

# Baseline Report on “Mirpur Urban Community Empowerment Project on Waste and Sanitation Management (MUCEP) - Dhaka”

***Submitted to***



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## ABBREVIATION

BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi Taka
BMK	Balur Math/Kalshi
BPB	Black-P Basti
CB	Ceramic Basti
CC	City Corporation
DCI	Data Collection Instrument
DNCC	Dhaka North City Corporation
DPHE	Department of Public Health Engineering
DSM	Drainage System and Management
FGD	Focus Group Discussion
HDRC	Human Development Research Centre
HH	Household
JMP	Joint Monitoring Programme
KB	Kurmitula Bihari
KII	Key Informant Interview
KKB	Kalapani/Kochukhet Bosti
KNC	Kurmitula Nuton Camp
KPCG	Kurmitola Purb Camp & Gudhara
MHM	Menstrual Hygiene Management
NGO	Non-government Organization
PLW	Pregnant and Lactating Women
SDG	Sustainable Development Goal
ShG	Shahparan Gagur
SMC	School Management Committee
SWM	Solid Waste Management
TB	Takerbari
TMB	Tota Mia Basti
WASH	Water, Sanitation, and Hygiene
WatSan	Water and Sanitation
WinS	WASH in School
WVB	World Vision Bangladesh

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## EXECUTIVE SUMMARY

### Household Characteristics and socio-economic status

According to survey findings, the proportion of female-headed households is 2.1 percent. It is observable that the average household size is 4.2, which is slightly higher than the national estimate (4.06). The sex ratio of a male against a female is 1.10. The average rate of disability is 1.2 percent, where the national estimate is 6.94 percent, according to the HIES Survey 2016. Lastly, it is notable that around 53.3 percent of the surveyed households have under-5 children. The findings depict that the portion of children under 10 is 28.2 percent, while percent for children aged 10-18 years is 17.3. A considerable part of household members (18.9%) is aged between 19-27 years, while 17.7 percent are from the age of 28-36 years.

Nearly one-third of the members (28.8%) have primary education level while the other 19.6 percent members have the experience of pre-primary. Most importantly, secondary schooling is the highest observable education level attained by more than one-fifth (22.7) of the surveyed household members. A greater part of them (20.5%) are housewives, while 17.9 percent are students. Among all of the employed persons, around 8.4 percent are daily laborers while other mentionable occupations are Handicraft/Cottage industry (5.6%), drivers (5.2%), govt. /non-govt. employee (7.5%), small or medium business (4.7%), etc.

According to the findings, the average monthly per capita income is 3532 BDT. And the average monthly household income is 14,133 BDT. The monthly per capita expenditure is 2,445 BDT, while the average monthly household expenditure is 9,607 BDT. The average monthly household WASH cost is 495.8 BDT, and this share is only 5.1 percent of the total monthly expenditure. It is to mention here that 33 percent of members live below the lower poverty line, while 65 percent live below the upper poverty line.

### Access to Sanitation

Only 17 percent of households have access to improved latrines, which are not shared with other household members, while 20.2 percent have the same kind facility which is shared with other household members. On the contrary, as many as 62.1 percent have access to an unimproved sanitation facility. But, a minimum amount of members (0.7%) still are used to open defecation, meaning that they do not have access to a minimum sanitation facility. Only 40.7 percent of households opine that their latrines have the facility of supportive elements for the use of physically challenged persons like older men and women, persons with disabilities, children, and pregnant women, while other 59.3 percent do not have this facility. A high number of household members (83.6%) have reported that they share their sanitation facilities with other household members. The average number of families for sharing the same toilet is about 56, while the average number of individuals is approximately 179. Findings remind that more than half of the latrines (51.2%) are connected to open spaces like or canal or pond. By the way, around 30 percent have taken self-initiatives for fund management for repair, maintenance, and renovation of the latrines when the other fund management sources for this task are house owners (29.8%), NGOs (14%), users and WASH committee (9.2%).

It is to mention here that a high number of slum latrines (51.2%) are linked with open spaces like pond or canal or ditches and around 17.9 percent with the sewerage system. Also, a few of them (1.7%) are merged with existing drains. According to the respondents who have witnessed the evacuation of latrine pits, the rented service providers (28.7%) have safely evacuated the latrine pits. But the concerning matter is that the unhygienic, acrid, and dirty excreta was placed to uncovered pit or open ground (13.8%) and water body or pond or ditches (27.7%).

## Access to Hygiene Facility

According to SDG service level classification, less than one-third (27.4%) households have basic service facilities with soaps and water, and the rest of them (13.3%) having limited service level without soap and water. And a good many households (59.3%) have no facility for handwashing. The study findings have already revealed that only 186 households (40.7%) have a facility for handwashing place; out of them, a great many of families (88.7%) have handwashing agents like only water (13.9%), soap (60.6%), soap dust or soapy water (19.4%) available. According to the reporting of the respondents, 96.7 percent of the surveyed respondents know about the proper time of every occasion for handwashing. As reported, the highest portion of respondents (99.3%) have knowledge about post-defecation handwashing with soap. And other mentionable reported occasions for handwashing knowledge were before eating (85.1%), after rinsing a child's excreta (51.4%), before cooking (44.6%), before feeding a child (41.2%).

