



## **GREATER VIRUNGA TRANSBOUNDARY COLLABORATION**

Intergovernmental Organization- Organisation Intergouvernementale  
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### **TERMS OF REFERENCE FOR CONSULTANCY ON VULNERABILITY ASSESSMENTS OF PROTECTED AREAS VIS A VIS CLIMATE CHANGE AS WELL AS OTHER THREATS ON WILDLIFE AND BIODIVERSITY UNDER DIFFERENT CLIMATE CHANGE SCENARIOS WITHIN THE GREATER VIRUNGA LANDSCAPE**

#### **1 Background of GVTC**

The Greater Virunga Transboundary Collaboration (GVTC) was established through a treaty signed by the three partner states of Democratic Republic of Congo (DRC), Rwanda and Uganda on 30<sup>th</sup> October 2015 as a collaborative transboundary framework of programs, plans and activities to conserve a network of Protected Areas (PAs) in the Greater Virunga Landscape (GVL) of DRC, Rwanda and Uganda. The treaty was a climax of 10 years of formal engagement between the three countries. The GVL covers areas and communities around the protected areas (PA) of Volcanoes National Park, in Rwanda; Virunga National Park, in DRC and five national parks (NP) in Uganda, namely: Mgahinga Gorilla NP, Bwindi Impenetrable NP, Queen Elizabeth NP, Rwenzori Mountains NP, Semuliki NP (NP). This landscape is unique and a hot spot for biodiversity as it contains rare and charismatic species such as the mountain gorillas, chimpanzees, African elephants, etc.

The objectives of GVTC as enshrined in the treaty are;

- To promote and coordinate conservation of biodiversity and other socio-cultural values within the Greater Virunga wildlife protected area network;
- To develop strategies for Transboundary management of biodiversity
- To promote and ensure coordinated planning, monitoring and evaluation of implementation of transboundary conservation and development projects;
- To promote and coordinate tourism development in GVL
- To secure sustainable funding for Conservation of GVL
- To enhance and harmonise the generation and sharing of knowledge, experience and best practices for evidence based decision making

In undertaking to achieve the stated objectives, GVTC works with both state and non-state partners with the following key roles:

- Coordination and convening of stakeholder partnerships and meetings
- Information and information management/ clearing house
- Brokering/Mediation
- Monitoring and Evaluation
- Warning bell/early warning system
- Implementation of some interventions

## 1.1 Context of the Study on Vulnerability Assessment of Protected Areas vis a vis Climate Change and other threats on Wildlife and other biodiversity under different Climate Change scenarios within the Greater Virunga Landscape

The GVL covers the central part of the Albertine Rift that straddles the borders of Democratic Republic of Congo Rwanda and Uganda, is one of the most diverse landscapes in the world and is known as a world's hotspot for biodiversity conservation. This region is also well endowed with other natural resources (water, fertile lands, minerals, oil, wood, etc.), though their spatial and seasonal distribution and accessibility varies. GVL is famous for its mountain Gorillas (*Gorilla Beringei Beringei*) and other endangered flora and fauna. The biodiversity richness of GVL is threatened with species depletion and habitat loss from poaching, illegal timber harvesting, over fishing and of recent exploration (and upcoming exploitation) of oil and gas. Climate Change is also believed to exercise compounding effects, exacerbating the observed impacts of these threats to the biodiversity and ecosystem services within the GVL.

Climate change is perceived as a critical phenomenon with long term effects on the ecosystems and behaviour of wildlife. In cases where climate change has resulted in habitat changes, what will happen to the plants and animals that survived in such sites? How would they adjust to the changed conditions? The extent to which climate change would influence the long-term behaviour of wildlife needs to be examined in-depth.

One impact of climate change is to create additional stress on habitats and ecosystems that are already threatened, which may result in a reduction of habitat leading to death or the migration of animals. Pressures on ecosystems include high rates of change in land use and the conversion of land associated with agricultural expansion, pollution, population growth, civil wars, and the introduction of exotic species changing the integrity of ecosystems. Significant local and global extinctions of plant and animal species, many of which are important resources for people, are projected, and if they occur, would affect rural livelihoods, tourism and genetic resources (IPCC, 2007).

Protected Areas are natural environmental assets providing crucial ecosystem services that are supporting livelihoods and the socio-economic development in the Landscape. Due to insufficient protection and management, their role in mitigating Climate Change and supporting climate resilience as well as safeguarding ecosystem services such as water provision, food and energy security, is currently threatened. As a result of past and current population and economic growth across communities in the three countries, the Protected Areas Network and the GVL's resources are experiencing increasing pressure.

