

# Local Level WASH Service Monitoring in Bangladesh

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WASH Alliance International (WAI) WASH SDG sub-programme in Bangladesh



Supporting water sanitation and hygiene services for life

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This document is an assessment of the subnational level Water, Sanitation and Hygiene service monitoring systems in Bangladesh. One of the strategic objectives of the WASH SDG Programme in Bangladesh is to improve the quality of WASH service provision, and to improve service provision, service monitoring is essential. This document gives insight in the present WASH service monitoring systems and practices at subnational level in Bangladesh. This document also provides recommendations to the concerned government departments.

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## ABBREVIATIONS

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<b>APA</b>	Annual Performance Agreement
<b>BBS</b>	Bangladesh Bureau of Statistics
<b>CSO</b>	Civil Society Organisation
<b>DGHS</b>	Directorate General of Health Services
<b>DHS</b>	Demographic and Health Survey
<b>DPHE</b>	Department of Public Health Engineering
<b>FSM</b>	Faecal Sludge Management
<b>IMED</b>	Implementation Monitoring and Evaluation Department
<b>IMIS</b>	Integrated Municipal Information System
<b>JMP</b>	Joint Monitoring Programme
<b>LGD</b>	Local Government Division
<b>LGED</b>	Local Government Engineering Division
<b>LGI</b>	Local government Institutes
<b>MICS</b>	Multiple Indicator Cluster survey
<b>MP</b>	Member of Parliament
<b>NAP-IRF</b>	National Action Plan for Institutional Regulatory Framework
<b>NGO</b>	Non-Governmental Organisation
<b>PSB</b>	Policy Support Branch
<b>SDG</b>	Sustainable Development Goals
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children’s Fund
<b>WASA</b>	Water and Sewerage Authority
<b>WAI</b>	WASH Alliance International
<b>WASH</b>	Water, Sanitation and Hygiene

# I NATIONAL WASH STATUS OF BANGLADESH

Bangladesh has made remarkable progress in eliminating the practice of open defecation. As a result, Bangladesh has been successful in achieving the Millennium Development Goals (MDGs). But realising safely managed water and sanitation service levels remains a challenge. The Joint Monitoring Programme's 2021 Progress Report shows that Bangladesh has safely managed drinking water coverage of 59% (Rural 62%, Urban 53%) and safely managed sanitation coverage of only 39% (Rural 42%, Urban 34%). JMP 2021 also reported that at the national level basic hygiene service coverage is 58% (rural 54%, urban 66%)<sup>1</sup>.

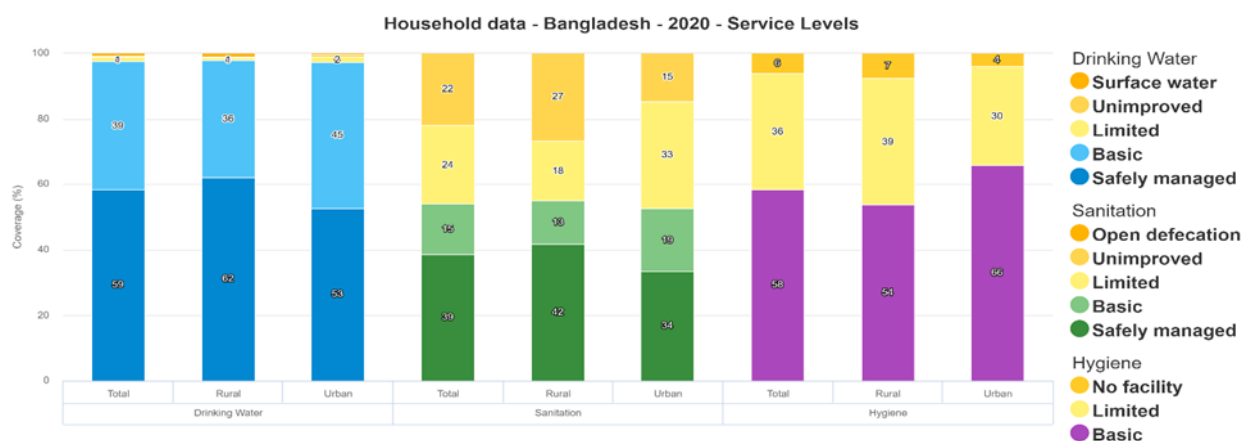


Figure 1: WASH service coverage in Bangladesh (JMP2020)

Regular monitoring of WASH indicators is essential to understand about the level of WASH service coverage as well as track whether WASH programmes at local level are on track to certain criteria (service levels) and meet agreed upon sector targets. Regular basis reporting of WASH progress is also required so that all actors can understand the progress that is being made. However, there are different administrative units in Bangladesh and to provide WASH services in these administrative units, different WASH actors are present. These actors differ in capacity, scale, geography, and operation modality. This report therefore:

- Explores the existence of monitoring system among those public actors (institutions) that generate (quality) data on WASH service levels, and
- Evaluates opportunities for the WASH SDG programme to align with those existing monitoring systems.

The scope of this report is limited within the key Local Government Institutions i.e., City Corporations (the ones without WASA), Municipalities and Union Parishad areas.

