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WASH Field Note FN/36/2024

Reaching Communities and Institutions with Access to Safe Drinking Water through an Integrated Approach in the Central Region of Afghanistan

SUMMARY

According to the Whole of Afghanistan Assessment (WoAA), in 2022, more than 60 per cent of households did not have enough water for drinking, cooking, bathing, and washing across all population groups and provinces. The situation was similar in institutions in the central region, with only 76 per cent of schools with access to safe drinking water (MOE, EMIS 2019); and 69 per cent in health centres (MoPH HMIS, 2018).

In 2017, UNICEF, in partnership with international non-governmental organizations (INGOs) and NGOs, and in coordination with the Ministry of Rural Rehabilitation and Development (MRRD), MoPH and MoE, implemented an integrated WASH project in communities and institutions through Community Development Councils (CDCs), to support the most vulnerable populations to gain access to safe and sustainable WASH services.

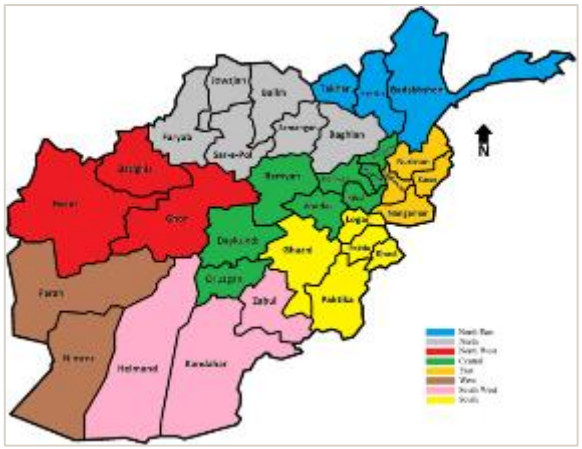
The programme benefited 304,791 people in 98 communities and 104 institutions, of which 50 per cent also gained access to safe sanitation and handwashing facilities between Oct 2017 and May 2023. Furthermore, 98 operation and maintenance (O&M) committees were established and 98 mechanics were assigned, trained, and received tools to operate and maintain their WASH facilities. These mechanics remain active and carry out maintenance jobs with the support of O&M committees. The implementation of this approach helped to increase access to safe drinking water for institutions and communities, created strong water user and O&M committees and enhanced the capacity of partners in the efficient and effective implementation of integrated water supply projects.

According to beneficiaries and health facility staff, a significant reduction in waterborne diseases was reported, resulting in an improved health status.

Introduction

Afghanistan consists of 34 provinces divided into 8 regions. The central region (CR), the central highland and the Southeast regions are part of the regions where UNICEF has active operations. As per the delineation of UNICEF, the Central Region of Afghanistan consists of 12 provinces which makes up 1/3 of the country and its population. The CR region has a diverse climate and geography.

Picture 1. Map of Afghanistan



Access to safe drinking water is limited in most parts of the region. The 2022 Whole of Afghanistan Assessment (WoAA) carried out by REACH[1] showed that more than 60 per cent of households did not have enough water for drinking, cooking, bathing, and washing, indicating high water needs across the population groups and provinces. This figure is representative of the entire country and the situation is even worse in the CR. As per the Ministry of Education (MoE) Educational Management Information Systems (EMIS 2018-2019), there are 6,889 schools in the CR of which 76 per cent had access to safe drinking water. The Ministry of Public Health (MoPH) Health Management Information System (HMIS 2018) reported that there are 1,077 health centres in the CR, 69 per cent of these had access to safe drinking water. In comparison with previous studies, there is a significant reduction in access to safe drinking water in the CR. Drought and other over-exploitation of the aquifers have contributed to the drying-up of surface water sources such as springs, and a significant drop in groundwater levels of hand-dug and shallow wells.

The prolonged and repeated droughts since 1995, combined with the over-exploitation of groundwater resources, resulted in Afghanistan's groundwater resources being severely depleted; with 49 per cent of boreholes with handpumps in Kabul reportedly completely dry. The functionality of the systems has been assessed at about 60 per cent, with four out of ten systems reported non-functional at a given time. Water production has been reduced by half while network losses peak at 50-60 per cent, with intermittent distribution and increased contamination from wastewater, a situation that occurs both in urban and rural areas.

