



**GREEN
CLIMATE
FUND**

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3 March 2016

Progress and outlook report of the Readiness and Preparatory Support Programme – Addendum Project Preparation Funding Application

Summary

This addendum contains the following document:

- (a) Project Preparation Funding Application for the Rural Green Economy and Climate Resilient Development Programme

This document is presented as submitted by the accredited entity.

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I. Executive summary

1. The Ministry of Natural Resources of Rwanda (MINIRENA), a direct access entity of the GCF, submitted a funding proposal entitled “Rural Green Economy and Climate Resilient Development Programme” with a no-objection letter from the National Designated Authority of Rwanda – the Rwanda Environment Management Authority (REMA). The programme aims to increase the resilience of one of Rwanda’s poorest districts - Gicumbi - to the impacts of climate change, and establish small-scale, low carbon rural industries to create green jobs. The programme seeks to pilot innovative approaches to develop low carbon industries, increase the resilience of tea farming to the impacts of climate change and use targeted research and analysis to guide policy makers, business leaders and communities.

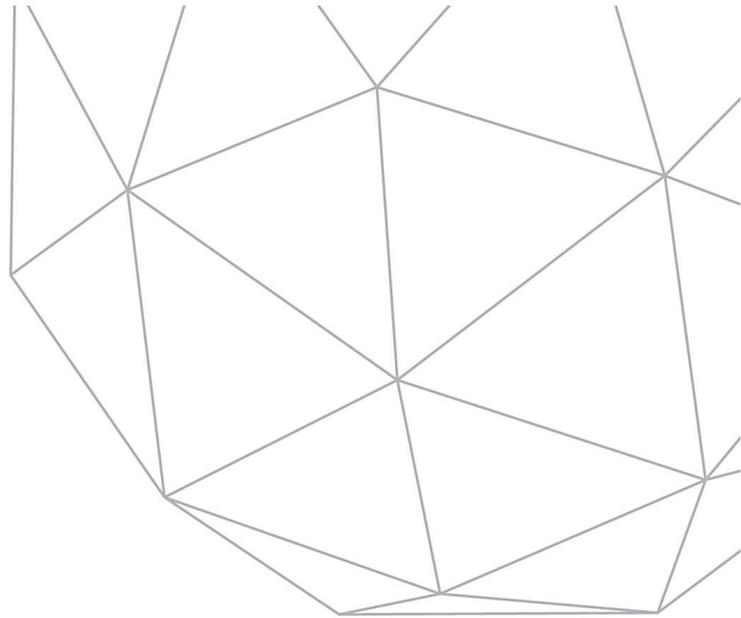
2. The programme will focus on four key sectors that are critical to enabling Gicumbi to achieve its development targets and align with national green growth and climate resilient priorities: tea, forestry, construction and energy. The pilot programme comprises four interlinked projects: (1) affordable, low carbon settlements and industries as growth hubs; (2) climate-resilient production of tea; (3) sustainable forest management and watershed management; and (4) knowledge development and transfer.

3. The Secretariat reviewed the funding proposal of the programme above and, in consultation with the accredited entity and the NDA identified that the following activities need to be undertaken to complete the funding proposal prior to the submission to the Board:

- (a) Development of a master-plan for infrastructure, energy and water;
- (b) Delivery of feasibility studies on:
 - (i) Forestry and watershed management; and
 - (ii) Climate resilient tea;
- (c) Preparation of Environmental and Social Impact Assessment and gender analysis;
- (d) Development of a Financial Model and Economic Analysis;
- (e) Development of a Project Management Plan, including the implementation manual; and
- (f) Preparation of Legal due diligence report.

4. MINIRENA seeks financial support from the GCF through the Project Preparation Facility to finance the activities above. The total expected cost requested from the GCF is USD 1,498,841.

Annex I: Project Preparation Funding Application for the Rural Green Economy and Climate Resilient Development Programme



Project Preparation Funding Application

Application Title:	Project Preparation Funding Application for the Rural Green Economy and Climate Resilient Development Programme
Country/ Region:	RWANDA
Accredited Entity:	MINIRENA

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Please submit the completed form to:

fundingproposals@gcfund.org

and use the following name convention for the file name:

“[PPF]-[Agency Short Name]-[Date]-[Serial Number]”

A. Executive Summary <i>(in one page)</i>	
Accredited Entity	Ministry of Natural Resources of Rwanda (MINIRENA)
Contact Details	<p>Primary contact Name: Fatina Mukarubibi Position: Permanent Secretary, MINIRENA Email: fmukarubibi@minirena.org.rw Tel: +250 252 582 628 Full Office address: KG 220 St. Kigali, Rwanda.</p> <p>Secondary contact Name: Alex Mulisa Position: Coordinator, Fund for Environment and Climate Change of Rwanda (FONERWA) Email: a.mulisa@fonerwa.org Tel: +250 78830 2107 Full Office address: KG 7 Av. P.O Box 7436 Kacyiru, Kigali, Rwanda</p>
Concept Note/Funding proposal Title (reference number)	Rural Green Economy and Climate Resilient Development Programme (GCF internal number 2015112)
Country/Region	Rwanda
Request Summary (in 200 words)	<p>MINIRENA aims to pilot measures to increase the resilience of Gicumbi district to the expected impact of climate change, establish small-scale low carbon rural industries and create green jobs. The programme would like to pilot innovative approaches to develop low carbon industries in one of Rwanda's poorest districts, Gicumbi, increase the resilience of farming systems to climate change and use targeted research and analysis to guide policy makers, business leaders and communities in this respect. The programme will focus on four key sectors that are critical to enabling Gicumbi to achieve its development targets and align with national green growth and climate resilient priorities: tea, forestry, construction and energy. The pilot programme comprises four interlinked projects: (1) affordable, low carbon settlements and industries as growth hubs; (2) climate resilient production of tea; (3) sustainable forest management and watershed management; and (4) knowledge development and transfer. The Project Preparation Facility (PPF) will be used to finance the following required studies:</p> <ol style="list-style-type: none"> 1. Low carbon settlement feasibility study 2. Watershed feasibility study 3. Upgrade of the Environmental and Social Impact Assessment (ESIA) 4. Gender analysis 5. Financial model and economic analysis 6. Project management plan (including implementation manual) 7. Legal due diligence report <p>These studies are required to determine the best way to implement, design and integrate the various aspects of the program. Furthermore, these studies will be needed by other financial institutions from whom MINIRENA is also seek financing.</p>
Anticipated Duration	4 months (01/05/2016 – 31/08/2016)
Estimated cost	<p>Total Cost: USD 1,498,841</p> <p>Funding amount requested to GCF: US\$ 1,498,841 (including contingency – 9% of total amount)</p>

B. Description of Activities

In 2008, the Rwanda Environment Management Authority (REMA), supported by the Poverty and Environment Initiative (PEI), and funded by the United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP) launched a highly successful low carbon, climate resilient Kabeza housing village in the Rubaya sector of the northern District of Gicumbi. This district was chosen because of its history of poor land practices, inadequate soil conservation, destruction of wetlands, a declining size of arable and pastoral land, inappropriate water harvesting measures. In other words, it was considered to be among the most climate vulnerable parts of Rwanda. In order to combat these concerns and reduce vulnerability to food insecurity, Gicumbi sought to address these issues through the Kabeza Green Model Village. This programme intended to address the specific issues of access to clean drinking water, energy, food security, nutrition, income generation and participatory energy and natural resources governance. Structured as a type of commune, Kabeza uses a set of technologies ranging from rainwater harvesting and biogas systems to terracing and tree planting to improve the quality of life and enhanced environmental sustainability in Rubaya. As a result of introducing rainwater harvesting systems, the use of biogas residue as a fertilizer, tree planting and terracing, and food security for the community has increased and excess production is being sold at the market. Terracing has helped to reduce landslides on the slopes which used to cause damage to property and in extreme cases loss of lives. The biogas generated through the system is distributed to households for cooking and lighting. This has reduced the dependency on firewood and thus decreased the deforestation rate. An estimated 14 Ha of forest has been saved. Owing to the use of biogas plants, the community has a clean, nontoxic fuel source thereby reducing health issues related to the inhalation of smoke from firewood. Today the village has been successful in overcoming most of the challenges and is home to 43 families. The pilot village has generated immense interest and has been part of south-south exchange programmes involving government representatives from Burkina Faso, Mozambique and Malawi.

MINIRENA will seek to scale up the existing Kabeza housing village by adding an additional 57 units. These units will differ slightly from the original 43 units, in their use of locally available raw materials such as clay, sand, dimension stones as well as locally grown eucalyptus timber as a substitute for imported concrete and steel. Doubling the size of the village will require upgrades to the existing infrastructure such as expanding the off grid solar, rainwater collection and biogas system. All of these aspects of construction and infrastructure expansion will be included and analyzed as part of feasibility study.

In addition to scaling up Kabeza, MINIRENA seeks to build and expand on the green village model in Kaniga. The proposed 400 unit village is situated on 20 Ha in Kaniga, adjacent to the Mulindi tea estate run by the Wood Foundation Trust, a charitable organization which focuses on improving the lives of small scale farmers. Similar to the expansion at Kabeza, the new village would be constructed using local, ecofriendly building materials which will reduce the continued reliance on imported construction materials such as cement and steel with high levels of embodied carbon. The village would utilize innovative technology, specifically energy efficient cook stoves, LED lighting and water heaters, along with off-grid solar PV mini-grids. A self-build, incremental construction model will be followed in creating a higher density settlement (i.e. two storey houses) that addresses the high population density and land shortage issue facing much of rural Rwanda. Kaniga could potentially provide housing for the 1000 small scale farmers who work at the Mulindi tea estate (a major source of employment locally) and whom currently reside in self-built, single store dwellings. The feasibility of the site location, project size, affordability and infrastructure requirements will be included and analyzed as part of a feasibility study.

This programme will demonstrate a model of accelerated economic growth based on the principles of climate resilience and low carbon development. Firstly, the interventions are designed to stimulate a demand for affordable, low carbon housing by reducing the costs of construction by using locally available materials, promoting an incremental, self-build model of construction that utilises available labour and increases the availability of and access to renewable energy and appropriate financial products for low income households and enterprises increasing the availability of and access to affordable, low carbon housing for 7102 people. Secondly, the programme will invest in small and medium scale enterprise development around the production of low carbon construction materials (clay blocks, non-fired bricks and laminated timber) in target settlements to reduce unit costs of construction, raise incomes, broaden the skill base, support improved land use management and provide an alternative to subsistence agriculture. Thirdly, key interventions to build the resilience of Gicumbi's primary cash crop, tea (which is highly sensitive to



climate change), will be piloted on 1700 ha benefiting around 5000 households along with support to improve watershed protection, expand woodlot and forest resources and improve silviculture techniques in the Mulindi tea estate's private eucalyptus plantation to provide a sustainable supply of timber for construction and fuel-wood for the tea factory. Currently wood fuel and charcoal are the main energy source for cooking and tea drying at the Mulindi tea factory and deforestation has made this area prone to floods and landslides during the rainy season, and any sort of sustainable housing must also address this issue. Fourthly, the programme will include support for integrating the use of climate information and analysis into decision-making by policy makers, businesses and investors. In all, around 23,000 households are expected to benefit from the adoption of diversified, climate- resilient livelihood options around six key value chains: tea, wood, compressed earth blocks, agro-fired bricks, solar mini-grids and house construction. Building climate resilience into tea production will ensure that tea production can remain as an important source of employment and can contribute to erosion control as tea cultivation moves higher up the slopes. Providing energy efficient homes and stoves, and improving the energy efficiency of the tea factory at Mulindi, will significantly help to reduce amount of wood required for cooking and heating which will lead to a reduction in deforestation, reduce erosion and protect the area's watershed. The viability of the tea estate and watershed management programme is closely intertwined and both must succeed if Kaniga and the surrounding area is to prosper All aspects of the watershed plan and tea drying efficiency improvements will be included in the feasibility study.

The main activities under the project preparation funding will include:

Activity 1. Development of a master-plan for infrastructure, Energy, Water/wastewater

Activity 2. Delivery of feasibility studies

2.1 Forestry and watershed management feasibility study

2.2 Climate resilient tea feasibility study

Activity 3. Preparation of an Environmental and Social Impact Assessment and gender analysis

3.1 ESIA

3.2 Gender analysis (and action plan if required)

Activity 4. Development of a Financial Model and Economic Analysis

Activity 5. Development of a Project Management Plan including the implementation manual

Activity 6. Preparation legal arrangements

Activity 7. Reporting

Activity details are as below:

Activity1. Development of a master-plan for infrastructure, Energy, Water/wastewater

The specific objectives of this design component are to:

- a) Develop **affordable housing typologies** and **technological strategies** suitable for application in a peri-urban and rural context
- b) Develop **master plans** - for a peri-urban growth hub and for a rural village expansion
- c) Configure both master plans to optimise and integrate **green infrastructure plans** - inclusive of Power infrastructure, Water and waste Infrastructure and Physical infrastructure. Investigate renewable domestic strategies. Investigate construction material production and factory feasibility in conjunction with housing technological solutions as part of physical infrastructure.
- d) Prepare two **financial models and implementation plans** - and provide relevant financial and economic information on the project components for input to the economic and financial appraisal of the project
- e) Supplementary studies required as part of above.
 - a. Topographic surveys - with 0.5 contours and all key and relevant features (including under and over ground services) on site.
 - b. Geotechnical surveys - to determine suitability and bearing strength for development.
 - c. Environmental Impact assessments - to Rwanda Development Board (RDB) requirements.
 - d. Policy review study - review all relevant national and local statutory policy or guidance.
 - e. Precedent study - use real built precedents to demonstrate all key moves.
 - f. Market and Affordability study - required for Kaniga masterplan
 - g. Community consultation - clear record of all consultations

- f) Detailed terms of reference (ToR) are provided in Annex I.

Activity 2. Delivery of feasibility studies for forestry and watershed management and agriculture

The objectives of this study are:

- a) To undertake the technical feasibility and design phase for the two components of the project (climate resilient production of tea and sustainable forest management and watershed protection);
- b) To develop and agree the commercial and management case for the two project components, including the project partnership arrangements; and
- c) To provide relevant financial and economic information on the project components for input to the economic and financial appraisal of the project.

