Final Report

Balaganj Upazila of Sylhet District, Lot-1 and 2
October 2022 to December 2024

Project title: Technical Assistance to DPHE for Strengthening Community Capacity and Arsenic Mitigation Initiatives to Ensure Drinking Water Safety for All

Implemented by: Asia Arsenic Network

Contents

Abbreviations	
AAN	Asia Arsenic Network
CAP	Community Action Plan
CBO	Community Based Organization
CLTS	Community Led Total Sanitation
CSA	Community Situation Analysis
DPHE	Department of Public Health and Engineering
DTW	Deep Tube well
HH	House Hold
HP	Hygiene Promotion
HWD	Hand Washing Device
LGI	Local Government Institution
MHP	Menstrual Hygiene Promotion
O&M	Operation and Maintenance
PRA	Participatory Rural Appraisals
PWSS	Pipe Water Supply System
RW	Ring Well
RWH	Rain Water Harvesting
SDP	Sector Development Plan
SMC	School Management Committee
TOT	Training of Trainers
UNICEF	United Nations International Childrens Emergency Fund
WASH	Water, Sanitation and Hygiene
WatSan	Water and Sanitation
WQ	Water Quality
WSP	Water Safety Plan
WWC	Ward WatSan Committee
WWD	World Water Day
WP	Water Point

1 Project Overview

1.1 Introduction

In Bangladesh, significant progress has been made in providing access to water; however, the quality and safety of this water remain major concerns. According to recent data, nearly 98.5 percent of the population can access improved water supply. Still, only 42.6 percent have access to safe drinking water on their premises, free from contaminants like E. coli and arsenic, meeting the country's standards. Specifically, 11.8 percent of households have arsenic concentrations above safe levels, and 40.3 percent have E. coli contamination in their water sources. While access to water and sanitation facilities is relatively high, the safety, sustainability, and equitable distribution of these services are lacking. This jeopardizes public health, education, and nutritional outcomes.

Unsafe drinking water poses immediate and long-term health risks, particularly for the most vulnerable populations. To address this issue, UNICEF, along with partners such as the Department of Public Health and Engineering (DPHE) and NGOs, implemented projects to mitigate arsenic contamination in severely affected areas like Sylhet, Satkhira, and Cumilla. These projects focused on constructing arsenic-safe water points, ensuring equitable site selection, monitoring, and implementing digital data management tools for analysis and reporting. As a result, 114 villages were declared arsenic safe and open defecation free (ODF), with 4 unions achieving the status of 'arsenic safe union' and ODF. The success of these initiatives led the Government of Bangladesh (GoB) to commit $240 million to expand these programs. UNICEF, in collaboration with partners, will continue technical assistance, concentrating on quality assurance, capacity building, establishing a robust national database using digital tools, and targeting the poorest and most vulnerable communities, ensuring an equitable approach. NGOs will assist DPHE in arsenic screening, equity-based site selection, community mobilization, water safety planning, and sanitation and hygiene promotion in targeted areas, following the arsenic safe union concept.

To extend support to DPHE, UNICEF is engaging Community Based Organizations (CBOs) as implementing agencies. These CBOs will provide support, especially targeting the poorest and most vulnerable, including women and girls. Their role will encompass improving access to sustainable and climate-resilient water services, ensuring arsenic-safe villages, and open defecation-free environments, and promoting sanitation and hygiene through community-led approaches. Additionally, they will strengthen systems, enhance capacities, and scale up efforts to ensure drinking water safety through the arsenic-safe union concept.

This report provides an overview of the Asia Arsenic Network's (AAN) activities and achievements during the specified reporting period. AAN's focus during this time was on four unions within Balaganj upazila under Sylhet District. The primary objective was to transform these unions into "Arsenic Safe Unions" by December 2024. This endeavor began on October 20, 2022, and concluded on December 09, 2024. AAN's commitment to addressing arsenic-related issues in these areas signifies a comprehensive approach to ensure clean and safe drinking water, improved sanitation facilities, and enhanced awareness regarding arsenic contamination. This mission reflects AAN's dedication to fostering healthier and safer living conditions for the residents of these targeted unions, thereby contributing to the betterment of their overall well-being.

1.2 Expected Results/outcomes of the project

The expected results are -

- By 2026, DPHE and LGIs capacity strengthened on arsenic screening, equity-based water points allocation, and pro-poor site selection for arsenic-safe water points in selected unions
- By 2026, community leaders and users have increased awareness of water safety planning, arsenic, sanitation and hygiene, and sustainable operation and maintenance in selected unions
- By 2026, the entire population of selected unions have appropriate and context-specific arsenic-safe drinking water facilities, improved sanitation facilities, and hygiene behaviors with proper operation and maintenance of WASH facilities in place

1.3 Purpose of Assignment

The overall purpose is to implement the WASH activities under CPD 2022-2026 and technical guidance of the UNICEF WASH section, the relevant zonal section, UNICEF BCO, and DPHE, the implementing agency is required to undertake and facilitate actions to ensure the union wide coverage of safe drinking water, improved sanitation and hygiene behavior through community led approaches in selected rural communities.

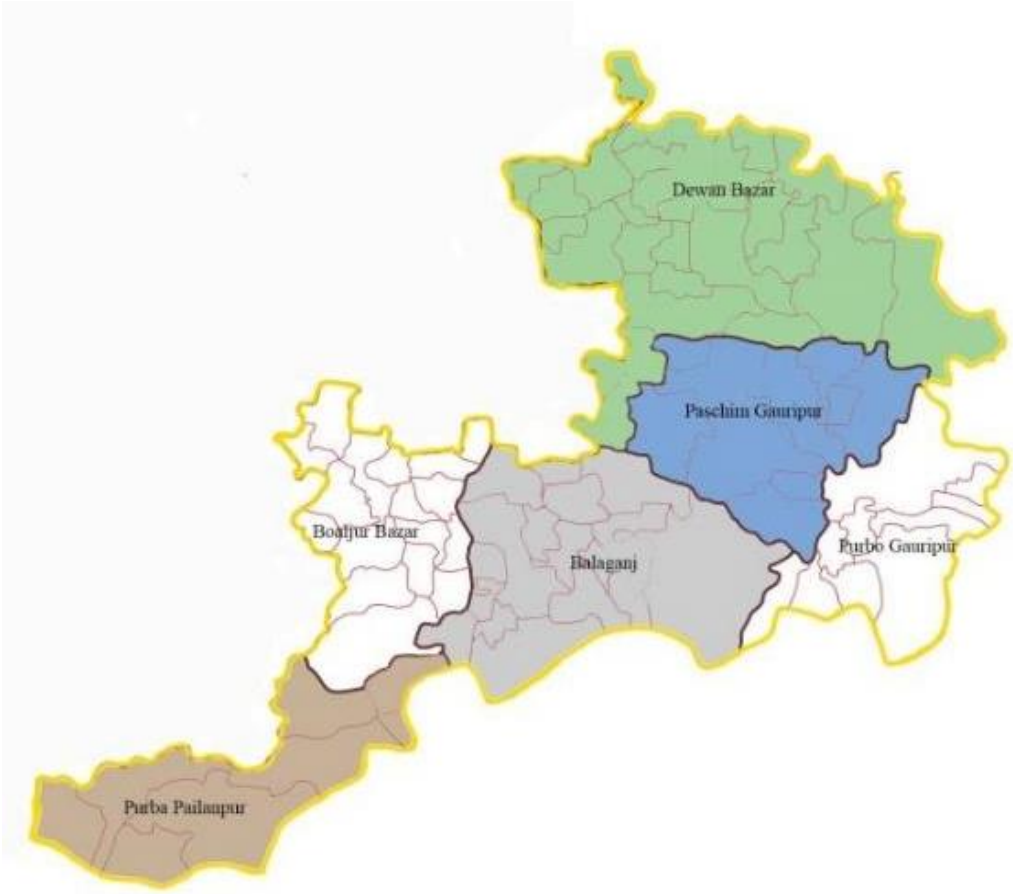
2 Descriptions of Project Location

2.1 The Geographic Coverage

The Phase of the project interventions under Lot 1 (Sylhet) will be implemented in the 4 selected unions of Balaganj upazila under the Sylhet district of Sylhet division that are highly arsenic affected and are included under the DPHE's arsenic mitigation program. Upazila wise selected union names are below table:

Balaganj Upazila

1) Balaganj Union
2) Purba Pawlanpur Union
3) Paschim Gouripur Union
4) Dewan Bazar Union



2.2 Geography with Demographical Information

Balaganj: Balaganj stands on the Kushiyara River and is on the southwest periphery of Sylhet district. To the north is Sylhet Sadar Upazila, to the south are Rajnagar Upazila and Moulvibazar Sadar Upazila in Moulvibazar District, Fenchuganj Upazila of this district is on the east, and on the west is Bishwanath Upazila of this district and Jagannathpur Upazila of Sunamganj District. Geographically Balaganj Upazila is situated at about 24.36^0 and 24.47^0 longitude and 91.38^0 and 91.56^0 east latitude. The land area is approximately 115 km^2. Balaganj Upazila is divided into 4 union parishads, 67 mouzas, and 153 villages. Demographic information is given below-

- Households – 19,100
- Population - 85222 (Census-2001).
- Males constitute 49% of the population, and females 51%.

3 Programme Update

3.1 Onboarding Human Resources and Office Setup

Balaganj office setup was completed in November 2022 and area Managers joined on 20th October 2022 according to the contract and the remaining staff joined from 20th November as per budget allocation. The project team was divided into two groups namely the Field team and headquarters team (HQ), Balaganj field team consisted of 13 members, and the HQ team consisted of 4 members.

3.2 Inception Workshop/meeting

Balaganj: The Project Inception workshop, conducted collaboratively with the Department for Public Health Engineering (DPHE) as part of the "GoB-UNICEF Strengthening Community Capacity and Arsenic Mitigation Initiatives to Ensure Drinking Water Safety for All," took place at Balaganj Upazila in Sylhet District on January 17, 2023. This workshop was chaired by Md. Mustakur Rahman, Upazila Chairman, and led by Ms. Rozina Akter, Upazila Nirbahi Officer. The participants include Upazila Vice Chairman, Union Chairman and Secretaries, and Kamrul Hasan, SAE, DPHE. Dr. Md. Shamim Uddin, Consultant (UNICEF, Dhaka), and Md. Sayed A.H Sunny, Project Manager, and other government and NGO officials. The session featured a detailed project introduction through a PowerPoint presentation, with an open discussion highlighting equity-based site selection as a major focus. Most chairmen concurred on the preference for equity-based allocation, considering the number of households per union as the basis. During the discussion, the Upazila Chairman expressed concern about the decreasing water table, advocating for the prioritized use of surface water when possible. DPHE engineers shared their efforts in installing Deep Tube Wells (DTWs) with submersible pumps and tanks to address water table challenges. The Upazila Nirbahi Officer suggested the inclusion of the remaining two unions in Balaganj Upazila, a move that would contribute to declaring the Upazila as Arsenic Safe.

