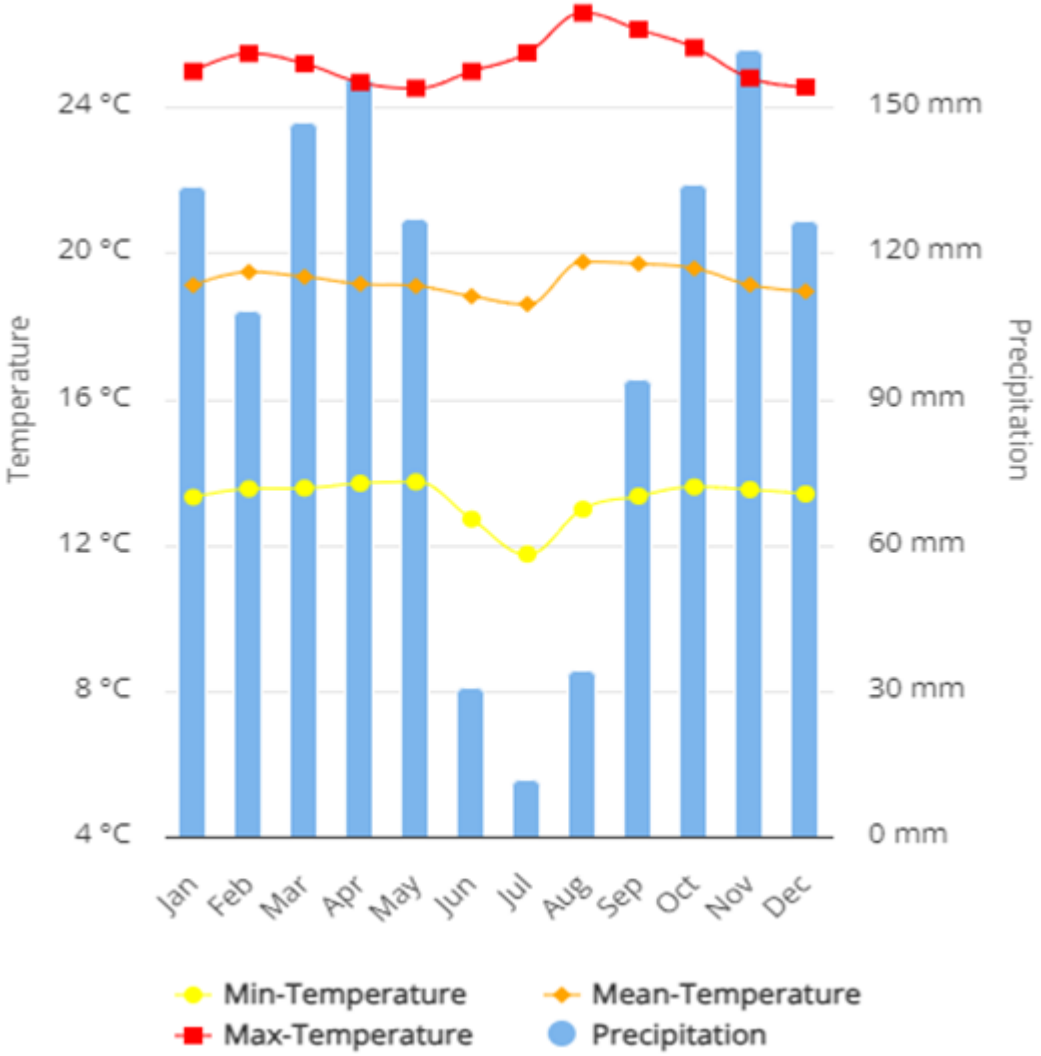


**Figure 3. Average monthly precipitation and temperature trends for the Southern Province of Rwanda[69][69].**

**13 Rainfall across the country exhibits a bimodal pattern, primarily influenced by the progression of the Inter-Tropical Convergence Zone (ITCZ), which oscillates between the northern and southern hemispheres[70][70]. As a result of this phenomenon, the country experiences two distinct wet seasons: a 'long wet season' from March–May (MAM) and a 'short wet season' from September–December (SOND). These rainfall periods are interspersed with a 'long dry season' from June–August (JJA) and a 'short dry season' from January–February (JF).**

**14 Despite these general trends, precipitation across Rwanda is highly variable and prone to extremes, with fluctuations frequently resulting in floods, landslides and**

**droughts. Prolonged droughts mainly impact the country's eastern and southern regions, while flooding is most prevalent within the northern and western regions, where rainfall is abundant[71]71,[72]72.**

**15 Other natural hazards in Rwanda include earthquakes, landslides, storms (windstorms, lightning, rainstorms and thunderstorms), wildfires, diseases and epidemics. Landslides are particularly common in the highlands of the Congo-Nile Ridge, which traverse the Northern, Western and Southern Provinces and are characterised by moderate–very steep slopes. Approximately 40% of Rwanda's population resides in this region and is, therefore, exposed to landslides. Additionally, ~70% of Rwanda's population is exposed to magnitude 6.0 earthquakes, while ~30% is exposed to magnitude 5.0 earthquakes[73]73. Table 2 below presents a summary of the natural hazards Rwanda has endured over the period spanning 1900–2020.**

**Table 2. Table showing the number of natural hazards experienced in Rwanda from 1900–2020, as well as the total number of casualties and impacted individuals for each hazard type[74]74.**

| Natural hazard | Event count | Total casualties | Total individuals impacted |
|---|---|---|---|
| Drought | 6 | 237 | 4,156,545 |
| Bacteria epidemic | 11 | 317 | 7,259 |
| Earthquake | 2 | 81 | 2,286 |
| Flood | 14 | 214 | 111,790 |
| Convective storm | 2 | 3 | 6,553 |
| Landslide | 5 | 117 | 11,949 |

**Observed and projected climate change**

**16 Over the past few decades, considerable changes in precipitation and temperature have been observed across Rwanda as a result of anthropogenic climate change. Analyses of national rainfall measurements from 1961–2016 suggest an overall decrease in precipitation during the months of January, February, May and June. In contrast, an**

increase in monthly rainfall has been observed from September–December. These trends are particularly pronounced in Rwanda's eastern and southern regions, where alternating periods of rainfall deficits and surpluses have been recorded. Additionally, in the mountainous northern and western provinces, the biannual wet seasons have become shorter and more intense, which has enhanced the risk of flooding and erosion in these areas[75]75,[76]76.

17 Noteworthy temperature changes have also been observed across the country. Indeed, Rwanda's mean annual temperature has increased by ~0.8°C within the last century[77]77, as shown in Figure 4 below. In Kigali — the country's capital city — this warming trend has been more pronounced, with average annual temperatures having risen by ~1.5°C since pre-industrial levels, owing largely to rapid population growth, urbanisation and industrialisation[78]78. Similarly, observational data from 1971–2010 indicate that mean annual temperatures in Rwanda's Southern Province have increased by ~0.35°C per decade, representing an overall increase of ~1.4°C[79]79. These warming trends align with regional patterns for central-east Africa, wherein an average temperature increase of 0.29°C per decade has been recorded since 1985[80]80.

Figure 4. Observed mean annual temperature (°C) for Rwanda (1901–2020)[81]81.

18 At the national scale, observed rainfall and temperature trends in Rwanda are projected to continue under future climate scenarios. By the end of the 21st century, the country's mean annual temperature is expected to increase by 1.1–3.9°C above pre-industrial levels, with temperatures increasing across all four seasons[82]82,[83]83. Additionally, by the year 2100, the number of annual heatwave days in Rwanda is expected to increase by ~85 days, coupled with a reduction in the frequency and intensity

of cold spells[84][84]. Under the RCP8.5 emissions scenarios (worst-case scenario), the number of days exceeding 25°C is expected to be greatest between October and May (Figure 5), coinciding with the traditional planting season.

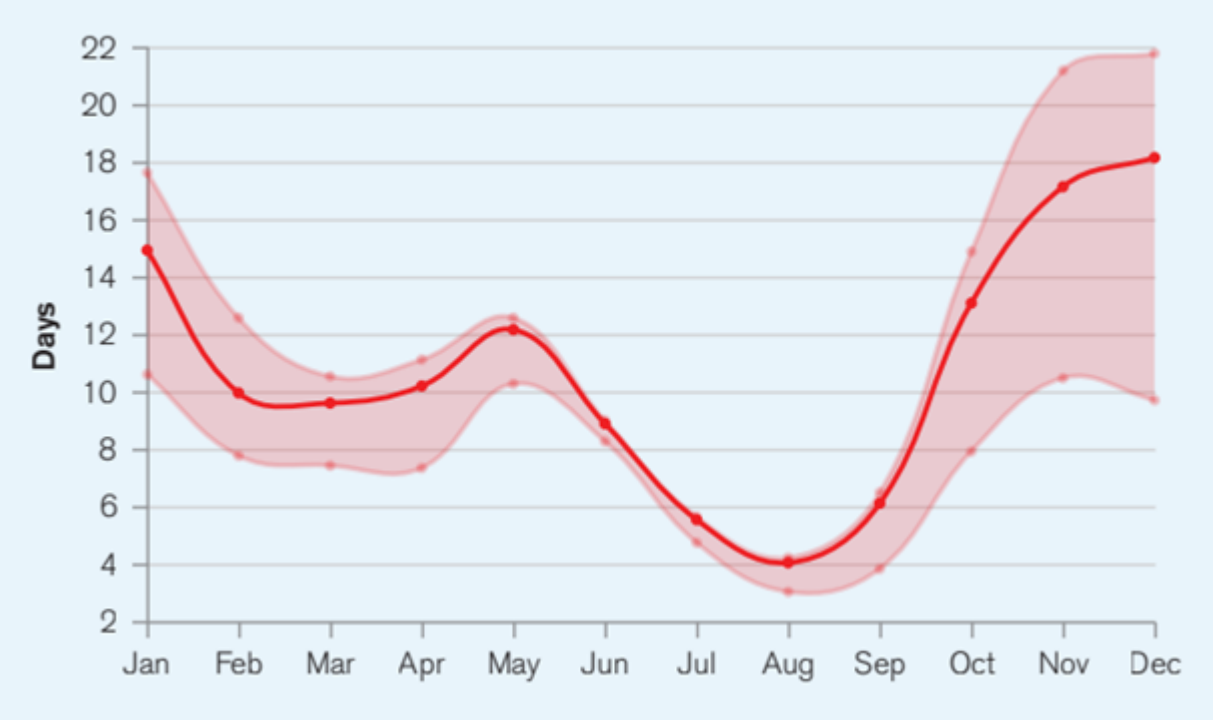


Figure 5. Projected change in the number of days with maximum temperatures exceeding 25°C under the RCP8.5 emissions scenario[85][85]

19 Global climate models further suggest that warming trends in Rwanda will be accompanied by an increase in mean annual rainfall of ~20% by 2050 and ~30% by 2080[86][86]. Temporal changes in precipitation will be characterised by: i) a projected increase in average rainfall between the months of December and April; and ii) a projected decrease in average rainfall between July. Additionally, both the intensity and frequency of heavy rainfall events across Rwanda are projected to increase — by ~15% and ~50%, respectively — which will likely increase the country's overall water balance[87][87].

20 In the Southern Province, climate change projections largely mirror the national outlook, however, some unique characteristics are presented. Projected changes in maximum temperature (2021–2050) for the six target districts are summarised in Table

**2. In general, maximum temperatures are expected to significantly increase ($p$>0.05) across all target districts under both RCP4.5 and RCP8.5 for the period spanning 2021-2050[88][88].**

**Table 3. Projected changes in maximum temperature (°C/year) in each of the target districts in the Southern Province for the period spanning 2021–2050. A positive sign indicates an increasing trend, whereas a negative sign indicates a decreasing trend[89][89].**

| District | Annual maximum temperature trend (°C/yr) | |
|---|---|---|
| | RCP4.5 | RCP8.5 |
| Muhanga | +0.02 | +0.03 |
| Ruhango | +0.02 | +0.03 |
| Huye | +0.03 | +0.03 |
| Kamonyi | +0.03 | +0.03 |
| Gisagara | +0.02 | +0.03 |
| Nyanza | +0.03 | +0.03 |

**Projected changes in precipitation across the Southern Province suggest a drying trend during the rainy seasons (March–May and September–December)[90][90],[91][91] and a reduction in the total number of wet days by 2050[92][92]; however, these projections are caveated by a large degree of uncertainty resulting from complex local climate influences and divergent scientific predictions[93][93]. Downscaled rainfall projections (2021–2050) — disaggregated by rainfall season — for the proposed project's six target districts are summarised in Table 3. In general, mean annual precipitation is expected to significantly ($p$<0.05) decrease across all target districts under both the RCP4.5 and RCP8.5 emissions scenarios; however, a large degree of spatiotemporal variation exists[94][94].**

**Table 4. Projected changes in precipitation (mm/year) in each of the target districts in the Southern Province for the period spanning 2021–2050. A positive sign indicates an increasing trend, whereas a negative sign indicates a decreasing trend[95][95].**

| District | Annual trend (mm/yr) | | JF trend (mm/yr) | | MAM trend (mm/yr) | | JJA trend (mm/yr) | | SOND trend (mm/yr) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | RCP4.5 | RCP8.5 | RCP4.5 | RCP8.5 | RCP4.5 | RCP8.5 | RCP4.5 | RCP8.5 | RCP4.5 | RCP8.5 |
| Muhanga | -5.21 | -3.19 | -4.17 | +1.69 | -2.20 | +2.16 | 0.00 | -1.62 | -0.49 | -3.61 |
| Ruhango | -5.21 | -3.19 | -4.17 | +1.69 | -2.20 | +2.16 | 0.00 | -1.62 | -0.49 | -3.61 |
| Huye | -6.41 | -1.79 | -4.67 | +1.57 | -0.84 | +1.92 | 0.00 | -0.85 | -1.35 | -2.47 |
| Kamonyi | -5.21 | -3.19 | -4.17 | +1.69 | -2.20 | +2.16 | 0.00 | -1.62 | -0.49 | -3.61 |
| Gisagara | -5.93 | -4.11 | -4.03 | +0.83 | -2.38 | +1.44 | 0.00 | -1.55 | -1.52 | -3.70 |
| Nyanza | -6.41 | -1.79 | -4.67 | +1.57 | -0.84 | +1.92 | 0.00 | -0.85 | -1.35 | -2.47 |

**As a result of changing temperature and precipitation trends across Rwanda, the frequency and intensity of extreme climate events — including droughts, heatwaves, floods and landslides — are expected to increase under future climate scenarios[96][96]. In the Southern Province, seasonal droughts are expected to last longer, particularly in the southeastern districts of Nyanza and Gisagara. These droughts, coupled with potential increases in the frequency of flooding and landslide events — which are expected at the national scale — pose considerable environmental risks to populations and ecosystems in the proposed project's target region[97][97].**

