Terms of Reference for international consultancy to undertake baseline study for the "Landscape and Integrated Water Resources Management and Restoration in Sebeya and Other Catchments" project

1. Introduction

Rwanda is currently implementing its "Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development (GGCR)" strategy with ambitions to transform by 2050 Rwanda's economy into a climate resilient, low carbon economy, with a strong services sector, low unemployment and low levels of poverty. The strategy defines three objectives: (i) achieve energy security and a low carbon energy supply (green industry and services); (ii) realize sustainable land use and water resource management (enhanced food security, appropriate urban development and preservation of biodiversity and ecosystem services); and (iii) achieve social protection, improved health and disaster risk reduction (reduced vulnerability to climate change). The GGCR identifies mounting pressures on natural resources (land, water and ecosystem services) which requires Rwanda to employ sustainable land use planning and integrated water resource management to ensure human wellbeing.

2. Background

Rwanda is characterized by steep mountainous landscapes and fragile soils, with intensive use of limited land resources together for subsistence agriculture, which has led to sustained degradation of landscapes. Moreover, because 85% of rural communities depend on biomass fuel for cooking; there is increased demand for fuelwood. As result, much of the steep land is bare and susceptible to surface run-off with deep gullies and landslide.

Sebeya Catchment, located in the Western part of Rwanda, is facing all of these social and environmental challenges, as it has some of the steepest slopes, highest mountains and a population density exceeding the national average at 400 people/km^2. These problems are exacerbated by climate change, unsustainable agricultural practices, and limited economic opportunities, access to finance, alternative sources of livelihoods, access to the markets. This leaves communities heavily dependent on subsistence farming, which results in land degradation and loss of fertility. This, in turn, leads to increased food insecurity, reduced yields and a reduction of water provision services.

In order to reverse this trend, the Government of Rwanda (GoR) signed a partnership agreement and received funding from the Government of Netherlands (GoN) through the Embassy of the Kingdom of Netherlands (EKN) to implement the Integrated Water Resources Management Programme Rwanda.

The IWRM Programme was developed to support:

- Development of agriculture and preservation of valley bottoms;
- River bank and course rehabilitation and stabilisation;
- Watershed protection and development, including terracing of hill slopes;
- Catchment flood protection and water management;
- Development and protection of water intakes;
- Development and installation of efficient water use techniques in agriculture, energy;
- Development of infrastructure related to hydro-power, drinking water supply; and
- Undertaking research and development of cost effective measures towards water; and natural resource management.

The Water for Growth Programme Implemented between 2015-2019 facilitated the development and implementation of a framework to achieving the desired results in water and natural resource management. Based on the success of the Water for Growth programme, and the need to scale up catchment and water resources management and restoration measures, the Government of Rwanda through Rwanda Water and Forestry Authority (RWFA) in collaboration with International Union of Conservation of Nature (IUCN), received additional funding from the Embassy of the Kingdom of the Netherlands (EKN), to support the scale up of the initiatives from the Water for Growth programme through the '***'Landscape Restoration and Integrated Water Resources management and in Sebeya and other Catchments''*** project.

The Project has the overall purpose of "*Increased livelihood and conservation Benefits in Sebeya (& other) catchments from restoration & improved local land management*".

The project will support ongoing initiatives by the government of Rwanda to implement Integrated Water Resources Management for improved management of land and water resources, landscape restoration, catchment management planning and implementation of innovative financing mechanisms to improve community household incomes. The project will also provide opportunities for scaling up initiatives that were initiated under the Water for Growth project.

3. Project Components

The "***Landscape Restoration and Integrated Water Resources management and in Sebeya and other Catchments''*** project, which will provide Technical Assistance (TA) to the implementation of the Sebeya Landscape Restoration Pilot Programme (SLRPP) implemented by Government of Rwanda (RWFA) has four key outcome areas focusing on:

I. Reduced land and soil degradation, river sedimentation and flooding;
II. Improved incomes and resilience based on sustainable use of landscape resources;
III. Empowered landscape governance and management institutions; and
IV. Evidence-based guidelines for the landscape approach.