Pic-1: Inception workshop at Balaganj Upazila

3.3 Union level rapport building and planning meeting

The Union level rapport building and planning meetings were completed in Balaganj Upazila showcasing a remarkable confluence of stakeholders committed to the success of the WASH project. By bringing together around 30 participants from diverse backgrounds in each of the 4 targeted unions, including representatives from Union WATSAN committees, Union Parishads, and local citizens, the event transcended mere information dissemination. It transformed into a dynamic platform for open dialogue, enabling participants to share insights, voice concerns, and collectively shape the trajectory of the project.

The tangible outcomes of the meeting were particularly significant. Elected members of the Union Parishads actively engaged in drawing ward-based maps, strategically placing WASH-related information, and delineating key areas of focus. The identification of hot spots and local challenges provided a nuanced understanding of the unique dynamics in each union. The particular collection of general information not only enriched the project plan but also underscored the importance of a community-centric approach.

As the initiative moves forward, the emphasis shifts to translating the collaborative groundwork into actionable steps. Implementation will hinge on the detailed action plan crafted during the meeting, ensuring a targeted and context-specific execution. The commitment to regular follow-up meetings aims to address emerging challenges promptly, while ongoing community engagement remains central to maintaining transparency and cultivating a sense of ownership among the local populace. The incorporation of a robust monitoring and evaluation system is poised to track progress, enabling adaptive management and continual improvement. The success of this meeting, therefore, not only marks a promising beginning but sets the stage for a sustained and impactful WASH intervention in the targeted unions.

3.4 Staff Foundation and Refresher Training

Two day-long training was conducted for the newly recruited project staff at the AAN Office at Balaganj on 21- 22 December 2022.

The training was conducted in classroom and field sessions, covering the following topics:

Outline of the project background, PRA and its importance and approach, CSA- Rapport building, Transect walk, Checklist, Social map, Economic condition, CBO committee formation, Community action plan, feces calculation and mobility. Safe water, Source, Contamination, WSP, Sanitation, Total Sanitation, CLTS, Hygiene, hand washing steps, and risk time. SDG, Water user group, Care Taker selection, Community mobilization, hygiene domain. Roles and responsibilities of UP, DPHE, Upazila, Partner Organization, and staffs.

3.5 Refreshers Training

Two days of refresher training were conducted for the existing staff to review the field activities as well as share the working field experiences among the staff. This training was held at the AAN office at Balaganj Upazila on 7 – 8 August 2023. To conduct this training multimedia, flip charts, whiteboard, marker, brown paper, and VIPP card were used. The training was divided into two segments i.e. lecture session; and group work followed by a feedback session. The training was conducted in the classroom, covering the following topics:

Outline of the project background, Community and Community motivation, its importance, CLTS, Community participation, Facilitation, PRA tools; CSA, transect walk, checklist, Social map, economical classification, face calculation, feces mobility, committee formation, CAP, Safe water source and contamination, WSP, Sanitation, Characteristics of Hygienic latrine, strategy of unhygienic to hygienic latrine, Hygiene, Hygiene promotion, social norms to change hygiene behavior, hand washing importance and risk time and steps. Steps of ODF and Arsenic safe village and union declaration.

3.6 Community Situation Analysis (CSA) and CAP

Between October 2022 and March 2023, a comprehensive engagement unfolded as 83,879 villagers actively participated in Community Situation Analysis (CSA) activities organized for 174 Community-Based Organizations (CBOs) in Balaganj and Kanaighat Upazilas. Through CSA, a meticulous assessment identified 5,848 functional water points, categorizing among functional 4,986 as arsenic-safe (1,747 Deep Tube Wells - DTWs, 3,239 Shallow Tube Wells - STWs), 241 as arsenic-contaminated (above 50ppb, with 30 DTWs, 211 STWs), 608 as untested tubewells, 295 as non-functional and 13 other types of water points. Moreover, the analysis revealed 491 households using unimproved water sources like rivers, ponds, and dug wells. CSA also identified 557 new water points required to achieve 100% safe water coverage considering a 150-meter radius or water collection round trip of 30 minutes. [Proposed site list as annex-1]

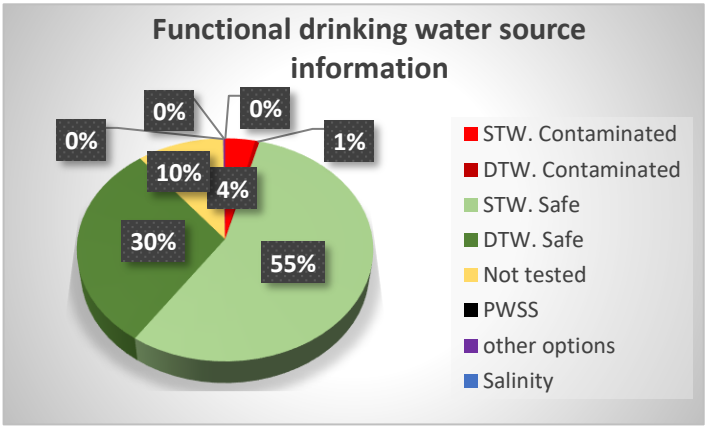


Fig-1: Functional drinking water source in Balaganj

In terms of sanitation, 4,087 households (27%) were identified to be using improved toilets, while 10,430 households (68%) utilized unimproved toilet facilities, and 834 households (5%) lacked toilets or continued open defecation practices. Additionally, 2,645 (17%) households possessed handwashing facilities with soap, 2,056 (13%) households had facilities without soap, and 10,650 (70%) households had no handwashing facilities in total. Throughout this period, 15129 villagers actively participated in 2293 CBO meetings to update the Community Action Plan (CAP) with assistance from project personnel.

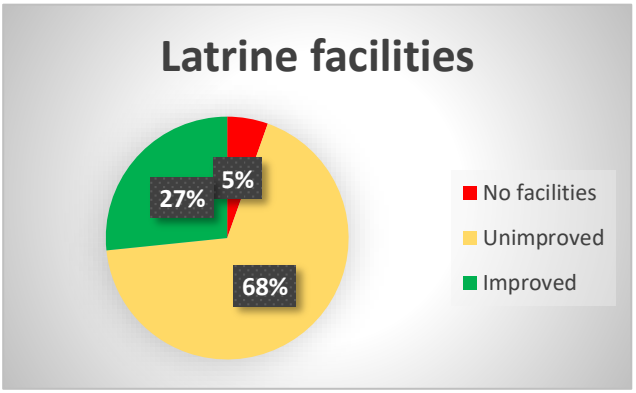


Fig-2: Latrine Facilities in Balaganj

Remarkable steps were made during these meetings, with CBO members taking charge of improving 8,657 unimproved toilets, constructing 1033 new latrines, and installing 11,674 handwashing devices through Community-Led Total Sanitation (CLTS) initiatives. Notably, 1254 households switched to arsenic-safe tubewells, showcasing the project's significant impact on improving sanitation practices and ensuring safe water access for the communities involved. These accomplishments underscore a substantial step toward achieving the overarching goal of enhanced community health and well-being. The detailed summary of CSA findings in Balaganj is given in below table No.01:

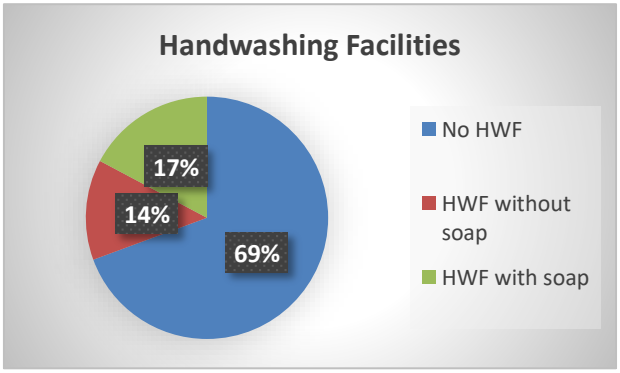


Fig-3: Handwashing Facilities in Balaganj

Categories	Head	Balaganj	% (where applicable)
Population	Total HH	15,351	
	Female	42,563	
	Male	41,316	
	Total	83,879	
	Children (<18 Year)	24,269	

Categories	Head	Balaganj	% (where applicable)
	PwD	262	
Economical Category (based on CSA)	Rich	1,961	12.77%
	Middle	4,268	27.80%
	Poor	8,193	53.38%
	Extreme Poor	929	6.05%
Latrine facilities (in HHs numbers)	No facilities (open defecation)	834	5%
	Unimproved latrines	10,430	68%
	Improved latrines	4,087	27%
Handwashing Facilities (in HHs numbers)	HH with no handwashing facilities	10,650	70%
	Handwashing facilities without soap	2,056	13%
	Handwashing facilities with soap	2,645	17%
Functional Drinking Water Source Informations (options in numbers)	STW - Arsenic contaminated tubewells (> 50 ppb)	211	4%
	DTW - Arsenic contaminated tubewells (> 50 ppb)	30	1%
	STW - Arsenic safe tubewell (< 50 ppb)	3,239	55%
	DTW - Arsenic safe tubewell (< 50 ppb)	1,747	30%
	Not arsenic tested tubewells	608	10%
	Pipe Water System	0	
	Others options	13	0.22%
	Not used for high salinity	0	
# of Water options Installed by (Ownership)	Public (GoB, NGO etc)	1,049	18%
	Private	4,786	82%
# of non functional drinking water points		295	5%
Drinking Tubewells without/ broken platform		363	6%
Water Users Information (HHs in numbers)	a. HHs with unimproved water sources	491	3.19%
	b. HHs with limited facilities	2,872	18.70%
	c. HHs with basic facilities	11,979	78.03%
	d. HHs with improved facilities (basic plus)	9,338	60.82%
	e. HHs with safely managed facilities	5,633	36.69%
	f. HHs with improved well but arsenic contaminated	936	6.09%
	g. HHs with improved well but not tested well (arsenic)	1,462	9.52%
# of arsenic Patients	Female Arsenicoisis	0	
	Male Arsenicoisis	0	
Required number of water points for 100% safe water coverage		557	

Table-1: CSA findings in Balaganj, Sylhet

3.7 Facilitate equity-based site selection

AAN has successfully executed its role in supporting the Department of Public Health Engineering (DPHE) and Local Government Institutions (LGIs) in achieving equity-based allocation and site selection. Utilizing tools such as GIS mapping and agreed-upon site selection criteria, a joint field visits was conducted and facilitated discussion sessions to identify and prioritize water point installation site in the targeted areas. Also, the team collaborated effectively with UNICEF and DPHE zonal offices, overseeing the installation of point water sources to the agreed site selection protocol. This ensured the systematic and scientific approach to addressing arsenic contamination in affected areas and providing safe water solutions.