Picture 2. Central region map of Afghanistan

As a result of the ongoing drought events and water crisis, the proportion of households experiencing barriers to accessing water has risen from 48 per cent in 2021 to 60 per cent in 2022 (WoAA, 2022). Infrastructural barriers were reported most frequently, with 19 per cent of households stating that there were insufficient water points and 18 per cent that were not functioning or had dried up. Additionally, urban households reported that purchasing water was too expensive (21 per cent of urban households). The drought conditions are expected to continue into 2023, negatively impacting livelihoods and health conditions of an already vulnerable population. Poor water and sanitation services

[1] REACH is a leading humanitarian initiative providing granular data, timely information and in-depth analysis from contexts of crisis, disaster and displacement. The work of REACH directly feeds into aid response and decision-making by providing accessible and precise information on the humanitarian situation of crisis-affected populations.

play an important role in increasing the risk of severe acute malnutrition and stunting, particularly amongst children. The three main underlying causes of undernutrition are unsuitable or insufficient food intake, poor care practices, and diseases such as diarrhoea, which are directly and indirectly related to inadequate access to safe water, sanitation, and hygiene (WASH).

UNICEF is one of the key actors supporting the WASH sector in the region. From the beginning of its operations in 1949, UNICEF has financially and technically supported the line ministries through the implementation of development and emergency projects. UNICEF works closely with the Community Development Councils (CDCs), INGO/NGOs and the private sector in coordination with line ministries and provincial-level line departments, to support the provision of safe drinking water and sanitation facilities to the vulnerable people in Afghanistan through the implementation of both development and humanitarian projects.

Background

Since 2008, UNICEF has implemented water supply projects through CDCs to ensure the sustainability of the WASH services. CDCs are local entities established in 2003 by the National Solidarity Program (NSP) for the implementation of community infrastructures and skills development projects in rural communities of Afghanistan. Through a presidential decree, CDCs were assigned to take care of development interventions and facilitate the implementation of infrastructure projects in the communities. The World Bank (WB) funded the NSP and provided grants for CDCs for the implementation of projects prioritized by the community. Since 2008, most of UNICEF supported water supply projects in rural communities were implemented through the CDCs.

In 2016, CDCs became part of a nationwide program which was called the Citizen Charter National Priority Program, with a broader mandate. Even with the change of government, CDCs are still used by the MRRD for the implementation of water supply projects in rural areas. Community Development Councils across Afghanistan use participatory approaches in identifying the needs of the communities and possible solutions as well as prioritizing options for implementation. Women were part of the decision-making process, and two women were selected as CDC executive committee members in the provinces where it was culturally accepted.

In 2017, UNICEF, with the agreement of line departments, the Provincial Rural Rehabilitation and Development Directorate (PRRD), Directorate of Education (DoE) and Directorate of Public Health (DoPH), decided to implement water supply and sanitation projects in schools through CDCs. Line departments shared lists of institutions (schools and health centres) with PRRD for implementation. PRRD technical teams conducted assessments and feasibility studies, and following approval from UNICEF, started the implementation of WASH projects through CDCs.

Project activities were monitored by partners, UNICEF staff and third parties, and reports were regularly shared and reviewed. As a result of field visits and the review of the WASH programme performance against the plan, it was recognized that water supply projects were implemented in some communities, but water needs of many institutions such as schools and health centres in these same communities were not addressed, and they were effectively neglected whilst there were possibilities to provide safe drinking water to the institutions in the community. The findings were shared and jointly assessed with partners, and it was found that the PRRD engineers had only considered water needs of people living in the community and didn't consider the water needs of students in schools and users of the health centres. MRRD considered MoE and MoPH to be responsible for the provision of safe drinking water in institutions. Also, there were some cases where the provision of safe drinking

water was considered for institutions but the people living in the vicinity of the institutions were neglected.

UNICEF, in consultation and agreement with the partners revised the assessment sheet used to prioritize the villages for water supply interventions and included the identification of safe drinking water needs in institutions as well.

Picture 3. Handwashing station in school

The Integrated Approach

The initial water needs assessment was done by the implementing partners (PRRD and I/NGO) through visits to the community, meeting with stakeholders: Community Development Council (CDCs) members and School Management Shura members (SMS). The implementing partners organized focus group discussions with the beneficiaries to identify their water needs and possible solutions to meet their needs. The community identified the need for safe drinking water, and they came up with different solutions such as the drilling of wells with installation of hand pumps, the development of solar-powered water supply networks through the drilling of wells with the installation of solar-powered systems and gravity water supply network. After the identification of key problems and possible options and solutions, the partners and beneficiaries jointly visited the proposed locations for validation and selected the best options that could address the needs of the community in the long-term.

