



**AFRICA DEVELOPMENT  
ENVIRONMENT FACILITY  
PROJECT DOCUMENT**

**BANK/GLOBAL**

**PROJECT TITLE: Increasing the adaptive capacity of vulnerable Rwandan communities to adapt to the adverse effects of climate change: Livelihood diversification and investment in rural infrastructures.**

**PROJECT SYMBOL: GCP/RWA/0xx/GFF**

Recipient Country: Rwanda

Resource Partner: Global Environment Facility. LDCF

AfDB project ID: xxxxxx

GEF Project ID: 5495

Executing Partner (s): The National Fund for Environment and Climate Change (FONERWA)

Expected EOD (starting date): 1 January 2016

Expected NTE (End date): 31 December 2020

Contribution to AfDB's Strategic Framework	Strategic Objective 2: Green growth: To ensure that inclusive growth is sustainable by helping Africa gradually transition to green growth that will protect livelihoods, improve water, energy and food security, promote the sustainable use of natural resources and spur innovation, jobs creation and economic development.
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GEF Strategic Objectives:

CCA-1 (Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change) and CCA-2 (Strengthen institutional and technical capacities for effective climate change Adaptation).

Environmental Impact Assessment Category: The project does not require EIA, although it falls under operational safeguard 1 – Environmental and Social assessment of AfDB integrated safeguard system.

Financing Plan:

**GEF allocation (USD):**

<i>LDCF:</i>	<i>US\$ 8,824,749</i>	<b>8,824,749</b>
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**Co-financing (USD):**

<i>African Development Bank - Loan</i>	<i>US\$ 23,471,000</i>	
<i>African Development Bank - Grant</i>	<i>US\$ 17,983,000</i>	<b>45,386,000</b>
<i>Government of Rwanda</i>	<i>US\$ 3,932,000</i>	

<b>Total Budget:</b>		<b>54,210,749</b>
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## EXECUTIVE SUMMARY

**Global Environmental Objective:** Increase resilience to the adverse impacts of climate change in Western Rwanda, through livelihoods diversification leading to a reduction of expected socio-economic losses associated with climate change and variability.

**Project Objective:** To facilitate diversification of livelihoods away from traditional agricultural activities so as to most efficiently utilize the new infrastructure created by an electricity rollout programme, and consequently increase resilience to the negative impacts of climate change.

### Description of Project Area:

The project will be implemented in the 3 districts; Rusizi, Nyamasheke and Karongi. Poverty rates for these three districts are in the lowest two groups - Nyamasheke and Karongi have poverty rates of 55-73% while Rusizi has poverty rates of 39-54%. Karongi and Nyamasheke are also among the three poorest districts in the country.

High rates of poverty amongst a population that heavily relies on agricultural primary production means that people have few livelihood alternatives when they incur agricultural losses. Similarly, this population has fewer reserve assets or alternative livelihoods that they can turn to when agricultural production becomes unreliable. According to the National Institute of Statistics of Rwanda's 2010/2011 assessment on evolution of poverty, the Western Province ranked 2<sup>nd</sup> poorest, with poverty rates of 48.4% against the national average of 44.9% (NISR 2013). This makes the Province far more susceptible to livelihood disruptions such as those related to floods and landslides, which are both more common in the context of increasing climate variability.

District	2012 Population			Population Change (2002- 2012)	Sex Ratio	Average Annual Growth Rate (2002-2012)	Population Density
	Male	Female	Total				
Karongi	155,887	175,684	331,571	18.9	89	1.7	334
Rusizi	194,310	210,402	404,712	21.9	92	2.0	422
Nyamasheke	179,023	204,115	383,138	17.9	88	1.7	326

Source: NISR 2013

The project will target 18 sectors (6 sectors in each district), with approximately 110,000 HH. This will allow for intensification of activities to create visible impact of the project.

### Summary of Project Strategy:

Project components, outcomes and activities are summarized in the table below.

<b>Project Objective:</b> Increasing the adaptive capacity of vulnerable Rwandan communities to adverse effect of climate change through livelihood diversification and investment in rural infrastructure		
Component	Outcomes	Outputs
Enhanced and diversified climate resilient rural livelihoods	Outcome 1.1: Diversified, strengthened and climate resilient rural livelihood opportunities for vulnerable women and men.	1.1.1. 110,000 HH with enhanced, understanding and awareness of livelihood opportunities resulting from electrification
		1.1.2: At least 110,000 HH with increased capacity to participate in market-oriented enterprises
		1.1.3: Nine value chain development creating and linking demand to supply
		1.1.4: 30% of women and 20% of youth involved in off-farm enterprises and increased income of at least 50%
Strengthening awareness and ownership of	Outcome 2.1: Community driven adaptation and reduced vulnerability to climate change	2.1.1: Eight trainings on knowledge and understanding of the social dimensions of vulnerability and resilience to climate change conducted.

<b>Project Objective:</b> Increasing the adaptive capacity of vulnerable Rwandan communities to adverse effect of climate change through livelihood diversification and investment in rural infrastructure		
<b>Component</b>	<b>Outcomes</b>	<b>Outputs</b>
adaptation and climate risk reduction processes		2.1.2: Eight (2 per year) awareness campaigns on climate change impacts and promotion of gender-responsive climate adaptation conducted
		2.1.3: Four trainings for district administrations and communities on coordination and support on climate-resilient development planning at the local level conducted.
		2.1.4: Six community based planning, implementation and monitoring adaptation programmes implemented.
Climate resilient small-scale rural infrastructure	Outcome 3.1: Increased resilience of small scale rural infrastructure to climate change	3.1.1: 1 market built to a specification that takes into account anticipated climate risks
		3.1.2: Six markets upgraded and 30% of space allocated to women and 20% to youth
		3.1.3: Four training for District engineers and local contractors on climate risks on the design and construction of small-scale rural infrastructure conducted and modules developed for polytechnic
Monitoring and Evaluation	Outcome 4.1: M&E management and lessons learnt are captured and appropriately disseminated	4.1.1: Six knowledge adaptation products developed documented and disseminated.
		4.1.2: Two adaptation practitioners' events attended and evidence of incorporating lessons into the project
		4.1.3: Timely, 4 Annual reports and MTE, TE carried out and reported

#### **Summary of End of Project Results:**

- More than 20% increase in households income from off-farm electricity supplied enterprises
- Less than 10% post harvest loss of grains, due to establishment of small-scale rural infrastructure
- 80% of communities aware of livelihood options from electricity connectivity
- Over 30% of women and 20% of youth have increased income form new enterprises
- 80 % of Households with knowledge on new enterprises and are involved
- At least 15 community groups with capacity to plan, implement and monitor climate adaptation programmes
- At least 6 markets (2 per District) upgraded with allocation by gender and age
- At least 9 post harvest infrastructures built and operational
- At least 50% of engineers trained and utilizing guidelines on climate risks
- Set of indicators for monitoring community vulnerability agreed and being actively used
- At least 6 main knowledge products developed and evidently being used in training

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## ACRONYMS

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AfDB	The African Development Bank
AMAT	Adaptation Monitoring and Assessment Tool
DDP	District Development Plan
DRC	Democratic Republic of Congo
EDPRS-II	Economic Development and Poverty Reduction Strategy II 2013-2018
FONERWA	National Fund for Environment and Climate Change
FSP	Full Size Project
GEF	Global Environmental Facility
GoR	Government of Rwanda
LDCF	Least Developed Countries Fund
MINIRENA	Ministry of Environment and Natural Resources
M&E	Monitoring and Evaluation
NAPA	National Adaptation Programmes of Action
NCCP	National Climate Change Policy
PAR	Project Appraisal Report
PIF	Project Identification Form
PPG	Project Preparation Grant
REMA	Rwanda Environmental Management Authority
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training

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## SECTION 1: RELEVANCE

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### 1.1 CONTEXT

#### 1.1.1 National Context

In Rwanda, degradation of the environment and ecosystems is a phenomenon caused by both the anthropogenic activities and climate disturbances. The intensity and frequency of climate hazards and their harmful effects are emphasized by the topographical structure unique to Rwandan territory, a country particularly characterized by a very accidental relief and consequently very sensitive to erosion and landslides. The rural economy of Rwanda is mainly agricultural and high-density population zones are currently characterised by overexploitation of land and a vegetation cover severely altered the climate of the country is temperate to subtropical, with two rainy seasons and two dry seasons each year.

#### 1.1.2 Environmental and climate change context

1. Rwanda has a high risk of climatic and hydrological hazards (droughts, storms, floods and associated landslides). Analysis of rainfall trends indicate that rainy seasons are tending to become shorter and with higher intensity. This tendency has led to decreases in agricultural production and events such as droughts in traditional dry areas and floods or landslides in areas experiencing heavy rains. Heavy rains have been observed in the northern and western provinces. Heavy rains cause floods, washouts, and inundation of low-lying areas. For example, in the eastern region of the country rain deficits are common. Observations between 1961 and 2005 showed that the period between 1991 and 2000 has been the driest since 1961. These observations showed a marked deficit in 1992, 1993, 1996, 1999 and 2000 with rainfall excesses in 1998 and 2001 (MINITERE 2006)<sup>1</sup>.

#### 1.1.3 The Districts: Pilot sites –Socio Economic

2. A participatory selection process was conducted during stakeholder workshop. It included extensive consultations with the District Executive Committees to identify priority issues and possible project areas. This was followed by further consultation with community structures (Agriculture Extension Planning Areas, and Traditional Authorities), to confirm areas where the baseline investments (described in section 1.2) were active, and where there were resources under threat from climate risk.
3. The project will be implemented in three districts of Karongi, Nyamasheke and Rusizi. A summary of the Districts socio-economic profiles are as summarised in Table 1

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<sup>1</sup> MINITERE (2006). National Adaptation Programmes of Action (NAPA) To Climate Change. Ministry Of Lands, Environment, Forestry, Water and Mines (MINITERE), Kigali.



Description	Participating Districts		
	Karongi District	Nyamasheke District	Rusizi District
	and 11.5% of total households earn wages from agriculture. The export cash crops of coffee, tea and macadamia are produce, while food crops include maize, sorghum, beans, soya beans, peas, Irish potatoes, bananas, cassava, wheat, vegetables and fruit trees. Livestock such as cows, sheep, goats, pigs and poultry are reared in the rural areas, while bee-keeping and fish farming are encouraged, but are not very well developed.	independent farmers. Livestock sub sector is also notable with 12.2% of households in possession of a cow provided through either the "One Cow" program or through not for profit organizations.	provides ample opportunity in cross-border trade, and has provided capital for numerous development projects within the district
Poverty	High levels of poverty are witnessed in the district, that is, 61.7% poverty rate, and 39.8% extreme poverty rate.	Poverty is very high in Nyamasheke District (second highest in the country), with 63.4% of the population under the poverty line, whereas poverty reduced in Rwanda from 56.9% to 44.9% between 2007 and 2011.	Poverty rate is 45 against the national 44.9
Socio-economic Challenges	<ul style="list-style-type: none"> <li>Isolated habitat in the district, leading to low levels of development of settlements (Imudugudu) and difficulty in accessing social amenities such as schools, health facilities, clean drinking water, waste management facilities, etc.</li> <li>Poor infrastructure (including low access to electricity at only 2.8%, ICT, water and sanitation) and undeveloped tourist sites</li> <li>Small land size (57.9% of households have less than 0.5 ha) vis-à-vis the number of farmers, leading to low productivity</li> <li>Need for value addition of agricultural and livestock products, accompanied by creation of off-farm jobs</li> <li>Very high dependency on wood energy (99.9%)</li> <li>Low education levels and high drop-out rates of students</li> <li>Disabled persons head 21.7% of households.</li> </ul>	<ul style="list-style-type: none"> <li>Low productivity of agriculture, especially from poor quality of soils and unfavorable climatic conditions</li> <li>Lack of diversification as more than 70% are still employed in unproductive agriculture</li> <li>Disaster risks to livelihoods – loss of lives from mud/landslides and impassable roads affecting economic activities</li> <li>Inadequate settlement patterns (such as isolated rural housing) that hamper provision of basic services and increase vulnerability to disasters</li> </ul>	<ul style="list-style-type: none"> <li>Low productivity of agriculture, especially from unfavorable climatic conditions</li> <li>Lack of diversification as more than 70% are still employed in unproductive agriculture</li> <li>Inadequate settlement patterns (such as isolated rural housing) that hamper provision of basic services and increase vulnerability to disasters</li> <li>Isolated habitat in the district, leading to low levels of development of settlements (Imudugudu) and difficulty in accessing social amenities such as schools, health facilities, clean drinking water, waste management facilities, etc.</li> <li>Degraded natural resources like watershed, wetland, lakes and river band.</li> <li>Lack of financial capital to initiate off farm enterprises.</li> </ul>

Description	Participating Districts		
	Karongi District	Nyamasheke District	Rusizi District
Analysis	<p>Karongi District has been observed as the third poorest district in the Western Province, a situation which is increased by steep topographic features that hamper access to social amenities and infrastructure. In addition, agriculture, the main economic activity in the district, is adversely affected by soil erosion arising from the steep topography.</p> <p>The purpose of this project, which links climate change adaptation to last-mile connectivity, has the potential to address the high dependency on agriculture in the district, which is characterized by low productivity. Specifically, this project may contribute to tourism development in the district, which has great potential, and provides a ready market for local agricultural and livestock products. For these products to sustainably supply the tourist sites, however, activities related to value addition are required so as to promote off-farm activities and provide opportunities for employment.</p>	<p>Productivity and employment is one of the thematic areas under the ‘District-led development principle’ as presented in EDPRS2, where an increase in off-farm employment is encouraged, with an aim of about 50% of the population engaged in non-farm employment by 2018. Off-farm agriculture-related activities may arise from the commercialization of agriculture, and improvement of post-harvest handling and storage services.</p> <p>The baseline rural electrification project addresses a key development constraint of low rate of electricity access. In line with the District focus, the project’s emphasis on trading centres encourages the uptake of electricity as well as supporting off-farm agriculture-related activities. However, the appropriate use of electricity for productive and income-generating purposes has been identified as a critical need in the District.</p>	<p>The socio-economic indicators of Rusizi district are not too far off from the national average. In addition, the District’s proximity to Burundi and DRC presents great opportunities for cross-border trade. This opportunity so far remains largely untapped, yet it would provide employment opportunities and sources of income to households, and also finance the district’s development activities. The DDP also identifies ‘access to electricity’ and ‘agriculture development’ as prerequisites for integrated development, sectors that are also highlighted as priority areas for the district, and pertinent to the current project.</p>

The project will target 18 sectors (6 sectors in each district), with approximately 110,000 HH. This will allow for intensification of activities to create visible impact of the project.

#### 1.1.4 Threats – Vulnerability to Climate change

4. Current and future climate-related risks to Rwanda and key areas of vulnerability have been analyzed in the country's National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), the National Adaptation Programme of Action (NAPA) and The National Strategy on Climate Change and Low Carbon Development for Rwanda. The impacts of climate change on various sectors are briefly discussed below.
5. **Vulnerability of the Agricultural Sector:** Rwanda's national communication notes a shift in growing seasons (September-November) and (March-May). The short dry season (mid-December - mid-February) seems to disappear as indicated by the continuity of rain until the first ten days of May. This causes the delay of the March-May season. The shift confuses farmers on planting dates. As a result, they cultivate late with the risk of an early onset of the dry season, before the harvest. Consequently, lower yields, intensification of crop diseases, and reduction of irrigation water has been observed.
6. This situation is exacerbated by heavy reliance of many livelihoods on rain-fed agriculture. Over 80% of people living in Northern and Western parts of Rwanda are largely dependent on agriculture. Erosion of fertile soils from the hills results in reduced agricultural productivity while floods lead to crop losses. In Bugarama, Rusizi district, too much water due to floods destroys rice fields.
7. **Water resources vulnerability:** Intense rains lead to upstream erosion and consequent flooding of lowland areas. Bare hill-sides have low absorption and retention capacity, depriving soils of water necessary for post-rains period. This has consequent impacts of reducing crop productivity. Floods increase sedimentation of water courses and silt up the lakes. Major flood events in the recent past have occurred in 1997, 2006, 2007, 2008, 2009 and 2012. As recent as April 2015<sup>2</sup>, heavy rains caused flooding and landslides in Nyamasheke and Rubavu districts of Rwanda's Western Province. The Red Cross Society estimated that 3,425 (685 households) had been displaced and were being accommodated by nearby communities after their homes were damaged. Some 206 hectares of crops were also inundated and water supply and sanitation infrastructures floods thereby increasing the risk of water and airborne diseases.
8. **Socio-economic vulnerability:** Rwanda's population density estimated at 416 persons per square kilometer as of 2012 (RoR 2012) and projected at 445 persons per square kilometre<sup>2 (3)</sup> in 2015 according to National Institute of Statistics of Rwanda make it particularly vulnerable to the adverse effects of climate change and climate variability. Landslides cause destruction of structures including homes, buildings, roads and bridges while floods cause displacements of populations.