The feasibility study will include vulnerability and risk mapping assessment for current and future tea production in Gicumbi in Rwanda. A short-list of potential adaptation options to address the risks of current and future climate change on tea production will be developed, and a short-listed set of programmatic components for the project, to be taken forward for full design and implementation will be agreed.

The study will also produce a fully comprehensive and costed forest management plan for the 280ha Mulindi plantation and 500ha of other woodlots. It will also design and produce a detailed management plan for the establishment of 7000ha of new plantations on slopes >55% and develop comprehensive land use plans for the stabilisation of slopes and soil erosion protection using a variety of cost effective measures. It will also appraise the options and develop action plans for setting up and supporting out-growers scheme to supplement wood supply from the tea factories' own plantation and supply wood to the laminated timber beam factory. This will also include designing and producing an action plan to support the development of existing and setting up new private sector tree nurseries. A full capacity building and strengthening plan supporting the forest sector and wood products industry will be developed. The assignment will also develop the options for the improved energy efficiency and reduced emissions for the overall wood processing and energy use operations at the tea factory.

Detailed ToRs are provided in Annex II.

Activity 3. Preparation of an ESIA and gender analysis

i. ESIA

- a) The objective of the assignment is to assist MINIRENA to develop an Environmental Social Impact Assessment (ESIA) to ensure that the programme is implemented in an environmentally and socially sustainable manner and in full compliance with Rwanda's and the GCF's environmental and social policies and regulations.
- b) The specific objectives are: (i) to assess the potential environmental and social impacts of the RCDP in Gicumbi District, whether positive or negative, and propose mitigation measures which will effectively address the impacts; and (ii) to inform the programme preparation process of the potential impacts of different alternatives, and relevant mitigation measures (including implementation requirements).
- c) Detailed ToRs are provided in Annex III

i. Gender analysis – August 2016

The specific objectives of the gender analysis are to:

- a) improve the extent to which the programme design is informed by a thorough understanding of gender roles, power relations and a disaggregation of women's and men's specific interests, needs, and priorities
- b) provide recommendations on how women can participate equally and actively alongside men, and can gain maximum benefit from programme interventions and how the programme can contribute to the Government's gender equality agenda
- c) develop appropriate gender sensitive indicators that can be integrated into the programme framework.

Detailed ToRs are provided in Annex IV.

Activity 4. Development of a Financial Model and Economic Analysis

The specific objectives of the study are to:



- a) To develop a method for the Economic Appraisal, and Financial Model, setting out the input requirements as determined by the technical feasibility studies.
- b) To undertake a detailed Economic Appraisal (EA) for each of the four components or sub-projects, and for the Project as a whole, drawing on the cost and benefit information collected by the technical feasibility studies. This will require close integration and working with the consultants for these work packages. The appraisal should also identify the distributional costs and benefits of the project.
- c) To prepare a detailed Financial model (FM) for each of the four sub-projects, and the project as a whole, drawing on the cost and programming information from the feasibility studies, and collating the information on project and external finance and funding modalities.
- d) To use the information of the two assessments above to complete the relevant sections of the GCF application template.

Detailed ToRs are provided in Annex V.

Activity 5. Development of a Programme Management Plan and a Programme Implementation Manual

- a) A **Programme Management Plan (PMP)** is required to ensure that the programme is managed in a coherent and efficient manner, risks are managed effectively and outputs are delivered to time and budget. It will provide detailed guidance for the PMU (and project partners) and cover project management, quality assurance, reporting and communication, coordination and phasing of activities, risk identification and tracking, cross learning and value for money. Effective programme management will eliminate gaps and duplication in service delivery, determine an appropriate division of responsibility and establish a framework for information sharing, component collaboration and joint planning. The PMP will provide a set of guidance notes for managers to ensure project management is executed effectively and the programme is on track to deliver against its targets.

The PMP will also include the initial design of the Monitoring and Evaluation (M&E) system. The M&E system will as much as possible be based on existing systems used by MINIRENA. Monitoring and data collection is crucial for the successful delivery of the pilot programme and the focus will be on building a responsive M&E system that provides almost real-time feedback to the PMU and the management team for each sub-project, to develop evidence-based implementation, a continual assessment of progress and draw lessons for the future. The design phase will also include training and mentoring for sector and district staff to support the capacity building goals of the pilot. The M&E Specialist will work closely with design leads on each sub-project in order to ensure cross-programmatic coordination and minimise data collection duplication. S(he) will design the M&E system including programme indicators, targets and resource requirements drawing on existing work carried out to date. The number of indicators will be manageable and realistic bearing in mind the scope and timeframe for the project and associated data collection. The indicators will feed into the log-frame design and the M&E Specialist along with the Design Coordinator and Design Leads will ensure the development of a realistic and suitable data collection plan. The M&E Specialist will provide training and mentoring to key GoR staff and officers in Gicumbi District emphasising the basics of data collection as well as data management, analysis and simple report writing. In the District, the focus will be more on data collection and data collection coordination, data storage and management. This will ensure that the tools and systems developed are transferrable and capacity remain in GoR for future oversight and evaluation of the programme.

- b) **Development of Programme Implementation Manual (PIM)**

A **Programme Implementation Manual (PIM)** is required to ensure that programme implementation follows appropriate processes and procedures. It will provide detailed guidance for the PMU (and project partners) and includes reporting obligations, payments and other programme-related requirements. The PIM will provide a set of guidance notes for managers to ensure project management is executed according to the regulations and rules relevant to the programme. As well as developing the PIM, this assignment will also assess capacity needs of MINIRENA/GoR with respect to adopting and applying all aspects of the PIM during implementation and prepare a capacity development plan if necessary.

Detailed ToRs are provided in Annex VI.

Activity 6. Preparation of legal arrangements

Legal services are needed to review the approach to be adopted and to advise on the legal implications in the following areas of the programme:

- a) Review of risk assumptions to evaluate how risks can legally be allocated in regard to land acquisition, collection of tariffs from individual consumers and safety monitoring.
- b) Assess the financial management and accounting structures proposed to identify efficiency gains including taxation of revenues and accounting methods for depreciation of assets.
- c) Identify licensing, permitting and other legal risks that need to be addressed and allocated to potential risk owners.
- d) Identifying all contractual and commercial relationships in the course of conducting studies and subsequent implementation.
- e) Ensuring all necessary approvals and permissions are obtained before commencement of tender process and relevant parties to sign the tender documents and contracts.
- f) Confirming legality of budgeting assumptions and the management of revenue flows.

Support is also required to perform legal due diligence during appraisal and as the need arises to fully inform of all aspects of the relevant laws and local regulatory issues affecting its prospective investments. Detailed ToRs are provided in Annex VII.

Activity 7. Reporting

The design team will produce the following reports:

- 1. Weekly updates to MINIRENA
- 2. Monthly Progress Briefs to MINIRENA and GCF
 - Interim Report 1 - Master-plan for infrastructure, Energy, Water/wastewater
 - Interim Report 2 - Forestry and watershed management feasibility study
 - Interim Report 3 - Agriculture feasibility study
 - Interim Report 4 - ESIA and gender analysis
 - Interim Report 5 – Financial model and Economic Analysis
 - Interim Report 6 - Programme Management Plan and Programme Implementation Manual
 - Interim Report 7 - Legal arrangements
 - Interim Report 8 - Capacity Development Plan for PMU
- 3. Final Report, including: a) final summary of activities, b) lessons learned, c) recommendations, and d) audited expenditure report.

Full proposal finalized and approved by MINIRENA and the NDA with a letter of no objection

C. Rationale

C.1 Background

Rwanda is one of the most vulnerable countries in the world to climate change. High levels of poverty, a shortage of land and rapid population growth combined with Rwanda’s hilly topography are creating huge pressures on its natural resources. The expected impacts on climate change in Rwanda are well documented in the national communications to UNFCCC, the Stockholm study and the recent climate vulnerability analysis. Climate change impacts will combine with these anthropogenic factors to significantly damage Rwanda’s growth and development with implications for peace and stability in the country as well as the region. Urgent action is needed to deliver the national strategies that have been developed by the Government.

Rwanda’s commitment to tackling climate change is recognised worldwide and there is strong ownership of the development and green growth agenda. Rwanda has established a strong and effective policy framework to deal with climate change. All the necessary policies and legal frameworks are in place including a national climate fund that can absorb, disburse and monitor interventions to tackle climate change. There is high-level ownership and commitment to adapting to the effects of climate change and Rwandan institutions, particularly MINIRENA, have significant experience from implementing a number of projects that support

adaptation. In terms of mitigation, the Government has enshrined low carbon growth in its policy framework across Government and has made significant efforts to build awareness at the local level. Tree planting is widespread and efforts to replant areas deforested after the genocide against the Tutsis, generate small woodlots and agroforestry have increased cover.

With a small but fast growing economy, there is a window of opportunity for Rwanda to adopt low carbon development pathways that would be challenging for more developed countries. Renewable energy already plays a major role in Rwanda's energy mix and with only 20% of the population connected to the grid. At the same time, there is a significant risk that, without the necessary support, growth of key sectors such as construction will inevitably follow the business as usual high carbon route to development. Early action is needed to incentivise the production and use of low carbon, locally produced materials and technologies to chart a more sustainable route for the growth of this sector and the economy more widely.

C.2 Justification on request

As one of the poorest countries in the world, Rwanda does not have the necessary financial resources to adopt the programmes of action needed to deliver national priorities for green growth and climate resilience. There is high potential to shift Rwanda to low carbon, climate resilient development pathway but this will require a substantial investment of resources. As a least developed country, Rwanda needs external financing to fund the additional net economic costs of climate change, and deliver its vision of a low carbon route to development. Climate change is already affecting large numbers of vulnerable households throughout Rwanda particularly those dependent on rain-fed agriculture. The upfront investment costs needed to shift Rwanda toward more climate resilient green growth are a significant barrier for pursuing these development pathways. A GCF contribution is therefore crucial to build on the progress Rwanda has made so far on green growth and take this programme forward, and to catalyze private sector investment to deliver financially sustainable solutions. Whilst National Budget contributions currently facilitate a step by step delivery of Low Carbon Climate Resilient (LCCR) development, GCF funding will enable the immediate coordinated and integrated piloting of proposed interventions, thereby i) enabling rapid delivery of green growth that accelerates transformational impacts, ii) demonstrating practical and integrated low carbon development in key locations for wider adoption and scale up at regional and national levels and iii) providing immediate information with which to inform the wider national development agenda, with a particular ability to influence the planning, design and development of the next five year development strategy.

Rwanda needs GCF support now to avoid the predicted higher costs of adapting to climate change in the future. Failing to act now will result in higher costs downstream from damage caused by extreme weather events and the additional costs of supporting higher numbers of poor households affected by lower agricultural production associated with erratic rainfall patterns and rising temperatures. Without effective intervention now, Rwanda's planned expansion of the tea sector will take place without adequate consideration of climate risk. Moreover, delaying support will allow more time for carbon intensive practices to develop and take hold especially in the construction sector making it more difficult to adopt low carbon interventions at a later stage.

GCF is mandated to support developing countries in limiting their greenhouse gas emissions and adapting to the impacts of climate change. Taking into account, the needs of Rwanda, its lack of financial resources and that is particularly vulnerable to the adverse effects of climate change, there is a strong case for GCF support. Supporting the proposed programme through the Project Preparation Facility (PPF) will demonstrate the fund's commitment to enabling developing countries, such as Rwanda, that have demonstrated high levels of commitment, ownership, capability and fiduciary management to manage their own country driven LCCR growth agenda. In this regard, the MINIRENA would like to submit a funding proposal in the coming months to the Board of the GCF, for the "Rural Green Economy and Climate Resilient Development Programme", however the studies described this PPF application are required. The proposed programme has been designed with significant stakeholder participation and designed in a cost effective way to ensure sustainability of outcomes. The private sector has been actively engaged and there is strong interest to participate in the programme with a view to replicating successful pilots elsewhere in Rwanda and the region. Supporting climate resilient tea production and small local industries around construction and forestry will ensure that some of the most vulnerable households in the district participate and benefit from

the programme. It is also expected that the innovative approaches put forward will also showcase what is possible and the knowledge management component will facilitate market entry and scale up as well as ensuring effective lesson learning and communication of results to maximise the uptake of successful approaches. The PPF funding from the GCF will allow the MINIRENA to address these challenges, which will help identify and maximize the potential impact of the underlying programme, and address barriers in future implementation of the programme.

D. Implementation Plan

D.1 Implementation approach

Please include information on implementation arrangements.

1. Tasks to be implemented

Activity 1. Development of a master-plan for infrastructure, Energy, Water/wastewater

Activity 2. Delivery of feasibility studies

2.2 Forestry and watershed management feasibility study

2.2 Climate resilient tea feasibility study

Activity 3. Preparation of an Environmental and Social Impact Assessment and gender analysis

3.3 ESIA

3.4 Gender analysis (and action plan if required)

Activity 4. Development of a Financial Model and Economic Analysis

Activity 5. Development of a Project Management Plan including the implementation manual

Activity 6. Preparation of legal arrangements

Activity 7. Reporting

2. General principles

MINIRENA, the accredited entity to the GCF will lead the implementation of the PPF activities in collaboration with the FONERWA (the Fund for Environment and Climate Change of Rwanda), an affiliate agency of MINIRENA and the national fund for climate and environment to mobilise and manage the flow of climate funds in Rwanda. FONERWA is also expected to be an executing entity of the underlying programme. The design phase will be implemented as a learning process. The systems developed during the design phase will adhere to GCF guidelines and environmental and social safeguards. The design phase will include training and mentoring of local counterparts as well as systems development. Extensive field visits will be built into the design activities with all consultants conducting assignments in country and on site as required. The design phase will support the preparation of the full proposal to GCF. All activities will be undertaken from the perspective of strengthening the national capacity to implement the proposed programme. The approach to monitoring during this assignment will focus on building a responsive M&E system that provides real-time feedback to the design team coordinator and MINIRENA to develop evidence-based implementation and draw lessons for the implementation phase.

