

**Rural Water, Sanitation and Hygiene for  
Human Capital Development Project  
Terms of Reference (TOR)  
Position: Water Supply Specialist  
Package No. RWSHP-SD-07**

**A. Background**

Bangladesh is one of the world's most populous countries with an estimated 165 million people in a geographical area of about 144,415 sq.km and per capita income of US\$1,670 (WB Atlas method) in 2018, well above the lower middle-income country category threshold which it crossed in FY14. During recent years, economic condition was much improved in the country with higher GDP growth rate. About 97 percent of the rural population had access at least to 'basic' water supply. This achievement was largely due to the expansion of tube wells in rural areas, with close to 95 percent of rural people using them.

Bangladesh's performance against the Millennium Development Goals (MDG) goals was also impressive relative to the South Asia Region average for most of the indicators. Now, Bangladesh is committed to achieve SDG goal 6.1 and 6.2. The Rural WASH for HCD Project is a first step in the World Bank's support designed to help the government achieve better human development outcomes through WASH interventions and uses a convergence approach. The proposed project will invest in WASH infrastructures that meet the 'safely-managed' service standard including in remote areas and public places. The project will be supported through Investment Project Financing (IPF) on IDA terms. The government has committed to investing in 'safely-managed' WASH facilities, which are in line with the service standards needed for meeting SDG 6 and maximizing human capital development. The Project Management Unit (PMU) will be responsible for implementation and supervision of preparatory works, headed by Project Director and with adequate staffing along with experienced Consultants

**B. Rationale/Objective**

The complexity and magnitude of the activities under the Rural Water, Sanitation and Hygiene for Human Capital Development Project, DPHE would need a dedicated and experienced Water Supply Specialist consultant who will provide technical assistance and

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support to the PMU. The Consultant will help ensure that the water supply-related activities and obligations under the Project are implemented smoothly and orderly.

### C. Key Tasks/Responsibilities

The Consultant shall perform, but not limited to, the following tasks/responsibilities:

- C1. Revise or adjust (where necessary and appropriate) the process/hydraulic design of water supply system to retrofit actual field conditions during project implementation. This includes hydraulic analysis of the water transmission and distribution network using available and acceptable software's, such as Water GEMS, Epanet, among others, based on the demand responsiveness.
- C2. Supervise and provide guidance to all the activities related to engineering design and construction of the water supply system. The task includes redesign/retrofitting, where necessary, of water sources (production wells and/or intake for surface water); appropriate treatment process or technology; pumping station and related facilities; storage facilities; transmission and distribution pipe networks and appurtenances; and service connection to consumers.
- C3. Assist the Project Director in decision-making and in addressing issues related to Project implementation and in oversight monitoring of field/sub-project activities, including the review & confirmation of quantity and quality of works.
- C4. Provide guidance and monitoring of activities of other consultants aiding the Technical Support Unit to ensure effective and efficient performance as well as strict adherence to specifications and quality of works.
- C5. Prepare piped water supply scheme reports with support from other specialists.
- C6. Assist the Project Director in ensuring that the Project is implemented in accordance with the Project Implementation Manual, the Project Appraisal Document, the Loan Agreement, as well as related operational policies of the World Bank.
- C7. Assist the PMU in reviewing/evaluating reports and other related documents and support Project Director carrying out decisions relevant to critical O&M arrangements and needs of the project.
- C8. Attend meetings/workshops and coordinate with the other specialists/consultants who will be involved in analysing, designing and supervising the water supply and sanitation facilities.



C9. Assist the PMU in other related tasks activities that the Project Director deem necessary in implementing the Project smoothly and orderly.

C10 Assist the PMU to prepare estimate and bid documents of water supply schemes

#### **D. Key Qualifications of the Consultant**

The Water Supply Consultant shall have the following minimum qualifications:

##### **a) Educational Qualification**

- Master's degree in Water Supply Engineering/Environmental Engineering/Master's degree in relevant field with Bachelor degree in Civil Engineering.

##### **b) Experience**

- At least 10 years experience in planning; designing and implementing large-scale water supply projects, of which at least 7 (seven) years' experience in piped water supply sector in Bangladesh i.e. in urban water supply project.
- Strong and relevant experience in the sector; capable of interpreting hydrogeological assessments; performing hydraulic analysis and design of pipe networks (transmission and distribution) using computer-aided software (Water GEMS/EPANET etc.).
- Familiarity and working experience in preparation of treatment processes/ hydraulic design of water supply system.
- Strong experience in construction supervision of water supply system (from water source to house connection).
- Familiarity and good understanding of the national water policies, National Arsenic Mitigation Policy and WB's Social and Environmental Safeguards are desired.
- Working experience with donor-assisted government projects, as well as with national and local bureaucracy.
- Fluent in English, both oral and written.
- Competent in technical report writing.
- Age limit not more than 55 years.

#### **E. Duration of the Assignment**

The duration of the assignment will be throughout the project's duration (atleast December, 2025). But it may be extended as per requirement of the project. However, this will depend on performance of the individual in the position.



## F. Remuneration

The Consultant will be paid a negotiable consolidated remuneration inclusive of all applicable Taxes and VAT as per law of Bangladesh. Payment shall be made on monthly basis upon satisfactory performance output certified by the Project Director.

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CE, DPHE

Proposed TOR may be approved.

*Sb.*  
08/05/2021

*Dalila*  
06.05.2021  
Executive Engineer  
DPHE

Approved.

*Md. Saifur Rahman*  
08/05/21  
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