#### Socio-economic factors of vulnerability

- High population density
- High reliance of agriculture
- High poverty rates

*Text*

*box 1: Socio-economic factors of vulnerability*

9. High rates of poverty amongst a population that heavily relies on agricultural primary production means that people have few livelihood alternatives when they incur agricultural losses. Similarly, this population has fewer reserve assets that they can turn to when agricultural production becomes unreliable. According to the National Institute of Statistics of Rwanda, as of 2010/2011 assessment on evolution of poverty, the Western Province ranked 2<sup>nd</sup> poorest, with poverty rates of 48.4% against a national average of 44.9% (NISR 2013). This makes the Province far more susceptible to livelihood disruptions such as those related to floods and landslides.

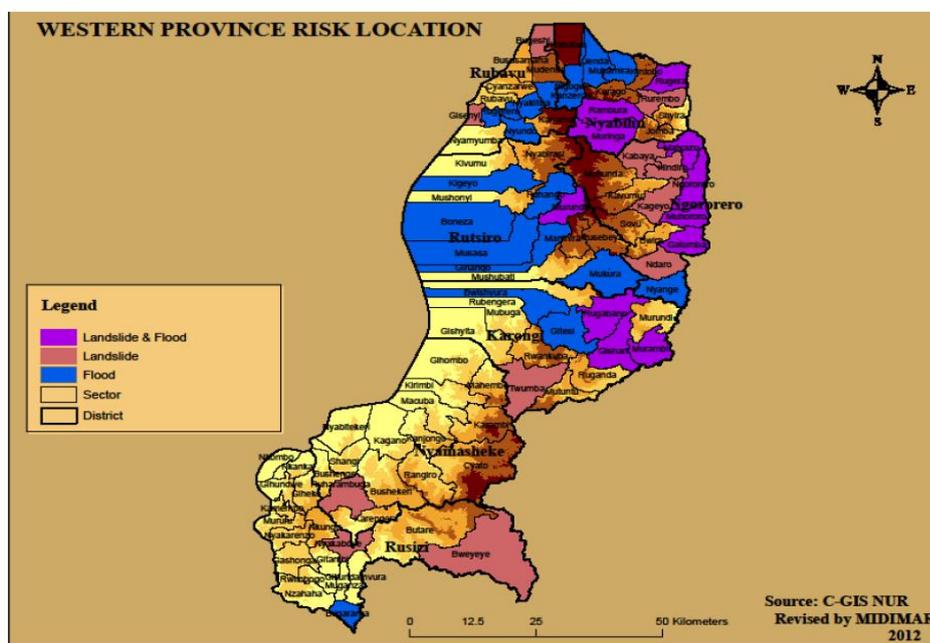
<sup>2</sup> <http://reliefweb.int/disaster/fl-2015-000042-rwa>

<sup>3</sup> <http://www.statistics.gov.rw/>

### 1.1.5 Impacts of climate change

10. Although Rwanda is not immune to droughts, it is the irregularity in the timing and intensity of rainfall that has raised the biggest concern. As indicated in the NAPA, Soil degradation, floods and landslides trigger numerous consequent impacts including crop losses.

- a) **Soil erosion and soil degradation:** The Rwanda Development Agricultural Authority (2005) estimates that 77% of Rwanda is threatened by soil erosion. In Western Province, Rwanda's NAPA (2014) picks on Nyamasheke and Karongi district due to the frequent occurrence of landslides and landslips which lead to degradation of arable land due to erosion. Soil erosion is observed to contribute to decrease in crop yields and consequently food insecurity.
- b) **Floods and Landslides** cause human injuries, loss of life, damage to buildings and infrastructure such as water supply systems, roads and bridges. Irrigation infrastructure (canals) are threatened by erosion from sediment delivery and floods. According to Rwanda Meteorology agency, heavy rains were causing floods in Bugarama valley as recent as April 2015, where damage to rice plantations was reported.



**Figure 1:** Western Province Risk Location

- c) **Crop loss:** Local community in Bugarama, Risizi District report extensive losses of rice crops due to flooding of rice paddies. A study of climate change impacts on rice production in Bugesera District revealed that rice production decrease was associated with submergence of rice fields along river Akanyaru (Rwanyiziri and Rugema 2013)

#### Impacts of Floods and Landslides on farming – based livelihoods

- Food insecurity due to reduced crop yields from low fertility precipitated by soil erosion; and loss of crops due to destruction by floods
- Limited access to markets when roads and bridges are destroyed by too much water

## 1.2 RATIONALE: LONG TERM SOLUTIONS AND BARRIERS

### 1.2.1 Long –term solution

It is a national priority to transform Rwanda's mainly agrarian economy into a middle-income country (per capita income of about US\$ 1240 by 2020, from US\$ 658 in 2012). However, with Rwanda's population projected to rise to around 16 million by 2020, its small land area and high dependence on agriculture (agriculture provides around 36% of GDP, 80% of employment and generates more than 45% of the country's export revenues) significant challenges remain particularly around food security. Rwanda's geographical location, its relief (hilly and mountainous terrain), population density (nearly 1000 people per square kilometer) and socio-economic indicators make it particularly vulnerable to the adverse effects of climate change.

The threats facing the three Districts, the broader Western province and its constituent resources are mainly climatic and anthropogenic and can be effectively addressed through joint effort between the Government of Rwanda, Joint Action Development Forum (JADF), local Communities and other stakeholders. Local communities are particularly aware of the threats to their livelihoods and acknowledge that most of the threats emanate from local resource management issues.

All the project-implementing districts have similar yet specific set of problems and circumstances. Given the low levels of economic and technological sophistication in the three districts and over reliance in agricultural as the main economic activity, the ideal situation would be to adopt alternative productive systems that would be implemented in a Community Based Adaptation (CBA) context, which is more effective in enabling climate vulnerable people to plan for and adapt to the impacts of climate change. Socio-economic solutions include the promotion of intensive agriculture, and value addition of produce. Intensive agriculture will encourage the maximum utilization of already small land sizes while value addition will encourage better returns on agricultural produce.

The long-term goal of Rwanda is to ensure sustainable utilisation of its natural resources. A holistic approach in ecosystem management is one of the tools to achieve this goal. One of the tools Healthy ecosystems play a critical role in adaptation, supplying services to support livelihoods and reinforcing development investments, helping to build resilience of livelihoods, thereby reducing vulnerability to disasters, particular climate related risks. In this context, Ecosystem-based Adaptation can directly meet the needs of Community Based Adaptation and poverty reduction initiatives. These sentiments were echoed during the stakeholders planning where each district was facilitated to come up with possible and viable options (Table 6).

An excellent opportunity has now emerged from The African Development Bank funded project; Scaling Up Energy Access Project with the objectives of improving access to electricity. The proposed LDCF project will reduce the vulnerability of current economic development and livelihoods in the three districts, through three interrelated approaches: one, diversifying and strengthening climate resilient rural livelihood opportunities for vulnerable women and men; two, strengthening awareness and ownership of adaptation and climate risk reduction processes; and three, increasing resilience of small scale rural infrastructure to climate change. The project will therefore facilitate communities to formulate, and start the implementation of community based adaptation plans, informed by detailed vulnerability assessments and technical knowledge of the risks and opportunities presented by the existing enterprises and their services. This will lead to expansion of livelihood support systems with climate smart measures.

### **1.2.2 Baseline Analysis: Programmes and Co-Financing**

The majority of approximately 9.1 million people living in Rwanda's rural areas practice agriculture as a source of livelihood. Increasing population coupled with increasing demand for cultivable land poses a threat to livelihoods as land size holdings get smaller and productivity decreases. With an additional threat of climate change impacts, rural livelihoods will have to diversify, either vertically or horizontally. Vertical diversification involves investment in value chain development on one production line in order to increase the marginal returns on production. Horizontal diversification on the other hand, entails intensification or addition of new alternatives to livelihood support. Both aim to reduce risk of business as usual livelihood support options. A good example is EDPRS-II plans to support irrigation

to cushion Rwanda's growing population from food insecurity. The Strategy regards irrigation as a panacea to not only the demand to raise agricultural yields but also prolonging growing periods in areas with dry seasons.

The African Development Bank has approved the *Scaling Up Energy Access Project* for a US\$ 45 million (loan+grant) on 26th June, 2013. The project, to be executed by Rwanda Energy Group (REG), covers 6 districts in the Northern and Western provinces of Rwanda (Rusizi, Nyamasheke, Nyabihu and Karongi districts in the Western Province and Rulindo and Gicumbi and districts in the Northern Province). The project seeks to (i) improve access to electricity for households and priority public institutions in the proposed project area and (ii) contribute to a sustained reliable electricity supply. Project interventions include: upgrading and rehabilitating the existing supply system, installing distribution networks in both provinces to connect 25,438 households and priority institutions (179 schools, 29 health centers and 25 sector administration offices). Construction is expected to be implemented over a period of 24 months after contract effectiveness and to be completed by August 2017. The baseline project provides an opportunity for enterprise development, livelihood diversification and has the potential to reduce the dependence on farming for an income. The provision of electricity for lighting, cooking and other domestic needs also has positive implications for local communities as it could reduce the use of biomass fuel supplies and enable study and work outside daylight hours.

This baseline project has been prepared in consideration of the Rwanda "Green Growth and Climate Resilient Strategy (2012-2017)" which provides for the country to embark on a climate resilient path and factor in adaptation to climate change into policy and planning. In the project design there was also consideration for the Rwanda Environment Management Authority (REMA)'s "Guidelines To Mainstream Climate Change Adaptation and Mitigation in The Energy And Infrastructure Sector" which aims to reduce the costs of infrastructure development and/ or maintenance by reducing the risk of destruction from floods, heat waves, strong winds, or secondary effects like frequent power breakdowns or road destroyed by landslides. As earlier indicated that the project entails rehabilitation and upgrading of the substations one of which is situated in a marshy area, this means climate change issues have to be considered. The Climate Change Action Plan (2010) identifies annual rainfall as increasing by up to 20% in 2050 compared to 1970 levels. This therefore makes the project susceptible to floods. However, the project design factored this in and sought to counter it by relocating the Rulindo substation to a higher ground (difference in altitude between the old and new site is 16 metres). Therefore, the substation will be located at 1: 100 year flood line. This will go a long way in making electricity supply sustainable even if adverse effects like floods happen as a result of climate change.

The on-going rollout of electricity is a key opportunity to livelihood diversification. In many instances, energy, especially electricity is a key input in facilitating vertical diversification of agricultural and non-agricultural value chains. The proposed Global Environment Facility – Least Developed Countries Fund (GEF-LCDF) is once case that seeks to take the opportunity of electrification to support livelihood diversification as an adaptation to climate change.

### **1.2.3 Relevant Government Investments and Actions**

Rwanda considers itself a leader in environment and climate change awareness. Climate change concerns are integrated in key planning documents including the National Strategy for Green growth and climate resilience and the Economic Development and Poverty Reduction Strategy-II (EDPRS-II) (for period 2013-2018). The Country's adoption of the National Green Growth and Climate Change Adaptation Strategy is a clear indicator of the importance given to climate change in GoR policy making. The strategy is supported by a fund for environment and climate change (FONERWA) to facilitate access to sustainable financing and support implementation. In its efforts to support mainstreaming environmental sustainability, GoR has prepared a Budget Call circular that includes environment and climate change mainstreaming guidelines for sectors, the increasing use of strategic environmental assessment, and successful pilots of rural 'climate proofed' settlement development.

Biomass energy efficiency is given high impetus due to recognition to its threat to forests, which form part of climate change mitigation.

**The EDPRS-II (Economic Development and Poverty Reduction Strategy) – (2013 – 2018):** considers environment and climate change as cross-cutting issues and seeks to mainstream environmental sustainability and reducing vulnerability to climate change in all sectors of development. The strategy seeks to integrate climate change adaptation and mitigation strategies in the urbanization process as well as proposes establishment of an environment and climate change innovation centre to promote transformational green innovation in the industrial and private sectors.

**The constitution:** The Constitution of the Republic of Rwanda of 04 June 2003, as amended to date constitutes the basis for the legal framework for the protection and safeguarding of environment in Rwanda.

**Organic Law on the environment:** The legal framework for the management of environment was put in place by the Government of Rwanda by the organic law Nr 4/2005 of 8 April 2005 putting in place the modalities to protect, safeguard and promote environment in Rwanda. That law governs environment in its broadest term (land, agriculture, forests, water, biodiversity, etc.). The National Environmental Policy has been in place since November 2003 and the main objective is to ensure sustainable protection and management of environment and natural resources in Rwanda

**The Vision 2020:** The proposed project is also consistent with Rwanda's National Development Vision and Strategic framework set out in the Vision 2020, which has been the main development roadmap for Rwanda since 2000. The relevant priority areas are: productive high value and market oriented agriculture; reducing dependency on agriculture; developing human resources and pursuit of a knowledge-based economy to facilitate a strategic shift from agriculture and natural resources-dependent sectors to a knowledge economy; private sector-led development. The Government of the Republic of Rwanda has set a mission of decreasing the percentage of households involved in direct exploitation of primary agriculture from 90% to 50%; setting up efficient and updated regulations which are appropriate for sustainable protection and management of natural resources and environment; decreasing within the national energy assessment rates of diseases related to environmental degradation and firewood from 60% and 94% to 50% respectively.

**Green Growth and Climate Resilience, National Strategy for Climate Change and Low Carbon Development:** This Strategy aims to guide the process of mainstreaming climate resilience and low carbon development into key sectors of the economy. The strategy has a list of planned actions that will make a significant impact on adaptation; mitigation and economic development have been identified. These include; Irrigation infrastructure; Robust road network; Centre for Climate Knowledge for Development; and Agro-forestry

**National Adaptation Programs of Action (NAPA) to Climate Change:** NAPA was developed for a number of reasons, including the evaluation of present vulnerabilities to climate change, considering the socio-economic aspects and land use that exacerbate these vulnerabilities; identification of the most vulnerable groups of population, regions and sectors; and determination of priority adaptation options, among others. The NAPA articulates Rwanda's strategy to reduce vulnerability to climate change and provides a technical basis for decision makers to prioritize action areas. The plan identifies six priority areas for immediate adaptation action. Of these six the following are related to the project; promotion of non-agricultural income generating activities and development of energy sources alternative to firewood.

**Atlas of Rwanda's Changing Environment:** The Atlas documents and quantifies environmental changes in Rwanda, starting with the presentation of Rwanda's environmental profile, which includes climate, hydrology, and forests. Synopses of Vision 2020, the Economic Development and Poverty Reduction Strategy EDPRS1 and State of the Environment 2009 Report are also presented.

**Second National Communication under the United Nations Framework Convention on Climate Change (UNFCCC):** This Report is a continuation of the Initial National Communication. On vulnerability and adaptation to climate change, climate scenarios are initially presented, where an average increase in minimum, average and maximum temperatures are predicted, an increase in rain during the wet seasons, and an increase in annual potential evapotranspiration.

**FONERWA:** FONERWA contributes to sustainable wealth creation and poverty reduction in Rwanda, through sustainable management of natural resources, climate resilient and green economic growth through sustainable financing mechanism and support to districts on implementation of climate change projects.

In order to achieve its objective of contributing towards sustainable wealth creation and poverty reduction in Rwanda, through sustainable management of natural resources, climate resilient and green economic growth, FONERWA's has financed a number of climate change projects from Window 1 (Conservation & Sustainable Natural Resources Management) and Window 3 – (Environment & Climate Change Mainstreaming) some examples are summarized in Table 2

**Table 2:** A sample of FONERWA funded projects within the participating Districts

Project	Local Implementing Organization	Area of Implementation
Ecosystem rehabilitation and green village promotion	Nyamasheke District	Nyamasheke District
Vulnerable ecosystem recovery programme towards climate change resilience	REMA	National Project
Karongi District integrated greening village program	Karongi District	Karongi District

Source: FONERWA Website.

