

**Government of the People's Republic of Bangladesh**

**Local Government Division**

**Department of Public Health Engineering**

**Terms of Reference**

For

**Consultancy Service for Capacity Building**

Under

**Urban Water Supply and Sanitation in 23 Pourashavas Project in Bangladesh (GoB-IDB)**

**January 2022**

## 1. Scope and Objectives of the project

The Government of Bangladesh has received financing in the amount of US\$89.30 million from the Islamic Development Bank toward the cost of the "Urban Water Supply and Sanitation in 23 Pourashavas Project in Bangladesh (GOB-IDB)", and it intends to apply part of the proceeds to payments for goods, works, related services and consulting services to be procured under this project. This project will be jointly financed by the Government of Bangladesh.

The project comprises seven components such as 1) Water Supply Services; 2) Sanitation Facilities; 3) Solid Waste Management Facilities; 4) Rehabilitation of Existing Facilities; 5) Capacity Building & Awareness; 6) Consultancy Services; and 7) Implementation Support.

Conceived with a sector-project approach, the project objectives are:

Overall objective of the Project:

- The overall objective of the project is to improve the health and living standard of the people of 23 Pourashavas by increasing access to safe water supply and Sanitation System.

Specific Objectives:

- To introduce piped water supply system in the project Pourashavas.
- To develop sanitation system in these Pourashavas.
- To improve the capacity of Pourashavas on O&M of water supply and sanitation.

The project will contribute to fulfill government's commitment to provide arsenic safe water for all. This project will provide increased supply of safe water to the people of the project areas. Environmental sanitation activities, such as, public & community toilets, desludging equipment, drainage, solid waste management will be carried out to improve the living standard of the inhabitants of project Pourashavas. Moreover, training, awareness building campaign will also be conducted to develop skill of service providers for proper O&M and for beneficiaries to enable them to handle the constructed facilities efficiently.

## 2. Background including available studies and institutions concerned

Bangladesh is one of the emerging developing countries of the world, lies in South-Asia between 20°34' and 26°38' north latitude and 88°01' and 92°41' east longitude. With a total area of 147,570 sq. km and total population of about 158.90 million, the population density is about 1077 persons per sq. kilometer. A network of rivers exists in the country of which the Padma, the Jamuna, the Brahmaputra, the Meghna, the Teesta, the Surma, the Karnafuli are prominent. However water resources management still remains a challenge. Urban water supply and sanitation (WSS) is a priority sector in the development agenda of GoB. The country, however, has made some good progress in increasing service coverage for WSS in recent decades.

The Government of Bangladesh is emphasizing the importance of water supply and sanitation for protection of environment leading to improved health status and thus the sector is considered as the top priority one. The water supply and sanitation system in newly created Pourashavas is not adequate to meet the minimum public demand. So, it is needed to develop the water supply with piped network and environmental sanitation system in those Pourashavas.

Government has decided to introduce piped water supply facilities integrated with environmental sanitation gradually in the small (Thana & Growth Centre) Pourashavas. Regarding piped water supply project in the Pourashavas (having no piped water supply system) the independent expert committee formed as per instruction of the National Policy on Arsenic Mitigation, 2004 implementation Guidelines

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decided to undertake a study project for detailed survey and investigation for the 148 small Pourashavas located at Thana (Sub-district) Headquarters and Growth Centers. As a consequence a Master Plan has been prepared with a detail survey project considering short, medium and long term implementation plan:- Short term (2010-2015), Medium term (2015-25), and long term (2025-40). The DPP titled "Urban Water Supply and sanitation in 23 Pourashava Project in Bangladesh" has been formulated based on short term Implementation plan. About 40% People of the project area are getting adequate safe water through pipe line.

From the survey it has been found that despite observed progress, urban piped water supply still suffers from a poor daily supply time (2-12 hrs), low production, storage and unaccounted-for-water (UFW). Connections are seldom metered. Due to low tariffs and collection inefficiencies, water revenue falls short of utility O&M cost. Operations are mostly subsidized. Capital-shortage limits expansion of supply net, including safe water supply to the poor.

DPHE needs institutional strengthening in its key sector roles and responsibilities. The relevant areas are: (i) capacity for sector planning, monitoring and control is inadequate, which is constrained by lack of database on nationwide service coverage and other indicators; (ii) project management and implementation skills are mostly in rural WSS and need to be further upgraded to manage urban WSS projects, and (iii) organizational issues constrain provision of sustainable support to PSs. There is no integral unit within DPHE tasked to handle this role on a permanent basis. The DPHE organization continues to be a predominantly engineering entity, with limited capability to provide support to the PS in financial management and community organization. PSs mostly have limited technical competence, autonomy and capacities in managing and financing WS operations efficiently. Moreover, PWSSs are set up as a unit of the PSs and not as separate legal entities. Revenues and expenses of PWSSs are largely centralized in the PS accounts section. LGD approves all important municipal decisions on planning, staffing and tariff. Technology options for WS are area-dependent. GoB is now focusing on decentralizing the implementation process, promoting sustainable water supply operations, and facilitating NGO, community and private sector participation.

Although some progress has been achieved in reducing mortality and morbidity rates from water-related diseases due to improvements in WSS, further development hinges on addressing the inadequacies/shortfalls in cost recovery, demand management, service provision, financing, user-involvement in water utility planning and operation, and autonomy for Pourashavas (PSs) to carry-out mandated responsibilities. WSS sector is apparently centralized and seldom responds to user needs, due to inadequacy of current organizational structures and lack of capacity both at DPHE and PS level. GoB has approved the National Strategy for Water Supply and Sanitation 2014, Institutional and Regulatory Framework for Faecal Sludge Management (FSM) and synthesizes the spirits of other relevant policies, strategies and plans that sets a reform agenda, outlines investment priorities and incorporates expenditure framework WASH and Waste Management Sector. Capacity building and reforms will be undertaken in the process of transition from the present situation to the envisaged scenario of new institutional arrangements, new roles and greater investments. It also gives a meticulous direction for urban sector institutional reforms, especially eyeing WSS. Urban Water Supply and Sanitation in 23 Pourashavas Project in Bangladesh (GOB-IDB) has been formulated in line with the GoB's sector policies and strategies. In order to support the GoB's strong priority in the WSS sector, and in particular SDP initiatives, the Project has been structured for financing using IsDB's Financing Modality. It includes 23 Pourashavas in 19 Districts of Bangladesh.