3. Design phase team

The Design team will comprise the following members:

- Design Team Coordinator
- A design team team leader to oversee the feasibility studies for agriculture, watershed management and forestry
- Tea specialist with climate change expertise (design lead on tea)
- Specialist in sustainable forest management and watershed protection (design lead on forestry and watersheds)
- Agro-economist specialist with climate change and agriculture experience
- Senior Economist with experience of economic and financial appraisal, and value for money assessment.
- Agricultural expert



- Private sector specialist
- M&E specialist
- A capacity development specialist
- Gender specialist
- Project and development manager (design lead on master-plan development)
- Urban planner/ Architect
- Sustainable architect or specialist
- Landscape designer/ecologist
- Mechanical and Electrical engineer
- Water engineer
- Cost planning consultant
- Financial consultant
- Structural and civil engineer
- Surveyor

D.2 Implementation schedule

The expected implementation period is from 1 May -31 August 2016.

Description	May	June	July	August
Activity 1. Development of masterplan for Infrastructure / Energy/ Water	x	x	x	x
Activity 2. Delivery of feasibility study for agriculture and forestry	x	x	x	x
Activity 3. Preparation of ESIA and gender analysis		x		
Activity 4. Development of financial model and economic analysis			x	x
Activity 5. Development of programme management plan		x	x	x
Activity 6. Preparation of legal arrangement				x
Activity 7. Reporting	x	x	x	x

D.3 Procurement Plan

Please provide detailed procurement plan including methods, terms of reference of consultancy services.

General Information

Project Name : PPF for Rural Green Economy and Climate Resilient Development Programme	
Country: Rwanda	Executing Agency: MINIRENA
Estimated grant Amount: USD 1,259,530	

A. Process Thresholds, Review - Month Procurement Plan

1. Project Procurement Thresholds

1. The following national process thresholds shall apply to procurement of goods and works

Procurement of Goods and Works		
Method	Threshold (Rwf)	Threshold (USD) 1 USD=746 RWF
International Competitive bidding (ICB) works	>1,200,000,000 Rwf	>1608579
International competitive bidding for goods & other services	>600,000,000 Rwf	>804290
National competitive bidding (NCB) for works	Beneath that stated in ICB, works	Beneath that stated in ICB, works
National competitive bidding for goods & other services	Beneath that stated in ICB, goods & other services	Beneath that stated in ICB, goods & other services
Open competitive/simplified method	</=10,000,000 Rwf	</=13405
Request for Quotation (RFQ)	</=2,000,000 Rwf	</=2681



Single source/Shopping	</=300,000 Rwf	</=402
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2. National Prior or Post Review

2. The following national prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement Method	Prior or Post	Comments
Procurement of Goods and Works		
International Competitive bidding (ICB) works	post	
International competitive bidding for goods & other services	post	
National competitive bidding (NCB) for works	post	
National competitive bidding for goods & other services	post	
Open competitive/simplified method	post	
Request for Quotation (RFQ)	post	
Single source/Shopping	post	

Recruitment of Consulting Firms

International consultant services (QCBS,CBS,FBS,LCS)	post	
National consultant services (QCBS,CBS,FBS,LCS)	post	

Recruitment of Individual Consultants

Individual consultant services	Post	
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3. Consulting Services Contracts Estimated USD 1,259,530)

3. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 12 months.

General Description	Contract Value (USD)	Recruitment Method ¹	Advertisement Date (quarter/year)	International or National Assignment	Comments
Consultancy to develop project implementation manual for Low Carbon and Climate Resilient Programme in Gicumbi (LCCR)	22,600	QCBS	15/04/2016 I/2016	National assignment	To be advertised
Consultancy to conduct Agriculture feasibility study	514,925	QCBS	15/04/2016 I/2016	International assignment	To be advertised
Consultancy services to develop master plan	586,100	QCBS	15/04/2016 I/2016	International assignment	To be advertised
Hiring consultant for conducting Gender analysis	35,450	QCBS	15/04/2016 I/2016	National assignment	To be advertised
Consultancy service to develop Financial	82,500	QCBS	15/04/2016 I/2016	International/National assignment	To be advertised



model and Economic analysis					
Consultancy to conduct Environmental Social Impact assessment	24,310	ICS	15/04/2016 I/2016	National assignment	To be advertised
Consultancy to provide legal	83,750	QCBS	15/04/2016 I/2016	International/national consultant	To be advertised
Consultancy to develop Management and reporting framework	18,000	ICS	15,04/2016 I/2016	National assignment	To be advertised

QCBS-Quality cost Based Selection
ICS-Individual consultant
NCB-National Open Competitive bidding

E. Financing Plan

E1. Cost breakdown

The estimated total cost is USD1,498,841 including a contingency budget, which is 9% of the total cost. The estimated cost breakdowns are as below:

Description	Cost (in USD)
Consultancy services	
1. Development of masterplan for Infrastructure / Energy/ Water	535,100
2. Delivery of feasibility study for agriculture and forestry	464,440
3. Preparation of ESIA and gender analysis	26,160
4. Gender analysis	28,150
5. Development of financial model and economic analysis	82,500
6. Development of programme management plan	39,430
7. Preparation of legal arrangement	83,750
sub-total	1,259,530
MINIRENA Management fee (10%)	125,953
Sub-total	1,385,483
Contingency (9%)	113,358
Total	1,498,841

E2. Disbursement plan

GCF will make an upfront payment of the full amount of USD 1,385,483 to the MINIRENA under the accreditation master agreement between the GCF and MINIRENA. MINIRENA is responsible for repaying unused grant to the GCF. The contingency allocation (USD 113,358) will be only disbursed upon submission of a separate disbursement request with a justification by MINIRENA.

F. Risk and Mitigation measures

There are two main risks expected:

1. The results of the feasibility studies and ESIA indicate that the underlying project is not viable or that the underlying project may be classified under an ESS Category level (e.g. Category A) that would not fit into MINIRENA's accreditation type.
2. Results of the PPF activities will be well-reflected in the funding proposal of the underlying project. Therefore if the GCF Board does not approve the underlying project, the information and analysis obtained from the various studies and implementation planning materials financed by PPF funding will not be fully used.

MINIRENA has been mobilise and manage the flow of climate funds across various sectors of the Rwanda economy in collaboration with the FONERWA, which projects valued at USD 22 million and has played a key role in attracting climate finance. In particular, MINIRENA has been implementing the Green Village projects in the Gicumbi District, which is the project site, with the FONERWA. In Kabeza, which is one of the potential project sites, UNDP and UNEP have been operating a "Sustainable Village" project with a collaboration with the Rwanda Environment Management Authority, the national designated authority of Rwanda to the GCF. The government of Rwanda and MINIRENA's familiarity and experience in the project site should greatly limit the possibility of mis-conceptualising or mis-categorising the project.

To mitigate the second risk above, the MINIRENA has consulted with the M&A team of the GCF, thus making sure the funding proposal is well aligned with the Fund's investment framework and results management frameworks. Also the outcomes of the PPF activities will serve the purpose, improving the project's alignment to the GCF's objective. Furthermore, apart from use for developing the funding proposal, results of the PPF activities can also be shared with other international, national, subnational entities and communities for other funding/project opportunities.

II. Annex I: Draft Masterplan Terms of Reference

1. Study objectives

In summary - the specific objectives of the two feasibility studies are to:

1. Develop **affordable housing typologies** and **technological strategies** suitable for application in a peri-urban and rural context
2. Develop **master plans** - for a peri-urban growth hub and for a rural village expansion
3. Configure both master plans to optimise and integrate **green infrastructure plans** - inclusive of Power infrastructure, Water and waste Infrastructure and Physical infrastructure. Investigate renewable domestic strategies. Investigate construction material production and factory feasibility in conjunction with housing technological solutions as part of physical infrastructure.
4. Provide relevant financial and economic information on the project components for input to the economic and financial appraisal of the project
5. Supplementary studies required as part of above.
 - a. Topographic surveys - with 0.5 contours and all key and relevant features (including under and over ground services) on site.
 - b. Geotechnical surveys - to determine suitability and bearing strength for development.
 - c. Environmental Impact assessments - to Rwanda Development Board (RDB) requirements.
 - d. Policy review study - review all relevant national and local statutory policy or guidance.
 - e. Precedent study - use real built precedents to demonstrate all key moves.
 - f. Market and Affordability study - required for Kaniga masterplan
 - g. Community consultation - clear record of all consultations

2. Specific tasks

The Consultant(s) will conduct the following tasks:

2.1 Production of Kaniga Masterplan

2.1.1 Design Affordable Housing

This should be of a density of between 20- 30 dwellings per hectare (exclusive of roads and other functions) to cater for the demographic (as identified in the Market and affordability study).

Designs exploring options and feasibility of simple typologies of a variety of sizes that allow for incremental or alternative financing strategies. The typologies must be suitable for a variety of dwelling sizes and configurations and must offer opportunities for multi-family occupation, spare room rental and future expansion. The designs must be in accordance with Rwandan Building regulations and comply with the new Policy guidelines for affordable housing (see MINIFRA policy).

The designs must, where possible, pioneer 'home grown' Rwandan construction technologies (such as soil stabilised bricks (CSEBs), laminated local timber products (pioneered by Light Earth Designs LLP in partnership with Rubengera Secondary Technical School), local agro waste fired bricks (as pioneered by SKAT consulting) and agro waste panels. The designs must, with an associated training component, be suitable for application by smaller scale contractors, community cooperatives or even individual self build. We expect some of the production of construction materials to be integrated within the master plans (with a short cost, demand and feasibility business plan) and form part of the physical Infrastructure component.

The houses must have adequate external private terraces or garden spaces with access to agricultural plots - and must be arranged and clustered to encourage good social interaction with neighbours.

The designs must explore the feasibility of integrating 'green home renewable technologies' - using both passive and active green technologies for basic utilitarian needs - such as sensible North south orientation (to cut solar gain and ensure comfort), rainwater harvesting, innovative cooking stove solutions, recycling and possible solar renewables.

2.1.2 Propose a Master plan

This will arrange the housing and all of the other required functions of the settlement in line with cohesive and best practice 'neighbourhood' creation (refer to publications and policies attached).

Mixed uses - The master plan should include a variety of 'mixed uses' and 'community' and 'educational' amenities - all within a short walk at a reasonable gradient. There should be both external and internal spaces for local market trade and retail and spaces suitable for general income generation. Provision of both primary and secondary education as well as health care should be as per the regional master plan. Transport must be considered - with bus stops - and limited parking if required.

External spaces - The design should consider external spaces - as places for amenity, community and communal neighbourhood use - and the design must respect Rwandan cultural and social practices.

New Industrial functions - The new proposed industry components of the funding application - (such as the proposed glue laminated timber factory) are required to be integrated in the masterplan.

2.1.3 Design a Green and renewable infrastructure integral to the new settlement

This must explore 'an ecosystem' approach to landscape and infrastructure - and utilise multiple green strategies to reduce energy/carbon and mitigate future environmental/ eco system damage. The Infrastructure should be split into three strategic plans -

- **Water and Waste water Infrastructure** - Strategies to be explored include - Storm water management and erosion protection using 'low impact design', Rainwater harvesting or use of ground water. Low carbon waste water treatment options should be explored.
- **Power Infrastructure** - Renewable PV on or off grid district systems (with connection to industry or Tea factory), off grid or domestic net metering options.
- **Physical Infrastructure** - Soft and hard landscape design must be carefully considered - ensuring erosion protection and with appropriately designed roads and pavements in shade - to facilitate pedestrian and vehicular connectivity. Where possible peri-urban agriculture and animal husbandry should be integrated. Factory provision is considered as part of the physical infrastructure.

2.2 Production of Kabeza masterplan

2.2.1 Low cost rural housing

Design new housing typologies for 57 new households as part of the existing village. These are planned to be built with support of Rwanda Housing Authority, that will provide the material for the roofing. This 57 dwellings will be self-built with Compressed soil stabilised blocks or similar technologies suited to low costs self build - and can be single storey or storey and a half with room of expansion under the roof - thus allowing for expansion. Unit arrangement configurations should be explored - to potentially allow for a simple incremental growth approach (such as the traditional homestead expansion around a courtyard).

Investigate with Rwanda Housing potential or alternative new low cost self build technologies and incorporate into house designs. Typological solutions require carbon quantification and life cycle costing to determine impact and viability.

2.2.2 Propose a Master plan in partnership with Rwanda Housing Authority (RHA)

Arrange the new housing and all of the other required functions of the settlement in line with cohesive and best practice 'umudugudu' creation (refer to relevant publications and policies attached).

Include all required complementary mixed uses - and plan for expansion of all communal and market facilities - to complement proposed and future population growth.

2.2.3 Investigate climate resilient and renewable infrastructure strategies

The Infrastructure component should be split as follows:

Power Infrastructure - Incorporate on site simple and cost effective strategies for provision of utilities - such as domestic solar off grid provision. Look at efficient low carbon cooking solutions. Investigate district off grid strategies such as micro solar grids and bio gas.

Water, storm and waste water Infrastructure - look at on and off plot rainwater harvesting. Utilize strategies such as low impact design to mitigate the negative effects of storm water. Investigate low carbon waste water treatment strategies. Investigate possible ground water supply.

Physical Infrastructure - Adopt a green infrastructure approach to soft and hard landscape design -. Investigate low impact solutions to erosion control. Incorporate productive small agricultural plots as required. Road and external spaces should be carefully considered with appropriate planting to maintain pedestrian comfort. A proposed brick factory, located to the north of the village, is considered part of the physical infrastructure.

2.3 Costing and delivery

Produce a separate **Cost plan, financial model and delivery plan for both master plans**. Cost planning should be continually undertaken throughout the study. A 'Value Management process' should be adopted at the start of the design process, and continue right up until the end of the study - by analyzing the key design strategies as the study progresses and ensuring that they represent the best value options, so the completed design studies are within the clients budget constraints. As part of this exercise continual Cost benefit analysis and Life cycle costing (along with carbon quantification) should be undertaken at an early stage to determine the viability of key strategies/decisions. A final elemental feasibility cost plan is required (with approximate quantities) - closely estimating the entire budget cost.

Financing options study (applicable to Kaniga masterplan) - Determine from a market and affordability analysis the local affordability criteria and the likely demographic of residents. Undertake wide ranging research into all available financing options (from bank finance to community finance to incorporating incremental solutions). Apply options to a financial model - to determine affordability and if required adapt housing typology design proposals.

Grants and Tax - Identify any available grants or subsidies (such as the Affordable Housing subsidy for Infrastructure - MINIFRA). Incorporate taxation issues and tax relief strategies into delivery plan. Incorporate all relevant costs and all fees/ duties/taxes.