The summary of the needs assessment was shared with UNICEF for review and approval. The summary provided information about the location of the water supply project (province, district, village, school, health centre), the proposed type of water supply system (gravity-fed water supply networks, solar-powered water supply networks and bore wells with hand pumps), with disaggregated data on the number of beneficiaries in communities, schools and health centres. The summary also outlined the approximate cost of the projects and the approximate duration for the implementation of the projects. The UNICEF team reviewed the assessment reports and advised the partners to go ahead with the implementation of those projects in line with the implementation criteria.

The main criteria for the selection of the water supply projects were:

- Marginalized communities
- Remoteness of the communities
- Projects covering water needs of community and institutions.
- Projects covering more beneficiaries with less investment (lower cost per capita).

From 2018 to mid-2023, UNICEF and its partners were able to implement 98 integrated water supply projects reaching 98 communities, 65 schools and 39 health centres. For all the completed projects, integration of the provision of safe drinking water to the people in the communities as well as the institutions happened during the assessment, design, implementation, monitoring, completion, handing over, operation and maintenance stages. The concerned stakeholders such as community members, SMS, health centre representatives, were engaged from the beginning until the end of the project.

It was challenging to follow an integrated approach for the provision of safe drinking water in communities and institutions. To ease the process, an agreement was made between the involved stakeholders at national level such as the

MRRD, MoPH and MoE. The agreement was then shared with the provincial directorate of PRRD, DoPH and DoE and they were encouraged to support the implementation process of the integrated water supply projects. Although the agreement was endorsed by all, close coordination and cooperation amongst the provincial stakeholders was not without challenges. As part of the integration process, it was agreed that the technical teams from PRRD, and the relevant Institutions should take part jointly during the different stages of project implementation. This was complex because in most cases they were not actually collaborating with each other, this caused delay in the implementation process of the project and led to the CDC members being dissatisfied with the lack of cooperation.

basic operation and maintenance of their own WASH infrastructures. The amount which institutions receive for general maintenance is often spent on other priorities.

After several meetings with the CDC members, the communities accepted to exempt schools and health care facilities from paying the costs for all the water supply systems and agreed with the representatives of the concerned institutions to support the O&M committee administratively and socially as to properly operate and maintain the WASH services.

In general, community members expected the representatives of those institutions to provide their advice during meetings with the users. Teachers and doctors are respected by the people in the community; therefore, their voice can boost fee collection and the generation of funds for the O&M of the water supply networks and other community-related expenses.

BOX 1: VOICES FROM THE COMMUNITIES

Mohammed Atta, Teacher in Abubakr Sediqqu school in Mehlan village, Gardez district of Paktia province said *"We are thankful to UNICEF for the provision of safe drinking water to the beneficiaries in Mehlan community, school and health centre. One water source was used to address the water needs of all the people in the community and institutions. In addition, a toilet block with 10 flush latrines was constructed with two sets of handwashing stations, as well as garbage points in the schools. All of the service providers have helped us in creating a safe and clean environment and for students to continue their lessons." He added: "We are part of the operation and maintenance committee for the water supply project, and we are responsible to take care of the WASH supplies in schools and extend our support to the committee members in the community".*

Mohibullah, CDC member in Arzo Village, Ghazni district of Ghazni Province said *"Thanks to UNICEF, people now have access to safe drinking water in the village, and beneficiaries in health facilities have access to safe drinking water and sanitation facilities. This support was crucial for our people. We had to fetch water from the river or a private water supply network in our neighbourhood which was not always accessible. Now people have access to safe drinking water 24 hours a day. Access to safe drinking water has positively impacted our health status and a significant reduction was observed in water borne diseases".*

Abdul Jalil, a health care facility staff member in Arzo village said: *"having access to safe water for drinking, handwashing and sanitation facilities has improved our working standards and now the health centre is more hygienic in comparison to the past. Also, it has helped in increasing beneficiaries' satisfaction by getting access to clean and hygienic services in the health facility and having access to safe drinking water and sanitation facilities inside the health centre."*

At the community level, it was easier to bring the concerned stakeholders together. However, in a few cases, CDC members were expecting schools and health care facilities to pay for the service.

In Afghanistan, institutions do not have specific budgets for covering WASH services, including

Through the implementation of the integrated WASH projects, both household users and institutions benefited from access to safe drinking

water, and in almost 67 per cent of cases, the targeted institution also received access to sanitation and hand-washing facilities.

