Building Drought Resilience through Land and Water Management

Request for Proposal for Development of strategic water infrastructure in selected sub-catchments of Lower Tana Basin, Kenya

1. Background

The International Union for Conservation of Nature, IUCN, is a membership Union uniquely composed of both government and civil society organizations. It provides public, private and non-governmental organizations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together. Created in 1948, IUCN has evolved into the world's largest and most diverse environmental network. It harnesses the experience, resources and reach of its 1,300 member organizations and the input of some 15,000 experts. IUCN is the global authority on the status of the natural world and the measures needed to safeguard it. Our experts are organized into six commissions dedicated to species survival, environmental law, protected areas, social and economic policy, ecosystem management, and education and communication.

The ability to convene diverse stakeholders and provide the latest science, objective recommendations and on-the-ground expertise drives IUCN's mission of informing and empowering conservation efforts worldwide. We provide a neutral forum in which governments, NGOs, scientists, businesses, local communities, indigenous peoples groups, faith-based organizations and others can work together to forge and implement solutions to environmental challenges. By facilitating these solutions, IUCN provides governments and institutions at all levels with the impetus to achieve universal goals, including on biodiversity, climate change and sustainable development, which IUCN was instrumental in defining

IUCN has three programme areas: (1) Valuing and conserving nature; (2) Effective and equitable governance of nature's use and (3) Deploying nature-based solutions to global challenges in climate, food and development. IUCN mandate is achieved by supporting scientific research, managing field projects all over the world, and creating a platform for governments, NGOs, the UN and companies to work together to develop policy, laws and best practice. IUCN's Eastern and Southern African Regional Office (ESARO) have thematic programmes with various projects in the region. One such project is a Building Drought Resilience through Land and Water Management (BDR) funded by Austrian Development Agency. The first phase of the project was implemented from 2012-2014 in Lower Tana sub-catchments in Kenya and Upper Aswa-Agago sub-catchment in Uganda. These are arid and semi-arid (ASAL) areas where communities within the catchments face multiple challenges including recurrent droughts and floods and resource use conflicts that hinder development and livelihood strategies

BDR phase 1 targeted to build resilience of dryland communities within the river catchments to the impacts of increasingly severe and frequent drought, through strengthened ecosystem management and adaptive capacity and used IUCN resilience framework as building. The BDR phase 1 project proved a success hence recommendation to scale up the successful approaches and consolidate the achievements of BDR Phase 1 was made by the Mid-Term Review in July 2014. Phase 2 is consolidating the gains and scale up the approach at landscape level in six sub-catchments in Lower Tana sub-catchments in Kenya and six districts in Upper Aswa-Agago sub-catchment located in Nile Water Management Zone in Uganda and funded by Austrian Development Agency over the next three years (2015-2018). In the Lower Tana River Basin the project is being implemented in partnership with Fafi Integrated Development Association (FaIDA), Water Resource Management Authority (WRMA) and other partners including national and county government institutions (National Drought Management Authority, Water, Forest and Wildlife, Livestock, Agriculture, Irrigation, NEMA, Administration), civil society organizations and communities. In Uganda, IUCN works with multiple government institutions including Directorate of Water Resources Management in the Ministry of Water and environment, inter-district steering committees, communities and Non-Governmental Organizations.

Phase 2 of BDR project aims to achieve the following four key results:

Result 1: Inclusive governance and self-organization at community level over land, water and other assets within catchment areas is improved;

Result 2: The integrity, diversity and functioning of natural (ecosystems/ catchments) and built (subsurface dams/boreholes) infrastructure is rehabilitated/improved;

Result 3: Livelihood diversification and market developments that promote resilience are enhanced;

Result 4: Multi-stakeholder engagement, participation, learning and political support to enhance effective resilience is achieved at county/district level;

2. Purpose and scope of the consultancy

Under result 2 BDR project target to improve water access for household and livestock in manner that enhances resilience without resulting to environmental degradation and disrupting the social systems including the pastoralists movement partners. Water infrastructure development will adopt participatory approach by involving all relevant stakeholders to ensure appropriate siting. Community validation of water infrastructure will be one key component to be mainstreamed in water development for this exercise to cater for the needs of the local communities and taking into consideration the local context including pastoral way of life in particular conformity of the infrastructure with the grazing pattern and catering for the need of vulnerable members of the society. To accomplish the task IUCN is looking for suitable consultant to undertake feasibility study of the appropriate technology and location of the water infrastructure and supervision of the construction till the structures are commissioned. The project team in collaboration with community members have identified two possible sub-catchments for development of the infrastructure which will be subjected to further analysis.

3. Specific tasks and methodology

Working with communities specifically Water Resource Users Associations (WRUAs) and other project partners including county officials the consultant(s) will be in charge of design, construction and supervision of the selected water infrastructure in prioritized sub-catchments.

