

**Government of the People's Republic of Bangladesh
Local Government Division
Department of Public Health Engineering**

**Terms of Reference (ToR)
For
Consultancy Services for Integrated Information Management System, Smart Digital
Inclusive financing systems and other software components.**

Package No.: SER-06

Under

**Inclusive and Integrated sanitation & Hygiene Project in 10 priority Towns in
Bangladesh
(GOB-IsDB)**

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Table of content

1. Project Background1

2. Objective of the Assignment.....3

3. Scope of Services.....3

 3.1 GIS Database Creation..... 3

 3.2 Survey Activity 3

 3.3 IMIS-System Development 3

 3.5 Server Hosting 3

 3.6 Waste Management & Operation Module and Data Updating 4

 3.7 Reconciliation of E-governance Databases and Systems 4

 3.8 API Assessment and Design 4

 3.9 System Maintenance & GIS Data Updating Support..... 4

 3.10 Reporting Mechanisms 4

 3.11 Monitoring Framework..... 4

 3.12 Audit Mechanism..... 5

 3.13 Operation and maintenance (O&M)..... 5

 3.14 Capacity Building..... 5

4. Expected Deliverables and Time Schedule.....5

5. Mode of payment7

6. Ownership of Documents.....7

7. Team Composition &Qualification Requirements for the Key Experts and Non-Key Expert.....7

 7.1 Description of the main terms and conditions of appointment Key Experts..... 9

 7.2 Description of the main terms and conditions of appointment Non-Key Experts 11

8 Duties and responsibilities.....11

 8.1 Responsibilities of DPHE and counterpart personal 11

 8.2 Responsibilities of the Consultants..... 12

9.0 Assignment duration and required man-month.....13

1. Project Background

Bangladesh is experiencing rapid urbanization, surpassing that of most other South Asian countries. By 2023, approximately 40.5% of the country's total population resided in urban areas. In 2020, about 51.9% of these urban residents lived in slums under extremely poor conditions. The urban poor, particularly women and children, face heightened risks of waterborne diseases due to limited access to safe drinking water, inadequate sanitation, and poor hygiene practices in slums and informal settlements. The improper management of fecal sludge, solid waste, and wastewater exacerbates environmental pollution, further deteriorating health outcomes in these vulnerable communities.

'Inclusive and Integrated Sanitation and Hygiene Project in 10 Priority Towns in Bangladesh', under the Department of Public Health Engineering (DPHE) has been designed to support the Government of Bangladesh in scaling up the Fecal sludge management (FSM) and solid waste management (SWM) guided by the CWIS (Citywide Inclusive Sanitation) approach in Urban Poor communities and to promote hygiene behaviors in preventing water-borne diseases.

The project area comprises Cumilla City Corporation and 9 (nine) pourashavas including Narshingdi Pourashava, Shariatpur Pourashava, Jamalpur Pourashava, Lakshimpur Pourashava, Pabna Pourashava, Natore Pourashava, Sirajganj Pourashava, Bagerhat Pourashava and Patuakhali pourashava.

The project's overall objective is to ensure good quality lives and livelihoods through safe, adequate, equitable, sustainable sanitation, hygiene facilities, and services, with a special focus on the urban poor women and children, guided by City-wide Inclusive Sanitation (CWIS) approach.

The specific objectives of the project are:

- To improve the public and environmental health by reducing water and land pollution as well as water borne diseases through risk-informed sanitation infrastructure and services, occupational safety, community engagement and climate change mitigation.
- To ensure universal access to sanitation services, especially for the poor & marginalized communities by promoting safe, innovative, inclusive, efficient and climate & disaster- resilient sanitation, hygiene infrastructures and services at the city level.
- To institutionalize the livelihood opportunities for the informal sanitation workers and private sector through viable business models and capacity development including gender equity, and economic and social inclusion.
- To strengthen governance accountability systems through development of municipal level CWIS framework and guidelines.