## I.1 What is WASH service monitoring

WASH service monitoring supposed to look at coverage, status and quality of water, sanitation, and hygiene services for the inhabitants in all geographies and settings of the country. To ensure water and sanitation services that last, monitoring must<sup>2</sup>:

- Focus on the level of services provided over time (rather than coverage or the number of facilities, quality and service level will be focused),

<sup>1</sup> <https://www.unwater.org/publications/who-unicef-joint-monitoring-program-for-water-supply-sanitation-and-hygiene-jmp-progress-on-household-drinking-water-sanitation-and-hygiene-2000-2020/>

<sup>2</sup> <https://www.ircwash.org/tool-subcategory/monitoring>

- Be part of a national monitoring and information system (rather than be limited to isolated project efforts to ensure that project targets are met), and
- Support planning and remedial actions (rather than stop at the level of reporting with little or no follow-up).

As per WASH in the 2030 Agenda New global indicators for drinking water, sanitation and hygiene are follows<sup>3</sup>:



Figure 3: JMP WASH Ladder - Briefly



Figure 4: JMP 'Ladder' for Monitoring WASH

<sup>3</sup> [WASH in the 2030 Agenda: New global indicators for drinking water, sanitation and hygiene, WHO and UNICEF, 2017](#)

## 2 INSTITUTIONAL ROLES AND RESPONSIBILITIES

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As per the Local Government Act 2009, City Corporations<sup>4</sup> and Municipalities<sup>5</sup> are responsible for provision of water and sanitation services except in cities where Water and Sewerage Authorities (WASA) are present. City Corporations and Municipalities are Local Government Institutes for urban areas run by elected local government representatives. Water and sanitation fall under the responsibility of the concerned departments (water supply and conservancy department<sup>6</sup>) of the City Corporations and Municipalities<sup>7</sup>. Among the twelve (12) City Corporations, four (4) have separate Water and Sewerage Authorities (WASA) – namely in Dhaka, Chittagong, Khulna and Rajshahi – for the provision of water and sanitation services. WASAs are public authorities established under the WASA Act of 1996<sup>8</sup>.

Beside the City Corporations and Municipalities, there are rural areas which are governed by Union Parishads. The work of the Union Parishads is guided by the Union Parishad Act of 2009<sup>9</sup>. The Act provides partial responsibility of water supply, sanitation and septage management to the Union Parishad. The Local Government Institutions operating in the rural areas fall under the Ministry of Local Government, Rural Development and Cooperatives. Partial responsibility of water supply and sanitation also falls under Department of Public Health Engineering (DPHE) which is an executive department under the same ministry. The actual monitoring of WASH services and WASH service providers is not a clear responsibility of any of these institutions. None of the relevant acts and departmental directives of these two departments (Union Parishads and DPHE) clearly mentions service monitoring as their responsibility. As per the National Forum for Water Supply and Sanitation, having representatives from relevant ministries, agencies and the external support agencies and chaired by the Secretary, Local Government Division (LGD) is responsible for overall coordination, monitoring and evaluation of the sector activities. The reconstituted 8 thematic groups of the Sector Development Plan also provided direction on monitoring and evaluation the progress by Policy and Monitoring Support Committee (chaired by the Joint Secretary, LGD -WS) and Technical Support Committee (chaired by the CE -DPHE). Within the Ministry the Local Government Division has a unit, called Policy Support Branch (PSB), which is responsible for overall WSS sector coordination.

The newly commissioned Pro-Poor Strategy for Water and Sanitation Sector of Bangladesh of 2020<sup>10</sup> exerts some passive responsibility of water and sanitation service monitoring to Local Government Institutes (LGIs)<sup>11</sup>. The strategy has no direct service monitoring element. However, the strategy leaves the responsibility of selecting the hard-core poor households that are leaving without basic minimum water and sanitation services. The LGIs (City Corporations, Municipalities and Union Parishads) need to identify the real hard core poor households as per the criteria first, then they need to select which of these households are not accessing water and/or sanitation services

<sup>4</sup> There are **12 city corporations** in Bangladesh who perform a variety of socio-economic and civic functions.

<sup>5</sup> There are **330 municipalities** in Bangladesh which in total comprise more than 60 percent of the country's total urban area. Municipalities or Municipal Corporations (also known as pourasabha) are the local governing bodies of the cities and towns in Bangladesh. Municipalities are established for the administration of towns and smaller cities. Conservancy department is the responsible department for cleanliness of the town and performs waste collection, street sweeping, drain and canal cleaning and mosquito control

<sup>7</sup> <http://www.lgd.gov.bd/site/page/46c396a8-1f8a-41d3-895c-8e11dc053854/>

<sup>8</sup> <https://www.adb.org/sites/default/files/project-document/60396/39405-013-ban-prtr.pdf>

<sup>9</sup> <http://www.clcbd.org/document/536.html>

<sup>10</sup> Local Government Division of the Ministry of Local Government, Rural Development & Cooperatives (June 2020). Pro Poor Strategy for Water and Sanitation Sector in Bangladesh (Revised version). Available on: [https://psb.gov.bd/policies/ppse.pdf?fbclid=IwAR2\\_pUb08aCoh8G0RnTJ4bTYC-Mc1apwoDvIXEYlIVd7h44Vhcbp6isWik](https://psb.gov.bd/policies/ppse.pdf?fbclid=IwAR2_pUb08aCoh8G0RnTJ4bTYC-Mc1apwoDvIXEYlIVd7h44Vhcbp6isWik)

<sup>11</sup> [https://www.ircwash.org/sites/default/files/bangladesh\\_pro-poor\\_strategy\\_for\\_water\\_and\\_sanitation\\_sector\\_june\\_2020.pdf](https://www.ircwash.org/sites/default/files/bangladesh_pro-poor_strategy_for_water_and_sanitation_sector_june_2020.pdf)

following the criteria for basic minimum level of service criteria listed in the strategy. Proper selection of households would eventually require service quality monitoring in the respective area.