Moreover, there is a concern that climate shocks may increase the pressure on national governments to degazette parts of the GVL in order to avoid food insecurity and displacement of people. Degazetting is already a potential threat on the DRC side which could potentially disrupt the connectivity between the northern and southern half of the Virunga NP, an area of land that has already been invaded illegally by people.

In view of these concerns related to Climate Change impacts, GVTC has developed a Climate Change Strategy with an overall objective of *Strengthening Landscape - wide resilience to climate change and ensuring climate compatible conservation measures for sustainable livelihood in the GVL.*

This Climate Change Strategy forms an integral part of the set of GVTC policies, strategies and guidelines and complements partners' efforts. It focuses on transboundary PA network as a strategic element of climate adaptation and low carbon development in the region. It

integrates key strategic plans and activities of the GVTC programmes and provides a broader framework for action. The GVTC is the addressee of this Strategy.

However, in order to start implement this Strategy, there is a fundamental need to ascertain a baseline of how species, ecosystems, and ecological processes within the GVL are currently affected by climate change to understand how Ecosystem Services will be affected by future changes. It is also important to undertake forecast climatic conditions at high spatial resolution across the GVL to serve conservation planning needs. These forecasts need to be robust in that they take into account exposure, adaptive capacity and sensitivity components. There is also a need to identify the tipping points of species, ecosystems, and ecological processes to stressors associated with climate change so that we can avoid crossing critical thresholds, beyond which it may be difficult and costly to restore or find substitutes for important Ecosystem Services.

Similarly, there is a need to improve understanding on how current threatening processes such as invasive species, mining, land use, diseases of humans, livestock and wildlife will change under different climate change forecasts.

Also, the high spatial variability of climate across the GVL, and distinct area morphology, biogeography, hydrology etc. of each of the major ecosystems, point to the need for each Protected Area to be assessed individually for its climate change sensitivity and response.

It is in this regards that this consultancy is being undertaken.

## **1.2 Purpose and Objectives of the Study**

### **1.2.1 Purpose of the Study**

The purpose of the study on Vulnerability Assessment of Protected Areas vis a vis Climate Change and other threats on Wildlife and other biodiversity under different Climate Change scenarios within the Greater Virunga Landscape is to strengthen the knowledge base in order to enhance common understanding of Climate Change risks and its impacts on biodiversity, ecosystems & associated services and the socio-economic system of the GVL.

### **1.2.2 Specific Objectives**

The specific objectives are;

- 1) To assess the existing gaps in knowledge about the Climate Change and its impacts on the management of PAs in the GVL;
- 2) To describe how species, ecosystems, and ecological processes within the GVL are currently affected by climate change to understand how ecosystem services will be affected by future changes;
- 3) to undertake forecast climatic conditions sufficiently robust and that take into account exposure, adaptive capacity and sensitivity components;
- 4) To describe how current threatening processes such as invasive species, mining, land use, diseases of humans, livestock and wildlife will change under different climate change forecasts and what these changes mean for the future of the PAs in GVL;
- 5) To propose appropriate actions for managing and mitigating negative changes in biodiversity and ecosystem services in the GVL

## **2 Scope of Work**

The Geographical scope covers GVL as described in section 1.1 while the content of the scope will be unpacked by prospective consultants in their proposal that address and adequately answer the study objectives with scientifically justifiable evidence. Specifically,

the short term and long term changes should be disaggregated with supporting data/information sources. However, the study content should include the following among others;

- The actual and potential changes in biodiversity and ecosystem services in the GVL associated with climate change;
- The actual and potential drivers of climate change and their relative impacts on biodiversity and ecosystem services;
- The level of the exposure of GVL's PAs to Climate Change and a major of the level of their vulnerability;
- The actual and potential responses of biodiversity elements (concrete examples) to climate change and how these can be enhanced;
- Concrete changes in biodiversity and ecosystem services that may be caused by factors other than climate change, including magnitude and severity of such changes if any; and
- Appropriate and realistic management recommendations for adaptation and mitigation of adverse changes in biodiversity and ecosystem services in the GVL.

### **3 Study Methodology**

#### **3.1 General**

GVTC requires the consultant to propose and use a sound methodology that enables to obtain information from a representative of existing documentation on the subject, as well as field evidence based on past and current similar studies. The methodology must enable the consultant to obtain data for appropriate analysis of the study problems and generate outputs of high quality with high level scientific rigor. The methodology should also allow to unearth scientifically sound evidence and documented in scientific and ordinary language.