### Impacts of climate change

21 **Historically, Rwanda has experienced considerable impacts from floods and droughts, providing evidence of its vulnerability to extreme climate events. Recurrent floods in 1997, 2006, 2007, 2008, and 2009 caused landslides, environmental degradation and damage to both agricultural lands and infrastructure across the nation[98][98]. The most severe of these recurrent floods occurred in 2007 — primarily in the Western Province — wherein ~1,000 families were displaced and productive agricultural land, responsible for ~70% of the country's potato production, was degraded[99][99]. The total economic cost of the 2007 flood was estimated at over USD20 million (around 0.1 – 0.6% of GDP)[100][100], illustrating the extent to which extreme climate events negatively impact**

**Rwanda's economic growth. More recently, in May 2023, severe flooding and landslides across Rwanda resulted in at least 130 casualties, as well as damage to ~5000 homes, 17 roads, 26 bridges and a hospital[101]. Flooding and landslides have also negatively impacted agricultural productivity in the country, with ~600 million tonnes of topsoil lost annually in Rwanda as a result of torrential rain[102].**

**Concurrently, periodic droughts across the region have resulted in widespread food insecurity[103],[104]. In 2005 and 2006, below-average rainfall across Rwanda during the wet season resulted in crop failures necessitating ~33,000 tonnes of food assistance. The 2005–2006 drought impacted ~202,000 households (>1 million people), particularly in the Eastern and Southern Districts[105]. Additionally, in 2008, spatially erratic rainfall resulted in maize yield losses of 37% in the Eastern Province and 26% in the Southern Province[106]. Under future climate scenarios, the impacts of droughts, floods and landslides are expected to worsen, with primary concerns for climate-vulnerable communities including potential displacement, reduced access to natural resources, increased poverty and conflict along Rwanda's eastern and southern borders[107].**

22 **Climate change-induced changes in rainfall will also place water resources at risk in the Southern Province, which is characterised by steep topography, as flooding often leads to increased runoff and siltation — both of which reduce surface water quality. A decrease in water quality has subsequent impacts for the health, tourism and agricultural sectors[108]. In particular, food security — which is already a concern given that ~90% of households in Rwanda practise rain-fed agriculture[109],[110] — is expected to be compromised by prolonged drought events and heatwaves under future climate scenarios.**

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23 **Income generated from agriculture is dependent on yield size and quality. Rising temperatures and rainfall variability, therefore, pose a risk to both household-level and national economic stability as these conditions affect agricultural output. Elevated temperatures are likely to negatively impact the quality and productivity of temperature-sensitive crops such as tea and coffee — which account for over 20% of Rwanda's national export earnings and are a major source of income for rural communities[111]111. Projections of longer dry spells and increased heat wave days are particularly concerning for subsistence farmers in Rwanda's eastern and southern regions. For example, in 2016, a severe drought resulted in ~44,000 households (~31% women-led[112]112) experiencing crop and livestock losses in these regions. Moreover, because of the country's steep topography, ~90% of crops grown on hillsides are vulnerable to soil erosion, irreversible fertility loss and land degradation resulting from heavy rainfall. Other climate change impacts relevant to the Southern Province have been summarised in Table 5 below.**

**Table 5. Summary of the vulnerable regions and the impacts of climate hazards in the Southern Province[113]113, [114]114**

| Climate hazards | Vulnerable regions in Southern Province | Impacts |
|---|---|---|
| • Increasing temperatures<br>• More frequent and severe droughts | Southeastern districts and parts of the central plateau | **Water resources**<br>• Altered river flows and disturbance of hydraulic cycle<br>• Low surface water levels, particularly in marshlands<br>• Drying up of groundwater sources<br>• Loss of biodiversity in aquatic ecosystems<br>**Land and agriculture**<br>• Reduced banana production |

| | | |
|---|---|---|
| | | • Reduced production of cereals and legumes, particularly maize and beans<br><br>• Favourable conditions for parasites (for example, increased incidence of caterpillars on sweet potatoes and beans)<br><br>• Failure of marshland- and rainfed crops<br><br>**Food security**<br><br>• Fluctuations in crop productivity increase the risk of food insecurity and favourable conditions to famines.<br><br>**Hydroelectric and wood energy**<br><br>• Reduction of hydroelectricity production, with a subsequent increase in pressure on forest resources (for fuelwood)<br><br>• Reduced wood lot productivity<br><br>• Forests exposed to direct and indirect impacts of drought (e.g., bush fire). |
| • Heavy rainfall<br><br>• Flooding<br><br>• Landslides | High altitude regions in the southwest and areas bordering rivers | **Health**<br><br>• Proliferation of mosquitoes and water-borne diseases (e.g., malaria, diarrhoea).<br><br>• Loss of lives (both livestock and human)<br><br>**Agriculture**<br><br>• Erosion of topsoil, with impacts on crop productivity and food insecurity<br><br>• Silting of marshlands and surface waters, leading to reduced water quality<br><br>**Infrastructures**<br><br>• Damage to economic infrastructure (e.g., roads, bridges, schools, |

| | | |
|---|---|---|
| | | hospitals, houses)<br><br>• Damage to erosion control measures (e.g., terracing)<br><br>**Economy**<br><br>• Reduction of rural population revenues.<br><br>• Increased food costs<br><br>• Rural exodus<br><br>**Ecosystems**<br><br>• Increased water pollution (e.g., solids, silt, chemical runoff)<br><br>• Favourable conditions for invasion of water bodies by alien plants (e.g., water hyacinth)<br><br>• Loss of soil fertility by leaching of arable lands<br><br>• Increased sediment deposits on arable land at the foot of slopes<br><br>• Soil erosion and degradation<br><br>• River, lake and reservoir sedimentation |

24 **Notably, climate change impacts in Rwanda are not gender-neutral, with differences in time usage, sexual division of labour and production patterns, access to microfinance and participation in policy decisions intensifying the vulnerability of women and girls to climate change[115]115. The collection of water and fuel wood, for example, is disproportionately carried out by women in Rwanda. As a result of droughts and erratic rainfall, women often travel farther to access these resources, which requires more time[116]116. To address the impacts of climate change in Rwanda, particularly in the Southern Province, communities require prompt, effective and gender sensitive strategic responses for climate change adaptation.**

**Root causes of vulnerability**

**25 The proposed project will focus on the Southern Province of Rwanda, specifically targeting six districts: Kamonyi, Muhanga, Ruhango, Huye, Gisagara, and Nyanza. The high vulnerability of these districts to climate change has resulted in low food crop production, among others, necessitating urgent adaptation efforts. Importantly, the interventions will be strategically aligned with existing initiatives to foster synergy and facilitate a landscape-level transformative change in community resilience. The following section outlines the root causes of vulnerability within the target areas.**

-

**26 Reliance on natural resources heightens community vulnerability to climate impacts. Approximately 87% of the communities living in Rwanda's Southern Province depend on agriculture as a primary source of livelihood, specifically rainfed crop agriculture[117]. Approximately 68%, 74%, 71%, 72%, 82% and 75% of households in Kamonyi, Muhanga, Ruhango, Huye, Gisagara and Nyanza, respectively, practise crop cultivation[118], mainly using traditional farming methods[119]. Any shifts in precipitation patterns are therefore, expected to have substantial socio-economic effects on the communities within these districts. Variability in rainfall — including longer dry seasons and intensifying rain events — leads to crop failure, affecting food security and livelihoods[120]. Further to this, Rwanda has one of the highest population densities in the world 533 people per square km[121] — 530 persons/km$^2$ [122]. The population density in the target districts exceeds the national density, ranging from 545 persons/km$^2$ (Nyanza) to 683 persons/km$^2$ (Kamonyi), exacerbating the demand for these districts' agricultural sectors and natural resources to sustain food security. In turn, these factors lead to pressure on natural systems, such as forests, and result in deforestation and unsustainable land use management practices.**

**27 Rwanda's topography contributes to disaster risk. Mountains, continuous hills and steep gradients characterise the Southern Province's landscape. As ~62% of the**

Southern Province consists of hillside agricultural land [123][123], runoff and soil erosion are common within the target districts[124][124]. Widespread subsistence farming and mining activities further contribute to instability of soils, thereby increasing disaster risk. The steep topography also makes roads and other critical infrastructure susceptible to damage from flooding and landslide events[125][125]

28 Widespread poverty in rural communities inhibits resilience to climate change impacts. In the target districts, the population is primarily rural, with proportions ranging from ~68% (Kamonyi) to ~97% (Gisagara)[126][126]. These rural communities have limited access to insurance, alternative sources of income and the emergency funds necessary to recover from extreme climate events. Limited access to such resources perpetuates a 'poverty trap': when disasters disrupt livelihoods, they also diminish access to the tools needed for recovery, deepening the cycle of poverty[127][127]. For example, reoccurrence of low-intensity, high-probability extreme climate events — such as frequent floods or droughts — hinders capacity to rebuild livelihoods and invest in human capital. Reflecting the considerable challenges these rural communities face, the Southern Province reports highest levels of multidimensional poverty (MPI) in the country with a MPI value of 0.305[128][128].

Problem statement and preferred solution

29 Climate change in Rwanda's Southern Province, characterised by projected increases in intensity and frequency of precipitation variability and extreme temperatures, results in: i) reduced water supply; ii) limited surface water availability; iii) increased soil erosion; iv) altered soil moisture; v) potential water contamination and vi) a heightened risk of landslides. These impacts degrade both water- and land resources[129][129], posing direct threats to ecosystems, infrastructure, human safety and agricultural productivity. This, in turn, leads to limited resource access, reduced adaptive capacity, and heightened sensitivity to changing climate conditions. Moreover, the degradation of the Southern Province's landscape further constrains livelihood options and economic growth prospects, thereby diminishing community resilience to extreme climate events,

**including floods and droughts. The problem tree in Figure 6 below provides a visual representation of the climate change- and anthropogenic challenges communities in the Southern Province of Rwanda are currently facing.**

[Please note that it was not possible to save Figure 6 on the portal. Kindly refer to the attached word version of the PIF document uploaded to the Roadmap Section.]

**Figure 6. Problem tree showing the impacts of climate change and anthropogenic factors on communities in the Southern Province of Rwanda.**

30 **To address the climate adaptation challenges described above, several project design options were considered as part of the development process. The following list provides a brief summary of the options analysis undertaken.**

- **Ecosystem-based adaptation and restoration approach: EbA and restoration interventions are effective methods for adapting to the climate impacts experienced by Rwandan communities. Restoration of wetlands and watersheds enhances water retention, while afforestation and reforestation can be deployed to reduce soil erosion, lower landslide risk and improve soil quality. Following an EbA and restoration-focussed approach would be effective for addressing the ecosystem degradation aspects of the challenges, however it also would have limited possibility for ensuring sustainability in the long run. Without addressing the other drivers of degradation, namely livelihood activities, ecosystems would return to a degraded state once the project lifespan had passed.**

- **Livelihood diversification approach: Introducing climate-resilient and sustainable livelihoods is a valuable strategy for addressing climate change impacts in vulnerable communities — particularly in the target area where livelihoods are reliant on natural resources. Diversifying livelihoods into safer economic activities, such as eco-friendly tourism or non-extractive industries, provides a sustainable path forward for communities and reduces vulnerability to climate hazards. However, while adopting practices that have fewer degradational impacts on the environment will have a positive impact on ecosystem function, this impact will not likely be enough to reverse existing damage in a timely manner.**

- **Integrated systems approach: An in-depth analysis of the climate-related challenges in the target districts recognises the interconnectedness and interdependencies of the climate impacts communities experience — as illustrated in Figure 6 above. Therefore, the project has been designed using a systems-based approach to enhance climate resilience in the target communities. The preferred solution, further described below, encourages the development of sustainable and transformative change in Rwanda by fostering a more comprehensive response to the climate challenges than the previously described approaches.**

31 **The preferred solution will enhance community climate resilience by supporting livelihood security and improving land and natural resource management. This solution will be achieved by integrating economic incentives — like agricultural inputs and livelihood support — and improved technologies that reduce pressure on natural resources and lower vulnerability to climate hazards. Under project interventions, local communities will be empowered to engage in in climate-smart and sustainable livelihoods, including circular agriculture activities. This support will be underpinned by peer-to-peer learning, facilitated by community-led organisations. Further to this, the proposed project will create opportunities for enterprise development and facilitate private investment into climate resilient resource management and livelihoods.**

32 **The project interventions will address the interconnected issues of water and land management, and food and livelihood security through a systems-based approach. This involves improved land and water resource management, at community, district and provincial levels as well as channelling public and private sector investments towards climate resilient value chain development. Building positive synergies between these systems will facilitate integrated and coherent planning and investment at the landscape level, as well as implementation, monitoring and evaluation of adaptation solutions in the target area.**

33 **By implementing improved resource management and enabling sustainable community livelihoods, the project will strengthen community resilience to the impacts of climate change induced droughts, floods and landslides. As a core element, the preferred solution will prioritise community ownership of locally led adaptation solutions, thereby ensuring every intervention is sustainable and can be continued in the long term. Further to this, the interventions of the proposed project will form the basis of an integrated strategy that will catalyse future investments into climate resilience beyond the project's lifespan, laying the foundation for upscaling throughout Rwanda and the region.**

**Barriers to the preferred solution**

34 ***Barrier 1: National and districts strategies for climate change adaptation and climate-resilient development lack 'last mile' support to reach local community levels.***

**While Rwanda has a comprehensive framework of national and district strategies for climate change adaptation and sustainable development, implementation of these strategies often does not sufficiently reach the local or community-level that is the most climate risk exposed and vulnerable. This gap arises because of insufficient resources and capacity limitations. Consequently, there is a need to improve extension services and build upon existing community-driven knowledge-sharing systems to ensure adaptation measures permeate to the local level.**

35 ***Barrier 2: Limited community engagement in conservation and restoration activities***

**Lessons learned from previous adaptation initiatives and programmes have shown that the success and sustainability of interventions depend on community buy-in. Projects designed without substantial input or collaboration from local communities often fail to acquire adequate community engagement, compromising the longevity and sustainability of project interventions. As a result, low community participation in conservation and restoration activities will limit the potential for up-scaling interventions.**

36 ***Barrier 3: Current gaps in irrigation systems and rainwater harvesting infrastructure are limiting communities' resilience to climate change impacts.***

**Observed and projected climate change impacts in Rwanda are resulting in longer dry periods and changing precipitation patterns. Consequently, communities no longer can rely on natural water resources throughout the year and need improved infrastructure to ensure water needs for community and agricultural activities are met during droughts.**

37 ***Barrier 4: Rural communities have limited access to investment opportunities and market support to improve livelihood options***