From discussions with the students and teachers from the schools after the completion of the project, students said that they didn't need to bring water with them from their homes any longer, and janitors no longer needed to fetch water from a nearby water source to clean the schools.

The situation had been even worse in the health centres, as without regular access to water it was impossible to provide hygienic services. In most cases, the janitors were fetching water for the health care centres from nearby sources and drinking water was not available. Even handwashing facilities were not available for health professionals or users to wash their hands after defecation. With support from the WASH project, 39 health care centres now have access to safe water, sanitation and handwashing facilities.

Table1: Communities and institutions supported with WASH components through the integrated WASH approach

Outreach	Water supply	Sanitation and handwashing in institutions
Communities	98	-
Health facilities	39	33
Schools	65	30

Description of Intervention

Engagement with the local communities

UNICEF supported the implementation of the water supply projects with the partnership of MRRD/PRRD/CDCs and I/NGOs. Community members submitted their requests for the provision of safe drinking water to the PRRDs. PPRDs collected and compiled the requests and shared them with MRRD, UNICEF and INGO/NGOs for funding. UNICEF reviewed the provided information and prioritized project locations based on several criteria (donor conditions, vulnerabilities of people and cost per capita). The list of prioritized projects was then shared with the implementing partners (PRRD and/or NGOs) for completion of the initial assessment.

A team consisting of technical and social experts travelled to the proposed project sites to assess the WASH needs and identify possible options for the provision of safe drinking water using participatory approaches. Beneficiaries gathered and expressed their needs, solutions and best options to address them. They also assessed the capacity of CDCs in terms of project implementation and future operation and maintenance. They met with the Community Development Councils (CDC) members, school management shura members, the health facility leadership and interacted with the beneficiaries. The team then visited the proposed project sites and conducted a project pre-feasibility assessment, considering social, technical, environmental, financial, and institutional sustainability aspects. The assigned team shared the pre-feasibility assessment reports with PRRD, MRRD and UNICEF for review and approval.

UNICEF reviewed and approved the pre-feasibility assessment reports which are aligned with the selection criteria. Partners were assigned to complete the project feasibility study including technical assessment, preparation of Bill of Quantities (BoQs), and drawings, with the agreement of CDCs. CDCs were used as implementing partners for the water supply projects in communities by PRRD. With the support of PRRD, CDCs recruited engineers to supervise the project implementation work. The engineer was hired by CDC and financed through UNICEF. The PRRD provided technical support during the entire project cycle management process. During the project feasibility assessment, an agreement was made with the CDC members

to establish the O&M mechanism for the planned project. The community contributed around 10 per cent of the project cost in the form of labour and the provision of locally available construction materials such as stone, sand, gravel, etc.

In most cases, the main source for water was either a spring or a borehole. Gravity flow water supply networks or solar-powered water supply networks were selected based on multiple criteria, including the type of water sources. The major components of the project were spring protection, construction of water reservoirs, construction of pressure tanks, the extension of water networks, household connections and the installation of meters. In addition, the drilling of wells and the installation of solarized systems was part of the development of solar-powered water supply networks.

Aligned with SDG targets, the project provided safely managed water supply service level which consisted in the provision of safe drinking water inside the premises. Water meters were installed to promote equity and efficient use of safe drinking water. As per the O&M plan, a fixed rate per cubic meter for water consumed was confirmed and agreed upon with the beneficiaries. The revenue should cover the salary of the mechanic/operator and some savings are to be set aside for repairs when required. Water meters were extended to some of the available institutions in the community as per the suggestion of CDC members to prevent inefficient use of water. As schools and health facilities don't have funds to pay water fees, they were exempted by the community from paying the fee, but they were assigned to take care of the installed drinking water and handwashing services inside the institutions. In some villages, CDC members did not agree with the installation of a water meter inside the institutions with the reason that the institutions do not have the financial means to cover the fees and did not want to limit usage of water. However, the installation of water meter was implemented based on the agreement and recommendations of the CDC members.