The project includes the following key components:

- Establish Integrated waste management (IWM) System including both Fecal and solid waste Management Facilities.
- Rehabilitation or upgrading existing household containments.
- Provision of Community-based Sanitation Facilities including street hydrants and community toilets.
- Capacity Building & Awareness Raising Programs

Establishing the Integrated Information Management System, Smart Digital Inclusive Financing Systems and other software components (IMIS) will empower authorities to perform three key functions to enhance municipal services and accountability:

1. Tracking progress and performance through customizable dashboard indicators and data.
2. Managing services by linking fecal sludge management (FSM) and solid waste management (SWM) to mobile apps, enabling service providers to record service requests, track delivery, and collect real-time customer feedback.
3. Implementing geospatial-based planning and investment strategies to support informed decision-making and efficient service delivery.

The IMIS will be designed to integrate geospatial, granular data covering sanitation and solid waste management systems within a broader urban development framework that also may include building information, property tax data, and utility information. This integration will facilitate comprehensive and sustainable urban development planning, service management, and monitoring and evaluation.

IMIS will support the development of evidence-based strategic and tactical interventions to optimize the performance of existing sanitation systems and expand services to unserved areas, ensuring no one is left behind. This will involve incorporating household-level data through surveys, conducting detailed assessments of containment infrastructure, tracking services across the entire service chain, and gaining a deeper understanding of the relationships between infrastructure, service gaps, and public health risks specific to the local context.

Establishing IMIS is also crucial for advancing Citywide Inclusive Sanitation (CWIS) and developing Smart Sanitation Model Cities. IMIS will enable centralized data management, data-driven decision-making, improved service delivery, transparency, and accountability. The Department of Public Health Engineering (DPHE) intends to use IMIS to optimize resource management, implement smart infrastructure and services, and enhance citizen engagement at city level. The system's key components include digital data collection, a centralized data platform, analytics, real-time monitoring, citizen engagement, collaboration, privacy protection, capacity building and institutional systems strengthening to improve the sanitation value chain. For this purpose, the project will hire a firm to implement IMIS in the project areas of Bangladesh.

2. Objective of the Assignment

To design, develop and support implementation of a robust Integrated Information Management System that integrates smart digital financing systems and other software components, enabling efficient, inclusive, and sustainable management of urban sanitation, waste, and related services. The IMIS will empower municipalities and stakeholders by providing a scalable, secure, and user-friendly platform for data collection, storage, analysis, and reporting, ensuring alignment with the Citywide Inclusive Sanitation (CWIS) approach.

3. Scope of Services

Scopes of the service have been mentioned below;

3.1 GIS Database Creation

Create comprehensive survey (pan city scale) GIS Data housing key geographic features such as building footprints, roads and drainage networks, land use, road network, water bodies, low- income settlements, and any relevant data as required by IMIS through drone survey, open sources or combined as deemed necessary.

3.2 Survey Activity

- 1) Define survey parameters, questionnaires, and data collection methods (mobile apps, etc.)
- 2) Train survey enumerators on data collection protocols, procedures and tools.
- 3) Conduct a comprehensive survey activity to capture comprehensive census level attribute data for geo-spatial data housing key geographic features such as building footprints, containment systems (type, capacity, connection, accessibility, etc.), treatment plants, secondary transfer stations, road network (type, width, length, etc.), water bodies, land use, low-income settlement areas, etc to cover both fecal sludge and solid waste management system of the city
- 4) Conduct field surveys, ensuring accuracy and completeness of data.
- 5) Validate and verify collected data for accuracy and reliability.

3.3 IMIS-System Development

- 1) Design and develop the base IMIS system architecture (i.e. the conceptual model that defines the structure, system components) initially comprising of Building Information Management System, Integrated waste management (IWM) System, IWM Monitoring and Evaluation system and/or any other system (on demand) guided by the Citywide Inclusive Sanitation (CWIS) approach.
- 2) Integrate safe and secure digital utility payment channel into IMIS for ease of customer engagement or interface.
- 3) Develop user-friendly interfaces and functionalities to support efficient data entry, storage, retrieval, and analysis.
- 4) Implement necessary security measures to protect sensitive data and ensure data privacy.
- 5) Conduct thorough testing and debugging to ensure system functionality and stability.