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### 3. Institutional Strengthening of DPHE

The National Strategies along with the Mapping of Ministries by Targets in the implementation of SDGs aligning with 7th Five Year Plan (2016-20) envisions DPHE as the lead sector institution that will coordinate, facilitate and monitor all sector activities Under Local Government Division. The Project will enable DPHE to take on the new responsibilities envisioned in the SDP. Specifically, the Project will (i) increase DPHE's ability to manage sector-wide investments by providing support for managing and implementing the sector Project; (ii) assist in institutionalizing DPHE's role as a technical support agency to the Pourashava water supply, sanitation and waste management sections, by positioning the DPHE-based Project Management Unit (PMU) as the primary advisory body for all technical, contractual, financial, and implementation related activities under the Project; (iii) supporting the capacity development of DPHE HRD and Training Center by developing a training program, developing a trainers pool, designing, training curricula/courses for DPHE, Pourashavas, and other users, and delivering initial training courses; and (iv) support DPHE's sector monitoring and planning capability by providing training and equipment support for a geographic and management information section to be established.

### 4. Institutional Strengthening of Pourashavas

The Project will support Pourashavas in their effort to assume full responsibility for water supply, sanitation and waste management activities at the local level, as envisioned in the SDP and the National Policy for Safe Water Supply and Sanitation (1998) along with the other policies and strategies of the Government on WASH and waste management. The Project will finance the computerization of the Pourashava water supply sections (PWSS); institutionalize double entry accounting at the PWSS; train Pourashava staff in accounting and financial management, operations, and management of their water supply systems, and the setting, billing, and collection of tariffs; establish town-level water, sanitation and waste management coordination committees that ensure full representation from all socioeconomic groups and women; institutionalize processes for effective community engagement; and significantly improve Pourashavas capacity to operate the built infrastructure, monitor, supervise and enhance the services in all aspects.

### 5. Project Management and Implementation Support

Consulting services will be engaged to help manage the Project at the PMU, Project Implementation field offices, and Local Project Advisory Committee (LPAC) to implement and supervise the various interventions. Consulting support will include (i) project management and monitoring, (ii) planning and design of projects components to maximize the effectiveness services, (iii) management of the systems, (iv) construction supervision, (iv) preparation of health education program, (v) preparation of the tariff awareness program; and (vi) planning of PS and DPHE capacity building programs. vii) Development of training modules/materials and O&M guides for all the relevant components of the project for the Pourashavaas. The consulting services will also include significant engagement of NGOs to manage the sanitation, waste management program, communal water-supply infrastructure improvements, and awareness programs.



## 6. Project Performance Monitoring and Evaluation

A Project Performance Monitoring and Evaluation (PPME) program will be carried out by the PS with guidance from the PMU. Consulting support will be provided to the PMU to define the Base Management Evaluation program and identify indicators and methodologies for monitoring benefits such as increased coverage, service level and consumption, efficiency in operations and financial management, and health & Environmental improvements among the beneficiary population.

## 7. Special Features

Special features include among others:

### *Emphasis on Tariffs and Financial Sustainability*

The project will place a strong emphasis on tariff reform and financial sustainability of the investments. Adoption of a tariff reform plan, and the implementation of the first major tariff revision. Piped water supply systems in the project towns will be metered. An aggressive public motivational campaign on the need of metering and tariff changes will be carried out in each PS to help the PSs leadership with this sometimes politically difficult initiative. In addition to tariff reforms, PSs will also be required and supported to (at a minimum) completely separate their water supply accounts from those of the PSs, establish double-entry book-keeping for the PWSS, inventoried PS water supply assets, have key staff trained in financial management, and have PWSS financial performance data shared with the public through the Town Level Coordination Committee (TLCCs). Outsourcing of billing and collection will also be strongly encouraged. Simultaneously a sustainable business model will be developed and tested on solid waste and faecal sludge management in the respective Pourashavas under this project.

### *NGO Participation*

The NGO sector of Bangladesh is very well developed, and the Project aims to take full advantage of their capacity by engaging them to implement a parts of the overall Project investment. The entire sanitation and waste management improvement component of the Project will be developed and implemented through NGOs and local CBOs, under the supervision of the PMU and PIUs. In addition, NGOs will lead the process of constructing and O&M if possible of the communal infrastructure such as deep hand tube wells, latrines, standpipes, bins, solid waste sorting shed, solid waste composting plant and faecal sludge treatment plant; and manage the entire process of organizing and training community level user groups to own, operate, and manage such infrastructure and service system.

### *Community Management of Common Infrastructure*

The Project will provide public standpipes, deep hand tube wells and community latrines in poor areas and areas not reached by the pipe network. Contracting/development of these communal facilities, as well as their O&M will be managed by local user groups/CBOs. Experienced NGOs will be engaged through the PIU to support the formation of such user groups/CBOs, and to train and build their capacity on the range of skills and responsibilities associated with communal ownership of infrastructure.

Safe water points will be constructed by the private sector, contracted by the user group/CBO, with technical support from the PIU. Market and terminal associations will manage the public toilets to be constructed in their areas. Community latrines will be built in slum areas/low income communities, with adequate technical and software support from. The community will also be responsible for soliciting contributions and subsequently O&M for latrine facilities.

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## 8. Implementation Period

The project will be completed within June 2023. There is every possibility to extend the project duration till June 2024.

## 9. The Consultancy Package, Tasks and Terms of Reference: Capacity Building

The Capacity Building Program provides for general assistance to strengthen the DPHE and the Pourashavas as institutions in the sector and to build up the capabilities of the staff specifically in general management, financial and engineering planning and community participatory approaches.

Main objective of this service is

- To conduct training programmes to both the DPHE personnel and pourashava staffs related to Water Supply and Sanitation Sector,
- To develop modules to conduct these training activities,
- To improve overall capacity of the concerned personnel engaged in this sector.