The National Strategy for Water and Sanitation of 2021<sup>12</sup> has identified different water and sanitation technologies that can be considered as improved according to the JMP ladder. This can be used as the basis for WASH service quality monitoring at local level.

The National Action Plan<sup>13</sup> (NAP) of the Institutional and Regulatory Framework for Faecal Sludge Management of 2020 also exerts some monitoring responsibility for Faecal Sludge Management (FSM) services. According to it, Corporations and Municipalities are the two responsible LGIs to provide FSM services in their respective areas. As a part of that these two LGIs need to form 'FSM Monitoring Cells' to monitor the FSM services. However, the NAP for rural areas leaves no such responsibility to Union Parishads (UPs), rather it guides the UPs to connect with nearby Municipalities with FSM services and leaves the responsibility of FSM service monitoring to those municipalities.

For institutional WASH infrastructure development, there are departments within the Ministry of Education and the Ministry of Primary and Mass Education<sup>14</sup>. The first two look after the WASH infrastructure of primary and secondary/higher secondary schools whereas the latter looks after the WASH infrastructure of health care facilities. However, their responsibility is mainly limited to initial construction and major repairs. Service quality monitoring is not part of their responsibility. There are dedicated health units in all urban Local Government Institutions (City Corporations and Municipalities) as primary health care also falls under their mandate.

The Health Education Bureau under the Ministry of Health & Family Welfare<sup>15</sup> is responsible for hygiene promotion in households of rural areas through local level health services and the Ministry of Environment and Forests is responsible for development of environmental standards and enforcement of water and air quality standards. Finally, the Ministry of Finance assesses funding requests, provides financial resources, and controls its depletion.

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<sup>12</sup> Local Government Division of the Ministry of Local Government, Rural Development & Cooperatives (2021). National Strategy for Water Supply and Sanitation. Revised and Updated Version 2021. Available on: [https://www.psb.gov.bd/policies/nswssren.pdf?fbclid=IwAR1Epe26uNOPpX17a86t8kShjcl2SefQuX07B1Gvo\\_oFSwk771lixOlPQvw](https://www.psb.gov.bd/policies/nswssren.pdf?fbclid=IwAR1Epe26uNOPpX17a86t8kShjcl2SefQuX07B1Gvo_oFSwk771lixOlPQvw)

<sup>13</sup> Local Government Division of the Ministry of Local Government, Rural Development & Cooperatives (March 2020). Implementation of Institutional and Regulatory Framework for Fecal Sludge Management, National Action Plan. Available on: <http://www.lgd.gov.bd/site/publications/e2225c3a-c975-494d-ba87-61c8b0fec13a/NAP-Implementation-of-IRF-FSM--Paurashava--English>

<sup>14</sup> <http://www.eedmoe.gov.bd/>

<sup>15</sup> <http://www.hed.gov.bd/>



### 3 MONITORING PRACTICE AT DIFFERENT LEVELS OF BANGLADESH

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#### 3.1 Department of Public Health Engineering

Service level and service provider monitoring at the local level falls under the responsibility of the Department of Public Health Engineering (DPHE) as it is responsible for Water Supply and Sanitation (WSS) service delivery in small towns and rural areas. The vision of DPHE is “to provide safe drinking water supply and sanitation facilities to the people”. It has a dedicated mission “to increase the capacity of organizations and communities to implement water supply and sanitation facilities for all”<sup>16</sup>. DPHE installs the infrastructure and supports the Local Government Institutions (LGIs) such as Union Parishads, Upazila Parishads and municipalities to operate and maintain these services.

At present no clear mechanism is present to monitor the WASH services and service providers. DPHE collects information as part of their reporting on annual performance agreements (APA). The APA is signed with the Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives which is the line department of DPHE<sup>17</sup>. The report covers service coverage information by capturing the number of new (additional) latrines and handpumps put in place by or with the support of DPHE. Service quality indicators<sup>18</sup> are not monitored as a part of this reporting exercise. Figure 3 below shows a WSS services reporting template of DPHE used at Union Parishad level. The Union Parishad identifies the demand for new handpumps (for community) or ring-slabs (latrines for poor and hard-core poor) and forwards this information to DPHE. DPHE, based on available resources, constructs community handpumps and provides ring-slabs to (hard-core) poor households. However, after installation, there is no system in place to monitor the quality and functionality of the WSS services. Furthermore, till date there is no strong selection system in place on which basis UPs can identify eligible hard-core poor households for these grants. It must be mentioned however that as discussed in section 2, the Pro-Poor Strategy for the Water and Sanitation Sector in Bangladesh does have clear guidelines for the selection of hard-core poor households and a directive to provide 100% subsidy to hard-core poor households for basic water and/or sanitation services. As these guidelines are relatively new they are still to be embraced, operationalised, and implemented by the LGIs.

The responsibility for regular operation and maintenance of handpumps lies with the receiving communities. DPHE has an annual internal reporting system which is expected to provide insight in the number of new handpumps and latrines installed during the year. It should also provide an overview of the cumulative numbers of handpumps, and latrines installed over the years. With the use of this information, the DPHE calculates the coverage. The problem is that it does not take into consideration breakdowns and slippage which may result in lower actual coverage figures.

