



MINISTRY OF WATER AND IRRIGATION

THWAKE MULTIPURPOSE WATER DEVELOPMENT PROGRAM

ADB LOAN NO.: 2100150029993

ADB GRANT NO.: 2100155025973

PROJECT ID NO.: P-KE-E00-008

REQUEST FOR EXPRESSIONS OF INTEREST FOR COMPLEMENTARY STUDIES FOR THWAKE MULTIPURPOSE WATER DEVELOPMENT PROGRAM

The **Ministry of Water and Irrigation** has received financing from the African Development Bank toward the cost of the **Thwake Multipurpose Water Development Program Phase 1**, and intends to apply part of the agreed amount for this loan to payments under the contracts for complimentary studies that include **Consulting Services for Thwake Reservoir Modelling, Identifying Investment Opportunities for Project Affected Persons (PAPs) and Baseline Study**.

TENDER NO.: MWI / TMWDP/C04/2016-2017: CONSULTING SERVICES FOR THWAKE RESERVOIR MODELING

The immediate objective of the hydrological study is to carry out Thwake Reservoir Modelling with the purpose of arriving at estimates of safe yield for the reservoir as well as developing operational rules and a monitoring programme of measurements. A wider objective of the project is to contribute towards the construction of a hydrological and hydraulic model which is part of a decision support system (DSS) for Client and other end users. The Thwake Reservoir Modelling assignment will include the following tasks: Estimation and statistical processing of historic inflow discharges for the reservoir, estimation of evaporation rates from the reservoir surface; estimation of all water demands on a monthly basis for different time horizons estimation of the relationship between reservoir water elevation, hydropower discharge and hydropower generation, setting-up of a model to simulate the monthly reservoir balance of Thwake reservoir; simulation using the water balance model to obtain the demand satisfaction reliability, the safe yield of the reservoir and hydropower production under different operation rules, sensitivity analysis of the different components of reservoir water balance to the available predictions of the effects of climate change in the catchment and qualitative conclusions on the expected level of adverse or beneficial impacts on reservoir yield and preparation of a hydrological monitoring programme for the reservoir. The Consultant will provide services related to hydrologic analysis, hydraulics and water resources modelling.

TENDER NO.: MWI / TMWDP/C010/2016-2017: CONSULTING SERVICES FOR IDENTIFYING INVESTMENT OPPORTUNITIES FOR PROJECT AFFECTED PERSONS (PAPs)

The objective of the assignment will be to conduct an independent study in the project area so as to Identify Investment Opportunities for Project Affected Persons (PAPs) highlighting the key components of economic empowerment, areas for capacity building as well as the available investment opportunities that the PAPs and the community at large can benefit from. The consultant will also identify areas of training and types of training and recommend how the training will be undertaken and implemented. The assignment will also ensure gender participation and inclusion of the vulnerable groups (women headed households, physically challenged and elderly

The Consultant's specific responsibilities will include, but are not limited to: carrying out a baseline survey and a needs assessment for the Project Affected Persons (PAPs) on economic empowerment with a view of providing solutions aimed at enhancing their capacity in acquiring employment and improving their livelihoods once they receive their compensation, recommend the best possible training modules for each identified opportunity that will assist the (Project Implementation Team) PIT to mobilize the trainings and identify economically viable opportunities for implementation to empower the PAPs within the project area and increase their employment potential.

TENDER NO.: MWI / TMWDP/C011/2016-2017: BASELINE STUDY

The objective of the study will be to carry out a baseline survey to depict the existing cultural, social, economic and environmental situation in the entire proposed dam area; and to provide data and information on the relevant project outcome indicators as specified in the project documents and reports. The study is expected to assess and document the existing situation of the society and the environment, and all social and economic activities of entire proposed dam area including carrying out an assessment of the settlement patterns of the area population and poverty levels; carrying out an assessment of land use patterns and land use activities practiced in the area; carrying out an assessment of the current income generating activities practiced in the area; carrying out an assessment of the types of water sources, quantity and quality available in the area; carrying out an assessment on the level of community involvement in catchment conservation and the community-led initiatives in managing water resources in the catchment; carrying out an assessment of the current delivery arrangements for water in the area; carrying out an assessment of the current infrastructure for sewerage in place in the area; and carrying out an assessment of the existing sanitation facilities in the area.

The study will be based on primary and secondary information including review of relevant project documents. The study is expected to be extensive and comprehensive covering the entire project area. The consulting firm is expected to mobilize and assemble all required staff and skills to broadly cover all the aspects of the assignment.

The **Ministry of Water and Irrigation** now invites eligible consultants to express their interest in providing these services. Interested consultants must provide information indicating that they are qualified to perform the services by providing brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc. Consultants may constitute joint-ventures to enhance their chances of qualification.

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the African Development Bank's "**Rules and Procedures for the use of Consultants**" force 2008 revised in 2012 which is available on the Bank's website at <http://www.afdb.org>.

Interested consultants may obtain further information from the Ministry's website: www.water.go.ke or at the address below during office hours (8:00 a.m. to 5:00 p.m. local time)

Expressions of interest in three (3) copies must be delivered/ dropped in the Tender Box in Maji House on Ground Floor or posted to the address below so as to reach us on or before **9th August, 2016 at 10:00 local time** with the **RESPECTIVE TENDER NUMBER** clearly marked.

**PRINCIPAL SECRETARY
STATE DEPARTMENT OF NATIONAL WATER SERVICES
MAJI HOUSE, NGONG ROAD
P.O. BOX 49720-00100, NAIROBI
KENYA.**