The consulting services will cover:

### 9.1. Organization and Staffing Advice:

The government of Bangladesh approved the Sector Development Programme (SDP) for water and sanitation sector in Bangladesh. In line with the SDP government has also approved the National Strategy for Water Supply and Sanitation 2014 (NSWSS 2014), Institutional and Regulatory Framework for Faecal Sludge Management (FSM). While approving the SDP, the government has taken 23 decision points. In decision point #13 it has been stated that-- "A National HRD center for Water Supply and Sanitation will be established under DPHE to institutionalize human resources development for ensuring required supply of skilled manpower in the water and sanitation sector, including that for LGIs". DPHE has already established HRD centre and started to provide training on WASH to the officers and staffs. But according to the NSWSS 2014, it is required to

- i. Strengthen DPHE capacity based on a comprehensive HRD plan, logistics, improved systems, procedures and guidelines to carry out its new roles.
- ii. Enhance the capacities of Pourashava Water Supply Sections (PWSS) of City Corporations and Paurashavas through, among others: a) staff recruitment and training, b) establishment of separate accounts for PWSS and introduction of appropriate financial management system.
- iii. Create a positive image by highlighting customer excellence in the provision of services, transparency and accountability in its operations.
- iv. Support the LGIs, particularly the Paourashavas, to facilitate, coordinate and ensure the quality of all WASH services of the government agencies, NGOs and private sector including regulations, monitoring and record keeping.
- v. Establish coordination and monitoring mechanisms at different levels to track the sector performances, spanning from community levels to headquarters, having some common key indicators and set up reporting and feedback mechanisms between them.
- vi. Strengthen the National Management Information System for water supply and sanitation at DPHE and integrate the various monitoring systems.

**Consultant has to prepare proposal and module of training considering the strategy points mentioned above.**



**MIS Unit and FSM Support Cell of DPHE** plays vital role to achieve an efficient management. The existing manual information system in DPHE is inadequate to cope with the growing needs. This age old system of information management has been found insufficient towards institutional as well as professional development of the department in addition to its overall administration and management.

Keeping all these in mind, it is high time to establish a modern computerized and web based management information system, to accelerate institutional and professional development of DPHE and the water, sanitation and waste management sector of the country as a whole.

For a MIS Center the consultants are expected to assist in following tasks;

- Assessing the present MIS capability of DPHE
- Developing appropriate organizational proposals to strengthen DPHE
- Designing different DATA base such as; Manpower, Water, sanitation and waste management (municipal solid waste and Faecal sludge) utilities for rural/urban areas, Asset inventory, Hydro-geological and water quality inventory etc.
- Designing a routine data entry program, resource management (DPHE and Pourashavas), Tariff setting and collection etc.
- Establishing internet based linkage to update database centrally and regionally

The financial and institutional management capability of the Pourashava found to be inadequate in handling water and sanitation project/utilities efficiently. This project will support Pourashavas in their effort to assume full responsibility for water supply, sanitation, municipal solid waste and faecal sludge management activities at the local level. To achieve those objectives, consultants are expected to take all necessary steps to train Pourashava staff to improve their ability in managing respective project/utilities properly.

Besides this, with a view to give more autonomy and increasing efficiency, sustainable business model for water supply, sanitation and waste management utilities, will be tried to support the Pourashavas by this project. According to the above context, consultants are deemed;

- To assist in computerization of PWSS along with the waste management system;
- Institutionalize double entry accounting system
- To establish a computerized/web based setting, billing and collection system of tariff
- To assist the Pourashavas in achieving the minimum desired change to develop autonomous utilities within the municipality
- To assess the appropriateness of transformation autonomous utilities into sustainable business models

## **9.2. Comprehensive Training will include:**

- (i) A Training Needs Assessment,
- (ii) development of a Training Strategy for the DPHE Training Center
- (iii) development of:
  - module design
  - course design
  - training materials
  - training program, and



- trainer's training program (ToT) for the DPHE Training Center
- (iv) Implementation of the training program, of which the concomitant issues/doable are given below in a more elaborate form.

### 9.3 Training Component of the Capacity Building Package

#### ▪ General Approach

The Training subcomponent will be implemented by the national Human Resource Development (HRD) Consultants and facilitators/trainers as part of the Capacity Building Consultancy Package. The consultants will primarily be responsible for developing the training strategy and implementing training at the DPHE and Pourashava level. The facilitators/trainers will be resident in the PSs and will be responsible for conducting training programs, providing on-the-job training and coaching sessions, and doing follow up work to apply concepts learned on site in the PSs. There will be six facilitators and trainers working full time in the DPHE headquarter, HRD center and Pourashavas for the 18 months.

The Training consultants will assist to establish the standard modules for DPHE Training Center based on the revised organogram and staffing of DPHE. In addition, the consultants will undertake the following:

- Training Needs Assessment
- Develop Training Strategy, covering:
  - issues consistent with the SDP, NSWSS 2014, IRF-FSM, National Action plan for implementation of IRF-FSM in Pourashavas, other acts, policies and strategies along with the relevant documents of SDG-6 for Capacity Building Program;
  - market including DPHE central, circle and district levels, PS, PWSS, and others; and
  - appropriate institutions to deliver training like DPHE HRD Center, PS, NGOs and others)
- For DPHE Training Center based training, develop curriculum design, course design, training materials, 3year training program, and trainer's training program. The consultants will assist in developing the training materials.
- Develop pool of the trainers and implement the Trainer's training program
- Implement Training program

Substantial inputs will be provided by the consultants in the initial three months of the project primarily to assist DPHE in standardization of the existing Training Center. During this period, the consultants will also (i) design the TNA questionnaires which will be carried out by the facilitators/trainers, (ii) conduct the TNA questionnaire survey on prospective trainees (iii) prepare a report that will identify key areas where DPHE / Pourashava officials require skill-building.

A pool of trainers will be selected to conduct DPHE Training Center and Pourashava based training. The pool will consist of selected DPHE and Pourashava staffs and the 3 facilitators/trainers. By month 4 when the training courses and materials are ready, the Training of Trainers (ToT) will be conducted. The training program will be conducted from the month 5 to 18. During this period the consultants/trainers will alternatively conduct training for DPHE and for the PSs. Some months will also be scheduled for training outside DPHE (e.g. town/master planning, community, business model development training etc.) Indicative list of Training Courses and total expected participants under the loan project is given in the table below. The stated training areas shall be further firmed up based on findings of the TNA survey. The trainers will provide on the job training and will monitor progress.

