CONSULTANCY SERVICES TO QUANTIFY LOSSES ASSOCIATED WITH THE HYDRO POWER PLANTS AS A RESULT OF LANDSCAPE DEGRADATION AND ASSESS THE POTENTIAL OF PRIVATE SECTOR (HYDRO POWER COMPANIES) IN WATERSHED MANAGEMENT, INCLUDING POSSIBLE ENGAGEMENT GUIDELINES

1. Background

The Uganda Wildlife Authority (UWA), established in 1996 through the merger of the former Uganda National Parks and the Game Department, is a semi-autonomous statutory body tasked with the sustainable management of Uganda's wildlife conservation areas, as mandated by Section 6(1)(a) of the Uganda Wildlife Act 2019. The Rwenzori Mountains National Park

(RMNP), a UNESCO World Heritage Site, is one of Uganda's most significant conservation areas, renowned for its exceptional biodiversity, diverse ecosystems, and breathtaking landscapes. RMNP plays a crucial role in biodiversity conservation, sustainable tourism, and the socio-economic development of surrounding communities. Despite its international recognition, RMNP faces significant challenges such as environmental degradation, resource limitations, and increasing pressure from human activities in surrounding areas.

The RMNP ecosystem is a source of several rivers that run down stream, majority of them discharging into Lake George. By its slopy terrain, the ecosystems around the park present huge potential for hydro power generation. To date, there are completed, ongoing and planned hydro power projects in the various areas around Rwenzori Mountain ecosystem. While hydropower is clean energy and is widely needed as a transition to clean energy alternative, the process involved in its development involves degradation of some ecosystems. Hydropower contributes heavily to carbon emissions reduction, for example, according to project proponent of the Nyamagasani 1 project (a 15.0 MW run-of-river hydro power plant), the carbon emissions reduction potential is 30,000 tCOeq/annum. However, this gross gain in carbon emissions reduction is affected by land degradational process during development phases that include, construction at the dam site as well as vegetation loss along the pathways for power delivery off the dam, as well as impact on local communities living near the affected sites. The losses are numerous and vary from reduced power generation capacity, increased maintenance and repair costs to negative impacts on local ecosystems and biodiversity and socio-economic impacts on local communities.

The ongoing Hempel Phase II Project (Hempel-Rwenzori project "Restoration for Resilient Rwenzori"), funded by the HEMPEL Foundation Denmark, plays a pivotal role in supporting RMNP's conservation and management efforts. This project focuses on enhancing park management capacity, reducing environmental pressures, and securing alternative funding sources. The project's objective is to position RMNP as a model of effective protected area management in Uganda, balancing biodiversity conservation with the socio-economic needs of surrounding communities and Uganda. The project addresses key threats such as deforestation,

promotes afforestation, and aims to improve park management practices while supporting sustainable livelihoods for local communities.

The Terms of Reference (ToRs) outlined in this document underscore the need to ***undertake an assessment to quantify losses associated with the hydro power plants as a result of landscape degradation around the protected area***. The ToRs further seek for ***an assessment of the potential of private sector (hydro power companies) in watershed management, including possible engagement guidelines***

This consultancy aims to build on the lessons and successes of the Hempel Phase I Project and other ongoing conservation efforts led by UWA and WWF Uganda Country Office (UCO). In partnership with UWA, WWF UCO seeks to engage a consultant to undertake the assessment. The consultancy will help to produce actionable recommendations for an improved ecosystem functionality as well as a profile of private sector players and guidelines to foster a sustainable pathway to engagement. WWF UCO will facilitate coordination, while UWA will ensure that the consultancy reflects the park's specific operational priorities and local conservation objectives.

1.1. Objective of the consultancy

The objective of this consultancy is to quantify the losses associated with hydro power plants due to landscape degradation in the Rwenzori Mountain National Park and surrounding areas.