Financial model - Propose a viable financial model integrating the costs of all master plan proposals with the delivery plan. Investigate phasing options and present as a cohesive financial model.

Delivery plan - Finally there must be a clear delivery plan with a detailed programme of works. This should outline how elements of self-build can be safely incorporated into a large-scale construction programme and will explain how it can be guaranteed that the quality of any self-build elements will meet the minimum standards required to obtain mortgage or other appropriate finance on the completed structures.

3. Methodology

The consultant team should formulate a work plan that allows for the following -

- Close consultation with all key relevant stakeholders (such as Gicumbi district, Rwanda Housing Agency).

- Community consultation throughout the process.
- A clear staged approach (3 stages are suggested though we are open to any suggested alternatives) to facilitate good client and stakeholder involvement and decision making throughout the design process.
- Constant Value management - with life cycle costing, cost benefit analysis and carbon quantification to justify all key adopted strategies. These should be undertaken on an open book basis throughout the design process and assist the team and client to make informed design decisions.
- Cost model and delivery plan - should be available and updated throughout the entire process of the study - and should be developed in close consultation with the client. Costs should clearly separate all 'green strategic' cost premiums.

4. Team composition and required expertise

The team should comprise the following key team members:

- Project and development manager - experienced in coordinating and delivering large complex infrastructure projects, with experience in the developing world. This individual will be the lead member of the team and the primary client contact .
- Urban planner/ Architect - with experience in both sustainable technology and sustainable urban and housing design practice in the developing world. Demonstrable local knowledge of the Rwanda context is key.
- Sustainable architect or specialist - - with demonstrable experience in best practice sustainable integrated and housing and urban design.
- Landscape designer/ecologist - with experience in landscape eco system design and practice.
- Mechanical and Electrical engineer - with experience in best practice sustainable infrastructure design.
- Water engineer - experienced in urban and rural water engineering with Africa experience
- Cost planning consultant - with experience in cost planning development modelling. Experience and knowledge of the African market is fundamental.
- Financial consultant - with local knowledge of market and skills in large scale infrastructure and housing cost planning and modelling.
- Structural and civil engineer - experience in sustainable structural design practice and large scale infrastructure provision.
- Surveyor - topographic and geotechnical surveys are required
- Environmentalist - accredited by RDB.

This is an important project of national priority. Only a team of the highest quality consultant candidates will be considered. A minimum of 10 years professional experience and relevant internationally recognized qualifications/degrees are required for the key team members. Relevant experience of projects in Rwanda is preferred.

5. Reporting requirements

The consultant will report directly to the MINIRENA Project Manager and Design Team Leader. Other key contacts and stakeholders will include MINIFRA, Rwanda Housing Agency, MINIRENA/ REMA, MINALOC, The Gicumbi District, the local community and any other relevant sector specialists.

6. Workplan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed programme interventions as well as the context in which it will operate. The Consultant is expected to review the relevant programme documents and other sector or country specific available materials (to be provided by the Design Team Leader) prior to starting the field work.

The work is expected to take place over a maximum 5 month period starting in April 2016:

- Stage 1 - Inception (briefing,consultation, studies, research, surveys, analysis) - 3 weeks. Client and stakeholder sign off - 1 week.
- Stage 2 - Feasibility (initial designs and strategy options) - 5 weeks. Client and stakeholder sign off - 2 weeks
- Stage 3 - Final proposals (complete feasibility studies and cost, delivery plans) - 6 weeks. Client and stakeholder sign off - 2 weeks

- Stage 4 - Issue of final Consolidated summary report

Total 19 weeks

Completion - by end of August 2016 at the latest.

7. Deliverables

The Consultant(s) will be responsible for the following final deliverables as a minimum:

1. Masterplan - plans and sections at minimum 1:1000 scale. Key external spaces drawings at 1:500 scale. 3 dimensional sketches of key external spaces and housing clusters. Sections and plans through all key streets and external spaces. Any other relevant material (models, sketches, computational 3D renders) to convey the design.
2. Housing typology designs - plans, sections and elevations at a minimum 1:100 scale - of all key typologies. Diagrams illustrating flexibility and expansion strategies. 3 dimensional computational models of each typology as a minimum showing all key materials.
3. Clear diagrams and sketches illustrating constructional strategy - with images of proposed solutions. Key design intent details of all key proposed technological solutions. Supply descriptive specification as required and any performance criteria required to meet relevant standards. Provide any relevant information to enable factory business planning activities (see separate study).
4. Infrastructure - clear schematics and plans to scale of all key infrastructure proposals. Calculations - showing supply & demand and carbon savings. Outline descriptive and performance specifications. Sketch plan layouts to scale of all landscape and landscape infrastructure proposals.
5. Development and Cost plan - elemental cost plan of all proposals. Cost model for development - including phasing and financing options. Brief feasibility business plans are required for any construction material factory
6. The development plan should include - a Phasing plan, Marketing plan, Construction Logistics plan, A Risk Register, a Construction & Procurement programme, Construction Contract recommendations, a Construction Methodology - including a Health & Safety plan and a Proposed Project management and Reporting plan.
7. Study process and Outputs - There are 4 suggested stages to this work - 1. Inception - including research analysis and brief definition 2. Feasibility options and proposals 3. Final proposals and 4. Validation workshop.
8. These stages must contain all relevant information to assist the stakeholder team to understand the key decisions made in the design process. Each stage will require a formal presentation (in power point) and printed report material - which will be given to the Client agent - who will arrange review, comments and sign off prior to proceeding to the next stage of the project.
9. Consolidated summary report - for the purposes of knowledge transfer and dissemination of lessons learned.

Annex II: Draft Agriculture Feasibility Study Terms of Reference

1. Study objectives

The specific objectives of the study are to:

1. To undertake the technical feasibility and design phase for the components of the project.
2. To develop and agree the commercial and management case for these project components, including the project partner arrangements.
3. To provide relevant financial and economic analysis on the project components for input to the economic and financial appraisal of the project.

2. Methodology and Tasks

The Assignment will be carried out by a core team of consultants (or consulting company) in co-ordination with MINIRENA. The “core” team of consultants will undertake a desk-based review of relevant materials prior to visiting Rwanda, if not already based in country.

Following this, the main design phase should be undertaken. The suggested method for consultants and the task components are suggested below.

2.1 Component 1: Tea resilience

Scoping

The team should visit Rwanda for the scoping phase, and should include consultations with MINIRENA, FONERWA, MINIAGRI and other government/project partners, development partners, civil society, academic institutions and private sector partners and prepare a detailed work plan for the rest of the study. Before departure they will make a presentation to MINIRENA and Key Ministries on the key findings and a draft design of the programme.

Vulnerability and climate change analysis

This activity will undertake the vulnerability and risk mapping assessment for current and future tea production in Gicumbi in Rwanda. It will:

- Collate historical climate data relevant for the area;
- Collate current tea production data for the area and analyse the historical effects of climate variability on tea production (and if possible quality);
- Undertake a literature review of the potential response functions linking climate and tea (production and quality), particularly in East Africa, as well as a review of the international impact on tea and Rwanda’s comparative advantage under climate change;
- Review the latest future climate projections for Rwanda (drawing on the recent assessment for MINIRENA), and provide relevant metrics linked to the response functions for assessing the future risks of climate change.
- Develop a GIS based assessment of elevation data and overlay this with tea production areas (current and proposed) to understand current agro-climatic zones and the potential future shifts under climate change.
- Use this information to develop a risk map of current and future production areas in terms of current, short and mid-century periods for climate change.
- This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required in section C.2.1 Baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies).

Adaptation assessment

This task will develop a short-list of potential adaptation options to address the risks of current and future climate change, working within a framework of decision making under uncertainty¹ and iterative decision making. This will focus on three types of interventions.

¹ see www.vfmadaptation.com

1. Immediate actions that address the current impact of climate variability and build resilience for the future. This involves early capacity-building and the introduction of low- and no-regret actions.
2. The integration of adaptation into immediate decisions or activities with long life-times, notably tea expansion plans. This should include analysis of decision making under uncertainty. It is recommended that potential concepts of portfolio analysis and robust decision making are included.
3. Early planning for the future impacts of climate change, noting the high uncertainty. This should include analysis of early actions to improve future decisions, and should include consideration of the value of information and option values.

As an example, the initial project proposal included discussion of sustainable tea management, better weather information, insurance and small scale irrigation as potential options for type 1, the use of portfolio planting strategies, minimum plantation height limits for smallholder expansion schemes for type 2, and research and enhanced monitoring into climate trends and varietal choice for type 3.

The tasks will include:

- A review of the literature on potential options for enhancing tea resilience.
- Discussion with tea producers and the sector on potential options.
- An assessment of the timing and phasing of these options using the iterative framework above.
- To undertake technical review and feasibility assessment
- To review the potential barriers to adaptation options.

At the end of this task, a portfolio of promising options – based on an iterative adaptive management framework – will be produced, i.e. a draft tea resilience programme.

This information will provide input to the GCF application and should be consistent with the GCF guidance and the information required, section C.2.1.3 Key barriers and challenges to addressing climate vulnerability and adopting low carbon development pathways.

Prioritisation

This task will agree a short-listed set of programmatic components for the project, to be taken forward for full design and implementation. This should identify 1 – 3 activities in each of the three interventions outlined above. The task will:

- Work with the economic appraisal and financial model team to undertake an economic cost-benefit analysis of the promising options. For longer-term options, this should include a light touch assessment using decision making under uncertainty techniques.
- Combine this information in a multi-criteria analysis that considers the urgency, practicality and feasibility of options, as well as the distributional and gender dimensions of the options.
- Discuss potential options with project partners and other stakeholders.
- Agree on the short-list of project components to take forward to implementation and discuss why these options represent the application of best practice and value for money.
- Discuss and agree the pilot locations.
- Undertake consultation and planning. This task will comprise a stakeholder analysis with key implementation partners and local groups, to ensure suitable locations are chosen for the interventions.
- Once the promising sites are identified, undertake topographic survey and land use planning assessments, and discuss the proposals with local groups.
- To develop a costed M&E framework

At the end of this task, the project will have developed a techno-economic tea resilience plan and have a detailed implementation plan.

This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required for section E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. The task will also need to provide the necessary information on

costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency.

2.2 Component 2: sustainable forest management and watershed protection

The programme will facilitate a partnership between the tea factories, local farmers and the producers of low carbon construction materials (above) to increase the supply of fuel-wood and timber from well-managed sources (creating new woodlots on 7000 ha and better managing existing plantations). To enhance forest productivity, this component will design and implement a range of sustainable forest management interventions for multiple uses and benefits. These include wood-fuel supply (Mulindi tea plantation and for local households), timber products for construction and other uses, diversification of forest goods and services, protection of watersheds, reduced soil erosion and promotion of other benefits such as carbon sequestration, biodiversity, and direct and indirect ecosystem services (for example, fodder, NTFPs, nutrient and water cycling). The primary objectives of this sub-component, whilst strengthening local capacities and supporting private sector development, are to:

1. increase the productivity of existing plantations (280 ha private Mulindi plantation + 500 ha of poorly managed woodlots) – for wood-fuel and to increase the range and quality of other timber products,
2. increase and/or diversify other forest goods and services (including NTFPs and ecosystem services), and
3. stabilise slopes and introduce erosion protection.

Scoping

This activity will review existing literature and key documents, and meet with key stakeholders, both government and potential implementation partners, to discuss the project. It will produce a detailed work plan for the design phase. There are multiple stakeholders and existing plans, policies and initiatives concerning forestry, land use and watershed management within Rwanda and it is essential that the design of these elements fits within and supplements the national and local priorities and methodological landscape. Where practicable and effective the designs should utilise and build on existing information and best practice.

Forest assessment and planning

This task will supplement existing information to produce a fully comprehensive and costed forest management plan for the 280ha Mulindi plantation and 500ha of other woodlots.

- Consultation with plantation and woodlot owners and users to establish clear and agreed management objectives
- Review and collation of existing inventory, use and management information
- Supplementation of the above with site surveys and assessments, to include as necessary soil analysis, inventory and stand quality assessment, species: site suitability assessment
- Production of plantation and woodlot inventories
- Production of long term (20 year) forest management plan
- Production of costed operational 5 year forest management plan
- Assessment and articulation of options for the inclusion and prioritization of women and vulnerable groups in management

This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required for section C.2.1 Baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies), E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. The task will also need to provide the necessary information on costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency.

Increase the productivity of existing plantations

This task will supplement the management plans above in providing more details for informing management operations.

- Review and collation of existing operational practices (from project sites and other forestry initiatives)
- Identification and appraisal of practicable best practices to be trialled
- Identification and agreement of pilot sites for trialling best practices
- Design of piloting programme and production of costed action plan
- Design of costed M&E framework for assessing pilots

This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required for section E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. The task will also need to provide the necessary information on costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency.

Develop new sustainable wood plantations

This task will design and produce a detailed management plan for the establishment of 7000ha of new plantations on slopes >55%.

- Consultation with land owners and national and local stakeholders to establish clear and agreed management objectives. These may include, but are not restricted to:
 - Timber production
 - Wood fuel production
 - Provision of NTFPs
 - Slope stability and soil erosion control
 - Watershed management protection
 - Biodiversity and/or cultural values
- Review and collation of relevant literature, in particular reports related to other establishment initiatives and national guidelines on site
- Review and collation of site and locational information
- Supplementation of the above with site surveys and assessments, to include as necessary soil analysis, ecological and climatic classifications (and projections) and current land use data.
- Appraisal of suitable species and varieties for different sites
- Appraisal of practicable high quality seed and provenance sources, with action plan for seed / species supply
- Production of long term (20 year) new plantations management plan
- Production of costed operational (site preparation, planting, establishment and maintenance) management plan
- Assessment and articulation of options for the inclusion and prioritization of women and vulnerable groups in establishment and new plantation management
- Design of costed M&E framework for assessing new plantation establishment

This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required for section C.2.1 Baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies), E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. The task will also need to provide the necessary information on costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency.

Improve the energy efficiency and reduce emissions from Mulindi tea factory

This task will develop the options for the improved energy efficiency and reduced emissions for the overall wood processing and energy use operations at the tea factory. The task will include:

- An initial site visit of existing operations with an indicative energy audit, to provide a baseline analysis and a baseline emissions profile. This information will provide input to the GCF application

form section C.2.1 Baseline scenario (i.e. emissions baseline) and the analysis should be undertaken and described to be consistent with the form guidance.

