# Project Annual Report

## GoB-UNICEF WASH project

## December 2023 to December 2024

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

Asia Arsenic Network
Dharmapasha, Sunamganj District
Lot-1

**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 has access to improved water supply, but 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 concentration 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, Sunamganj,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, 251 villages were declared arsenic safe and open defecation free (ODF), with 10 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 ten unions within Dharmapasha is under Sunamganj District. The primary objective was to transform these unions into "Arsenic Safe Unions" by December 2025. This endeavor began on December 10, 2023, 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 on 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 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 first-year project interventions under Lot 1 (Sunamganj) will be implemented in the 4 selected unions of Dharmapasha Upazila under Sunamganj district of Sylhet division that are highly arsenic affected and are included under the DPHE's arsenic mitigation programme. Upazila wise selected union names are in below table:

Dharmapasha Upazila

| |
|---|
| 1) Dharmapasha Sadar Union |
| 2) Joysree Union |
| 3)Slborash Union |
| 4) Paikurati Union |

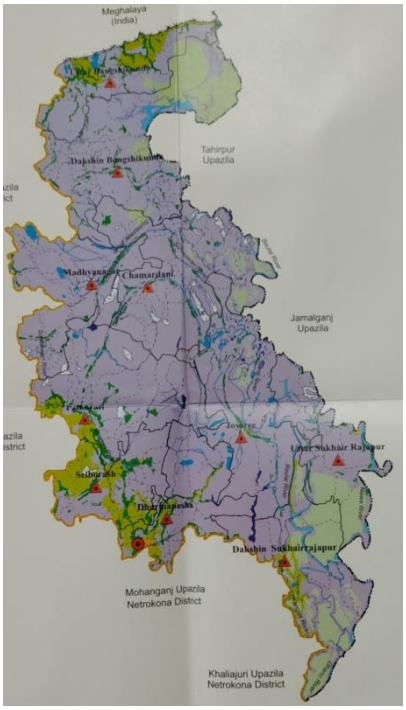


Figure 1 Unions under this project marked in color

## 2.2 Geography with Demographical Information

**Dharmapasha:** Dharmapasha stands on the Baulai River and is on the southwest periphery of Netrokona district. To the north is India (Meghalaya), to the south isMohonganj Upazila of Netrokona District. and on the west is Kalmakanda Upazila of Netrokona District. Geographically Dharmapashaj Upazila is situated at about $24.47^0$ and $25.12^0$ longitude and $90.56^0$ and $91.11^0$ east latitude. The land area is approximately 496.03km$^2$.Dharmapasha Upazila is divided into 6 union parishads,In 4 Targeted unions66 mouzas and 153 villages. Demographic information is given below-

- Households –22,514
- Population -1, 11, 427 (As per CSA Report).
- Males constitute 50.62% of the population, and females 49.38%.

# 3 Programme Update

## 3.1 On boarding human resources and Office Set up

Dharmapasha office setup completed in December 2023 and area Managers joined from 10thDecember 2023 according to the contract and remaining staff joined from 10thDecember as per budget allocation. The project team was divided into two groups namely the Field team and Headquarter team (HQ), field team consisted of 13 membersand HQ team 4 members.

## 3.2 Inception Workshop/meeting

**Dharmapasha:**The Project Inception workshop, a collaborative effort held at Dharmapasha Upazila on March 18, 2024, in the Upazila Parishad conference room, marked a significant milestone in advancing project initiative. Chaired by Aliduzzaman, the Assistant Commissioner (Land), the meeting saw active participation from key stakeholders including the Upazila Vice Chairman, All Union Chairmen, Secretaries, and Mehedi Hasan, SAE, DPHE the Chairman and representatives from all six Union Parishads, signifying a comprehensive engagement of local leadership. The workshop served as a platform for the detailed introduction of the project's objectives, emphasizing collaborative strategies for community capacity strengthening and arsenic mitigation. The participants engaged in discussions focusing on the allocation of resources, community involvement, and the role of Union Parishads in ensuring drinking water safety. This collaborative and inclusive approach ensures a strong foundation for the project, fostering a shared commitment to address water-related challenges and promote sustainable solutions within the Dharmapasha Upazila communities.