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<sup>16</sup> <http://www.dphe.gov.bd/site/page/97922e25-71f5-4788-a806-c7e568e894a6/>-

<sup>17</sup> [http://www.dphe.gov.bd/site/page/ba3e8e31-70b5-4db9-b13e-8478f0fe3ffd/Agreement-\(DPHE\)-](http://www.dphe.gov.bd/site/page/ba3e8e31-70b5-4db9-b13e-8478f0fe3ffd/Agreement-(DPHE)-)

<sup>18</sup> For example, those required to establish safely managed services. In order to meet the criteria for a safely managed drinking water service, households must use an improved source that is: i) accessible on premises, ii) available when needed, and iii) free from contamination. In order to meet the criteria for a safely managed sanitation service, people should use improved sanitation facilities (those designed to hygienically separate excreta from human contact) which are not shared with other households, and the excreta produced should either be: i) treated and disposed of in situ, ii) stored temporarily and then emptied and treated off-site, or iii) transported through a sewer with wastewater and then treated off-site.

**DEPARTMENT OF PUBLIC HEALTH ENGINEERING**  
Upazilawise Water Source Status & Coverage-June'2020

Sl.No. of pabila	Union	Projected Rural Population	Type of Water Sources																			Total Water Source	* No. of Arsenic Cont. Pabil	No. of Arsenic safe Public WP Running	Covera ge (person per Water Source		
			Shallow (Shal)						Deep		Tara Deep				SF/LC		Ringwell		RWHS		Running					Ch.Up	Total
			6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23							
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
fgung	Badarkhali	27511							435	174												435	174	609		435	63
	Gourichanna	29058							493	215												493	215	708		493	59
	Fuljuri	13865							297	127												297	127	424		297	47
	Kcwrabunia	18642							301	108												301	108	409		301	62
	Ayia	20771							277	93												277	93	370		277	75
	Burirchar	31019							402	176												402	176	578		402	77
	Dhalua	26985							358	170												358	170	528		358	75
	Barguna	21628							421	204												421	204	625		421	51
	Mbalitali	30391							312	160										15		327	160	487		327	93
	Naltona	20690							170	132				50	2	38				72		244	220	464		244	85
		240560	0	0	0	0	0	0	3466	1559	0	0	0	50	2	38	0	0	0	87	0	3555	1647	5202			

Figure 3: Upazila reporting template of DPHE (Collected by – DORP/IRCWASH)

3.2 Urban Local Government Institutes (City Corporations and Municipalities)

According to the Local Government Act, operation and maintenance of the urban WASH services falls under the responsibility of City Corporations and Municipalities (except for the four cities where separate Sanitation and Sewerage Authorities exist). DPHE constructs piped water networks and water treatment systems and then hands them over to the Municipalities. The Water Departments of the Municipalities (supported by DPHE) take care of the operation and maintenance of these systems. However, the responsibility for asset and service monitoring is not clearly defined in the regulations. It is assumed that service level monitoring is the responsibility of LGIs. The elected LGIs are struggling with this task and often lack the required capacities (and human and or financial resources). As different reporting templates have been found in different Municipalities it can be concluded that there is no standard reporting template. Figure 4 below provides an example of such a template from Patharghata (Barguna) Municipality.

২০১১ সালের আদম শুমারী অনুযায়ী পাথরঘাটা পৌরসভার জনসংখ্যা এবং ২০২১ সালে বিভিন্ন সংস্থার জরিপে পানি, স্যানিটেশন হাইজিন এর বর্তমান অবস্থা

তারিখ : ১২/০১/২০২১ইং

পৌরসভার নাম	মোট খানা	জনসংখ্যা			শিক্ষার হার	পানি	স্যানিটেশন	হাইজিন	মন্তব্য
		মোট জনসংখ্যা	পুরুষ	মহিলা					
পাথরঘাটা পৌরসভা	৪৮৬৭	১৭১১৭	৮৭৯১	৮৩২৬	৭০%	৯৫%	৭৮%	-	

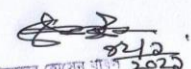
  
 মো: মোসাক্কেব হোসেন  
 কাজিলার-০৭ নং ওয়ার্ড  
 পাথরঘাটা পৌরসভা, বগুড়া  
 স্মারক: ০১৭১৩০৪৫১৫৯

Figure 4: Municipality WASH reporting template (Collected by- DORP/IRCWASH)

**Table 1: Translation of figure 3**

Population of Patharghata Municipality according to 2011 census and Water, Sanitation and Hygiene Status of the municipality according to survey of different Organisations/NGOs

Date: 12-01-2021

Municipality name	Number of HHs	Population			Education	Water	Sanitation	Hygiene	Remarks
		Total	Male	Female					
Patharghata	4867	17117	8791	8326	70%	95%	78%	-	-

It can be seen from the DPHE reporting system that it reports the newly constructed water and sanitation facilities whereas the LGI reporting template reports on the overall water, sanitation, and hygiene coverage. Both reporting systems lack provision for real-time monitoring for service level indicators. The Additional Chief Engineer of DPHE, Tushar Mohan Sadhu Kha<sup>19</sup>, confirmed that they monitor ground water levels at periodic basis only. Beside that Government has a department named Implementation Monitoring and Evaluation Department (IMED) which monitors the progress of ongoing projects. It includes the WASH projects of DPHE also. However, the focus of IMED monitoring is transparency and accountability assurance of project work. But regular service level monitoring is not happening since they lack manpower and other resources (e.g., vehicles). For service level information they rely on LGI information sources.

