Last update: 19 December 2021

## 30 November 2021 REQUEST FOR PROPOSAL (RFP)

# Technical study on introducing area-based water tariff for Dhaka WASA

#### Proposal submission deadline: 25 December 2021

Interested team of consultants/consulting/research firms are requested to submit a technical and a financial proposal through email at WaterAid-Tender-TA@wateraid.org

The focal person for this assignment is Mr Md Tahmidul Islam (tahmidulislam@wateraid.org) to answer queries. There was pre-bid meeting scheduled on 13 December 2021.



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### TABLE OF CONTENTS

SECTION 1: INFORMATION TO ORGANISATIONS/INDIVIDUALS	3
SECTION 2: TERMS OF REFERENCE	6

## SECTION 1: INFORMATION TO ORGANISATIONS/INDIVIDUALS

1. Introduction	1.1	The eligible team of consultants/consulting/research firms with required qualifications and experience are invited to submit a proposal.
	1.2	Costs for preparing the proposal and attending the pre-bid and/or negotiation meeting are non-reimbursable.
	1.3	Team of consultants/consulting/research firm is expected to follow highest ethical standard in their participation in the bidding process and refrain from influencing the internal selection process of WaterAid Bangladesh.
	1.4	Any attempt of undue influence on the evaluation and selection process will lead to cancellation of the proposal from the subsequent process.
	1.5	Any misrepresentation of facts including the facts on professional /institutional capacity will also lead to cancellation of the proposal.
	1.6	WaterAid Bangladesh reserves the right to amend and modify this RFP document. Also, to select team of consultants/ consulting/ research firm(s) for providing selected goods and services cited in section-2 (article-4) as deliverables of this RFP, either for the entire content of the proposal or a part thereof.
2. Clarification and amendment of RFP documents	2.1	At any time before the receipt of proposals, WaterAid Bangladesh may for any reason, whether at its own initiative or in response to a clarification requested by an invited consultant/consulting/research firm(s), amend the RFP. Any amendment shall be issued in writing and shall be posted and will be binding. WaterAid Bangladesh may at its discretion extend the deadline for the submission of proposals.
3. Preparation of proposal	3.1	Team of consultants/consulting/research firm(s) are requested to submit their proposal written in English (font-Arial, size-11). Proposals must remain valid for a minimum of 90 days after the submission date.
Technical proposal	3.2	<ul> <li>research firm(s) must give particular attention to the following:</li> <li>Appreciation of the Terms of Reference (TOR)</li> <li>Detailed methodology and workplan to address the objectives of the assignment</li> <li>CV of proposed key person(s); it is desirable that the key professional staff who would be involved in the assignment have practical experience and an extended knowledge on the subject matter having relevant qualification and experiences</li> <li>Organisational/individual profile with an outline of recent experience on assignments similar to the nature of this RFP</li> </ul>
Financial proposal	3.3	The financial proposal from team of consultants/consulting/ research firm(s) are expected to take into account the requirements for accomplishing the deliverables specified in the

section-2 (article-5) and conditions outlined in the RFP documents.

- 3.4 Provide a justified financial proposal consistent with the technical proposal which clearly mentions item wise summary of cost for the assignment with detail breakdown, the taxes, VAT, duties, fees, levies, and other charges to be included under the applicable law. Copy of VAT registration certificate including BIN, TIN certificate, and bank account details should be attached with the financial proposal.
- 3.5 WaterAid Bangladesh will deduct VAT and Income Tax at source according to the GoB rules and deposit the said amount to government treasury.
- 4. Submission of proposals
   4.1 The technical and financial proposals should be submitted electronically to the following email address WaterAid-Tender-TA@wateraid.org with 'Technical study on water tariff' as the subject.
  - 4.2 Proposals submitted to any other e-mail account except the above will be treated as disqualified.
  - 4.3 Submissions after the **deadline** 25 December 2021 will be treated as disqualified.
  - 4.4 Two different files (PDF) should be generated for technical and financial proposals, and both the files should be submitted into one zip folder. Please name the zip folder in the name of your organisation/individual.
  - 4.5 The proposal altogether (technical and financial part) should not exceed 25 pages, including CVs and organisational/individual profile.
  - 5.1 The evaluation committee will evaluate the proposals on the basis of their responsiveness to TOR, and applying the evaluation criteria and point system specified herein. Each responsive proposal will be given score. Proposal(s) will be rejected at this stage if it does not respond to important aspects of the TOR.
  - 5.2 The final selection will be done following Quality and Cost Based Selection (QCBS). This will be done by applying a weight of 0.80 (or 80 percent) and 0.20 (or 20 percent) respectively to the technical and financial score of each evaluated proposal and then computing the relevant combined total score for each consultant/consulting/research firm(s).
    - Technical proposal: 80
      - o Technical Proposal with detailed methodology: 30
      - Composition of the team: 20
      - o Relevant work experience: 15
      - Work plan and overall quality of the proposal: 15
    - Financial proposal with a detailed breakdown: 20
  - 5.3 The evaluation committee will determine whether the proposals are complete or not. The committee may invalidate any proposal