**Agriculture is the primary economic activity in the Southern Province of Rwanda. However, farmers and communities are unable to optimise their income generation because of: i) insufficient processing technology, which reduces the market value of agricultural products; ii) insufficient data on market trends and consumer demand, resulting in agricultural products that are not priced competitively; and iii) gaps in value chain development that would increase the value of agricultural products — including the need for post-harvest infrastructure to minimise product loss.**

**Baseline projects**

38 **To enhance project complementarity and minimise duplication of efforts within the target region, the proposed project will ensure alignment with ongoing and planned initiatives relevant to landscape and resource management in Rwanda. To this end, several baseline projects have been identified and described in Table 6 below. Mechanisms for coordination with these baseline initiatives will be finalised during the PPG phase.**

**Table 6. Overview of baseline projects and complementarity with the proposed PIF.**

| **Baseline project information** (budget value, implementation period, Executing Entity, fund) | **Summary of project initiative** | **Alignment with proposed project** |
|---|---|---|
| **Forest landscape restoration in the Mayaga region**<br>• USD6.2 million (GEF); USD26.5 million (co-financing)<br>• 2019–2025<br>• Rwanda Environmental Management Authority (REMA)<br>• GEF Trust Fund | This project focuses on restoring forests in the Mayaga region of the Southern Province, specifically in the Kamonyi, Ruhango, Nyanza and Gisagara districts. It aims to avoid emissions of 4,7000,825 carbon dioxide equivalent over 20 years by delivering four forest landscape restoration plans covering a total of 263,270-hectare acres (ha) | The proposed project will build on the forest rehabilitation-, ecosystem restoration- and resilient food production regimes established by the GEF project by: i) supporting circular agricultural livelihoods (Output 2.2.1); ii) reducing pressure on forest resources by scaling up improved cookstove distribution and promoting alternative fuel sources (Output 2.2.2) and iii) restoring degraded forests using indigenous species (Output 2.2.3). |
| **Ecosystems/landscape approach to climate proof the rural settlement program of Rwanda**<br>• USD8.4 million (GEF); USD22.9 million (co-financing)<br>• 2021–2026<br>• REMA, Rwanda Housing Authority, Gakenke and Kirehe District Authorities<br>• Least Developed Countries Fund | This project aims to operationalise livelihood interventions included in the rural settlement program for the Northern and Eastern provinces, to ensure the adaptability of the program's livelihood strategies to climate change. This will prevent the impacts of climate change from further diluting the benefits and achievements of the rural settlement program. | The proposed project has been designed to create an enabling environment for improving climate resilience through a systems-based approach to climate risk reduction (Component 1) and enhance community climate resilience through improved landscape management and sustainable climate-resilient livelihoods (Component 2). This design will align with the GEF interventions by implementing climate-resilient strategies at a community level (Outcome 1.1) and using Ecosystem-based Adaptation to enhance the climate resilience of water resources (Outcome 2.1) and land management (Outcome 2.2). |
| **Anchor farm project: Rwanda**<br>• Value: TBD | This project covers Rwamagana, Nyagatare, Kirehe, Gatsibo and Kayonza districts in the Eastern Province of Rwanda, where a network of agriculture and enterprise was established. It targets 35,000 smallholder farmers promoting good agricultural practices to increase yields and strengthen agricultural value chains. | There is alignment between the BMGF and AGRA and the proposed project's objectives for leveraging sustainable finance through private sector investments (Component 3). The proposed project design and implementation strategy will incorporate best practices and lessons learned from the BMGF and AGR project on private-sector engagement in the Rwandan context. |

| | | |
|---|---|---|
| • Implementation period: TBD<br>• Clinton Development Initiative<br>• Bill and Melinda Gates Foundation (BMGF), Alliance for Green Revolution for Africa (AGRA) | | |
| **Transforming Eastern Province through adaptation**<br>• USD33.8 million (GCF); USD15.8 million (co-financing)<br>• 2021–2027<br>• Rwanda Forestry<br>• Authority, the development agency of the Belgian federal government (ENABEL) and the International Union for Conservation of Nature (IUCN) Rwanda country office<br>• Green Climate Fund grant | This project focuses on restoring ecosystems and transforming fragile landscapes in the Eastern Province of Rwanda. It also aims to support the livelihoods of communities impacted by climate change-induced land degradation, with a focus on strengthening sustainably managed and climate-resilient agricultural and forestry value chains — to optimise benefits for communities and farmers. | The GCF project focuses on ecosystem restoration, facilitating climate resilient livelihoods through strengthening of agricultural and forestry value chains. The GCF project also aims to enhance financial inclusion and investment into climate resilient value chains.<br><br>This proposed LDCF project aims to incorporate lessons from the GCF project in project design and implementation strategy on restoration, strengthening value chains to achieve climate resilient livelihoods and access to finance in the Southern Province of Rwanda. This project also lays emphasis on the eco-tourism value chain to incentivize climate resilient agriculture and forest management which distinguishes itself from the GCF project.<br><br>Complementarity with the GCF project is further ensured through the proposed project's focus on private sector engagement and investments into climate resilient livelihood strengthening activities. In addition, the proposed LDCF interventions around climate risk insurance will enhance the access to finance interventions of the GCF project.<br><br>The proposed project interventions will scale up and build upon many of the interventions from the GCF project. In particular, enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods under Component 2 of the proposed project will scale up the land restoration and support of the GCF project's climate-resilient agro-ecological systems and livelihoods.<br><br>The proposed LDCF project also aims to engage with FONERWA (Rwanda Green Fund) on access to finance and private sector investments. This would institutionalise climate |

| | | |
|---|---|---|
| | | adaptation finance (including interventions of the GCF project). It will enable further capacity building of a national financing institution which will ensure the local ownership of the project resulting in scaling up of project interventions. |
| **Rwanda dairy development project**<br><br>• USD48.5 million (IFAD); USD20.4 million (co-financing)<br>• 2016–2023<br>• Ministry of Agriculture and Animal Resources (MINAGRI)<br>• IFAD | This project focuses on climate-smart dairy production. It aims to reduce poverty and promote economic prosperity among communities by strengthening dairy value chains and creating a more sustainable dairy sector. The project has facilitated: i) the establishment or strengthening of co-operatives; ii) investments in processing and marketing infrastructure; and iii) the establishment of an institutional framework for the growth of the dairy sector. Under the project, the sustainable management of dairy cows will also reduce pressure on natural ecosystems that are subject to overgrazing. | The proposed project shares the IFAD project's objectives of climate resilience, capacity building, community engagement and sustainable development. The proposed project will build on the foundation laid by the IFAD project by focusing more extensively on climate resilience strategies within water resources and land management and private sector engagement. The proposed project will also complement the IFAD project's efforts by ensuring that the dairy sector's growth aligns with climate resilience efforts in the broader Rwandan agricultural and environmental landscape. |
| **Promoting smallholder agro-export competitiveness project**<br><br>• USD30 million (IFAD); USD32.2 million (co-financing)<br>• 2022–2028<br>• MINAGRI<br>• IFAD | This project aims to increase rural income by strengthening sustainable agri-export value chains. It is targeted at fourteen districts across Rwanda's Southern and Western provinces. The project will focus on enhancing smallholder's productivity in climate-smart agricultural value chains, facilitating an enabling business environment for exporting sustainably produced products and providing policy support and coordination. | The proposed project will expand the climate-smart production and productivity of smallholders' tea, coffee, fruit tree and essential oil plantations developed by the IFAD project to hillside agriculture, rice-fish farming, agroforestry, apiculture and livestock farming by applying Ecosystem-based landscape management (Component 2). Moreover, the proposed project will scale up the enabling business environment established by the IFAD project by unlocking financing for climate-resilient investments and private-sector engagement in the proposed project's target districts (Component 3). |
| **Transforming household resilience in vulnerable environments (THRIVE)**<br><br>• Value: TBD<br>• Implementation period: TBD<br>• World Vision<br>• VisionFund | This project targets the Northern and Southern provinces of Rwanda. It aims to build resilience among families and communities by promoting sustainable economic livelihoods, aiding in adaptation measures and creating resilient systems to prevent loss of livelihood caused by climate change. | The proposed project will scale up the THRIVE project's interventions of aiding community farmers manage their land and water resources by: i) implementing climate resilient strategies at a community level (Outcome 1.1); and ii) using Ecosystem-based adaptation approaches to enhance landscape management (Component 2). The proposed project will additionally build on the THRIVE project's efforts to improve agricultural value chains and provide improved market access by leveraging sustainable finance through private-sector investments to enhance market access (Component 3). |

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|---|---|---|
| **Partnership for resilient and inclusive small livestock markets (PRISM)**<br><br>• USD14.9 million (IFAD); USD29 million (co-financing)<br>• 2019–2026<br>• Rwanda Agriculture and Animal Resources Development Board<br>•(RAB)<br>• IFAD, ENABEL | This project aims to reduce poverty by transforming the livestock sector in districts spread across the Northern, Southern and Western provinces in Rwanda. It focuses on increasing the competitiveness of the small livestock sector and its profitability. It also aims to strengthen the value and quality of products sold by smallholder producers to domestic and regional markets. | The proposed project will expand the PRISM project's efforts to enhance resilience and productivity within the livestock sector to the broader agricultural sector. |
| **BUILD Impact Fund**<br><br>• USD 10 million<br>• 2021-2031<br>• United Nations Capital Development Fund (UNCDF) and Bamboo Capital Partners | This fund is an innovative blended finance vehicle focused on supporting businesses which contribute to sustainable development goals in lower income countries, specifically least developed countries. The main objective of this fund is to provide access to finance to SMEs, women entrepreneurs and early-stage companies who suffer from a financing gap in least developed countries. This gap primarily arises due to the lack of access to finance in these countries. | The proposed project will establish partnerships with MSMEs, co-operatives and small businesses to help strengthen value chains within the target region. Access to finance is crucial in this effort, which is also the crux of the BUILD Impact fund. |
| **UNCDF Bridge Facility**<br><br>• USD 50 million (Initial funding)<br>• United Nations Capital Fund Development (UNCDF) | The UNCDF Bridge Facility is a dedicated financing facility for least developed countries. It aims to 'fill the missing middle' in financing, which refers to the vacuum in lending to enterprises which require amounts too small for commercial capital and too large for micro-finance. The average size ranges from USD 100,000 to 500,000. | The proposed project focuses on fostering climate resilient livelihoods by strengthening agricultural value chains and establishing partnerships between private enterprises/community-based organizations and co-operatives with communities. The private sector engagement facility proposed under this component aims to attract investment for sustainable livelihoods through MSMEs, co-operatives and private enterprises (Output 3.1.1). The sustainability of the outcomes of interventions under this component will be achieved by ensuring that the MSME's/co-operatives/enterprises supported by this project are able to access finance to grow their businesses after the completion of the project. This will require access to finance, which shall be ensured by the scaling up of the private sector engagement facility under FONERWA. The UNCDF Bridge Facility can play a crucial role in providing finance to the enterprises/MSMEs/co-operatives supported under this project. |
| **Strengthening climate resilience of rural communities in Northern Rwanda** | This project aims to increase the resilience of vulnerable communities to climate change in Gicumbi District in Northern Rwanda by: i) restoring and enhancing ecosystem services in one of the sub-catchments of the degraded Muvumba watershed ii) increasing the capacity of communities to renew and | The proposed project will build on the watershed restoration achieved in GCF project by restoring riverbanks in the Southern Province (Output 2.1.3). Moreover, the proposed project complements the GCF project's efforts to support community implementation of sustainable forest |

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| • USD 32.8 million (GCF)<br>• USD 36,000 (co-financing)<br>• 2018–2025<br>• FONERWA<br>• Green Climate Fund grant | sustainably manage forest resources and iii) supporting smallholders to adopt climate resilient agriculture. This project will also invest in climate resilient settlements for vulnerable families currently living in areas prone to landslides and floods and support community-based adaptation planning and livelihoods diversification. | management and adoption of fuel-efficient cooking methods by introducing circular agriculture systems that use sustainable land management techniques (Output 2.2.1) and distributing improved cookstoves and biofuel options (Output 2.2.2). Lastly, the proposed project's dissemination of lessons learned and best practices via regional and international information exchange platforms (Output 1.1.4) aligns with the GCF project's goal of mainstreaming and communicating successful adaptation approaches at a national level. |
| **Building resilience of communities living in degraded wetland, forest and savannas of Rwanda through an ecosystem-based adaptation approach (LDCFII)**<br>• USD 5.5 million (GEF)<br>• USD 9.2 million (co-financing)<br>• 2015–2019<br>• REMA in partnership with Ministry of Natural Resources (MINIRENA) and MINAGRI<br>• GEF Trust Fund | This project used an Ecosystem-based Adaptation (EbA) approach to address the problems caused by floods, droughts and landslides in Rwanda by restoring degraded wetland, forest and savanna ecosystems. Specific interventions included: i) increasing the technical capacity to plan and implement EbA at national and local levels; ii) strengthening the national and local policies, strategies and plans to facilitate the national implementation of EbA and iii) restoring degraded savanna, forests and wetlands to provide proof-of-concept for the role of ecological infrastructure in increasing climate resilience and providing alternative livelihoods for local communities. The EbA restoration activities were combined with: i) bio-physical interventions to increase the climate resilience of local communities; and ii) green technologies that promote the sustainability and resilience of restoration activities. | The proposed project will build on the national and local institutional capacity-building established by the GEF-funded project by building the capacity of communities to implement climate change adaptation strategies at a local level (Output 1.1.1) and disseminating lessons learned and best practices via regional and international information exchange platforms (Output 1.1.4). Additionally, the policy campaign to empower communities to use sustainable, climate resilient development practices (Output 1.1.2) planned in the proposed project complements the integration of EbA into Rwanda's policy, strategy and plans undertaken by the GEF funded project. The proposed project will also scale up the GEF funded project's ecosystem restoration and local community livelihood diversification interventions by: i) restoring riverbanks (Output 2.1.3), forests and mining areas (Output 2.2.3); ii) introducing circular agriculture systems that combine livelihood options with sustainable land management techniques (Output 2.2.1) and iii) establishing partnerships with larger commercial agriculture, agro-processing and ecotourism corporations (Output 3.1.3). |
| **Building the capacity of Rwanda`s government to enhance the National Adaptation Planning process (NAP)**<br>• USD 6 million (GEF)<br>• USD 7.5 million (co-financing)<br>• 2019–2025<br>• REMA<br>• Least Developed Countries Fund | This project aims to facilitate country-driven medium- to long-term climate change adaptation in Rwanda. The objective of the project is to increase the capacity of governmental authorities and local communities in Rwanda to plan, fund, implement and monitor climate change adaptation solutions in the medium and long term. A special focus is the enhancement of the climate change adaptation knowledge base, with a particular emphasis on guiding adaptation planning based on technical and financial effectiveness of adaptation measures to inform the funding of the NAP process | The proposed project complements the GEF-funded project's aim of using EbA to build climate resilience for the Rwandan society in the medium- to long term. |
| **Landscape restoration for improved environmental resilience and community livelihoods**<br>• Value: TBD | This project aims to upscale restoration interventions currently underway in Mukura Forest, Lake Kivu and southern wetland catchments in Kirehe — to enhance resilience to climate change, biodiversity and the provisioning of ecosystem services, food security and sustainable community livelihoods. | The proposed project will also implement activities related to ecosystem restoration in forests, wetlands and water catchments. This will further efforts to upscale restoration interventions in Rwanda.<br><br>The proposed project will also focus on private-sector investment in value chain development |