In order to achieve the listed outcomes, the project has four key component areas namely:

1. **Degraded lands in Sebeya & other catchments restored;** this will include capacity strengthening and land use planning at village levels and the implementation of restoration and land management measures (planning, action, by gender) at Village, micro catchment, and catchment levels (monitoring, provision of training). It will also support continued implementation of Water for Growth action and respond to national level RWFA capacity needs. In terms of support for the identification and uptake of landscape restoration supportive policies, the project will work with central government, development partners, civil society organizations and private sector entities to support in-country efforts to enhance the enabling policy environment for integrated landscape restoration. Work will include the development of case studies and policy briefs, high-level workshops, and an awareness-raising campaign featuring restoration champions from within and outside Sebeya Catchment. The project will also support the development of Village Landuse Action Plans and support their implementation in coordination with RWFA.
2. **Innovative financing mechanisms & value chains for improved ecological & economic benefits Developed**: This component will support implementation and scale up of Payment for Ecosystem Services (PES) that has been piloted by Water for Growth in Nyabugogo, implement community environmental conservation incentive mechanisms and support mobilization of restoration finance using project generated lessons, leverage on additional finance sources to scale up implementation of integrated landscape and water resource management in Rwanda. In addition, for villages where there will be no PES, the Community Environmental Conservation Fund (CECF) will be used to provide farmer incentives. IUCN being a Green Climate Fund (GCF) and Global Environment Facility (GEF) accredited and implementing agency, will explore opportunities with the government of Rwanda to develop new proposals that will enable scale up. The project will also support implementation of Enterprise Partnership Facility (EPI) launched in 2018 by RWFA with support from EKN Rwanda and will be continued under this project., While financing remains

an important elements for this component, the project will provide a significant support to other livelihoods alternatives focusing on agricultural value chains and market development and access.

3. **Scaling up to all of Sebeya and to 4 other Catchments (Nyabarongo, Nyabugogo & Muvumba).** The project will provide support to developing the remaining five catchments plans (Lake Kivu catchment, Rusizi River catchment, Mukungwa River catchment, the Akanyaru catchment, the upper Akagera catchment) and supporting 3 Micro-Catchment Action Plans (MCAPs) using participatory planning and including the development of livelihood alternatives, supporting capacity enhancement and knowledge management. TA will continue support implementation of restoration work in Nyabarongo, Lake Muhazi infrastructure, Sebeya river diversion and dikes infrastructure and Nyabugogo check dams work. TA will ensure capacity of technical staff for both RWFA and district is enhanced. TA will also continue to support All Sebeya districts, as part of micro catchment plans to develop the district landscape restoration action plan and ensure this is built in District development strategies, Performance contracts with sectors, cells and village level plans.
4. **Knowledge management System for landscape restoration and integrated water resource management improved.** This will include the extension of the water monitoring network, regular water monitoring, Water permit system, Geoportal, Hydrological Database (AQUIRUIUS), studies on keys aspects like flooding, water storage, pollution, erosion, etc. It also includes the capacity development of RWFA staff and Districts.

The baseline study will provide baseline data for these four outcome areas. There will be a focus on the Sebeya catchment for which W4GR have recently produced detailed technical baselines, which will inform the baseline studies of this project. The baselines for Sebeya will be carried as soon as possible, while the baselines for the other catchments will be carried out later.

4. Objectives, definition and tasks of the assignment

The main purpose of this assignment is to determine and document baseline indicators for measuring socio-economic and biophysical parameters that will be monitored throughout the implementation of the project. Therefore, the baseline study will cover all outcome areas as described in the project document and the firm is expected to produce a detailed methodology and then the baseline report for the Sebeya catchment, especially where there are already MCAPs. The information generated will aid in setting the indicators and mechanisms to track progress in the implementation of the project.

The broad objectives of the assignment include:

a) Undertake socio-economic baseline assessment of key indicators within Sebeya and other catchments. The key socio-economic indicators in the project results framework include;
   - Number (#) men and women with improved livelihoods as a result of the project
   - Number (#) of community members (men and women) with benefits from catchment or environmental financing
   - Percentage (%) community members with increased income;

   The baseline assessment will include desktop review to identify existing baseline data for the project socio-economic indicators. For indicators that have no existing baseline data, design and conduct a baseline assessment to generate the required information;

b) Undertake baseline assessment of the key biophysical project indicators.
   The main biophysical indicators in the results framework include:
   - Area (Ha) under restoration
   - Area (Ha) under improved land management
   - % of sub-catchment under improved landscape governance & management
   - Improvement of water services and water retention flows
   - Improved water flows for downstream use as a result of Payment for Ecosystem Services (PES)
   - Ha of land with demonstrated increased productivity.

The approach will include identification of already existing baseline information from various sources (e.g. from W4GR and other data sets) within Sebeya and other catchments. Where there are indicators without existing baseline data, the consultant will design and conduct biophical assessmnets to address the data gaps.