- To prepare an initial report, based on the report and literature review, plus discussion with other international good practice examples, detailing the range of possible options for improving the emissions profile of the plant, including both direct furnace operations and ancillary energy use (including the potential for the development of small solar). The consultants will be expected to consider a wide range of potential options, including technical options and changes in maintenance and operational practice, though some examples are available from previous studies in the tea sector in Rwanda (see <http://www.ndf.fi/project/ncf-enhancing-sustainable-energy-supply-tea-factories-ndf-c3-c7>).
- To undertake an initial assessment of the costs of these options, including an assessment of their potential emission saving.
- To consult with the tea factory on these potential options and discuss the feasibility and agree on a package of key options for implementation.
- Following this, to work up a costed analysis of the various preferred options, the emissions savings these will achieve and to develop relevant indicators. This should include the activity plan for the implementation of the option, the necessary staff training, capital and operation costs, etc. It should also work up in detail the emission benefits likely from the implementation. The task results will form part of the GCF application and should be consistent with section E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. This task will also need to provide the necessary information on costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency. This will involve close co-operation with the economic appraisal and financial model activities, working with the methodology developed by this team and collecting relevant data and analysis.
- To develop a dissemination plan for communicating results for industry.

Stabilise slopes and introduce erosion protection

This task will develop comprehensive land use plans for the stabilisation of slopes and soil erosion protection using a variety of cost effective measures.

- Consultation with national and district agricultural experts and local communities on zoning of land for agriculture, pasture, perennial crops/grasses and land use objectives
- Slope stability and erosion assessment
- Appraisal of cost effective options, to include but not be limited to tea planting, low impact planting (such as bamboo and Vetiver grass, restoring permanent vegetative cover on steep slopes, e.g. grasses, shrubs etc., contour trenches, construction of terraces and check dams, tree planting on gully banks, groundwater recharge structures, percolation pits, ponds, sediment traps etc., agroforestry, shelterbelts)
- Production of fully costed management and action plans for slope stabilisation and soil erosion control, This may include, but not be limited to:
 - Re-planting of steep slopes with perennial grasses and shrubs (5600ha)
 - Other erosion control measures 1500ha
 - Excavation of ponds to manage storm water (120m³ pond) 96 ponds
 - Re-planting on 160km channel, river and lake shores (trees, shrubs, grasses)
- Design of awareness raising campaign on erosion control and identified management options.
- Design and produce a costed plan for the establishment and capacity development of water user groups, including identification of suitable groups and interest parties, capacity needs assessment and appropriate capacity development actions
- Assessment and articulation of options for the inclusion and prioritization of women and vulnerable groups in the management and action plans
- Design of costed M&E framework

This information will provide a key input to the GCF application and should be consistent with the GCF guidance and the information required in section C.2.1 Baseline scenario, E.1.1. Mitigation / adaptation impact potential, E.1.2. Key impact potential indicators, E.3.1. Environmental, social and economic co-

benefits, including gender-sensitive development impact, E.6.5. Key efficiency and effectiveness indicators, F.2. Technical Evaluation and E.6.4. Application of best practices. This task will also need to provide the necessary information on costs and benefits for the overall study cost-benefit analysis, and the information for E.6.1. Cost-effectiveness and efficiency. This will involve close co-operation with the economic appraisal and financial model activities, working with the methodology developed by this team and collecting relevant data and analysis.

Establish and support tree growers associations or cooperatives

This task will appraise the options and development action plans for setting up and supporting out growers scheme to supplement wood supply from the tea factories' own plantation and supply wood to the laminated timber beam factory. It involves the following steps:

- Stakeholder consultations to ascertain current status and potential of such groups
- Undertake a survey of existing associations and cooperatives within the project area
- Assessment of the potential for the establishment of new associations or cooperatives
- Undertake capacity needs assessment of interested existing or potential new tree growers associations or cooperatives
- Market analysis of existing and potential new timber products
- Assessment of available credit and micro-finance options and opportunities to support associations / cooperatives
- Development of design and fully costed action plan for the establishment and support of tree growers associations or cooperatives, to include but not necessarily be limited to:
 - Arrangements for compliance with institutional and regulatory requirements
 - Economic analysis of options and opportunities
 - Links to credit and micro-finance services
 - Technical, financial and business advice and capacity strengthening support actions
 - Assessment and articulation of options for the inclusion and prioritization of women and vulnerable groups in tree growers associations or cooperatives
 - Design of costed M&E framework for assessing association or cooperative performance

Support private sector nursery development

This task will design and produce an action plan for supporting the development of existing and establishment of new private sector tree nurseries within the project area:

- Consultations with national and local stakeholders to assess legal, regulatory and financial requirements and current tree nursery status.
- Appraisal of practicable high quality seed and provenance sources
- Undertake a survey of existing nurseries and assessment of the potential for the establishment of new nurseries
- Appraisal of current nursery techniques, technologies and practices and comparison with industry best practice
- Undertake capacity needs assessment
- Economic analysis of nursery development and business opportunities, to include but not be limited to:
 - Market analysis of existing and potential new nursery products and services
 - Assessment of available credit and micro-finance options and opportunities to support associations / cooperatives
 - Potential for subsidies or other incentives for nursery development and management
 - Available credit or micro-finance sources
- Development of design and fully costed action plan for support to private sector nurseries, to include but not necessarily be limited to:
 - Seed sourcing
 - Arrangements for compliance with institutional and regulatory requirements
 - Technical, financial and business advice and capacity strengthening support actions
 - Assessment and articulation of options for the inclusion and prioritization of women and vulnerable groups
 - Costed M&E framework

Develop capacity

This task involves development of a full capacity building and strengthening plan supporting the forest sector and wood products industry.

The consultant will therefore need to demonstrate both capacity development expertise and technical competence in these sectors.

- Review of existing initiatives, agencies and potential partners in capacity development in Rwanda within the forestry sector and the wood products industry
- Stakeholder consultations to ascertain and agree capacity development priorities, these might include, but not be limited to:
 - National Capacity Building Secretariat
 - MINIRENA
 - RNRA
 - REMA
 - Gicumbi District staff
 - Training institutions
 - iNGOs
 - National NGOs
 - National and local businesses and cooperatives, (harvesting, processing, woodfuel and charcoal producers)
 - Communities
- Comprehensive capacity needs assessment, including but not necessarily limited to:
 - Forest management planning and operational skills
 - Technical forestry operations
 - Business planning
 - Technical wood processing operations
 - Awareness raising and extension skills
 - Lesson learning and knowledge sharing approaches
 - Training techniques and Training of Trainers
- Development of costed capacity development action plan, including:
 - Trainees selection processes
 - Description and reasoning for capacity building, development and strengthening methods and approaches proposed, these could include, but not be limited to:
 - Peer to peer visits
 - Local fora
 - Formal training and workshops
 - Master classes
 - Coaching and mentoring
 - Materials to be developed and used, including multi-media resources
 - Review, monitoring and evaluation procedures and plans.

2.3 For all components

Environmental and social safeguards

A separate Environmental and Social Impact Assessment (ESIA) study as well as gender involvement will be undertaken as part of another component. The consultants should, however, be in close coordination with the consultants identified for this component and if possible ensure that site visits can be done jointly. The ESIA will undertake environmental and social safeguards, as appropriate for the activities planned (under Rwanda guidance and aligned with GCF safeguards)

Costed proposal

The task will draft costed work plan for the relevant interventions and the project as a whole. It will need to:

- Estimate the individual activities associated with delivering each of the preferred options.
- Produce unit cost estimates for each component of each option.
- Estimate the aggregated cost per unit, taking account of scale.

- Provide the total cost of the project.

This will involve working with the economic appraisal and financial model team. It will produce information as set out in the methodology for the work plan (see the economic appraisal and financial model appraisal).

The task results will provide input to the GCF application form, section F.4. Financial Management and Procurement. The analysis should be undertaken and described to be consistent with the GCF guidance and requirements.

Economic appraisal input

The study will generate the information needed to support the economic appraisal, following the guidance and requests set out in the accompanying terms of reference. This will involve working with the economic appraisal and financial model team. It will produce information as set out in the methodology for the work plan (see the economic appraisal and financial model appraisal). It will also need to provide relevant information to allow the Value for Money analysis.

Risk assessment

This task will undertake a risk assessment for the project and how these can be mitigated and managed.

Commercial and management

This task will review the institutional arrangements for the project and input to the commercial and management case. It will:

- Identify the key actors involved in the delivery of the different project components. This will involve the combination of MINRENA/FONERWA, MINAGRI, other GoR Ministries, agencies and Gicumbi District, NAEB, RAB and the Wood Foundation (and co-operatives) and communities.
- Review how best to implement project components priority options, taking account of the barriers, as well as the preferred delivery mechanisms.
- Working with the economic appraisal and financial model team, to discuss and agree the commercial arrangements, e.g. MoU and agreements, phasing and protocols for financial transfers to the project partners.
- Working with the economic appraisal and financial model team, discuss and agree arrangements for programme governance, management, operating and reporting procedures.

This will involve working with the economic appraisal and financial model team. It will produce information as set out in the methodology for the work plan (see the economic appraisal and financial model appraisal).

The task results will form part of the GCF application form, section F.4. Financial Management and Procurement. The analysis should be undertaken and described to be consistent with the form guidance.

Work plan

The information above will be used to compile a logframe, detailed work plan, identifying the phasing and costing of the project component, with key milestones, indicators, outputs and costings.

This will involve working with the economic appraisal and financial model team. It will produce information as set out in the methodology for the work plan (see the economic appraisal and financial model appraisal).

This workplan will be discussed with the key stakeholders. Following comments a final work plan will be developed. The work plan will align to the information requested in the GCF application form.

M&E plan

This task will provide an overall monitoring and evaluation plan for the project, including baseline studies and framework, in line with GCF requirements.

It will also produce documentation of the activities and steps above, to provide a learning component, for action planning and early mainstreaming. This should be shared through a national workshop to advance information dissemination in the sector.

3. Team composition and required expertise

The team should comprise the following key team roles (team members can combine roles if suitably qualified):

- A design team leader, with a strong track record in the delivery of Natural resources/Rural Development projects and in project design with previous experience of working in Rwanda.
- A component 1 design team leader (tea resilience) with international expertise in the design and implementation of adaptation. Previous experience of working in Rwanda is required, preferably in the agricultural or tea sector.
- A component 2 design team leader (sustainable forest management and watershed protection) leader, with international experience in the design and implementation of forestry projects. Previous experience of working in Rwanda is required.
- An economist specialising in the impacts of climate change and adaptation, preferably with experience in the agricultural sector.
- An agricultural expert with experience in the design and integration of soil erosion control approaches within integrated land use planning. Previous experience in Rwanda would be preferable.
- A private sector specialist with experience in facilitating the development of small scale enterprises and cooperatives, and facilitating linkages with markets and credit institutions. Previous experience with working with cooperatives in Rwanda would be an advantage.
- M&E specialist with experience of theory of change and logical frameworks and establishment of evaluation programmes.
- A capacity development specialist with international experience in designing and developing training, capacity building and capacity strengthening approaches and materials for a range of participants and stakeholders. Previous experience within a rural development context within the region is essential, and within Rwanda an advantage.

4. Reporting requirements

The consultant(s) will report to Government of Rwanda, MINIRENA/FONERWA. Other key contacts include: the NAEB, the Wood Foundation and other sector specialists involved in the design.

The Design Team Leader shall be responsible for overall delivery of the assignment i.e. the key outputs from programme design and appraisal and producing the full business case. The Team Leader shall be responsible to coordinate and manage inputs from other team members and will be a key contact person to.

The Design Team leader shall report directly to MINIRENA on the overall delivery of this assignment and for all contractual issues.

5. Workplan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed programme interventions as well as the context in which it will operate. The Consultant is expected to review the relevant programme documents, and other sector- or country specific available materials (to be provided by the Design Team Leader) prior to starting the field work.

The overall assignment, including the completed (and accepted) final report must be completed by the end of August.

The consultant team shall be responsible for their own logistic arrangements e.g. travel, communication, accommodation etc. All relevant expenses should be covered from the contract budget. It is assumed that MINIRENA staff will be unable to contribute significantly to the preparation of the design phase and that the consultants will have to make their own logistical arrangements when in Rwanda.

6. Deliverables

The Consultant(s) will be responsible for the following deliverables:

- a. An inception phase report and work plan.
- b. A detailed design phase report for the components of the project with a descriptive and analytical report (in MS Word, Arial 12 Font) - which contains:
 - a. a summary of the key findings;
 - b. a detailed technical feasibility study
 - c. a programme of work covering the duration of the project, with a detailed work plan and budget
 - d. Arrangements for programme governance, management, operating and reporting procedures (including the commercial and management case for the two project components, including the project partner arrangements)
 - e. relevant financial and economic information on the project components for input to the economic and financial appraisal of the project.
 - f. an M&E plan.
 - g. the list of stakeholders consulted (principles of choice, role ascription, date of consultation),
 - h. a description of the consultation techniques (tailored specifically per target group).
- c. present the findings of the study in a validation workshop (using Power Point – maximum of 10 slides).

The findings should be presented in a format that is helpful to the design team. The Consultant will provide digital photographs where appropriate.

Annex III: Draft Environmental Social Impact Assessment Terms of Reference

1. Objectives of the assignment

The objective of the assignment is to assist MINIRENA to develop an Environmental Social Impact Assessment (ESIA) to ensure that there are sufficient safeguards and that the RGCDP is implemented in an environmentally and socially sustainable manner and in full compliance with Rwanda's and the GCF's environmental and social safeguards.

The specific objectives are: (i) to assess the potential environmental and social impacts of the RCDP in Gicumbi District, whether positive or negative, and propose mitigation measures which will effectively address the impacts; and (ii) to inform the programme preparation process of the potential impacts of different alternatives, and relevant mitigation measures (including implementation requirements).

2. Programme components

The programme will be run under four components.

- Component (1) affordable, low carbon settlements and industries as growth hubs;
- Component (2) climate resilient production of tea;
- Component (3) sustainable forest management and watershed protection; and
- Component (4) knowledge development and transfer.

