How was GCF investment criteria applied to the Rwanda's GCF approved project:

"Strengthening climate resilience of rural communities in Northern Rwanda"

A proposal from the Ministry of Environment to the Green Climate Fund



Improved management of land and forest areas contributing to increased climate resilience and emissions reductions

Strengthened adaptive capacity and reduced exposure to climate risks

Watershed restored and agricultural practices resilient to climate change

Increased productivity of forest resources and reduced deforestation

Reduced exposure of human settlements to flooding and landslides

Successful adaptation and mitigation approaches communicated and mainstreamed at the national level



Watershed protection and climate resilient agriculture

Community based adaptation Slope stabilisation Protective forestry Agro-forestry Climate resilient agriculture Strengthening local extension services Weather and climate services Pest monitoring, surveillance and IPM

Sustainable forest management and sustainable energy

Sustainable forest management Strengthen forest management skills Improve small farmer woodlots Strengthen forest products and services Efficient energy for cooking Energy efficiency measures at Mulindi tea factory

Climate resilient settlements

Improve surface water management around settlements Rainwater capture and harvesting Construction of green social housing developments for vulnerable families living in high risk zones

Knowledge transfer and mainstreaming

Communicate Iresults and essons learned Awareness building and advocacy to support replication and scale up Institutional capacity building Mainstream forestry, watershed, CRA energy efficiency iapproaches

Project interventions to increase climate resilience

Degradation of the Muvumba watershed accelerated by climate change and local communities have low adaptive capacity

Productive forest resources are degraded and poorly managed

Rural population living in houses and areas susceptible to landslides and flooding with limited access to water and other essential services

Limited mainstreaming of climate concerns into policies, plans and programmes

Low resilience of critical export crops, tea and coffee, to rising temperatures and unpredictable rainfall patterns

slopes, shallow soils with low fertility

High erosion from

Poor quality forests and high levels of deforestation from high demand for bioass for household energy needs

Increasing number of people living in areas at risk from flooding and landslides

Inadequate planning and capacity to respond to climate change

Low awareness and skills in low climate resilient practices

Sub-optimal farming practices leading to land degradation and higher vulnerability to climate change

> High population pressure and shortage of land

Lack of financial resources to support climate adaptation

Erosion of household assets. increasing climate vulnerability, spiralling poverty

Drivers of climate vulnerability

Baseline scenario

Key Assumptions

External factors

- District managers commit to including project targets in AAPs and imihigos
- Communities supportive and adopt improved practices

Increasing climate variability. Floods and

landslides, dry spells and drought

- Forest owners and workers commit to forest renewal and best practice
 Subsidies are sufficient to motivate households to invest in rainwater harvesting and efficient energy for cooking Tea factory owner and managers support and invest in efficiency measures
- Programme implementation
- The TA team recuited has the skills and the relevant contextual understanding to implement project
- Funds disbursed in timely manner at all levels Project monitors its progress and makes changes as needed
- Suitably qualified service providers are available and procured in a timely manner

Causality

- Technologies and approaches applied successfully, yield positive results and stimulate demand
- Policy makers and planners receptive and responsive to mainstreaming approach and endorse and adopt new approaches

Risks

- Low capacity of farmers and communities to invest in adaptation actions where public benefits dominate jeopardises project objectives
- 6 years is insufficient time to prove adaptation benefits
- High costs of improved cooking technologies deter households from investing.

High levels of pervaisve poverty and high dependence on rainfed

agriculture which constrains household adaptive capacity

- Operational targets for each component not included in District Imihigo framework Project activities then become deprioritised by District staff and activities are not delivered to time/quality, and capacity to manage the activities is not developed.
- Contracted service providers maintain BAU and do not follow best practice. This would severely impact on the adaptation and mitigation potential because many of the results depend on the uptake of improved technologies and approaches. This would also compromise the project's value for money.

Rationale for an integrated approach

- Rural households experience multiple impacts from climate change
- Climate threats are <u>exacerbated</u> by erosion, deforestation and a lack of water storage capacity
- Climate <u>vulnerability</u> links to pervasive poverty and a high dependence on natural resources and in particular, rainfed agriculture.
- No singular or sectoral solution to climate change for households living in the target area
- An <u>integrated watershed management</u> approach was considered the most effective adaptation measure for vulnerable rural households
- Tackling climate change at the watershed, community and household levels therefore required <u>multiple</u>, integrated interventions

High impact potential

- Significant impact on adaptive capacity and resilience among vulnerable groups as well as increased awareness of climate threats and risk-reduction processes.
- Mitigation interventions target high emission sectors and so also have high impact potential.
 - No. of direct beneficiaries is estimated to be at least 150,000
 - This includes:
 - 125,680 people that will benefit from biogas and improved cook stoves
 - 27,456 people benefitting from rainwater harvesting
 - 93,826 people benefitting improvements to surface water management
 - 49,733 people benefitting from agro-forestry
 - 3,960 people trained to establish community tree nurseries
 - 1,080 people trained in woodlot management
 - 405 people supported to engage in beekeeping
 - 108 people trained in forest management
 - 117 people participating in learning exchange visits
 - 580 construction jobs in Kabeza and Kaniga
 - 13,000 smallholders benefiting from tea and coffee mainstreaming interventions