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| • 2022–2024<br>• ARCOS<br>• TerraFund for AFR100 | | for sustainable alternative livelihoods. This will complement ongoing efforts to enhance the resilience of both ecosystems and communities in Rwanda to climate change under the ARCOS project. |
| **LAND-at-scale (LAS)**<br>• USD 1.6 million<br>• 2021–2025<br>• Netherlands Ministry of Foreign Affairs, managed by the Netherlands Enterprise and Development Agency (RVO) | The overarching objective of the LAND-at-scale programme is to improve and ensure sustainability of land registration and management systems in Rwanda. This will be achieved using the following project strategies:<br>• institutionalise a (financially) sustainable land administration and management system;<br>• implement sustainable, climate-resilient land use planning at national level;<br>• implement a more just decision-making process by local mediators; and<br>• strengthen academic capacity to assist in the further development of a fair and just land governance system.<br>The LAND-at-scale programme contributes to addressing non-climate drivers of land degradation in Rwanda by improving the regulation of land acquisition, such that encroachment into marginal areas and intact ecosystems is better monitored (or, where possible, prevented). | The proposed project will contribute to improving land management, in line with the objectives of the LAND-at-scale project, by facilitating the establishment of agricultural-, livestock- and forestry-based cooperatives.<br>Cooperatives established under the proposed project will benefit from improved access to capacity-building initiatives, including those focused on land consolidation and the sustainable management of land and natural resources.<br>These outcomes will contribute to the LAND-at-scale programme objectives by helping to: i) institutionalize land management and administration; ii) implement sustainable, climate-resilient land-use planning at the local scale; iii) improve decision-making at the local level; and iv) strengthen land governance in rural areas. |
| **Landscape approach to forest restoration and conservation (LAFREC)**<br>• USD 9.5 million (GEF)<br>• USD 51.6 million (co-financing)<br>• 2014–2022 | This project aimed to restore and maintain critical landscapes in Rwanda that provide global environmental benefits and<br>contribute to enhanced resilient economic development and livelihoods. | The proposed project will build on the institutional capacity to implement long-term landscape restoration and conservation that was developed by the GEF-funded project by building the capacity of communities to implement climate change adaptation strategies at a local level (Output 1.1.1). The proposed project will scale up the forest and river restoration carried out by the GEF funded project by reforesting degraded forests and mining areas (Output 2.2.3) and restoring riverbanks (Output 2.1.3) in the Southern province of Rwanda. Moreover, the proposed |

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| • REMA<br>• The GEF Trust Fund | | project's introduction of circular agriculture systems that combine livelihood options with sustainable land management techniques (Output 2.2.1) complements the GEF funded project's adoption of alternative and sustainable agricultural practices and livelihoods. |

**39 The baseline initiatives in Table 6 collectively address both climate- and non-climate drivers of land degradation in Rwanda. Non-climate drivers of landscape transformation within the target region include: i) unregulated deforestation and logging, driven by the need for fuelwood, charcoal and building materials; ii) overgrazing by free-roaming livestock; iii) overcultivation — particularly on slopes — without appropriate soil conservation measures[130]; and iv) land-use changes resulting from the expansion of rapidly growing rural populations into marginal areas[131],[132].**

**40 By incorporating interventions that address anthropogenic challenges, many of the baseline projects above synergistically reduce pressure on natural ecosystems and enhance resilience to climate change. One example of this is the PRISM project — described in Table 6 — which aims to strengthen small livestock[133] value chains in Rwanda, such that income-generation in rural areas is increased and pressure on natural forests is reduced. Similarly, the Rwanda Dairy Development Project seeks to enhance profitability within the dairy sector. This will contribute to poverty alleviation as well as reduced land degradation, as the promotion of stall-fed cattle farming will reduce livestock overgrazing. In these ways, baseline projects focused on curbing unsustainable land-use practices address non-climate drivers of land degradation, while simultaneously enhancing local communities' resilience to climate change-induced droughts, floods and landslides.**

**41 To ensure intervention efficacy, the proposed project will incorporate lessons learned from the GCF project in project design and implementation strategy on restoration, strengthening value chains to achieve climate resilient livelihoods and access to finance. By scaling up and building on interventions on improved landscape management and**

**sustainable, climate resilient livelihoods, the project will maximise investment potential to create transformative change.**

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[127] World Bank Group (2016). Gender Equality, Poverty Reduction, and Inclusive Growth. Available at: http://documents1.worldbank.org/curated/en/820851467992505410/pdf/102114-REVISED-PUBLIC-WBG-Gender-Strategy.pdf

[128] United Nations Development Programme. 2021. 3rd Rwanda National Human Development Report. Kigali, Rwanda.

[129] Climate Risk Profile: Rwanda (2021): The World Bank Group.

[130] REMA. No date. Chapter 7. Agriculture and land degradation. Available at: https://www.google.com/search?q=Rwanda+PCEA+Report&rlz=1C1GCEA_enZA1005ZA1005&oq=Rwanda+PCEA+Report&aqs=chrome..69i57.334j0j4&sourceid=chrome&ie=UTF-8

[131] The Economics of Land Degradation (ELD). 2023. Africa: Rwanda. Available at: https://www.eld-initiative.org/en/country-work/africa/rwanda

[132] Kanyamibwa S. 2023. ARCOS' Tree-mendous Efforts to Restore Rwanda's Ecosystem. Available at: https://afr100.org/project/arcos-tree-mendous-efforts-restore-rwandas-ecosystem

[133] Pigs, goats, sheep and chickens

## B. PROJECT DESCRIPTION

### Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

1 To enhance climate change resilience against floods, droughts and landslides in Rwanda, the proposed project will contribute to food, water and livelihood security through improved land and water resource management. In addition, the project will fill capacity gaps to facilitate climate change adaptation at a community level. In the proposed solution, barriers to climate resilience will be addressed by: i) strengthening local-level capacity for implementing national and district climate adaptation strategies; ii) supporting the uptake of sustainable livelihood options and establishing the required infrastructure to improve water and land

resource management; and iii) accelerating value chain development through improved market access and private sector partnerships. Figure 7 below outlines the theory of change for the proposed project.

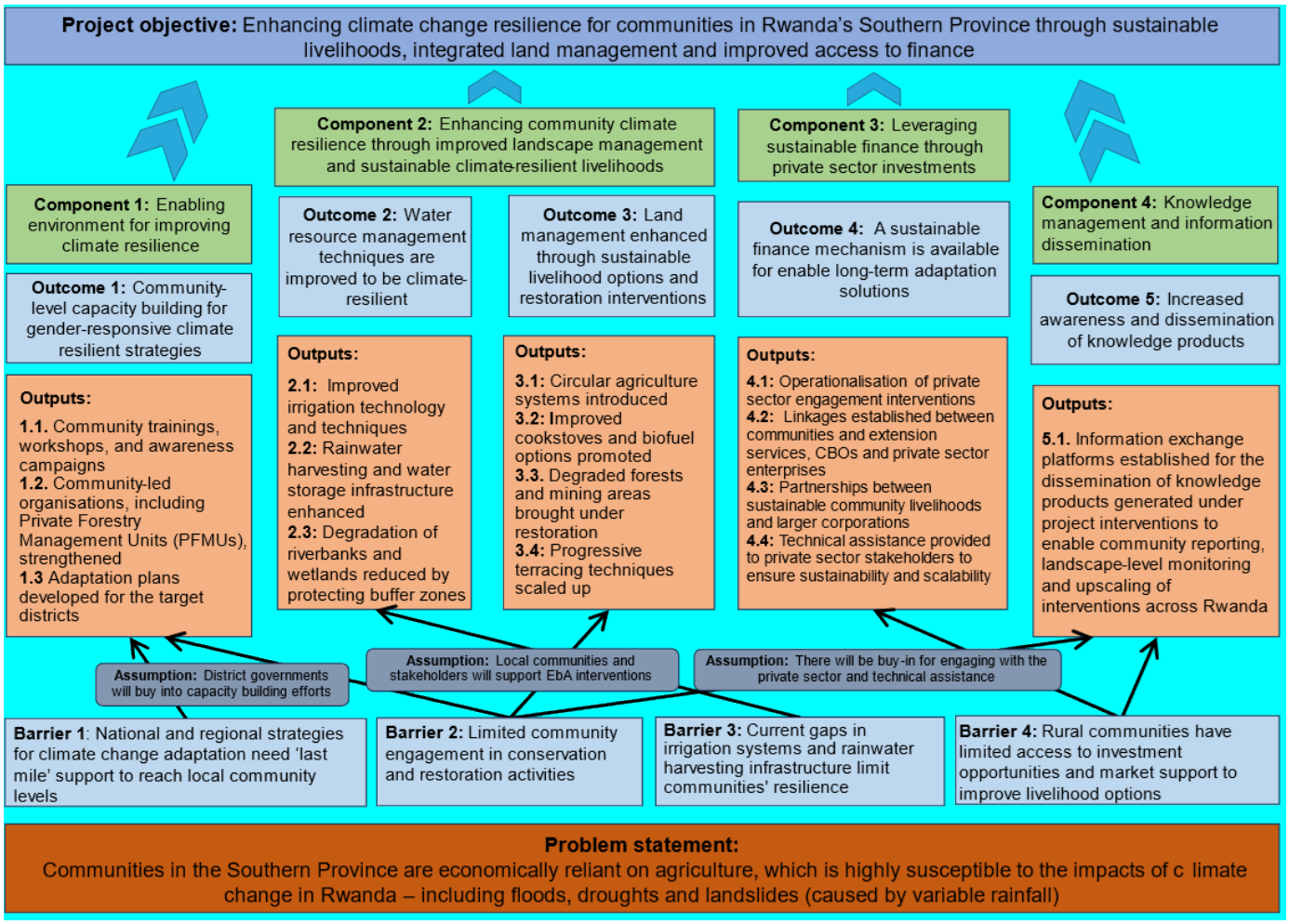



Figure 7. Theory of change diagram

## Component 1: Enabling environment for improving climate resilience through a systems-based approach to climate risk reduction

2 Under Component 1, the project will create an enabling environment for systems-based climate resilience by connecting local communities with national and district-level strategies. Proposed interventions will address capacity gaps at the local level through technical assistance and awareness-raising campaigns (Barrier 1). Capacity-building will be further supported by community-based systems of knowledge sharing and expanding extension services (Barrier 2).

Outcome 1: Community-level empowerment for developing and implementing gender-responsive climate resilient strategies

3 The interventions under Component 1 will focus on connecting local communities with national and regional strategies for climate change adaptation and sustainable development. Despite comprehensive strategies and policy frameworks at larger scales, current capacity limitations result in implementation gaps at the community level. Where possible, capacity-building efforts will be field-based and include gender responsive experiential learning, using project sites for field based, farmer-to-farmer learning (Output 1.1). In addition, local-level management will be prioritised through the development of systems that enable district-level governments to engage with existing community-based organisations — including Private Forestry Management Units (PFMUs), farmer field schools, and women's cooperatives (Output 1.2). These organisations are already established within local communities and are well-placed to support the implementation of project interventions with the necessary support of local government institutions. Private sector engagement and investment focussed interventions under Outcome 4 will also be implemented in the same project sites and communities. By building capacity of these local organisations, communities will be better placed to engage with technical assistance provided under Outcome 4 for market development. In addition to laying the groundwork for technical assistance the capacity building efforts under Output 1.1 will be applied to developing adaptation plans using cross-sectoral and participatory approaches for the target districts, with support from government institutions (Output 1.3). By empowering communities through training and capacity support, the project interventions will support active community participation in developing adaptation plans, thereby securing buy-in and long-term sustainability from local communities. The best practices and lessons learned from these adaptation plans will be disseminated under Outcome 4 in order to facilitate replication and scaling-up in other districts. To ensure gender-responsiveness, training and capacity building initiatives will be conducted in a gender-sensitive manner and require equal participation of men and women. Locally appropriate parameters for gender sensitivity will be determined by the Gender Action Plan (GAP), to be undertaken during the Project Preparation Grant (PPG) phase.

4 Awareness-raising campaigns within communities will be undertaken to mainstream climate-resilient practices and provide communities with the necessary information to explore how sustainable options can benefit their lives and livelihoods (Output 1.1). Information sharing during these campaigns will be done in a gender-responsive and inclusive manner to involve all community stakeholders. Community outreach interventions will build upon existing systems, including environmental committees in schools, as established under REMA's Environmental Education and Mainstreaming Framework[1]134. By including youth engagement as an integral aspect of project design, next generations will be empowered to participate in sustainable livelihoods, thereby ensuring further sustainability and scalability of interventions. Sustainability will be further supported by interventions under Outcome 5 that will facilitate knowledge-sharing and scaling up of these awareness-raising efforts.

**Component 2: Enhancing community climate resilience through improved landscape management and sustainable climate-resilient livelihoods**

5 Component 2 will improve community climate resilience by reducing landscape degradation using two approaches. First, water management infrastructure will be upgraded to be climate resilient and meet community needs. Second, land resources will be protected through sustainable livelihood options and

restoration interventions. To ensure complementarity with other ongoing initiatives, the project will draw upon lessons learned and best practices to scale up effective EbA techniques and fill in identified gaps (see Baseline Projects section).

Outcome 2: Water resource management techniques are improved to be climate resilient

**6** Interventions under Outcome 2 will improve the management of water resources to ensure community resilience during dry seasons and protect natural sources of surface water — including rivers, streams and marshlands. Current irrigation systems consist of low-tech, traditional methods that are only viable in low-lying marshlands. As a result, agricultural activities are limited during the dry season when cultivation on the hillsides is constrained by water availability (Barrier 3). To support farmers during prolonged dry and drought seasons, the project will upgrade small-scale irrigation systems to facilitate hillside agriculture (Output 2.1). Improved irrigation systems may include drip irrigation, solar water pumps or gravity-fed irrigation systems. In addition to providing inputs for irrigation system upgrades, the project will train local farmers on how to use the systems, including maintenance. Site-specific design of the improved irrigation systems will be informed by feasibility studies during the PPG phase, including ecological studies and environmental impact assessments to ensure there are no negative impacts on the surrounding ecosystems. Private sector driven business models and financing of irrigation systems will be operationalised in the same project sites and communities to ensure technology diffusion and adequate service and maintenance provision. These technologies would include, but not limited to, digital agriculture tools, remote sensing, and drone-based technologies that will be employed.