### Institutional framework

In Rwanda, although management of environment is shared by several ministries (MINITERE, MINAGRI, MININFRA and MINALOC), decentralized organs (Districts and Sectors), public institutions (REMA), local and international non-governmental organizations (NGOs), research and/or higher education institutions, each district has an officer in charge of environment under the new administrative reform. The mandate of the main ministries are summarised below;

**Table 3:** Mandate of main ministries in Rwanda

Ministry/Departments/Agencies	Main Role
MINAGRI	Mandated to develop, transform and modernize the Rwandan agriculture in general (including fishing and livestock). The ministry supervises 3 new agencies namely RADA (Rwanda Agricultural Development Authority), RARDA (Rwanda Animal Resources Development Authority) and the Rwanda Horticulture Development Authority
MININFRA	Is in charge of public infrastructures (buildings, roads, etc.), energy, transport and communication. This ministry is also in charge of housing and town planning. MININFRA mainly gets involved in environment management through urban planning.
FONERWA	FONERWA contributes to sustainable wealth creation and poverty reduction in Rwanda, through sustainable management of natural resources, climate resilient and green economic growth through sustainable financing mechanism and support to districts on implementation of climate change projects.

Ministry/Departments/ Agencies	Main Role
REMA	Has a mission of the implementation of the national policy on environment. Has responsibility of the entire biophysical environment management throughout the whole country.

#### 1.2.4 Barriers to the achievement of the long-term vision

Despite the large baseline programmes, economic development and livelihoods of the communities in the three districts are still threatened by uncertainties associated with climate change, particularly floods and droughts. This is because under the business as usual, the baseline programmes fail to integrate additional risks expected from the uncertainties associated with the changing climate, due to the barriers described in the section below.

##### Barrier I: Lack of diversified rural livelihoods

Over 80% of population living in Rwanda's rural areas practice agriculture as a source of livelihood. Increasing population coupled increasing demand for cultivable land poses a threat to livelihoods as land size holdings get smaller and productivity decreases. Lack of diversified livelihood is facing additional threat of climate change impacts. Rural livelihoods will have to diversify, either vertically or horizontally. Vertical diversification involves investment in value chain development on one production line in order to increase the marginal returns on production. Horizontal diversification on the other hand, entails intensification or addition of new alternatives to livelihood support. Both strategies are aimed at reducing the risk of business as usual livelihood support options. A good example is EDPRS-II plans to support irrigation to cushion Rwanda's growing population from food insecurity. The Strategy regards irrigation as a panacea to not only the demand to raise agricultural yields but also prolonging growing periods in areas with dry seasons. Within the project area, all the three District Development plans have indicated diversification from agriculture-based economy.

##### Barrier 2: Lack of ownership of adaptation and climate risk reduction

The Government of Rwanda is aware that urgent action is needed to address the threats posed by climate change to the country's population. Rwanda's Vision 2020 states that development should be achieved through better adaptation to, and mitigation against, climate change, with a focus on resilience building for Rwandese citizens. Other climate change related policies (Rwanda Environmental and Climate change policy; National strategy on Climate change and low Carbon) all emphasize on the creation of environment for the development of a country-wide, coordinated and harmonized approach to climate change management, to guide actions that reduce community and ecosystem vulnerability through adaptation and mitigation.

However, there are no proven techniques, tools and methods (or examples) of how the communities can practically climate proof baseline programs, thereby protecting the development gains from further climate risk. This is primarily because the district councils have very limited finance, which compounds the capacity deficit. Like other Least Developed Countries (LDCs), Rwanda has high adaptation costs relative to GDP. Adaptation costs are especially high, because of the geography of the country and its dependence on small-scale rain-fed agriculture, with >80% smallholders in the country with an average landholding of less than 0.28 ha per household. This limits the interest of households to invest in land development, farm mechanization and climate smart agriculture.

##### Barrier 3: Lack of Climate Resilience of small-scale rural infrastructure

Rural infrastructure development is one of the pillars for Rwanda's vision 2020. There are a number of infrastructure programmes rolled out in rural areas. As indicated in the NAPA, one of the negative effects of climate change caused by high precipitation is destruction of infrastructures especially in low zones. This is a major barrier in ensuring access to services and markets for goods and services. The

project will work with Districts to ensure climate proofing for all infrastructure by increasing capacity of District engineers and local contractors in climate risk designs and construction.

#### Barrier 4: Technological and cultural barriers

Lack of appropriate equipment, tools and techniques may constrain adaptation (i.e. diversification). Although some adaptations may be technologically possible, they may be constrained by economic and cultural barriers. Technological barriers may also lead to inaccurate information due to, for example, limitations in modeling the climate system or lack of accurate weather forecasts. Insufficient information and knowledge on the impacts of climate change may continue to hinder adaptation.

### **1.3 AfDB's COMPARATIVE ADVANTAGE**

The AfDB boasts a portfolio comprising 20 operations in Rwanda. These include sixteen (16) sovereign loans and grants and four (4) private-sector operations. The portfolio distribution by sector shows that infrastructure (energy, transport, and water) accounts for 62% of the total commitments, followed by agriculture, 18%; private sector, 12%; human development, 5%; and multi-sector, 2%. This is indicative of the commitment the AfDB has in developing the sectors that can have the most impact on people's livelihoods given that only 4% in the rural areas in Rwanda have access to electricity. The AfDB's comparative advantage also lies in the fact that it has a Field Office in the country with staff of diverse expertise in water & sanitation, transport, social and agriculture and rural development. This makes the AfDB to have a good ability to interact well with the stakeholders and interested parties in the project thus placing them in an ideal position to support the implementation of the project. The project is also aligned to the AfDB's interventions in the country as detailed by Country Strategy Paper (CSP) for Rwanda (2012–2016) which seeks to support two strategic pillars: (i) infrastructure development through interventions to address the country's energy and transport bottlenecks, and (ii) enterprise and institutional capacity development by supporting institutions that implement Rwanda's policy on small and medium enterprises (SMEs). Moreover, the experience of the AfDB in dealing with member countries in provision of among others financial support, capacity building and technical support in relevant areas also augurs well for its advantage

### **1.4 STAKEHOLDER ANALYSIS**

The preparation of this project was guided by a comprehensive and extensive participatory process involving all stakeholders, including local communities, a multidisciplinary approach (professionals from different sectors participated); and a complementary approach, building upon existing plans and programmes, including national action plans and national sectoral policies. The preparation of the project involved a number of assessments and analysis as described below.

**Climate vulnerability and capacity assessment:** Through use of climate vulnerability and capacity assessment methodology, the analysis provided the understanding of the implications of climate change for the lives and livelihoods of households at risk living in the Northern and Western provinces of Rwanda. Local knowledge and scientific data was combined to provide an in-depth socio-economic analysis as well as capture people's understanding about climate risks and possible adaptation strategies. The analysis will also provide a framework for dialogue within communities as well as between communities and other stakeholders. The assessment identified investment opportunities and capacity building gaps for local institutions and communities.

**Gender analysis:** To assure that alternative adaptation options meet equality and equity criteria, with special attention given to women and youth, a gender impacts assessment methodology was used to complement the climate vulnerability and capacity assessment. This assessment reviewed the impact of alternative adaptation options on women and men as well as on gender relations in the project area.

**Stakeholder analysis:** The stakeholder analysis was conducted as part of vulnerability and adaptation opportunities analysis. The analysis provided insights into and understanding of the interactions between the project and its stakeholders and identified and prioritized stakeholders who have an impact

on project success so as to assure their support as well as manage their expectations. **Table 4** provides a summary of the key stakeholder of the project.

**Table 4: Key stakeholders of the project**

Stakeholder	Interest in CCA	Degree of Interest	Level of influence	Participation in project implementation
Communities	Livelihood improvement and resilience	HIGH	LOW	-Most of the project activities will take place at the community level -Active participation and engagement of villagers in the project design will be integral to the success of the project
Farmers' cooperatives	Improving irrigation to enhance agricultural productivity.	HIGH	MEDIUM	Collaborate with farmer cooperatives and associations
FONERWA	The vehicle in Rwanda through which environment and climate change finance is channeled, programmed, disbursed and monitored.	HIGH	HIGH	It is expected to support the disbursement and monitoring of the project funds
Local NGOs	Serve as project partners in supporting communities to adapt to climate change and diversify their livelihoods	MEDIUM	LOW	Participate in PSC, share knowledge and implementation lessons.
Rwanda Environment Management Authority (REMA):	Mandated to facilitate coordination and oversight of the implementation of national environmental policy and the subsequent legislation	HIGH	HIGH	a source of knowledge and expertise on climate change and has a number of climate change projects under its SPIU and has been instrumental in mainstreaming climate change into key Government policies and programmes REMA is expected to execute the project through the SPIU.
Energy, Water and Sanitation Authority (EWSA)	Responsible for the provision of sufficient, safe, reliable, efficient, cost-effective and environmentally appropriate energy, Water and Sanitation services to households and to all economic sectors on a sustainable basis	LOW	LOW	It will implement the baseline project and is expected to liaise closely with the proposed project during the design phase.
Private Sector Federation (PSF):	Promotes and represents the interests of the Rwandan business community	LOW	LOW	Help the project identify important value chains and facilitate vertical linkages between private companies and project beneficiaries.
MINICOM	a mandate to support private sector growth and SME development	MEDIUM	LOW	support all private sector interventions of the project
Private companies		LOW	LOW	Key actors in creating a demand for and supporting the supply of new products and services generated in areas connected to the grid by the baseline project.
MINALOC	Responsible for policy implementation and oversight over all Districts	LOW	LOW	support the integration of livelihood interventions with these key Government programmes
NAWOCO:	An organ of the Ministry of Gender and Family Promotion	MEDIUM	MEDIUM	-Encouraging women to participate in the development of the country

Stakeholder	Interest in CCA	Degree of Interest	Level of influence	Participation in project implementation
				<ul style="list-style-type: none"> <li>-Support advocacy and capacity building around gender-responsive climate adaptation</li> <li>-Project will utilize NAWOCO's extensive network of women's councils</li> <li>-Advise the project on how to ensure gender equality in delivering its outputs</li> </ul>
National Youth Council	Part of the Ministry of Youth, Sports and Culture NYC advocates for youths, trains them in leadership, economic development and social mobilization	LOW	LOW	It is expected that the NYC will support advocacy and capacity building of project interventions targeted towards the youth.
RNRA	Mandated to manage and develop the Rwanda's natural resources including water	LOW	LOW	RNRA will be responsible for water infrastructure improvements such as construction of storage reservoirs, drainage canals etc.
MINRENA	Rwanda's environmental policy-making and regulatory institution MINRENA also serves as the GEF Operational Focal Point	HIGH	HIGH	It is expected that MINRENA will play an important role in providing strategic advice to the project design.
MININFRA	Is responsible for the sustainable development of infrastructure including transport networks, power and water supply. It is expected to support the rural infrastructure interventions	HIGH	HIGH	Development of climate risk guidelines and modules for engineers and procurement officers.
Gender Monitoring Office	The GMO is responsible for the monitoring and evaluation of compliance with national gender indicators. It also serves as a reference point on matters relating to gender equality and equity in national development. GMO is expected to advice on how to monitor the gender dimension of the project.	LOW	LOW	<ul style="list-style-type: none"> <li>-Provide and validate gender indicators</li> <li>-Assist the project to achieve 30% and 20% women and youth respectively</li> <li>-Provide gender training</li> </ul>

## **1.5 FIT WITHIN NATIONAL, GEF AND AfDB STRATEGIC OBJECTIVE**

The proposed project fits well within the National, GEF and AfDB strategies and policies. These are described below.

### **1.5.1 National Strategic Objectives**

The project is aligned with several national and local strategies related to climate change and environmental management and builds on existing activities.

The NAPA articulates Rwanda's strategy to reduce vulnerability to climate change and provides a technical basis for decision makers to prioritize action areas. The plan identifies 6 priority areas for immediate adaptation action. The proposed project will address components of the NAPA priority 3. The project, which directly responds to the top priorities identified in the NAPA, seeks to reduce livelihood vulnerability in flood-prone communities through enhancing and diversifying rural livelihood opportunities and investing in rural improved rural infrastructure. Since rainfall variability, floods and landslides present the most significant climatic hazards in Rwanda, the project will address the most pressing development needs of food and livelihood security of vulnerable communities. It also contributes to pillar 4 (Technology, Innovation and Infrastructure) of The Rwanda National Strategy on Climate Change and Low Carbon Development that of Effectively managing the impacts of climate change through interventions that build and sustain the social and ecological resilience of Rwandese.

The proposed project is also consistent with Rwanda's National Development Vision and Strategic framework set out in the Vision 2020, which has been the main development roadmap for Rwanda since 2000. The relevant priority areas are: productive high value and market oriented agriculture; reducing dependency on agriculture to reduce the pressure on water resources given that agriculture accounts for nearly 70% of the total water use; developing human resources and pursuit of a knowledge-based economy to facilitate a strategic shift from agriculture and natural resources-dependent sectors to a knowledge economy; private sector-led development.

The EDPRS 2 (2013 - 2018) prioritizes economic growth, rural development and poverty reduction. Under rural development, the EDPRS emphasizes among others: connecting rural communities to economic opportunity through improved infrastructure (with an emphasis on feeder roads and linking communities to markets), creating greater access to economic opportunities and basic services in rural settlements, increasing the productivity of agriculture with a focus on irrigation and land husbandry, transitioning 50% of population from farm to off-farm jobs.

The country's National Green Growth and Climate Resilience Strategy also recognizes its high vulnerability to climate change due to its dependence on rain-fed agriculture both for rural livelihoods and exports of tea and coffee.

The proposed intervention is fully consistent with the LDCF Programming Strategy, the main objective of which is to address the most urgent and immediate adaptation needs of LDCs. The project, which directly responds to the top priorities identified in the NAPA, seeks to reduce livelihood vulnerability in flood-prone communities through enhancing and diversifying rural livelihood opportunities and investing in rural improved rural infrastructure. Since rainfall variability, floods and landslides present the most significant climatic hazards in Rwanda, the project will address the most pressing development needs of food and livelihood security of vulnerable communities.

### **1.5.2 National Eligibility**

The project is aligned with several national and local strategies related to climate change and environmental management and builds on existing activities.

The proposed project is also consistent with Rwanda's National Development Vision and Strategic framework set out in the Vision 2020, which has been the main development roadmap for Rwanda

since 2000. The relevant priority areas are: productive high value and market oriented agriculture; reducing dependency on agriculture to reduce the pressure on water resources given that agriculture accounts for nearly 70% of the total water use; developing human resources and pursuit of a knowledge-based economy to facilitate a strategic shift from agriculture and natural resources-dependent sectors to a knowledge economy; private sector-led development.

The EDPRS 2 (2013 - 2018) prioritizes economic growth, rural development and poverty reduction. Under rural development, the EDPRS emphasizes among others: connecting rural communities to economic opportunity through improved infrastructure (with an emphasis on feeder roads and linking communities to markets), creating greater access to economic opportunities and basic services in rural settlements, increasing the productivity of agriculture with a focus on irrigation and land husbandry, transitioning 50% of population from farm to off-farm jobs.

The country’s National Green Growth and Climate Resilience Strategy also recognizes its high vulnerability to climate change due to its dependence on rain-fed agriculture both for rural livelihoods and exports of tea and coffee.

The Project sets clear priorities for urgent and immediate adaptation activities as identified by the Government of Rwanda, through MINRENA and REMA. Rwanda signed the UNFCCC and ratified it in August 18, 1998. Its Initial National Communication was submitted in 2002, and the Second National Communication was launched in late 2012. The country has prepared a National Adaptation Programme of Action (NAPA) and is among forty-nine countries designated as Least Developed by the UN. It is therefore eligible to receive funding for climate change adaptation implementation under LDCF. The proposed project responds to NAPA priority 3, (promotion of non-agricultural income generating activities).

Moreover, the country adheres to several international agreements, treaties and conventions, though management legal tools are not yet well developed. Among other conventions ratified by the Republic of Rwanda, the most important ones, which have influenced or influence the national policy with regard to environment, are summarized in **Table 5**.

