Baseline Assessment of WASH Service Level: The State of Paikgacha

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Abbreviations and Acronyms

AIRP	Arsenic Iron Removal Plant
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
CC	Community Clinic
CSO	Civil Surgeon Office
CU-5	Children Under Five
DPHE	Department of Public Health Engineering
EA	Enumeration Area
FGD	Focus Group Discussion
GoB	Government of Bangladesh
HCF	Health Care Facility
HDRC	Human Development Research Centre
HH	Household
JMP	Joint Monitoring Programme
KII	Key Informant Interview
IDI	In-Depth Interview
LGED	Local Government Engineering Division
LGI	Local Government Institution/Institute
LNOB	Leave No One Behind
MHM	Menstrual Hygiene Management
MoHFA	Ministry of Health and Family Welfare
MoLGRD&C	Ministry of Local Government, Rural Development and Cooperatives
MoP	Ministry of Planning
PSF	Protected Shallow Tubewells
PWD	Persons with Disability
ROP	Reverse Osmosis Plant
RWH	Rain Water Harvesting
SDG	Sustainable Development Goal

SIDCOARP	Sidco Arsenic Removal Plant
SMC	School Management Committee
UEO	Upazila Education Office
UHC	Upazila Health Complex
UH&FPO	Upazila Health and Family Planning Officer
UP	Union Parishad
USEO	Upazila Secondary Education Office
USO	Upazila Statistics Office
UZP	Upazila Parishad
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WQT	Water Quality Test

Executive Summary

Bangladesh has made significant strides in the WASH sector, with improved drinking water sources and sanitation facilities increasing from 79.5% to 98% in 2019. However, progress on water, sanitation and hygiene (WASH) targets is still a concern, with only 59% of the national achievement as of 2021. The Joint Monitoring Programme (JMP) report by the World Health Organization and UNICEF shows that 68.3 million people in Bangladesh lack safely managed drinking water, and 103 million lack safely managed sanitation facilities.

The purpose of the baseline assessment is to understand the status of WASH services and set a benchmark to track the progress towards achieving universal, sustainable, and safe WASH in Paikgacha Upazila. The report aims to assess the current state of WASH services in various settings including households, educational institutions, and health care facilities.

The baseline study adopted a mixed-method approach to gather quantitative data (using mWater) and qualitative information on WASH service levels using JMP core questions and recommended additional questions. The household survey implemented a structured questionnaire through face-to-face interviews in 1,200 randomly selected HHs covering 198 communities and ensuring a minimum sample in each union and Paurashava. Furthermore, the survey covered 102 educational institutions and 51 public health facilities in Paikgacha. The baseline survey collected a total of 345 water samples to lab test nine different parameters. Focus group discussions with adults and students and interviews with elected and appointed LGI officials, GoB health managers, relevant GoB departments, and other stakeholders were integral parts of the assignment. The analysis plan adopted the WASH service level assessment tool for water, sanitation and hygiene.

WATER: The basic water access is 84%, with 48% available within the premises. However, only 14% of the water sources of tested samples are safely managed, a contribution of faecal (55.6%) and arsenic (30.8%) contamination, with only 23.2% of HH treating drinking water. Water from improved water sources (i.e., piped water, tubewell/boreholes, and water kiosks) is more contaminated than surface water. The scope of alternative water sources is also limited. 36.2% of the households do not have any alternative source of drinking water, and 22.2% of the HHs with alternative sources rely on surface water. At least 5.2% HHs using surface water as main drinking source do not have any alternative.

Water scarcity escalate during dry seasons, and water quality also gets compromised. Paikgacha HHs need alternative water sources during the dry season. The water expenses add a burden to the HHs. The water expenses force many HHs to compromise their living standards. The unit cost of drinking water for a Paikgacha is 65 times higher than a DWASA consumer, and they are still deprived of safe drinking water. 95% of the water sources are functional, and 74% of the households expressed their reliability (water is always available) on water sources. So, rather than installing and maintaining water sources, Paikgacha HHs need motivation and information to start treating water before drinking.