Si. No.	Indicative Training Courses	No. of Trainees (Nos)		
		DPHE Central Office	DPHE District Offices	Pourashava
1	Sector Planning/Policy/Strategy Review	20	38	76
2	Town Planning/Master Planning	20	38	76
3	Project and financial Management	20	38	76
4	Technical Models of Water supply, Sanitation and Waste Management services	20	38	76
5	Construction Supervision	20	65	46
6	Training of Trainers (ToT)	20	38	46
7	Private Sector participation	12	30	76
8	Management of Water Supply Utilities	20	38	184
9	Resource utilization, Service Charge Setting, Collection and review	20	38	76
10	Financial Management and sustainable model	20	30	76
11	O&M of water production structure	20	30	76
12	O&M of water distribution system	20	30	76
13	Maintenance of water meter, record collection, preservation	20	30	184
14	Water Sampling, Water Quality and Testing	20	60	184
15	Consumer capacity & knowledge	20	30	184
16	Community development	20	30	184
17	Sanitation & waste management Technology Options	20	30	184
18	Environmental management	20	30	184
19	Enabling Environment for the service providers	20	30	184
20	Operation & Maintenance of Pump, Motor, Machinery & Equipment	20	30	184
21	Water Billing Collection system and Software Training	20	30	76
22	Hygiene Education and exercise	20	30	184
23	Faecal Sludge management Training	20	30	184
24	O&M of Faecal Sludge treatment plant	20	30	184
25	Drainage Management	20	30	184
26	O&M of Drainage system	20	30	184
27	Solid Waste Management Training	20	30	184

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Si. No.	Indicative Training Courses	No. of Trainees (Nos)		
		DPHE Central Office	DPHE District Offices	Pourashava
28	O&M of solid waste sorting shed and composting plant	20	30	184
29	Collection & Transportation Technologies Plan for Solid Waste and Faecal Sludge	20	30	184
30	GIS Based MIS Software Management	20	30	76
31	Social And Gender aspect in Water Supply, Sanitation, Drainage and Waste Management services	20	30	184
32	Capacity Building Plan	20	30	76
33	Pourashava Solid Waste and FSM implementation plan	20	30	184
34	Refreshers courses	100	150	920
	<b>Sub-Total</b>	<b>752</b>	<b>1261</b>	<b>5420</b>
	<b>Estimated Days/course</b>	<b>2</b>	<b>2</b>	<b>2</b>
	<b>Total Training man days</b>	<b>1,504</b>	<b>2,522</b>	<b>10,840</b>

#### 9.4 Training Center

Selected DPHE and Pourashava's officials, staffs will be trained as trainers and required training materials will be prepared by the consultants. The center should be sustainable beyond the project. However, in the event DPHE is not able to hire full time trainers on a revenue budget, the conduct of training could still be done through outsourcing of the service using the materials prepared under the project.

#### 9.5 Linkages with other Training Institutions

The training strategy will include the appropriate institution to carry out training. Training in town/master planning and community development could be provided by Financial Management Academy (FIMA), Bangladesh Institute of Administration and Management (BIAM) Foundation, National Academy for Planning and Development (NAPD), The Rural Development Academy (RDA), ITN-BUET etc. since these are already in place.

#### 9.6 Preparation and Monitoring of Reform Action Plan for each Pourashava:

An efficient management is extremely important to make a water supply, sanitation & waste management project sustainable. To achieve an efficient management, it is important to put right person in right place. It is evident that, in spite of having good intention of a Pourashava authority to run a Pourashava Water Supply, Sanitation and waste management Service smoothly, they can't do it because of improper fixation of tariff, poor tariff collection efficiency, imbalanced ratio of income over expenditure and reluctance in paying electricity bills, enforcement of laws and orders, effective use of resources, community mobilization etc. However, in that context, consultants are expected to assist Pourashava not limited to the following tasks;

- Assessing the present staff situation and recommendation for further requirement;
- Preparing a detailed Management Action Plan;
- Assessing and recommend on Organization and Staffing Plan;
- Preparing a Tariff and Financial Management and Action Plan which, will be geared towards helping the Pourashava meet the performance criteria;
- Occupational health and safety measures for the staffs,
- Establishing standard service model of waste sanitation and waste management etc.

### 9.7 Preparation of Guidelines and Simplified Manuals:

Printed guidelines and manuals are the ultimate outcome from consultancy services for human resource development purpose. The Project aims to preserve all its findings and recommendations in a well-documented manner so that, it can be referred and used in future in other project or activities. Keeping that in mind, consultants are expected to assists in following guidelines and manuals;

Guidelines for tariff setting and review, hiring and appointment of staff; appropriate organization/staffing/ job descriptions; and Simplified and basic policy and operating manuals Commercial practices manuals, covering:

**Double entry bookkeeping;** In present practice Pourashavas are maintaining the accounts of PWSS & Waste Management in separate register for income and expenditure. As a result, they can't see the income over expenditure situation at a glance. Double entry bookkeeping system shall help the authority to make quick decision over financial situation of PWSS & Waste Management.

**Guide line for billing and collection;** At present Pourashavas do not have meter for their water supply system. A metered water supply system will help the Pourashava in managing the system properly. It will also help in additional revenue collection, proper billing as well as to control water wastage.

**Fixed assets inventory;** A proper asset inventory related to PWSS & Waste Management is extremely important to plan an efficient system. It can also help the authority to utilize the asset in an economic manner to raise fund for PWSS & Waste Management.

**Budgeting & financial management;** A computer oriented budgeting and financial management system shall help the Pourashava authority in efficient financial management. Such programmed oriented manual considering computerization shall be prepared where and whenever appropriate.

**Occupational Health and Safety;** The project will facilitate the Pourashavas with production of safe water, distribution of Piped Water Supply, Sanitation for the communities and in public places, solid waste and faecal sludge management. Operation and maintenance of the systems requires efficient and skilled human resources and many of them will be exposed to hazardous matters. So, special attention has to be given of their occupational health and safety issues.