3.5 Server Hosting

- 1) Procure and configure server space for hosting the IMIS.
- 2) Ensure the server meets the requirements for scalability, security, and reliability.

- 3) Install and configure necessary software and applications for IMIS hosting.
- 4) Implement backup and disaster recovery mechanisms to ensure data integrity and availability contingent and disaster recovery policy.
- 5) Monitor performance and address any issues promptly.

3.6 Waste Management & Operation Module and Data Updating

- 1) Develop specific modules within the IMIS for FSM, SWM and operation along with data updating.
- 2) Design interfaces and workflows to enable effective management and monitoring of FSM and SWM.
- 3) Integrate data updating functionalities to ensure the accuracy and reliability of information.
- 4) Provide user training on the utilization of the modules.

3.7 Reconciliation of E-governance Databases and Systems

- 1) Identify all existing e-governance databases and systems within the municipality.
- 2) Analyze and map data fields and structures of these databases and systems.
- 3) Develop strategies and mechanisms to reconcile and integrate these databases and systems with the IMIS.
- 4) Ensure data consistency, accuracy, and seamless information flow between systems.

3.8 API Assessment and Design

- 1) Assess the need for APIs to integrate all relevant databases and systems with the IMIS.
- 2) Analyze the functionalities and data exchange requirements of each system.
- 3) Design APIs to facilitate smooth and secure integration between the IMIS and other systems.
- 4) Implement APIs according to industry standards and best practices.

3.9 System Maintenance & GIS Data Updating Support

- 1) Establishment of the helpline to provide ongoing system maintenance and technical support for the IMIS for a duration of two years.
- 2) Monitor system performance, troubleshoot issues, and apply necessary updates and patches.
- 3) Ensure data backups and implement disaster recovery measures.
- 4) Update GIS data as required and provide continuous GIS data support.

3.10 Reporting Mechanisms

- 1) Develop reporting formats and templates for progress updates, system performance, and other relevant aspects.
- 2) Specify the frequency and recipients of the reports.
- 3) Include information on achievements, milestones, challenges faced, and proposed mitigation strategies.

3.11 Monitoring Framework

- 1) Establish a comprehensive monitoring framework to track the progress, performance, and utilization of the IMIS.
- 2) Define key performance indicators (KPIs) to measure the effectiveness and efficiency of the IMIS implementation.
- 3) Regularly monitor system uptime, response time, data accuracy, and user feedback.
- 4) Submit monitoring reports to the municipality and clients, detailing the status of the

system, identified issues, and remedial actions taken.

3.12 Audit Mechanism

- a. Establish an audit mechanism so that the IMIS implementation is subject to an independent audit, according to the national/ municipality guidelines and regulations.
- b. Facilitate access and cooperation with auditors during the audit process.
- c. Submit the audit report to the municipality/ DPHE, highlighting findings, recommendations, and any non-compliance issues requiring resolution.

3.13 Operation and maintenance (O&M)

- 1) Provide O&M support for 6 months to establish the sustainable implementation of IMIS at Pourashavas through skilled personnel in design, monitoring and reporting to national level (DPHE) for safely managed service delivery.

3.14 Capacity Building

- 1) Assess the human resources availability and digital literacy of the municipality staffs.
- 2) Cater the capacity building modules based on the assessment.
- 3) Provide trainings to municipal staff on the effective use of IMIS and obtain periodic feedback and handholding support from the users for 6 months period.
- 4) Provide training on server management and IMIS management to DPHE personnel.