Figure 2 Upazila Inception Workshop

## 3.3 Union level rapport building and planning meeting

The Union level rapport building and planning meeting convened in Dharmapasha Upazila showcased a remarkable confluence of stakeholders committed to the success of the WASH project. By bringing together around 20 participants from diverse backgrounds in each of the 4 targeted unions, (Dharmapasha, Joysree, Paikurati and Selborash) 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.

Figure 3 Union Level Rapport Building

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 theunique 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 Foundation and Refresher Training

Two day-long training was conducted for the newly recruited project staff at the AAN Office at Dharmapasha Upazila on 2/2/24 to 3/2/24.

The training was conducted in classroom and field sessions, Participants were a total- of 14, 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 staff.

Figure 4 Staff foundation training at Dharmapasha

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## 3.5 Report for Union level rapport building and Planning meeting

On 19, 20 February, 10, and 11 March 2024 arranged a Union Planning Meeting under "Technical Assistance to DPHE for Strengthening Community Capacity and Arsenic Mitigation Initiatives to Ensure Drinking Water Safety for All" at Paikurati, Joysree, Dharmapasha Sadar Union & Selborash Union in Dharmapasha Upazila. Here present as an Honorable Chairman of 4 unions. Also, present here are all ward members, Local elite persons, Religious leaders, Teachers, Health assistance, Wash motivators& others. Also, present here Area Manager, Project Engineer and Union Supervisor. Date:19, 20 February, 10, 11 March 2024. Method: Lecture, Open Discussion & multimedia Presentation

**Participants (**Short description about participants**):** Union Chairman-1,Secraery-1, ward members-10, Local elite person-2, Freedom Fighter-1-, DPHE Mechenic-1, EPI Techicaian-1, NGO person-1,Asst. Accountant Com computer operator-1, VDP member-1, Total-20 prs.

| SL # | Training/orientation date | | Venue | Male | Female | Total | Name of Facilitators |
|---|---|---|---|---|---|---|---|
| | From | To | | | | | |
| 1 | 19/02/2024 | 19/02/2024 | Paikurati UP hall Room | 14 | 6 | 20 | Madhu Sudon Dey, Md. Rokon Uddin & Md. Mojaffor Hossain US |
| 2 | 20/02/2024 | 20/02/2024 | Joysree UP hall Room | 14 | 5 | 19 | |
| 3 | 10/03/2024 | 10/03/2024 | Dharmapasha Sadar UP hall Room | 17 | 3 | 20 | |
| 4 | 11/03/2024 | 11/03/2024 | Selborash UP hall Room | 16 | 4 | 20 | |

**Key delivered topic/discussion point:**

Project Goal & Objectives, Project Working Area, Justification for project working area selection, Tentative Plan, Project Duration, Project Result, Project Activities, Project implementation strategy, Equity based Water point site

selection & Planning. End of the session Honorable Chef Guest Delivered Summary speech. Everybody is given a warm welcome for the project starting in this union. Also committed to give all kinds of support for near future amends. Two days of refreshers training was conducted for the existing staff to review the field activities as well as sharing the working field experiences among the staffs. This training was held at the AAN Dharmapasha office at to conduct this training multimedia, flip chart, whiteboards, marker, brown paper and VIPP card were used. Training was divided into two segments i.e. lecture session; group work followed by a feedback session. The training was conducted in 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, check list, Social map, economical classification, feces calculation, faces 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.

Figure 5: Union level rapport building and Planning meeting

Figure 6: Union level rapport building and Planning meeting

### 3.6WASH, Arsenic and WSP at Union Watson Committee's orientation

03 June' 2024 to 15 July,2024 a arranged Orientation on WASH, Arsenic & WSP with union WATSAN committee at Dharmapasha, Joysree, Selborash & Paikurati union in Dharmapasha, Upazila Sunamganj. There were present as a chief guest Honorable chairman. Also present as a Facilitator Mr. Madhu Sudon Dey. There were Present all word Members, Local elite persons, focal persons, religious leaders, Teachers, Health providers, WASH Motivators and Union Supervisors. Date: 03 June' 2024 to 15 July, 2024 Method: lecture, Open Discussion, Question and Answer Participants (Short description about participants): There was Present all word Members, Local elite persons, focal persons, religious leaders, Teachers, and Health providers

| .SL# | Date | Venue | Male | Female | Total | Facilitator |
|---|---|---|---|---|---|---|
| 1 | 3-Jun-2024 | Selborash union parished hall room | 18 | 2 | 20 | Madhu Sudon Dey |
| 2 | 12-Jun-2024 | Paikurati union parished hall room | 17 | 3 | 20 | |
| 3 | 25-Jun-2024 | Dharmapasha union parished hall room | 17 | 3 | 20 | |
| 4 | 15-Jul-2024 | Joysree Union Parished Hall Room | 13 | 4 | 17 | |