In addition, if required by the PMU, any manual related to PWSS & Waste Management operation & maintenance

### 9.8 Inputs

As explained in earlier sections, this capacity development component shall be largely completed within the 18 months. In all there will be a 153 person-months input. A significant portion of these inputs shall be spent in the field (to be agreed between the project authority and the team). Facilitators and trainers shall mainly be located and working in the field.

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### 9.9 Duration, Personnel, Person-months and Reporting

The Project will be implemented over a period of 18 months (continuous) and will require inputs from a team of local expert consultants. The local experts having experience of works in the relevant field will add additional score. About 153 person-months of local consultants are required consisting of professionals with expertise in management, training, management information systems, and water supply financial systems. In addition to the **various manuals and materials required, the consultant will prepare brief quarterly progress reports and the project completion report for the institutional development component of the Project** (also see section on Reporting, letter in the document).

The matrix below reiterates the length of input, qualification and specific experience against individual consultants (also spelled out in the subsequent section wherein the job requirements are delineated).

**Consulting Input Schedule Showing Requirements and Person-Months**  
**Capacity Building Component**

Sl Nr	Position	Nr	Person Months	Minimum qualification	Specific experience
1	Team Leader- Institutional Development Specialist	1	18	Masters in Social Science /Economics/Management or Bachelor Degree in Engg (civil/ water resource) plus MBA/ Masters in Management/ Social Science/ Engg with special training/certificate in HRD/HRM/Capacity raising in urban development context	Preferably 20 years' total experience including 15years specific experience in capacity building/Institutional development HRM. performance improvement of service-oriented govt./semi govt./local government institutions.
2	HRD Specialist for module development	1	12	Bachelor Degree in Social science/ management/engineering/urban planning. MBA (majoring in HRD/HRM) / Masters or equivalent in Personnel management or HRM/HRD will be preferable.	Preferably 20 years' total work experience with at least 12 years in HRD/HRM areas, both professional as well as in research, involving govt/semi govt/local govt entities spanning capacity/skill development parameters.
3	Financial Management Expert	1	12	Master Degree in (Economics/Finance)/ MBA (majoring in Finance)/ CA/CFA/ CMA	Preferably 15 years of professional experience, at least 10 years of which are required to be specifically in the assessment, analyses and installation of financial management system, especially spanning urban finance and tariff/service charge setting. International experience/exposure shall be an added advantage

Sl Nr	Position	Nr	Person Months	Minimum qualification	Specific experience
4	MIS Specialist	1	12	BSc in MIS/CIS or BSc in Computer Science or Engineering.	Preferably 5 years' professional experience including 3 years' proven track record in the design and development of MIS for govt./semi govt./local govt./large commercial entities including website and server management.
5	Trainers	3	54	Bachelor Degree in Social science/management/engg. (civil/ water.resource)/urban planning/Finance. MBA (majoring in HRD/HRM/Finance)/Masters of equivalent in personnel management or HRM/HRD/Finance will be preferable.	Preferably 15 Years total work experience with at least 10 years in the specific training/skill or capacity development areas with proven track record in TNA. Design of training modules, imparting training involving govt./semi govt./local govt. entities
6	Facilitators	3	45	Bachelor Degree in engg. (civil/ w.resource)/urban planning/management/Finance. Masters in Engg (civil/w.resource)/MBA (majoring in Finance) will be preferable.	Preferably 10 Years total work experience with at least 8 years in the specific training/skill or capacity development areas with proven track record in imparting training involving govt./semi govt./local govt. entities
<b>Total</b>		<b>10</b>	<b>153</b>		

Given below is a narration of the individual consultants, specific qualification and experience requirements and a job description for each position. **It is important to note that all consultants, both collectively and individually, shall remain fully committed to specifics delineated in the section 'Training Component of the Capacity Building Package' in an earlier section.**

**i. Team Leader/ Institutional Development Specialist (1X18=18 person-months):**

The Institutional Development vis a vis Capacity Development consultant will have experience as the Team Leader for the package that shall consist of multi-disciplinary team members. For the position, he/she is required to have a Master degree in Social Science /Economics/Management or Bachelor Degree in Engg (civil/ water resource) plus (MBA/ Masters in Management/ Social Science/ Engg. with special training/certificate in HRD/HRM/Capacity raising in urban development context. He/she will be required to possess a minimum 20 years' total experience including 15 years' specific experience in capacity building/ institutional development, HRM and performance improvement of service-oriented government/semi govt/local government institutions.

The TL will have to lead a multi-disciplinary team of consultants; hence work experience in multi-cultural and multi-disciplinary environment will be a pre-requisite for selection to the position. He/she will have to fast-acclimatize with the assignment situation, requirements and environment and be very closely familiar with the pertinent aspects of the undertaking.

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Broad tasks/activities/works shall be to: ensure close cooperation and assistance to the PD for effective execution of the works under the institutional development component of the project - help prepare pragmatic and achievable work plan - ensure execution of all activities defined in the overall scope of works - help timely preparation of Inception Report - organize and distribute assignments - through the team, develop curriculum design, course design, training materials, a 18 months training program and Training of Trainers (ToT)- - conduct constant supervision of the consultants – combining with the consultants, design a pragmatic program for TNA, keeping in view the requirements and deliverables by DPHE and Pourashavas to the sector – decide on training strategy - provide insight regarding designing training modules – assist the SE (Planning) and the PD through enhancing and strengthening the training division and HRD centre of DPHE- prepare and transmit monthly, quarterly, annual reports - assist the PMU in the preparation of the SOE - set up procedures for management and monitoring of the of the programs – decide on the clustering of Pourashavas for the convenience of imparting training at common venue(s)

Specifically the tasks will also be to: formulate along with other consultants in the team a RAP (Reform Action Plan) for each PS that shall include management action plan, organization and staffing plan, Tariff and Financial Action Plan (geared towards helping the PS meet the performance criteria) – Prepare Guidelines and Simplified Manuals including (i) guidelines for tariff/service charge setting and review, hiring and appointment of staff; appropriate organization/staffing/ job descriptions; and (ii) simplified and basic policy and operating manuals and commercial practices manuals (covering double entry bookkeeping, meter reading/ billing and collection, fixed assets, budgeting and financial management systems considering computerization whenever appropriate).