5. Proposal evaluation

		if it is determined that significant budgetary mistakes or omissions undermine the integrity of the proposal.
6. Pre-bid meeting	6.1	There will an online pre-bid meeting on 13 December 2021 to brief the objectives of the assignment and answer related queries, if you are interested to join please communicate.
7. Presentation and negotiation	7.1	Once the proposals are evaluated, WaterAid will request team of consultants/consulting/research firm(s) with valid and complete proposals for a presentation within two weeks of the submission deadline.
	7.2	WaterAid may enter into negotiation with one or more bidders before final selection. If negotiations fail, WaterAid Bangladesh will then invite those organisation/individual whose proposals received the next highest score. If none of the invited proposals led to an agreement, a new RFP will be called upon.
	7.3	The presentation and negotiations may include a discussion on the proposed methodology, workplan, staffing, costing, or any suggestions made by the bid participating organisation(s) to improve the terms of reference.
	7.4	WaterAid Bangladesh and the contracted organisation/individual may revise the TOR which should be incorporated final contract document.
8. Awarding of contract	8.1	The team of consultants/consulting/research firm(s) is expected to sign the final contract document within a week of communication of selection and commence the assignment within 2 weeks.
9. Penalty clause	9.1	The team of consultants/consulting/research firm(s) is expected to deliver required outputs within the stipulated timeframe maintaining the quality. If for any reason, the consultant/consulting/research firm(s) fails to deliver required deliverables within stipulated time, the consultant/consulting/research firm(s) needs to inform WaterAid intime with valid and acceptable explanation in written. Failing to this may evoke penalty clause at the rate of 0.5% for each day of delay.
10. Confidentiality	10.1	Information relating to evaluation of proposals and recommendations concerning awards will not be disclosed to the organisations who submitted the proposals or to other persons not officially concerned with the process, until the winner has been notified with award of the contract.
11. Focal person	11.1	Mr Md Tahmidul Islam Technical Advisor – WASH WaterAid Bangladesh
		Can be reach directly at: tahmidulislam@wateraid.org

#### SECTION 2: TERMS OF REFERENCE

#### 1. Background

Bangladesh has made significant progress in recent years and has improved its human development indicators despite of high population density, frequent natural disasters and widespread poverty. Bangladesh's population is around 164.6 million<sup>1</sup>. The capital, Dhaka, is one of the world's most populated cities and is home to more than 20 million people<sup>2</sup>. An estimated 400,000 migrants, who are mostly poor, arrive in the city each year<sup>2</sup>. A recent study found that, about 26% of the country's population are under multidimensional poverty index (MPI) in immediate pre-pandemic period, of which about 14% lives in the urban areas<sup>4</sup>. Population living in the slums can be defined as low-income communities, and in 2014, Bangladesh Bureau of Statistics (BBS) found more than half a million are living in slum areas of Dhaka.

Bangladesh is facing major challenges around water security than ever before due to increased demand of a growing population as well as impacts of climate change, inappropriate land use and waste management. Rapid growth of the industrial hubs in Dhaka and other cities are also imposing substantial pressures on the environment. Most of the industries, especially the textile and leather sectors, are heavily reliant on water for production and operations. These are leading to depleting groundwater levels and worsening of surface water quality.