As reported by the respondents, a good many of them (63.8%) always practice handwashing with soap just after defecation. The other informed occasions for continuous handwashing practice with soap are after rinsing child's excreta (57.5%), before eating (47.5%), before cooking (27.1%), before child feeding (41.2%). It is to notify here that there is a massive gap between the level of handwashing knowledge and practices followed by the respondents. Additionally, the behavior of handwashing practice among the women includes 63.8 percent for after defecation, 48 percent for before eating, 27.3 percent for before cooking, 58 percent for after rinsing child's excreta and 37.3 percent for before feeding child

As per reporting, a large portion of households (61.1%) have children aged between 5-17 years, and It is a matter of concern that only 47 percent of the children used to practice handwashing with soap before eating. And 61.6 percent of these children usually always do it after defecation as reported.

## Solid Waste Management (SWM)

Around 66.1 percent of households are currently used to storing home-produced garbage as per our findings. The results also show that more than one-third of them (39.7%) store garbage in a bag keeping in a bucket or box while other 32.5 percent store it in a bag keeping in a selected place. A few of them (16.6%) store garbage in a bucket directly, and the rest of them (10.9%) store it in a selected open place. Just before dumping the household waste to the dustbin or trash service, more than half of the households (55.8%) like to separate the family produced garbage in different categories like organic and inorganic materials (40.8%), reusable materials (32.9%), and the materials with resale value (49.4%). According to our findings, a vast portion of the household (89.7%) know about making a profit by selling organic or inorganic materials. In the meantime, more than half of the households (55.9%) used to sell plastic or metallic materials, and 16.8 percent keep these materials for further use.

The study has already revealed that only 128 out of 457 households (only 26%) have the facility for public or private trash service. City Corporation (76.6%) mostly plays an active role in managing these trash services, while the WASH committee (18.8%) has a contribution to this management. A non-negligible portion of NGOs (3.9%) also have a few contributions to this arrangement. And the average amount of money spent on this service is about 48 BDT.

## **Drainage System and Management (DSM)**

Anyhow, most of the households (88%) are lying within the coverage of the drainage system. But, according to our observational findings, the drain is not well cleaned, covered, with running water, crack-free, unlocked by hard materials, insects-free, and mud-free as 55 percent of households have confirmed the availability of water and dirt borne insects within the drain. Besides this, the other informed problems are- cracked drain (53%), locked by hard materials (48.5%), logged by dirty water and mud (46.8%), and open (44%). The burning problem is that according to the observational findings, around 76.6 percent of drains are connected to any open pond directly when only 20.9 percent is linked with the sewerage system.

## **Menstrual Hygiene Management (MHM)**

Most of the community latrines are not suitable for MHM as more than two-thirds of the community women (69.8%) have reported it. The most reported reasons for it are the absence of dustbin or facility for disposal of MHM materials (76.2%) and shortage of enough space within the latrines (72.2%). And the other causes are the shortage of privacy (27.3%), lack of time for MHM because of fewer latrines in number, and shortage of enough light (25.1%) in the latrines. On the contrary, a high number of the women (77.4%) like to use the household room for MHM while the other 36 percent anyhow manage the MHM within the latrines. And a few of them (2.2%) have the opportunity to use their own or room-attached washrooms. By the way, a good number of women (63.1%) use reusable cloth, which is higher than the use of sanitary napkin (36%), as depicted in figure 4.14. About 95.1 percent reported that they used to wash reusable cloths with water and soap. But the main concerning fact is that a great many women (79.8%) get their reusable MHM materials by hidden dry without the direct sunlight, which is not hygienic at all.

## **Diseases incidence among Household Members**

Within the last three months, around 62.6 percent of households have suffered from any diseases. The average number of people suffered from any kind of disease is 1.49 within the households. Finding suggests that a good portion of members (61.6%) have suffered from either fever or jaundice or typhoid within the last three months. Besides this, a few of them (8.7%) have also suffered from Dysentery, diarrhea, and Cholera. The study findings show that more than half of the community people (51.3%) identify their diseases by themselves without a diagnosis from any qualified or non-qualified doctors. Additionally, only 13.6 percent go through lab tests, and 16.2 percent visit any eligible or MBBS doctor for the identification of their diseases. A mentionable tiny portion of these people (18.1%) also visits any quack, which is higher than the proportion of lab tests or visit MBBS or medical doctors. But as reported, most of them (95.3%) receive health care services while a good many of them (64.4%) receive this care from any pharmacy, which is undeniably higher than receiving health care service from MBBS doctor (19%) or hospital/clinic (18.5%). Most of the portion (70%) who did not receive any medical care, think that it is not necessary while 20 percent for Financial insolvency

## **Availability and responsibilities of WASH Committee**

Only a few households (17.9%) can address the availability of the WASH committee within the surveyed areas, while 19 percent are not sure whether this committee exists or not. But according to the reporting of a great many persons (63%), the WASH committee is not available within slums. Less than half of households (43.9%) have reported that they have definite roles to perform while 19.5 percent for no exact roles and responsibilities. And more than one-third of them (36.6%) do not know whether they have any definite roles or not.