**Table 5:** Rwanda’s commitments to the Multi-lateral Agreements on Environment and Climate change

Convention/Agreements	Date Ratified
Convention on Biological Diversity of June 10, 1992	March 18, 1995
United Nations Convention Framework on Climatic Changes of June 10, 1992.	August 18, 1998
United Nations Convention on Desertification Control of June 17, 1991	October 22, 1998. -
Vienna Convention on Ozone layer Protection of September 22, 1987 and Montreal Protocol on substances impoverishing Ozone layer of September 16, 1987	December 6, 2000
Stockholm Convention on Persistent Organic Pollutants (POP)	July 8, 2002
Basle Convention on Dangerous Wastes, adopted on March 22, 1989 in Basle	August 24, 2003
RAMSAR Convention on February 2, 1971 on wetlands	April 2006
Kyoto Protocol to the Convention Framework on Climatic Changes	March 16, 1998.

### 1.5.3 AfDB Strategic Framework Objectives and Rwanda Country Programming Framework

AfDB has a ten-year (2013-2022) strategy, which focus on two objectives; to improve the quality of Africa’s growth: inclusive growth, and the transition to green growth. The LDCF project is aligned more into the second objective that ensures that inclusive growth is sustainable, by helping Africa gradually transition to “green growth” that will protect livelihoods, improve water, energy and food security, promote the sustainable use of natural resources and spur innovation, job creation and economic development. The AfDB Strategy outlines five main channels (operational priorities) for the

Bank to deliver its work and improve the quality of growth in Africa. This project falls under the infrastructure development. The project is also in sync with the AfDB two of the three areas of special emphasis; Agriculture and food security and Gender.

#### 1.5.4 GEF-5 Focal Area Strategy and Programme

The proposed project targets climate change adaptation measures that are complementary and additional to those funded by the GEF and other bilateral and multilateral donors in Rwanda. This is in line with work programme under the LDC Fund, established under decisions 5/CP.7 and 7/CP.7 of the Seventh Conference of the Parties, United Nations Framework Convention on Climate Change.

The project is in line with GEF-5 focal area strategy of climate change and contributes directly to objective CCA1 - Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level. Under this objective the project contributes to GEF Outcome 1.1 (Vulnerability of physical assets and natural systems reduced) and 1.2 (Livelihoods and sources of income of vulnerable populations diversified). The project also contributes to CCA-2 Strengthen institutional and technical capacities for effective climate change Adaptation through GEF outcomes 2.1 (Increased awareness of climate change impacts, vulnerability and adaptation) and 2.4 (Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures)

The project development was in line with LDCF project eligibility criteria, such as participatory approaches, supporting a “learning-by-doing” approach, multi-disciplinary, and gender equality. The project will serve as a catalyst to leverage additional resources, and efforts have been made to maximize co-financing from other sources (GEF/C.24/12, paragraph 25). The selected sectors (agriculture, water resources management; infrastructure development) are in line with priorities outlined in paragraph 44 of the GEF/C.24/12 document. The contribution of the project to both GEF and LDCF are indicated in **Table 6** below.

**Table 6:** Project contribution to GEF Indicators and outcomes

<b>GEF Focal Area Objectives</b>	<b>GEF Indicators/Outcomes</b>	<b>Project Contribution</b>
CCA-1 Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	Outcome 1.1 Vulnerability of physical assets and natural systems reduced	1 market developed and 6 upgraded 9 small scale infrastructure developed
	Outcome 1.2 Livelihoods and sources of income of vulnerable populations diversified	At least 110,000 HH benefit from livelihood options at least 30% women
CCA-2. Strengthen institutional and technical capacities for effective climate change Adaptation	Outcome 2.1: Increased awareness of climate change impacts, vulnerability and adaptation	At least 50% of targeted households are aware of climate change impacts, vulnerability and adaptation options
	Outcome 2.4 Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures	50% of targeted HH trained to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures

### **1.5.5 Linkages with other relevant GEF and donor funded projects**

The implementation process of the proposed project will ensure that the LDCF investments build on all other related investments in the project area (and national level) and ensuring that it does not duplicate efforts or waste resources. It will be coordinated with the national level initiatives undertaken by other development partners, including the 2 GEF financed projects other Africa Development Bank.

At the national level, there are two on-going UNEP/GEF projects with an explicit focus on climate change adaptation. These are; (1) Reducing Vulnerability to Climate Change by Establishing Early Warning and Disaster Preparedness Systems / Support for Integrated Watershed Management in Flood Prone Areas being executed by the REMA and aims to reduce the vulnerability of communities in the Gishwati forest and the associated Congo-Nile watershed area to climate change impacts and the (2) Landscape Approach to Forest Restoration and Conservation (LAFREC) which aims to introduce and implement landscape restoration management plans and develop risk and vulnerability assessments for 4 districts around the Gishwati forest area. The project includes support infrastructure measures and the restoration of marshlands and river basins along with improved Water management practices. There is also provision for the support of alternative energy sources and the adoption of sustainable and alternative agricultural practices and livelihoods including Climate resilient agricultural and livestock practices in the target areas.

In addition to these on-going projects, there are two pipeline projects under review by UNEP/GEF and the Adaptation Fund. These are (a) Building resilience of communities living in degraded forests, savannahs and wetlands of Rwanda through an ecosystem management approach and (b) Reducing Vulnerability to Climate Change in North West Rwanda through community based adaptation which t aims to increase the adaptive capacity of natural systems and rural communities living in exposed areas of North Western Rwanda to climate change impacts. Finally, in addition to the key baseline project, there are several ongoing government programs that are pertinent to the LDCF project. These include: the VUP and resettlement programme and the Rural Sector Support Programme and the Land Water Husbandry Project both implemented through MINAGRI. Where possible, the LDCF project will build upon the existing activities of these programmes and introduce climate resilience aspects in these efforts.

## SECTION 2: PROJECT STRATEGY

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The Government of Rwanda (GoR) requests the Least Developed Countries Fund (LDCF) to support a Full-Sized Project (FSP) to implement climate change adaptation project. The objective of the project is to facilitate diversification of livelihoods away from traditional agricultural activities so as to most efficiently utilise the new infrastructure created by an electricity rollout programme, and consequently increase resilience to the negative impacts of climate change.

The project responds to the barriers preventing the communities in the three districts and other stakeholders from achieving the climate change adaptation programmes. The baseline has provided an opportunity to integrate, the last mile electricity provision and alternative livelihoods. Without the GEF alternative, communities will continue rain fed agriculture on small lands without value addition to increase income.

The proposed project will create the conditions necessary for transforming the baseline programme described in section 1.2.2 to make it systematically integrate measures to address additional risks associated with climate change, in order to secure gains on improving livelihoods for the communities through diversification the traditional agriculture production systems which have uncertainties related to the changing climate. This will be achieved by empowering communities in the three districts with enhanced and diversified climate resilient rural livelihoods; strengthening awareness and ownership of adaptation and climate risk reduction processes and development of climate resilient small-scale rural infrastructure to compliment the baseline project.

The Government of Rwanda has invested heavily in policies and decentralization to ensure that support is realized at rural areas, however given the state of infrastructure development in the country, the government is likely to prioritize its development funds to build roads and water systems, with little being directed to the climate change adaptation programmes. Thus its investments will fail to remove the barrier on inadequate extension service to circumvent the barriers of improving vulnerability to climate change. Indeed, in the absence of the LDCF alternative, this increased investment from the Government and others may fail to provide sustainable development.

### 2.1 PROJECT GOAL, OBJECTIVE

The project aims to maximize the impact of an on-going AfDB funded project – *Rwanda Scaling-up Energy Access Project* (also called the Baseline Project - which provides infrastructure to generate and distribute electricity for households and public institutions by creating and expanding opportunities for local populations to pursue non-agricultural electricity dependent income generating activities. The goal of the project is to take advantage of reliable energy provided by the baseline electricity project in order to (i) reduce dependence on farming (ii) add value to farming value chains and (iii) ensure climate proof rural infrastructure

**Project objective:** The objective of project is to facilitate diversification of livelihoods away from traditional agricultural activities so as to most efficiently utilise the new infrastructure created by an electricity rollout programme, and consequently increase resilience to the negative impacts of climate change. Specifically, the project has two main objectives;

- To facilitate diversification of livelihoods away from traditional agricultural activities so as to most efficiently utilise the new infrastructure created by an electricity rollout programme, and consequently; and
- To increase local communities' resilience and to adapt to the negative impacts of climate change.

### 2.2 PROJECT OUTCOMES, OUTPUTS AND ACTIVITIES

The project's components are described as follows:

### 2.2.1 Component 1: Enhanced and diversified climate resilient rural livelihoods

This component will support the transition of target households from unsustainable, low-income agriculture based into economically viable and market oriented livelihoods in rural areas that are connected to the electricity-grid by the AfDB baseline project. This will reduce the exploitation of marginal lands and unsustainable farming practices and generates much needed economic growth in rural areas and increase the resilience of local communities to the impacts of climate change. The project will support both women and men farmers in the targeted areas to diversify and improve livelihood opportunities in non-farm sectors such as agro-processing, agricultural supply chains, eco-tourism and handicrafts. The project will help farmers who want to move out of farming to explore and plan for other viable alternatives. Using the cooperatives as entry points the project will support value addition in agricultural value chains through processing and packaging to supply the market demand of a growing population with processed food items, much of which is currently imported from regional and international suppliers. Processing agricultural products also reduces post-harvest losses due to insufficient storage or cold-chain facilities, particularly with high value and perishable fruits and vegetable crops. Expansion of processed products will be achieved through the development of decentralized village-based agriculture processing centers.

To achieve these, the project will ensure the flow of both financial and technical support to local communities so that they can capitalize on the supply of electricity. The approach will be to promote off-farm livelihoods and agricultural value chain development through vocational training, support for enterprise development, improved access to credit schemes, and employment generation. The improved access to credit scheme will exploit synergies with Vision 2020 Umurenge Programme (VUP).

**Umurenge SACCOs**

(VUP provides access to savings and credit for enhanced livelihoods through the Umurenge Savings and Credit Cooperatives (Umurenge SACCOs) in each sector). Loans taken under VUP Financial Services are invested in enterprises that generate net income for borrowers. It also encourages the development of "appropriate" skills, handicraft, or social service activities with direct financial support for landless households with no members qualifying for public works or credit packages.

*Text box 2: Umurenge SACCOs*

The initial process will involve communities identifying alternative livelihood opportunities in a participatory process with project staff and other key stakeholders. In addition, the project will also target the 38% rural population that has been resettled under the Government’s Resettlement Programme for ease of rolling out essential public services (electricity, water, education etc.) for livelihood restoration means apart from agriculture.

Four outputs have been planned in order to achieve this component. These are as indicated in **Table 7** described below;

**Table 7:** Component 1 outputs and activities

Component 1: Enhanced and diversified climate resilient rural livelihoods (USD 3,000,000)		
Outcome	Output	Activity
Outcome 1.1: At least 9 diversified, strengthened and climate resilient rural livelihood opportunities	Output 1.1.1 110,000 HH with enhanced, understanding and awareness of livelihood opportunities resulting from electrification	KAP baseline survey
		Development of awareness materials
		Community Awareness Programmes

for vulnerable women and men developed	Output 1.1.2: At least 110,000 HH with increased capacity to participate in market-oriented enterprises	MINICOM to determine baseline capacity (Capacity needs Assessment)
		MINICOM Training - Cooperatives
		Facilitate study tour to working enterprises
	Output 1.1.3 Nine value chain development and creating linkage and demand to supply	Nyamasheke District - Fruit processing plant; Animal feeds production plant; Pork processing unit
		Karongi District – Ecotourism; Banana value chain; Briquette making
		Rusizi District – Briquette making; Fruit value chain promotion
	Output 1.4.1: Increased economic opportunities for women and youth	Facilitate Youth Fund and Gender Monitoring Office (GMO) of MIGEPROF – Ministry of Gender & Family Promotion

***Output 1.1.1 110,000 HH with enhanced, understanding and awareness of livelihood opportunities resulting from electrification***

The project will facilitate a Knowledge Attitude Practice survey as a baseline on the current knowledge and understanding of livelihood opportunities. Based on the results of the baseline, awareness materials will be developed both in electronic and print. Community radio will also be utilised. Community awareness programmes will also be designed. The programmes will take opportunity of World International days (World Environment day; World Wetland day, etc.) to create awareness to a wide range of stakeholder.

***Output 1.1.2: At least 110,000 HH with increased capacity to participate in market-oriented enterprises***

Almost 80% of the population in the three districts depend on subsistence agriculture as the main livelihood. The project will facilitate MINICOM to undertake a baseline (Capacity needs Assessment) and provide capacity on the identified gaps. Through MINICOM the project will facilitate training of cooperatives on viable enterprises. The project will also facilitate study tours both within and in neighboring countries to enable beneficiaries to learn from viable and profitable enterprises.

***Output 1.1.3: Output 1.1.3 Nine value chain development and creating linkage and demand to supply***

During the programme development phase, each of the three districts presented preliminary off-farm enterprises (Table 8).

**Table 8:** Priorities provided by community groups as possible livelihood alternatives

District	Priority 1	Priority 2	Priority 3
Karongi	Eco- tourism	Banana value chain	Briquette making
Nyamasheke	Fruit processing plant	Animal feeds production plant	Pigs processing unit
Rusizi	Briquette making from waste products	Construction of a modern fruit market	Fruits value chain promotion

The project will work with stakeholders to identify viable and profitable livelihoods opportunities resulting from electrification. A rapid assessment will be conducted in each District to ensure that all ideas were captured during the stakeholder meeting. Other activities under this output will include;

study tours to viable enterprises within the country, development and implementation of a sensitization programme and initiating of an awards scheme. The project will facilitate the development of the identified enterprises. Efforts will be made to work closely with the private sector. This will ensure available market options and future sustainability.

***Output 1.1.4: 30% of women and 20% of youth involved in off-farm enterprises and increased income of at least 50%***

To ensure that women and youth benefit from the project, the project will put affirmative action with clear quotas for women and youth during the formation of groups for each enterprise. The project will facilitate existing institutions like Youth Fund and Gender Monitoring Office (GMO) of MIGEPROF – Ministry of Gender & Family Promotion to ensure the affirmative action is realized during the life of the project and beyond. The project will also establish access to financial support for women and youth.

**2.3.2 Component 2: Strengthening awareness and ownership of adaptation and climate risk reduction processes**

This component will work with existing institutions and strengthen their capacity on climate adaptation and awareness raising and how to ensure that adaptation efforts are gender-responsive. The focus will be on building institutional capacity and awareness raising for communities. A baseline survey will be conducted as part of the inception to map institutions currently undertaking climate change adaptation programmes. To achieve this four main outputs have been earmarked. The main outcomes and activities for this component are summarized in **Table 9**.

**Table 9:** Component 2 outputs and activities

<b>Component 2: Strengthening awareness and ownership of adaptation and climate risk reduction (USD 1,154,749)</b>		
<b>Outcome</b>	<b>Output</b>	<b>Activity</b>
Outcome 2.1: At least 3 District planning committees together with communities have improved capacity on driven adaptation and reduced vulnerability to climate change	Output 2.1.1: Eight trainings on knowledge and understanding of the social dimensions of vulnerability and resilience to climate change conducted	Development of awareness materials
		Community training PLPA/CVCA vulnerability
	Output 2.1.2: Eight (2 per year) awareness campaigns on climate change impacts and promotion of gender-responsive climate adaptation conducted	Awareness campaigns
		Workshop – Adaptation activities
	Output 2.1.3: Four trainings for district administrations and communities on coordination and support on climate-resilient development planning at the local level conducted.	Facilitate MINIRENA/REMA and MINILOC to support greening of DDPs
	Output 2.1.4: Six community based planning, implementation and monitoring adaptation programmes implemented.	Training –Participatory M&E
		Development of M&E tools
		Facilitate communities to carry out planning and monitoring

***Output 2.1.1: Eight trainings on knowledge and understanding of the social dimensions of vulnerability and resilience to climate change conducted***

Using the cooperatives as the entry point, the project will use the PLPA (Participatory Learning Planning and Action) to capture the social dimensions of vulnerability and resilience to climate change in a participatory manner. The PLPA model will allow learning by doing and provide flexibility in project planning. The PLPA process will also establish the current knowledge attitude and practices as

a baseline (KAP Survey). Using the results from the two processes, the project will then design training programmes and develop both print, voice and electronic public awareness materials on social dimensions of vulnerability and resilience to climate change.

***Output 2.1.2: Eight (2 per year) awareness campaigns on climate change impacts and promotion of gender-responsive climate adaptation conducted***

The project will ensure that the adaptation efforts are gender and age responsive and consider the specific needs of men, women and youth as well as the gendered inequalities that may exacerbate the impacts of climate change for poor women in particular, or prevent women from benefitting from adaptation interventions.

