



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Terms of Reference for Consultant ☒ /PSA ☐

Minimum number of years of relevant experience required: 1 year ☐; 5 years ☐; 12+years ☒

Job Title	Hydrology and Water Management Specialist (Senior Consultant)		
Division/Department	FAAFG		
Programme/Project Number	UTF/AFG/070/AFG		
Location	Kabul with travel to all Regional Offices in Bamyan, Jalalabad, Kandahar, Hirat, Kunduz and Mazar-e-Sharif		
Expected Start Date of Assignment	March 2016	Duration:	6 months (possibility of extension)
GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED			
Under the general supervision of FAO Representative (FAOR) in Afghanistan, the technical guidance of the Lead Technical Officer (LTO) and the direct supervision of the CTA/TL, and in close consultation and cooperation with the Water Management Department (WMD) of Ministry of Energy and Water (MEW) of Afghanistan, other concerned government agencies and project staff, the incumbent will provide technical services to the implementation of hydro-meteorological activities defined in the FAO technical assistance contract (UTF/AFG/070/AFG) under the World Bank funded IRDP in Afghanistan as Component C. The main responsibility of the Specialist will be to develop the capacity of the MEW staff to collect and process hydrological data, inclusive of hydrological modelling. Specifically, the incumbent will carry out the following responsibilities as hydrologist and as water resource management specialist:			
1. Develop detailed work and budget plans for the hydro-meteorological component of the Irrigation Restoration and Development (IRD) Project and develop the capacities of the Department Heads and their respective engineers/hydrologists; 2. Prepare the necessary documents required to successfully initiate the rehabilitation of the hydro-meteorological observation network; 3. Ensure that all previous and existing hydrological, meteorological and snow stations rehabilitated under EIRP have been visited by national or international professional staff for data collection and O&M purposes at least 3 times a year; 4. Establish correlations between the available long-term hydrological data series from the historical stations and the data series observed/collected by the IRD Project rehabilitated site; analyzing and reporting changes in climatic/flow patterns and their implications for future water resources planning; 5. Prepare technical specifications for all software, equipment and materials required to further strengthen the hydro-meteorological observation; 6. In consultation with MEW, World Bank and the project team, advise on preparation and implementation of the overall training program for the hydro-metrological network operation in Afghanistan pertaining Twinning Arrangement with international hydro-meteorological institutes; 7. Organize training workshops and courses on data analysis, operation and maintenance of hydro-meteorological stations with relevant manuals, inclusive of hydrological modelling; 8. Undertake hydrological modelling or rivers – flood forecasting and dam breakage scenarios, as well as prepare precipitation (snow inclusive)-runoff model for the purpose of water availability forecasting and train relevant staffs in MEW in these areas. 9. Further improve and update the Operations Manual Section 4: Establishment of Hydro meteorological Facilities and Services; 10. Prepare technical reports, monthly/fortnightly progress reports on hydrology service and other relevant reports as may be required and an end-of-assignment report; 11. Develop a viable and sustainable hydrology service through support for (i) procurement of hardware and software, and (ii) capacity building in use of software and O&M of the hydrology service; 12. Technical assistance in operating the Data Processing Centre for compilation, processing of hydro met data, preparation of water year reports, meteorology data reports for the basins; 13. Collaborate with faculty of Kabul University and other technical institutions to, (ii)develop internship plan for graduating engineers/scientists /hydro-meteorologists with objective of recruiting suitable candidates, (iii) design formal vocational training courses (each as one semester course spread over 60 working days) for staff of MEW, 14. Prepare detailed proposals on the following: i) Establishment of Flood Forecasting Network; ii) Establishment of Network of Silt Sampling Stations; iii) Creation of in-house capacity to repair and maintain hydro met equipment; 15. Contribute to the progress and technical and terminal reports of the project as required; 16. Any other duties requested by the FAO Representative and the CTA/TL.			
Key Performance Indicators			

Expected Outputs: • Outline/proposal for follow-up projects e.g. DRM, FFEWS for the MTR Progress report on the established hydrology services and MPR are prepared, • A concise Assignment Report containing findings, conclusions and recommendations for the future • Budget plans for the hydro-meteorological component developed; • Changes climatic/flow patterns and their implications analyzed and reported for future water resources planning; • Technical specifications prepared for all software, equipment and materials required; • The overall training program for the hydro-metrological network operation prepared and implemented in Afghanistan pertaining Twinning Arrangement with international hydro-meteorological institutes; • Courses on data analysis, operation and maintenance of hydro-meteorological stations with relevant manuals, as well as hydrological modelling, including precipitation (snow inclusive)-runoff model for water availability forecasting is prepared; • Keep updated the Operational Manual Section 4 (Hydro-meteorology); • Data Processing Centre is operated; • A concise End of Assignment Report containing findings, conclusions and recommendations for the future. • A concise End of Assignment Report (EoAR) with finding and recommendation in the standard template.	Required Completion Date: Most of the outputs to be performed during the assignment and End of Assignment (EOA) report within a month after the assignment's NTE in line of FAO norms.
<i>Required Competencies</i>	
Academic Qualifications: • Advanced university degree (M.Sc. or Ph.D.) in related field with specialization in Hydrology/Water Resources with a strong background in meteo hydrological network installation, precipitation-runoff modelling and other hydrological analysis. • Experience in hydrological modelling essential. • Experience in establishment of flood forecasting systems desirable. Technical Competencies and Experience Requirements • At least 15 years practical experience in performing the tasks described above in semi-arid regions. • Extent and relevance of experience in planning and implementation of development projects and programme • Demonstrated results-based management capabilities with an ability to manage programmes, budgets and human resources efficiently under priorities • Extent and relevance of experience in different countries and regions, especially in developing countries and countries in transition • Demonstrated ability to mobilize resources and to deliver against deadlines • Extent and relevance of experience in organizing international meetings, seminars and training courses • Familiarity with UN agencies administrative, finance and operation system. • Fluency in English (speaking and reporting) essential.	
HOW TO APPLY: Interested applicants are required to create and online Personal Profile form (PPF) in iRecruitment. To create the PPF, please follow the instructions available at : http://www.fao.org/employment/irecruitment-access/en/ The PPF should be sent via e-mail to : FAOAF-vacancies@fao.org Deadline for application: 29 February 2016 Applications received after the closing date will not be given consideration. Only short-listed candidates	