### 3.3 DPHE National MIS system (NaMIS)

DPHE carried out a project with support from JICA named 'Improvement of Comprehensive Management Capacity of DPHE on Water Supply'. One of the key objectives of the project was to establish a framework for monitoring the operational status and water quality of installed water supply facilities. As a part of that initiative, DPHE established a national level Management and Information System. However, the project failed to make institutional arrangements to collect data from the local level. Although the project is now concluded, the national MIS for WASH did not become functional. At present DPHE publishes annual reports that accumulate the reports from subnational level<sup>20</sup>. These reports combine information on groundwater quality and newly constructed WASH infrastructure information but lacks overall service quality information.

### 3.4 DPHE FS and SWM Dashboard

DPHE has developed a Faecal Sludge (FS) and Solid Waste Management (SWM) Dashboard as part of its effort to establish a Citywide Inclusive Sanitation (CWIS) information system. Developed with support from the Bill and Melinda Gates Foundation, the dashboard contains sanitation and FSM service information for 53 municipalities and 8 city corporations. The sanitation indicators of this dashboard follow the JMP sanitation ladder and thus can be considered as service level indicators. It has planned to collect information from all 330 municipalities of Bangladesh. Sharmistha Debnath, Executive Engineer from the Feasibility and Design Circle confirmed that DPHE is planning to include

<sup>19</sup> Interviewed as a part of the WAI WASH SDG mid-term review

<sup>20</sup> [http://www.dphe.gov.bd/site/view/annual\\_reports/](http://www.dphe.gov.bd/site/view/annual_reports/)

water indicators for the remaining municipalities. However, at present it has no plan to extend the monitoring to union level (rural areas).



Figure 5: DPHE FS & SWM Dashboard (Source: sanboard.gov.bd)

### 3.5 Directorate General of Health Services Health Monitoring

The Bangladesh Health Service Department has an army of community field workers spread across the Union Parishads of Bangladesh. They share monthly statistics of their working area to the Upazila (sub-district) Health Office on a monthly basis. The Health Departments are expected to publish yearly Upazila Health Bulletin Reports based on the collected information<sup>21</sup>. The health indicators include two WASH indicators. They are

- Coverage of households having access to safe drinking water (in %)
- Coverage of households having access to sanitary latrines (in %)

However, the information collected on these two indicators focus on coverage only, not on the service levels. As mentioned above, the information for these two indicators is collected by the rural health workers. It is not clear if they follow an indicator/ladder to categorize safe drinking water or sanitary latrine. In fact, the Directorate General of Health Services (DGHS) of the Ministry of Health and Family Welfare publishes these bulletins with a disclaimer: *Due to lack of statistical knowledge and skills of concerned local staffs, few health bulletins may show incorrect information and data. Please consider such limitation when interpreting the information or data. You may bring such mistakes to the attention of the concerned authority along with helping them to improve.* Figure 6 shows an example from the 2016 Health Bulletin of Savar Upazila

<sup>21</sup> <https://app.dghs.gov.bd/localhealthBulletin2016/publish/>

MORTALITY PROFILE			
Top (5) causes of death between ages 30 & 70 years			
Total No. of cases reviewed for causes of death (30 to 70 years)			4
No. ICD-10 Code	Disease name	No. of Cases	%
1 V87	V87 Traffic accident of specified type but victim's mode of transport unknown	2	50.0
2 I21	I21 Acute myocardial infarction	1	25.0
3 R570	R570 Cardiogenic shock	1	25.0
4			0.0
5			0.0
WATER & SANITATION IN THE UPAZILA			
Indicators	Upazila %		
Coverage of households having access to safe drinking water (%)	99.0		
Coverage of households having access to sanitary latrines (%)	99.0		

Figure 6: Health Bulletin report 2016, Savar

### 3.6 Bangladesh Bureau of Statistics (BBS) survey

The Bangladesh Multiple Indicator Cluster Surveys (MICS) are carried out by the Bangladesh Bureau of Statistics (BBS) in collaboration with UNICEF Bangladesh, as part of the Global MICS Programme. During data collection, UNFPA<sup>22</sup> Bangladesh also provides financial resources to undertake quality assurance visits. MICS provides estimates at national level with disaggregated data by division, location, sex, age, education, and wealth quintiles. The most recent survey was conducted in 2019<sup>23</sup>. For the first time, the survey included the assessment of the quality of drinking water for arsenic and microbiological (E.coli) contamination levels.

BBS is also responsible for the Demographic and Health Surveys (DHS). The most recent DHS was carried out in 2017 and 2018 by the National Institute of Population Research and Training, Medical Education and Family Welfare Division of the Ministry of Health and Family Welfare.<sup>24</sup> Drinking water sources and treatment and sanitation are important components of the DHS and results can be found in Chapter 2 on Housing Characteristics and Household Population.

In 2018, BBS carried out the National Hygiene Survey which incorporated hygiene in the national survey mechanism for the first time. The National Hygiene Survey 2018<sup>25</sup> report presents the findings from the data collected across five different components: households, schools, health care facilities, restaurants, and food vendors with the objective to allow monitoring of the progress of hygiene related indicators of the SDGs, Five Year Plan, Vision 2021, and Vision 2041.