**7** Improved irrigation systems will be complemented with rainwater harvesting and water storage infrastructure on hillsides to subsidise freshwater needs during the dry season — as well as supply water for the irrigation systems (Output 2.2). Many communities currently do not have the infrastructure needed to capture abundant rainfall during the wet season. Introducing infrastructure such as rooftop catchments and underground storage tanks will fill this gap. As with the irrigation systems, final designs for rainwater harvesting infrastructure will be determined by feasibility studies undertaken during the PPG phase. The interventions on the hillsides will be underpinned by the restoration of riverbanks and wetlands to further protect water resources (Output 2.3). This restoration will build on the existing legislation related to buffer zones protection. During the PPG phase, the project will also explore options for combining income generating incentives with buffer zone enforcement.

Outcome 3: Land management enhanced through sustainable livelihood options and restoration interventions

**8** Under Outcome 3, interventions against landscape degradation will focus on improving land management. To reduce degradation caused by agricultural activities, local farmers will be supported to integrate circular agriculture systems[2]135 into their livelihoods (Output 3.1). Private sector engagement and investment

focussed interventions in strengthening agricultural value chains (as proposed under Component 3) will also be implemented in the same project sites and communities. These systems will include agricultural practices that improve agricultural outputs and income generation, while simultaneously enabling sustainable land management. By shifting to practices that farm with nature rather than against it, adopting circular agriculture will reduce the need for chemical fertilisers, improve soil health and improve resource use efficiency. In turn, this will alleviate pressure on natural resources and reduce degradation. By promoting ecosystem health through these sustainable practices, local communities will see improvements in crop yields and income generation, thereby contributing to food and livelihood security. Circular agriculture also leads to more diversity of products in comparison to more intensive, monocrop practices, therefore it is also associated with better health and nutrition. Examples of circular agriculture systems that might suit the target area include, *inter alia*: i) integrated rice-fish farming[3]136; ii) agroforestry and apiculture; and iii) agroforestry and livestock farming. Site-specific agricultural systems and livelihood support will be determined through continued stakeholder engagement and feasibility studies undertaken during the PPG phase. Outputs from the GAP undertaken during the PPG phase will also be integrated to ensure support is provided in a gender-responsive and equitable manner for all vulnerable groups. Livelihood support will include technical capacity building and training for communities, extension services, and community-based organisations. Further to this, dissemination of lessons learned and best practices in circular agriculture will be facilitated via the PFMUs and farmer field schools supported under Output 1.2.

**9** To underpin sustainable land management practices, Outcome 3 will also include interventions for reducing pressure on forest resources, including the scaling up of improved cookstove production and diffusion as well as other alternative fuel sources (Output 3.2). Activities under Output 3.2. will include capacitating communities to produce improved cookstoves and alternative fuel sources at a local level — rather than importing from international suppliers. This will further promote community ownership, sustainable livelihoods and scalability of the project interventions. Forest resources will further be protected through the restoration of degraded forests by integrating indigenous species (Output 3.3). Restoration efforts will focus on areas degraded by mining activities, which are pervasive throughout the target areas. Interventions will include engagement with mining companies to create awareness on sustainable approaches to mining. In addition to improving conserving land and soil quality, this restoration will also reduce water pollution by preventing runoff. To further mitigate any negative effects of hillside agriculture on the landscape, the project will scale up progressive and radical terracing techniques that reduce erosion and surface water runoff (Output 3.4). These interventions will build on ongoing projects and initiatives including the GEF-funded Green Amayaga project that have successfully implemented progressive terraces in sectors[4]137 adjacent to the project target areas.

**Component 3: Leveraging sustainable finance through private sector investments**

**10** Component 3 of the project will unlock financing for climate-resilient investments and private-sector engagement in the target districts (Barrier 4). Interventions will include operationalising proposed project interventions under pre-existing financing facilities (Ireme Invest and Community Adaptation Fund) under FONERWA (Rwanda Green Fund) to improve climate-resilient livelihood options. Based on preliminary

research and stakeholder engagement, potential areas for market access development have been identified, including, but not limited to:

- Agriculture and food processing chains: Agriculture is crucial to the economy of the Southern Province. It provides employment to about 80% of the population. Annually, 379,000 ha are cultivated.[5][138] They cultivate maize, beans, cassava, rice, banana, sorghum, wheat, peanuts, fruits, macadamia nuts. Tea and coffee are the primary cash crops cultivated in the region[6][139]. The southern province also grows a variety of horticultural and agro-forestry plants. There is a need to improve the value of these crops to increase farmer income. Value addition can be achieved through processing. Agro-processing has dual benefits – It increases the revenue generated by the farmers as well as a ripple effect across the value chain. It provides an opportunity for attracting private sector investment towards the sector. Engagement with private sector stakeholders (particularly MSMEs/co-operatives that employ women and local youth) , providing training and assistance to famers is crucial in strengthening value chains in this sector.

- Ecotourism: The tourism sector is one of the key drivers of economic growth in Rwanda. It is also one of the largest employers of women and youth. Ecotourism generates 80% of Rwanda's tourism revenue reflecting on the potential the sub-segment showcases for growth. Tourists are attracted to the hiking trails across the national parks in the country and mountain gorilla tourism. Furthermore, it has been estimated that for every USD 1 million invested in nature-based tourism 1328 new jobs can be created[7][140]. The Rwandan government is also setting up a payment for ecosystem services model for conservation of vital ecosystems across the country[8][141]. The commitment towards balancing conservation with tourism can be seen through establishment of national parks, re-introduction of threatened and extinct species, and attracting investments towards eco-tourism. Rwanda is one of the fastest growing tourism sectors in the world[9][142]. Eighty percent of the foreign exchange earned from tourism is rooted in nature-based tourism[10][143]. Earnings from tourism have grown at a rate of 11% annually over 2009-2019. In 2022, tourism comprised of more than 13.3% of total exports. Ecotourism as a sector generates employment and economic activity combined with spillovers to other sectors. The ecotourism sector in Rwanda showcases immense potential. Training individuals particularly women and local youth for various roles in the tourism sector will help in employment generation for Rwandans. The nature of ecotourism relies on the health of the allied ecosystem which will ensure sustainability of the project's interventions, as local communities derive economic benefits. Furthermore, it incentivizes engaging in circular and climate resilient farming and improved forest management as revenue of local communities heavily depends on ecosystems. Enhancing ecotourism value chain as a climate resilient livelihood intervention is distinct from and complementary to other baseline projects being implemented in Rwanda.

- Sustainable biomass briquette production: Majority of the population in Rwanda use traditional biomass as the primary source for heating and cooking. About 77% of households in Rwanda rely on firewood, 17.5% on charcoal and 4.2% on gas to meet energy needs. The remaining households use crop waste and residue for satisfying their energy needs[11][144]. Rwanda aims to reduce dependence on wood and charcoal to 20% by 2030[12][145]. Deforestation, lack of access to clean energy, lack of access to electricity, agricultural waste are factors contributing to the need for sustainable charcoal briquettes. This will not only reduce emissions, provide cleaner source of energy but also generate local employment (particularly for women and local youth) in the production, sales and marketing of briquettes. This will further bolster pre-existing clean cook stove programs of the Government of Rwanda.

- Non-timber forest products (NTFPs) including fruit and essential oils: In Rwanda, NTFPs comprise of plants used in traditional medicine, essential oils, fruits, tree seeds, fodder, honey, handicrafts material, mushrooms, ornamental and melliferous plants. All these products provide a valuable source of income for communities. Essential oils are a valuable source of income. Rwanda has the pre-requisites to capitalize upon the potential of essential oils as a source

of livelihood. The climate conditions and soil quality are appropriate to cultivate high quality and volume of plants used to manufacture essential oils. Furthermore, by virtue of its geographical location and climate farmers can have four harvests a year which increases their productivity[13][146]. The essential oils and NTFP value chain provides an attractive opportunity to engage local communities (particularly women and local youth) in generating climate resilient livelihoods.

- Apiculture or Beekeeping: Apiculture is a low-cost enterprise. It does not require large number of resources or equipment and can provide returns within a year. It is a sustainable economic activity. Beekeeping can provide employment as well as be a supplementary source of income to households (particularly women and local youth). Rwanda's honey products are of high quality due to the ecological conditions in Rwanda. There is always a high demand for honey. Honey is also a high value export product. Bee keeping is a low capital economic activity and a home-based source of income generation. This makes the activity favourable for rural entrepreneurs. Furthermore, honey can also be processed to add value to the product before selling to markets. This activity will be included in the project contingent to the results of a feasibility analysis during the PPG phase.

Outcome 4: Operationalisation of private sector engagement interventions under existing Ireme Invest and Community Adaptation Fund (CAF) facilities of FONERWA.

**11** Under Output 4.1 , the private sector engagement interventions will be operationalised through the pre-existing Ireme Invest and the Community Adaptation Fund (CAF) facilities established by FONERWA. Ireme Invest is a green investment facility in Rwanda which provides financing for the implementation of green and resilient projects. The CAF was designed to support smallholder farmers and communities to access climate finance to bolster climate adaptation efforts. Operationalising these facilities will stimulate private investment from private sector companies, co-operatives and Micro, Small and Medium sized Enterprises (MSMEs). There will be funding windows opened under both the facilities. The funds under this window will be utilised for strengthening and promoting existing climate resilient agriculture, sustainable briquette production, eco-tourism value chain, access to finance, insurance, and social protection measures. GEF-LDCF resources will be deployed only for provision of technical assistance, training and capacity building for private sector and community engagement as described in this section, with capital grants (with matching resources invested by private sector partners) provided via co-finance. FONERWA will be engaged as a Responsible Party (RP) by the project for launching challenge fund windows, selecting private sector (MSMEs, cooperatives, private enterprise) partners, disbursement of capital grants, portfolio management and monitoring and evaluation activities under both these facilities. Ireme Invest will focus on deploying capital for private sector enterprises and MSMEs. The CAF will be the facility which targets co-operatives and community-based organisations to provide capital.

**12** A competitive application process for private sector entities to be recipients of the benefits offered by these challenge funds set up under Ireme Invest and CAF will be initiated. The main benefits offered to these entities will be TA, access to markets and funding to develop and implement business models in the selected communities with an aim to co-invest in and build profitable business ventures that have the potential to improve climate resilient livelihoods of rural communities. Private sector enterprises that will be selected for support under this output will be subject to UNDP's and FONERWA's due diligence process, including Environmental and Social (E&S) safeguard criteria and periodic compliance and audits to ensure compliance with UNDP and FONERWA policies. Table 7 below reflects the main responsibilities of FONERWA (Ireme Invest and CAF) and GED-LDCF in relation to this project.

Table 7. Main responsibilities of FONWERA (Ireme Invest and CAF) and GEF-LDCF funds

| GEF – LDCF | FONERWA |
|---|---|
| • Provision of technical assistance<br>• Training and capacity building for private sector<br>• Community engagement | • Deployment of capital to MSME's, private enterprises (Ireme Invest) and Co-operatives (Community Adaptation Fund).<br>• Provision of in-built Technical Assistance |

Figure 8 below is a representation of the proposed private sector engagement facility for this project.

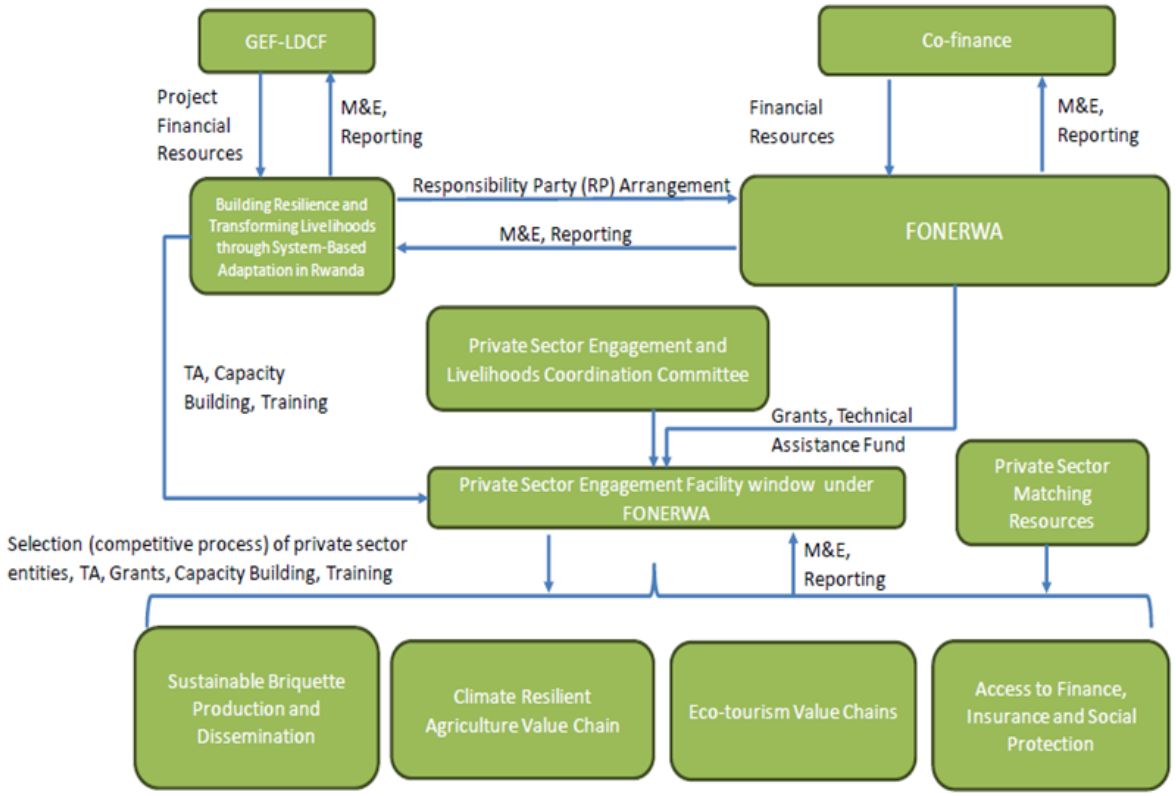



**Figure 8.** Structural diagram of the private sector engagement investment facility.

**13** To support the private-sector engagement facility, the project will establish partnerships between communities, extension services, Community Based Organisations (CBO)s, Civil Society Organization (CSO) and private-sector enterprises — including MSMEs and cooperatives (Output 4.2). These partnerships will be

facilitated by the development of a market information hub, building on the knowledge-sharing interventions under Outcome 1. By establishing these partnerships, the project will determine linkages between community farmers and private sector enterprises with buying potential. This will increase access to, and strengthen, high value markets. This Output will ensure that capacity building and technical assistance are provided to private sector entities involved in agri-businesses, sustainable briquette production, access to finance and eco-tourism. The crux of this output is to establish linkages between farmers/communities and buyers/private sector enterprises. Irrigation, cold chains, and warehousing will be given special focus while establishing these linkages. . Access to finance will be strengthened by establishing a performance-based payments (PBPs) system for financial institutions to incentivize lending to private sector enterprises involved in climate resilient livelihood enhancement value chains. Furthermore, this Output will enable negating the information asymmetry in the agricultural sector by introducing a market information hub. This hub will be a comprehensive depository containing data pertaining to agri-business and other climate resilient livelihood value chains. This hub will also provide information relating to the availability of various innovative and blended financing instruments / financing opportunities that can be utilised by these enterprises.