The project will achieve this by identifying gender and age dimensions of vulnerability to climate change as well as analyzing and addressing gender and age inequalities, risks and opportunities in the context of the planned responses to climate change and promoting gender-aware responses to climate change.

The project will work with men and women and boys and girls to promote equal access to decision-making processes in adaptation planning by making the capacity building processes transparent and accessible. The project will also train women and youth organizations to take part in and lead these processes.

***Output 2.1.3 Four trainings for district administrations and communities on coordination and support on climate-resilient development planning at the local level conducted.***

The Government of Rwanda through FONARWA has provided funds for REMA and MINILOC for greening the District Development Plans. The project will enhance this effort through targeted capacity building towards key staff in the local authority at District, Sector and Cell levels and promote a climate extension service. At the District level this will include: Agronomist Officers, Environment Officers and interns, Infrastructure Officers, Lands Officers, Forestry Officers, Extension Officers and RAB CIP Officers. Agronomist Officers in each sector and Integrated Development Programme (IDP) Officers at the cell level will also be included.

***Output 2.1.4: Six community based planning, implementation and monitoring adaptation programmes implemented***

This output will use co-operatives as an entry point to strengthen the capacity of vulnerable communities to plan and implement adaptation interventions recognizing that these processes must be founded on men and women farmers’ knowledge and experiences. Using training materials manuals and materials produced by the Adaptation Fund project, the project will progressively build capacity of communities to plan, implement and monitor adaptation programmes.

**2.2.3 Component 3: Climate resilient small-scale rural infrastructure**

This component will focus on investment in upgrading rural infrastructure, such as post-harvest storage facilities that are connected to the electricity-grid by the AfDB baseline project. In order to achieve the results of this component, a number of outputs and indicative activities are summarized as **Table 10**.

**Table 10:** Component 3 outputs and activities

<b>Component 3: Climate resilient small-scale rural infrastructure (USD 4,000,000)</b>		
<b>Outcome</b>	<b>Output</b>	<b>Activity</b>
Outcome 3.1: Increased resilience to climate change of six small scale rural infrastructure in three Districts	Output 3.1.1: 1 market built to a specification that takes into account anticipated climate risks	Consultant –Infrastructure audit
		Small scale infrastructure - Karongi
		Small scale infrastructure - Nyamasheke
		Small scale infrastructure - Rusizi

	Output 3.1.2: Six markets upgraded and 30% of space allocated to women and 20% to youth	Rehabilitation/Upgrade markets-Karongi -
		Rehabilitation/Upgrade markets- Nyamasheke -
		Rehabilitation/Upgrademarkets - Rusizi
		Construct New Market Rusizi
		Meeting– Market committees
	Output 3.1.3: Four trainings for District engineers and local contractors on climate risks on the design and construction of small-scale rural infrastructure conducted and modules developed for polytechnic	Training –Engineers and Procurement
		Consultant - Training Modules development
		Training – TOT on Modules for IPRC
		Support trainees to deliver modules
		Consultant – Guidelines development
		Consultant – Checklist development
		Working with Integrated Polytechnic Regional Centre (IPRC), develop training modules for Training of Trainers
		Develop a checklist for construction, supervision and audit to ensure future compliance of future infrastructure with the new climate-proofed design standards

***Output 3.1.1: 1 market built to a specification that takes into account anticipated climate risks***

The main activity under this output is carrying out an infrastructure audit. The audit will list the number and type of structures, which require climate proofing. Using communities and other stakeholders, selected number of infrastructure will be identified for upgrading. The upgraded structures will act as models for future designs and building.

***Output 3.1.2: Six markets upgraded and 30% of space allocated to women and 20% to youth***

During a stakeholder workshop conducted as part of project development, one market was identified for construction.in Rusizi. The project will carryout a rapid assessment of the existing markets, work with key stakeholders and identifies at least six markets for rehabilitation/upgrading of existing markets in other Districts. To ensure that women and youth benefit from these rural investments, the project will work with sectors allocation committee to ensure that 30% and 20% of women and youth are allocated spaces.

***Output 3.1.3: Four trainings for District engineers and local contractors on climate risks on the design and construction of small-scale rural infrastructure conducted and modules developed for polytechnic***

The project will build capacity of district engineers and procurement officers on factoring of climate risks in the design and construction of small-scale rural infrastructure. This will be achieved by first, developing of training modules and conduct a TOT for IPRC (Main college where rural engineers are trained). The project will also develop guidelines for engineers and procurement officer on inclusion of climate risks in tender documents. A checklist for construction, supervision and audit will also be developed and capacity built for the main users.

## 2.2.4 Component 4: Monitoring and Evaluation

It is of utmost importance for the project to make use of internationally recognized results-based monitoring and evaluation frameworks during the implementation of the entire project. FONERWA as the implementing agency will be responsible for the monitoring. This will be in collaboration with the AfDB's country office in Rwanda and the project team. The project will also document all problems and lessons encountered during the project's implementation as a way of knowledge management. This will ensure that successes are replicated while hindrances would be avoided early for similar future projects or even other current projects. The component will look at knowledge management and dissemination, monitoring (both internal and external). In order to achieve the results of this component, a number of outputs and indicative activities are summarized as **Table 11**.

**Table 11:** Component 4 outputs and activities

<b>Component 4: Knowledge, Monitoring and Evaluation (USD 250,000)</b>		
<b>Outcome</b>	<b>Output</b>	<b>Activity</b>
Outcome 4: M&E management and lessons learnt are captured and appropriately disseminated	Output 4.1.1: Six knowledge adaptation products (CCA lessons learnt, methodology used, training modules, etc.) developed documented and disseminated.	Establish a knowledge management strategy
		Document knowledge adaptation products and lessons learnt (Writesops)
		Dissemination of lessons – electronic, paper and workshops
	Output 4.1.2: Two adaptation practitioners' events attended and evidence of incorporating lessons into the project	Project team participation and presentation of knowledge products from the projects in various forums
		Facilitate seminars and workshops
	Output 4.1.3: Timely, Project Implementation Reviews and MTE, TE carried out and reported	Develop a project M&E framework
		Produce monitoring reports per component and as annual project reports
		Mid Term Project Evaluation
		End of Project Evaluation
		Monitoring Travel - Joint monitoring and staff

### ***Output 4.1.1: Six knowledge adaptation products (CCA lessons learnt, methodology used, training modules, etc) developed documented and disseminated.***

This output will focus on Knowledge Management and Dissemination: Knowledge sharing is central to climate compatible development and plays a key role in ensuring stakeholder participation at all levels. Knowledge production is often considered a shared experience between national level policy makers, scientists and local community members. Climate change adaptation being new with few case studies, this project will facilitate documentation of adaptation practices at community level on the learning by doing approach.

The associated knowledge dissemination framework will include communities as generators of knowledge and promote peer-to-peer and lateral knowledge sharing across all stakeholders in the climate change domain in Rwanda with specific focus on the project areas. To promote both dissemination and interaction on a wider scale, mass and social media will be used to facilitate broad knowledge sharing across significant portions of the communities that are and will likely continue to be affected by climate change in the project areas. To achieve this, various knowledge dissemination products will be developed such as; (i) Web and paper based information booklets/brochures (ii) Posters (ii) Radio/television broadcasts (iv) Videos, animations, still images and Policy briefs, etc. Information contained in the above knowledge dissemination products will be generated from climate change relevant information available from national, regional and global sources, including the differential impacts of climate change across genders, classes, ages, abilities and ethnic groups.

***Output 4.1.2: Two adaptation practitioners' events attended and evidence of incorporating lessons into the project***

The project will facilitate participation of various stakeholders in practitioners' events. Proceedings from climate change seminars, stakeholder workshops, focus group discussions, progress reports and other climate change relevant information and knowledge products. The knowledge dissemination products will target both grassroot level and policy level stakeholders to bridge the gap between top-level (policy makers) and bottom-level (portion of stakeholders most affected) stakeholders. The project will also facilitate participation of various stakeholders in practitioners' events. Proceedings from climate change seminars, stakeholder workshops, focus group discussions, progress reports and other climate change relevant information and knowledge products.

***Output 4.1.3: Timely, Project Implementation Reviews and MTE, TE carried out and reported***

The project will ensure that monitoring of the project is conducted and reported at various levels; including internal, external and at community levels (participatory M&E). At the beginning of the project, a project M&E framework will be developed together with a robust IMS (Information Management Systems). The system will allow real time data input and analysis from internal and community evaluation.

**Internal monitoring:** Internal monitoring will serve the purpose of ensuring that the proposed Knowledge management and monitoring & evaluation (M&E) framework is adhered to using appropriate means and approaches. Monitoring and evaluation personnel from REMA, MINIRENA, FONERWA, and the Bank's Country Office team will be in charge of the internal monitoring and evaluation of the project.

The proposed monitoring parameters, frequency and time schedule should be followed to the later to ensure effective implementation of proposed intervention measures. All experts involved in the project; climate change adaptation and vulnerability expert, financial, procurement, & M&E expert, rural infrastructure expert, and social development expert are expected to make at least two monitoring visits yearly per project activity to observe pre-project situation, middle of activity and end of project status. Progress reports will be prepared for each visit by each expert with collaboration with the implementing agency (ies) to give finer details of the project at the time of evaluation. The progress reports will be submitted to the implementing agencies REMA, MINIRENA, FONERWA, and the Bank's Country Office Team.

**Participatory M&E:** Participatory Monitoring, Evaluation, Reflection and Learning (PMERL) formulated and information gathered used in adaptive management and shared widely: The project will facilitate the design and use of a Participatory Monitoring, Evaluation, Reflection and Learning for Community-based Adaptation plans. As described in the CoBRA (UNDP, 2013 and PMERL Manual (by CARE International), the formulation and implementation of this system will enhance participation of the communities in learning about the effectiveness of the adaptation measures and the continuous modification of those measures as the circumstances change, to continually improve their efficacy. Under this output, the project staff will monitor the climate / environment / development indicators on yearly basis, and prepare annual plans based on these indicators and also facilitate the publication of annual district report which at present is not produced by any district in Rwanda.

**External monitoring:** External monitoring will be executed by an independent monitoring expert who will review the progress reports prepared by the internal monitoring process Vis a Vis the actual situation on the ground. The external monitoring expert will evaluate reports, data, work and other activities related to implementation of the project with the aim of ensuring that the proposed intervention measures are implemented as planned in the Knowledge management and monitoring & evaluation (M&E) framework. The independent monitoring expert will submit progress reports to the AfDB/GoR/GEF and will be contracted by AfDB/GoR/GEF.

## **2.3 SOCIAL ECONOMIC BENEFITS INCLUDING GEDER CONSIDERATIONS**

The project will address the problems of poverty, environmental degradation and climate-led disasters in the project area and will serve as a model for scaling up in neighbouring districts facing similar problems. The project will ensure that diversification of agriculture provides resilience of local economies and livelihoods and form the basis of community based adaptation plans. Assisting the district environment teams to mainstream climate risk considerations in the district development plans will further contribute to the target of mainstreaming sustainable development principles in national development policies.

The project will develop and demonstrate practical enterprises, tools, technologies and capacities for non-agricultural income generating activities, through community centered adaptation program, focusing heavily on promotion of utilization of electricity. These interventions will collectively lead towards environmental sustainability and reduce vulnerability of livelihoods to climate risks and increase household welfare (including incomes) of local communities.

At the micro level, the project is expected to benefit approximately 110,000 HH, working directly on in directly through cooperatives. The proposed projects in each district are expected to provide incomes to individual members within the cooperatives. The project will introduce measures to expand economic opportunities for women and youth and promote their participation in the labor force as this will reduce poverty, foster faster growth and increase resilience. To address specific gender inequalities that impede women’s participation in enterprise development and the jobs market, the project will identify gaps in gender equality by consulting with men and women and developing skills and strategies to address these gaps. The project will specifically target vulnerable male youths (aged 15 to 21 years) from unstable family backgrounds for vocational training and other support needed to enable them to get productive employment and reduce youth disaffection and delinquency. The benefits and impacts are summarized under each component in **table 12** below;

**Table 12:** Project Benefits and Impacts

Component	Benefits and Impacts
<p><b>Component 1:</b> Enhanced and diversified climate resilient rural livelihoods</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Increased economic benefits for approximately 110,000 HH from economically viable and market-oriented enterprises, with opportunities for women (30%) and youth (20%), particularly in the value addition (such as agro-processing, eco-tourism and handicrafts);</li> <li>• Target beneficiaries engagement in alternative livelihood activities (off-farm)</li> <li>• Livelihoods will now be able to sustain the needs of individual households (economic benefits will be sufficient to cater for basic needs)</li> </ul> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Improved purchasing power for vulnerable households;</li> <li>• Inclusion of all members of the society, including vulnerable persons, in economic activities;</li> <li>• Increased access to social infrastructure and amenities</li> </ul>
<p><b>Component 2:</b> Strengthening awareness and ownership of adaptation and climate risk reduction processes</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• The characteristics of cooperatives, which consist of almost all members of a community, will serve as an efficient entry point for strengthening of awareness</li> <li>• Better understanding within the community of the link between existing socio-economic activities and the need for improved adaptation and climate risk reduction processes;</li> <li>• Gender and age responsive adaptation and climate risk reduction activities will be undertaken by all within the community;</li> </ul>

Component	Benefits and Impacts
	<ul style="list-style-type: none"> <li>• Adaptation and climate risk reduction activities incorporated into socio-economic activities</li> </ul> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Adaptation and climate risk reduction processes embedded in socio-economic activities;</li> <li>• Ownership of these processes by community members, irrespective of gender or age, through the cooperatives, increases their application and use</li> </ul>
<p><b>Component 3:</b> Climate resilient small-scale rural infrastructure</p>	<p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Livelihood opportunities not disrupted by climate-related risks;</li> <li>• Stability of livelihood activities, leading to improved living standards</li> </ul> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Livelihood activities continue despite climate change and associated risks;</li> </ul> <p>Improved standard of living</p>

## 2.4 COST-EFFECTIVENESS

The project has been designed to be highly cost effective. The project is additional to the baseline project by providing the needed resources that will maximize the impact of the baseline project in the communities by opening up opportunities for them to pursue other electricity dependent income generating activities apart from farming. Due to the proneness of the project area to adverse impacts of climate change, the heightened awareness of climate threats and participation in adaptation planning will also enhance the capacity of local communities to adapt to climate change in future.

By reducing dependency on agriculture and diversify livelihoods the project will increase the capacity of the target communities to withstand adverse situations due non-reliance on agriculture. By expanding economic opportunities for vulnerable communities, the project will increase the incomes of households further strengthening the ability of local communities to cope with extreme weather events. The project will also secure and enhance agricultural output (and hence increase food security) through improved post-harvest facilities.

The projects model of transfer of technical capacity to the community will eventually reduce the government involvement to an advisory role thus making the project cost effective. This is unlike the business-as-usual scenario in which knowledge and technical capacity is limited to a few public and private sector players.

The project aims to increase the benefits from off-farm through diversification of enterprises and products and the equitable sharing of these benefits. The alternative livelihoods proposed offer some solutions for generating suitable revenues that are sustainable. The project will use the Public Private Partnership model will be used, with project facilitating a feasibility studies and linkages for all enterprises and value chains. The project puts emphasis on the inclusion of women in the implementation of these economic activities to reduce vulnerability to environmental risk such as droughts and floods.

The project is also designed to use existing institutions, like cooperatives where the community is already organized and have some equipment for value addition and TVETs, which have long-term experience, and infrastructure for capacity building

## 2.5 INNOVATIVENESS

139. The outcomes of this project are designed to strengthen the foundational capacities required to continue implementing adaptation measures and for the ongoing replication of adaptation strategies countrywide. This project is therefore, expected to make a lasting contribution not only to the sustainability of all adaptation projects in the country but also to broader EDPRS II objectives. The participatory approach will root ownership of the project interventions firmly in the local communities. By engaging communities in the design and implementation of the project and creating local employment and enterprise development schemes, the project will empower and build capacity of local people to continue adapting to climate change risks. Adaptation plans will be incorporated into District Performance Contracts to institutionalize and sustain community interventions.