**Key delivered topic/discussion point:** Purpose Of Orientation, Overall about WASH, Safe Water and Source of Safe water, Causes of water contaminate, About Disadvantage of using unimproved latrines, Sanitation, Hand Washing step and rules, Overall arsenic, Inspect and prevalence of arsenic in Bangladesh, Harmful effects of arsenic and mitigation measures, Water safe plan (WSP), Union WatSan Committee's Duties and Responsibilities, Equity based site selection, DTW site selection Criteria, Water users Group and Caretaker selection, Water Options O & M committee formation, Duties and responsibilities of O& M committee. **Leanings**: Water safe plan (WSP), Five Steps of water safe plan, Causes of water contamination, Disadvantage of using unimproved latrine, DTW site selection Criteria, Personal hygiene, Arsenic and Arsenic impact in human body. **Conclusion:** End of the session Honorable Chairman's of various Unions Delivered Summary speech. WATSAN committee given thanks for the project activities starting in all six Unions. All of the participants are committed will give all kinds of support to implement all activities

Figure 7: WASH, Arsenic and WSP at Union Watson Committee's orientation

## 3.5 Community Situation Analysis(CSA) and CAP

### Dharmapasha:

Between December 2023 and November 2024, a comprehensive engagement unfolded as 1, 11, 427 villagers actively participated in Community Situation Analysis (CSA) activities organized for 217 Community-Based Organizations (CBOs) in Dharmapasha Upazila. Through CSA, meticulous assessment identified 5,956 functional water points, categorizing among functional 2,773 as arsenic-safe (48 Deep Tube Wells - DTWs, 937 Shallow Tube Wells - STWs), 985 as arsenic-contaminated (above 50ppb, with 48 DTWs, 937 STWs), 2198 as untested tube wells, 637 as non-functional. Moreover, the analysis revealed no households using unimproved water sources like rivers, ponds, and dug wells. CSA also identified 656 new water points required to achieve 100% safe water coverage considering 150-meter radius or water collection round trip 30 minutes.

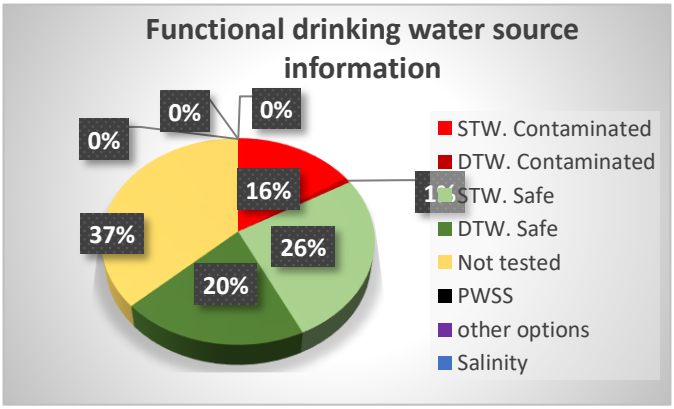


Figure 8 : Functional drinking water source in Dharmapasha

In terms of sanitation, 3,819 households (16.96%) were identified to be using improved toilets, while 14,785 households (65.68%) utilized unimproved toilet facilities, and 3,910 households (17.6%) lacked toilets or continued open defecation practices. Additionally, 2,204 (9.79%) households possessed hand washing facilities with soap, 857 (3.81%) households had facilities without soap, and 19453 (86.40%) households had no hand washing facilities in total. Throughout this period, 3449 villagers actively participated in 610 CBO meeting sin updating the Community Action Plan (CAP) with project personnel assistance.