3. Scope of assignment

The present terms of reference were designed to guide the study for ESIA of the four components of the RGCDP. The present study will consist of collecting and analyzing available data using appropriate techniques to achieve the goals of this consultancy. It will come up with realistic proposals and recommendations after consultations with REMA, Gicumbi Districts, other local authorities and all persons involved in programme activity.

The ESIA study team will carry out environmental and social assessment and planning to support RGCDP that shall include:

- Analyze interventions proposed for each of the proposed component within and around the sites of Rubaya and Kaniga Sectors of Gicumbi;
- Minimize potential adverse social and environmental impacts;
- Assess social, environmental and climate change effects/impacts related to the proposed programme and propose mitigation/adaptation measures;
- Conduct a comprehensive impact assessment of programme components in Gicumbi District sites.
- Conduct extensive consultations with various programme teams and other relevant stakeholders to obtain information and inform the different on going RGCDP studies including; Planning, design and construction of a LCCR and peri-urban growth hubs, Forest and watershed management; and
- Provide design and operation measures to minimize the risk of social and environmental impacts.

The ESIA study team will also provide an environmental social management plan that:

- prescribes other mitigation measures needed to ensure long-term programme sustainability, including institutional capacity building for environmental social management at all levels, public safety measures during design, construction and operational phases of the programme and,
- Outlines indicators and sets up a monitoring program to track agricultural and environmental and social performance of the target sites and implementation of the mitigation measures for the refinement of future management action as required including an estimate of the costs associated with the ESMP.

To carry out this study, the selected consultant will conduct assessment of all relevant types of environmental and social adverse impacts on physical and/or human environments. This includes, but not limited to:

- Relocation of population associated with the settlement process
- Community Health, security and safety
- Effects on Biodiversity including Natural Habitats
- Change in land use
- Soils and terrain
- Water sources including wetlands
- Vegetation
- Flora and fauna
- Physical cultural resources and heritage
- Socio-economic resources including livelihood of people
- Vulnerable people particularly aged, women and children
- Indigenous people, if applicable

3.1 *Legislative Requirements of ESIA*

Requirements for ESIA include identification of relevant legislations and guidelines (local, National, GCF, IFC, as well as broader international considerations) in line with environmental social impact assessment for RGCDP.

a) *Review of Baseline Data*

Assemble, evaluate and present baseline data on the relevant environmental characteristics of the Programme area. Include information on any changes anticipated before the programme commences. Include the following information:

(a) Physical environment: geology; topography; soils; water resources; climate.

(b) Biological environment: flora; fauna; rare or endangered species; sensitive habitats, including parks or preserves, significant natural sites, etc.; species of commercial importance; and species with potential to become nuisances, vectors or dangerous.

(c) Socio-economic environment (include both present and projected where appropriate): population; present land use; planned development activities; community structure; employment; distribution of income, goods and services; recreation; public health; cultural properties.

(d) Analysis of interactions likely to occur with all activities in the vicinity including associated facilities and cumulative impacts on the environment.

b) *Description of the project*

Detailed programme description covering the area of influence (spatial and temporal boundaries), location, layout, different activities related to the programme etc:

- Programme size and land requirement
- Description of all activities associated with all development stages from conception to closing, staffing and employment related to each phase of the programme components,

c) *Public consultation*

The consultant will propose, for MINIRENA approval, a thorough program of consulting the public during the development of the detailed ESIA study. The purpose of this consultation program will be to assist MINIRENA to both inform all interested parties about the programme and to solicit their views about it. Specifically, the Consultant will propose an effective, comprehensive public consultation strategy which includes at least:

- A list of stakeholders or audiences to be consulted;
- Methods for reaching these stakeholders/audiences;
- The scheduling of consultation activities; and

- How the consultation efforts will be analyzed, reported and used.

The consultant shall provide evidence of public consultation including but not limited to communities, signed list of participants, photos and outcome of consultations. The consultations should be conducted for these programme sites.

After consultations are conducted, key points should be incorporated into the draft ESIA/ESMP reports. ESIA/ESMPs should, in turn provide recommendations to the programme design.

d) Impacts prediction and analysis

This will consist of identifying and describing adverse impacts as well as social and environmental risks associated with the execution of the proposed project.

e) Analysis of alternatives:

Describe alternatives that were examined in the course of developing the proposed Programme and identify other alternatives which would achieve the same objectives. The concept of alternatives extends to siting, design, technology selection, construction techniques and phasing, and operating and maintenance procedures. Compare alternatives in terms of potential environmental and social impacts, capital and operating costs, suitability under local conditions, and institutional, training, and monitoring requirements.

To the extent possible, quantify the costs and benefits of each alternative, incorporating the estimated costs of any associated mitigating measures.

Include the “no project” alternative, in order to demonstrate what would reasonably be expected to occur to environmental and social conditions in the foreseeable future, based on existing ongoing development, land use, and regulatory practices and other relevant forces.

f) Mitigation Measures

Recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels and enhance positive impacts.

Provide a detailed description for appropriate reduction and compensatory measures as well as the design and the description of equipment and operational procedures (considered relevant) to respond to those impacts or to avoid or reduce the risks with the cost associated.

Describe the precise roles and responsibilities of different actors to be involved in effective implementation of the proposed mitigation measures.

Explain how the programme would comply with the requirements (including consultation) of the GCF's Environmental and Social Safeguards and Assessment Policy.

g) Environmental Social Management Plan (ESMP):

Prepare an Environmental Social Management Plan (ESMP) including proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures.

The Environmental Social Management Plan includes the following components:

Mitigation

The ESMP will be presented in tabular form and covers all anticipated significant adverse impacts, mitigation measures, implementation schedule and highlights the responsibility of people and institution involved as well as the costs required.

Monitoring

The monitoring section of ESMP, presented in tabular form, provides a specific description and technical details of monitoring measures including the parameters to be measured, methods to be used, frequency of measurements, responsibility of different actors involved in effective implementation of the proposed mitigation measures especially at lower level and an estimation of the cost of the implementation of the proposed mitigation measures.

4. Reporting

4.1 Reporting requirements

The report will be based on the above terms of reference and will be submitted to MINIRENA in One printed copies, along with an electronic copy on CD, for evaluation and approval. The report will be presented to the public during consultative sessions involving relevant stakeholders for their views on the report.

The following format is suggested for the EIA report:

Executive summary

This concisely discusses significant findings and recommended actions.

Introduction :

- a. Background to the project
- b. Objectives of the study
- c. Methodology

Policy, legal, and administrative framework

This part discusses the policy, legal, and administrative framework within which the EA is carried out. This should include both national and international legislations.

Baseline data

This section assesses the dimensions of the study area and describes relevant physical, biological, and socio-economic conditions, including any changes anticipated before the programme commences. It also takes into account current and proposed development activities within the programme area but not directly connected to the project. Data should be relevant to decisions about programme location, design, operation, or mitigatory measures. The section indicates the accuracy, reliability, and sources of the data.

Programme description.

This part concisely describes the proposed programme activities and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, water supply, housing, and raw material and product storage facilities). It provides detailed information on the following:

1. Location of the study area and description of the current use of the location, programme objectives and size;
2. Detailed description of the project, extent in time and space;
3. Description of activities related to all implementation stages from the inception, staffing and employment related to different stages of the project;

Analysis of alternatives

This section systematically compares feasible alternatives to the proposed programme site, technology, design, and operation--including the "without project" situation--in terms of their potential environmental social impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements (where applicable). For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible.

Environmental and Social impacts Analysis

This part predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. It explores opportunities for environmental enhancement, identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention. The impact analysis will also include climate change impact and mitigation/adaptation measures.

The impact is assessed by:

- Nature (positive/negative, direct/indirect)
- Magnitude (severe, moderate, low)
- Extent/location (area/volume covered, distribution)
- Timing (during construction, operation etc, immediate, delayed)
- Duration (short term/long term, intermittent/continuous)
- Reversibility/irreversibility
- Likelihood (probability, uncertainty)
- Significance (local, regional, global)

For each identified impact, the consultant shall propose mitigation measures and at the end of this chapter a summarized table should be established.

Environmental Social Management Plan (ESMP) and Monitoring plan:

This section includes two components: Environmental Social Management Plan (ESMP) and monitoring plan (MP). The ESMP and MP should be presented in tabular format.

- (i) **ESMP:** for each component (planning phase, construction phase and operation phase) an Environmental Social Management Plan is present and should include and not limited to:
 - Activity
 - Adverse impacts of the subproject;
 - Proposed mitigation measures,
 - Implementation schedule;
 - Responsibility of people and institution involved
 - Occurrence/incidence
 - Estimate of the costs required
- (ii) **Monitoring plan:**
 - Activities
 - Parameters to be measured
 - Indicator
 - Method used to measure the parameter
 - Frequency of measurements
 - Responsibility of people and institution involved
 - Estimate of the costs required

Conclusions and Recommendations

The report should also include all information necessary to the programme review such as lists of data sources, programme background reports and studies, and any other relevant information to which the developer/consultant's attention should be directed. It should provide also detailed designs/plans of construction, the water canalization and waste water treatment systems, etc.

References

These are written materials both published and unpublished used in the study preparation.

Appendices

- List of ESIA report preparers –individuals and organizations
- Record of interagency and consultation meetings.
- Tables, maps presenting the relevant data referred to or summarized in the main text.

4.2 Report presentation and Deadlines

Draft report of the ESIA will be presented within 45 calendar days from the date of signing the contract by both parties. MINIRENA will have 5 calendar days to check the document and request some modifications on it. The modifications to be made on the document will be submitted to the consultant in writing and must be integrated during the editing of the final version. The final version of ESIA report for each site will be presented within 15 calendar days after submitting the comments to the consultant. MINIRENA will have 5 working days to check the documents. The final draft ESIA report will be sent to GCF for review and request some modifications on it, if any. The consultant will have 5 days calendar to incorporate all comments from GCF. The Final version of the ESIA report will be presented in 2 printed copies and one CD.

While conducting this assignment, the consultant will be requested to present to the client a monthly progress report. However, the client may request the consultant at any time to present any desired clarification about the progress of the assignment when it is determined to be necessary.

The final reports of the ESIA will be submitted to RDB for approval and the GCF for no objection. In the event RDB or the IFC require some clarifications to be made on the report, the consultant holds the responsibility to address issues raised until the Certificate of approval is issued.

Once reports are approved, they will be disclosed in Rwanda and submitted by the MINIRENA to the GCF for disclosure.

5. Qualifications and experience required

5.1 Qualifications and experience required for the consultant

The consultant to be qualified for this study will have a vast experience in consultancy services with at least 2 references in Environmental Impact Assessment studies related irrigation infrastructure water management and other public infrastructures.

5.2 Qualifications and experience required for the key personnel

To realize this assignment, the selected consultant will recruit competent and qualified personnel with proven experience in similar services. Key personnel needed for this study by **the consultant** will have the minimum qualifications below:

- Team Leader with minimum Masters Degree in Environmental Science or related fields and with a background in soil and water management for the Assessment of Impact on the Environment,
- Specialist in sociology or related fields with minimum Bachelor Degree to evaluate potential impacts of the programme activities on socio-economic conditions of the population in the study areas.

The key personnel must have the following minimum experience:

(i) *The Environmental Specialist (Team leader) for Environmental Impact Assessment (E.I.A):*

Experience in environmental studies: 5 years; specific experience: 5 references in Environmental Impact Assessment.

(ii) *The Specialist in sociology or related fields:* experience in the domain of social studies: 4 years; specific experience: 2 references in Assessment of Impact of programme activities on the socio-economy.

Notes:

1. ***The consultant must attach the certificate of completion for each reference;***
2. ***The key personnel must attach the CV, notified degree and completion certificate for each reference.***

6. Reporting

The consultant will report directly to the MINIRENA/FONERWA Project Manager and Design Team Leader. Other key contacts and stakeholders will include RWANDA DEVELOPMENT BOARD (RDB), Rwanda Environment Management Authority (REMA), Ministry of Local Government (MINALOC), The Gicumbi District, the local community and any other relevant sector stakeholders.

The work is expected to take place over 25 days:

Documentation review and data analysis	4 days
Field visits and interviews with key respondents	15 days
Report preparation	5 days
Presentation	1 day

7. Deliverables

The Consultant(s) will be responsible for the following final deliverables as a minimum:

- a) a descriptive and analytical report (in MS Word, Arial 12 Font) which contains:
 - i. a summary of the key findings, with appropriate options and recommendations and specific measures to be included in the proposed project;
 - ii. the list of stakeholders consulted (principles of choice, role ascription, date of consultation),
 - iii. a description of the consultation techniques (tailored specifically per target group).
- b) Validation workshop - Present a clear summary of the final findings of the study in a validation workshop (using Power Point – maximum 5 slides).
- c) A report as outlined in section 5 above along with a Consolidated summary report - for the purposes of knowledge sharing.

The findings should be presented in a format that aligns with and is complementary to the outputs of design team and presented in a validation workshop (using Power Point – maximum of 2 slides) entitled: “Legal guidelines for implementation Rural Green Economy and Climate Resilient Development Programme - Rwanda”.

Annex IV: Gender Analysis Draft Terms of Reference

1. Objectives

The specific objectives of the gender analysis are to:

1. improve the extent to which the programme design is informed by a thorough understanding of gender roles, power relations and a disaggregation of women's and men's specific interests, needs, and priorities;
2. provide recommendations on how women can participate equally and actively alongside men, and can gain maximum benefit from programme interventions and how the programme can contribute to the Government's gender equality agenda; and
3. develop appropriate gender sensitive indicators that can be integrated into the programme framework.