In addition to above, the job shall as well include writing specific reports as and when necessary and assisting the PD on any other areas as would be required from time to time.

**ii. HRD Specialist (1X12 = 12 person-months)**

The position of HRD Specialist will require a Bachelor Degree in Social science/management/engg. (civil/ water.resource)/urban planning/Finance. MBA (majoring in HRD/HRM/Finance)/Masters of equivalent in personnel management or HRM/HRD/Finance will be preferable. Other requirements include 15 Years total work experience with at least 10 years in the specific training/skill or capacity development areas with proven track record in TNA. Design of training modules, imparting training involving govt./semi govt./local govt. entities

Broad tasks/activities/works shall be to: closely cooperate with the TL and Institution Specialist for effective execution of the works under the institutional development component of the project - help prepare pragmatic and achievable work plan - contribute to the development of curriculum design, course design, training materials, a 3-year training program and Training of Trainers (ToT) and orient the trainers and facilitators on imparting training – help Institutional specialist in designing a pragmatic program for TNA and conducting the exercise, keeping in view the requirements and deliverables by DPHE and Pourashavas to the sector – help decide on the training strategy – play a major role in designing/developing the training modules – assist the TL and other Specialist in their effort to enhance the capacity of training division and HRD center at DPHE along with the Pourashavas of the project – assist in identifying and developing a pool of trainers within DPHE so that they are eventually able to continue imparting training in a sustained manner -decide on the clustering of Pourashavas for the convenience of imparting training at common venue(s) – closely work with the training officers of DPHE to prepare him/her to continue the relevant works when he/she leaves-

Specifically the tasks will also be to: formulate along with the TL, Specialists and FM Specialists, a RAP (Reform Action Plan) for each PS that shall include management action plan, organization and staffing plan, Tariff and Financial Action Plan – Prepare Guidelines and Simplified Manuals including

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(i) guidelines for tariff setting and review, hiring and appointment of staff; appropriate organization/staffing/ job descriptions; and (ii) simplified and basic policy and operating manuals and commercial practices manuals (covering double entry bookkeeping, meter reading/ billing and collection, fixed assets, budgeting and financial management systems considering computerization whenever appropriate).

In addition to above, the job shall as well include writing specific reports as and when necessary and assisting the PD and TL on any other areas as would be required from time to time.

**iii. Financial Management Specialist (1X12 = 12 person-months)**

Required qualification for Financial Management Expert shall have Master Degree in Economics/Finance/ MBA (majoring in Finance)/ CA/CFA/ CMA from a recognized school/ institution. The position shall also require a Minimum 15 years of professional experience, at least 10 years of which are required to be specifically in the assessment, analyses and installation of financial management system, especially spanning urban finance and tariff/service charge setting.

The set of tasks/activities/works shall be not limited to: closely cooperate with the TL and Institution Specialist for effective execution of the works under the component – closely examine and make in-depth analyses of the financial management systems of the Pourashava (municipality) keeping in view the provisions of in-place poura (municipal) ordinance- identify the areas of shortfall in the current system- evolve/recommend best available financial management practices that could be installed/adopted for efficient management of the system – set the trend and recommend ways to effect better collection and cost recovery so that these LGIs are able to manage the urban water supply, sanitation, solid waste and faecal sludge management systems more effectively- contribute to the development of curriculum design, course design, training materials falling within the umbrella of Pourashava financial management – convene seminar/workshop ensuring participation of the poura-chairmen, personnel and DPHE officials at the initial phase and as well at post-analysis phase of the financial system with consequent recommended actions - evolve required financial manuals (as the case may be) for the relevant PWSS and waste management system -

More precisely (in reiteration) the specific tasks shall also be to: along with the TL, Institution Specialist and other consultants in the team initiate and advance formulation of a RAP (Reform Action Plan) for each PS that shall include management action plan, organization and staffing plan, Tariff and Financial Action Plan – Prepare Guidelines and Simplified Manuals including (i) guidelines for tariff setting and review, and (ii) simplified and basic policy and operating manuals and commercial practices manuals (covering double entry bookkeeping, meter reading/ billing and collection, fixed assets, budgeting and financial management systems considering computerization, digitization whenever appropriate).

In addition to above, the job shall as well include writing specific reports as and when necessary and assisting the PD on any other areas as would be required from time to time.

**iv. MIS Specialist (1X12 = 12 person-months)**

Required qualification for BSc in MIS/CIS or BSc in Computer Science or Engineering. On top of this, the position will need a Minimum 5 years' professional experience including 3 years' proven track record in the design and development of MIS for govt./semi govt./local govt./large commercial entities including website and server management.

Broad tasks/activities/works shall be to: closely cooperate with the TL and Institution Specialist for effective execution of the works under the institutional development component of the project – along with the national MIS Specialist, make an in-depth assessment of the works done at different hierarchical (strategic, tactical & operational) levels of DPHE, the data/info needed to make decisions

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at these levels for efficient management of the system; frequency, relevance and accuracy parameters of the flow, storage, analyses and output of the data-spectrum – eventually evolving a MIS for installation and adoption by DPHE for their overall data base management to user an improvement in the management of the entity- in the process provide and install the desired computerized MIS at selected place in close consultation with the SE (Planning) and PD – assist and initiate establishment of the stipulated MIS center at DPHE (PD and SE, Planning to be continuously discussed with in this regard) - carryout any other tasks assigned by the TL and/or PD. He/She will also be responsible to upgrade and customize the existing water meter billing software for the 23 Pourashavas under the project, if not possible to upgrade or customize have to prepare and a new user friendly software for serving the purposes. He/She will also be responsible to establish a digitized system the service of water supply, sanitation, solid waste and faecal sludge management and all of their components including establishing mobile application/software for the Pourashavas to monitor pit emptying/solid waste collection, waste transportation, waste disposal, service charge collection, service efficiency and income-expenditure status etc. including data preservation analysis ensuring all sorts of security. He/She will also assist for training to the respective officers and staffs of DPHE and Pourashavas who will be the responsible to take over the system to the next stage.