140. Scaling up will be an integral part of the project planning process. During the design phase, key actors will be identified as those who will have to be convinced of the value of the planned concept and approach. These will include the actors who are important for scaling up such as key ministries (MININFRA, MINALOC, and MINICOM etc.), local authorities, NGOs as well as the private sector. The strategy is to involve them in planning, implementation and evaluation processes at an early stage and build a working relationship with them. Getting their support will be crucial in ensuring the interventions have the necessary political backing for scaling up (including incorporating the concept into their own sector programmes or policies). During the design phase, the project will develop an effective communications strategy and invest specifically in disseminating information and in awareness programmes to ensure that major stakeholders and population groups are informed, convinced and involved. This will include the production of briefing notes for policy makers to create a positive environment for scaling up utilizing websites, site visits, and the print and radio media to broadly advertise project results and foster replication and scaling up of successful interventions, provide updates on the progress and project activities, disseminate case studies and comments from the project participants, and communicate lessons learned from project activities. To make the project even more sustainable, partnerships with the private sector will have to be fostered to ensure continuity, for example, by encouraging a close exchange between businesses and vocational training centers.

## 2.6 STAKEHOLDER PARTICIPATION PLAN

During the project development phase, stakeholder analysis was carried out using Stakeholder Circle methodology (Bourne and Walker 2005). The process involved a review of documents (such as District Development Plans), individual interviews and focus group discussions. While the findings from these activities produced a preliminary list (**Table 13**), there is need for further engagement for a comprehensive stakeholder analysis, such as a stakeholder analysis workshop during the inception of the project.

**Table 13:** Stakeholder participation plan

	Stakeholder	Requirement from the project	Significance to the project
1	FONERWA	Disbursement of climate adaptation funds	Project implementation
2	Rwanda Energy Group (REG)	Provision of electricity	Baseline electricity project
3	AfDB	Funding of climate adaptation projects	Project sponsor
4	Mayor, Executive Secretaries, Steering/Technical Committees	Socio-economic development of districts	District-level leadership

	<b>Stakeholder</b>	<b>Requirement from the project</b>	<b>Significance to the project</b>
5	Government Ministries, e.g. MINAGRI, MINICOM, MINALOC, MINIFRA	Socio-economic development of districts	National-level leadership
6	Government Agencies, e.g. REMA, Rwanda Agricultural Board, Rwanda Development Board, Rwanda Cooperative Agency, National Women Council, Gender Monitoring Office	Socio-economic development of region	National-level leadership
7	NGOs, CSOs, associations and churches	Development that enhances quality of life	Advocacy for local community
8	Academic/training institutions	Opportunity to improve capacity and skills in region	Capacity building
9	Cooperatives	Coordination of empowerment activities	Coordination of members & activities
10	Private sector/business community	Increased business opportunities	Promotion of economic activities
11	Local community, including vulnerable persons	Climate change adaptation & increased opportunity for livelihood creation	Beneficiaries of project

## SECTION 3: FEASIBILITY

### 3.1 ENVIRONMENTAL IMPACT ASSESSMENT

As described in the previous section, the project is designed to have positive benefits to the environment. No adverse environmental impacts are likely and it conforms to AfDB's pre-approved list of projects excluded from a detailed environmental assessment. The project is classified as operational safeguard 1 – Environmental and Social assessment of AfDB integrated safeguard system.

### 3.2 RISK MANAGEMENT

An identification and ranking of risks has been conducted as well as identification of mitigation measures. Overall, the risks are not exceptionally high and should be manageable. Risks, their ranking and mitigation measures are presented in the following table:

**Table 14: Risk and mitigation factors**

Description	Ranking	Mitigation measures
Low awareness and acceptance of the need to tackle climate change among key practitioners limits the support for action on climate change within key sectors.	LOW	Project will engage with co-operatives during the design phase as they have been found to play an important role in creating awareness and advocating for changes in behavior and practices locally The Project will undertake detailed stakeholder analysis during the design phase and develop an effective advocacy strategy to win over influential stakeholders.
District administrations lack the resources and capacity to engage fully with the project and integrate project outputs with development plans.	LOW	Inclusion of project deliverables in the District Performance Contract where possible will also help to ensure project activities become integrated and sustainable with ongoing development at the local level. Project implementation will be supported with a competent team of professionals that are dedicated full time to the project.
Climatic conditions (destructive rains and unpredictable seasons) hamper project interventions (planting etc.).	MEDIUM	The project will build in flexibility in terms of resource disbursement to enable communities to bring forward project interventions if necessary.
Limited capacity of partner organizations to deliver project outputs.	LOW	The project will carry out capacity assessments of community institutions (co-operatives etc.) during the design phase before finalizing the implementation arrangements and incorporate capacity building where necessary.
Failure to create ownership of the project at the local level to project interventions.	LOW	Project design team will involve the key stakeholders in problem identification, project design, implementation and phase out activities to create ownership at the community level and build in sustainability
Delays in the disbursement of funds and Institutional inefficiencies (lengthy	LOW	Government and AfDB will work closely to ensure optimum conditions for timely disbursement of funds.

Description	Ranking	Mitigation measures
approval processes etc.) delay the resulting in delayed recruitment of project staff and hence project implementation		
High costs and insufficient supply of electricity impedes livelihood diversification (Rwanda is expensive compared to other countries in the region at \$0.24/kwh compared to Kenya's \$0.15/kWh, Uganda's \$0.17/kwh, and Tanzania's \$0.05/kwh (EDPRS 2, 2013).	MEDIUM	Project will invest in a range of livelihood opportunities with varying power requirements.
Failure to adopt a holistic approach necessary for this type of project due to a lack of expertise within the project team or lead agency.	LOW	Project team will be multi-disciplinary. Project will include provision for outsourcing to competent third parties (NGOs, CSOs, specialized technical service providers, consultancy firms etc.) where necessary
Lack of co-ordination with other climate change projects in Rwanda limits the capacity of implementing agency to learn from and build on the experiences of related projects.	LOW	Project will review lessons from other projects during the design phase. The Project Management unit hosted by FONERWA will coordinate Thematic Working groups and Joint Sector Reviews
Weak capacity of coordination for concerned services in the optional choice of technical solutions and project planning for each district.	LOW	Project will allocate resources for effective co-ordination

## SECTION 4: IMPLEMENTATION AND PROJECT MANAGEMENT ARRANGEMENTS

### 4.1 INSTITUTIONAL ARRANGEMENTS

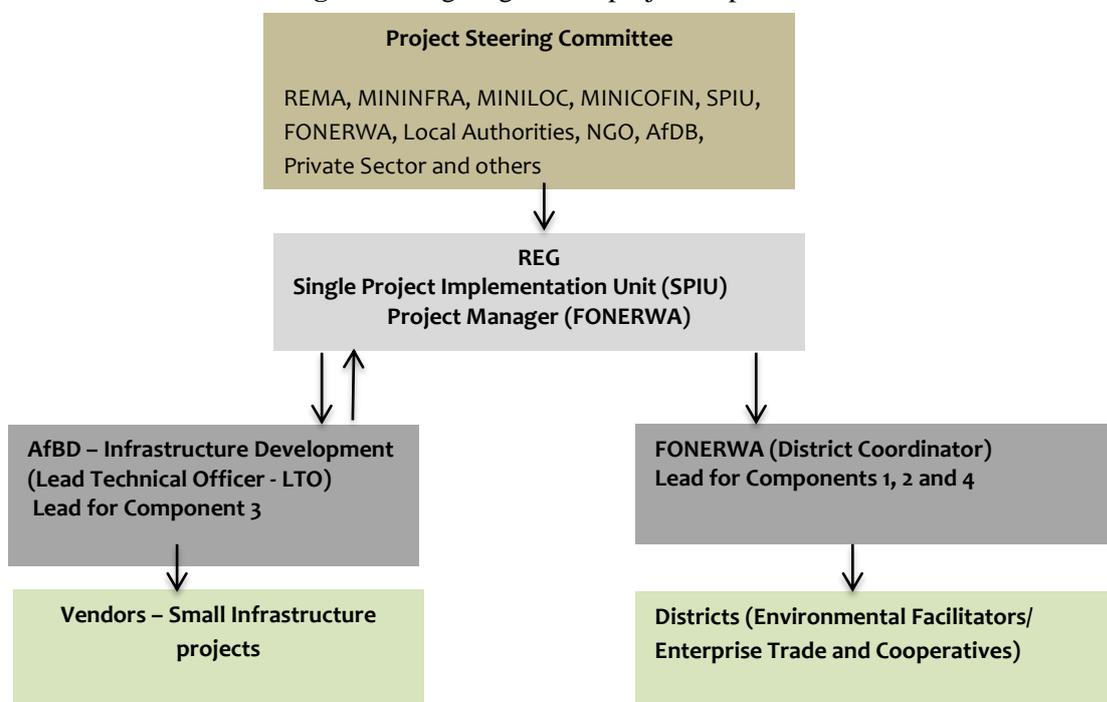
The overall client for the project is the Government of Rwanda under the Ministry of Environment and Natural Resources (MINIRENA) with the National Fund for Environment and Climate Change (FONERWA) as the lead executing agency. FONERWA will be the center of the project's work and operations. The project will be implemented through strategic partnerships with MININFRA, MINICOFIN and other national, district and local institutions (please also see section 1.4) over a period of four years. An inception period will be used to refine the project institutional arrangements after conducting a rapid baseline assessment so as to bring on board other relevant stakeholders for implementation.

The project is designed to coordinate closely with on-going related initiatives. The coordination will be undertaken at several levels: (i) coordination with "baseline programmes or projects" (projects/programmes that provide critical baseline investments on which this GEF investment is built); (ii) coordination with other, related GEF projects in Rwanda and in the region, and; (iii) coordination with other national and international initiatives with which lessons can be shared. FONERWA will ensure coordination with national initiatives, whereas AfDB will facilitate coordination with internationally supported initiatives.

### 4.2. IMPLEMENTATION ARRANGEMENTS

The AfDB will be the GEF Agency responsible for the supervision and provision of technical guidance during the implementation of the project. A single Project Implementation Unit (SPIU) model will be used as the implementation arrangement for this project. The existing REG SPIU will be used. (Figure 2).

**Figure 2:** Organogram for project implementation.



FONERWA, shall second a senior staff member as a project focal point responsible for ensuring the smooth execution of the project (Project Manager). The duties of the project focal point will include (i) acting as the responsible focal point at the policy level within FONERWA; (ii) ensuring all necessary support from FONERWA is provided for implementation of all of the proposed components' activities; (iii) reviewing and providing input to annual work plans and budgets in consultation/collaboration with AfDB; and (iv) participating in the selection of consultants. FONERWA will chair the multi-stakeholder Project Steering Committee (PSC), which will bring together all key institutions including the Rwanda Environment Management Agency (REMA), 3 NGOs Districts, and local community representatives<sup>4</sup>.

The **Project Steering Committee** will guide and oversee implementation of the project. Specifically the PSC will:

- Provide guidance to ensure that project implementation is in accordance with the project document;
- Review and approve any proposed revisions to the project - project results framework and implementation arrangements;
- Review, amend (if appropriate) and endorse all Annual Work Plans and Budgets;
- Review project progress and achievement of planned results as presented in six-monthly Project Progress Reports, annual Project Implementation Reviews (PIRs) and Financial Reports;
- Advise on issues and problems arising from project implementation, submitted for consideration by the Project Management Unit or by various stakeholders; and
- Facilitate cooperation between all project partners and facilitate collaboration between the Project and other relevant programmes, projects and initiatives in Rwanda.

Under the SPIU model, the project will be implemented by FONERWA technical and administrative staff through part-time secondment as necessary. FONERWA will also second a senior staff member to be the overall in-charge of the project (Project Manager). The Project Manager working closely with SPIU will be responsible for the overall delivery of the project. The Project Manager will work closely with the District Coordinator who will be in-charge of the day-to-day activities of the project. Other technical staff to be seconded whenever necessary will include; a knowledge Management specialist and a Monitoring and Evaluation Specialist. The District Coordinator will be answerable to FONERWA and will coordinate all activities at the District level. Based at the District level, the District Coordinator will ensure effective and efficient implementation of activities by communities and other stakeholders.

In close consultation with other partners involved in the execution of project components, the PSC, and AfDB, the SPIU/Project Manager will:

- Act as secretariat to the PSC;
- Organize project meetings and workshops, as required;
- Prepare Annual Work Plans and detailed Budgets (AWP/B) and submit these for approval by the PSC;
- Coordinate and monitor the implementation of the approved AWP/B;
- During project inception period, review the project's M&E plan and propose refinements, as necessary, and implement the plan;
- Prepare the six-monthly Project Progress Reports (PPRs) and give inputs in the preparation of the annual Project Implementation Review (PIR); Ensure that all co-financing partners provide information on co-financing disbursed during the course of the year for inclusion in the PIR;
- Coordinate the project with other related on-going activities and ensure a high degree of inter- institutional collaboration; and
- Assist in the organization of mid-term and final evaluations.

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<sup>4</sup> Please see also section 1.4 stakeholders and participants.

**The Project Manager (PM)** will report to the SPIU and work closely with the PSC, FONERWA and AfDB. The PM will also take the lead in communications with government agencies and advocacy. The PM will also be responsible for providing technical advice and guidance in his/her area of technical expertise. The PM will report on Project progress to PSC meetings, and will develop and submit semi-annual PPRs and annual PIRs. In addition to technical and substantive duties, the PM will:

- Ensure real-time monitoring of Project progress and alert FONERWA and AfDB of potential problems that could result in delays in implementation;
- Ensure the Project's effective and efficient work with stakeholders in the pilot areas;
- Organize and supervise consultant and partners' inputs;
- Oversee creation of the Project's approach to managing and sharing knowledge, and to identifying and disseminating lessons learned;

#### **4.2.1. Other executing partners**

The project will work with a number of partners who will contribute to the execution of specific components/outputs through Letters of Agreement. Letters of Agreement with partners will be based on specific activities in each annual work plan and budget approved by the Project Steering Committee.

##### **AfDB's Role:**

AfDB will be the GEF Agency for the project. As the GEF agency, AfDB will maintain project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. AfDB will report on project progress to the GEF Secretariat; financial reporting will be to the GEF Trustee. AfDB will closely monitor and provide technical support to the project. AfDB Rwanda will second a Lead Technical Officer (LTO) for the project. As the GEF agency for the project, AfDB will:

- manage and disburse funds from GEF in accordance with the rules and procedures of AfDB;
- oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of AfDB;
- provide technical guidance to ensure that appropriate technical quality is applied to all activities;
- carry out at least one supervision mission per year; and
- report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation
- review on project progress and provide financial reports to the GEF Trustee.

AfDB will also be responsible for the financial execution of the project. This implies that AfDB will be responsible for the procurement of goods and services for the project in consultation with project partners based on the annual work plans and budgets approved by the PSC. The AfDB Representative in Rwanda will be the Budget Holder (BH) responsible for the timely operational, administrative and financial management of the project. The BH, working closely with the PM, will disburse funds to FONERWA based on approved workplans and will also be responsible for:

- a. Management of GEF resources in accordance with the Project Document, and approved Annual Work Plans and Budgets;
- b. Procurement of goods and contracting of services for the project and financial reporting in accordance with AfDB rules and procedures;
- c. Preparation of annual/six-monthly budget revisions, as required, for submission to the GEF Coordination Unit;
- d. Preparation of six-monthly financial reports to be submitted to the GEF Unit and shared with the executing partners and the PSC;
- e. Represent AfDB in the PSC.

160. The BH will also be responsible for reviewing and giving no-objection to Annual Work Plans and Budgets (AWP/B), Project Progress Reports and co-financing reports submitted by the SPIU/PM, in consultation with the AfDB Lead Technical Officer (LTO), and the GEF Coordination Unit.

161. **The AfDB Lead Technical Unit (LTU):** The AfDB Climate change Division will form the AfDB LTU for this project. The LTU will support a Lead Technical Officer in the Sub regional Office for Eastern Africa, in providing technical advice and backstopping in consultation with other technical teams in AfDB Rwanda and AfDB Headquarters. The LTU will:

- a. review and provide clearance to TORs for consultancies, LOAs and contracts, in consultation with the LTU and relevant technical officers in AfDB;
- b. participate in the selection of consultants and firms to be hired with GEF funding;
- c. review and provide technical comments to draft technical products/reports and, as necessary, ensure clearance by relevant AfDB technical officers of final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
- d. review and approve project progress reports submitted by the Project Management Unit to the BH;
- e. support the BH in reviewing, revising and giving no-objection to AWP/B to be approved by the Project Steering Committee;
- f. prepare the annual Project Implementation Review (PIR) report to be submitted to the LTU and the GEF Coordination (TCI) for clearance. The PIR will subsequently be submitted to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report;
- g. field annual (or as needed) backstopping missions;
- h. with the LTU, review and clear TORs for the mid-term evaluation, participate in the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation;
- i. with the LTU, review and clear TORs for the final evaluation, participate in the final project closure workshop with all key project stakeholders and the development of and follow up on recommendations on how to ensure sustainability of project outputs and results after the end of the project.