Pic-7: Training on Equity based site selection at Sylhet

Moreover, a comprehensive support to ITN-BUET at divisional level trainings were ensured on equity-based site selection for DPHE officials from different level. The NGOs officials were mainly responsible for the session connected with community situation analysis, implementations of site selection approaches and community mobilization. At the beginning the NGOs officials were participated in a ToT program to understand the training process in ITN-BUET. A total of 41 participants joined in two batch. List of participants given in below:

Batch-1		
Sl No.	Name	Designation
1	Md. Alamgir Hossain	Executive Engineer, DPHE, Sylhet
2	Md. Azad Kazi Assistant	Engineer, DPHE, Zakiganj
3	Shah Mohammad Luton	Assistant Engineer, DPHE, Golapganj
4	Mohammad Layes Miah Talukder	Assistant Engineer, DPHE, Sylhet
5	Md. Amdadul Haque	Sub-Assistant Engineer, DPHE, Sylhet Sadar
6	Md. Kamrul Hasan	Sub-Assistant Engineer, DPHE, Balaganj
7	Paniruzzaman	Assistant Engineer, DPHE, Kanaighat
8	Md. Yunus Ali	Sub-Assistant Engineer, DPHE, Gowainghat
9	Md. Sujan Mia	Sub-Assistant Engineer, DPHE, Beanibajar
10	MD.RASEL BHUIYAN	Sub-Assistant Engineer, DPHE, Biswanath
11	Md. Ruhul Amin	Sub-Assistant Engineer, DPHE, Companiganj
12	Kazi Riyel	Assistant Engineer, DPHE, Dakshin Surma
13	Abdulla	Sub-Assistant Engineer, DPHE, Fenchuganj
14	Tushar Paul	Sub-Assistant Engineer, DPHE, Jointiapur
15	Saiyod Didarul Islam Kayes	Sub-Assistant Engineer, DPHE, Osmaninagar
16	Md. Rafiqul Islam	Assistant Engineer, DPHE, Sylhet Circle
17	Ahamed Hossain Chowdhury	Area Manager, AAN
18	Md. Mustafijur Rahman	Union Supervisor, AAN
19	Sayed Abdullah Hiss Sunny	Project Manager, AAN

Table-3: List of participants in ToT by ITN-BUET

With the successful completion of the task, local DPHE officials are now well-versed in equity-based site selection, prioritizing the needs of impoverished and underserved populations in arsenic-affected areas. This strategic shift from equal to equity-based site selection is poised to significantly contribute to the overall success of the initiative, ensuring that safe water reaches the communities that need it the most.

Consequently, the project team has prepared a list of proposed waterpoint sites with the active involvement and support of the community. This involved creating a social map and pinpointing the locations and quantities of necessary water points for the community. These lists have been meticulously reviewed, accepted, and approved by the relevant Union and Upazila WatSan committees for future installation. The summary of the proposed site by using equity-base site selection criteria is given in below table:

Upazila	Unions	Number of proposed water point site
Balaganj	Balaganj,	104
	Purba Pailanpur,	49
	Dewanbazar	85
	Paschim Gouripur	37
Balaganj upazila total		***275**
**Note: During the initial assessment (CSA) identified a proposed site for water points was at Balaganj, after final assessment it was confirmed Balaganj 275.*		

Table-4: Number of proposed water point site in Balaganj, Sylhet

3.8 Support to DPHE for community mobilization and WASH

AAN has effectively fulfilled its commitment to supporting the Department of Public Health Engineering (DPHE) and Local Government Institutions (LGIs) across various areas, such as site selection, installation supervision, feasibility assessment etc. Comprehensive support was provided to orient officials on arsenic, safe water, sanitation, and hygiene, extending beyond mere installation to prioritize the sustainable operation and maintenance of facilities in targeted upazilas. A total of 99 officials from diverse organizations and LGIs underwent training on Water, Sanitation, and Hygiene (WASH) as part of this initiative supported by UNICEF.

Pic-8: Community Mobilization

AAN, in collaboration with UNICEF, adopted a holistic approach involving community mobilization and consultation, actively engaging local residents in the installation process. Mechanisms for tariff collection were established to fund routine operation and maintenance, ensuring financial sustainability and active community participation. Thorough training for caretakers responsible for day-to-day operations and maintenance not only equipped them with essential skills but also instilled a sense of ownership within the community, fostering a sustainable model.

Pic-9: Rehabilitating water point

Aligned with the ongoing Government safe water supply projects, AAN focused on facilitating caretaker training for water points under those projects. The integration of climate-resilient Water Safety Plans (WSP) underscored the importance of maintaining water safety amidst environmental challenges, enhancing long-term resilience against climate change impacts.

This task's completion represents a significant achievement in promoting sustainable water solutions, community engagement, and climate resilience. AAN's collaborative efforts with DPHE and LGIs not only facilitated successful installations but also laid the foundation for enduring community-led management and maintenance, ensuring the ongoing provision of safe water in targeted upazilas.

3.8.1 Water points installation

The Department of Public Health Engineering (DPHE) plays a crucial role as the mandated stakeholder in allocating and installing water points. Meanwhile, Asia Arsenic Network (AAN) with the overall guidance from UNICEF takes on the responsibility of recommending potential water point sites for the targeted community. This is achieved through various community engagement programs and the application of project-developed site selection criteria. The scope also encompasses water points installed by the ARRP, BSWSC, and Haor projects since 2021.

In the timeframe of 2021-2023, the Local DPHE provided information on 382 installed water points under projects like ARRP. From this list, AAN strategically selected 252 water points for project implementation. These include DTWs with submersible pumps (TSP) 252. A dedicated caretaker, equipped with maintenance tools and trained for regular operation for the above mention WP, was appointed. Furthermore, the community received education on hygiene practices and the installation of handwashing devices, contributing to improved sanitation and hygiene practices. This comprehensive approach reflects a commitment to ensuring sustainable and resilient water access in the targeted areas.

3.8.2 Rehabilitate Water Points

AAN made a list of 64 inactive water points that may be repaired and that tested arsenic-safe. 64 water points were repaired benefited about 3204 people during the project period. During the reporting period, 64 water points were repaired and handed over to the community. In numerous instances, it was discovered that the check valve, bucket, TW head, some classes' platforms, drain, or water seal were damaged or stolen. Construction of a new platform cost about Tk. 8000, while additional repairs
cost between Tk. 500 and Tk. 1500, including mechanic fees. With the exception of the Tara pump, which has its spare parts locally unavailable.

Pic-10: After rehabilitation

During this reporting period, AAN transformed a traditional DTW (1.5 inch pipe) to tara pump (Switching from Suction to Force Mode). Balagang Upazila current water table for deep aquifer is 31 feet, which makes traditional No.6 DTWs with 1.5 inch pipes inactive as the suction limit is about 25 feet. To overcome the low water table problem project team conducted this transformation as a test case with the support of the local Mechanic. The transformed tube well now provides a consistent and plentiful supply of safe water. All 11 families in the community have reliable access to clean water for cooking and drinking. Here an inactive DTW was repaired about Tk. 25000, but a fresh DTW installation costs Tk. 1.5 lack, which means at least 6 DTWs can be made active for one DTW installation fee. Moreover, the cost-effective nature of the conversion means that similar initiatives can be implemented in other areas, potentially solving water crisis issues for more communities. This accomplishment highlights the importance of innovative solutions and community initiatives in addressing

crucial challenges and improving the lives of people. List of Rehabilitated Water Points included in rehabilitated water points is included in Annex-2.

3.8.3 Caretakers training on O&M and WSP

Caretaker training was successfully completed for 436 water points, with the participation of 728 individuals. The initial goal was to train two persons from each water point, but some points had only one participant. While the total target was set at 872 persons, the achieved number was 728, indicating that 143 persons did not participate. There are plans to include these individuals in the training for the rehabilitation of water points. List of trained caretaker attached as Annex-3

Pic-11: Caretaker training

Maintenance tools were distributed to the Community-Based Organizations (CBOs) who has public water points. However, in cases where a CBO had more than 5 water points, managing them with a single set of tools proved challenging. To address this, the project team is considering providing extra tool kits for CBOs with more than 5 safe water points.

Some CBOs were found to have no water points at all, as Deep Tube Wells (DTW) installations were not feasible in those areas. The project team has retained tools for future handovers in such cases.

Apart from that Balagang 174 tools were handed over to the CBOs Considering one CBO one tools. In total maintenance tools were handed over 174 sets. List of operation and maintenance tools distribution attached as annex-4

Union Wise Summary of Tools Distributions

SL	Union	Total Community	Total Tools
1	Balaganj Union	55	55
2	Purba Pawlanpur Union	63	63
3	Paschim Gouripur Union	30	30
4	Dewan Bazar Union	26	26
Total	4 Union	174	174

3.8.4 User Group Orientation on CR-WSP

Orientation programs on Water Safety Plans (WSP) were organized for water user groups in close proximity to various water options. The goal was to ensure that at least one person from each family participated, with a focus on involving female members. A total of 24189 individuals from 1383 water points actively participated in these orientation sessions.

During the orientation, participants were educated on essential practices, such as proper techniques for collecting water from the water options, methods for carrying and preserving water, and the significance of maintaining

cleanliness in the surroundings of water options. The instructional content was presented using a flip chart to enhance understanding and engagement.

Moreover, the orientation covered the anticipation of potential challenges that the participants might encounter in the future. Through interactive discussions, participants were given an opportunity to explore and exchange ideas on how to effectively address and resolve these potential problems. This proactive approach aimed to empower the community members with the knowledge and skills necessary to ensure the ongoing safety and sustainability of their water sources.

The comprehensive orientation not only provided practical insights into daily water-related activities but also fostered a sense of community collaboration and shared responsibility. By incorporating discussions on problem-solving and encouraging active participation, the orientation programs contributed to building a resilient and well-informed community dedicated to maintaining the integrity and safety of their water sources.

3.9 Capacity building on WASH:

3.9.1 Training on WASH, WSP and Arsenic:

Training sessions for Water and Sanitation (WatSan) committee members were conducted in all 4 targeted unions and 1 upazilas. A total of 103 individuals actively participated in these training sessions. Additionally, training sessions were held for Community-Based Organization (CBO) leaders. As of the reporting period, 174 CBOs had already been formed, and during this timeframe, 334 community leaders received training from 174 CBOs. The goal was to have two representatives from each CBO trained.