### 3.7 NGO and project-based monitoring

Different NGOs have established their own project-oriented MIS systems. Notable examples are the BRAC WASH Programme (2009-2015) monitoring system which used both Qualitative Information

<sup>22</sup> The United National Population Fund (UNFPA)

<sup>23</sup> Bangladesh Bureau of Statistics (BBS) and UNICEF Bangladesh (2019). *Progotir Pathey, Bangladesh Multiple Indicator Cluster Survey 2019, Survey Findings Report*. Available on: [https://www.unicef.org/bangladesh/media/3281/file/Bangladesh%202019%20MICS%20Report\\_English.pdf](https://www.unicef.org/bangladesh/media/3281/file/Bangladesh%202019%20MICS%20Report_English.pdf)

<sup>24</sup> National Institute of Population Research and Training (NIPORT), and ICF (2020). *Bangladesh Demographic and Health Survey 2017-18*. Available on: <https://dhsprogram.com/pubs/pdf/FR344/FR344.pdf>

<sup>25</sup> Demography and Health Wing Bangladesh Bureau of Statistics and Informatics Division Ministry of Planning (December 2020). *National Hygiene Survey 2018*. Available on: [https://www.wateraid.org/bd/sites/g/files/jkxooof236/files/2021-01/National%20Hygiene%20Survey%202018\\_Bangladesh.pdf](https://www.wateraid.org/bd/sites/g/files/jkxooof236/files/2021-01/National%20Hygiene%20Survey%202018_Bangladesh.pdf)

System (QIS) and MIS system indicators with support from IRCWASH<sup>26</sup>. Project MIS should provide a picture of how targets are being met and provides inputs for planning and corrective action. QIS type of monitoring systems can help to monitor or measure non-quantitative information such as behavioural change (e.g., whether people use latrines and whether they practise handwashing) and the performance of village WASH committees.

SNV in its urban sanitation programme has developed an Integrated Municipal Information System (IMIS). IMIS is a GIS web-based information system integrating spatial data on buildings, roads, drains and onsite human excreta containment systems (septic tanks and pit latrines). IMIS was originally designed to help municipalities and service providers to effectively manage Faecal Sludge Management (FSM) services. However, as the holding IDs (unique ID for each building/residence of the town) are linked, it helps the City Authorities to integrate different municipal functionalities and services (e.g., water, holding tax, solid waste)<sup>27</sup>.

WAI Bangladesh’s local partners like DORP, SLOPB and Uttaran are practicing social mapping to collect local community level WASH and WRM information which are also a source for WASH service level information<sup>28</sup>. However, these efforts often end with the end of a project or programme. Furthermore, these project-based initiatives are often not linked to national databases.

### 3.8 SDG Implementation Review and SDG Tracker

An SDG Implementation Review (SIR) mechanism has been established under the Honourable Prime Minister’s office. SIR is responsible for facilitating the development of National Action Plans for each goal including SDG 6 and complete data gap analysis against the indicators that are used to track progress across the different SDG targets. It has established a monitoring and evaluation framework for SDGs that will facilitate the tracking of follow-up on the Government’s priorities and commitments. A set of 39 indicators has been selected under the instructions of SDG Working Committee of The Prime Minister’s Office. Under this indicators, some of the indicators are selected from the global Sustainable Development Goals and some of the indicators are selected after modification on Bangladesh perspective. For SDG 6, SDG tracker has two target indicators, 1. Ensure 100% population using safely managed drinking water services (NPT 17) and 2. Ensure 100% population using safely managed sanitation services (NPT 18). However, the SDG tracker has no internal data collection system. It doesn’t collect primary data and uses different secondary sources. For WASH indicators, it collects data from WHO, MICS and BBS sources which have been described above. Thus no regular service monitoring data is reflected in the SDG tracker, as we can see in figure 7.

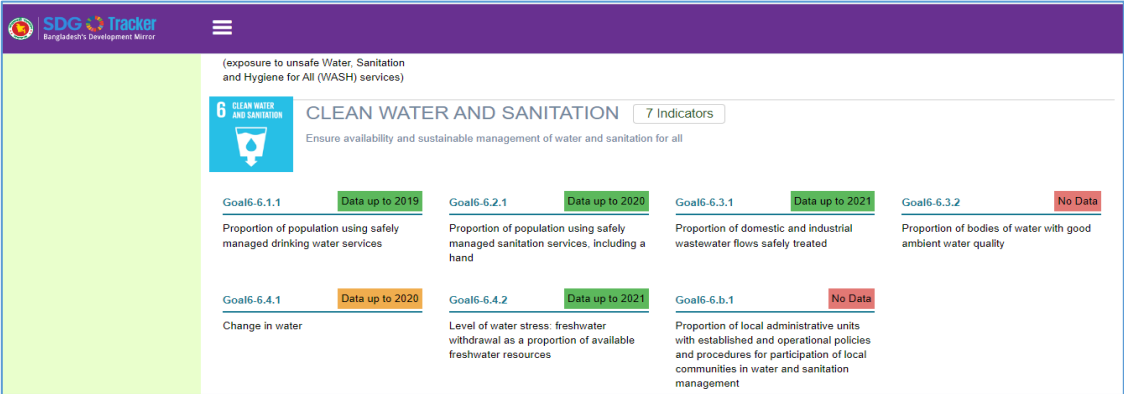


Figure 7: SDG tracker dashboard for clean water and sanitation indicators

26 <https://www.ircwash.org/news/monitoring-scale-brac-wash>

27 <https://snv.org/update/imis-improving-municipal-led-fsm-service-efficiency-and-accountability>

28 <https://washalliance.akvoapp.org/en/project/6892/update/29595/>

## 4 KEY FINDINGS AND RECOMMENDATIONS

In general, the assessment gives the impression that different organisations are monitoring different components of WASH services in different administrative areas of Bangladesh. However, a triangulation of the existing monitoring systems leads to two specific findings. They are:

1. Despite different organisations monitoring are covering different aspects of WASH, none of them is monitoring and reporting on service level information related to WASH services. Only the DPHE FS and SWM Dashboard collects sanitation service level information. It is yet not a regular monitoring system, nor does it collect information from rural areas. The MICS survey looks at all WASH service level indicators, but it is a survey (which is limited to district level data) and not a regular monitoring system.
2. There were different efforts to monitor WASH services by Government and NGOs (e.g., NaMIS, IMIS, BRAC QIS, etc) however none of them have yet been institutionalized fully to collect and process WASH service level data from different administrative areas on a regular basis.