**14** In addition, an Innovation Challenge will be set up under this component. The Challenge will focus on identifying and supporting early-stage innovative technologies and business models that could enable climate resilient livelihoods in the target districts. UNDP will partner with FONERWA and other local institutions to operationalize this innovation challenge mechanism, based on a proven methodology of UNDP in other countries. Focus of this innovation challenge will be on early-stage ventures and technologies as compared to the private sector engagement facility which will focus upon growth stage ventures.

**15** Further to this, the project will also provide intermediary services between stakeholders on the supply and demand side — namely, establishing partnerships between larger commercial agricultural corporations and local producers (Output 4.3). This Output's primary aim is to involve corporations in developing climate resilient livelihoods in the southern province of Rwanda. This project will provide intermediary services between stakeholders on the demand and supply side, which will identify and establish partnerships with existing corporations working in these sectors. This would benefit both the farmers/communities as well as the corporations/private sector. Farmers and communities are ensured of access to market and finance. Conversely, corporations and private sector stakeholders are ensured of a reliable supply chain and business opportunities. In ecotourism, larger corporations can provide the necessary investment and communities will provide human resources needed to succeed in the sector. In Insurance, the corporations will provide valuable services for populations which are vulnerable to climate change. The communities covered help in widening business opportunities for these markets. This Output will engage with the existing National Agricultural Insurance Scheme[14][147] to ensure optimum efficiency of interventions in selected communities. Cold chain providers such as Kivu Cold group, warehousing companies such as Kumwe, Irrigation companies such as Sun Culture provide a valuable opportunity to establish private sector linkages. Agro-processing companies such as Asili Oils (Essential oils), Ikirezi Oils (essential oils), Gashora farms (chilies), The Apiary (honey) are involved in strengthening the agricultural value chain. Partnerships can be fostered with such pre-existing companies to achieve this output. This Output will enable partnerships with such corporations. Similar engagement activities will be envisaged in the tourism and insurance sectors. There is prior experience of engaging private sector (both MSMEs and large corporations) to work with local communities in Rwanda. For instance, Body Shop the cosmetic giant sources its moringa oil from a community driven enterprise Asili Oils in Rwanda. Green Mountain Arabica Coffee is another example of a corporation being incentivized to work with local communities in Rwanda. The project's proposed interventions on restoration,

community capacity enhancement, access to finance and brokering partnerships will provide sufficient incentives for larger corporations/MSMEs to engage with local communities.

Below is a representation of private sector partnerships envisaged in this Output.

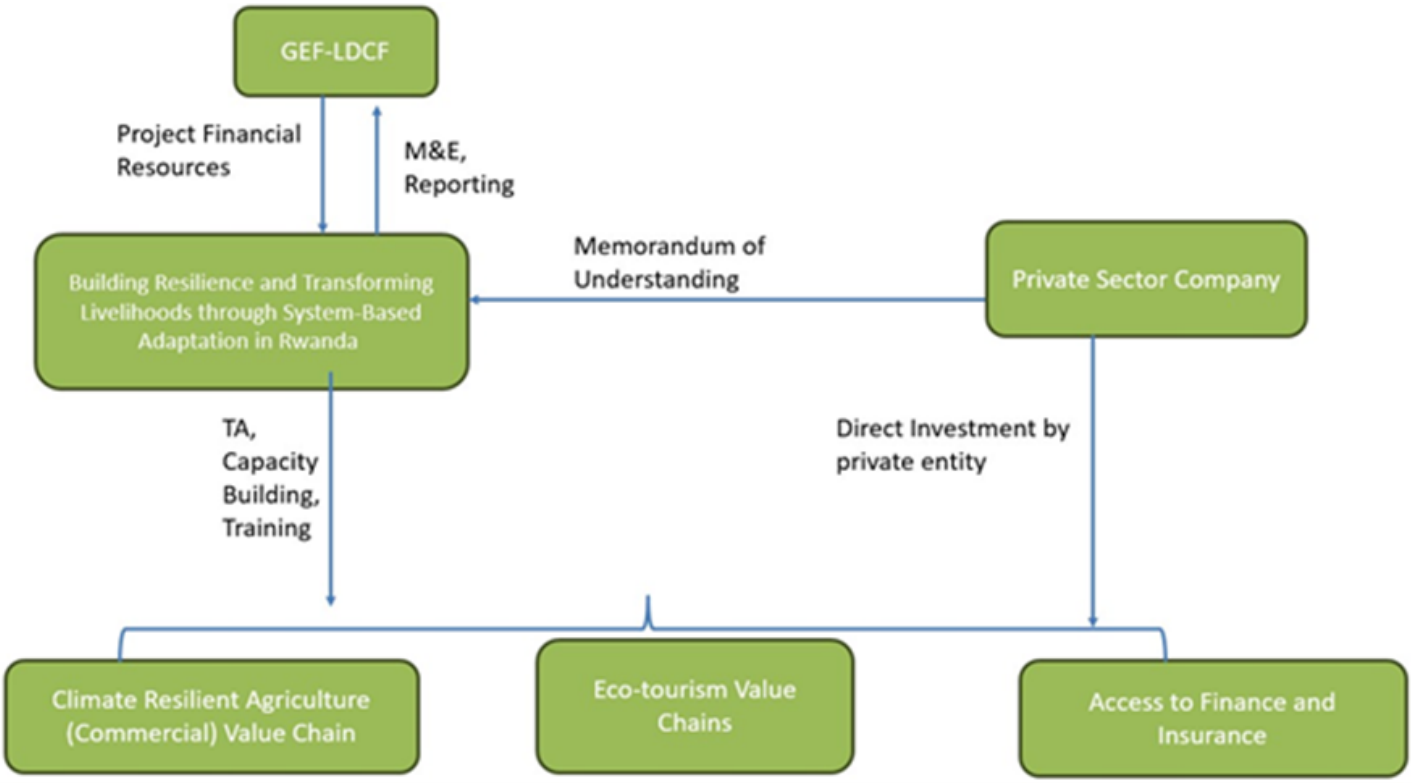



Figure 9. Structure and linkages of potential private sector partnerships under this Output 4.2.

**16** The sustainability of interventions under Outcome 4 will be ensured by scaling up the private sector engagement facility proposed to be established under FONERWA to offer blended/concessional finance to MSMEs/community cooperatives supported under this project to scale up and to ensure partnerships persist following the completion of the project. The project will also provide the necessary technical assistance to ensure that processes and mechanisms are in place for sustainability (Output 4.4). The scaling of outcomes will be ensured by devising suitable blended finance instruments (concessional debt, guarantees), which will provide finance to private enterprises that have showcased financial viability. During the project, a selection of MSMEs or cooperatives will be chosen as beneficiaries of the support mechanisms under Output 4.2. After the completion of the project, the most financially viable enterprises will be given an opportunity to scale up their activities. These opportunities will be funded by blended finance mechanisms. The proposed interventions under this project (training, technical assistance, grant-based investments and blended finance investments to be designed later) will ensure that local MSME's/co-operatives including those owned by women and local youth sustain climate resilient livelihood investments during and after the project's implementation period. The result of the interventions of this project will be scaled up across Rwanda during and beyond the project implementation period, in collaboration with FONERWA.

**Component 4: Knowledge management and information dissemination to facilitate national-level information exchange and scaling-up**

**17** This component will focus on strengthening awareness of national, district and local-level stakeholders on climate change and ecosystem-based adaptation strategies to increase resilience in the short, medium and long term. Activities under Component 4 will support the establishment and application of a knowledge management and learning framework which engages with stakeholders to raise awareness and share lessons learned locally and nationally during and beyond the project lifespan.

Outcome 5: Increased awareness of gender-inclusive climate resilience adaptation strategies and dissemination of knowledge products for scaling up results

**18** An information exchange platform will be established to guide the adaptive management of the proposed project, as well as support the implementation of national and district-level climate change adaptation plans at the local level beyond the project lifespan (Output 5.1). This platform will disseminate knowledge products generated under project interventions to enable community reporting, landscape-level monitoring and upscaling of interventions across Rwanda. Further to this, the platform will serve as a hub for information sharing between complementary projects and initiatives. This information sharing will be interlinked with the awareness-raising campaigns included under Output 1.1.

**19** Similarly, the information exchange platform will provide an opportunity to scale up the community outreach interventions, also included under Output 1.1, that target youth engagement. In line with this, knowledge-sharing activities under this Outcome will be designed to incorporate local communities, including local knowledge systems, thereby ensuring community ownership and sustainability of project interventions. Beyond the local level, the platform will be used as a springboard to share knowledge, lessons learnt and policy recommendations at provincial and national levels. In addition to their use under Outcome 2, technological and ICT tools such as drones, remote sensing and other analytical tools will be used to collect analyze, store and disseminate raw and processed data to aid decision making by different actors. These will be customised for different stakeholders such as communities, businesses, local authorities.

[1] More information on this framework is available at: https://rema.gov.rw/rema_doc/EEM/Rwanda%20Environment%20Education.PDF

[2] Circular agriculture focuses on using minimal amounts of external inputs, closing nutrient loops, regenerating soils, and minimising the impact on the environment. More information is available at: https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-105-circular-agriculture-for-sustainable-rural-development/

[3] More information on integrated rice-farming systems is available here: https://agrilinks.org/post/integrated-rice-fish-farming-localization-through-farm-diversification

[4] In this context, 'sector' refers to the administrative boundary, as mentioned in the Governance and Administrative Overview sub-section

[5] Government of Rwanda - Southern Province

[6] Seasonal Agricultural Survey 2022

[7] World Bank

[8] Rwanda Development Board

[9] UNCTAD

[10] World Bank - Nature based Tourism

[11] UN Rwanda Energy Compact

[12] Rainforest Journalism

[13] Essential Oils Industry in Rwanda - Botho Group

[14] More information on the NAIS is available at: https://afr.rw/rwanda-government-launches-the-national-agriculture-insurance-scheme-in-partnership-with-the-private-sector/

## Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

No

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

**1** This project will be implemented using the National Implementation Modality (NIM) modality. Under this modality, responsibility for project execution will rest with REMA as the Implementing Partner. REMA will be responsible for the management and administration of all project activities. Accordingly, tasks undertaken by REMA during project execution will include, *inter alia,* annual planning, coordination, implementation, management and reporting. During implementation, the project will be guided by the Project Board (Steering Committee). For the proposed GEF project, the Project Steering Committee will be chaired by the Director General of REMA and membered by the Minister of Environment, Mayors or Vice Mayors from target districts in the Southern Province, other relevant local authorities and co-chaired by the UNDP Resident Representative.

**2** Responsible Parties will be appointed to lead on specific components or activities. Thus far in the development process, FONWERA has been identified as a Responsible Party for the activities under Component 3. Further details of the project execution arrangements will be finalised during the PPG phase, on the basis of a capacity assessment. During this assessment, the project development team will establish and strengthen linkages with other agencies and institutions that are implementing or planning to implement relevant projects (further details of the relevant projects have been included under the Baseline Project section). Additionally during the PPG phase, stakeholders will be consulted to inform comprehensive structures for project implementation and management that ensure a Whole-of-Society Approach.

3 Rwanda is one of the pilot countries under the GEF-GCF collaborative framework, the Long-Term Vision on Complementarity (LTV) and this project will contribute to the realization of this vision at the institutional, geographical and project-specific levels thereby laying the foundation for Coherence and Collaboration between the two Funds.. Given the state of climate vulnerability in Rwanda, there is a need to coordinate climate investments in a manner that supports tangible initiatives with tangible climate benefits, ultimately generating long-lasting outcomes as opposed to scattered initiatives. At these early stages of the LTV in Rwanda, this project will contribute to both the planning and institutionalization of the LTV as well as to the eventual investments and results for scaled up impacts. At the PIF stage, it is planned that at the minimum, GEF investments under this project should not duplicate GCF investments, now and in the future. The ideal situation being planned for is for GEF and GCF investments to build on each other and the results of the different investments combined showing continuous progress in building resilience across the country which, if possible, should be traceable over time. To make this happen, this project proposes to enhance this collaboration through the entry points below, to be fleshed out during detailed design.

4 **Planning and investments:** While the on-the-ground structure of how the LTV will be operationalised in Rwanda is still under development until the country's updated GCF's Country Work Programme is approved by the GCF, this project has been designed to respond to the strategic entry points for collaboration, as identified by the LTV. The interventions under this project, particularly Component 3 activities that will unlock private sector partnership opportunities, will provide a platform on which future GCF investments will build. While this project focuses on specific geographical areas, the partnerships and financing modalities built under this project will be used to sacle up interventions at national levels, especially given that some of the private and public sectors also operate in other parts of the country. GCF investments can use these to leverage even larger investments using for instance the financing facility developed by this project. In addition to forming a foundation for future investments, this project had been developed to ensure alignment with ongoing and planning initiatives relevant to landscape and resource management in Rwanda. A description of how the proposed project will cooperate with these initiatives has been detailed in Table 6 above. More importantly, the process of the GCF Country Work Programme will be used to ensure the planned projects/programmes and investments build on this project.

5 **Knowledge management for scaling up:** From a knowledge management perspective, REMA's joint role as the Operational Focal Point (OFP) for the GEF and the National Designated Authority (NDA) for the GCF will enable the centralised collection and dissemination of best practices and lessons learned from both GEF and GCF projects. To this end, a dedicated LTV knowledge management platform will be established under REMA's supervision, and all knowledge products generated by the proposed LCDF project will be inputted into this system — to ensure it is accessible by accredited entities, government agencies and other stakeholders involved in planned and ongoing GEF and GCF initiatives. This will strengthen the implementation of climate change adaptation projects in Rwanda and facilitate complementarity, coherence and collaboration between the GEF and GCF, thereby contributing to the LTV. There is an opportunity for this project to contribute to a common knowledge platform that shows how national progress on adaptation as a result of multiple investments by the GEF, GCF and others can be tracked. This process will start in the next stage of project design under the entry point below.