Furthermore, various workshops and training programs were organized, including upazila and union inception workshops, as well as planning workshops. Staff foundation training sessions were also conducted as part of the comprehensive training initiatives. These efforts aimed to enhance the knowledge and skills of participants to strengthen the capacity and effectiveness of community-based initiatives in the targeted areas.

3.9.2 CBO Meetings

AAN conducts monthly CBO meetings with community leaders in 174 CBOs across the targeted 4 unions in 1 Upazilas. Throughout the project duration, a total of 2293 CBO meetings were convened, with the active participation of 15129 members. These meetings served as a platform for dialogue and collaborative decision-making.

Pic-12: CBO meeting

During these gatherings, participants maintained a resolution register and deliberated on various crucial issues. The agenda typically included a review of the minutes from the previous meeting, progress reports, and plans for new latrine installations, latrine renovations, handwashing device installations, tube well renovations, and ODF (Open Defecation Free) declaration.

The CBO committee members actively took on responsibilities related to the installation of new latrines, the repair of unhygienic latrines, and the installation of handwashing devices. Their active involvement is geared towards enhancing the Water, Sanitation, and Hygiene (WASH) situation in their respective communities. These meetings contribute to fostering community-driven initiatives and improving overall WASH conditions through collaborative efforts and shared responsibilities.

3.9.3 WSP corner

The project team strategically established 5 WSP corners across the Union Parishads, with 4 units distributed within the union and one situated in the DPHE offices of Balaganj upazila. The purpose behind this initiative was to empower villagers to independently test their drinking water points for arsenic contamination. Recognizing the dynamic nature of arsenic concentration, it is recommended to conduct tests twice a year, acknowledging that water deemed safe today may become contaminated over time. Also applicable for newly installed Water Points (WPs).

Pic-13: WSP corner

Each WSP corner is well-equipped with essential resources, including a volunteer, desk, chair, cabinet, a register book for recording arsenic test results, and an arsenic test kit. Interested villagers are encouraged to utilize the WSP corner for testing their water points, with a reasonable cost associated with the service. The arsenic test, conducted using the test kit, provides crucial information about the safety of the water. The Union Parishad facilitates this process by charging a fee ranging between 150 and 200 Tk. per test.

In the upazilas of Balaganj and Kanaighat, a total of 83 tubewells were rigorously tested by the 4 WSP corners, and encouragingly, all of them were found to be arsenic-safe except one. This positive outcome highlights the effectiveness of the testing initiative in ensuring the provision of safe drinking water to the local communities.

Additionally, to enhance transparency and facilitate efficient monitoring, 5 monitoring charts were prepared and handed over to the Union Parishads and the DPHE offices at the upazila level. These charts comprehensively outline the project's activities, set targets, and current progress at the union level. To maintain an updated and accurate record of progress, the monitoring charts were regularly reviewed and refreshed on a quarterly basis, ensuring that stakeholders remained informed about the ongoing developments in arsenic testing and water safety initiatives.

3.9.4 Courtyard session

AAN's WASH Motivators undertook house-to-house visits in areas where sanitation, hygiene, and arsenic-safe coverage were observed to be inadequate. Residents were invited to participate in courtyard sessions aimed at discussing the present conditions of sanitation, hygiene, and arsenic safety in the community. These sessions served to enlighten participants about the advantages and disadvantages of the WASH situation and emphasized their responsibilities in improving the situation.

WASH Motivators facilitated five distinct sessions covering critical aspects:

1. **Arsenic and Its Impact Session:** In this session, the devastating effects of arsenic were discussed. Participants learned about the risk and its impacts by using arsenic-contaminated water for drinking and cooking. Flip charts and posters were utilized to illustrate the consequences of arsenic exposure. Throughout the project period, this session was conducted at 1186 sites, engaging 19986 participants.

Pic-14: Courtyard session-1

2. **Hand Hygiene Session:** After home visits, participants were encouraged to join handwashing sessions to practice proper handwashing with soap. The session highlighted the occasions when handwashing is crucial through visual aids such as hygiene pouts, posters, and a 5-F diagram. This session took place at 1190 sites, with 19054 participants during the project period.

3. **Sanitation Session:** AAN Wash Motivators, along with community leaders, visited community latrines and invited residents to attend sanitation sessions. Discussions focused on the drawbacks of unhygienic latrines, incorporating the 5-F diagram and utilizing sanitation pouts, posters, and a latrine game. These sessions were conducted at 1,370 sites, engaging 22233 participants during the project period.

4. **Arsenic Safe and WSP Session:** Emphasizing the importance of arsenic-safe water for maintaining health, this session introduced the concept of a Water Safety Plan (WSP) to safeguard water from source to consumption. Posters and flip charts were used to illustrate arsenic and WSP-related information. This session occurred at 1383 sites, involving 24189 participants during the project period.

Pic-15: Courtyard session-2

5. **Personal and Menstrual Hygiene Management Session:** Female WASH Motivators invited women and adolescent girls from the community to participate in sessions focusing on personal and menstrual hygiene management. The Motivators followed the menstrual hygiene guidebook, utilized pocketbooks with pictures, and shared stories from a storybook. Throughout the project period, this session took place at 619 sites, engaging 7380 women and adolescent girls.

These initiatives reflect AAN's commitment to community education and empowerment in promoting better WASH practices and enhancing overall community health and well-being.
Courtyard session: Conducted (October 2022 to November 2024) in both Balaganj as below:

Session	Total	
	Number	Participants
Arsenic and its Impact Session	1,186	19,986
Hygiene session	1,190	19,054
Sanitation session	1,370	22,233
Safe water and WSP session	1,383	24,189
Personal and menstrual hygiene management	619	7,380
Total	**5,748**	**92,842**

Table-5: Courtyard session conducted in Balaganj, Sylhet

3.9.5 Switching to arsenic safe water points

Balaganj areas prone to hoars. In these regions, some individuals and households using unimproved water sources such as ponds, rivers, and hoars for drinking and cooking due to the absence of safe water options. Some of those areas are not suitable to install DTWs as gravel layer existence. Recognizing this challenge, the project staff conducted visits to these areas, aiming to motivate the residents to shift towards using improved and safe water sources for their

drinking and cooking needs. The motivation involved discussions on the drawbacks and disadvantages associated with using unsafe water.

During the project period, a noteworthy outcome was achieved, with a total 1,624 families switch to arsenic-safe wells as a result of the motivation efforts. This positive change signifies a significant step toward improving access to safe water and fostering better health practices in the community.

3.9.6 Toilet installation and repair

The Community Situation Analysis (CSA) revealed that a significant number of households in the targeted 4 unions across 1 Upazilas either lacked latrines or had unimproved latrines. In response to this finding, the project staff conducted house-to-house visits to motivate residents to install and renovate their latrines.

WASH motivators played a crucial role in encouraging community members to install new latrines, particularly in the higher part of their households. In the first year of the project, the outcomes were substantial, with 1,032 families opting to install new latrines, and an additional 8,661 families taking steps to upgrade their existing latrines through repair and improvement efforts. This concerted effort signifies progress toward enhancing sanitation facilities and promoting healthier practices within the community.

3.9.7 Hand washing device installation and practice

The Community Situation Analysis (CSA) highlighted a prevalent lack of handwashing facilities or devices in a majority of households within the targeted 4 unions across 1 Upazilas. In response to this observation, the project staff undertook house-to-house visits and organized hand hygiene sessions to motivate residents to install handwashing devices.

WASH motivators played a proactive role in assisting community members, at times helping them install locally made handwashing devices equipped with taps and buckets. During the first year of the project, a positive outcome was achieved, with 11,624 families successfully installing handwashing devices and adopting proper handwashing practices. This initiative reflects progress toward improving hygiene practices and fostering a healthier living environment within the community.

3.10 Coordination:

Throughout the reporting period, the project demonstrated significant progress by effectively coordinating with key stakeholders at both local and central levels. Collaborative efforts were maintained with the Department of Public Health Engineering (DPHE), Local Government Institutions (LGIs), and the United Nations International Children's Emergency Fund (UNICEF). Activities such as the Upazila inception workshop, Union planning meetings, and WatSan committee orientations witnessed active participation from local members, occasionally including Union Parishad Chairmen. Quarterly progress-sharing meetings with Union Parishad and monthly NGO coordination sessions at the Upazila level ensured a harmonized approach. The Area Manager consistently communicated with DPHE's Sub-Assistant Engineer (SAE) and Assistant Engineer (AE), sharing monthly progress reports for transparency and real-time updates. Collaboration with UNICEF involved periodic field visits, report sharing, and occasional visits to the local office. Central coordination was achieved through project coordination meetings, fostering unity among Implementing Partners, DPHE, and UNICEF. Major stakeholders, including WatSan Committee Members, Union Parishad, and Implementing Partners (IPs), actively contributed to the project's success. Major stakeholders for the project listed in below:

Stakeholder	Role in implementation
Upazila Parishad	Upazila parishod support administrative part and also play role through Upazila WatSan committee for equity-based water point site allocation, verification and certification on Arsenic Safe Union declaration.

DPHE	DPHE manor role is to supply necessary safe water point, technology selection, site selection, and water point's installation etc. Also participate in Arsenic Safe Village/Union declaration.
LGIs	To arrange working environment in field and support CBOs for declaration. Also participate in Arsenic Safe Village/Union declaration and Verification.
National NGOs (AAN)	Engaged in enhancing the capacity of communities through community action planning, equity-based site selection, awareness of arsenic/ sustainable O&M, water safety planning, improved sanitation and hygiene.

3.10.1 Meetings and monitoring Visits

District-Level Progress Sharing Meeting:

On March 12, 2023, a district coordination meeting convened at the DPHE office in Sylhet. Mr. Alomgir Hossain, Executive Engineer of Sylhet, presided over the meeting. Representatives from AAN, Ahamed Hossain Chowdhury Helal presented current project activities and outlined the plan for the upcoming quarter. A request was made to share screening data in soft copy for Balaganj Upazila. The Executive Engineer noted that screening data for the ARRP project couldn't be shared without the Project Director's consent and mentioned ongoing efforts to find a double-platform solution, requesting AAN to provide a list.