37.3% of health care facilities and 78.4% of educational institutions have basic water access. However, the water contamination problem persists. Nearly 29% of the HCFs have no water source, most of which are community clinics. 43.1% of HCFs have water storage, and 27.5% can last two days with stored water. Most of the education institutes have water storage facilities but rarely treat drinking water. Students and health service providers (in CCs) usually bring water for themselves.

SANITATION: Around 16% of Paikgacha households access safely managed, and 49.4% basic sanitation facilities, but unimproved sanitation still persists in 10.2%. The unimproved sanitation facilities usually last a year and create overflowing problems during the rainy season and flood, risking health hazards for all households in the community. 65.6% of households with CU-5 do not dispose of child faces

safely, posing the same risk. 27.4% of HHs use shared toilets; on average, 2.7 HHs (12-13 people) use them. Almost 51% of households never emptied their sanitation facilities; among those emptied toilets, 43.1% did not dispose of excreta safely. Nearly 24% of households report an event where excreta is released to the surface from their sanitation facility.

Toilets in 71.2% of the households are not clean. The HHs are also not very concerned about cleanliness and need awareness. The superstructure, in many instances, is not complete (no roof), so it is often inaccessible during storms and does not have anything similar to a rail or ramp. The absence of a light source poses a risk of harassment. The HHs face economic challenges, so they are unable to install pucca latrines. Repair and maintenance are challenging for the remote HHs; 35.5% face difficulty accessing sanitary spare parts. A market chain of WASH spare parts can improve sanitation accessibility.

44% of educational institutions have basic sanitation facilities, and 9% have no sanitation facilities. On average, five (5.2) toilets are available. Separate toilets for boys and girls are available in 45% of educational institutions (45%), but not many of them have disposal mechanisms for MHM. Only 12% of educational institutions have at least one toilet for persons with limited mobility or vision. Only 22% of the educational institutions' student toilets were clean, but 60% had the necessary cleaning tools and materials.

There are 80% health care facilities (HCF) with limited sanitation services. 92.2% of HCFs (community clinics) do not have separate sanitation facilities for males and females. Among HCFs, 23.9% have clean sanitation facilities, but basic cleaning supplies are available for 64.4%. HCFs face financial challenges to maintain toilets.

HYGIENE: Around 18% of the households have basic handwashing access, while 29.1% have no access to handwashing facilities. Only 24.9% of the observed households with handwashing facilities have water and soap in place. Overall, 85.7% of HHs never experienced any hygiene session or intervention, but 89.5% know how to wash their hands after defecation and 68.6% before having food. However, very few know about handwashing after cleaning a baby's bottom/nappy. With 31.7% of HHs with U5 children, this should be a key concern.

Using cloth or reusable sanitary pads (55%) is more prominent during menstruation. Most female household members (88.0%) have access to private space to wash and change their menstruation materials at home, but the sanitation facilities are not comfortable or safe enough to use for menstrual hygiene. Family and social taboos regarding menstruation are still pertinent in society. Such taboos contributed to the lack of participation or not being allowed to participate in many core household and social activities, including attending schools or visiting worship places.

Only 30.4% of educational institutions have basic handwashing services, and 39.2% of them have soap and water, while 6.3% have neither. The educational institutions do not have specific budget allocations to operate and manage WASH facilities. 83.1% of educational institutions have a handwashing point within 5 meters of the toilets, but 90.2% have no provision for menstrual hygiene management MHM. Only eight educational institutions place bins in toilets. 57.8% of educational institutions experienced hygiene-related sessions in the last six months; however, most female students shared that they had never encountered any MHM-related sessions or SBCC materials.

Nearly half (49%) of HCFs do not have any handwashing facilities. Only one out of ten HCFs has visible and understandable (with clear writing, pictures, and graphs) hygiene promotion materials in all points of care (9.8%). Only 27.1% of HCFs maintain regular compliance activities as per GoB guidelines (Medical Waste Management Rules 2008). The term' WASH auditing' is not familiar to health care providers. The Ward WASH committee does not arrange regular meetings. 25.5% of the HCFs do not

have any waste management services. Bins are available in 72.5% of HCFs, but 98% do not maintain standard GoB procedures for medical waste disposal. Only 2% of the HCFs are capacitated to maintain basic environmental cleaning services, and 21.6% can maintain limited services.