The Consultant will:

1. Gather information on legal frameworks and mechanisms for promoting gender equality in Rwanda and make an assessment of the extent to which increased gender equality is currently being achieved in relevant (sub) sectors, such as agriculture, forestry, economic development in the public and private sectors;
2. In Gicumbe district, gather information on gender roles and the distribution of tasks, activities, and rewards associated with the division of labour and the relative positions of women and men in terms of representation and influence as well as access to and control over resources;
3. Map out women's current role(s) in relevant value chains, such as tea growing cropping and processing, forest products, including non-timber forest products, timber, brick production and construction make recommendations for how these may be enhanced through the programme;
4. Identify current gender-differentiated access to existing income-generation and business opportunities, finance and capacity development and advise on how the programme can support increased access for women to programme supported income-generation and business opportunities, finance and capacity development;
5. explain how climate change affects women and men from the target group in different ways, including their ability to recover from climate change impacts, and any opportunities that climate change might provide for greater gender equality and women's empowerment;
6. assess the different implications of planned programme interventions for women and men and advise on how project objectives can incorporate a gender dimension as well as identify activities that include:
 - a. actions to ensure that the needs, interests and concerns of women as well as men are mainstreamed through all components of the project;
 - b. capacity strengthening requirements for women and vulnerable men so that they can effectively participate in green growth job creation and business opportunities,
 - c. gender sensitive/transformational approaches specific activities that address gender inequalities in all four project components and contribute to greater gender equality,
 - d. measures to increase awareness of gender inequalities and support women's full participation in decision-making and technical activities associated with climate adaptation;
7. provide recommendations on how changes in gender relations can be monitored and evaluated using gender-sensitive indicators including, developing appropriate targets for male/female participation in programme activities;
8. assess the capacity of institutions to address gender issues that are related to climate change and provide recommendations on how the institutional arrangements of implementing organisations can support gender equality;

9. use the information above to suggest additional activities to be included in the work plan and budget, indicators and targets for the logframe, identifying the phasing and costing of additional inputs.

The target group for this study is the women and men living in Gicumbi District in Northern province of Rwanda and relevant government officials, private sector and NGO representatives.

2. Methodology

The Assignment will be carried out by a core team of consultants in co-ordination with MINIRENA. The “core” team of consultants will undertake a desk-based review of relevant materials prior to visiting Rwanda, if not already based in country. The team will then visit Rwanda for the scoping phase, and should include consultations with MINIRENA and government/project partners, development partners, civil society, academic institutions and private sector partners. Before departure they will make a presentation to MINIRENA and Key Ministries on the draft design programme.

The gender analysis should be conducted using participatory research methods and obtain qualitative information as well as quantitative data disaggregated by gender. The following research methods are proposed but the Consultant may suggest modifications as necessary.

- Review of relevant documents including: National Gender Policies, programme documentation, demographic surveys, social and poverty analyses, EDPRS, agriculture, forestry, employment and climate change documentation.
- Conduct focus group discussions and/or PLA activities and with women farmers and (separately) men’s farmer groups, women’s groups, and community leaders and community women and men in the target district.
- Conduct interviews with selected men and women Government staff at district level (Agronomist Officers, Environment Officers, Infrastructure Officers, Lands Officers, Forestry Officers and RAB CIP Officers), sector level Agronomist Officers and cell level Social Development Officers (better known as the Integrated Development Programme Officers or ‘IDPs’).
- Hold discussions with staff of other ministries, such as MINALOC and Ministry of Gender and Family Promotion
- Hold discussions with private sector companies and NGOs working in the target area and agencies providing different rural services such as credit, inputs, and marketing

The consultant will work with a local Gender expert and a Monitoring and Evaluation specialist.

3. Expertise required

The consultant should have:

- a post-graduate degree in social sciences or another relevant field,
- more than five years experience in conducting gender analysis and social research studies,
- knowledge and experience on rural livelihoods projects,
- strong communication skills (both written and verbal in English),
- the ability to work in a team and the ability to liaise with many different groups at different levels such as policy makers, grass-root woman’s organizations, field workers, technical experts, etc., and
- cultural sensitivity and respect.

4. Reporting requirements

The consultant(s) will report to Government of Rwanda, MINIRENA. Other key contacts include: the NAEB, the Wood Foundation and other sector specialists involved in the design.

The Team Leader shall be responsible for overall delivery of the assignment i.e. the key outputs from programme design and appraisal and producing the final report. This will include coordinating and managing inputs from other team members.

The Team leader shall report directly to the Design Coordinator on the overall delivery of this assignment. For all contractual issues, the contractor will report to Y.

5. Work plan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed project interventions as well as the context in which it will operate. The Consultant is expected to review the relevant project documents, and other sector- or country specific available materials (to be provided by the Design Co-ordinator) prior to starting the field work.

The work is expected to take place over 12 days:

Documentation review and data analysis	2 days
Field visits and interviews with key respondents	6 days
Report preparation	3 days
Presentation	1 day

The work must be completed by **.

6. Deliverables

The Consultant will:

- a. prepare a descriptive and analytical report (in MS Word, Arial 12 Font) which contains:
 - i. a summary of the key findings, with appropriate options and recommendations and specific measures to be included in the proposed project;
 - ii. the list of stakeholders consulted (principles of choice, role ascription, date of consultation),
 - iii. a description of the consultation techniques (tailored specifically per target group).
- b. present the findings of the study in a validation workshop (using Power Point – maximum of 10 slides).

The findings should be presented in a format that is helpful to the design team. The Consultant will provide digital photographs where appropriate.

Annex V: Draft Economic Appraisal and Financial model Terms of Reference

1. Study objectives

The specific objectives of the study are to:

1. To develop a method for the Economic Appraisal and Financial Model, setting out the input requirements from the technical feasibility studies, and the methods and outputs from the study. This method will be summarised into guidance and circulated to the consultants responsible for each of the four feasibility studies. The method and outputs produced should produce information for direct use in the Green Climate Fund application process and therefore must follow the appropriate guidance for GCF applications and the information required for the GCF application form.
2. To undertake a detailed Economic Appraisal (EA) for each of the four components or sub-projects, and for the Project as a whole, drawing on cost and benefit information collected by the technical feasibility studies. This will require close integration to work with the consultants for these work packages. The appraisal should also identify the distributional costs and benefits of the project.
3. To prepare a detailed Financial Model (FM), including the costs of each component of the programme (with a breakdown by subcomponent) for the four programme areas, and the project as a whole, drawing on the cost and programming information from the feasibility studies, and collating the information on project and external finance and funding modalities. This task will include the development of the financial model.
4. To provide inputs to help the PMU work components and their role in developing the implementation manual for the project.

Requirements

The Consultant(s) will conduct the following tasks:

1. To develop a method for undertaking the economic, financial analysis that is consistent with the information needed for the GCF application and discuss and agree this with Government of Rwanda.
2. To circulate guidance note, and provide guidance to the technical feasibility teams (low carbon hub team, and the agricultural feasibility team) on the cost, benefit and financial information needed for the assessment.

Economic Appraisal

3. To undertake an economic assessment (ex ante) of each sub-project and for the Project as a whole. This is expected to include a cost-benefit analysis, including non-market values (where possible), and to follow the methodology proposed in this ToR. This task is expected to be undertaken in close partnership with technical design teams.

Financial Model

4. To undertake a cash flow based Financial model indicating the sources of finance and different project components (GCF finance, private sector leveraging) the modality of finance (grant, concessionary loans, etc.) transfer of finances, expenditure flows and timetable or each sub-component. This task is expected to be undertaken in close partnership with technical design teams.
5. To describe the financial elements of the subprojects and the Project so as to be consistent with the GCF application process (e.g. GCF application sections B.1, B.2, B.3):



- an integrated financial model that includes a projection covering the period from financial closing through final maturity of the proposed GCF financing with detailed assumptions and rationale; and a sensitivity analysis of critical elements of the project/programme.
 - a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance.
 - a breakdown of cost estimates for total project costs and GCF financing by sub-component in local and foreign currency and a currency hedging mechanism.
 - a breakdown of cost/budget by expenditure type (project staff and consultants, travel, goods, works, services, etc.) and disbursement schedule in project/programme confirmation (term sheet).
6. To provide information on co-financing, leveraging and mobilized long-term investments (mitigation only) consistent with the GCF application process (section E.6.2. in GCF application)
 - To estimate the expected volume of finance to be leveraged by the proposed programme and as a result of the GCF's financing, disaggregated by public and private sources (E.6.5 in GCF application).
 - To provide the co-financing ratio (total amount of co-financing divided by the GCF's investment in the project/programme) and/or the potential to catalyze indirect/long-term low emission investment.
 7. To provide information on financial availability consistent with the GCF application form (section E.6.3)
 - To specify the expected economic and financial rate of return with and without the Fund's support, based on the analysis conducted; and describe financial viability in the long run beyond the Fund intervention
 8. To provide economic and financial justification (both qualitative and quantitative) for the concessionality that GCF provides, with a reference to the financial structure proposed, consistent with the GCF application form (section F1)
 9. To provide input to the PMU team and their development of the implementation manual, in providing relevant information of use for the financial accounting, disbursement methods and auditing, consistent with the GCF application form (section F.4).
 10. To provide input to PMU team and their development of the implementation manual, in their role to develop financial systems and procedures for the whole Project management and delivery in a way that is consistent with the requirements of the GOR and donors.
 11. To collect supplementary data where necessary for the EA and FM mainly through interviews in country, but also through a review of the existing national literature.
 12. To produce a report containing the EA and FM for each of the four sub-projects by using one common methodology and outline (as proposed in this ToR).
 13. To provide information in a format and following the relevant guidance for sections of the GCF application template (namely subsections of B, E and F)
 14. To prepare 2 XLS documents for each sub-project, with calculations of the EA and FM respectively.

2. Methodology

The following research methods are proposed but the Consultant may suggest modifications as necessary. Determination of the project cost (par component and sub-component)

2.1 Economic Appraisal (EA)

For the EA, the Consultants will conduct a (ex ante) cost-benefit analysis (CBA) based on the economic costs and benefits generated by the project from the point of view of society as a whole over a period of 35 years. The analysis will be undertaken for three discount rates, 13% (the GoR official rate) and two other (lower) rates (following guidance from the GCF and MINIRENA).

The Consultants will review the following input and output requirements from the technical feasibility studies, namely:

1. Economic co-benefits
 - Amount of government's budget deficits reduced
 - Amount of foreign currency savings
 - Diversified livelihoods and increased incomes
 - Growth of competitive low carbon industries
 - Sustained productivity of a climate resilient tea sector
 - Growth of affordable, low carbon housing sector
 - Reduced losses and costs associated with disaster response and rehabilitation costs from extreme weather events
 - Hydropower plants operate to capacity generating electricity for the population
2. Social co-benefits
 - Increased productive and adaptive capacity of individuals, households and communities
 - Reduced impact of climate-related shocks on food security of target households
 - Increased skills within the rural workforce
 - Reduced dependency on agriculture
 - Reduced poverty levels with associated reduction in morbidity rates
 - Reduced number of deaths, injuries, livestock losses and damage to housing from extreme weather events
 - Increased access to low cost, low carbon housing
 - Increased access to renewable energy sources
 - Improved nutrition from diversified, climate resilient agriculture
 - Vulnerable households including women headed households benefit from employment in new industries and affordable, low carbon housing
3. Environmental co-benefits
 - Stabilised slopes and reduced erosion
 - Increased productivity and diversity of forest products
 - Increased forest and agro-forestry cover
 - Improved soil quality, water retention capacity and increased agricultural productivity
 - Improved biodiversity and preservation of ecosystem services in critical watersheds
 - Reduced emissions from substitution of locally available construction materials for carbon intensive imported steel and cement, the use of efficient cookstoves and solar power.

Use the above inputs, and others where applicable, the consultant will also conduct an economic assessment of the program (ex ante) of each sub-project and for the Project as a whole. This is expected to include an indicative cost-benefit analysis, including non-market values (where possible). The final output will include a qualitative and quantitative assessment of the project that determines the following items:

- Economic IRR and Economic NPV of the project, with and without concessional financing.

2.2 Financial Model

A separate Financial Model (FM) should be developed for each sub-project and for the Project as a whole.

The Consultant will use information from the technical feasibility teams to build a financial model.

The Financial model should indicate the sources and uses of finance (GCF finance, private sector leveraging) the modality of finance (grant, concessionary loans, etc.) expenditure flows and timetable. This task is expected to be undertaken in consultation with Minirena and use information from the technical studies.

The Financial model will need to show for each subproject and for the Project as a whole:

- Sources of finance divided by semi-annual (cashflows) and modality of finance;
- Financial conditions attached to each source of finance (tenor/duration, times of disbursement, interest rates etc);
- Expenditure items divided by semi-annual (cashflows and item description);
- Capital and operating expenditure items arising in projects could include amongst others:
 - Staff
 - Investment costs e.g. construction costs, materials etc
 - IT costs
 - Fixed assets
 - Equipment
 - Overheads
 - Operating costs
 - Maintenance costs

Cash flows should be expressed in financial (current and expected) terms, i.e. including any interest rates, taxes, subsidies, inflation etc.

The model will need to break down expenditure items by funding sources.

In addition to the model, qualitative work will need to contain specific information pertaining the use of GCF funds and relevant for the GCF application process/forms, as follows:

- a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance
- a breakdown of cost estimates for total project costs and GCF financing by sub-component in local and foreign currency and a currency hedging mechanism.
- a breakdown of cost/budget by expenditure type (project staff and consultants, travel, goods, works, services, etc.) and disbursement schedule in project/programme confirmation (term sheet).
- To estimate the expected volume of finance to be leveraged by the proposed programme and as a result of the GCF's financing, disaggregated by public and private sources (E.6.5 in GCF application).
- To provide the co-financing ratio (total amount of co-financing divided by the GCF's investment in the project/programme) and/or the potential to catalyze indirect/long-term low emission investment.
- To provide information on financial availability
- To specify the expected economic and financial rate of return with and without the Fund's support, based on the analysis conducted; and describe financial viability in the long run beyond the Fund intervention
- To provide financial justification (both qualitative and quantitative) for the concessionality that GCF provides, with a reference to the financial structure proposed
- To describe the sub-projects financial management and procurement processes, including financial accounting, disbursement methods and auditing

The financial model will need to include details of all financial arrangements agreed or to be agreed with third parties for the realisation of the sub-project, including time of disbursements, financing conditions (e.g. interest rates), penalty schemes etc. for each financing tranche.

3. Team composition and required expertise

The team should comprise the following key team roles (team members can combine roles if suitably qualified):

- One senior Economic/Financial consultant who will co-ordinate the work and work closely with the consultants working on each subproject study, and with the PMU and implementation manual study.
- A senior environmental economist with experience of the valuation of non-market benefits of environmental projects, experience of valuing the economic costs of climate change, and experience of applying decision making approaches for uncertainty for adaptation (ROA, RDM and PA).
- An economic consultant with experience of cost-benefit and financial cost analysis of forestry projects.

The team leader should have the following expertise:

- At least Master degree in Economics or Business Planning.
- At least 5 year-experience in work in developing countries. Past experience in East Africa would be highly valued.
- Past experience in cost-benefit analysis, financial planning assessment applied to investment projects in developing countries.
- Excellent communication and team-working skills.