District-Level Progress Sharing Meeting (Zoom):

On June 22, 2023, a district coordination meeting was conducted through Zoom. Participants included Mr. Kamrul Alam, UNICEF WASH Officer, Mr. Sayed Sunny, Project Manager, Ahamed Hossain Chowdhury Helal, Area Manager Balaganj, Forman Ali, Area Manager Kanaighat, and various project officers. Mr. Ahamed Hossain Chowdhury Helal presented the progress report on behalf of AAN for the period from April 2023 to June 2023, Mr. Kamrul Alam suggested improvements to the report contents and recommended more frequent meetings of this nature.

Monitoring Visits by UNICEF and Other Stakeholders:

1. SIDA Representative Mr. Mostafizur Rahman, UNICEF Asia Advisor Mr. Peter Maez, WASH Specialist Md. Adnan, and National Consultant Ershadul Haque visited Radhakona Paschim-2 CBO of Balaganj Upazila on 19/11/2024. The visit included observations of field activities such as modified suction mode to force mode in number 6 tube wells, courtyard sessions, newly installed and renovated latrines, and handwashing devices. Later, he visited the Water Safety Plan corner at Balaganj Union Parishad.

2. On 22/10/2024 UNICEF Sylhet National Consultant Mr. Ershadul Haque participated in a rally and discussion meeting on the observation of Global Hand Washing Day at Janakyanbazar Government Primary School of Dewanbazar Union of Balaganj. Later, he visited West Haiderpur CBO of Dewan Bazar Union.

3. On 17/7/2024, UNICEF National Wash Cluster Coordinator Mst. Saleha Khatun along with UNICEF Kolkata representative and three representatives of Bata Company distributed 100 set hygiene kits and 10,000 water purification tablets to various CBOs of Paschim Gauripur Union of Balaganj Upazila. Asia Arsenic Network Balaganj assisted in this.

4. During the 2024 floods, UNICEF Consultant Dr. Shamim Uddin distributed 100 water jerrycans and 8000 water purification tablets to various CBOs in Paschim Gauripur Union of Balaganj Upazila.

5. During the flood in 2024, the Department of Public Health Engineering, Balaganj Sub Assistant Engineer Mr. Kamrul Hasan along with Asia Arsenic Network distributed 32 sets of hygiene kits and 100 water jerrycans in West Gauripur Union of Balaganj Upazila on 27/6/2024.

6. On September 13, 2023, UNICEF, represented by Mr. Kamrul Alam, WASH Officer, and Md. Mamun from IDE, conducted a monitoring visit at Radhakona Paschim-2 and Khud Latifpur, Kazipur communities of Balaganj union. The visit included observations of field activities such as modified suction mode to force mode in number 6 tube wells, courtyard sessions, newly installed and renovated latrines, and handwashing devices. Discussions were held with villagers, local government institutions (LGI), and Upazila Parishad, including DPHE.
7. On May 24, 2023, a monitoring visit was conducted at Kashipur Paschim of Balaganj union by UNICEF's Ms. Kazi Dil Afroza Islam, Chief of Field Office, Mr. Kamrul Alam, WASH Officer, and Monirul Alom, WASH Specialist. Field activities, including courtyard sessions, newly installed and renovated latrines, and handwashing devices, were observed. Discussions took place with villagers, LGI, and Upazila Parishad, including DPHE. A similar visit occurred in Kanaighat on April 16, 2023, with Ms. Kazi Dil Afroza Islam and Mr. Kamrul Alam as team members.
   On March 03, 2023, UNICEF, represented by Mr. Kamrul Alam, WASH Officer took part on Hygiene campaign at Kashipur Paschim Community of Balaganj Upazila as a part of World Water Day. He visited the Tube well surrounding, Latrine, and Hand washing device and discussed with community people.

3.11 Demonstrate arsenic safe unions:

With the overall guidance from UNICEF team, AAN has successfully implemented a comprehensive training program for frontline staff, with a specific focus on interventions related to water, sanitation, and hygiene promotion. The primary goals included guiding communities towards achieving Open Defecation Free (ODF) status, instilling lasting behavioral changes related to the use of safe water and water safety plans, ensuring safe excreta disposal, particularly for children, promoting handwashing with soap before meals and after defecation, and enhancing awareness about menstrual hygiene. Additionally, AAN played a key role in community mobilization through community-led approaches, supported the celebration of ODF and arsenic-safe communities, and advocated for the installation of low-cost handwashing devices at the household level.

In the process of attaining arsenic-safe union status, a meticulous series of steps were undertaken according to preset ASU declaration guidelines, commencing at the Community-Based Organization (CBO) level and progressing through the Village, Ward, and Union levels. The process began with the CBO declaring its commitment to eliminating open defecation, ensuring the installation of handwashing devices with soap, and collecting safe water for drinking and cooking purposes. This declaration underwent thorough verification by the CBO committee.

3.11.1 Arsenic safe community and village with ODF

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In the process of attaining arsenic-safe union status, a meticulous series of steps were undertaken according to preset ASU declaration guidelines, commencing at the Community-Based Organization (CBO) level and progressing through the Village, Ward, and Union levels. The process began with the CBO declaring its commitment to eliminating open defecation, ensuring the installation of hand washing devices with soap, and collecting safe water for drinking and cooking purposes. This declaration underwent thorough verification by the CBO committee.

From November 2022 to December 2024, various awareness programs and activities among beneficiaries revealed no open defecation in the project area. Sanitation has improved as expected, with households following safe water practices. Every household has soap and water for handwashing, and children now use latrines wearing sandals. Beneficiaries installed 1,032 new latrines, 8,661 latrines converted from unimproved to improved, and 11,624 handwashing devices installed near latrines through motivation from the project team.

During the reporting period, the Targeted 4 union achieved a significant milestone with 174 Community-Based Organizations (CBOs) declaring themselves as arsenic-safe and open defecation-free (ODF). This achievement highlights the concerted efforts to enhance water quality and improve sanitation practices within the targeted communities. In accordance with these declarations, 114 villages were officially recognized as arsenic-safe and ODF. These declarations signify meaningful progress in promoting safer water sources and better sanitation practices at the grassroots level. To verify the credibility of these declarations, the Union WatSan committee conducted a verification process. This involved random visits to the declared villages by selected representatives from the relevant Union. During these visits, the committee gathered observations, assessed the accuracy of the claims, and either confirmed or provided feedback on the arsenic-safe and ODF status of the villages. A detailed list of the aforementioned CBOs and villages, along with their corresponding statuses, is provided in List of Arsenic-safe communities and villages with ODF in Annex-5, ensuring transparency and accountability in the project's outcomes. This comprehensive approach reflects not only the dedication of the community members and CBOs but also their commitment to sustaining the achievement of arsenic-safe and ODF conditions in the targeted areas.

4 3.12 Union phase-Out workshop

The GOB-UNICEF project started in November 2022 in Balaganj upazila under Sylhet district. Its activities were implemented in Balaganj Sadar, Dewanbazar, Paschim Gauripur and Purba Poilanpur unions of Balaganj upazila.

The four unions were divided into 174 CBOs through the community situation analysis. CBOs were first declared as open defecation free and arsenic safe communities by increasing the capacity of the community through various trainings, orientations, and sessions for two years. Gradually, the villages, wards, and unions were declared as open defecation free and arsenic safe villages, and wards. In the last phase, Balaganj, Dewanbazar, Paschim Gauripur, and Purba Poilanpur unions were declared open defecation free and arsenic safe unions after scrutiny by the Upazila Watsan Committee.

On December 10, 2024, a phase-out workshop of four unions of Balaganj upazila was jointly held at the Upazila hall room. A total of 12 CBOs were awarded as models as three CBOs in each of the four unions. The CBOs who received the award are-a . Char Subia, Adityapur-2, Radhakona Paschim-2 of Balaganj Union. Sheorkhal Majhpara, Mohammadpur Dakkhin, and Paschim Sultanpur of Dewanbazar Union. Algapur, Harisham Uttor-1 and Fultail Paschim of Paschim Gauripur Union. Purbo Oyea, Rashidpur and Hamsapur-3 of Purba Poilanpur Union. Besides, awards were given to four Union Parishads, Public Health Engineering Department and Upazila Watsan Committee.

Sub Assistant Engineer, Department of Public Health Engineering Balaganj was present as the President of the Phase Out Workshop, Honorable Upazila Nirbahi Officer was the Chief Guest, UNICEF Sylhet Representative, Director Asia Arsenic Network, Project Manager AAN was special guest. Chairmen of different unions, UP members, journalists, CBO presidents, Secretary and Members of the community, and employees of Asia Arsenic Network Balaganj were also present.

First, the Area Manager of Balaganj Asia Arsenic Network described the purpose of the phase out workshop. CBO President, Union Parishad Members, Journalists, Special Guests and Chief Guest presented their speeches. The CBO

presidents said, "Our areas were previously unhygienic and dirty. We have learned a lot since the arrival of the Asia Arsenic Network and with the support of AAN, we have been able to make our areas healthier and Hygienic. All the people in our area now use hygienic latrines and use arsenic safe water for cooking and drinking purpose. The Union Parishad representatives said that they have not seen other NGOs like Asia Arsenic Network. AAN has explained to the people by going from Commnity to Community. With the support of the Asia Arsenic Network and the implementation of proper activities, the use of hygienic latrines, hand washing and arsenic safe water has been ensured 100%. He thanked UNICEF and Asia Arsenic Network for undertaking such a project. The UNICEF representative said Asia Arsenic Network has been in constant touch with UNICEF during the project period. Activities have been implemented in joint consultation at different times. He thanked the Union Parishad and the Upazila administration, including the Department of Public Health Engineering, for successfully declaring the unions as open defecation free and arsenic safe unions with the help of Asia Arsenic Network.

The Project Manager AAN thanked the people of the community and urged them to work to sustain this change in the community. The director AAN thanked everyone for declaration the CBO, ward and union. Speaking as the chief guest, the Upazila Nirbahi Officer said that it is possible to change the society if the people wish. He said that with the help of Asia Arsenic Network, the people of the community should always keep the area hygienic and clean. Later, crests were distributed among the President of Model CBO, Union Parishad Chairman, Department of Public Health Engineering and Upazila Watsan Committee and four unions were certified as Open Defecation Free and Arsenic Safe Union.

In his presidential speech, Sub Assistant Engineer highlighted the success of the GOB-UNICEF project. He has been amazed to visit different CBOs at different times. He thanked everyone, including the people of the community, for their hard work and announced the end of the phase out workshop.