163. **The GEF Coordination Unit** will review and clear project progress reports, annual project implementation reviews (PIRs) and financial reports and budget revisions. The unit will also participate in the mid-term and final evaluations and the development of any corrective actions to mitigate eventual risks affecting the timely and effective implementation of the project. The GEF Coordination Unit will, in collaboration with the AfDB Finance Division, request transfer of project funds from the GEF Trustee based on 6 monthly projections.

#### 4.3.2 GEF inputs

164. GEF resources (USD 8 824 749) will be provided to **Rwanda as a grant**.

#### 4.3.3 Government inputs

165. The Government of Rwanda through **FONERWA** will provide in-kind co-financing in the form of technical and operational support. In addition, FONERWA will provide in-kind co-financing to support project management including office space for the Project Management Unit.

#### 4.3.3 AfDB inputs

166. AfDB will provide in-kind co-financing comprising staff time especially for component 3. The AfDB Rwanda country office will be called upon to mainstream guidelines for last mile

enterprise development and procurement of vendors for small-scale infrastructure development.

#### **4.4 FINANCIAL MANAGEMENT AND REPORTING**

167. AfDB will maintain a separate account in USD for the Project GEF resources showing all income and expenditures. Expenditures incurred in a currency other than USD will be converted into USD at the United Nations operational rate of exchange on the date of the transaction. AfDB shall administer the GEF resources in accordance with its regulations, rules and directives.

##### **4.4.1 Financial reports**

168. AfDB Rwanda as the BH, supported by an Operations and Administrative Officer, will prepare six-monthly Project expenditure accounts and final accounts for the Project GEF resources, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the unliquidated obligations as follows:

- Details of Project expenditures on an output-by-output basis, reported in line with Project budget codes as set out in the Project Document, as at 30 June and 31 December each year.
- Final accounts on completion of the Project on an output-by-output cumulative basis, reported in line with Project budget codes as set out in the Project Document.
- A final statement of account in line with AfDB Project budget codes, reflecting actual final expenditures under the GEF component of the Project, when all obligations have been liquidated.
- An annual budget revision will be prepared by the BH in consultation with the LTO and Project Manager and submitted for approval to the AfDB Coordination Unit.

169. The BH will submit the financial reports. Financial reports for submission to the GEF will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the AfDB Finance Division.

##### **4.4.2 Responsibility for cost overruns**

170. The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the GEF component of the Project budget under any budget line provided the total cost of the annual budget is not exceeded.

171. Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget line over and above the 20 percent flexibility should be discussed with the AfDB GEF Coordination Unit with a view to ascertaining whether it will involve a major change in Project scope or design. If it is deemed to be a minor change, the budget holder shall prepare a budget revision in accordance with AfDB standard procedures. If it involves a major change in the Project's objectives or scope, a budget revision and justification should be prepared by the BH for discussion with the GEF Coordination Unit and eventually with the GEF Secretariat.

172. Savings in one budget line may not be applied to overruns of 20 percent in other lines even if the total cost remains unchanged, unless this is specifically authorized by the AfDB GEF Coordination Unit upon presentation of the request. In such a case, a revision to the budget will be prepared by the BH.

173. Under no circumstances can expenditures exceed the approved total Project budget for the GEF resources or be approved beyond the completion (NTE) date of the Project. Any over-expenditure is the responsibility of the BH.

##### **4.4.3 Audit**

174. Project GEF resources will be subject to the internal and external auditing procedures provided for in AfDB financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and AfDB.

175. The audit regime at AfDB consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the governing bodies of the Organization and reporting directly to them, and an internal audit function headed by the Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of AfDB, which establish a framework for the TOR of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at AfDB field and liaison offices on a cyclical basis.

#### **4.5 PROCUREMENT**

176. Goods, services and works will be procured in accordance with AfDB regulations, rules, procedures, and administrative instructions for procurement and finance. A tentative procurement plan has been developed and will be finalised following the approval of the project (inception phase).

#### **4.6 MONITORING AND EVALUATION**

##### **4.6.1 Oversight and reviews**

177. Project Oversight: The PSC, FONERWA and AfDB will carry out Project oversight. Project oversight will be facilitated by: (i) documenting project transactions and results through traceability of related documents throughout the implementation of the project; (ii) ensuring that the project is implemented within the planned activities applying established standards and guidelines; (iii) continuous identification and monitoring of project risks and risk mitigation strategies; and (iv) ensuring project outputs are produced in accordance with the project results framework. At any time during project execution, underperforming components may be required to undergo additional assessments, implementation changes to improve performance or be halted until remedies have been identified and implemented.

178. Project revisions: The following types of revisions may be made to this project document with no-objection from the PSC and the approval of AfDB GEF Coordination Unit in consultation with the LTO, SPIU and BH:

- Minor revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation. These minor amendments are changes in the project design or implementation that could include, *inter alia*, changes in the specification of project outputs that do not have significant impact on the project objectives or scope, changes in the work plan or specific implementation targets or dates, renaming of implementing entities.
- Revisions in, or addition of, any of the annexes of the project document.
- Mandatory annual revisions which, re-phase the delivery of agreed project outputs or take into account expenditure flexibility.

179. All minor revisions shall be reported in the annual Project Implementation Reviews (PIRs) submitted by AfDB to the GEF Secretariat and Evaluation Office.

##### **4.6.2 Monitoring responsibilities**

180. Monitoring and evaluation (M&E) of progress in achieving project results and objectives will be done based on the targets and results indicators established in the project results framework and annual work plans and budgets. M&E activities will follow AfDB and GEF monitoring and evaluation policies and guidelines. The M&E plan will be reviewed and

updated, as necessary, during the project inception phase. This will involve: (i) review of the project's results framework; (ii) refining of outcome indicators; (iii) identification of missing baseline information and actions to be taken to collect the information; and (iv) clarification of M&E roles and responsibilities of project stakeholders. The project's M&E system will be established within the first 6 months of project implementation.

181. The day-to-day monitoring of the project implementation will be the responsibility of the SPIU led by the Project Manager and driven by the preparation and implementation of annual work plans and budgets (AWP/B) and six-monthly project progress reports (PPRs). The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will define activities proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the achievement of the output and outcome targets. An annual project progress review and planning meeting should be organized by the SPIU with the participation of representatives from key executing partners prior to the Project Steering Committee Meeting. The AWP/B will be submitted to AfDB and to the PSC for approval. The AWP/B will be developed in such a way that it is always linked to the project's Results Framework to ensure the achievement of outputs and outcomes.

#### **4.6.3 Indicators and information sources**

182. To monitor project outputs and outcomes including contributions to global environmental benefits, specific indicators have been developed in the Results Framework (see Annex 1). Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

#### **4.6.4 Reports and their schedule**

183. The specific reports that will be prepared under the M&E program are the: project inception report; Annual Work Plan and Budget (AWP/B); Project Progress Reports (PPRs); annual project implementation review (PIR); technical reports; co-financing reports; and a terminal report. In addition, GEF tracking tools for CCA will be updated after the baseline and completed by the project team at mid-term and final evaluation.

184. **Project Inception Report:** After GEF approval of the project and signature of the AfDB/Government Cooperative Programme (GCP) Agreement, the project will initiate with a six-month inception period. An inception workshop will be held and immediately after the workshop, the Project Manager will prepare a project inception report in consultation with the AfDB LTO and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed First Year Annual Work Plan and Budget (AWP/B) and supervision plan with all monitoring and supervision requirements. The draft report will be circulated to AfDB and the Project Steering Committee for review and comments before its finalization. The report should be cleared by the AfDB BH (AfDB Rwanda) in consultation with the LTO, FONERWA and the AfDB GEF Coordination Unit and uploaded in FPMIS by the BH.

185. **Annual Work Plan and Budget (AWP/B):** The National Project Coordinator will submit to the AfDB Budget Holder an Annual Work Plan and Budget for clearance. The AWP/B, divided into monthly timeframes, should include detailed activities to be implemented and outputs (targets and milestones for output indicators) to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B is circulated to and reviewed by the AfDB Project Task Force (LTO, LTU, GEF Coordination Unit and others), the Project Coordinator incorporates eventual comments and

the final AWP/B is sent to the PSC for approval. The AfDB Budget Holder will upload the final AWP/B in FPMIS.

186. **Project Progress Reports:** One month before the end of each project year, the Project Manager will prepare an annual Project Progress Report (PPR). The report will contain the following: (i) an account of actual implementation of project activities compared to those scheduled in the AWP/B; (ii) an account of the achievement of outputs and progress towards achieving project objectives and outcomes (based on the indicators contained in the results framework); (iii) identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation and the reasons for these constraints; (iv) clear recommendations for corrective actions in addressing key problems resulting in lack of progress in achieving results; (iv) lessons learned; and (v) a revised work plan for the final six months of the project year. The report will also include an estimate of co-financing received from all co-financing partners.
187. The Project Manager will submit the PPR to AfDB no later than one month after the end of each reporting period (31 December). The draft PPR will be reviewed and cleared by AfDB (BH and LTO). The LTO will submit the PPR to the GEF Coordination Unit for final clearance. The BH will circulate the final cleared PPR to the PSC.
188. **Project Implementation Review:** The LTO supported by the AfDB LTU, with inputs from the Project Manager will prepare an annual Project Implementation Review (PIR) covering the period July (the previous year) through June (current year). The PIR will be submitted to the GEF Coordination in TCI for review and approval no later than 15 July. The GEF Coordination Unit will submit the final report to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the AfDB-GEF portfolio.
189. **Technical Reports:** Technical reports will be prepared and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the Project Manager to the AfDB Budget Holder in Rwanda who will share it with the LTO for review and clearance, prior to finalization and publication. Copies of the technical reports will be distributed to the Project Steering Committee and other project partners as appropriate. These will be posted on the AfDB FPMIS by the LTO.
190. **Co-financing Reports:** The Project Manager will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by all co-financing partners. The National Project Coordinator will provide the information in a timely manner and will transmit such information to AfDB. The co-financing reports should be completed as part of the semi-annual PPRs and annual PIRs.
191. **GEF-5 Tracking Tools:** Following the GEF policies and procedures, the tracking tools for Climate Change Adaptation on CCA-1 and CCA-2 will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at project mid-term evaluation; and (iii) at final evaluation. The Project Manager is responsible for completing these reports with support from the LTO at mid-term and final evaluation.
192. **Terminal Report:** Within two months before project completion, the Project Manager will submit to AfDB a draft Terminal Report, including a list of outputs detailing the activities taken under the Project, “lessons learned” and any recommendations to improve the efficiency of similar activities in the future. This report will specifically include the findings of the final evaluation as described above.

#### **4.6.5 Monitoring and evaluation plan summary**

193. Monitoring of project progress will be against indicators identified in the project results framework. These indicators will be further refined, as necessary, in consultation with project

stakeholders during the project inception phase. This process of further collaborative refinement of project indicators will facilitate greater stakeholder engagement with the project and support broader monitoring and reporting of project achievements and challenges. The monitoring and evaluation plan is summarized below.

**Table 15:** The monitoring and evaluation plan

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Inception Workshop	Project Manager leads the organization, in close consultation with FONERWA and AfDB.	Within first two months of project inception	10,000
Inception report	Project Manager with inputs from project partners. Cleared by AfDB and the Project Steering Committee.	Immediately after the project inception workshop	None
Design and implementation of monitoring and evaluation system	Project Manager with support from the AfDB Lead Technical Officer	Within the first six months after the project inception	10,000
Field-based impact monitoring	Project Manager with support from other project partners	Continually	40,000
Supervision missions	AfDB LTO/LTU and AfDB Rwanda	Annual or as required.	Paid by GEF Agency fee
Project progress reports (PPRs)	Project Manager. Submitted to AfDB Rwanda (Budget Holder). Finalized reports submitted to the AFDB GEF Unit by the LTO, and to the PSC by the Project Manager	Annually	None
Project Implementation Review (PIR)	AfDB LTO with inputs from the Project Manager and AfDB Budget Holder. Submitted by the AFDB GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point by the Project Manager.	Annually	Paid by GEF Agency fee
Reports on co-financing	Project Manager with information from all co-financing partners.	Six monthly and annually as part of PPR and PIR.	None
PSC meetings	Project Manager, PSC Chair, AfDB Budget Holder	At least once a year	40,000

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Technical reports	Project Manager, Consultants, AfDB	As appropriate	Component budgets
Mid- term evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At mid-point of project implementation	50,000
Final evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At the end of project implementation	50,000
Terminal report	Project Manager	At least one month before end of project	None
NPC, CTA and project admin assistance estimate total cost for all M&E activities			30,000
<b>TOTAL</b>			<b>250,000</b>

#### 4.7 PROVISIONS FOR EVALUATIONS

194. Half way through the project implementation period, an independent Mid-Term Evaluation (MTE) will be undertaken to evaluate progress and the effectiveness of implementation in terms of achieving the project objectives, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term. AfDB will arrange for the MTE in consultation with the project partners. The evaluation will, *inter alia*:

- a) review the effectiveness, efficiency and timeliness of project implementation;
- b) analyze effectiveness of partnership arrangements;
- c) identify issues requiring decisions and remedial actions;
- d) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- e) Highlight technical achievements and lessons learned derived from project design, implementation and management.

196. An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best practices within the country and to neighboring countries.

#### 4.8 COMMUNICATIONS AND VISIBILITY

197. The project will develop a communication strategy that will provide framework for information flow and feedback to all key stakeholders. Communication activities will focus on outputs, outcomes and good practices from the project. Various communication, awareness raising, dissemination and visibility tools (press releases, seminars and workshops, newsletters, videos presenting success

stories, publications, and production of visibility items) will efficiently be used. The communication/visibility plan and activities will be aligned with the GEF communication and visibility policy ([www.thegef.org/gef/policies\\_guidelines/communication\\_visibility](http://www.thegef.org/gef/policies_guidelines/communication_visibility)), and AfDB's corporate communication strategy with input from the FONERWA and other partner institutions implementing the project. All publications will bear the logos of the Government of Rwanda, AfDB and GEF. All information generated by the project will be uploaded in open source platforms in accordance with AfDB and the Government of Rwanda policy of right to information

## SECTION 5: SUSTAINABILITY OF RESULTS

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The sustainability of the project will be in its ability to continue functioning at the end of the project and learn from the lessons learnt and practices employed; the project can then be replicated across other districts, and eventually the whole country.

The project proposed is integral for the environmental, social, institutional and financial sustainability of the not just the three Districts but for the whole of Rwanda. Without this LDCF intervention, climate vulnerability will erode local economic development and resilient livelihoods.

### 5.1 SOCIAL SUSTAINABILITY AND GENDER MAINSTREAMING

The project will address the problems of poverty, environmental degradation and climate-led disasters in the project area and will serve as a model for scaling up in neighboring districts facing similar problems. The project will ensure that diversification of agriculture provides resilience of local economies and livelihoods and form the basis of community based adaptation plans. Assisting the district environment teams to mainstream climate risk considerations in the district development plans will further contribute to the target of mainstreaming sustainable development principles in national development policies.

The project will develop and demonstrate practical enterprises, tools, technologies and capacities for non-agricultural income generating activities, through community centered adaptation program, focusing heavily on promotion of utilization of electricity. These interventions will collectively lead towards environmental sustainability and reduce vulnerability of livelihoods to climate risks and increase household welfare (including incomes) of local communities.