1.1.1. Specific Objectives

1. To characterize the main stakeholders of the hydro power plants (developers, owners, operators, local communities, government agencies,)
2. To conduct a thorough assessment of the state of the prior site works and current state of site degradation in each selected hydropower site
3. To identify the specific losses of site degradation by the hydro power plants' development and operations.
4. To quantify the financial losses incurred by the hydro power plants due to landscape degradation, including reduced revenue, increased maintenance costs, and other related expenses.
5. To develop recommendations and plan of action for mitigating the impacts of landscape degradation on the hydro power plants' operations and revenue.
6. To provide specific details regarding potential private sector players (hydropower companies) to contribute to watershed management
7. Develop clear engagement guidelines that will support involvement of the hydropower companies in watershed management

2. Scope of Tasks

i. Conduct a literature review of existing studies on landscape degradation and its impacts on hydro power plants and their interconnections in the Rwenzori Mountain landscape
ii. Conduct interviews and surveys with stakeholders, including hydro power plant stakeholders, local communities, and government agencies to understand losses associated with hydro power plants due to landscape

iii. Conduct field observations and data collection in the affected sites and surrounding areas to assess the current state of landscape degradation.
iv. Assess the degradation status prior and after establishment of the hydro power plant
v. Analyze data and quantify the losses due to landscape degradation in the selected sites and surrounding areas
vi. Produce a list of stakeholders with potential interest in contributing to mitigation action, with viable actions suggested during the consultations.
vii. Develop a report detailing the findings, recommendations, and proposed plan of action for mitigation of the losses, clearly indicating modalities for implementation of the plan.
viii. Develop engagement guidelines for continued participation in watershed management.
ix. Facilitate meetings and workshops for disseminating findings and support private sector digest the findings for appropriate implementation

3. Deliverables

i. Inception report detailing the consultant's understanding of the assignment and proposed approach (two weeks after contract signing)
ii. Draft reports detailing (i) the findings, recommendations, and proposed mitigation measures and (ii) engagement guidelines (three weeks)
iii. Final report incorporating feedback from stakeholders (one week)
iv. Presentation summarizing the findings and actionable recommendations (one week)

4. SUBMISSION PROCEDURE

Consultants who wish to apply in undertaking the prescribed assignment are requested to send applications by 5:00 PM OF JUNE 16th. 2025, as follows:

(i) A technical and financial proposal (by email to procurement@wwfuganda.org clearly marked "Technical Proposal and Financial Proposal") containing:

a) An understanding and interpretation of the TORs.
b) Methodology to be used in undertaking the assignment.
c) Evidence of relevant experience and at least two samples of products related to the assignment.
d) Curriculum vitae of the experts to undertake the assignment plus relevant copies of key certificates.
e) A financial proposal containing the Consultant's daily rates and operational costs in Uganda Shillings.

5. Reporting and Coordination

The consultant will report to the WWF Uganda Wildlife and Protected Areas Manager, who will oversee the process and ensure alignment with project goals. Coordination will occur closely with UWA management at the head office and the park team, who will provide park-specific insights and ensure the deliverables align with operational needs. Regular communication between the Consultant, WWF UCO, UWA, and other stakeholders will be crucial for smooth implementation.

6. Evaluation Criteria

6.1. Technical Evaluation (70%)

i. Consultant's experience in conducting similar studies (20%)
ii. Consultant's knowledge of similar landscape degradation and its impacts on hydro power plants or similar projects (20%)
iii. proposed methodology and approach (15%)
iv. Consultant's ability to work in a team and engage with stakeholders (15%)

6.1.1. Consultant's Profile

The consultant should have:

i. A minimum of 7 years of experience in conducting environmental impact assessments and studies related to hydro power plants or similar projects
ii. A strong background in environmental science, ecology, or a related field.
iii. Excellent analytical and report-writing skills.

6.1.2. Composition of the team

6.1.2.1. Team leader

The team leader will serve as the coordinator as well as conservation Ecologist.
Experience of the team leader:

i. Master of science degree in Environment and Natural resources or related courses at master's level
ii. Not less than Eight years of experiences as team leader in consultancy work
iii. Seven years of experience in environment and natural resources conservation assignments

6.1.2.2. Hydrologist

i. At least Bachelor of Science hydrology or related courses at the same level
ii. Six (6) years of experience in hydrological related assignments
iii. Skills in GIS and Remote sensing

6.1.2.3. Economist

- At least Bachelor in Natural Resource Economics or related courses at the same level
- Six (6) years of experience in financial or economical loss analysis or related assignments

6.2. Financial Evaluation (30%)

i. Consultant's proposed budget and cost breakdown (15%)
ii. Consultant's value for money proposition (10%)
iii. Consultant's payment terms and schedule (5%)

7. Timeline

The consultancy is expected to be completed within two months from the date of signing the contract.

8. Language

The consultant should be fluent in English, with excellent written and verbal communication skills.

SUBMISSION DEADLINE: **JUNE 16th. 2025 by 5:00 PM**