

Baseline Survey: Establish and Manage an External Monitoring System in Dhaka City Covered by WASH Support for LIC Project



Prepared for



**DWASA Focal Point for WASH LIC Project
&
Water & Environmental Sanitation Section**
United Nations Children's Fund (UNICEF)
Bangladesh

Prepared by

Abul Barkat
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Human Development Research Centre

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Dhaka: January 31, 2013

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Acknowledgement

Bangladesh is committed to achieve the Millennium Development Goals (MDGs) in the water-and-sanitation sector by 2015. Poor people of Bangladesh are the major victims of the poor sanitation and safe water condition in Bangladesh. About 30 % population of Greater Dhaka City live below upper poverty line and 11.3% live below lower poverty line. It indicates the gravity of the problem in Dhaka city. As such Bangladesh ,DFID and UNICEF have jointly planned to handle with the problem and undertaken a pilot project titled, "WASH support for Low Income Communities Project" to be implemented in five clusters of Greater Mirpur areas of Dhaka city corporation . The clusters are Balurmath, Vashantek, Damalcoat, Muslim camp and Millat camp. The intervention includes installation of water points, sanitation facilities and promoting safe water and sanitation knowledge of clientele population.

Human Development Research Centre (HDRC) extends its gratitude to UNICEF, DFID and DWASA for entrusting HDRC with the assignment titled "Establishing an External Monitoring System for WASH-LIC" under this Project. The accompanying Baseline Survey – the first component of the assignment (having three components: Baseline Survey, Process Monitoring and End-line Survey) – has been successfully completed.

We are indebted to all concerned officials of UNICEF, DFID, DWASA, and Field Agencies for their dedicated support- without which successful completion of the survey could not have been possible.

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Team Leader for the Baseline Survey
&
Chief Advisor (Hon.), HDRC

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Abbreviations

AWP	Annual Work Plan
DCI	Data Collection Instrument
DFID	Department for International Development
DWASA	Dhaka Water Supply and Sewerage Authority
EMA	External Monitoring Agency
FGD	Focus Group Discussion
HDRC	Human Development Research Centre
HH	Household
IGA	Income Generating Activity
JMP	Joint Monitoring Programme
KII	Key Information Interview
LIC	Low-Income Community
NGO	Non-Government Organization
PPS	Probability Proportional to Size
UNICEF	United Nations Children's Fund
WASH	Water, sanitation and hygiene

Executive Summary

Background and Methodology

WASH-LIC Project is being implemented in five areas of Mirpur greater area of Dhaka city which are inhabited mostly by people of lower echelon of the society. The residents largely belong to poor and near poor ranks of economic status. Great majority of the residents of three areas speak in Bengali and whole majority of other two areas speak in Urdu. Bengali speaking areas are: Vasantek, Dhamalkot and Balurmath while other two areas are Muslim camp and Rahmat camp. PSTC/NDBUS and DSK are the two interventions implementing agencies under the project. The immediate objectives of the project are to improve water supply system, sanitation facilities and sanitation knowledge of the local residents.

As the external monitoring agency, HDRC has to conduct the Baseline Survey, 4 Process Monitoring Survey and the End- line Survey. The base line survey has been successfully conducted and this is the base line report.

In conducting baseline survey quick count approach has been applied considering the short duration of project. Data collection has been completed in a period of two weeks by deploying double of the planned number of field staff. Both quantitative and qualitative data/ were information collected.

A total of 1,024 households selected from five project clusters applying probability proportional to size approach. Households selected directly from household list of each cluster/area. FGD and KII have been conducted for gathering qualitative information.

Study Findings

Source of water for drinking and domestic uses: More than four-fifth of the households (83.0%) in low income settlements has access to piped supply water and 17.0 percent to deep-tube well water for both drinking as well as domestic uses. More than 90.0 percent of the households collect water from the community stand posts. Collection of water is primarily the job of women. Other family members stepped in when women are unavailable or sick.

Physical condition of water collection points: Overall 70.7 percent of households collect water from the water points which have cemented platform and 80.0 percent of these have attached drainage line for letting waste water. However, water points of 30.0 percent households bear mild to moderate crack on the floor.

Quality of drinking water: Quality of the water use by 84.4 percent households meets the photoreceptive requirements (e.g., clarity, color, odour, and taste) and is acceptable to the residents. However, the drinking water in 11.4 percent of households reportedly dirty/cloudy and in 6.2 percent often has bad smell – does not meet the photoreceptive requirements.

Purification of water: Reportedly, 77.0 percent households do not treat water before ingestion. Those who treat water, 71 percent purify water by boiling followed by 10.7 percent by adding chlorine or bleaching powder. Other methods are straining through cloth, filtration, allow to settle, and addition of alum.

Time spent for collection of water: Average time requires for collecting and storing (including queuing time) water is 41 minutes per day. However, it is 30 minutes or less to 51.4 percent households and more than 30 minutes to 48.6 percent households.

Barriers in water collection: The households face problem to collect water in the morning (52.7%), and at night (48.0%) largely due to overcrowding according to 69.0 percent households and inadequate duration of supply time according to 49.8 percent households.

Inclusion of women, old aged and differently able person in water point installation and use: In all the settlements, water points were largely installed without any discussion with the women, disabled and old aged persons as regard to their advantage or disadvantage in doing so. Less than 10.0 percent were consulted about their choice on type and place of installation of the water points.

Status of sanitation services: Overall, 60.2 percent households use unimproved latrines which are connected directly to the storm water drain or ditch and about (12.6%) use improve latrine linked to septic tanks. Some 19.4 percent child aged 3-9 years defaecate at open space. A 13.2 percent of the households have access to individual latrine, 36.3 percent share latrine with 2 to 3 families, and 49.1 percent use community latrines.