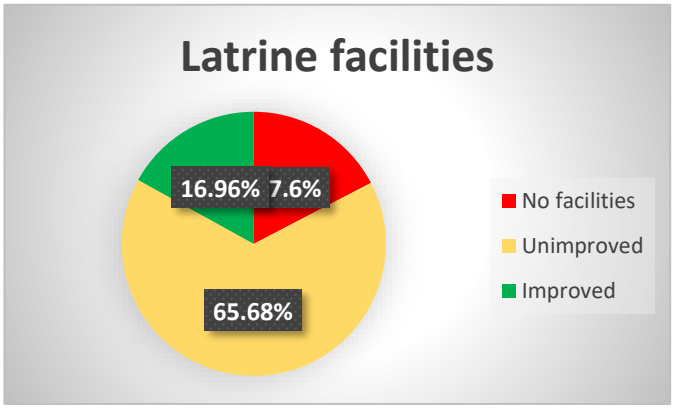


Figure 9: Latrine Facilities in Dharmapasha

Remarkable steps were made during these meetings, with CBO members taking charge of improving 619 unimproved toilets, constructing 431 new latrines, and installing 991 hand washing devices through Community-Led Total Sanitation (CLTS) initiatives. Notably, 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 detail summary of CSA finding in Dharmapasha given in below table No.01:

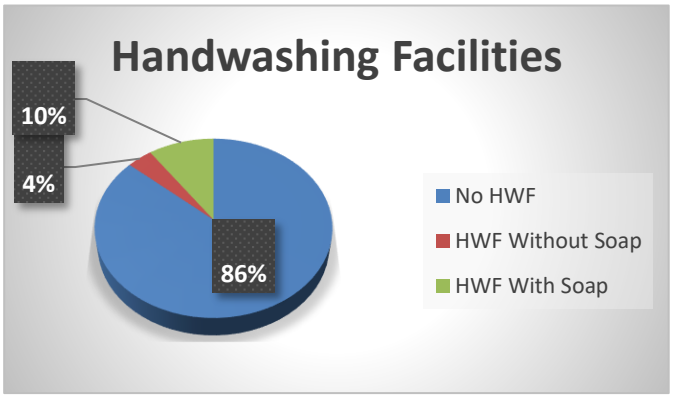


Figure 10: Hand washing Facilities in Dharmapasha

| Categories | Head | Dharmapasha | % (where applicable) |
|---|---|---|---|
| **Population** | Total HH | 22,514 | |
| | Female | 55027 | 49.36 |
| | Male | 56,400 | 50.62 |
| | Total | 1,11,427 | |
| | Children (<18 Year) | 39,538 | |
| | PwD | 615 | |
| **Economical Category (based on CSA)** | Rich | 1,532 | 6.80 |
| | Middle | 4,657 | 20.68 |
| | Poor | 12,805 | 56.88 |
| | Extreme Poor | 3,520 | 15.64 |
| **Latrine facilities (in HHs numbers)** | No facilities (open defecation) | 3, 910 | 13.37 |
| | Unimproved latrines | 14,785 | 56.67 |
| | Improved latrines | 3,819 | 16.96 |
| **Handwashing Facilities (in HHs numbers)** | HH with no hand washing facilities | 19, 453 | 86.40 |
| | Hand washing facilities without soap | 857 | 3.81 |
| | Hand washing facilities with soap | 2, 204 | 9.79 |
| **Functional Drinking Water Source Informations (options in numbers)** | STW - Arsenic contaminated tube-wells (> 50 ppb) | 937 | 24.93 |
| | DTW - Arsenic contaminated tube-wells (> 50 ppb) | 48 | 1.28 |
| | STW - Arsenic safe tube-well (< 50 ppb) | 1, 567 | 41.70 |
| | DTW - Arsenic safe tube-well (< 50 ppb) | 1, 206 | 32.09 |
| | Not arsenic tested tube-wells | 2, 198 | |
| | Pipe Water System (Mini Pipe for 40HH) | 0 | |
| | Others options | 0 | |
| | Not used for high salinity | 0 | |