4. Reporting requirements

The consultant(s) will report to the MINIRENA/Government of Rwanda.

5. Workplan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed programme interventions as well as the context in which it will operate. The Consultant is expected to review the relevant programme documents, and other sector- or country specific available materials (to be provided by the Design Team Leader) prior to starting the field work.

The work is expected to take place over the duration of the overall project components, so that the task aligns with the technical feasibility studies.

The overall assignment, including the completed (and accepted) final report must be completed by the end of August.

6. Deliverables

The Consultant(s) will be responsible for the following deliverables:

- 2) An initial scoping and methodology report, 3 weeks after contract signature.
- 3) A descriptive and analytical report (in MS Word, Arial 12 Font) which contains:
 - i) An Economic Analysis for each sub-project (so 4 in total), developed by using the Methodology presented in this ToR (to be used as outline), and including specific measures (e.g. collection of data) to be included in the proposed project;
 - ii) A Financial Model + annexes for each subproject
 - iii) A summary doc summarising EA, and FM for the Project as a whole
 - iv) Relevant sections of GCF application form and supplementary information completed.
 - v) The list of stakeholders consulted (principles of choice, role ascription, date of consultation);
 - vi) A description of the consultation techniques (tailored specifically per target group).
 - vii) List of references.
- 4) An initial draft of these will be produced 1 month in advance of the end date. Following comments, the final report and material should be produced by the end of August.
- 5) Two Excel documents for each sub-project showing the calculations for the EA, and FM respectively. For the EA, the xls template is the one used by MINIRENA/FONERWA.

- 6) Present the findings of the study in a validation workshop (using Power Point – maximum of 10 slides).

The findings should be presented in a format that is helpful to the design team and is compatible with the requirements of the GCF application process and forms.

Annex VI: Development of Project Management Plan Draft Terms of Reference

1. Objectives

The specific objectives of the assignment are to:

1. Review existing GoR/MINIRENA operating procedures for managing large programmes in Rwanda;
2. In consultation with key stakeholders including MINIRENA and GCF, the Consultant will prepare a detailed Programme Management Plan (PMP) that will include among others:
 - Outline of **objectives and a programme description**
 - Detailed description of the **institutional arrangement for programme delivery** including an organogram, composition of the steering committee, the PMU and specific roles and responsibilities the PMU and key partners responsible for delivery of the sub-projects within the programme, supervision of contractors and documentation and reporting standards, the division of responsibility between the PMU and the firms delivering the sub-projects within the programme as well as the use of call down consultants
 - Prepare a detailed Project Implementation Manual (PIM) that will include among others:
 - Outline of objectives and a programme description
 - Outline the institutional setup of the project;
 - Define the main principles and approaches during implementation;
 - Define the principles and systems of project management for implementation including an organogram, staffing compliments, composition of the steering committee, the PMU and specific roles and responsibilities the PMU and key partners responsible for delivery of the sub-projects within the programme, supervision of contractors and documentation and reporting standards;
 - Identify relevant external organisations that the PMU will work with;
 - Define a division of responsibility between the PMU and the firms delivering the sub-projects within the programme;
 - Outline the project implementation process including the use of call down consultants under framework contracts, partner organisations
 - Outline the financial management procedures including organisation of bank account and statements, procurement and accounting procedures/documentation, audit, Procurement Plan, Tendering procedures, Submission of requests for payment, eligibility of expenditure etc., prepare templates for procurement including long lead items, locally produced materials, material reception and positive ID procedures etc.
 - Outline the programme reporting including procedure for preparation and submission of Programme Progress Reports, Content of the Programme Progress Reports, prepare template for meeting minutes, monthly report, gateway review etc.
 - Outline of programme closure procedures, Retention of documents, Exit strategy, ownership of project results
 - Define the main principles and approaches of Monitoring and Evaluation (M&E) and knowledge management including a workplan and budget, reporting, mid-term and final reviews and audits as well as determine specific procedures for data capture and management, metrics for data analysis; and reporting requirements: and
 - Define the expected environmental and social impacts and develop a system for tracking and mitigating.
 - Outline the **co-ordination arrangements** including identifying potential barriers to coordination and developing actions and strategies to facilitate coordination, describing an appropriate mechanism to ensure effective organisation and management of projects and sub-components, joint workplan development and management, reporting and decision making structures, information sharing and management, follow up and follow through on coordination decisions, and effective communications (meetings, progress tracking etc.), this will also include developing MOUs with partner organisations.
 - Outline **quality assurance/control and oversight procedures** to ensure the highest professional standards in delivering outputs as well as cost effectiveness and efficiency.



- Submission of requests for payment, eligibility of expenditure etc.;
 - Outline the **programme reporting** including procedure for preparation and submission of Programme Progress Reports, Content of the Programme Progress Reports, prepare template for meeting minutes, monthly report, gateway review etc.
 - Outline of **Risk register** and risk tracking and mitigation to be maintained throughout the project.
 - Formulate a **lesson sharing** mechanism to ensure cross learning.
 - Define the main principles and approaches of **M&E and knowledge management** including a workplan and budget, reporting, mid-term and final reviews and audits as well as determine specific procedures for data capture and management, metrics for data analysis; and reporting requirements (this work to be coordinated carefully in consultation with the consultant preparing the Implementation Manual)
 - Define the expected **environmental and social impacts** and develop a system for tracking and mitigating (this work to be coordinated carefully in consultation with the consultant preparing the Implementation Manual);
 - Prepare a **Logistics plan** - prepare a clear development plan covering infrastructure provision, construction activities and phasing of all elements of the work;
 - Develop a **Key Task Tracker** - formulate tool to ensure that all key tasks are tracked and fully coordinated
 - **Implementation and Construction programme** - draft implementation programme for each work element. Formulate into a single coordinated programme of works.
 - **Cash flow programme** – prepare templates for cash flow prediction for each work element. Formulate into a single coordinated cash flow prediction covering the entire works.
 - **Procurement programme** - prepare templates for procurement including long lead items, locally produced materials, material reception and positive ID procedures etc.
 - **Value management** - establish a 'value management' procedure that prioritises a 'best value' approach to design feasibility solution - to ensure that the proposals are within the budget
 - **Construction contracts** - prepare templates for Construction contracts propose and formulate plan to implement/manage construction contract and FIDIC or otherwise
 - **Sub-Consultant contracts** - advise client on need for additional professional contracts. Propose suitable contracts
 - **Construction methodology** - including Health & Safety plan
3. Assess **capacity needs** of MINIRENA/GoR with respect to adopting and applying all aspects of the PMP during implementation and prepare a capacity development plan if necessary;
 4. Propose additional activities where needed to be included in the work plan and budget, indicators and targets for the logframe, identifying the phasing and costing of additional inputs.

All key members of the design team will be involved over the entire design period, coordinated by Design Coordinator. The PMP will be attached to the Full Proposal, to be submitted to the GCF Board Meeting in October 2016.

2. Methodology

The Assignment will be carried out by a professional consultant in co-ordination and consultation with MINIRENA. The consultant will undertake a desk-based review of relevant materials prior to visiting Rwanda, if not already based in country. The Consultant will then visit Rwanda for the scoping phase, and should include consultations with MINIRENA and government/project partners. Before departure s(he) will make a presentation to MINIRENA and Key Ministries on the draft PIM.

The following methods are proposed but the Consultant may suggest modifications as necessary:

- Review relevant documents,
- Conduct interviews and discussions with key informants, and
- Compile PMP.

3. Expertise required

The consultant should have:

- a post-graduate degree in project management, business studies, finance or another relevant field,
- more than ten years' experience in project management,
- knowledge and experience on procurement and accounting procedures,
- knowledge and experience on M&E and management systems,
- familiarity with ESIA processes, and
- strong communication skills (both written and verbal in English),

4. Reporting requirements

The consultant will report to Government of Rwanda, MINIRENA. The Consultant shall be responsible for overall delivery of the assignment i.e. the key outputs from programme design and appraisal and producing the final PMP. This will include coordinating and managing inputs from other team members as needed.

The Consultant shall report directly to the Design Coordinator on the overall delivery of this assignment. For all contractual issues, the contractor will report to Y.

5. Workplan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed project interventions as well as the context in which it will operate. The Consultant is expected to review the relevant project documents, and other sector- or country specific available materials (to be provided by the Design Co-ordinator) prior to starting the field work.

The work is expected to take place over 20 days:

Documentation review and data analysis	4 days
Interviews with key respondents	4 days
PMP preparation	30 days
Presentation	1 day

The work must be completed by 15th July 2016.

6. Deliverables

The Consultant will:

- a) Prepare a high quality professional and user friendly PMP and PIM (in MS Word, Arial 11 Font).
- b) Present the PMP and PIM at a validation workshop

The findings should be presented in a format that is helpful to the design team.

Annex VII: Legal Services to support Rural Green Economy and Climate Resilient Development Programme - Rwanda Draft Terms of Reference

1. Tasks of the consultant

1.1 Project feasibility

Legal services are needed to review the approach to be adopted and to advise on the legal implications in the following areas of the programme:

- Review of risk assumptions to evaluate how risks can legally be allocated in regard to land acquisition, collection of tariffs from individual consumers and social safety monitoring.
- Review of project assumptions and whether they are legally viable, e.g. management of rights and benefits and whether there might be legal limitations to how various stakeholders can be treated.
- Assess the financial management and accounting structures proposed to identify efficiency gains including taxation of revenues and accounting methods for depreciation of assets.
- Identify licensing, permitting and other legal risks that need to be addressed and allocated to potential risk owners.
- Identifying other contractual and commercial relationships in the course of conducting studies and subsequent implementation.
- Ensuring all necessary approvals and permissions are obtained before commencement of tender process and relevant parties to sign the tender documents and contracts.
- Confirming legality of budgeting assumptions and the management of revenue flows.
- Assessing risk allocation approaches to ensure that they correspond with private sector appetite and lender requirements. This should be done before bidding to avoid failure of the bidding process and the costly and reputational damage to the programme
- Assessing that approaches will conflict with available or required procurement, contracting and financing structures as established and governed by Rwanda Public Procurement Authority (RPPA).
- The legal consultant will advise on the tender process including the following tasks:
 - Advice on applicable procurement requirements
 - Advice on mechanisms to maximize competition while avoiding unrealistic bids.

1.2 Legal Due Diligence

Perform legal due diligence on the matters set out below during appraisal and as the need arises to fully inform all aspects of the relevant laws and local regulatory issues affecting its prospective investments.

Issues likely to be of interest are:

- Confirmation of the regulatory framework applicable to the Programme;
- Necessary approvals and consents for Loans as applicable;
- Due diligence on the status of the Borrower and all its subsidiaries and affiliates as applicable;
- Confirmation of the relevant legal issues arising from the Programme, and such other issues as tax, conflicts of law, recognition of foreign, environmental matters, creditor's rights, and bankruptcy and insolvency issues;
- Preparation of a legal due diligence report; and
- Any other matter relevant to the Project.

Outline and prepare Project Documents required for Review and Negotiation of the proposal

- a) Some of the documents the consultant is expected to prepare will include the following:
- b) Loan Agreement(s);
- c) Closing Documents and Disbursement
- d) Drafting and updating of closing checklists, including analysis of status of conditions of disbursement; and
- e) Attention to satisfaction of conditions of disbursement.

2. Methodology

The consultant team will develop a work plan that allows for the following -

- Close consultation with all key relevant stakeholders (such as Gicumbi district, Rwanda Housing Agency)
- Community consultation throughout the process.
- A clear approach that will facilitate good client and stakeholder involvement and decision making throughout the design process.

3. Team composition and required expertise

The assignment requires the following expertise:

1. Academic background and education in law;
2. At least 5 years of working experience;
3. Good knowledge of the legal procedures as governed by the Rwanda legislation, especially the legal framework under which Government institutions operate;
4. Experience in working with Multi-lateral Organizations procedures and/or with other International Financing Institutions is a plus;
5. Proven working experience in the fields of contract law;
6. Advanced PC skills and sound knowledge of the MS Office package: MS Word, Excel, Outlook, Power Point;
7. Strong analytical and inter-personal skills
8. Good capacity to communicate with people having different backgrounds and positions as well as with local and national authorities;
9. Excellent command of spoken and written English is a must.
10. Relevant experience of projects in Rwanda is preferred.

4. Reporting requirements

The consultant will report directly to the MINIRENA/FONERWA Project Manager and Design Team Leader. Other key contacts and stakeholders will include Ministry of Justice (MINIJUST), Rwanda Public Procurement Authority (RPPA), Ministry of Infrastructure (MININFRA), Rwanda Housing Agency, REMA, MINALOC, The Gicumbi District, the local community and any other relevant sector specialists.

5. Workplan and timetable

The consultant will need to familiarise her/himself with all aspects of the proposed programme interventions as well as the context in which it will operate in order to identify opportunities/entry point for legal services. The Consultant is expected to review the relevant programme documents and other sector or country specific available materials prior to starting the field work.

The legal consultant will identify and guide the work that needs to be done in close consultation with the programme manager but not to exceed 10 days to be completed by end May 2016 at the latest.

The work is expected to take place over	25 days
Documentation review and data analysis	4 days
Field visits and interviews with key respondents	15 days
Report preparation	5 days
Presentation	1 day

6. Deliverables

The Consultant(s) will be responsible for the following final deliverables as a minimum:

- a) a descriptive and analytical report (in MS Word, Arial 12 Font) which contains:
 - ii) a summary of the key findings, with appropriate options and recommendations and specific measures to be included in the proposed project;

- iii) the list of stakeholders consulted (principles of choice, role ascription, date of consultation),
- iv) a description of the consultation techniques (tailored specifically per target group).
- b) Guidelines - Legal documents that provide substantive legal guidance to engagements of consultants including legal advisory materials;
- c) Validation workshop - Present a clear summary of the final findings of the study in a validation workshop (using Power Point – maximum 5 slides).
- d) Consolidated summary report - for the purposes of knowledge transfer and dissemination of lessons learned.

The findings should be presented in a format that is helpful to the design team and presented in a validation workshop (using Power Point – maximum of 2 slides) entitled: “Legal guidelines for implementation Rural Green Economy and Climate Resilient Development Programme - Rwanda”.