Note: there is overlap as many individuals and households will benefit from more than one intervention

Key Potential Impact Indicator

GCF core indicators

Ref.: Methodology based on Second national communication of Rwanda (2012) and IPCC guidelines and emission factors, with global warming potential (GWP) taken from IPCC AR5 (2013)

	Expected tonnes of carbon dioxide equivalent (t CO ₂ eq) to be reduced or avoided (Mitigation only)	Annual	45,620 t CO ₂ eq (annual savings, averaged over the 6 years of project)
		Lifetime	273,720 tCO ₂ eq over the project lifetime (6 years)
	Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience); Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)	Total	150,000 direct beneficiaries (incl. 78,450 women) and 381,465 indirect beneficiaries
		% Percentage	96% (incl. 52.3% women) of the population living in the 9 target sectors (150,000 / 156,008)

Paradigm shift potential

Transferability of successful project interventions

- The climate vulnerabilities and low adaptive capacity observed in Gicumbi are to varying degrees typical to other districts in Rwanda.
- The Project supports the implementation and operationalization of several key national policies and strategies, including the GGCRS (and the NDCs), the NAPA and the NAMA.
- The GCF investment will <u>strengthen the technical capacity</u> of key government agencies, local NGOs, cooperatives and other key stakeholders to support new climate-resilient approaches and technologies and respond to climate change.
- Channeling funds directly through MOE which is mandated to <u>coordinate</u> <u>climate projects nationally and partner GoR agencies</u> at the sector and local levels significantly increases the potential for knowledge and capacity development.

Sustainable development potential

- **Economic co-benefits:** Ecosystem based approaches to mitigate and adapt to climate change targeting:
 - Households/communities to address current climate threats to <u>rain-fed agricultural production</u> and improve food security;
 - Off-farm employment opportunities with associated increase in skills within the rural workforce with potential to reduce poverty levels.
- Social co-benefits including gender-sensitive development impact: Interventions target some of the poorest and most vulnerable households in Rwanda and investments are expected to generate significant social benefits for local communities:
 - Reduced health problems associated with indoor pollution/access to clean water;
 - Reduced number of deaths, injuries, livestock losses and damage to housing from extreme weather events.
- Environmental co-benefits: Investments target restoration of degraded habitats and improve the management of natural resources and are expected to generate a wide range of environmental benefits that include:
 - Improved soil quality, water retention capacity and increased agricultural productivity;
 - Improved biodiversity and preservation of ecosystem services in critical watersheds.
- SDGs: 1,2,3,4,5,6,7,8, 11, 13 and 15

Needs of the recipient

- Lack of financial resources to adequately address climate threats:
 - The total additional capital costs of shifting to climate resilient and low carbon development pathways outlined in the (Green Growth and Climate Resilient Strategy (GGCRS) have been estimated to be around USD 2.7 bn (cumulative to 2030) compared to business as usual across three key sectors (water, agriculture, energy)
- Districts and MOE receive relatively low levels of budget support and the limited availability of private funds highlights the need for additional external finance.
- Targeted approaches are required to build capacity for CCD planning, budgeting, mainstreaming and proposal development at national and sub-national levels.
 - A coordinated, and systematic approach to capacity building, planning and resource mobilization is required within and across sectors and districts.
 - The involvement of Ministry of Finance/Fund for Environment and Climate change and capacity building and awareness raising will increase understanding of climate threats within key government agencies with potential to unlock resource flows to support climate action.

Country ownership

- Rwanda's commitment to tackle climate change and its implications for development and green growth is widely recognized and there is strong ownership for the climate agenda.
- The Green Growth and Climate Resilient Strategy (GGCRS) is central to achieving the government key development target of becoming a developed climate-resilient, low-carbon economy by 2050.
- This proposal has been developed in consultation with a wide variety of stakeholders at the national, sectoral and local levels and includes provision for their future engagement in accordance with GCF's environmental and social safeguards and stakeholder consultation guidelines.

Efficiency and effectiveness

- Co-financing: Only requires details of co-financing for mitigation interventions (Section E.6.2 on the GCF FP template)
 - Mitigation co-financing was 17% (community contribution included) calculated at 52% of the project's mitigation budget.
 - There is a large amount of adaptation co-financing for the project at 19%, but reporting was not required.
- All interventions have a positive benefit to cost ratio (>1) and a highly positive net present value, demonstrating the economic rate of return is high and that the project has a strong economic viability. But, many of the economic benefits are in non-market sectors (i.e. environmental and social benefits).

Sub-component	Benefit to Cost ratio (10% DR)
Energy (biomass)	6.5
Forests	1.3
Ecosystems	2.8
Climate resilient tea and coffee	2.0
Energy efficiency industry (tea)	8.2

- The analysis has also undertaken a full marginal abatement cost analysis, which has assessed the financial present value cost per tonne of CO2eq. The overall project cost-effectiveness, for the mitigation components, is USD-3.4/tCO2eq (as the financial present value, 10% discount rate).
- Component 4 provides resources to ensure that the project approaches are mainstreamed into policies, programmes and practices across the country, including in sector development plans
 - Mainstreaming activities will leverage on sector development budgets (Government and overseas development assistance)