Methodology

The siting and development of the water infrastructure will be done in participatory manner using various approaches including community validation, dialogues and consensus building, technical feasibility assessment and environmental impact assessment.

Specific tasks

Preliminaries

- Liaise and cooperate throughout the time of the assignment with the IUCN, community members, implementing partners and authorities.
- Participate in joint meetings with IUCN as and when requested
- Provide necessary documents that proof prior engagement in similar assignment when requested by IUCN.
- Familiarize with project context and understand how the water infrastructure fit with broader goal of the project.
- Allow IUCN and appointed implementing partners of the project to inspect the works in progress at any time.

Feasibility Study

The Consultant shall carry out the site investigations required for physical planning on 2 selected sites. The selection of the sites will be done jointly with community members and other relevant project partners including county government departments. The feasibility study will be linked with the community validation exercise. The consultant will present technical feasibility component to stakeholders during community validation workshop to come to consensus on appropriate sites and technologies based on the ecological, and socio-economic context. The Feasibility study will be conducted for two sites and cover the following components and others as deemed necessary:

- Brief assessment of the present institutional and organizational setup related to water management and utilization in selected sites
- Preparatory work for the selected sites and Collection of data and information: site identification, including use of the google earth map on locations and references
- Community consultation, probing, survey work
- Profile of the surveyed sites and survey report which among other things include selection of optimum solution and justification of selected solutions
- Preliminary design of structures

- Evaluation of the alternatives in the light of their technical feasibility and economic viability

Environmental Impact Study

- Site visit
- Consultation meetings with community, GOK & other stakeholders
- Reporting, permit application and approvals for selected water infrastructure

Final Design

The Final Designs of selected 2 sites will be prepared after the approval of the proposal as presented in the Feasibility Study.

- Geo technical Survey - Topographical survey of the site
- Collection and evaluation of hydro-geological data and information such as volume of storage, yield, earth to be moved as applicable
- Construction works including water quality analysis.
- Design Report includes Detail hydraulic design* for all related works
  *Engineering design shall include the preparation of
    - most important calculations for approved measures of feasibility study
    - detailed drawings,
    - detailed plans for construction works

Construction support documents and Permit registration

The consultant will recommend on the best approach to be used in developing water infrastructure whether to use community groups or contractors. The consultant will develop documents contain the following:

- Preparation of complete set of tender documents necessary to enable tendering of supplies and construction services by appropriate party
- Detailed Bill of Quantities, technical specification and construction schedule
- Permit application and Permit registration document
- Final Design Report

Supervision and support

If needed, and on the request of IUCN, the consultant shall assist in tendering process especially for supply services. The consultant will be involved in general and site supervision of works on a continuous basis. The specific supervision services to be provide include:

- Appropriate siting of the structures as stipulated in design document
- Preparation of any additional plans and drawings, which are necessary for the execution of the works.
- Reviewing of Partner's plant drawings, equipment and systems to be incorporated into the works for conformity with design requirements and amendment of any specific design details, if so required.

- Monitoring the execution and quality of work and for compliance with contract specification
- Maintaining quality control records as well as photographic records of the sites and work progress until commissioning.
- Arrangements for performance tests on site at commissioning and reporting on acceptance.

Reporting

All reports, drawings, maps etc. shall also be submitted in digital form. The Consultant shall prepare and submit the following reports for each selected water infrastructure:

a) Survey Report. The report should include the technical studies (EIA and feasibility).

b) Design Report containing all the relevant information

(c) Final Report including the permit registration and tender document (BoQ, etc.)

d) Supervision interim report during the execution

e) Final supervision report

4. Duration of the consultancy

The consultant(s) is expected to complete the work within 25 days within the months of June and July 2016.

5. Profile of suitable candidates

- A postgraduate degree (at least Master's degree) in civil or water engineering from recognized university,
- Over 10 years of experience in design and development of the water infrastructure in pastoral or agro-pastoral set up especially for multiple use (Livestock, human)
- Knowledge on development issues, gender, cultures, climate change and the drylands of Kenya,
- Experience in Kenyan policies and legislation on Environment and Social Impact assessment
- Experience in conducting community consultation and dialogue on consensus building
- Demonstrated high level of professionalism and ability to work independently in high pressure situations under tight deadlines,
- Strong communication skills,
- High proficiency in English language both written and spoken and understanding of local languages (Somali, Orma) used in project sites is highly desirable
- Residents and those with right to work in Kenya preferred

6. Submission of the proposal

Interested candidates should email their technical and financial proposals, along with detailed CVs sent to Yasin Mahadi, Programme Officer, People and Landscapes Programme, IUCN ESARO. Email: Yasin.Mahadi@iucn.org copying in Ahmed.Mohamed@iucn.org not later than 5.00 p.m. EAT, 6th June 2016. Only successful candidate will be contacted.