| Categories | Head | Dharmapasha | % (where applicable) |
|---|---|---|---|
| # of Water options Installed by (Ownership) | Public (GoB, NGO etc) | 1, 268 | |
| | Private | 4, 634 | |
| # of non functional drinking water points | | 637 | 5% |
| Drinking Tube-wells without/ broken platform | | 1259 | 6% |
| 0.33Water Users Information (HHs in numbers) | a. HHs with unimproved water sources | 0 | 0.33 |
| | b. HHs with limited facilities | 1, 217 | 3.23 |
| | c. HHs with basic facilities | 21, 288 | 52.33 |
| | d. HHs with improved facilities (basic plus) | 13, 770 | 29.62 |
| | e. HHs with safely managed facilities | 4, 905 | 6.75 |
| | f. HHs with improved well but arsenic contaminated | 2, 039 | 2.29 |
| | g. HHs with improved well but not tested well (arsenic) | 4, 314 | 5.47 |
| # of arsenic Patients | Female Arsenicoisis | 0 | 0 |
| | Male Arsenicoisis | 0 | 0 |
| Required number of water points for 100% safe water coverage | | 656 | |

Table-1: CSA findings in Dharmapasha, Sunamganj

## 3.6 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.

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 ToTprogram to understand the training process in ITN-BUET.A total of 41 participants joined in two batch. List of participants given in below:

Figure 11: Training on Equity based site selection at Sylhet

| 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 |
| **Batch-2** | | |
| Sl No. | Name | Designation |
| 1 | Md. Abul Kashem | Executive Engineer, DPHE, Sunamganj |
| 2 | Abdullah al Mamun | Assistant Engineer, DPHE, Sunamganj Sadar |
| 3 | Mridul Kanti Sarkar | Sub-Assistant Engineer, DPHE, Biswamvarpur |
| 4 | Mizanur Rahman | Sub-Assistant Engineer, DPHE, |
| 5 | Chatak Md. Atiwour Rahman | Sub-Assistant Engineer, DPHE, Sunamganj Sadar |
| 6 | Ujjal Khan | Sub-Assistant Engineer, DPHE, |
| 7 | Derai Mehedi Hasan | Sub-Assistant Engineer, DPHE, Dharmapasha |
| 8 | Md. Eliass Shah Sarwar | Sub-Assistant Engineer, DPHE, Doarabazar |
| 9 | Md. Abdur Rob Sarkar | Assistant Engineer, DPHE, Jagannathpur |
| 10 | Ram Kumar Saha | Sub-Assistant Engineer, DPHE, |
| 11 | Jamalganj Md. Rasedul Islam | Assistant Engineer, DPHE, |
| 12 | Sulla Alamin Sub- | Assistant Engineer, DPHE, Tahirpur |
| 13 | Md. Khaleduzzaman | Executive Engineer, DPHE, Moulvibazar |
| 14 | Swapan Chakma | Assistant Engineer, DPHE, Moulvibazar Sadar |
| 15 | Md. Jahangir Alam | Estimator, DPHE, Moulvibazar |
| 16 | Md. Muhosin | Sub-Assistant Engineer, DPHE, Kulaura |
| 17 | Moin Uddin | Sub-Assistant Engineer, DPHE, Barlekha |
| 18 | Md. Shofiqul Islam | Sub-Assistant Engineer, DPHE, Juri |
| 19 | Sujan Sarkar | Sub-Assistant Engineer, DPHE, Kamalganj |
| 20 | Md. Saiful Islam | Sub-Assistant Engineer, DPHE, Sreemangal |
| 21 | Ahamed Hossain Chowdhury | Area Manager, AAN |
| 22 | Abdul Alim | Project Engineer, 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 given in below table:

| Upazila | Unions | Number of proposed water point site |
|---|---|---|
| Dharmapasha | Dharmapasha Sadar | 175 |
| | Joysree | 171 |
| | Selborash | 138 |
| | Paikurati | 125 |
| **Dharmapasha upazila total** | | ***609** |
| **Note: During initial assessment (CSA) identified proposed site for water points was at Dharmapasha-656 and final assessment it was confirmed Dharmapasha 609)* | | |

Table-4: Number of proposed water point site in Dharmapasha, Sunamganj

The collaborative efforts of AAN, UNICEF, and ITN have played a crucial role in achieving the project's objectives and promoting sustainable water solutions in the targeted areas. The proposed site list as annex-1

### 3.7 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 137 officials from diverse organizations and LGIs underwent training on Water, Sanitation, and Hygiene (WASH) as part of this initiative supported by UNICEF.