At least following trainings should be conducted along with on-job training for 6 months period:

Sl no.	Training Item	Participants	Course Duration (days)	Batch no. (tentative)	Number of trainees per batch
1	IMIS training for municipal staff	Municipal staff	1	2	25
2	Training on server management and IMIS management	Municipal and DPHE staff	1	2	25

4. Expected Deliverables and Time Schedule

Key deliverables of the assignment are summarized as follows:

- a. Inception Report detailing the methodology/tools along with monitoring and evaluation framework and a well-defined work schedule for IMIS design, development and implementation.
- b. Comprehensive report on city scale census level geo-spatial data and inferences captured through the survey activity, properly formatted and validated.
- c. Technical Documentation housing following:
 - **System Architecture:** Detailed documentation of the IMIS system architecture, including hardware and software components, database structure, and integration mechanisms following CWIS approach.
 - **Module Design:** Specifications and documentations for the development of FSM and SWM operations and maintenance, and data updating modules within the IMIS.
 - **API Documentation:** Detailed specifications for the design and functionality of APIs, including data exchange formats, protocols, and authentication mechanisms.

- **User Manuals:** Comprehensive guides for system users, explaining how to navigate the IMIS, perform tasks, and utilize its features.
 - **System Administration Guide:** Documentation on system maintenance, backup and recovery procedures, security measures, and troubleshooting.
- d. Deliver resources including source code for fully functional IMIS and its extended modules for FSM management, and data updating along with reconciled databases and systems, ensuring smooth integration with the IMIS.
 - e. Regular progress reports on IMIS implementation on system performance, uptime, response time and user feedback highlighting achievements and milestones.
 - f. Training materials tailored for municipal staffs to effectively use and operate IMIS in any form including presentations, manuals, videos and exercises, etc.
 - g. Comprehensive capacity building report detailing number of participants trained, expectations of participants and extent to which training was able to address them, participants feedback, etc.

Expected deliverables of the assignment along with the timeline have been summarized in the following table:

Table 1: Expected Deliverables and Time Schedule

SI No.	Deliverables	Type	Estimated Submission Date
1	Inception Report	Report	1 month after signing of the contract.
2	Monitoring framework to track the progress, performance, and utilization of the IMIS with key performance index.	Report/ Matrix	2 months after signing of the contract.
3	Comprehensive report housing the survey methodology, findings and condensed responses and recommendations from the household survey (including all the responses)	Report	6 months after signing of the contract.
4	Finalized geo-spatial data along with the attribute files developed in a commonly used GIS data format (examples: shapefiles, geo-packages, etc.)	GIS files	8 months after signing of the contract.
5	Deliver resources including source code for fully functional IMIS.	Source Code (github)	12 months after signing of the contract.
6	IMIS Manuals (for all the modules), Deployment Manuals; User Guides for O&M and Troubleshooting; GIS Data Creation; Setup files; SoPs;	Technical Documents	12 months after signing of the contract.
7	Monthly Progress Reports housing the project progress; deviations/ challenges.	Reports	Every month
8	Capacity Building Modules and Training Materials.	Documents and Slide decks	6 months
9	Half-yearly Operation and maintenance (O&M) reports	Report	12 and 18 months after signing of the contract.
10	Training reports	Report	12 and 18 months after signing of the contract.
11	Completion Report	Report	Completion of the contract.

Note: The Project Director can change the time schedule for deliverables. Apart from all others, the consultants shall help the PD office by preparing special reports that may be felt necessary by the management.