Dhaka Water Supply and Sewerage Authority (DWASA) was established in 1963 as an independent organisation and is currently running under the WASA ACT 1996. Before the advent of the Water Supply and Sewerage Authorities (WASA), the Department of Public Health Engineering was responsible for supplying water to the residents of Dhaka, and services were provided mostly free of charge. DWASA is a service-oriented autonomous commercial organisation in the public sector, entrusted with the responsibility of providing water supply service for the dwellers of Dhaka City. It covers more than 401 sq. km. service area<sup>5</sup> with a supply capacity of 2740 million litres water per day (MLD)<sup>2</sup>.

Total service areas or zones of DWASA are currently divided in to 10 geographic zones for easy operation, maintenance and providing better public service. Mostly, the water supply system of DWASA is dependent on groundwater. Around 64 percent water comes from underground sources and the rest 36 percent from surface water. Groundwater is abstracted by using a total of 896 deep tube-wells. Surface water is supplied by treating water of the river Shitalakshya and Buriganga through 5 water treatment plants including Saidabad Water Treatment Plant Phase- I & II<sup>2</sup>.

Dhaka WASA is currently capable of supplying 274 crore litres of water against the daily demand of 252 crore litres. A BIGD study<sup>6</sup> estimates that per capita water consumption among the relatively affluent in Dhaka is 310 litres per day, compared to 85 litres for households in low-income communities. The high water usage among the affluent not only exceeds WHO standards but also exceeds that of many developed countries.

<sup>&</sup>lt;sup>1</sup> Bangladesh Statistics (2019), Bangladesh Bureau of Statistics (BBS)

<sup>&</sup>lt;sup>2</sup> Annual Report 2020-2021, Dhaka Water Supply and Sewerage Authority (DWASA)

<sup>&</sup>lt;sup>2</sup> Water and Sanitation for Urban Poor (WSUP) Practice Note (2015), Setting up an LIC Unit: DWASA's approach to serving low-income communities in Dhaka

<sup>&</sup>lt;sup>4</sup> Bangladesh Institute of Development Studies (BIDS) and University of Bath for General Economics Division of the Planning Commission (2019)

<sup>&</sup>lt;sup>5</sup> Water Supply Master Plan for Dhaka City (2014)

<sup>&</sup>lt;sup>6</sup> Water Governance in Dhaka (2019), BRAC Institute of Governance and Development

Public water utilities providing water to consumers through piped network charge a price for water provision known as rates or tariffs. Water tariffs generally serve multiple purposes: primarily to recover costs, ensure access across socioeconomic groups, regulate levels of use, and ensure fairness in water service delivery. However, cost recovery can often conflict with other objectives such as ensuring access to all. A more common conflict typical to developing countries is resource-constrained settings, where tariffs are generally considered as a controversial issue, and prices are usually set below full cost recovery for historical and political reasons<sup>1</sup>.

Domestic users in Dhaka currently pay BDT 15.18 for 1000 litres, and the water tariff per 1000 litres is fixed, regardless of whether one uses 1000 litres or 5000 litres. This heavily subsidised rate is well below the market rate of water. The subsidy is meant to alleviate some burden on the poor, who have to pay a larger share of their income to access water. Instead, the benefits are largely enjoyed by the affluent, which often leads to wastage and unproductive use.

While tariff setting practices vary widely, differential pricing is one of the ways that water demand can be managed and wastage disincentivised. Differential pricing can be established through various ways, including charging higher prices for increasing consumption (increasing block tariffs), or setting an area-based billing system in which users in relatively affluent areas pay a higher rate. The idea behind increasing block tariffs is to increase the water price per unit of volume as the volume used increases. Thus, the largest consumers of water pay higher rates for the volume of water consumed beyond a certain threshold<sup>2</sup>. A typical increasing block tariff structure corresponding to the essential volume or consumption is divided into social or lifeline, normal, and high block to finance the cost of the service while at the same time making water access inclusive for people with low affordability<sup>3</sup>.