At the micro level, the project is expected to benefit the whole Districts population, which is estimated at 800,000 people, working directly on in directly through cooperatives. The proposed projects in each district are expected to provide incomes to individual members. It is estimated that women make about 60% of the beneficiaries since women lead most smallholder farming activities. Youth will also benefits directly from this project as they have proposed a number of projects. In addition, the project will actively empower women and other excluded groups, particularly those at high risk of suffering from the effects of climate change vulnerabilities. This will be achieved through social mobilization utilizing Women Self Help Groups (SHGs) and other such community based structures. These groups will benefit particularly from skill development (education/training), access to financial resources and markets for sustainably produced/harvested products

### 5.2 ENVIRONMENTAL SUSTAINABILITY

The focus of this project is to provide alternative livelihood, which will eventually put less pressure on the environment. By providing alternative to agriculture, the project is not only improving livelihoods but also reducing pressure on land. One of the components of the project is looking at the development of post harvest enterprises to minimize commodity losses which will otherwise end in the environment. The project is also building on the baseline project, which is providing electricity to rural communities. This project is aimed at reducing the use of biomass energy that puts pressure on forests in Rwanda.

### 5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

The financial sustainability of this project rests in part on the improvement of economic capabilities for the local communities. The program design has several built-in options for scaling up program interventions to ensure financial sustainability. The project will introduce measures to expand economic opportunities for women and youth and promote their participation in the labour force as this will reduce poverty, foster faster growth and increase resilience. To address specific gender inequalities that impede women's participation in enterprise development and the jobs market, the project will identify gaps in gender equality by consulting with men and women and developing skills and strategies

to address these gaps. The project will specifically target vulnerable youths (aged 15 to 21 years) from unstable family backgrounds for vocational training and other support needed to enable them to get productive employment and reduce youth disaffection and delinquency. The project is designed to use staff and national institutions for capacity building activities. This will permit scalable investments from the project budgets.

#### **5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED**

The purpose of the program is to promote climate resilient development. In this regard, one component focuses on development of manpower in agriculture, land, water, forestry and infrastructure engineers in climate resilient technologies. The program will sensitize the planners and policy makers to incorporate climate resilience in development. An aggressive advocacy campaign in this regard will be launched through print and electronic media to influence the policy and development process. Thus the motivated and technically strong manpower in teaching and extension institutions will sustain and disseminate the climate resilient programs at a larger scale. This will ensure sustainability and up scaling of the present and future interventions. Policing to implement policies is not a solution; therefore, the community members will be sensitized and trained in participatory approaches to discourage negative environmental approaches and promote eco-friendly approaches. This will also ensure sustainability of the program interventions. In addition the project will rely on existing national institutions such as FONERWA/ REMA/ MINALOC/ MINAGRI/ MININFRA/ CAPACITY BUILDING SECRETARIAT/ GENDER MONITORING UNIT, etc. as a sustainable mechanism.

#### **5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED**

The project is introducing few technologies. All the technology introduced by the project meets two important criteria – it is appropriate for rural communities’ production systems, and it is low key in maintenance. Various technologies and their appropriateness are described below:

- Building of climate proof rural infrastructure, which includes markets and post-harvest technologies. The equipment associated with technologies will be simple and easy to use. Communities will be trained on usage and maintenance.
- Modern equipment for running cooperatives professionally – this will include simple computers, scanner/printers and telephones; the project will formulate a strategy for sustaining the cooperatives professional running and raise funds for its implementation post project. The long-term plan is that the cooperatives will raise money through membership recruitment, enough to meet the operational costs. The technology provided is very low key and easy to maintain at low budgets.

#### **5.6 REPLICATION STRATEGY**

The outcomes of this project are designed to strengthen the foundational capacities required to continue implementing adaptation measures and for the ongoing replication of adaptation strategies country-wide. This project is therefore, expected to make a lasting contribution not only to the sustainability of all adaptation projects in the country but also to broader EDPRS II objectives. The participatory approach will root ownership of the project interventions firmly in the local communities. By engaging communities in the design and implementation of the project and creating local employment and enterprise development schemes, the project will empower and build capacity of local people to continue adapting to climate change risks. Adaptation plans will be incorporated into District Performance Contracts to institutionalize and sustain community interventions.

Scaling up will be an integral part of the project planning process. During the design phase, key actors will be identified as those who will have to be convinced of the value of the planned concept and approach. These will include the actors who are important for scaling up such as key ministries (MININFRA, MINALOC, and MINICOM etc.), local authorities, NGOs as well as the private sector. The strategy is to involve them in planning, implementation and evaluation processes at an early stage and build a working relationship with them. Getting their support will be crucial in ensuring the

interventions have the necessary political backing for scaling up (including incorporating the concept into their own sector programmes or policies). During the design phase, the project will develop an effective communications strategy and invest specifically in disseminating information and in awareness programmes to ensure that major stakeholders and population groups are informed, convinced and involved. This will include the production of briefing notes for policy makers to create a positive environment for scaling up utilizing websites, site visits, and the print and radio media to broadly advertise project results and foster replication and scaling up of successful interventions, provide updates on the progress and project activities, disseminate case studies and comments from the project participants, and communicate lessons learned from project activities. To make the project even more sustainable, partnerships with the private sector will have to be fostered to ensure continuity, for example, by encouraging a close exchange between businesses and vocational training centers.

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## ANNEX 1: PROJECT RESULT FRAMEWORK

Results Chain	Performance Indicators			Means of verification	Risks/Mitigation Measures
	Indicator (Including CSI)	Baseline	Target		
Outcome 1: Diversified, strengthened and climate resilient rural livelihood opportunities for vulnerable women and men.	% reduction in post-harvest losses from improved and greened infrastructure	35%	10%	Project monitoring systems, Reports from district monitoring teams, MINIAGRI, Project Joint monitoring reports, mid and end of project reviews	<p><b>Risk:</b> People may fail to use the technologies correctly, despite the knowledge the advantages to be accrued from adopting.,</p> <p><b>Mitigation Measures:</b> Continuous awareness targeting communities to embrace the correct use of post harvest management technologies.</p> <p>Linkages to the private sector; careful use of the grants/credits to finance purchasing of energy efficient technologies.</p>
	% increase in knowledge of livelihood opportunities	None	80% of communities aware of alternative livelihood options	Project monitoring systems, district reports, Joint monitoring reports, mid and end of project reviews	
	% increase in economic enterprises for youth and women	0%	Over 30% of women and 50% of youth have increased income form new enterprises	Project monitoring systems, district reports, Joint monitoring reports, mid and end of project reviews	
Outcome 2: Community driven adaptation and reduced vulnerability to climate change	% increase of HH with knowledge on vulnerability and resilience to climate change and gender responsiveness	10%	80 % of HH with knowledge	Project monitoring systems, district reports  KAP survey Report	<p><b>Risk:</b> That the current political support for mainstreaming climate change considerations into the development processes, especially in order to secure current development gains of the baseline programs continues</p> <p><b>Mitigation Measures:</b> Timely implementation of the Training, implementation of activities and timely generation of lessons</p>
	Number of community groups with capacity to plan, implement and monitor adaptation programmes	0	At least 15 community groups with capacity	Project monitoring systems, district reports  Community action plans	

Results Chain	Performance Indicators			Means of verification	Risks/Mitigation Measures
	Indicator	Baseline	Target		
	(Including CSI)				
	District level development plans and policies updated with climate risk management provisions.	0	4 District level programs, development plans and/or policies updated with climate risk management provisions	Project monitoring systems, district reports	
Outcome 3: Increased resilience of small scale rural infrastructure to climate change	No of rural markets upgraded with at least 30% of space allocated to women and 20% to youth	0	At least 6 markets (2 per District) upgraded with allocation by gender and age	Project monitoring systems, district reports  Allocation minutes Designs reports	<b>Risk:</b> Unwillingness of engineers to embrace new guidelines and designs.  <b>Mitigation Measures:</b> Timely implementation of the Training, implementation of activities and timely generation of lessons.
	No of small-scale rural infrastructure built and/or rehabilitated to a specification that takes into account anticipated climate risks.	0	At least 9 post harvest infrastructures built and operational	Project monitoring systems, district reports	
	% of engineers utilising climate risks guidelines for rural infrastructure	0	At least 50% of engineers trained and utilising guidelines	Project monitoring systems, district reports,	
Outcome 4: M&E management and lessons learnt are captured and appropriately disseminated	Community involvement in monitoring vulnerability	0	Set of indicators for monitoring community vulnerability agreed and being actively used	Community monitoring reports; Project monitoring systems, district reports, PMERL reports	<b>Risk:</b> That the current political and social support demonstrated by politicians, technical staff and communities for mainstreaming climate change considerations into the development processes, especially in order to secure current development gains of the baseline programs continues  <b>Mitigation Measures:</b> That the project can identify and secure the services of a consultant with technical expertise, interest, availability and
	Quality knowledge products available, shared and being used	0	At least 6 main knowledge products acceptable for international publishing standards and	Project monitoring reports, PIRs, publications	

Results Chain	Performance Indicators			Means of verification	Risks/Mitigation Measures
	Indicator	Baseline	Target		
	(Including CSI)				
			information evidently being used in training,		willingness to work with communities and the government in a participatory monitoring

## ANNEX 2: BUDGET

Outputs	Impl. Agent	Fund ID	Budget Code	Description	Year 1	Year 2	Year 3	Year 4	Total	Note
Output 1.1: Improved knowledge, understanding and awareness of livelihood opportunities resulting from electrification	FNR			Baseline Survey	30,000	0	0	0	30,000	1
	FNR			Development of awareness materials		20,000	10,000	0	30,000	2
	FNR			Community Awareness Programmes		10,000	5,000	5,000	20,000	3
<i>Output sub-total</i>									<b>80,000</b>	
Output 1.2: Increased capacity of target households to participate in market-oriented enterprises	FNR			MINICOM to determine baseline capacity (Capacity needs Assessment)	20,000	0	0	0	20,000	4
	FNR			MINICOM Training - Cooperatives		5,000	5,000	5,000	15,000	5
	FNR			Study tour to working enterprises	65,000	0	0	0	65,000	6
<i>Output sub-total</i>									<b>100,000</b>	
Output 1.3 Increased investment in value chain development creating and linking demand to supply	AfDB			Nyamasheke - Fruit processing plant	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Nyamasheke - Animal feeds production plant	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Nyamasheke - Pork processing unit	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Karongi - Ecotourism	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Karongi Banana value chain	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Karongi -Briquette making	10,000	40,000	200,000	30,000	280,000	7
	AfDB			Rusizi - Briquette making	10,000	40,000	200,000	30,000	280,000	7

	<b>AfDB</b>			Rusizi - Construction of a modern fruit market	10,000	40,000	200,000	30,000	280,000	7
	<b>AfDB</b>			Rusizi – Fruit value chain promotion	10,000	40,000	200,000	30,000	280,000	7
<i>Output sub-total</i>									<b>2,520,000</b>	
Output 1.4 Increased economic opportunities for women and youth	<b>FNR</b>			Facilitate Youth Fund and Gender Monitoring Office (GMO)	50,000	50,000	50,000	50,000	200,000	8
<i>Output sub-total</i>									<b>200,000</b>	
Outcome 1: Diversified, strengthened and climate resilient rural livelihood opportunities for vulnerable women and men.									<b>3,000,000</b>	
Output 2.1 Increased knowledge and understanding of the social dimensions of vulnerability and resilience to climate change	<b>FNR</b>			Development of awareness materials	0	50,000	24,749	0	74,749	9
	<b>FNR</b>			Community Learning PLPA/CVCA vulnerability	0	80,000	40,000	0	120,000	10
<i>Output sub-total</i>									<b>194,749</b>	
Output 2.2 Increased awareness of climate change impacts and promotion of gender-responsive climate adaptation	<b>FNR</b>			Community Learning by doing and documenting	50,000	50,000	50,000	50,000	200,000	11
	<b>FNR</b>			Community Dissemination – Adaptation activities	0	40,000	40,000	40,000	120,000	12
<i>Output sub-total</i>									<b>320,000</b>	
Output 2.3 Increased institutional capacity of district administrations to coordinate and support climate-resilient development planning at the local level	<b>FNR</b>			Facilitate REMA and MINILOC to support greening of DDPs	125,000	125,000	125,000	125,000	500,000	13

<i>Output sub-total</i>									<b>500,000</b>	
Output 2.4 Increased capacity of communities to plan, implement and monitor adaptation programmes	<b>FNR</b>			Training –Participatory M&E	20,000	10,000	10,000	5,000	50,000	14
	<b>FNR</b>			Development of M&E tools	40,000	0	10,000	0	50,000	15
	<b>FNR</b>			Facilitate communities to carry out planning an monitoring	10,000	10,000	10,000	10,000	40,000	16
<i>Output sub-total</i>									<b>140,000</b>	
Outcome 2: Community driven adaptation and reduced vulnerability to climate change (Sub-total)									<b>1,154,749</b>	
Output 3.1: Increased investment in small-scale rural infrastructure designed, built and/or rehabilitated to a specification that takes into account anticipated climate risks.	<b>AfDB</b>			Consultant – Infrastructure audit	80,000	0	0	0	80,000	17
	<b>AfDB</b>			Small scale infrastructure - Karongi	0	40,000	300,000	300,000	640,000	18
	<b>AfDB</b>			Small scale infrastructure - Nyamasheke	0	40,000	300,000	300,000	640,000	18
	<b>AfDB</b>			Small scale infrastructure - Rusizi	0	40,000	300,000	300,000	640,000	18
<i>Output sub-total</i>									<b>2,000,000</b>	
Output 3.2: Rural markets upgraded with at least 30% of space allocated to women and 20% to youth and decentralized agriculture processing centers	<b>AfDB</b>			Rehabilitation/Upgrade markets-Karongi -	0	40,000	200,000	130,000	370,000	
	<b>AfDB</b>			Rehabilitation/Upgrade markets- Nyamasheke -	0	40,000	200,000	130,000	370,000	
	<b>AfDB</b>			Rehabilitation/Upgrade markets - Rusizi	0	40,000	200,000	130,000	370,000	
	<b>AfDB</b>			Construct New Market Rusizi	0	50,000	300,000	200,000	550,000	
	<b>AfDB</b>			Meeting– Market committees (GMO)	10,000	10,000	10,000	5,000	35,000	
<i>Output sub-total</i>									<b>1,705,000</b>	
Output 3.3: Increased capacity of District engineers	<b>FNR</b>			Training –Engineers and Procurement	20,000	0	20,000	0	40,000	

and local contractors to factor in climate risks to the design and construction of small-scale rural infrastructure	FNR			Consultant - Training Modules development	40,000	0	25,000	0	65,000	
	FNR			Training – TOT on Modules for IPRC	50,000	0	10,000	0	60,000	
	FNR			Support trainees to deliver modules	0	10,000	10,000	10,000	30,000	
	FNR			Consultant – Guidelines development	50,000	0	0	0	50,000	
	FNR			Consultant – Checklist development	50,000		0	0	50,000	
<i>Output sub-total</i>									<b>295,000</b>	
<i>Outcome 3: Community driven adaptation and reduced vulnerability to climate change</i>									<b>4,000,000</b>	
Output 4.1 Compile, document and disseminate Knowledge adaptation products	FNR			Document knowledge adaptation products and lessons learnt	20,000	0	0	0	35,000	
	FNR			Dissemination of lessons – electronic, paper and workshops	10,000	5,000	0	15,000	45,000	
<i>Output sub-total</i>									<b>80,000</b>	
Output 4.2: Participation in adaptation practitioners events	FNR			Facilitate seminars and workshops	0	15,000	0	15,000	30,000	
<i>Output sub-total</i>									<b>30,000</b>	
Outcome 4.3: Produce Monitoring and evaluation reports	FNR			Mid Term Project Evaluation	0	0	50,000	0	50,000	
	FNR			End of Project Evaluation	0	0	0	0	50,000	
	FNR			Monitoring Travel - Joint monitoring and staff	10,000	10,000	10,000	10,000	40,000	
<i>Outcome Sub-total</i>									<b>140,000</b>	
<i>Outcome 4: M&amp;E management and lessons learnt are captured and appropriately disseminated</i>									<b>250,000</b>	

Outcome 5: Project Management			Personnel and Management costs	68,750	68,750	68,750	68,750	275,000	
			Equipment & Furniture	20,000	10,000	5,000	5,000	40,000	
			Office Supplies	6,000	3,000	3,000	3,000	15,000	
			Communication & Audio Visual Equip	5,000	5,000	5,000	5,000	20,000	
			Travel	22,500	12,500	12,500	12,500	60,000	
			Miscellaneous	2500	2500	2500	2500	10,000	
<i>Outcome Sub-total</i>								<b>420,000</b>	
<b>GRAND TOTAL</b>								<b>8,824,749</b>	

### Budget Notes

Output 1.3: The 10,000 USD in year 1 to be used for value chain studies; 200,000 for infrastructure development and 30,000 for contingency.