WASH DATA MANAGEMENT: There is a limited scope of WASH data collection and gathering down to the Upazila level. Bangladesh Bureau of Statistics, at regular intervals, collects WASH data for the Sample Vital Registration Survey (SVRS) and the National census. The 2022 Census collected WASH data with four questions. The SVRS collects HH level data every two years with the possibility of assessing JMP level analysis except for 'safely managed' at the HH level. However, the SVRS data can only be analysed down to the division level. Apart from this, BBS partners with development activists to generate national-level WASH estimates such as the National Hygiene Survey and Multiple Indicator Cluster Survey.

Bangladesh Bureau of Educational Information and Statistics (BANBEIS) regularly collects WASH-related specific information from Schools, colleges, and madrassa. The WASH data is not reported in any published documents. Upazila Education Office and Upazila Secondary Education Office do not provide any WASH-specific data to the District Education Office and District Secondary Education Office.

Paikgacha Upazila Parishad, Paikgacha Municipality (Paurashava), and Union Parishads do not exchange or provide any WASH data to any other government authorities, including BBS (KIIs, officials, Paikgacha Upazila Parishad, Paikgacha Municipality, Gadaipur Union Parishad, Haridhali Union Parishad, Kapilmuni Union Parishad).

There are provisions for the UHC to report to the Civil Surgeon Office (CSO) and the Directorate General of Health Services (DGHS). Paikgacha Upazila Health Complex (UHC) shares selected WASH data as part of 'other services' data to the Khulna Civil Surgeon Office (CSO) and Directorate General of Health Services (DGHS). There are reporting protocols for both CC and UHC to provide medical waste management reports.

WASH GOVERNANCE: There are multiple government agencies engaged in WASH with different capacities and mandates. In Paikgacha, LGED is not involved in any WASH-related initiatives. Any engagement of DPHE is not found in the municipality but is actively engaged with WASH-related concerns in the rural area. Hardly there is any evidence of partnerships between/among government agencies for WASH management. One of the key challenges for most of local government institutions (Upazila, Parishad, Union Parishad, Municipality) are budgetary constraints. Upazila Parishad, Union Parishad, and Municipality have WASH-related line items, but according to LGI representatives, budget allocation is insufficient compared to demand. Budgetary challenges are also pertinent for educational institutions and health care facilities.

WASH service level in Paikgacha is a concern zone that demands purposive and systematic actions to achieve universal WASH coverage.

RECOMMENDATIONS

Based on the baseline survey findings, following are the potential recommendations (not in order of importance) to improve the WASH coverage in Paikgacha.

- Enlighten Paikgacha people on affordable water treatment technologies to treat drinking water. Arrange demonstration sessions on the risks of drinking contaminated water.
- Re-excavate ponds to increase water accessibility during the dry season.

- Undertake awareness sessions in the community to reduce delayed pit emptying or throwing extracted excreta into open space. Inform them about the pit emptying service availability. Arrange a demonstration.
- Inform the community about maintaining hygiene in latrines and its benefits.
- Organise hygiene sessions with handwashing demonstration and share the benefits of handwashing in critical times.
- Arrange awareness sessions with adolescent girls and women on hygiene during ministration. Introduce reusable sanitary pads. Also, introduce a market chain for reusable sanitary pads.
- Create a market chain on the availability of spare parts to repair and maintain WATER points and sanitation facilities, especially in hard-to-reach unions such as Lata, Laskar, and Deluti. Also, local youth can be trained in the required repairing skills.
- Introduce the Ministry of Education's published circular (23 June 2015) specifically focused on improving sanitation conditions in secondary and higher secondary schools, madrasas, and technical and vocational institutions in Bangladesh.
- Engage the local level (union and Ward) WASH committee and strengthen them to keep the WASH committee functional.
- Undertake advocacy activities to increase the WASH budget in Upazila and Union.
- The LGI representatives and officials need capacity development regarding WASH technologies and strategies to engage the community in improving the WASH situation.