It is to mention here that according to the study assessment, eight out of ten slums have available WASH management committee. However, most of them (Seven WASH Committees) are organizationally weak or not fully functional as they are not capable of performing necessary activities or solving problems important for slum dwellers. Additionally, it is also observable that they sometimes arranged meetings and tried to take initiatives irregularly (there is a lack of appropriate planning) but fully inadequate in comparison with the needs for slum development. Lastly, the study has also revealed that two slums have no WASH management committee.

### **WASH in School (Wins)**

According to the survey findings, 17 out of 20 schools have drinking water sources. Water sources include tap or piped water (5), motor water through the supply (4), deep tube-well (4), and filter water (3) the number of users per water source is about 368 students. Three schools have no source for safe drinking water. And the students of other schools without drinking water sources, carry water from home. All the water sources are functional for round the clock. All the schools have functional toilet facilities, and all toilets are flush or pour-flush toilets connected to a sewer system/Septic tank. Only eight schools have single sex-based toilets, and user per toilet is 132 students.

Nine schools have separate handwashing places, and eight of them have a basin with supply water while one has supply water without basin. Handwashing materials like Soap was available within five schools while two for liquid soap. Additionally, two schools had no handwashing materials except available water.

MHM materials as the sanitary napkin are available in only two schools, and students need not pay for this as reported by the school authority. If any female student faces any problem regarding menstruation, she gets permission to leave the schools instantly. Further, the female students of five schools carry these materials from home, and other students manage it after going back home. It is to mention here that only three schools have selected MHM teachers, and all of them have training.

WASH committee is available within only three schools, but two of them are active or functional about WASH development and inspection. As reported, school Bridget is available within seven schools, but only three school-Bridget have some duties about WASH management though they have no specific duties about WASH inspection.

WASH teacher is available in only one school. According to the reporting of the school authorities, most of the school-teachers discuss WASH issues within the class once in a week, while three schools for daily, two schools for once in a month, one school for once within two weeks.

### **Conclusion**

The baseline status suggests that a big part of the slum people are still in shortage of sanitation and hygiene facilities, and most of the existing facilities currently they have are not well maintained or safely managed. More than three-fourth of the slum people do not have the facility of solid waste management chain or trash service. On the contrary, almost all the existing drains are neither well maintained nor safely managed as these drains have a crack, waterlogging problem, are locked by hard materials without running water, and mostly connected to the open pond. Additionally, the use of sanitary napkin is still too low among slum women, which is essential for safe MHM management. Like the slum, the surveyed schools need many WASH supports.



### Outcome Indicators

Outcomes	Outcome Indicators	Baseline
Outcome 1	Strengthen community-based waste disposal systems in selected slums under DNCC	
	[1-1] Proportion of households that have effective options for solid waste disposal	<ul style="list-style-type: none"> <li>• 26% of households have the option for solid waste disposal</li> </ul>
	[1-2] Proportion of functional WASH and Waste Management committee	<ul style="list-style-type: none"> <li>• 8, out of 10 Slums, have a WASH management committee</li> <li>• 1 is fully functional</li> <li>• No waste management Committee</li> </ul>
Outcome 2	Women and children in the project communities practice improved hygiene and sanitation (including MHM)	
	[2-1] Proportion of women and children using improved sanitation facilities (including MHM) in the project communities	<ul style="list-style-type: none"> <li>• 34.6% women use improved sanitation</li> <li>• 31.5% children use improved sanitation</li> <li>• 36% women use sanitary napkin for MHM management</li> <li>• 63.1% use reusable cloths for MHM management</li> </ul>
	[2-2] Proportion of women and children practicing 5 critical handwashing behaviors in the project communities*	<p><b>Women with handwashing practice with soap</b></p> <ul style="list-style-type: none"> <li>• 63.8% for after defecation</li> <li>• 48% for before eating</li> <li>• 27.3% for Before cooking</li> <li>• 58%for After rinsing child’s excreta</li> <li>• 37.3%for Before feeding child</li> </ul> <p><b>Children (5-17 years) with handwashing practice with soap</b></p> <ul style="list-style-type: none"> <li>• 61.6% for after defecation</li> <li>• 46.6% for before eating</li> <li>• 13.6% for Before cooking</li> <li>• 20.4% for After rinsing child’s excreta</li> <li>• 14.0% for Before feeding child</li> </ul>
	[2-3] Proportion of people in the targeted slum enjoying effective drainage system and slab road over the drain for easy movement from their residence	<ul style="list-style-type: none"> <li>• 39.6% community people are in the coverage of effective drainage system</li> </ul>