The specific tasks to be undertaken by the consultancy firm are defined below:

1. Develop a methodology for the Baseline

a) Provide details as to how baseline data will be collected for the different socio-economic and biophysical indicators as outline in the project results framework.
The methodology should be as simple as possible, addressing only the key questions for the project. It should also collect the minimal amount of baseline data needed to address the various indicators so as to make monitoring simpler ("the need to know vs. want to know);
b) Develop a baseline study plan indicating the studies to be undertaken and when they will be conducted.
c) Based on the baseline values established by the socio-economic and biophysical assessments, set measurable, realistic and time-bound targets for the project indicators.

2. Tasks to be carried out by Project team as background for Baseline

a) Review and assess the baseline reports from W4GR project and use, as appropriate, key data and indicators from the W4GR baseline to support the baselines of this project;
b) Assess the impact of erosion control intervention on Hydrological behaviour in Upper Nyabarongo & Sebeya Catchments
c) Assess & map landslide & gullies potential in Kivu, Akanyaru & Nyabarongo (Upper & Lower)
d) Assess water permit system operations, and identify how to improve it;
e) Assess Geoportal system and how to improve it;
f) Assess water resources database (Aquarius) and identify how to improve data collection and configuration;
g) Evaluate baseline status of data collection, storage and dissemination and data sharing & communication linkages in water portal and other relevant sector agencies;
h) Evaluate historic data availability, type and format and quality;
i) Review need for strengthening stream flow measurements, and propose an action plan to strengthen stream flow network that takes into account technical, operational and logistical constraints;
j) Review water quality data requirements, current status of sites, instruments, sampling procedures, laboratory capacity, and recommend strengthening & upgrading the entire chain of data collection-analysis-storage activities, including setting up water quality laboratories if necessary; and
k) Based on the baseline reports, the project will compile a monitoring and Evaluation and Knowledge Management system for tracking implementation of defined biophysical, social, and economic baseline indicators by 30th November 2019

3. Degraded lands in Sebeya & other catchments restored

a) Assess demographic and social data – recent census figures, rural-urban shift, out-migration and remittances, poverty data, health services coverage and access, education availability, enrolment rates, major health issues/diseases as background and the basis for the baseline;
b) Carry out a simple household baseline survey (including livelihood assessments) for the Sebeya Catchment area based on standard statistical sampling (number of villages, number of households);
c) Carry out socio-economic profiling of representative categories of households by access to land (for example no access, 0-0.5 ha, 0.5-1 ha and above), by availability of labour (difficult for female headed households), and by access to assets/inputs (bicycle, tools, fertilizer, etc.).
d) Use the Household Economic Approach for in-depth conversations with selected households, to gain a deeper baseline understanding of such areas as the labour calendar through the year to

identify if there are periods of labour shortage, livelihood practices, availability of water, land use changes, extent of degradation, gender disaggregated uses;

e) Present a baseline analysis of current governance data, in terms of land tenure (statutory and customary), land governance structures (Formal and traditional), gender and equity; and
f) As part of the baseline assess recent or current landscape and catchment profiles (e.g. area under conservation, under improve landscape management) and initiatives in the study areas in terms of the elements of success, the gaps (e.g. forest management, integrated water resource management, ecosystem approaches, agroforestry, river management).

4. Innovative financing mechanisms & value chains development for improved ecological & economic benefits.

a) Assess the current extent of PES and other environmental incentive payments as part of the baseline;
b) Undertake baseline assessment of economic opportunities and value chains in Sebeya catchment area and propose value chain options for the landscape;
c) Assess baseline opportunities for credit & income generation for horticultural products;
d) Assess current water services and retention status and water flows for downstream use as part of baseline.

5. Scaling up to all of Sebeya and to 4 other Catchments (Nyabarongo, Nyabugogo & Muvumba).

a) Carry out these baselines in early 2020 to a lesser degree of detail, by using the "Poverty Tool-kit" in a selected number of villages to provide a baseline analysis of livelihoods in these catchments;
b) Carry out socio-economic profiling of representative categories of households by access to land (for example no access, 0-0.5 ha, 0.5-1 ha and above), by availability of labour (difficult for female headed households), and by access to assets/inputs (bicycle, tools, fertilizer, etc.).
c) Use the Household Economic Approach for in-depth conversations with selected households, to gain a deeper baseline understanding of such areas as the labour calendar through the year to identify if there are periods of labour shortage, livelihood practices, availability of water, land use changes, extent of degradation, gender disaggregated uses;
d) Provide an overall baseline of the catchments in terms of land and water use management;
e) Summarize existing data sets and literature as to their usefulness in the baselines;
f) Assess existing demographic and social data – recent census figures, rural-urban shift, out-migration and remittances, poverty data, health services coverage and access, education availability, enrolment rates, major health issues/diseases;
g) Present an analysis of current governance data, in terms of land tenure (statutory and customary), land governance structures (Formal and traditional), gender and equity;; and
h) Assess current land productivity based on existing records data as a baseline for this indicator,

