# Rural Water, Sanitation and Hygiene for Human Capital Development Project Terms of Reference (TOR) Position: Hydrogeologist Package No. RWSHP-SD-08

### 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. to smooth implementation of the project.

## B. Scope of Consultant's Assignment

The main objective of the consultant is Hydrogeological investigation related activities under this project. As and when required, the consultant will discuss with DPHE officials, team of Rural Water, Sanitation and Hygiene for Human Capital Development Project, PKSF personnel, Local Governments representatives etc. on issues encountered in to pursuit of the activities related to his (or her) work.

## C. Key tasks/responsibility:

The specific tasks/responsibility for the Consultant:

1. Examine the records of existing operational Tube Wells, especially borelogs to get an insight into the aquifer conditions and related lithological data/info along with Ground Water Division and District level officials and other consultants.

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- 2. Supervise and guide preparation of report on findings and provide guidance for drilling new wells considering location, depth, design, operation and O&M;
- 3. Review and evaluate all arsenic mitigation measures in place and see to the execution of specific studies such as recharging of deeper aquifer and
- 4. Provide necessary data/info/recommendations to the Project Management Unit (PMU)/local DPHE for drilling proposed TWs and PTWs in the scheme areas.
- 5. Build strong database of all hydrogeological and environmental project data.
- 6. Assist other Technical Consultant for drilling new wells considering location, depth, design, operation and O&M;
- Assist Water Supply Specialist to prepare estimate and bid documents.
- 8. Assist the Project Director (PD) with any other project related works as may be assigned.

#### D. **Key Qualifications:**

Educational Qualifications and Professional Experience of the Consultant:

### a) Educational Qualification:

Master degree in geology/hydrology/earth sciences or in the related fields; higher degree will be preferred.

### b) Experience:

- Minimum 10 years of experience and At least 5 years working experience and track record in relevant area.
- Expertise shall include hydro geological/groundwater assessment studies, preparing litho-stratigraphy, geophysical borehole logging, geophysical interpretation, hydrochemistry, production well design, pumping/aquifer test design and executing, especially spanning groundwater usage for public water supply systems in Bangladesh.
- Experience in the preparation of bid documents will be required.
- Familiarity with the National Policy for Safe Water Supply & Sanitation (NPSWSS) and National Water Policy (NWP), the World Bank Environmental Operation Policy will be an added advantage.
- Ability to work in a multi-disciplinary team environment
- Working experience in donor assisted government project
- Competence in writing memorandum of understanding, guidelines, manual, etc. in related field.
- Fluency in both oral and written English.
- 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.

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## 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.

DENECUTIVE Engineer Approved

DPHE

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