6 **Entity and partner collaboration:** To underpin LTV planning, the next stage of project development will include a joint national workshop and consultations to facilitate coordination and collaboration among GEF and GCF Accredited Entities, REMA and other development partners working on climate adaptation in Rwanda thereby ensuring traceability and tangibility of initiatives. This will support joint national investment

planning and enable long-term, transformative change in Rwanda's climate finance landscape. Given the integrated nature of this project, its design and implementation will identify other areas (thematic and geographical) that other partners and entities can take up and therefore contribute to a larger agenda. This will make this GEF/LDCF project already inform areas of potential focus for other entities, including development partners.

### Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

## META INFORMATION – LDCF

| LDCF **true** | SCCF-B (Window B) on technology transfer **false** | SCCF-A (Window-A) on climate Change adaptation **false** |
|---|---|---|

Is this project LDCF SCCF challenge program?

**false**

This Project involves at least one small island developing State(SIDS).

**false**

This Project involves at least one fragile and conflict affected state.

**false**

This Project will provide direct adaptation benefits to the private sector.

**true**

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).

**false**

This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

| Green Climate Fund **true** | Adaptation Fund **false** | Pilot Program for Climate Resilience (PPCR) **false** |
|---|---|---|

This Project has an urban focus.

**false**

This project will directly engage local communities in project design and implementation

**true**

This project will support South-South knowledge exchange

**true**

This Project covers the following sector(s)[the total should be 100%]: *

| | |
|---|---|
| Agriculture | 30.00% |
| Nature-based management | 25.00% |
| Climate information services | 0.00% |
| Coastal zone management | 0.00% |
| Water resources management | 15.00% |
| Disaster risk management | 5.00% |
| Other infrastructure | 5.00% |
| Tourism | 5.00% |
| Health | 0.00% |

| | |
|---|---|
| Other (Please specify comments)<br>Private Sector Engagement | 15.00% |
| Total | 100.00% |

This Project targets the following Climate change Exacerbated/introduced challenges:*

| | | | |
|---|---|---|---|
| Sea level rise<br>**false** | Change in mean temperature<br>**true** | Increased climatic variability<br>**true** | Natural hazards<br>**true** |
| Land degradation<br>**true** | Coastal and/or Coral reef degradation<br>**false** | Groundwater quality/quantity<br>**true** | |

## CORE INDICATORS – LDCF

| | Total | Male | Female | % for Women |
|---|---|---|---|---|
| CORE INDICATOR 1<br>Total number of direct beneficiaries | 578,268 | 279,937.00 | 298,331.00 | 51.59% |
| CORE INDICATOR 2<br>(a) Area of land managed for climate resilience (ha)<br>(b) Coastal and marine area managed for climate resilience (ha) | 6,000.00<br>0.00 | | | |
| CORE INDICATOR 3<br>Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation | 6.00 | | | |
| CORE INDICATOR 4<br>Number of people trained or with awareness raised | 1200 | 600.00 | 600.00 | 50.00% |
| CORE INDICATOR 5<br>Number of private sector enterprises engaged in climate change adaptation and resilience action | 25.00 | | | |

### Risks to Project Preparation and Implementation

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation-such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the "Project description" section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

| Risk Categories | Rating | Comments |
|---|---|---|
| Climate | Moderate | Increasing variability: Unforeseen natural hazards, such as floods, droughts and landslides, could potentially render adaptation measures ineffective, particularly if these hazards occur during construction or implementation. |

| | | |
|---|---|---|
| | | Mitigation strategy: Project investments will be climate-proofed — in terms of their locations, designs and capture capacities — to ensure they can withstand forecasted climate stresses. EbA measures and infrastructure designs will be based on projected temperature and rainfall predictions from the worst-case (RCP 8.5) climate scenario. Detailed hydrological assessments based on peak flows will also be undertaken during the PPG phase. These assessments will be used to size and cost proposed water management interventions, such as storage and diversion infrastructure, to ensure they are adequately climate-resilient. To minimize the impact of drought on EbA activities, active ecosystem restoration interventions will be timed to occur during the wet season, such that water availability for plants is maximised. Conversely, grey infrastructure will be built during the dry season to prevent potential damages from flooding or landslide events during construction. |
| Environment and Social | Substantial | Environmental risks: Interventions associated with water mobilisation and storage infrastructure have the potential to lead to unanticipated environmental impacts. Mitigation strategy: A detailed Environmental and Social Screening Procedure (ESMP) or Environmental and Social Management Framework (ESMF) will be undertaken during the PPG phase to: i) identify potential environmental risks; and ii) inform the design of project activities to ensure they mitigate or prevent these impacts. Additionally, a comprehensive environmental and social impact assessment (ESIA) will be undertaken at the beginning of |

| | | |
|---|---|---|
| | | project implementation, before any on-the-ground interventions are started. Gender-equitable access: Men and women may not benefit equally from the results of project activities — for example, improved access to water and other natural resources. Conventional gender roles may also limit women's participation in community consultations and decision-making processes during project implementation. Mitigation strategy: During the PPG phase, a Gender Assessment and Action Plan (GAAP) will detail gender-related challenges within the target sites and propose additional measures to ensure project interventions are gender-responsive and inclusive of all minority groups. Further to this, a Gender Specialist will monitor project interventions during implementation to ensure gender is mainstreamed throughout project design and implementation. |
| Political and Governance | Moderate | Limited resources in local government: District administration may have limited resources and capacity to engage fully with the project Mitigation strategy: The project interventions have been designed to be responsive to district and local government capacity needs and will fill gaps to ensure enough resources are available for project implementation. Regular engagement between local government and REMA will safeguard against any impacts to the project implementation. |
| Macro-economic | Low | Covid-19: The Covid-19 pandemic has the potential to disrupt the supply chain of equipment needed for project activities. Many of these materials are manufactured in other |

| | | |
|---|---|---|
| | | countries; therefore, disruptions to transportation and shipping could lead to increased costs and delays in project implementation. Mitigation strategy: A Covid-19 Strategy will be developed during the PPG stage that outlines contingencies and safety protocols to mitigate against Covid-19-related disruptions during project implementation. Materials will be locally sourced wherever possible, and provisions will be made in the project workplan to ensure the project remains on schedule in the event of supply chain delays. |
| Strategies and Policies | Low | Changes in national priorities: If Rwanda's national priorities shift during the project development process, there may be a misalignment between national goals and project objectives by the time project implementation begins. Mitigation strategy: The project has been designed to fit within Rwanda's well-established, long-term strategies; therefore, changes to short-term policies will not impact project success. Additionally, the design of activities during the PPG stage will be responsive to community and institutional needs, and can, therefore, be adjusted to reflect national priorities at the time. Close collaboration with government institutions (REMA) will further ensure the project is responsive to national- and regional-level strategies, while also responding to community needs. |
| Technical design of project or program | Moderate | Limited technical capacity: Limited on-the-ground technical expertise for implementing project interventions could result in the ineffective implementation of interventions or project delays. Mitigation strategy: |

| | | |
|---|---|---|
| | | The capacity of relevant implementation partners will be strengthened via on-the-ground training, to ensure project activities are implemented and monitored effectively. This strengthened capacity will be accompanied by regular technical oversight missions undertaken by UNDP staff and/or technical advisors. |
| Institutional capacity for implementation and sustainability | Low | High turnover: High staff turnover in relevant government departments and implementing agencies may result in the loss of institutional knowledge, reduced familiarity with project details and project delays. Mitigation strategy: Technical capacity will be retained within the core government staff capacitated by the project, who will be responsible for transferring technical knowledge to new staff within government departments and implementing agencies over time. By collecting and disseminating project knowledge via official channels, technical expertise will be consolidated at the institutional level. This will be complemented by the knowledge management infrastructure established by the project, which will retain lessons learned and practices. Additionally, deputies and alternative representatives to these core staff will be appointed to ensure sufficient continuity. |
| Fiduciary: Financial Management and Procurement | Moderate | Financial sustainability: Adaptation interventions may not be financially sustained after project termination. Mitigation strategy: Training and capacity-building initiatives introduced under the project will ensure that local community members are upskilled to maintain project equipment and infrastructure |

| | | |
|---|---|---|
| | | beyond the project life cycle. Additionally, activities relating to enhanced livelihood opportunities and technical assistance will support the sustainable maintenance of restored and managed ecosystems, with additional income accrued from these livelihoods serving as an incentive for continued upkeep. Moreover, value chain-development and enhanced support for cooperatives under the project will encourage beneficiaries to save profits that can then be used to maintain project interventions in the long-term. |
| Stakeholder Engagement | Moderate | Insufficient community ownership: If a participatory, community-based approach is not employed, the project design may be ineffective as a result of limited community ownership or insufficient understanding on the part of those involved in sustainable livelihood development or land management approaches. Mitigation strategy: Community cooperatives and other community-based systems supported by the project will be capacitated to maintain introduced equipment, infrastructure and practices. This will be facilitated using existing systems of peer-to-peer learning that have a proven track record of success under other initiatives. During the PPG phase, communities will be engaged with regularly and consultations will be ongoing to ensure specific needs and concerns are addressed. This will encourage continuous community buy-in during and after implementation. |
| Other | | N/A |
| Financial Risks for NGI projects | | N/A |

| | | |
|---|---|---|
| Overall Risk Rating | Substantial | |

## C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

**1** The proposed LDCF project is aligned with GEF-8 programming themes, including: i) agriculture, food security and health; ii) water; and iii) nature-based solutions. In accordance with the GEF-8 Climate Change focal area priorities, the project will foster climate-resilient development pathways in Rwanda by supporting improved landscape management and sustainable, climate-resilient livelihoods.

**2** The private sector engagement facility established under Component 3 aligns with the GEF-8 priority to effectively engage with the private sector to deliver lasting global environmental benefits. As highlighted by the GEF-8 strategy, engagement with the private sector in Rwanda will create a transformative effect on the landscape at a faster rate and broader scale than without private sector partnerships. The private sector facility established under the proposed project will create opportunities for replication and scaling up successful activities across the rest of the country. The project will further contribute to the achievement of GEF-8 programming intentions by improving linkages between local communities and national and regional strategies. This not only increases country ownership, but also strengthens local beneficiaries' capacities to replicate successful project interventions. In addition, support for knowledge-sharing and the collection and dissemination of best practices and lessons learned will enable efficient resource-use and land management practices beyond the project lifespan. These opportunities for scaling up will also create opportunities for complementarity with future GCF projects or programmes — a priority in the GEF-8 Climate Change focal area.

**3** The proposed project has been designed using a systems-based approach that integrates components of Rwanda's core development priorities and strategies. In accordance with Vision 2050, the project will enhance the resilience of communities and sustainable development through its multifaceted interventions. The sustainable livelihoods component of the proposed project aligns with the country's goals to improve: i) human development; and ii) agriculture for wealth creation, as stated in Vision 2050. Additionally, by developing value chains and improving market access for vulnerable communities, the proposed GEF project will contribute to Rwanda's ambitions for local communities to graduate from poverty. Moreover, by connecting local communities with national and regional climate strategies under Component 1, the project will address capacity gaps at the grassroots level, complementing the Green Growth and Climate Resilience Strategy's (GGCRS) emphasis on empowering local institutions. Similarly, innovative water resource-management techniques and circular agriculture systems proposed by the project echo the goals of the GCCRS, which emphasises the need for sustainable land management and reducing pressure on forest resources — as described in Vision 2050. Component 3 of the project further complements the GCCRS by fostering green investments and private sector engagement for economic development. By establishing a private-sector engagement facility, the project aligns with both GCCRS and Vision 2050, while blending private and public resources. This alignment extends to the Nationally Determined Contribution (NDC), GCCRS and other related policies such as the Environment and Climate Change Policy, since the project's focus on enhancing adaptive capacity and resilience will contribute to Rwanda's commitment to climate

action. In particular, the proposed project aligns with the NDC's emphasis on private-sector involvement for achieving climate goals. Lastly, the project's focus on gender-responsive approaches mirrors the nation's commitment to gender mainstreaming in climate policies. Overall, the proposed project connects with Rwanda's national strategies, epitomising a comprehensive and synergistic response to climate change adaptation, sustainable development and resilience-building.

**4** The Rwanda Green Fund Law (FONERWA,2012 revised 2017) mandates that FONERWA is responsible for mobilising and managing resources to finance activities focused on mitigating and adapting to climate change. The proposed project aims to set up a private sector engagement facility (described under Component 3) under FONERWA's existing facilities (Ireme Invest and Community Adaptation Fund) to ensure the participation of MSMEs/community cooperatives in the development of sustainable, climate-resilient livelihoods via agricultural/eco-tourism/sustainable briquette production value chains.

## D. POLICY REQUIREMENTS

### Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

### Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

**Were the following stakeholders consulted during project identification phase:**

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: No

Private Sector: Yes

**Provide a brief summary and list of names and dates of consultations**

To inform the PIF development process, a number of stakeholder consultations were held with representatives from the private sector, civil society, NGOs and both national- and sub-national government stakeholders. Consultations were held both virtually and in-person, with an in-country mission held in July 2023. During the mission, a team of international project development consultants, together with representatives from UNDP and REMA, hosted a full-day workshop in Kigali — to gather inputs from national-level stakeholders in the public and private sectors. This workshop was followed by a two-day field trip covering six districts in the Southern Province, wherein regional government officials were engaged to inform the design of the proposed project. The consultation process was designed to ensure a wide range of perspectives on rural

communities' needs for improved agricultural and land management were obtained. A summary of stakeholder engaged during the PIF development process is provided in  below.

