



## **Population, Health and Environment Consortium (PHEEC)**

### **Terms of Reference for Developing Resource base and Climate change risk Maps for Awash and Simien Mountains National Parks**

#### **1. Context**

Within the frame of the Strategic Climate Institutions Program (SCIP); PHEEC is implementing a project entitled "Building Institutional Capacity and Participatory Leadership in Awash and Simien Mountains National Parks for Resilience, Mitigation and Adaptation to Climate Change". Overall, the project aims to improve park management through building capacity of multi-stakeholders and communities on climate related issues for the mitigation of the impacts of climate change and to ensure climate change adaptation and environmental resilience in the stated National Parks.

So, with this background, PHE EC wishes to enlist the service of a suitably qualified professional consultant who can develop resource and climate change risk maps for Awash and Simien Mountains National Parks, and the following details provide the terms of reference for the study.

#### **2. Objectives**

The overall objective of this work is to assess the biological resource potential and values of the Awash National Park (ANP) and the Simien Mountains National Park (SMNP) and develop resource as well as climate risk maps. The specific objectives are:

- to assess and develop baseline data for the terrestrial biological resources of the national parks,
- to help park managers know what biological resources are present in the national parks and their location in order to enable them to be conserved appropriately
- to provide information for decision makers and justify the conservation and protection of the parks ecosystems as a mechanism to eradicate poverty and mitigate and adapt to climate change,
- to create climate change risk profiles that cover all the major hazards (floods, droughts, forest fires, landslides etc.) prevailing in and around the Awash and Simien Mountains National Parks

#### **3. Project scope**

The consultant is expected to undertake the following:

- Develop terrestrial biological resource maps (detailed GIS mapping) that include but not limited to information such as, major and rare plant communities and sensitive ecosystem polygons; wildlife species capture or identification sites (including major use areas for grazing/browsing, bedding, migration routes, etc.); threatened, rare or endangered species capture or observation sites; wetlands and watercourses; appropriate roads and landmarks; potential or known threat sources to the parks,

- Prepare a report detailing the findings of the biological resource assessment as indicated above including methodologies and models used,
- Undertake climate change risks assessment and characterize them in terms of their frequency, probability of occurrence and seasonality of occurrence,
- Develop a comprehensive risk profile of the national parks including major hazards-prone areas; delineate and characterize these hazard prone areas for all major risks and develop a set of major hazard intensity maps,
- develop methodologies for climate change risks mapping (define a common methodology by risk type for risk mapping),
- Prepare a “summary for policymakers” version of the final report that summarizes the key findings for a government audience.

#### 4. Tasks

The consultant must:

- develop a detailed work plan, indicating the time in which the project outputs will be produced and delivered;
- review relevant literature and publications;
- collect and collate baseline information on the environmental characteristics of the existing situation in and around each park (**Physical environment** - topography, land cover, geology, climate and hydrology, etc; **Biological environment** - flora and fauna types and diversity, endangered species, sensitive habitats etc.);
- consult with relevant stakeholders;
- identify and develop methodologies and models for biological resource and climate risk analysis and mapping;
- submit a draft report for review prior to finalization.

#### 5. Deliverables

1. A synthesis report on biological resource and climate risk assessment and the protected areas risk profile, including an executive summary,
2. detailed technical report on the process and methods used for the risk scenarios development as well as for the hazard prone areas identification and mapping, and
3. risk-zoning and risk intensity as well as biological resource digital maps with a 1:10,000 scale, geo-referenced and clear description of all symbols used on the maps in accordance with the national patterns and norms.

#### 6. Qualifications

The consultant should:

- have an appropriate post-graduate qualifications and/or appropriate experience in GIS related computer science, geography, information technology or natural resources management or equivalent, with at least five years relevant experience;
- be proficient in a range of database software, Arc GIS, Arc Info, Arc Reader, Map Info ERDAS,
- have good experience in the use of GIS tools, analysis and reporting.

## **6. Duration of the contract**

October 30/2014 to December 30/2014.

## **7. Application process**

The duration of the consultancy is for a period of 60 days, of which more than 30 days are devoted for field work in both parks starting from the date of the issuance of the contract. Candidates who meet the required qualifications may apply by sending/submitting an updated and comprehensive CV together with a technical and financial proposals (detail cost break down for professional fee, per diem, transportation & other costs, if any), their work experience that is relevant to the consultancy requirements as indicated in the Terms of Reference to PHE EC office (info@phe-ethiopia.org; pheethiopia@gmail.com) by no later than October 28, 2014.

For any clarification on the process or consultancy, please contact, haileoul.negash@phe-ethiopia.org, tadesse.hailu@phe-ethiopia.org; Telephone: 0912 174007.