**v. Trainers – 3 (3X18= 54 person-months)**

The position shall require a Bachelor Degree in Social science/management/engg. (civil/ water. Resource)/urban planning/Finance. MBA (majoring in HRD/HRM/Finance)/Masters of equivalent in personnel management or HRM/HRD/Finance will be preferable. 15 Years total work experience with at least 10 years in the specific training/skill or capacity development areas with proven track record in TNA. Design of training modules, imparting training involving govt./semi govt./local govt. entities

*Note: 2 of these 3 positions will require financial/ management background and 1 position will require technical/engineering background. They shall be working full time in the Pourashavas for the first 6 months. There will be three facilitators (described later) /trainers working full time in the PSs for the first 6 months. There will be two facilitators/ trainers (one with technical/engineering background and the other with a financial/ management background) for a cluster of 7-8 contiguous PSs.*

Overall tasks/activities/works shall be to: provide full assistance to the entire team of consultants in the assignment-related matters – assist the HRD specialist and Institutional specialist in the preparation of pragmatic and achievable work plan – assist in the design and development of training modules – draw specific training calendar - impart training at specific places for the PS as well as DPHE personnel – work with associate facilitator to congeal an effective capacity building team to serve 7-8 Pourashavas - keep close liaison with the training unit of DPHE to share and assist each other on common grounds - write specific reports as and when necessary – assist the PD on any other areas as would be necessary.

**vi. Facilitators – 3 (3X15= 45 person-months)**

Academic requirements for the position is a Bachelor Degree in engg. (civil/ w.resource)/urban planning/management/Finance. Masters in Engg (civil/w.resource)/MBA (majoring in Finance) will be preferable. This should be coupled with 10 Years total work experience with at least 8 years in the specific training/skill or capacity development areas with proven track record in imparting training involving govt./semi govt./local govt. entities.

*Note: 2 of these 3 positions will require technical/engineering background and 1 position will require financial/ management background. They shall be working full time in the Pourashavas for the 6 months. There will be two facilitators/ trainers (one with technical/engineering background and the other with a financial/ management background) for a cluster of 7-8 contiguous PSs.*

Broad tasks/activities/works shall be to: provide full assistance to the entire team of consultants in the assignment-related matters – assist the HRD specialist and Institutional specialist in the preparation of pragmatic and achievable work plan – assist in the design and development of training modules – draw specific training calendar in collaboration with the Trainer in his team - impart training at specific places for the PS as well as DPHE personnel – work with associate trainer to congeal an effective capacity building team to serve 7-8 Pourashavas - keep close liaison with the training unit of DPHE to share and assist each other on common grounds - write specific reports as and when necessary – assist the TL, Financial Management Expert and HRD Specialists on any other areas as would be necessary.

#### 9.10 Supporting staffs and Other Items

- a. Support Staff (Project Assistant, Computer Operator, Office Assistant etc.)
- b. NGO/ Local organization engagement
- c. Air Fare and travel expenses Vehicle rent
- d. Per Diem Domestic
- e. Computer, laptop, printer and other Equipment
- f. Office operations
- g. Photocopier, Scanner, Telephone, Internet Modem and other necessary office equipment's including accessories
- h. Project Completion Reports, Pourashava wise report, all deliverables in DVD including master copy and Copies
- i. Office Stationeries
- j. Office setup including Furniture, Recurring cost, Maintenance etc.
- k. Miscellaneous

**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 based on their own assessment of the needs of the assignment as described in the TOR.**

#### 9.11 Additional Tasks

In addition to the tasks mentioned above the consultants will activate TLCC of every Pourashava and assist for arranging meeting in every two months. Consultants will also collect information of local NGOs, select one two from each PS, develop their capacity for introducing outsourced O&M of the structures and the service systems under this project with the assistance of the respective PS.

#### 10 Deliverables

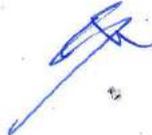
The total duration of the services will be 18 months and the consultant firm has to provide specific bar chart of service and delivery schedule with the effective time framework with 18 months. The firm has to provide the following modules of training within first 4 months after signing of Contract and assessment report after arranging batch wise training –

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Si. No.	Indicative Training Courses	Trainee from DPHE HQ/HRD center	Trainee from DPHE District Offices	Trainee from Pourashavas	Total Trainees
1	Sector Planning/Policy/Strategy Review	20	38	76	134
2	Town Planning/Master Planning	20	38	76	134
3	Project and financial Management	20	38	76	134
4	Technical Models of Water supply, Sanitation and Waste Management services	20	38	76	134
5	Construction Supervision	20	65	46	131
6	Training of Trainers (ToT)	20	38	46	104
7	Private Sector participation	12	30	76	118
8	Management of Water Supply Utilities	20	38	184	242
9	Resource utilization, Service Charge Setting, Collection and review	20	38	76	134
10	Financial Management and sustainable model	20	30	76	126
11	O&M of water production structure	20	30	76	126
12	O&M of water distribution system	20	30	76	126
13	Maintenance of water meter, record collection, preservation	20	30	184	234
14	Water Sampling, Water Quality and Testing	20	60	184	264
15	Consumer capacity & knowledge	20	30	184	234
16	Community development	20	30	184	234
17	Sanitation & waste management Technology Options	20	30	184	234
18	Environmental management	20	30	184	234
19	Enabling Environment for the service providers	20	30	184	234
20	Operation & Maintenance of Pump, Motor, Machinery & Equipment	20	30	184	234
21	Water Billing Collection system and Software Training	20	30	76	126
22	Hygiene Education and exercise	20	30	184	234





Si. No.	Indicative Training Courses	Trainee from DPHE HQ/HRD center	Trainee from DPHE District Offices	Trainee from Pourashavas	Total Trainees
23	Faecal Sludge management Training	20	30	184	234
24	O&M of Faecal Sludge treatment plant	20	30	184	234
25	Drainage Management	20	30	184	234
26	O&M of Drainage system	20	30	184	234
27	Solid Waste Management Training	20	30	184	234
28	O&M of solid waste sorting shed and composting plant	20	30	184	234
29	Collection & Transportation Technologies Plan for Solid Waste and Faecal Sludge	20	30	184	234
30	GIS Based MIS Software Management	20	30	76	126
31	Social And Gender aspect in Water Supply, Sanitation, Drainage and Waste Management services	20	30	184	234
32	Capacity Building Plan	20	30	76	126
33	Pourashava Solid Waste and FSM implementation plan	20	30	184	234
34	Refreshers courses	100	150	920	1170
<b>Total</b>		<b>752</b>	<b>1261</b>	<b>5420</b>	<b>7433</b>