Table 8. Summary of stakeholders consulted during PIF development stage

| Date | Type of stakeholder engaged | Stakeholder(s) |
|---|---|---|
| 20 July 2023 | National government | Rwanda Environment Management Authority (REMA) |
| | | Rwanda Agriculture and Animal Resources Development Board (RAB) |
| | | Rwanda Green Fund (FONERWA) |
| | | Rwanda Water Board (RWB) |
| | | Ministry of Environment (MOE) |
| | | Ministry of Agriculture and Animal Resources (MINAGRI) |
| | | Ministry of Local Government (MINALOC) |
| | NGO | Rwanda Rural Rehabilitation Initiative (RWARRI) |
| | | Rwanda Private Sector Federation (PSF) |
| | | Natural Capital Accounting (NCA) |
| | Development agencies | United Nations Development Programme (UNDP) |
| | | United Nations Food and Agricultural Organisation (FAO) |
| | | United Nations Capital Development Fund (UNCDF) |
| 21 July | Regional authorities | Vice Mayor of Kamonyi District |
| | | Vice Mayor of Muhanga District |
| | | Vice Mayor of Huye District |
| 22 July | Regional authorities | Director of Agriculture and Natural Resources for Ruhango District |
| | | Director of Agriculture and Natural Resources for Nyanza District |
| | | Vice Mayor of Gisagara District |

Table 9. Summary of stakeholders' roles and responsibilities during the proposed project

| Stakeholder | Expected role |
|---|---|
| REMA | REMA is the implementing partner and GEF Operational Focal ministry. REMA will have central role in providing technical guidance during project implementation and will coordinate with national, regional and local-level authorities and organisations to ensure the delivery of project outcomes and outputs. |
| RAB | RAB will play a role in implementing project activities related to agriculture and agricultural practices. This will align with their role in implementing other relevant projects in the target districts. |
| RWB | RWB will play a role in implementing project activities related to agriculture and agricultural practices. This will align with their role in implementing other relevant projects in the target districts. |
| FONERWA | FONERWA will act as the Responsible Party for implementing activities under Component 3. This will entail the deployment of capital to MSME's, private enterprises, as well as providing technical assistance. |
| MoE | The Ministry of Environment is responsible for the development and dissemination of climate change and environmental policies, strategies and programmes. Representatives from the ministry will contribute to the development and validation of local-level adaptation plans and policies under Component 1. |
| MINAGRI | MINAGRI will promote the sustainable development of improve agricultural practices. This will align with their role in implementing other relevant projects in the target districts. |
| MINALOC | MINALOC will play a coordinating role with district governments during the implementation of district-level activities. |
| Non-governmental organisations (i.e. RWARRI, PSF and NCA) | During project implementation, various NGOs will be engaged to provide insight on best practices and lessons learned for strengthening sustainable livelihoods, climate-resilient value chains, ecosystem restoration and enhancing access to finance the public-private partnerships.<br><br>RWARRI will provide insight regarding best practices for strengthening sustainable livelihoods and implementing national and global policies that lead to positive economic, social and technological transformation in rural areas.<br><br>PSF will assist with identifying suitable private-sector partners for the project, provide guidance on the establishment of climate resilient value chains and assist local-level stakeholders in accessing both global and local markets. |

| | |
|---|---|
| | NCA consultants will provide advice regarding best practices and lessons learned for incorporating the value of natural capital into public and private sector policies and decision-making. |
| Regional authorities | Regional authorities, including mayors and vice mayors in each target district, will play a supporting role in undertaking the local-level interventions. They will also participate in ensuring alignment with other projects or initiatives that are taking place in their districts. |
| Development partners | Similar to the regional authorities, development partners will play a role in ensuring alignment between the proposed interventions and other ongoing adaptation or development efforts. |

During the PPG stage, additional consultations with a range of stakeholders will be required to further refine the proposed project design. Accordingly, a stakeholder assessment and engagement plan will be developed. Given the cross-sectoral nature of climate change adaptation in Rwanda, the stakeholder engagement plan will need to: i) identify and map key stakeholders; ii) determine their role in the project; and iii) develop a coordination strategy. Additionally, an environmental and social management plan (ESMP) will be developed in line with GEF and UNDP requirements to ensure that social and environmental standards are upheld throughout the project's lifespan. This strategy will also prioritise engagement with women and youth, to ensure their participation throughout the project.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

### Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

### Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

| PIF | CEO Endorsement/Approval | MTR | TE |
|---|---|---|---|
| High or Substantial | | | |

## E. OTHER REQUIREMENTS

### Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

## ANNEX A: FINANCING TABLES

### GEF Financing Table

**Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

| GEF Agency | Trust Fund | Country/ Regional/ Global | Focal Area | Programming of Funds | Grant / Non-Grant | GEF Project Grant($) | Agency Fee($) | Total GEF Financing ($) |
|---|---|---|---|---|---|---|---|---|
| UNDP | LDCF | Rwanda | Climate Change | LDCF Country allocation | Grant | 18,048,624.00 | 1,624,376.00 | 19,673,000.00 |
| **Total GEF Resources ($)** | | | | | | **18,048,624.00** | **1,624,376.00** | **19,673,000.00** |

### Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

300000

PPG Agency Fee ($)

27000

| GEF Agency | Trust Fund | Country/ Regional/ Global | Focal Area | Programming of Funds | Grant / Non-Grant | PPG($) | Agency Fee($) | Total PPG Funding($) |
|---|---|---|---|---|---|---|---|---|
| UNDP | LDCF | Rwanda | Climate Change | LDCF Country allocation | Grant | 300,000.00 | 27,000.00 | 327,000.00 |
| **Total PPG Amount ($)** | | | | | | **300,000.00** | **27,000.00** | **327,000.00** |

Please provide justification

### Sources of Funds for Country Star Allocation

| GEF Agency | Trust Fund | Country/ | Focal Area | Sources of Funds | Total($) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| | | Regional/ Global | | | |
| **Total GEF Resources** | | | | | **0.00** |

## Indicative Focal Area Elements

| Programming Directions | Trust Fund | GEF Project Financing($) | Co-financing($) |
|---|---|---|---|
| CCA-1-1 | LDCF | 9,024,312.00 | 33550000 |
| CCA-1-2 | LDCF | 2,578,375.00 | 9585714 |
| CCA-1-3 | LDCF | 6,445,937.00 | 23964286 |
| **Total Project Cost** | | **18,048,624.00** | **67,100,000.00** |

## Indicative Co-financing

| Sources of Co-financing | Name of Co-financier | Type of Co-financing | Investment Mobilized | Amount($) |
|---|---|---|---|---|
| GEF Agency | UNDP | Grant | Investment mobilized | 1000000 |
| Recipient Country Government | Rwanda Environment Management Authority (REMA) | In-kind | Recurrent expenditures | 2500000 |
| Recipient Country Government | Ministry of Environment | In-kind | Recurrent expenditures | 2000000 |
| Recipient Country Government | Local Administrative Entities Development Agency (LODA) | In-kind | Recurrent expenditures | 2500000 |
| Recipient Country Government | Rwanda Water Board(RWB) | In-kind | Recurrent expenditures | 5000000 |
| Recipient Country Government | Rwanda Forestry Authority(RFA) | In-kind | Recurrent expenditures | 1500000 |
| Recipient Country Government | Rwanda Green Fund(FONERWA) | In-kind | Recurrent expenditures | 3500000 |
| Recipient Country Government | National Land Authority(NLA) | In-kind | Recurrent expenditures | 1000000 |
| Recipient Country Government | Rwanda Agriculture and Animal Resources Development Board(RAB) | In-kind | Recurrent expenditures | 10000000 |

| | | | | |
|---|---|---|---|---|
| Recipient Country Government | Kamonyi District | Public Investment | Investment mobilized | 7800000 |
| Recipient Country Government | Ruhango District | Public Investment | Investment mobilized | 3200000 |
| Recipient Country Government | Muhanga District | Public Investment | Investment mobilized | 4000000 |
| Recipient Country Government | Nyanza District | Public Investment | Investment mobilized | 5100000 |
| Recipient Country Government | Huye District | Public Investment | Investment mobilized | 4000000 |
| Recipient Country Government | Gisgara District | Public Investment | Investment mobilized | 9000000 |
| Private Sector | Kinazi | Public Investment | Investment mobilized | 1000000 |
| Private Sector | One AcreFund – Tubura | Public Investment | Investment mobilized | 1000000 |
| Private Sector | Private Sector Federation(PSF) | In-kind | Recurrent expenditures | 1000000 |
| Donor Agency | FAO | Public Investment | Investment mobilized | 1000000 |
| Donor Agency | IFAD | Public Investment | Investment mobilized | 1000000 |
| **Total Co-financing** | | | | **67,100,000.00** |

Describe how any "Investment Mobilized" was identified

- LODA co-financing comes from support provided in the project districts for strategic planning, resource mobilization, local economic development and implementation of social protection projects.
- RWB, RFA and NLA co-financing comes from the water resource, forest and land management projects these institutions are implementing in the project area.
- RAB co-financing derives from projects under implementation that increase agriculture and animal resource productivity and quality.
- District co-financing (Kamonyi, Ruhango, Muhanga, Nyanza, Huye and Gisagara) comes in the form of adaptation projects under each districts' jurisdiction.
- Kinzai co-financing is supplied by their work to supply smallholder farmers with agricultural inputs for casava farming.
- One Acre Fund co-financing is provided by their work with small holder farmers to improve crop yield and achieve food security and economic growth in the project area.

- FAO and IFAD co-financing will derive from each institution's implementation of agricultural projects within the project area

## ANNEX B: ENDORSEMENTS

### GEF Agency(ies) Certification

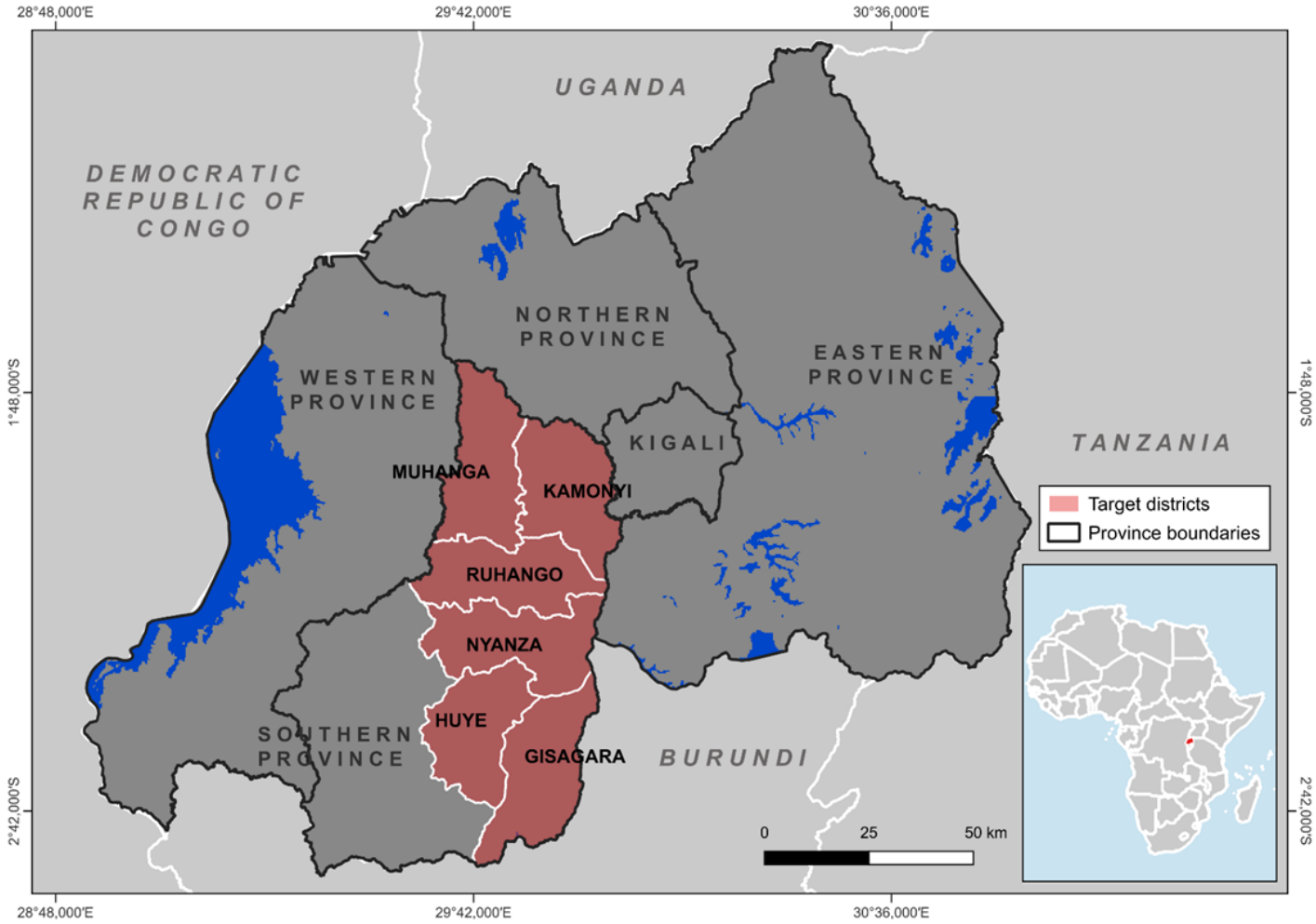
| GEF Agency Type | Name | Date | Project Contact Person | Phone | Email |
|---|---|---|---|---|---|
| GEF Agency Coordinator | Pradeep Kurukulasuriya | 10/17/2023 | | | pradeep.kurukulasuriya@undp.org |
| Project Coordinator | Muyeye Chambwera | 10/17/2023 | | +251912503320 | muyeye.chambwera@undp.org |

### Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

| Name | Position | Ministry | Date (MM/DD/YYYY) |
|---|---|---|---|
| Juliet Kabera | Director General | Rwanda Environment Management Authority (REMA) | 11/27/2023 |

## ANNEX C: PROJECT LOCATION

**Please provide geo-referenced information and map where the project interventions will take place**




## ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

**(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.**

| Title |
| --- |
| Rwanda LDCF Pre-SESP document |

## ANNEX E: RIO MARKERS

| Climate Change Mitigation | Climate Change Adaptation | Biodiversity | Land Degradation |
| --- | --- | --- | --- |
| No Contribution 0 | Principal Objective 2 | No Contribution 0 | Significant Objective 1 |

## ANNEX F: TAXONOMY WORKSHEET

| Level 1 | Level 2 | Level 3 | Level 4 |
|---|---|---|---|
| Influencing Models | Transform policy and regulatory environments | | |
| | Strengthen institutional capacity/decision-making | | |
| | Convene multi-stakeholder alliances | | |
| Stakeholders | Indigenous peoples | SMEs | |
| | Beneficiaries | Individuals/entrepreneurs | |
| | Private sector | Community Based Organisation | |
| | Local communities | Non-Governmental Organisation | |
| | Civil society | Information Dissemination | |
| | Type of engagement | Partnership | |
| | Communications | Consultation | |
| | | Participation | |
| | | Awareness-raising | |
| Capacity, Knowledge and Research | Capacity Development | Knowledge Management | |
| | Enabling Activities | Capacity Development | |
| | Knowledge Generation and Exchange | Adaptive management | |
| | Learning | Theory of change | |
| | Knowledge and Learning | | |
| Gender Equality | Gender mainstreaming | Beneficiaries | |
| | | Women groups | |
| | Gender results areas | Access to benefits and services | |
| | | Participation and leadership | |
| | | Capacity development | |

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| Focal Areas/Theme | Integrated Programs | Food security in Sub-Sahara Africa | Resilience (climate and shocks) |
| | | Food systems, land use and restoration | Land and soil health |
| | | | Integrated land and water management |
| | | | Small and medium enterprises |
| | | | Landscape restoration |
| | | | Comprehensive land use planning |
| | Land degradation | Sustainable land management | Restoration and rehabilitation of degraded lands |
| | | Land degradation neutrality | Sustainable livelihoods |
| | | | Income generating activities |
| | | | Improved soil and water techniques |
| | | | Sustainable pasture management |
| | | | Land productivity |
| Focal Area/Theme | Climate change | Climate Change Adaptation | Least developed countries |
| | | | Climate resilience |
| | | | Ecosystem-based Adaptation |
| | | | Community-based adaptation |
| | | | Livelihoods |