#### **3.2 Data quality Standards**

There should be robust data quality assurances and control measures put in place. The consultant is expected to exhibit high data quality standards and ensure validity, reliability, precision, utility and integrity for objective reporting and indicate data limitations as may exist with respect to quality standards.

#### **3.3 Key Tasks**

The consultant is required to undertake the following tasks;

- i. Prepare inception report and should include detailed methodology, sampling framework and work plan and submit to GVTC for review, discussion and approval
- ii. Select sound and updated documentation on the subject; as well as evidence based on selected samples including ecosystems / sites, flagship species of flora and fauna
- iii. Collect and analyse data
- iv. Prepare brief progress report for outputs agreed and scheduled in the study' work plan and submit to GVTC. GVTC reserves the right to request for bi-weekly reports and also as and when it is necessary and or required by GVTC partners.
- v. Prepare draft report for validation in a stakeholder workshop
- vi. Prepare final report that have incorporated recommendations from the validation workshop

#### **4 Quality of Consultant**

The individual consultants should have demonstrated experience in conducting similar studies related to Climate Change impacts, ecological modelling and habitat change studies. They must have demonstrable experience of working in the three countries and more so in the GVL. The ideal consultant must have demonstrate knowledge and experience through scientific works in the same subject in recognized journals, and they must demonstrate knowledge of the study subject in the GVL.

#### **5 Timeframe**

The study be conducted for a period of 45 calendar days from the date of contract. Realistic and scientifically sound time schedules will form part of GVTC evaluation criteria in addition to the scientific rigour the study requires.

#### **6 Key deliverables**

The following deliverables are expected from the selected consultancy;

- i. Inception report
- ii. Brief progress reports (two)
- iii. Draft report
- iv. Final report written in English and French

#### **7 Reporting and Coordination**

The consultant will report to the GVTC Executive Secretary but coordinated through the Department of Programs to monitor compliance with the methodology and data quality requirements. The final report shall be in French and English using a format that shall be agreed upon by the consultants and GVTC.

#### **8 Proposal Submission Requirements**

Interested consultants as individual, institutions and/or companies are required to submit a proposal note with the following components:

- a) Technical component that shall include among other things:
  - A detailed description of the methodology to be used for performing the assignment
  - A clear and comprehensive work plan, outlining the major activities and implementation time schedule, and including activity scheduling giving details of commencement and completion of different activities
  - Any comments or suggestions on the ToRs
- b) A financial proposal with itemized budgets and explanatory notes

The proposal should be limited to 7 pages in length (not including attachments), single-spaced, using a 12-Myriand Pro font.

#### **9 Deadline of submission**

Proposals must be either in English or in French and submitted electronically to GVTC Executive Secretary on email [es@greatervirunga.com](mailto:es@greatervirunga.com) and copy the Deputy Secretary for

Finance & Administration: [rkabeya@greatervirunga.org](mailto:rkabeya@greatervirunga.org) and the Administration Officer on email [pruhumuliza@greatervirunga.org](mailto:pruhumuliza@greatervirunga.org).

The closing date will be 14 working days from the date of publication of the call for bids.

## 10 Evaluation Criteria

Proposals will be evaluated using criteria summarized in the table below

| CRITERIA   | MAXIMUM POINTS |
|--|----------------|
| <p>Criteria 1: Soundness of implementation strategy and methodology in achieving project objectives, including clearly defined expected results and quantifiable targets/benchmarks, including:</p> <ul style="list-style-type: none"> <li>• Level of understanding of the ToRs</li> <li>• Clarity in the presentation of the bid</li> <li>• Clarity of the chronology/planning of the proposed activities</li> <li>• Relevance /suitability/soundness of the methodology for the proposed activity</li> <li>• Logistics for a good and smooth administration of the assignment</li> </ul> | 30             |
| Criteria 2: Relevant experience and competence of the proposed partner Institutions  | 30             |
| Criteria 3: Organizational capacity and experience in implementing similar studies or similar assignments  | 10             |
| Criteria 4: Previous successful track record with donor funded programmes/ projects  | 5              |
| Criteria 5: Cost reasonableness – a realistic budget in line with costs for similar activities in the region   | 25             |
| <b>TOTAL</b>   | <b>100</b>     |