5. Mode of payment

The mode of payment with milestone are given in the following table:

Table 2: Mode of payment with milestone

SI No.	Milestone	Percentage of the contract value
1	Submission and acceptance of the Inception Report	10%
2	Submission and acceptance of monitoring framework to track the progress, performance, and utilization of the IMIS with key performance index.	10%
3	Submission and acceptance of the report housing the survey methodology, findings and condensed responses and recommendations from the household survey (including all the responses)	10%
4	Submission and acceptance of geo-spatial data along with the attribute files developed in a commonly used GIS data format (examples: shapefiles, geo-packages, etc.) and resources including source code for fully functional IMIS.	30%
5	Submission and acceptance of IMIS Manuals (for all the modules), Deployment Manuals; User Guides; GIS Data Creation; Setup files; SoPs; Capacity Building Modules and Training Materials.	20%
6	Submission and acceptance of Training reports, Half-yearly Operation and maintenance (O&M) reports and completion Report	20%

6. Ownership of Documents

DPHE shall be the owner of all the software (all format), design, reports, modules, manuals, data and other documents prepared and procured under the project. After completion of the project, all documents/data/results/tools & equipment and all necessary software should be handed over to DPHE before final payment. The consulting firm shall accommodate the latest version of all the computer software/programs and shall provide the latest version while transferring database/tools/ software to DPHE.

7. Team Composition & Qualification Requirements for the Key Experts and Non-Key Expert

The assignment is planned to implement for 18 months, and the project will essentially require input from a team of expert consultants (refer to Table below). The team shall have to consist of professionals with expertise in software development and management in water supply, sanitation, and waste management projects. Knowledge and experiences on CWIS will be an advantage. An estimated total of about 552 person-months (30 for key experts and 522 for non-key professionals) of local professionals will be required. Interested consulting firm should have minimum 5 years of experience

in developing and operating MIS (Management information system) project. At least two completed WASH projects funded by Government of Bangladesh and/or Multilateral Development Banks (MDBs)/INGOs/other Development Partners.

Description of the main terms and conditions for appointment of Key Experts has been mentioned in table 3.

Table 3: Summary of Key experts

Sl. No.	Position	No	Person month	Minimum qualification	Experiences
1	Team Leader (WASH Expert) (TL-I)	1	12	Master's degree in Engineering and Bachelor's Degree in Engineering/ Urban and regional planning. Master's Degree in computer / software Engineering will be preferred.	15 years total experience, including 10 years of specific experience in managing MIS project preferably in GIS data collection or related projects. Proficiency in GIS software (e.g., ArcGIS, QGIS) and database management. Strong knowledge of geospatial data collection methodologies, spatial analysis, and data visualization techniques. Familiarity with data quality control and assurance processes.
2	GIS/MIS Expert (Deputy team leader)	1	12	Bachelor Degree in Engg./ Urban and regional planning having specialization on GIS. Master's degree in Engineering/GIS or in a relevant field will be preferable.	12 years total experience among which minimum 8 years' experience in GIS/ Remote sensing project development and implementation.
3	Software Developer	1	6	Bachelor's degree in Computer science and engineering/ Electrical engineering/ Information technology, or a related field.	8 years of working experience in including 5 years of experience in software development for GIS-based MIS and server systems including web application.

Description of the main terms and conditions for appointment of Non-Key Experts has been mentioned in table 4.

Table 4: Summary of non-key experts

Sl. No.	Position	No s.	Person month	Minimum qualification	Experiences
1	Technical Support staff (Field Based)	10	90	Diploma Degree in Engineering or in a relevant field. Degree in computer/software Engineering will be preferred.	5 years total experience among which a minimum 2 years' experience in GIS/Remote sensing project development and implementation.
2	Survey Coordinators	10	32	Minimum of a diploma or equivalent.	Experience in field data collection, preferably in a GIS or survey-related project. Familiarity with data collection tools and techniques. Good communication skills, attention to detail, and ability to follow data collection protocols accurately.
3	Field Enumerators	100	400	Minimum of a high school/ diploma or equivalent.	Experience in field data collection, preferably in a GIS or survey-related project. Familiarity with data collection tools and techniques.

The Client envisages professional staff inputs as per the table above, which are indicative and the consultants are free to propose their own staffing plan and inputs, including the non-key staffs, based on their own assessment of the needs of the assignment as described in the TOR.