However, increasing block tariffs are not considered feasible given that buildings in Dhaka generally have a single meter for all households/commercial entities. In contrast, the equity aspects that differential tariffs intend to achieve can be realised through area-based tariffs. Hence considering the logistical complexity and affordability of consumers of Dhaka WASA, we are planning to explore plans to set up area-based water tariff structure for Dhaka WASA. Under an area-based billing system, users in relatively affluent areas will pay a higher rate, which will be used to cross-subsidise lower tariffs in lower income areas. The tariff structure will be based corresponding to house rent or price of land which varies from area to area.

Differential tariffs can also be differentiated among consumer categories – such as domestic and commercial users. However, there are number of challenges to the proper design and implementation of a fair and equitable tariff structure that can also achieve cost recovery. Moreover, initial introduction of the revised system may face resistance and pilferage or not feasible if there is a large proportion of unconnected and informal settlement. At the same time changes in the billing systems would take time and further revision.

Despite these challenges, inclusive tariff system remains one of the main ways in which developing countries such as Indonesia, Philippines, Vietnam, as well as few developed countries like Japan are attempting to balance the dual objectives of cost recovery and

<sup>&</sup>lt;sup>1</sup> World Bank (2010) Cost Recovery, Equity, and Efficiency in Water Tariffs: Evidence from African Utilities <sup>2</sup> UN Environment – DHI Centre, Climate Technology Centre and Network (CTCN) and the UNEP - DTU Partnership (2017), Climate Change Adaptation Technologies for Water: A practitioner's guide to adaptation technologies for increased water sector resilience

<sup>&</sup>lt;sup>3</sup> https://sswm.info/water-nutrient-cycle/water-distribution/softwares/economic-tools/water-pricing---increasingblock-tariffs

wider access. Therefore, there is a need to rethink this strategy and implement a more equitable tariff system based on the amount of water used by a household, and its neighbourhood that belong to a certain area of the city.

The water tariff issue is particularly pertinent in Bangladesh's urban and municipal town context, given the country's existing water service scenario. Clause 22, sub-clause 2 of the WASA Act of 1996 permits WASAs to adjust the tariff at a rate of maximum 5% each year, but it is encouraging to note that DWASA is looking for support to design an area-based water tariff structure since flat tariff is not socially just and equitable; and should be reconsidered for many socioeconomic reasons. Moreover, an area-based water tariff may be set different type of structures e.g., tariff setting for apartments can be different than slums or low-income housing.

#### 2. Objectives

The key objective of this assignment is to present a comprehensive proposition on how DWASA can introduce area-based water tariff system. The proposed tariff system should be thoroughly studied in selected MODS zone of DWASA (under different city corporation area, i.e., DNCC & DSCC consist of diverse consumer groups) including mobilisation of opinion of local people and relevant policy makers.

#### 3. Scope of work

DWASA's role will be to introduce area-based tariff while WaterAid will be helping out to mobilise slum dwellers and facilitate engagement of policy makers where possible together with the contracted organisation/individual.

This assignment 'introduction of area-based water tariff system' is divided into two major components where the feasibility of the system to be analysed at the same time the consultant/research firm(s) is required to propose an implementation and communication plan to make mass people understand its benefits, and ensure the engagement of mass media to address behavioural issues with excessive water use or misuse. Component wise scope of works is as follows:

**Component A:** Propose an implementation plan for introducing an area-based water tariff system in the service areas of DWASA

- Understand the complexity of consumer groups [e.g., multiple apartments in the same apartment complex, income pattern, commercial cum residential venture, Low-Income Communities (LIC), Small-Medium Enterprises (SME), public toilet] and their consumption pattern
- Review the current billing and tariff collection systems of DWASA
- Evaluate the liability of users in existing tariff structures, their purchasing power, and reflections on flat vs area-based tariff system
- Review of existing tariff structures of some other water supply authorities in Bangladesh and provide grounds for comparison (e.g. CWASA, Chattogram; Paikgachha Municipality, Khulna)
- Identify and present examples of area-based water tariff structures in most relevant developing/developed countries, including discussion of other components of the tariff aimed to make the structure more inclusive
- Propose number of context-specific solutions for the area-based tariff in terms of quality, quantity, accessibility, coverage, and affordability
- Develop a financial model for area-based tariff, accounting for projected changes in revenue, water demand and usage in the pilot areas