6. Knowledge management System implemented for improved & integrated landscape restoration knowledge.

1. Provide a baseline for the knowledge management system as to what exists at present, and gaps
2. Identify the current baseline needs of WRMD in modeling, monitoring, remote sensing etc;
3. Summarize the baseline for stream flow measurement, water quality etc.
4. Suggest simple, appropriate and cost-effective means to measure the changes by project interventions and the communication strategy based on the baseline for the Knowledge management system;
5. Identify the current policies that support (or not) more sustainable landscape and catchment management, local rights, land tenure and governance institutions; and
6. Identify the current (baseline) policy opportunities for improved landscape and catchment management – ones that support or impeded good practice options, and opportunities for dialogue with government about policy improvement.

7. Time Frame and Deliverables

The team of consultants should be available to commence the work in September 2019 and finalize the Sebeya part of the assignment by end of December 2019. The first draft report of the Sebeya baseling should be shared by November 2019, whilst the final report should be produced by December 20th 2019. Then the baselines for the other catchments will be contracted between February and April 2020. Within this overall time frame, the detailed timeline of deliverables for consultants are:

a) Attend briefing session & sign contract;
b) Produce a detailed inception report within 2 weeks of contract signing which explains the methodology and how the baseline data gathered can be used for the project indicators. The inception report will also include a time-line for all the key activities;
c) Submit draft biopysical and socio-economic reports by 30th November 2019
d) Present the draft findings of the study at a feedback workshop with the Project Steering Committee and partners during November-December 2019; and
e) Submit Final biophysical and socio-economic reports intergrating comments from IUCN and RWFA by 20th December 2019

6. Experience Required - The Consultancy team

The consultancy firm will work independently, with RWFA and IUCN providing overall coordination. The selected team will prepare an inception report with a clear work- plan within 14 days of signing the contract. The proposed baseline study will require a period of 4 months to complete. The consultancy firm is expected to meet the following conditions:

a) Minimum of 5 years of of existance and experience in socio-economic, biophicial assessment, climate change impacts assessment, natural resource management, intergrated water resources management assessment;
b) Having undertaken other baseline assessments in Rwanda or other countries with similar contexts, preferably within the East African region
c) Experience in landscape, water resources and catchment management assessments, including integrated water management, land-use and restoration;
d) inexperience in value chains and markets, Incentive payment schemes assessments
e) Integrated land use and social skills – gender, institutions, livelihoods, farming systems, land use planning;
f) Policy analysis – so that a policy baselines are available; and
g) Being able to provide capacity analysis and needs.

Consultancy team composition

The Firm of Consultants is expected to provide a pool of international and regional/national short-term experts to implement the outlined tasks.

Socio-Economist with Water/Natural Resource Management expertise (Team leader) will be responsible for the overall approach and for managing the consultant's assignment. He/she will be responsible for leading the overall assignment with the following qualifications. The team leader will have At least a master's degree in Socio-Economic with experience in water/Natural Resources Management or a related area with a minimum of 10 years of experience in undertaking assessments and should have undertaken at least 5 similar tasks in undertaking baseline assessments in water/natural resources with at least some experience within Rwanda or the East Africa region

Team (pool) of other short-term experts

In the ideal case (optimal candidates), other short-term experts will have have the following experience:

Expertise required	General qualification	Specific qualification

1. Socio-Economics and baselines **2.** Community Development with experience in gender and village dynamics 3. Environment/Water Resource Management/Hydrogeology Specialist 4. land-cover/GIS/Remote sensing Specialist	The optimal expert(s) have earned a Degree at MSc Level that entails the area of expertise.	The optimal expert(s) have 7 years of professional experience in the required area of qualification

7. Assessment of Proposals

The following table provides an overview of the evaluated criteria and the corresponding weighting:

Criteria	Weighting
Technical Proposal	
Demonstrated thematic expertise/qualification/capacity/achieved results and institutional network	20%
General approach, relevance and probability of success	50%
Financial Proposal	
Clarity of the proposition, full character of the cost structure (personnel, material, traveling and other costs) and allocation to various lines of action, realistic estimation of the costs	20%
Relation of estimated costs to expected outcomes of the project proposal (Cost/Benefit ratio)	10%

8. Submissions

All applications (technical and financial) should be sent to KARANGWA Charles Charles.KARANGWA@iucn.org with copy to Assiel.NDAYISENGA@iucn.org with the subject line: "Baseline study for Sebeya" **not later than 15th September 2019**