7.1 Description of the main terms and conditions of appointment Key Experts

I. Project Team Leader (1X12=12 person-months)

The IMIS implementation team of consultants will have an overarching Project Team Leader (TL) who shall be heading the multi-disciplinary team. He/she will have to be fast-acclimatize with the project situation, requirements, and environment and be very closely familiar with all aspects of the undertaking and act as the counterpart of the Project Director (PD).

Broad tasks/activities/works (not exhaustive) shall be to - ensure close cooperation and assistance to the PD for effective and efficient implementation of the project - help prepare pragmatic and achievable annual work plan - ensure execution of all activities defined in the overall scope of works – lead the team to ensure proper execution of planned activities and assignments - support timely preparation of the deliverables - fine-tune the methodology and approach - organize and distribute assignments - keep

up/maintain a dynamic work environment - conduct constant supervision of the consultants - prepare contract documents and help evaluate contracts and prepare a statement of arrangements for IDB's approval - advise on issues pertaining to implementation and supervision of civil works and to review, confirm quantity and quality of works as and when any dispute arises at any timer point followed by certification/ authentication of bills for works under the project.

II. GIS/IMIS Expert (Deputy team leader) (1X12=12 person-months)

GIS/IMIS Expert will act as the deputy team leader and will be responsible for reviewing the database generated under the assignment, identifying the information to be incorporated in the GIS maps for the assignment and preparing layout plan of GIS map on findings of IMIS and Server System with the identified information. He/She will co-ordinate with DPHE and pourashavas and other stakeholders to carry out the assignment and support to prepare the reports according to the deliverables.

The II. GIS/IMIS Expert will conduct the following tasks;

- Prepare GIS-based IMIS protocol;
- Support to prepare roll-out plan for IMIS and Server System in pourashavas;
- Support DPHE and pourashavas to implement of roll-out plan;
- Install, configure, and upgrade GIS database software and related products;
- Create and manage GIS database users, roles, and permissions;
- Develop and implement GIS database backup and recovery procedures to ensure data availability and integrity;
- Monitor GIS database performance and identify and resolve performance issues;
- Perform GIS database maintenance activities such as indexing, reorganization, and statistics gathering;
- Ensure GIS database security by implementing access controls, auditing, and encryption;
- Provide technical support to end-users and troubleshoot GIS database-related issues;
- Support to O&M;
- Support to conduct training programme.

III. Software Developer (1X6=6 person-months)

The software developer will provide support to prepare draft protocol and roll-out plan for IMIS in pourashavas. He/She will design, develop, and maintain software solutions that support GIS-based IMIS and server systems along with support to finalize the protocol. He/She will support DPHE and pourashavas to implement of roll-out plan; collaborate with GIS analysts, database administrators, and other software developers to understand requirements and design solutions that meet their needs. He/She will develop web-based applications using GIS technologies such as ArcGIS Server, Open Layers, and Leaflet, software solutions that integrate with GIS databases such as PostgreSQL/PostGIS and Oracle Spatial. He/She will write and optimize SQL queries to retrieve and manipulate GIS data. He/She will work with GIS analysts to ensure that software solutions meet GIS data analysis and visualization needs and provide technical support to end-users and troubleshoot software-related issues. He/She will also support to conduct the training programme.

7.2 Description of the main terms and conditions of appointment Non-Key Experts

7.2.1 Technical Support staff (Field Based) (10x09=90 person-months)

He/she will support field-based operations relevant to the GIS and IMIS systems under the project; assist in data collection, validation, and integration into GIS/IMIS frameworks; maintain regular communication with municipal and project stakeholders to ensure smooth operations and provide hands-on technical assistance to ensure the operational functionality of field-level technical systems.

7.2.2 Survey Coordinators (8X4=32 person-months)

Survey Coordinators will be responsible for overseeing field data collection activities under the project with supervising enumerators, ensuring data quality, conducting training sessions, coordinating survey logistics, and maintaining communication with stakeholders. Their role involves monitoring field activities, verifying collected data, and submitting regular progress reports while addressing challenges to ensure accurate and reliable data for the project.