3.11.2 Day observation and participating in special events

On October 15, 2023, the vibrant celebrations of "National Sanitation Month October 2023 and Global Handwashing Day" unfolded in Balaganj Upazila, Sylhet. The participants, including students from local schools, government officials, and esteemed community members, gathered to champion the critical practice of handwashing for the preservation of public health. in Balaganj, fifty girls from TN Girls High School and fifty boys from Balaganj D.N. Government High School enthusiastically participated. The focal point of the event was a handwashing demonstration where students showcased the proper technique, adhering to World Health Organization guidelines, using soap and water. This effort aimed to educate others and was observed by government figures, ensuring a broader dissemination of essential knowledge. Lively rallies, featuring various community representatives, teachers, health

workers, and journalists, paraded through residential areas, displaying banners and posters emphasizing the significance of regular handwashing. Educational sessions led by prominent speakers in both Upazilas further underscored the importance of hand hygiene, making the events in Balaganj pivotal in promoting public health awareness.

The impactful events in Balaganj Upazila showcased the potential for positive change when communities unite for a common cause. By emphasizing the importance of continued efforts to promote hand hygiene, the participants, including students, officials, and community members, played a vital role in creating cleaner and safer environments. The celebration not only educated students on this essential practice but also empowered them to become advocates, actively spreading knowledge within their communities. As health ambassadors, these students significantly contributed to the collective effort toward building a healthier community, reflecting the positive outcomes achievable through collaborative initiatives focused on public health awareness.

World Water Day observation: "Accelerating Change; The Action You Take, No Matter How Little, Will Help Solve the Water Crisis" was the subject of the 2023 World Water Day. On March 22, 2023, project teams celebrate World Water Day in 4 unions and 1 upazila, Balaganj, with rally, Miking, and discussion meetings. Also, a clean water campaign with the slogan "Let's do our best to solve water problems" was run from March 18 to March 20. Using the five steps of safe water planning—water source, collection, transportation, storage, and consumption—this campaign aware the public on the value of safe water. Water may not be safe if even one of these five stages is violated. Everyone involved in the campaign pledged to safeguard the water.

Pic-16: Day

Pic-18: World Water Day Campaign

Development fair:

In September 2023, as part of a national program, Balaganj Upazila Parishad organized a development fair. Asia Arsenic Network and local DPHE jointly participated, showcasing, equity and abidance-based water point sites allocation system, several types of low-cost handwashing devices, and latrines (twin and single pit), which garnered positive attention from government officials, including the Member of Parliament (MP). He praised the project's use of locally available recycled materials to develop unique types of handwashing devices and expressed a commitment to allocating safe water points according to community needs.

Pic-19: Development Fair

During the fair, the Honorable Member of Parliament announced a shift from individual-level water point allocations to allocations for groups of families, demonstrating a commitment to equitable access. Subsequently, the Asia Arsenic Network and DPHE representatives were invited to meet with him in Sylhet to discuss this matter further. Accordingly, the project team and DPHE representative had a meeting with him at his office. MP shows his interest in using equity and evidence-based water point site selection by

involving the local community. He also shows his interest in allocating his portion of safe water points according to the project-developed necessary water points site list for the four unions. He also requested support in preparing a similar type of list for the remaining two Unions of the Balaganj Upazila. He shows his interest to contribute in making arsenic-safe Upazila rather than the project targeting four unions. He again thanked the project team for preparing this type of list which he looking for a long time.

3.11.2 Case study and Human story

During the reporting period, project staff identified several extraordinary approaches and initiatives undertaken by community members that have had a positive impact on the community. Some of these noteworthy initiatives were selected for further replication and documented as case studies or human stories. These stories encompass a range of initiatives, including equity-based site selection, union-level water quality testing, and menstrual hygiene promotion.

5 Target and Achievements summary

The project target and achievements summary for the period from 20th October 2022 to 9th December 2024 are given below:

Note: 90% above is considered achieved, PwD- Person with Disability

Activities		Total Target	Oct'22-'24Dec Achievement	Participants					Remarks
				Male	Female	Total	Achieve %	PwD	
Facilitation and sensitization workshops to orient LGIs and WASH stakeholders at the local levels on the proposed project plan and arsenic-safe union concept.	Inception/Planning workshop at Upazila level	1	1	31	3	34	100%	0	Achieved
	Union level rapport building and Planning meeting	4	4	84	19	103	100%	0	Achieved
	Staff orientation and foundation training on WASH, CLTS,	1	1	14	4	18	100%	0	Achieved
	Refreshers Training	1	1	8	7	15	100%	0	Achieved
Community social mapping and community action planning using community-led approaches	Social maps and a Community Action Plan (CAP) prepared	174	174	41316	42563	83879	100%	262	Achieved
	Follow-up meeting to implement the action plan / CAP (174 *5, Per CBO -5)	2293	2293	5055	10074	15129	100%	0	Achieved
	Proportion (%) of actions on the action plan (CAP) fully implemented (Target: 174 CBO)	174	174	N/A	N/A	0	100%	N/A	Achieved
Facilitate equity-based site selection for safe water supply by using agreed site selection criteria	Training conducted with support from NGOs	1	1	26	0	26	100%	0	Achieved
	Water points that followed equity-based site selection criteria	351	351	8707	9739	18446	100%	0	Proposed site
	List of arsenic-safe water points targeting pro-poor and unserved communities submitted to DPHE (After verification)	275	275	6769	7771	14540	100%	0	Achieved

Activities		Total Target	Oct'22-'24Dec Achievement	Participants					Remarks
				Male	Female	Total	Achieve %	PwD	
Provide support to DPHE and LGIs through community mobilization during the installation of water facilities	Proportion of installed safe water systems that are functional (Balaganj-200, Kanaighat-340)	400	400				100%	0	Achieved
	Installed water points with skilled caretakers and active O&M system	436	436	380	348	728	100%	0	Achieved
	Community based non-functional arsenic safe water points with GPS & cost estimate	36	64	N/A	N/A	0	155.56%	N/A	Achieved
	Rehabilitated water options with GPS	36	64	1506	1897	3403	155.56%	5	Achieved
	Rehabilitated WPs confirmed arsenic safe using field test kit	36	64	N/A	N/A	0	155.56%	N/A	Achieved
	Caretakers trained on O&M of water systems (Including Rehav.) Functional-400, Rehav-36	872	728	380	348	728	83.49%	0	Achieved
	Caretakers trained on CR water safety planning	872	728	0	0	0	83.49%	0	Achieved
	Water points where caretakers conduct and document a minimum of one preventive checks and maintenance of the water system each month	120	123	0	0	0	102.50%	0	Achieved
	User groups oriented on CR-WSP	1383	1383	5168	19021	24189	100.22%	48	Achieved
	HHs practicing HH-level water treatment and safe storage (collect water in clean pot, covered with lid, preserve in raised places, treatment and other safe handing practices)	15351	15351	0	0	0	100%	0	Achieved
	Safe water points with CR-WSP developed with at least two key actions implemented	373	373	0	0	0	100%	0	Achieved

Activities		Total Target	Oct'22-'24Dec Achievement	Participants					Remarks
				Male	Female	Total	Achieve %	PwD	
	91(rehabilitate)+40(double platform)+30(Functional TW)=								
Capacity building of the DPHE, LGIs and communities on raising awareness on WASH issues including water safety plan, arsenic, sanitation, and hygiene	Trainings conducted on WASH, WSP, Arsenic orientation	5	5	84	15	99	100%	0	Achieved
	Monitoring visits conducted by LGIs at the field level	124	124	N/A	N/A	0	100%	N/A	Achieved
	Local Entrepreneurs trained	20	19	19	0	0	95%	0	Achieved
	Local entrepreneurs implementing a business model for O&M of water systems	4	4	4	0	0	100%	0	Achieved
	Communities with leaders trained on WASH, Arsenic, WSP	348	334	159	175	334	98.38%	0	Achieved
	CBO meeting conducted on community action plan implementation progress	2293	2293	5055	10074	15129	100%	0	Achieved
	WSP Corner established	5	5	N/A	N/A	0	100%	0	Achieved
	Water system with arsenic testing conducted with the past 6 months (4 Unions, Per unions 100 test)	200	83	N/A	N/A	0	62%	0	Partial Achieved
	Water system with microbiological test conducted with the past 3 months	0	0	N/A	N/A	0	0	0	
	People reached with the full complement of services (safe water, arsenic, and WSP, sanitation, and hygiene) (4186 session x20 HHs x 6 person / 5 session) (From CSA-**2,24,008** People/2year)	83879	83879	41316	42563	83879	100%	0	Achieved

Activities		Total Target	Oct'22-'24Dec Achievement	Participants					Remarks
				Male	Female	Total	Achieve %	PwD	
	HHs reached with full complement of services (safe water, arsenic and WSP, sanitation and hygiene) (4186 session x20 HHs/ 5 session) (From CSA -40632 HH/2 years)	15351	15351	N/A	N/A	0	100%	0	Achieved
	HHs switched to arsenic safe well through motivation	1624	1624	4085	4780	8865	100%	0	Achieved
	HHs collect water in clean pot, covered with lid and preserve in raised places	15351	15351	0	0	0	100%	0	Achieved
	HHs that converted from unhygienic to hygienic / improved latrine through motivation	8661	8661	22668	23777	46445	100%	80	Achieved
	HHs that installed new improved latrine installed through motivation	1032	1032	2816	2746	5562	100%	6	Achieved
	HHs that installed Handwashing devices	11624	11624	30623	31888	62511	100%	27	Achieved
	HHs household members can demonstrate effective handwashing with soap and running water	11624	11624	0	0	0	100%	0	Achieved
Coordinate with relevant Govt. departments and stakeholders through quarterly/monthly meetings	Quarterly progress meetings with team and counterparts (DPHE, UNICEF, NGO)	23	22	110	154	264	96.65%	0	Achieved
	WATSAN Committee meetings (Union+Upazila wise- Half Yearly)	28	19	328	95	423	89.29%	0	Achieved
	Case studies and Human-interest stories	16	6	0	0	0	75%	0	Achieved
Demonstrate arsenic-safe union models including Community-	Communities declared arsenic safe with ODF	174	174	N/A	N/A	0	100 %	0	Achieved
	Villages declared arsenic safe with ODF	114	114	N/A	N/A	0	100 %	0	Achieved

Activities		Total Target	Oct'22-'24Dec Achievement	Participants					Remarks
				Male	Female	Total	Achieve %	PwD	
led total sanitation (CLTS) in selected unions	Unions declared arsenic safe with ODF	4	4				100%		Achieved
	# of Wall paintings done	36	36				100%		Achieved
	# of billboard installed	4	4				100%		Achieved

6 Activities by other stake holders

AAN provided support to Esolve for the site selection process of PWSS and the feasibility survey process. Additionally, AAN assisted the KTH-Dhaka University team in organizing a technocrat capacity-building training in Kanaighat upazila, including support for driller list preparation. Moreover, AAN had three representatives participate in a facilitation training organized by ITN-BUET on systematic and scientific approaches for targeting poor and unserved people in arsenic-affected areas, resulting in the successful acquisition of certificates.