Picture 4. Household water connection in community

Operation and Maintenance (O&M) mechanism

CDCs established an O&M plan during the assessment of the project and activated this after the completion of the water supply project. The O&M system included the formation of an O&M committee, the elaboration of an O&M plan and the agreement for the nomination and hiring of a mechanic for the water supply network. O&M committees consisted of CDC members, SMS members, representatives of the health centres and the mechanic. The O&M committee is responsible for the entire operating system in the communities and institutions. The mechanic was engaged during the implementation of the project from the beginning and on the job trainings were organized during the project implementation period. The mechanic was fully engaged during the improvement of the water sources; laying pipes and fixing of fittings. The mechanic was trained on laying pipes and the connection of pipes, the installation and replacement of the fittings, the operation of solar systems, the provision of water as per the agreed schedule with the beneficiaries, regular maintenance of the

infrastructures, etc. The Mechanic was also equipped with the required tools during the handing over process of the completed water supply project to the CDCs. The tools were procured by the project and provided to the O&M committee for proper operation and maintenance of the water supply projects. After the handing-over of the project to the CDC members, the O&M committee took the responsibility to run the service and provide safe drinking water to the people living in the community, students and health centre staff and users. In addition, the O&M committee elaborated the O&M plans which defined the rules and responsibilities of the members, CDCs and beneficiaries, as well as the mechanism for the collection of the water fee and the schedule for regular monitoring and maintenance of the water supply system.

Water safety planning and quality monitoring

Water safety planning workshops were organized for all the targeted communities and community members. This included members of O&M committee, school management shura and assigned people from the health centres, they were trained by a responsible WASH engineer and the NGO partners. Water safety planning workshops covered topics related to the potential risks that can cause destruction of water supply networks and contaminate water. It enhanced the capacity of the operators to identify the risks that can damage their water supply projects such as floods, droughts, landslides, etc., and also how they can protect their services. Risk-informed planning was done during the technical assessment of the projects and factors which could cause destruction of the infrastructure were assessed during the assessment stage and protection measures were considered during the design and implementation stages. In addition, the focus of the water safety plan is to prevent contamination of water at the source and the proper collection, handling and storing of water at household level. The objective is that safe water should be available at the water source, and it should be handled safely from the source to the mouth.

Assigned engineers from the CDC provided daily supervision of the project activities. PRRD engineers, third party monitoring teams and UNICEF WASH team members regularly visited the project activities and on-time feedback was provided to the project supervisor and CDC members. The UNICEF WASH team also visited project sites and proper guidance was provided to partners to improve the work quality and the implementation of sustainable WASH services.

Outcomes

- Around 136,791 people (68,380 women and 68,411 men) were reached with safe drinking water in the communities; 68,000 (25,000 girls and 43,000 boys) students in schools, and 100,000 people (49,500 women and 50,500 men) in health facilities. Access was ensured to all beneficiaries including women, men, children and for people with disabilities.
- 98 villages, 65 schools and 39 health centres were reached with safe drinking water.
- Both beneficiaries and health facility staff reported a significant reduction in waterborne diseases.
- Enhanced capacity of 980 people through attending water safety plan (WSP) trainings. They have used their acquired knowledge during the implementation and operation of the water supply services.
- 98 O&M committees were established and are active.
- 98 mechanics were trained and equipped with the required tools to operate the service and conduct regular maintenance. As per the received reports, all 98 mechanics are active, and they carry out small maintenance jobs with the support of the O&M committee.
- 98 people got regular jobs as mechanics which helped them to take care of their families.

- Job opportunities were provided to the people through working as a labourer on the project sites.

The implementation of this approach helped to increase the access to safe drinking water and sanitation facilities at household level and in institutions. It created strong water user committees and O&M committees, enhanced the capacity of partners in the implementation of an integrated water supply project and it was cost efficient and an effective practice.

Lessons Learned

- The approach proved to be successful with high levels of sustainability and community appropriation because the community level management of the project was delegated to the communities themselves.
- However, the sustainability of WASH services in schools proved to be challenging. Schools do not receive a budget for paying the costs of water services, of for even basic operation and maintenance of its own infrastructures. As a consequence, some services were not functional at the time of writing this field note although it often only required very small repairs.
- Functionality levels were higher in those cases where the expenses for basic operation and maintenance in institutions were covered by the CDCs.
- The extension of the role of O&M committees to schools and health care facilities could contribute to improve the levels of functionality of WASH services in institutions. However, this will need further research.

Next Steps

The integrated approach was initiated in 2018 and is currently being implemented. During the past few years, we were able to scale-up the programme with support from donors such as JICA, EU, USAID, and Korea. The lessons learnt from this approach need to be further documented and widely shared.

To ensure long-term sustainability there is a need to invest more resources in building capacities of the operation and maintenance committee members, and for schools and health care facilities to allocate budgets for paying for their WASH services and for maintaining its own infrastructures.

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