Figure 12: 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.

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

Figure 13: Rehabilitating water point

(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.

### 3.8.2 Rehabilitate Water Points

AAN made a list of 36 inactive water points by motivation that may be repaired and that tested arsenic-safe. During the reporting period, In numerous instances, it was discovered that the check valve, bucket, TW head, some classes' platforms, drain, or water seal were damaged or stolen cost between Tk. 500 and Tk. 1500, including mechanic fees. With the exception of the Tara pump, which has its spare parts locally unavailable.

Figure 14: Rehabilitate Water Points

During this reporting period, AAN transformed a traditional DTW (1.5 inch pipe) to tara pump (Switching from Suction to Force Mode). Dharmapasha Upazila current water table for deep aquifer is 25-40 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 Annex-2.

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## 3.8 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 in Dharmapasha upazila. A total of 432 individuals actively participated in these training sessions. Additionally, training sessions were held for Community-Based Organization (CBO) leaders. As of the reporting period, 217 CBOs had already been formed, and during this timeframe, 434 community leaders received training from 217 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 217 CBOs across the targeted 4 unions in Dharmapasha Upazila. Throughout the project duration, a total of 610 CBO meetings were convened, with the active participation of 3,449 members. These meetings served as a platform for dialogue and collaborative decision-making.

Figure 15: 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 hand washing 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 4 WSP corners across the Union Parishads, with 4 units distributed within the union.. 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).


Figure 16: 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.

### 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.

Figure 17: Courtyard session-1

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 532 sites, engaging 9, 397 participants.

2. **Hand Hygiene Session:** After home visits, participants were encouraged to join hand washing sessions to practice proper handwashing with soap. The session highlighted the occasions when hand washing is crucial through visual aids such as hygiene pouts, posters, and a 5-F diagram. This session took place at 447 sites, with 8, 311 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 494 sites, engaging 9, 129 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 196 sites, involving 3, 229 participants during the project period.

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 113 sites, engaging 1,294 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 (December 2023 to November 2024) in Dharmapasha as below:

| Session | Dharmapasha | |
|---|---|---|
| | Number | Participants |
| Arsenic and its Impact Session | 532 | 9, 397 |
| Hygiene session | 447 | 8,311 |
| Sanitation session | 494 | 9, 129 |
| Safe water and WSP session | 196 | 3, 229 |
| Personal and menstrual hygiene management | 113 | 1, 294 |
| **Total** | **1,782** | **31, 372** |

Table-5: Courtyard session conducted in Dharmapasha, Sunamganj

### 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 Dharmapasha Upazila 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 432 families opting to install new latrines, and an additional 619 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 hand washing facilities or devices in a majority of households within the targeted 4 unions of Dharmapasha Upazila. In response to this observation, the project staff undertook house-to-house visits and organized hand hygiene sessions to motivate residents to install hand-washing devices.

WASH motivators played a proactive role in assisting community members, at times helping them install locally made hand washing devices equipped with taps and buckets. During the first year of the project, a positive outcome was achieved, with 991 families successfully installing hand washing devices and adopting proper hand washing practices. This initiative reflects progress toward improving hygiene practices and fostering a healthier living environment within the community.

## 3.9 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 parishad 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 November 24, 2024, a district coordination meeting convened at the DPHE office in Sunamganj. Mr. Sayed Khaledul Islam, Executive Engineer of Sunamganj, presided over the meeting. Representatives from AAN, Madhu Sudon Dey, and Md. Shahadat Hossain presented current project activities and outlined the plan for the upcoming quarter. The

meeting also involved discussions on preparing a list of double-platform tube wells for flood-affected areas in Dharmapasha, and a request was made to share screening data in soft copy for Dharmapasha 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.

## 3.10 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 use of safe water and water safety plans, ensuring safe excreta disposal, particularly for children, promoting hand washing 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 hand-washing 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 guideline, 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.

This comprehensive approach not only reflects the dedication of the community members and CBOs but also demonstrates the commitment to ensuring the sustainable achievement of arsenic-safe and ODF conditions in the targeted areas.