The Esolve team visited Balaganj upazila on June 17, 18, and 19, 2023, tentatively confirming a location for a surface water-based water treatment plant. The UNO and AC Land, along with the Upazila surveyor, were present during these visits and confirmed that the chosen location was suitable for the treatment plant. The Esolve team collected the necessary information to finalize the design, conducting interviews with 100 households about the sustainability of the Mini Pipe Water Supply Systems. The AAN team provided the necessary support as requested.

The KTH-Dhaka University team organized a two-day (May 24 and 25, 2023) capacity-building training for technocrats in Balaganj Upazila. On Day 1, participants included UNICEF zonal office representatives, government officials, LGI representatives, NGOs, and local social workers. Day 2 was dedicated to local drillers listed in the training.

ITN-BUET organized a facilitation training on July 8-11, 2023, focusing on systematic and scientific approaches for targeting poor and unserved people in arsenic-affected areas at DPHE Sylhet.

7 Challenges and Way Forward

According to UNICEF consultant Dr. Shamim Uddin, several important findings were reported which included some areas are now suitable for DTWs installation for gravel layers, annual and flash flooding, Arsenic contamination at deep aquifer in some areas, low water table, Screening for arsenic contamination in tubewells conducted but report not available, hard to reach some areas in hour belt etc. According AAN also similar challenges in the working areas and noted in below:

1. Groundwater Suitability Challenges:
   - Challenge: Several areas face challenges in Deep Tube Well (DTW) installation due to the presence of gravel layers, annual and flash flooding, hard-to-reach areas, household distributions, arsenic contamination in deep aquifers, and a low water table.
   - Implications: Partial suitability of DTWs in specific unions due to gravel layers, insufficient water quantity in dry seasons, and the prevalence of flooding impact water access.
2. Water Quality and Arsenic Contamination Issues in Kanaighat and Balaganj:
   - Challenge: Arsenic contamination reported above the Bangladesh drinking water standard in 8.33% of installed DTWs in Kanaighat upazila, reflecting a similar trend in Balaganj.
   - Implications: The challenge of ensuring safe drinking water due to arsenic contamination poses health risks and necessitates effective mitigation strategies.
3. Water Table and Aquifer Challenges in Balaganj:
   - Challenge: Balaganj Upazila faces a significant problem with a low water table, impacting both deep and shallow tubewells, and a absence of spare parts affecting the functionality of tara tubewells.
   - Implications: The low water table during the dry season affects water availability, and the inactivity of tubewells requires timely solutions for sustainable water sources.
4. Accessibility and Communication Challenges in Hoar Belt Areas:
   - Challenge: Unions under the hoar belt in Balaganj and Kanaighat are challenging to reach, with scattered households and difficult communication during the dry season due to the absence of permanent roads.
   - Implications: Difficulties in reaching and communicating with households impact the implementation of water projects and require alternative transportation strategies during different seasons.
5. Water Quality Testing Constraints:

- Challenge: Water quality testing for newly installed tubewells is not possible locally, posing a challenge in ensuring the safety and potability of water sources.
- Implications: The inability to conduct local water quality tests hinders the immediate assessment of water safety, potentially affecting public health.

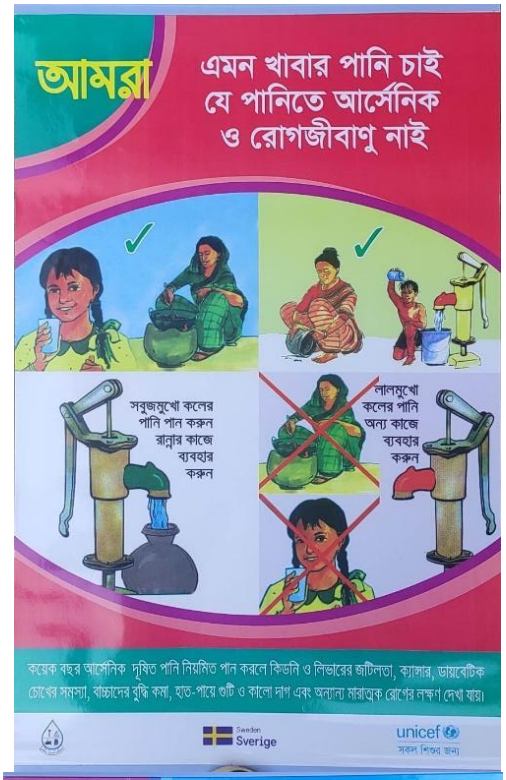
6. Delayed Activities and Backlog Adjustments:
   - Challenge: 1st preparations, including staff requirements, manual finalization, and CAS format development, took longer than planned, causing delays in various project activities.
   - Implications: The backlog in project activities requires efficient adjustment during the 3rd quarter, with the anticipation of finding appropriate solutions to overcome water quality, low water table, and aquifer challenges.
7. Incomplete Water Testing Reports:
   - Challenge: DPHE completed tubewell screening for both areas, but the reports have not yet been published, leading to uncertainties and lack of awareness among households regarding screening results.
   - Implications: Incomplete testing reports hinder informed decision-making about water sources, creating a gap in community awareness and potentially affecting public trust in water safety.
8. Sanitary Access and Hygiene Practice Challenges:
   - Challenge: In the targeted upazilas, the prevalence of open defecation, unimproved latrines, and the absence of handwashing devices pose significant challenges to achieving optimal sanitary access and hygiene practices.
   - Implications: The widespread practice of open defecation contributes to environmental pollution, posing health risks to the community.
   - Unimproved latrines may compromise sanitation, leading to hygiene-related illnesses and affecting overall community well-being.
   - The absence of handwashing devices hinders the adoption of proper hygiene practices, potentially contributing to the spread of diseases.

Addressing a myriad of challenges, the way forward involves a comprehensive strategy to ensure sustainable water access and hygiene practices. Initiatives include conducting feasibility studies for Deep Tube Well (DTW) installation, implementing arsenic mitigation strategies, investigating solutions for low water tables, and developing alternative transportation strategies for hard-to-reach areas. Additionally, streamlining delayed activities, advocating for local water quality testing capabilities, and transparently publishing tubewell screening reports are vital steps. To tackle sanitary challenges, community-led initiatives, improved latrine promotion, and handwashing device availability campaigns are essential for fostering healthier hygiene practices. The integrated approach aims to overcome each challenge systematically, promoting water safety, accessibility, and improved sanitation across the targeted upazilas.

To tackle the low water table issue, the Department of Public Health Engineering (DPHE) is installing deep tubewells with submersible pumps. They are also searching for suitable water points in areas with geological challenges. The project team is actively encouraging communities to upgrade their sanitation systems using the CLTS approach. Additionally, in flood-affected areas supported by the GoB-Unicef project, 40 double platform tubewells have been installed to provide access to safe water during flooding.

8 7. Communication Materials:

Various types of communication materials were utilized for awareness programs, training sessions, and courtyard meetings. These materials were designed and provided by UNICEF to effectively convey key messages. Additionally, wall paintings were created in each ward, and a billboard was installed in every union to ensure wider outreach. Below are some pictures of the communication materials used:


আমরা
এমন খাবার পানি চাই
যে পানিতে আর্সেনিক
ও রোগজীবাণু নাই
সবুজমুখো কলের
পানি পান করুন
রান্নার কাজে
ব্যবহার
করুন
লালমুখো
কলের পানি
অন্য কাজে
ব্যবহার
করুন
কয়েক বছর আর্সেনিক দূষিত পানি নিয়মিত পান করলে কিডনি ও লিভারের জটিলতা, ক্যান্সার, ডায়াবেটিক
চোখের সমস্যা, বাচ্চাদের বুদ্ধি কমা, হাত-পায়ে গুটি ও কালো দাগ এবং অন্যান্য মারাত্মক রোগের লক্ষণ দেখা যায়।
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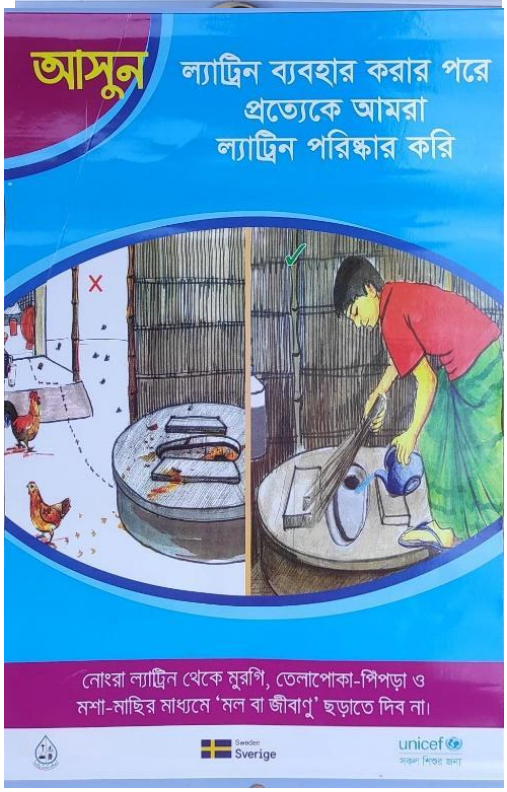
আর্সেনিক!