**Table 2: Service level data availability**

Monitoring systems	Drinking water monitoring		Sanitation monitoring		Hygiene monitoring	
	Urban (City Corporation and Municipality)	Rural (Upazila and Union)	Urban (City Corporation and Municipality)	Rural (Upazila and Union)	Urban (City Corporation and Municipality)	Rural (Upazila and Union)
DPHE regular reporting		Coverage information				
LGI reporting system	Coverage information		Coverage information		Coverage information	
DPHE FS and SWM Dashboard			Service level information			
DGHS Health Monitoring		Coverage information		Coverage information		
BBS MICS survey	District level service information		District level service information		District level service information	

Table 2 above identifies the gap in WASH service monitoring in Bangladesh. There are several monitoring systems that collect coverage information. However, only the FS and SWM dashboard collects service level information for sanitation. No service level information is available for water and hygiene. DPHE is planning to include water indicators in the dashboard and also to update the dashboard with data from all the 330 Municipalities. Even if DPHE succeeds in doing so there will be no WASH service level data available for the Union Parishads.

Based on the observations of the assessment, three (3) key recommendations have been identified.

- 1) **Specific service level indicators need to be selected based on the local and national level needs.** At present national level WASH service planning exists but local level (City Corporations, Municipalities, and Union Parishads) JMP indicator based WASH planning is absent. Ideally WASH planning (and monitoring and reporting) should be aligned with the JMP service ladders. The Pro-Poor Strategy for Water and Sanitation Section in Bangladesh (see annex 2) and The National Action Plan of the Institutional and Regulatory Framework for Faecal Sludge Management (NAP-IRF), both have emphasized the need for local level planning and monitoring. The National Water and Sanitation Strategy has made attempt to align the existing WASH facilities according to JMP ladder (see annex 3). Following that alignment, DPHE should be in a position to develop a uniform monitoring matrix for use by LGIs.

- 2) **Institutional capacity needs to be built at local level so that WASH service level data can be collected at this level on a periodic basis.** It may require additional resources and institutional arrangements. Union Parishads should get the highest priority as at present no service level information is available for rural areas. The NAP-IRF has particularly emphasized the need for local level (City Corporations and Municipalities) level monitoring and proposed institutional structure for it (see annex 4). However, a provision for institutional change for monitoring WASH services in rural areas is not included in the NAP-IRF. Following the institutional change proposed in the NAP-IRF for City Corporations and Municipalities, a similar change can be proposed for rural areas. As the National Institute of Local Government (NILG) is mandated for capacity building of the Union Parishads it could play an instrumental role.
- 3) **Different monitoring efforts should be integrated into one unified WASH monitoring and information system.** That would ensure value for money and reduce confusion as all the data will be available at one source. Initially it can be comprised of the Health Bulletin, BBS, NaMIS, FS & SWM dashboard and SDG Tracker. DPHE should take up the responsibility to integrate information from these sources as it is already working with the FS SWM dashboard. It can also look at different NGO/project led monitoring systems at local level (e.g., social mapping based service monitoring) to develop a system for primary data collection at the lowest levels.

WASH service quality monitoring can have different levels of effort. Table 3 categories these different levels. At present different monitoring channels exists (table 2) however most of them are limited to measure the one time access of households to WASH services (level 1). Level 2 is to measure the WASH service level of the households following JMP indicators. At level 3, along with the service level, wealth disaggregated data is collected. At level 4 which is more ambitious, disaggregated service data can be collected based on gender, households with persons of disability, hard-to-reach areas etc.

**Table 3: Different levels of effort for WASH service monitoring**

Category	Description
Level 0	No service data available
Level 1	Access of households to WASH services only (no categorisation; basically yes/no)
Level 2	WASH service levels for households following JMP indicators (ladders)
Level 3	WASH service levels for households following JMP indicators and segregated as per wealth information
Level 4	WASH service level for households following JMP indicators and segregated as per wealth, gender, hard-to-reach areas, and households with persons of disability information

Since there is no national structure for WASH service monitoring at present, the WASH SDG programme together with other sector stakeholders should lobby with DPHE to consider the most appropriate level. Level 3 would provide the information required to successfully implement the June 2020 Pro Poor Strategy for Water and Sanitation Sector in Bangladesh. Ideally as many as possible disaggregated data as suggested in level 4 are incorporated into the new local level monitoring system. However, as this will make monitoring a complex and thus expensive exercise it may make sense to limit the level of disaggregated data collection and instead obtain that information from other monitoring systems such as MICS and DHS.