- Present validated (through field assessment) propositions as to how DWASA can introduce an area-based water tariff system within its service area
- Discuss the factors found in the assessment of an area-based water tariff system proposition and document lessons learned from these discussions
- Recommend the best proposition with adequate details how DWASA will introduce the new area-based tariff system across the city addressing different socioeconomic groups and categories of connections in different areas as described in the earlier sections including the changes essential in the current billing and collection system of DWASA

**Component B**: Execution of a simple and short communication plan to sensitise mass people, civil society, and policy makers along with formulation of associated policies, guidelines, and way forward for the introduction of area-based water tariff system by DWASA.

- In line with the proposed area-based water tariff structure suggest an affordable and simple in nature communication plan to create an enabling environment for the introduction of inclusive area-based water tariff by DWASA
- Design realistic and limited in number communication activities to disseminate essential communication messages to sensitise the target groups (mass people, civil society, and policy makers) and create media awareness for their engagement on the proposed area-based water tariff system
- The communication plan should be executed by the contracted organisation/team jointly with DWASA and WaterAid

#### 4. Methodology

The assignments are expected to be based mainly on primary and secondary data collection from three distinct areas under DWASA service area, including field trials/validation. The assignment will also require extensive desk review and relevant analysis of collected data. The process will be supplemented by interviews with key informants and focused group discussions with concerned stakeholders, relevant government agencies, and academic/research institutions to better understand the bottlenecks and solutions for area-based water tariffs. The associated policies, guidelines and existing system of billing and collection should also be reviewed to understand current situation and propose what changes needs to be made for introduction of area-based water tariff. Moreover, development of communication messages and plan for dissemination of the same to the mentioned target groups through different channel for awareness creation and engagement would be essential. The team of consultants/research firm(s) is welcome to suggest essential appropriate methods as per their assessment of the assignment.

#### 5. Timeframe and deliverables

The assignment should be completed within eight months after the signing of the contract. The contracted organisation/team will submit a work plan with key milestones within one week of signing the contract. The work plan will be reviewed and approved by WaterAid and DWASA. The assignment is divided in two components, and it is anticipated to have interim reports after completing each component. The draft final report needs to be produced no later than seven months after signing the contract. The final report should be submitted within two weeks of receiving feedback on the draft. There will be formal dissemination of the findings to a wider audience.

The contracted organisation/team is expected to deliver the following outputs:

- Inception report containing agreed methodology and detailed work plan
- Interim report on the progress of the work components and containing the propositions for DWASA to choose the alternative for introducing area-based water tariff
- A well-written report with adequate details how DWASA will introduce the new areabased water tariff system across the city addressing different socio-economic groups, categories of connections in different areas including the changes essential in the current billing and collection system of DWASA
- A report on the findings and recommendations on interventions for sensitising mass people, civil society, and policy makers.
- A detailed final report containing the way-out for DWASA to implement the proposed area-based water tariff including potentials, opportunities, challenges, and way forward

All reports must be presented to DWASA and WaterAid, and comments to be accommodated accordingly.

#### 6. Mode of payment

Instalments	Percentage	Schedule for payment
First	20%	After acceptance of inception report
Second	30%	After receiving deliverables 2: interim report (1)
Third	30%	After receiving deliverables 3: interim report (2)
Fourth	20%	After completion of the assignment by receiving deliverables 4: draft, final report, and presentation

The payment will be made in following four instalments:

#### 7. Expected competency

Interested team of consultants/consulting/research firm(s) is expected to have the following competencies and experience:

- Expertise in conducting quantitative and qualitative study, and mix-method studies
- Expertise in conducting studies in WASH sector or a similar context
- Expertise and experience in development communication and/or Behavioural Change Communication along with production of Information, Education and Communication (IEC) materials
- Experience of working with regards to water efficiency/usage
- Competency and track record of conducting an economic analysis of investment projects
- Networking ability to access and collect relevant stakeholders' data/information
- Competent team for data collection and analysis
- Competency in writing good quality reports in English