7.2.4 Field Enumerators (10X10x4=400 person-months)

The Field Enumerators will conduct following tasks;

- For Data Collection Planning they will review and understand the questionnaires, checklists, or digital tools that will be used for data collection in coordination with Stakeholders. They will attend training sessions to become familiar with the IMIS framework, data collection tools, and procedures and conduct a pilot test or pre-test of data collection tools in the field to identify any issues and suggest improvements. They will also assist in organizing necessary materials and equipment for field data collection (e.g., tablets, smartphones, GPS devices, etc.).
- For Data Collection they will visit households within the municipality to collect data on sanitation, observe and record conditions related to sanitation services and conduct interviews with local leaders, municipal staff, sanitation workers, and other stakeholders to collect qualitative data.
- For Data Verification they will cross-check the collected data for accuracy and consistency with the IMIS framework and requirements, ensure data is collected in accordance with the standards set by the consultancy and the municipality, identifying and correcting any errors on the spot.
- They will input collected data into digital platforms and ensure all entries are accurate and also timely and secure upload of collected data to the central IMIS database or cloud storage as directed.
- They will provide regular updates to the consultancy team on progress, challenges encountered, and any deviations from the plan, offer feedback on the usability and effectiveness of the data collection tools and suggest improvements and attend debriefing sessions to discuss preliminary findings and data quality with the consultancy team.

8 Duties and responsibilities

8.1 Responsibilities of DPHE and counterpart personal

DPHE shall provide support and facilities as described below.

- Providing office space in DPHE Dhaka Office (Headquarter or HRD).

- At Paurashavas or municipality level, DPHE shall ensure provision of office space for the consultants within the Paurashavas or municipalities offices or PIU.
- Providing all data, if available, and access to the project information that may be necessary for the Consultants to carry out their assignments, and facilitate field visits, access to beneficiaries, contractors, consultants, and Government line department ministries;
- Providing supports in connection with field activities such as field survey, primary/secondary data collection, setting up field offices, etc., to the consultants;
- Depute DPHE personnel who would work in close support with the consultant team to facilitate the completion of the Project; DPHE would depute three personnel, including PD and DPD.
- DPHE will make available the following counterpart staff at the field level for the entire duration of the Project.
 - District Executive Engineer
 - DPHE Assistant Engineer (Field)/ Sub-Assistant Engineers (Field)

8.2 Responsibilities of the Consultants

Responsibilities of the Consultants include the followings, but not limited to;

- The consultants shall have regular meetings with the DPHE staff to discuss technical and project management issues. Any unresolved technical issues or otherwise should be taken up with Project Director of the project for his intervention and support.
- The consultants shall carry out the services as detailed in the “Scope of Work” in the best interest of DPHE for the successful realization of the project with reasonable care, skill, and diligence with sound technical, administrative, and financial practices. They shall be responsible to the DPHE for discharging responsibilities.
- The consultant shall keep in contact with the local municipality in liaison with DPHE to know their projects and plans in the WASH sector to avoid duplications and disorder in the study and development plan.
- Computers, printers, or other major equipment & data, if purchased under the contract and used by the Consultants, shall be delivered to the office of the project Director, DPHE, at the end of the project.
- The consultants shall indicate in their financial proposal the number and person-month requirement of additional counterpart personnel and the detailed requirement of office space, machinery, equipment, and supplies. The consultant will be attached to the Project Management Unit (PMU) according to a schedule and arrangements to be decided at the time of consultancy contract negotiations.

9.0 Assignment duration and required man-month

The duration of service will be 18 months or the completion of the project, which comes later. The proposed assignment will be for 552 person-months of local professional inputs. The assignment time is divided into 02 phases. The first phase is the development phase of 6 months and the second phase is the implementation, operation and maintenance phase of 12 months which will continue upon completion of assignment.