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## ANNEX I: KEY PERSONS INTERVIEWED (IN ALPHABETICAL ORDER)

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1. Alok Kumar Majumder, Country Coordination WAI Bangladesh
2. Md. Abul Kalam Azad, Secretary, Amtali Municipality, Barguna (Interviewed as a part of WASH SDG WAI MTR)
3. Md. Shahidul Islam, WASH Advisor, SNV Bangladesh (Interviewed as a part of WASH SDG WAI MTR)
4. Mst. Farida Yasmin, Councillor, Amtali Municipality (Interviewed as a part of WASH SDG WAI MTR)
5. Mirza Nazmul Hasan, Executive Engineer, DPHE, Barguna
6. Proshanto Pal, Sub-assistant Engineer, DPHE, Kalaroa (Interviewed as a part of WASH SDG WAI MTR)
7. Sharmistha Debnath, Feasibility Study and Design Circle, DPHE
8. Tushar Mohon Sadhu Kha, Additional Chief Engineer, DPHE (interviewed as a part of WASH SDG WAI MTR)

## ANNEX 2: ROLE OF MONITORING IN THE PRO-POOR STRATEGY 2020

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- 8.1 Union Parishad/Pourasava/City Corporation, in their own way, will take necessary initiatives to monitor and evaluate the progress of bringing the hardcore poor households under water supply and sanitation services. In case of Union Parishad, the Ward meeting should be held on regular basis. The written resolution of the meeting should be submitted to the Secretary of Union Parishad with special mention about the water supply and sanitation services, management of subsidy and the detailed process of selection of the hardcore poor households. It should be mentioned explicitly in the resolution who and what kind of services and how much subsidy have received and who would be provided services next. Moreover, steps should also be taken to host the information in the Union Parishad website. Similarly, Pourasavas and City Corporations, in their own way, will monitor and evaluate whether the hardcore poor and the low-income households are getting access to the water supply and sanitation services or not.
- 8.2 Union Parishad/Pourasava/City Corporation will take initiative to organise digital monitoring mechanism gradually in case of water supply and sanitation services. They may use their website for this, if necessary. Steps will also be taken to invite the opinion of the community through directly or by using website about the quality of services which will ensure good governance and accountability in the service delivery system. Local Government Division will made necessary supervision in this regard.

## ANNEX 3: IMPROVED WATER AND SANITATION FACILITIES

The following categories of sanitation technologies (Improved and Unimproved) has been extracted from MICS 2019 report

Improved sanitation facility	Unimproved sanitation facility
Flush/Pour flush (i. Piped sewer system, ii. Septic tank, iii. Pit latrine – single pit or twin pit)	Open drain
Ventilated improved pit latrine	Pit latrine without slab/ open pit
Pit latrine with slab	Hanging toilet/ latrine
Composting toilet	Open defecation (no facility, bush, field)

The following categories of water technologies (Improved and Unimproved) has been extracted from MICS 2109 report

Improved sanitation facility	Unimproved sanitation facility
Piped water (i. Into dwelling, ii. Into yard/plot, iii. To neighbour, iv. Public tap/ standpipe)	Unprotected well
Tube-well/bore-hole	Unprotected spring
Protected well	Surface water
Protected spring	
Rain-water collection	
Cart with small tank	
Water Kiosk	
Bottled water	
Sachet water	

Source: Local Government Division of the Ministry of Local Government, Rural Development & Cooperatives (2021). National Strategy for Water Supply and Sanitation. Revised and Updated Version 2021.

Available on:

[https://www.psb.gov.bd/policies/nswssren.pdf?fbclid=IwAR1Epe26uNOPpX17a86t8kShjcl2SefQuX07B1Gvo\\_oFSwk771IixOlP0vw](https://www.psb.gov.bd/policies/nswssren.pdf?fbclid=IwAR1Epe26uNOPpX17a86t8kShjcl2SefQuX07B1Gvo_oFSwk771IixOlP0vw)

### 2.6 Capacity Building

#### 2.6.1 National Level

At the national level, as part of building capacity of sector professionals, following actions should be taken:

- I. Develop a national standard/guideline for implementation of FSM at field level which will be led by the FSM Coordination Committee. These standards/guidelines will cover full FSM service chain and refer to different policies, acts (e.g., ECR 1997) and codes (e.g., Bangladesh National Building Code) that can be used as guidance for proper design and construction of sanitation facilities in buildings (both in new constructions and existing buildings), emptying, transportation and disposal of sewage/wastewater/garbage, construction, operation and maintenance of fecal sludge treatment facilities, quality control/standardization of treated products/by-products, and protocol for securing license for emptying and transportation, using/marketing of compost/organic fertilizers or other treatment products.
- II. Develop training modules on FSM implementation considering each aspect of FSM service chain and the national standards/guidelines. To develop the training modules, relevant national/international research/training organizations/institutions/universities, development partners, I/NGOs and the private sector may collaborate and share information.
- III. Arrange training programs for all City Corporation Councillors, officials and staffs, and local level experts/representatives from different stakeholder organizations including WASA, City Development Authority, etc. These training programs could be organized by specialized training institutions/experts.
- IV. The MoLGRD&C will initiate setting up Unit/Division for FSM in the City Corporation organogram, for effective delivery and monitoring of FSM services. Some of the City Corporations have already developed organogram for waste management including sanitation section, which could be considered by other City Corporations. Annexure-I presents a tentative organizational set up for waste management at City Corporation. For the interim period, City Corporations will use its existing relevant divisions/departments (with appropriate rearrangement) for implementation of sanitation/FSM services under the leadership of Mayor.

National Action Plan of the Institutional Regulatory Framework, City Corporations

Source: <https://www.psb.gov.bd/policies/iirffsme.pdf>