### 3.11.2 Day observation and participating in special events

On October 15, 2024, the vibrant celebrations of "National Sanitation Month October 2024 and Global Handwashing Day" unfolded in Dharmapasha Upazila, Sunamganj. 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 Dharmapasha, 80 girls and 70 boys from Kakiam Govt. Primary School,80 girls and 60 boys from Paikurati Govt Primary School actively engaged, while in Dharmapasha Nayaband Govt. Primary School 70Boys & 90 girls, 70 girls and 80 boys from Sheikergaon Govt. Primary 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 Kanaighat and Balaganj pivotal in promoting public health awareness.


Figure 18: Day observation and participation-1

**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 2024 World Water Day. On March 22, 2024, project teams celebrate World Water Day in 6 unions and Dharmapasha with rally and 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.

Figure 19: Day observation and participation-3

## Development fair:

In 3 4 March 2024, as part of a national program, Dharmapasha Upazila Parishad organized a development fair. Asia Arsenic Network and local DPHE jointly participated, showcasing, equity and abidance-based water point sites allocation system, As test,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.

Figure 20: Development Fair-4

# 4 Target and Achievements summary

The project target and achievements summary for the period from December 2023 to November 2024 are given in below:

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

| Activities | | Total Target | Dec'23-Nov'24 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 | 27 | 0 | 27 | 100% | 0 | Achieved |
| | Union level rapport building and Planning meeting | 4 | 4 | 61 | 18 | 79 | 100% | 0 | Achieved |
| | Staff orientation and foundation training on WASH, CLTS, | 1 | 1 | 9 | 3 | 12 | 100% | 0 | Achieved |
| | Refreshers Training | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| **Community social mapping and community action planning using community-led approaches** | Social maps, and Community Action Plan (CAP) prepared | 200 | 217 | 56400 | 55027 | 111427 | 108.50% | 615 | Partial Achieved |
| | Follow-up meeting to implement the action plan / CAP (217 *5, Per CBO -5) | 600 | 610 | 1641 | 1808 | 3449 | 101.67% | 0 | Achieved |
| | Proportion (%) of actions on the action plan (CAP) fully implemented | 0 | 0 | N/A | N/A | 0 | 0% | N/A | 50% Target for 1st year |
| **Facilitate equity-based site selection for safe water supply byusing** | Training conducted with support from NGOs | 1 | 1 | 18 | 4 | 22 | 100% | 0 | Achieved |
| | Water points that followed equity-based site selection criteria | 656 | 656 | | | | 100% | 0 | Proposed site |

| Activities | | Total Target | Dec'23-Nov'24 Achievement | Participants | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | Achieve% | PwD | |
| **agreed site selection criteria** | List of arsenic-safe water points targeting pro-poor and unserved communities submitted to DPHE (After verification) | 609 | 609 | 20478 | 19856 | 40334 | 100% | 0 | Achieved |
| **Provide support to DPHE and LGIs through community mobilization during the installation of water facilities** | Proportion of installed safe water systems that are functional (Dharmapasha) | 200 | 0 | | | | | 0 | Achieved |
| | Installed water points with skilled caretakers and active O&M system | 200 | 0 | | | | | 0 | Achieved |
| | Community based non-functional arsenic safe water points with GPS & cost estimate | 36 | 36 | 1335 | 1371 | 2706 | 100.% | N/A | Achieved |
| | Rehabilitated water options with GPS | 36 | 36 | 1385 | 1371 | 2706 | 100% | 0 | Achieved |
| | Rehabilitated WPs confirmed arsenic safe using field test kit | 36 | 36 | N/A | N/A | 0 | | N/A | Achieved |
| | Caretakers trained on O&M of water systems (Including Rehav.) | 472 | 0 | | | | | | |
| | Caretakers trained on CR water safety planning | 472 | 0 | | | | | 0 | |
| | Water points where caretakers conduct and document a minimum of one preventive checks and maintenance of the water system each month | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | User groups oriented on CR-WSP | 236 | 196 | 1024 | 2205 | 3229 | 83% | | 50% 1st year target |