Availability of water for hand washing: Except few (5.2%), none of the latrines have water inside. However, in 40.2% households, source of water is close to their latrines.

Cleanliness of the latrines: Reportedly, 90 percent of the latrines are cleaned by someone. However, the most common practice of cleaning latrines is once in a week (54.0%). Latrines are usually cleaned by the females or to some extent by appointed cleaners. Common cleaning agents are washing powder (34.2%) or bleaching powder (24.6%).

On observation, merely 35.0 percent of the households use latrines which are clean. Among the rest, either stools are found in the platform/pan/drop-hole or foul smelled.

Place of defaecation for the under-5 children and disposal of child excreta: Among the 58.2 percent households with children aged 3-9 years, 37.9 percent households use latrine for defaecation, 5.5 percent in potty and 19.4 percent defaecate in open field or nearby water body.

Inclusion of women, old aged and differently able person in latrine installation and use: In all the settlements, latrine were largely installed without any consultation with the women, disabled and old aged persons as regard to their advantage or disadvantage in doing so. Not in every settlement, very few of them were consulted about their choice on type and installation site of the latrine

Knowledge on hygiene and sanitation behaviours: Aggregated overall knowledge coefficient of the surveyed mothers/caregivers is found at 0.70, ranged from 0.28 to 0.98. More so, 97.1 percent of the mothers and caregivers are found adequately aware (5 out of 11 indicators) of hygiene and sanitation behaviours. The major source of knowledge is NGO workers (38.3%), followed by TV (25.2%) and family members (13.2%).

Hygiene practice of the women/mothers at key critical times: None of the women/mothers in observed households wash their both hands with water and soap before eating, feeding children, before preparing food or distribution of food. Merely, 14.2 percent women/mothers wash their both hands with water and soap (or ash) after defaecation and after cleaning baby's bottom. Some 11.5 percent do so after disposing child faeces. More so, 10.0 percent of them could demonstrate the proper way of wash hands.

Availability of soap at convenient places: Soap inside latrines has been observed in 5.2 percent households, at the place of hand washing in 4.8 percent households, at near the place of hand washing in 8.0 percent households

Storage of drinking water: Some 87.4 percent of the containers are found clean and 82.2 percent households store drinking water in covered container. However, one-fifth of the surveyed households keep container in a raised area.

Cleanliness surrounding the water points: Overall 53.9 percent of the households collect water from clean water points.

Cleanliness around the dwelling houses: Visible faecal matter has been noticed in the courtyard of 15.3 percent of households and around the courtyard/dwelling in 33.5 percent households.

Age at first menstruation: Mean age at first menstruation (menarche) is 12.6 years, ranges between the ages of 11 and 13 years

Knowledge on menstrual management: Some 43.8 percent adolescent girls had heard about menstruation before their menarche. Regarding protection from menstrual flow, old rag (piece of cloth) is known to 92.7 percent girls and sanitary pad/napkin to 62.6% girls. Other less reported materials are new rag, cotton and tissue papers.

Source of information: Mother (62.6%) is the prime source of information about menstrual management, followed by bhabi (sister-in-law) or elder sisters (39.5%), friends (30.1%) and NGO workers (12.5%).

Menstrual hygiene practice: Majority of adolescent girls (74.6%) use re-usable old rag during their menstrual period followed by disposable sanitary pad (14.4%) and new rag (8.9%).

Cleaning and changing: Most of the girls (76.2%) clean their genitals more than twice a day during menstruation and 63.1 percent girls change the absorbent material more than twice a day. Majority of the rag users (76.2%) wash the rag with soap and water before next use however, 8.9 percent wash the used rag with water only.

Drying and storing: Majority of the girls (68.6%), dry their washed re-useable absorbent material (cloth) in a hidden place inside the room and 30.5 percent outside the room under sun but some of them place the rag under another cloth to hide from others view.

Disposal of menstrual absorbent: More than two-third (68.5%) girls throw the unusable absorbent with other waste. Rest 10.6 percent bury under soil and 8.7 percent burn it with other waste.

General experience during menstruation: Overall 14.6 percent girls experience headache together with pain in waist and lower abdomen during menstrual period. Some complain of pain in the lower abdomen together with loss of appetite during each cycle.

Experiencing problem in keeping clean during the period: According to 63.5 percent of girls, lack of privacy is one of the prime factors against keeping oneself clean during the period. Inadequate supply of water is the next to 11.7 percent girls.

Restriction: The most common restriction is not allowing to go outside from home after sun set, followed by restriction on eating sour-tasting fruit or food item. Other articulated restrictions are abstaining from cooking, barred to touch water container, not to cross over drain, limited movement and physical activity, limitation in eating fish, egg and meat. Among the Muslims, religious activities (praying, fasting and reciting Quran), are forbidden at the time of menstrual period.

Role played by the males: Some adolescent girls have denied but others have acknowledged the cooperation of males in providing medicine, sanitary pad, and often taken to physician wherever required during menstruation.

Primary School

The Dhamalkot Government Primary School and Paschim Vasantek Government Primary are going to interventions under WASH-LIC project. No interventions have yet been made in these two schools.

Both the schools operate double shifts. On average Dhamalkot Government Primary School has 868 enrolled students while Paschim Vasantek Government Primary has 569 students. About 85 percent students of Dhamalkot Government Primary School found present on the survey day; compared to 82.4 percent for Paschim Vasantek Government Primary School. All the approved posts are filled up in both the school.

Dhamalkot Government Primary School has not yet formed student's brigade but Paschim Vasantek Government Primary has formed it. NGO workers have started visiting both the schools.

Both the schools have functional water points and functional separate latrine for girl students. Latrines of teachers better managed than that of students.