Institutional development/capacity building consultants, apart from all kinds of normal consultancy-related reports, training manuals, RAP, commercial practice manuals (refer previous sections) and different position papers, shall submit 10 (ten) copies to DPHE and 3 (three) to the Bank of the following reports in English with necessary CD Rom. They are:

- an inception report** including a detailed work plan in bar chart form – within 30 days (1 month) of the consultants' mobilization;
- an interim report** on the progress on implementation of the component at the end of 9 months of the component's implementation Project Implementation;
- a work completion report** (to be prepared and submitted by the team leader with the help of Financial Management Expert – to be submitted at the end of the overall completion of consultancy component.

The consultants will also assist the PMU with the preparation of quarterly progress reports. Such reports shall span progress of work, significant issues, constraints and other relevant aspects, including financial statements and shall be prepared within two weeks of the end of each quarter.

The consultants will prepare brief monthly progress reports to be submitted to DPHE within 4 (four) days of the end of each month.

Apart from all others, the consultants shall help the PMU by preparing special reports that may be felt necessary by the management but cannot be identified at the moment.

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Additional inputs of local supporting staff of about 72 Person- months of office assistants and support staff shall also require to carry out the assigned tasks under the component.

### 11. Ownership of Documents

- DPHE shall be the owner of all the materials and documents prepared under the project.
- After completion of the project all documents/results should be handed over to DPHE before final payment. No part of the software/documents will be used to anywhere without permission of DPHE. All the copy rights are reserved by DPHE.

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.

### 12. Source of fund and mode of payment

The source of fund of this consultancy services is from Islamic Development Bank (IsDB) under the project Urban Water Supply and Sanitation in 23 Pourashavas Project in Bangladesh except the portion of VAT, IT and other relevant taxes. Income tax and VAT will be deducted at source from the payment as per the latest rules of Bangladesh.

Mode of Payment:

• Advance payment	10%
• Upon Submission and acceptance of the training manuals on 34 nos. indicative training courses, commercial practice manuals, interim report & relevant reports as per TOR. (Advance payment will be adjusted)	40%
• Upon submission of completion report of at least 20 indicative training course as per TOR.	30%
• Upon Submission of the of completion report of the rest of 14 indicative training course, work completion reports and other deliverables as per TOR	30%

### 13. Counterpart Staff and Facilities

DPHE will make available adequate counterpart staff (in connection with both components i.e. Supervision and Technical Support and capacity development).

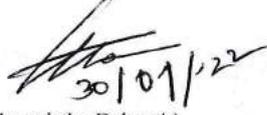
DPHE will also make available to the consultants all relevant reports, documents and data/info on an 'at cost basis'.

The consultants shall clearly indicate in their financial proposal the number and person-month requirement of additional counterpart personnel needed as well as the detailed requirement of logistics, equipment and supplies. The consultants should have separate office in Dhaka but have to report to PMU every day. During work in the field, they will be attached to the district offices according to a schedule and arrangements to be decided at the time of consultancy contract negotiations.

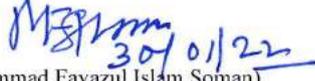
**14. Implementation arrangement** The DPHE will be the EA responsible for the Project. The PMU, headed by a full-time Project Director (PD) and other full-time DPHE staff will be responsible for the day-to-day management of the Project under which the consultancy component shall be carried out.

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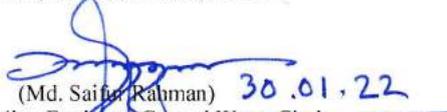
In respect of the capacity development component, the PMU will manage the overall training and capacity building program for DPHE and PSs and in conjunction with the consultants, strengthening the HRD center and Training division at DPHE within specified duration.

  
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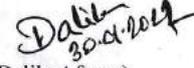
(Sharmistha Debnath)  
Executive Engineer,  
Survey Investigation & Research Division,  
Department of Public Health Engineering, Dhaka  
&  
Member Secretary, ToR Committee, DPHE

  
30/01/22

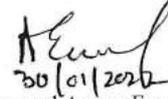
(Mohammad Fayazul Islam Soman)  
Executive Engineer, Ground Water Division  
Department of Public Health Engineering, Dhaka  
&  
Member, ToR Committee, DPHE

  
30.01.22

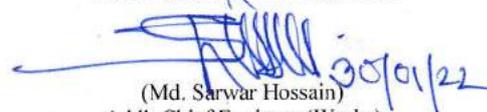
(Md. Saifur Rahman)  
Superintending Engineer, Ground Water Circle  
Department of Public Health Engineering, Dhaka  
&  
Member, ToR Committee, DPHE

  
30.01.2022

(Dalila Afroze)  
Executive Engineer, Design Division  
Department of Public Health Engineering, Dhaka  
&  
Member, ToR Committee, DPHE

  
30/01/2022

(Mohammed Anwar Eusuf)  
Superintending Engineer, Planning Circle  
Department of Public Health Engineering, Dhaka  
&  
Member, ToR Committee, DPHE

  
30/01/22

(Md. Sarwar Hossain)  
Addl. Chief Engineer (Works)  
Department of Public Health Engineering, Dhaka  
&  
Convener, ToR Committee, DPHE

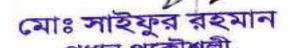
CE, DPHE

Proposed TOR may be approved.

  
20/02/2022

মোহাম্মদ রওশন আলম  
নির্বাহী প্রকৌশলী (সংস্থাপন)  
জনস্বাস্থ্য প্রকৌশল অধিদপ্তর  
বাংলাদেশ সরকার, ঢাকা।

Approved TOR.

  
মোঃ সাইফুর রহমান  
প্রধান প্রকৌশলী  
জনস্বাস্থ্য প্রকৌশল অধিদপ্তর  
বাংলাদেশ সরকার, ঢাকা।