| Activities | | Total Target | Dec'23-Nov'24 Achievement | Participants | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | Achieve% | PwD | |
| | 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) | 0 | 0 | 0 | 0 | 0 | 0% | 0 | |
| | Safe water points with CR-WSP developed with at least two key actions implemented | 100 | 40 | 0 | 0 | 0 | 40% | 0 | 50% 1st year target |
| **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 | 78 | 18 | 96 | 100% | 0 | Achieved |
| | Monitoring visits conducted by LGIs at the field level | 4 | 4 | N/A | N/A | 0 | 100% | N/A | Achieved |
| | Local Entrepreneurs trained | 20 | **0** | 0 | 0 | 0 | | 0 | |
| | Local entrepreneurs implementing a business model for O&M of water systems | 0 | **0** | 0 | 0 | 0 | | 0 | |
| | Communities with leaders trained on WASH, Arsenic, WSP | 434 | 434 | 219 | 215 | 434 | 100% | 0 | Achieved |
| | CBO meeting conducted on community action plan implementation progress | 600 | 610 | 1641 | 1808 | 3449 | 101..67% | 0 | Achieved |
| | WSP Corner established | 4 | 4 | N/A | N/A | 0 | 100% | 0 | Achieved |
| | Water system with arsenic testing conducted with the past 6 months | 100 | 0 | N/A | N/A | 0 | 0% | 0 | Target 50% |
| | Water system with microbiological test conducted with the past 3 months | 0 | 0 | N/A | N/A | 0 | 100% | 0 | Achieved |

| Activities | | Total Target | Dec'23-Nov'24 Achievement | Participants | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | Achieve% | PwD | |
| | People reached with the full complement of services (safe water, arsenic, and WSP, sanitation, and hygiene | 3000 | 2600 | 1820 | 780 | 2600 | 11.56% | 0 | Target 50% |
| | HHs reached with full complement of services (safe water, arsenic and WSP, sanitation and hygiene) | 600 | 520 | N/A | N/A | 0 | 11.56% | 0 | Target 50% |
| | HHs switched to arsenic safe well through motivation | 0 | 0 | 0 | 0 | 0 | 0% | 0 | Partial Achieved |
| | HHs collect water in clean pot, covered with lid and preserve in raised places (missing on monitoring) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | HHs that converted from unhygienic to hygienic / improved latrine through motivation | 700 | 619 | 1624 | 1620 | 3244 | 88.43% | 0 | Achieved |
| | HHs that installed new improved latrine installed through motivation | 500 | 432 | 1123 | 1188 | 2311 | 86.4% | | Partial Achieved |
| | HHs that installed Hand washing devices | 1000 | 991 | 2682 | 2714 | 5396 | 49.55% | 0 | Achieved |
| | HHs household members can demonstrate effective hand washing with soap and running water | 1000 | 991 | 2682 | 2714 | 5396 | 49.55% | 0 | Achieved |
| **Coordinate with relevant Govt. departments and stakeholders through quarterly/monthly meetings** | Quarterly progress meetings with team and counterparts (DPHE, UNICEF, NGO) | 12 | 11 | 89 | 40 | 129 | 91.67% | 0 | Achieved |
| | WATSAN Committee meetings (Union+Upazila wise- Half Yearly) | 10 | 11 | 157 | 37 | 193 | 110% | 0 | Achieved |
| | Case studies and Human-interest stories | | | 0 | 0 | 0 | | 0 | Achieved |

| Activities | | Total Target | Dec'23-Nov'24 Achievement | Participants | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | Achieve% | PwD | |
| **Demonstrate arsenic-safe union models including Community-led total sanitation (CLTS) in selected unions** | Communities declared arsenic safe with ODF | | | N/A | N/A | 0 | | 0 | Achieved |
| | Villages declared arsenic safe with ODF | | | N/A | N/A | 0 | | 0 | Achieved |
| | Unions declared arsenic safe with ODF | 0 | | | | | | | 2nd year activity |
| | # of Wall paintings done | 0 | | | | | | | 2nd year activity |
| | # of billboard installed | 0 | | | | | | | 2nd year activity |

# 5 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.

In the context of flood-prone areas, AAN selected 56 sites for the installation of double-platform Deep Tube Wells (DTWs) and submitted the list to the local DPHE for crosschecking.

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.

# 6 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 aabsence 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 Balaganjand Kanaighatare 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: Initial 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.

# 7 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.

# 8 Annex

- List of proposed site list as annex-1
- List of rehabilitated water points as Annex-2.
- Monitoring format as annex-3.
- CSA data as annex-4.