আসুন
ল্যাট্রিন ব্যবহার করার পরে
প্রত্যেকে আমরা
ল্যাট্রিন পরিষ্কার করি
নোংরা ল্যাট্রিন থেকে মুরগি, তেলাপোকা-পিঁপড়া ও
মশা-মাছির মাধ্যমে 'মল বা জীবাণু' ছড়াতে দিব না।
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আসুন জানি,
মল কিভাবে
মুখে যায়
সঠিকভাবে হাত ধোয়া
ঝুঁকি হ্রাস করে
সঠিকভাবে
খাবার
ঢেকে রাখা
সঠিকভাবে
খাবার তৈরী ও
রক্ষণাবেক্ষণ
ঝুঁকি হ্রাস করে
স্বাস্থ্যসম্মত পায়খানা
ঝুঁকি হ্রাস করে
নিরাপদ পানি
ঝুঁকি হ্রাস করে
হাত, মাছি, মাটি, পানি আর খাবার হয়ে মানুষের মল মুখে যায়।
আমরা তখন আক্রান্ত হই জন্ডিস, টাইফয়েড, ডায়রিয়া, কৃমি ও আমাশয়।
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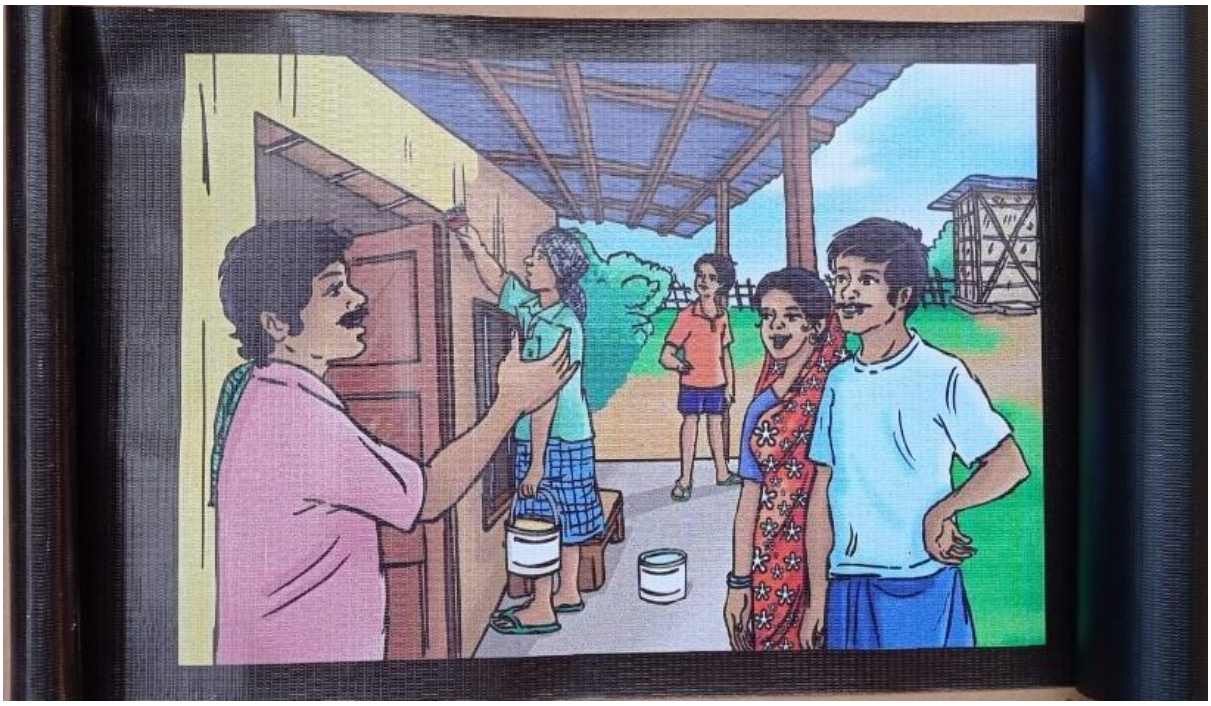


আসুন
খাবার আগে এবং
ল্যাট্রিন ব্যবহার করার পরে
সাবান দিয়ে দুই হাত ঘষে ধুই
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হাত ধোয়ার নিয়ম জানি
আমরা সবাই তা মানি
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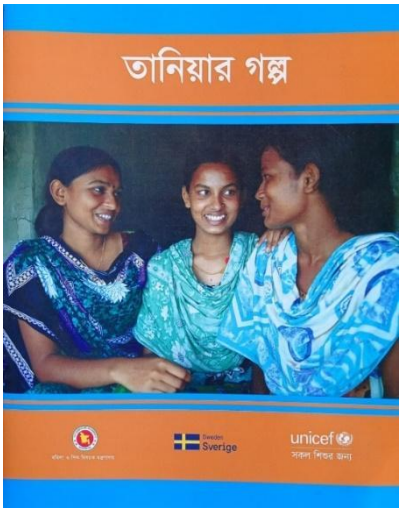
ফ্লিপ চার্ট
উন্নত স্বাস্থ্য অভ্যাস
জিওবি-ইউনিসেফ : আর্সেনিক সেফ ইউনিয়ন প্রকল্প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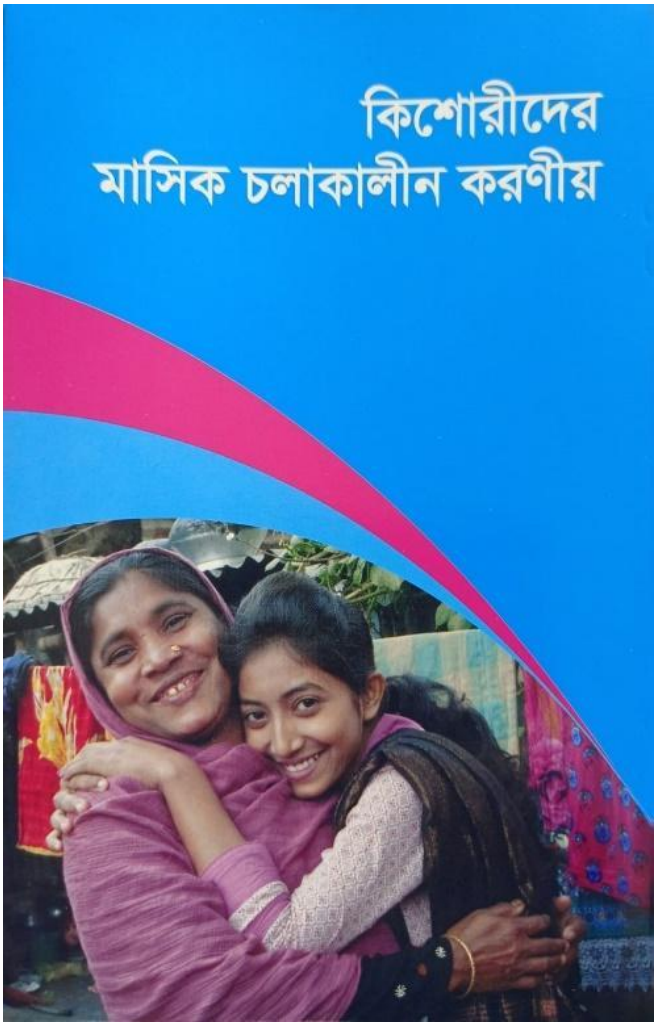
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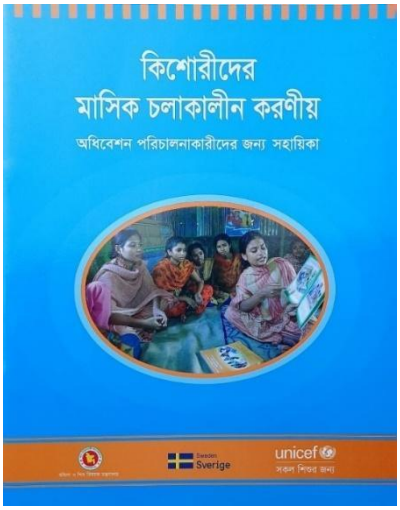
কিশোরীদের
মাসিক চলাকালীন করণীয়
অধিবেশন পরিচালনাকারীদের জন্য সহায়িকা
Sverige
unicef
সকল শিশুর জন্য


পান করবো নিরাপদ পানি
সুস্থ-নিরোগ থাকবো জানি
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সকল শিশুর জন্য
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পানির উৎস
পরিষ্কার ও নিরাপদ রাখুন
সংগ্রহ করুন
পরিষ্কার পাত্রে
বহন করুন
পাত্রের মুখ ঢেকে
সংরক্ষণ করুন
ঢেকে রেখে
পরিবেশন ও পান করুন
আঙুলে না লাগিয়ে
উৎস থেকে ব্যবহার পর্যন্ত পানি নিরাপদ রাখার উপায়সমূহ
১। উৎস
• পানির উৎসের চারিদিক পরিষ্কার রাখতে হবে
• নলকুপ নিরাপদ উঁচু স্থানে বসাতে হবে যা বন্যার পানি থেকে কুঁকিমুক্ত থাকবে
• নলকুপ থেকে কমপক্ষে ১০ মিটার বা ৩০ ফুট দূরত্বে পায়খানা স্থাপন করেতে হবে
• নলকুপের উপরে সম্ভব হলে ঢাকনা ব্যবহার করতে হবে
• পাতা ঝরে এমন গাছের নিচে নলকুপ না বসানোই ভাল
• কাছে কোন পঁচা ডোবা, গর্ত বা ময়লা আবর্জনার স্তুপ যেন না থাকে
২। সংগ্রহ
• পানির পাত্র পরিষ্কার হতে হবে
• হাত পরিষ্কার হতে হবে
• কোনোভাবেই পানির মধ্যে হাত দেয়া যাবে না
• নলকুপের মুখ নিয়মিত পরিষ্কার করতে হবে
৩। পরিবহন
• পাত্রের মুখ ওড়না বা শাড়ির আঁচল দিয়ে ঢাকা যাবে না।
• পরিষ্কার ঢাকনা ব্যবহার করতে হবে।
• পাত্রের মুখের চেয়ে বড় বা সমান ঢাকনা ব্যবহার করতে হবে
• লক্ষ্য রাখবেন যেন কোনোভাবেই হাত পাত্রের পানির মধ্যে না যায়
৪। সংরক্ষণ
• পানির পাত্র শুকনা, পরিষ্কার ও উঁচু স্থানে ঢাকনা দিয়ে রাখতে হবে।
• পানির পাত্র নিরাপদ এবং সুবিধাজনক স্থানে রাখতে হবে
• শিশু এবং অন্যান্য পশুপাখি যেন পানি দূষিত করতে না পারে সে বিষয়ে নজর রাখতে হবে
৫। গ্রহন বা ব্যবহার
• পরিষ্কার পাত্র বা গ্লাসে পানি পান করতে হবে
• পানি পান করার সময় পরিষ্কার হাতে গ্লাস ধরতে হবে
• গ্লাসের ভিতরে হাত দেয়া যাবে না

Billboard at Union level

Wall painting at ward level

8 Conclusion

Upazila level inception workshop and Union level rapport building and planning meeting completed where all local stakeholder participated and able to know the project goals and its activities, a timeframe which will ensure better coordination and implementation of project activities. All stakeholders and the Implementing Partner work closely together to ensure that identified project activities are executed promptly to avoid delay. On the other hand, central-level coordination meeting was completed and IPs reported progress, challenges, and the next work plan. It will support progress monitoring and IPs' good approaches to follow by others and rectify mistakes for the upcoming period.

9 Annex

- List of proposed site list as annex-1
- List of rehabilitated water points as Annex-2.
- List of trained caretakers as Annex-3
- List of operation and maintenance tools distribution as annex-4
- List of Arsenic-safe communities and villages with ODF as Annex-5
- List of distribution of CSA tools as Annex-6
- List of places for wall painting as Annex -7
- Monitoring format as annex-8