

Making the water sector more resilient

Improving water and sanitation services in Yemen to address the basic needs of the population

The challenge

Water has always been a precious commodity in Yemen, which is located on the Gulf of Aden and is one of the most water-scarce regions in the world.

Climate change is dramatically exacerbating the water shortage. At the same time the civil war worsened the supply situation of water and sanitation services as infrastructure has been damaged in many regions. Facilities are poorly maintained because, on the one hand, the power supply has failed, and water pumps, generators or treatment plants cannot be operated. On the other hand, there is a lack of financial resources for necessary procurements and salaries of many employees in the public sector. Skilled workers are leaving the sector, creating a knowledge gap while the service providers need more and sustainable financial resources to cover their operational costs.

Against this background, a decreasing water supply meets an increasing need due to a rapidly growing population. This hinders many water utilities to provide water and sanitation services to their citizens adequately. More than 17 million people urgently need assistance to access safe WASH services (UN-OCHA, 2022). However, only 30 percent of the population is reached by the current water networks (ICRC, 2022).

Our Objective

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) - GIZ is supporting the Water Sector in Yemen by strengthening the capacities of the actors in the water sector to ensure the basic supply of

drinking water and sanitation services to the population in a situation marked by the ongoing war.

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| Project name | Institutional Development of the Water Sector IV 'IDWS'- Addressing Basic Needs |
| Commissioned by | Federal Ministry for Economic Cooperation and Development (BMZ) |
| Project region | Whole of Yemen |
| Lead executing agency | Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH |
| Duration | 07/2020 – 12/2023 |

Our approach

GIZ aims to improve conditions for securing basic drinking water and sanitation services for the population. At the technical level, we work with national government agencies such as the Ministries of Water and Environment (MWE). At the organisational level the focus primarily is on the Water Supply and Sanitation Local Corporations (LCs) at governorate level that are responsible for supplying the urban population in the whole of Yemen with drinking water and sanitation services. We focus on crisis-appropriate instruments enabling the LCs staff to plan, implement and monitor their operations efficiently.

Additionally, GIZ is working with stakeholders to develop guidelines and training modules for appropriate, crisis-sensitive training and education, for example on how to operate solar pumps or construct dry toilets. GIZ also supports small-scale demonstration measures, like a gender-



Installation of solar water pumping systems to maintain the water supply services in Zabid Water Utility, to improve resilience and reduce the running costs.



Training for female plumbers as a self-help initiative in maintenance of household water and sanitation systems.



Installation and replacement of damaged water meters in Dhamar Water Utility to reduce nonrevenue water.



The introduction of water bill collection via handheld units 'PDAs' to improve the collection efficiency and customer satisfaction, Sana'a LC.

sensitive and disability inclusive rehabilitation of WASH-facilities of Sana'a LC and its branches.

We cooperate and coordinate with other GIZ projects, donors and humanitarian organisations in Yemen and are part of the UNICEF-led WASH-Cluster and other international coordination mechanisms like the Water Sector Coordination Group (WSCG) co-led by Germany and the UNDP. With these cooperations, GIZ aims to tap synergies, exchange knowledge and prevent overlaps.

What we have achieved so far

GIZ has commissioned a Damage and Need Assessment Study (DAS) that has already published the reports of its three successful stages. It records in detail the situation of the urban water sector. For example, its investment needs in 23 major cities with 7.5 million inhabitants. The DAS serves as a basis for decision-making for national and international actors. It is currently being updated and extended to 35 urban centres, covering 9 million people. We also support rehabilitation measures to maintain or replace power generators, pumps and skid steer loaders, extension or rehabilitation of water networks, and to install solar pumping systems. This improved the supply of water and sanitation to more than 1,462,000 beneficiaries.

With our support, eight of the most important LCs can monitor their facilities' performance based on 39 indicators. The provided data are shared with the WASH-Cluster, the Ministry of Water and Environment and other stakeholders to keep track of the WUs performance.

GIZ is also supporting the development of a strategic approach to help the LCs to strengthen the resilience of their water and sanitation services. To this end, we support the selected WUs with a range of technical assistance packages and capacity building activities. 32 utilities were able to digitally equip their branches and improve the recording of customers' consumption as well as the quality of service. In addition, the provision and training on mobile hand-held devices (Personal Digital Assistant - PDA) for billing

strengthens the revenues of six utilities. An average of 20 percent revenue increase has been achieved already, which is crucial to sustain their operation.

The capacity development activities are geared towards all levels. 325 professionals from the different water sector institutions have already been trained in various technical fields such as solar pumping and organisational development. Additionally, we support the preparation and agreement of an action plan for the women departments of the LCs in order in a better way, considering gender aspects in drinking water and sanitation services, e.g., the development and implementation of a training programme on gender aspects in the water sector and the improvement of working conditions for women.

Furthermore, with GIZ support, LCs have been able to keep their operations running even in challenging times by provision of solar panels for energy supply, IT- and office equipment as well as COVID-19 hygiene and personal protection equipment for 10.000 employees.

Insight – Empowering women locally

After her neighbour asked her for help, Nabila Al-Shibami immediately brought her tools. Even though her neighbour has turned the tap on full and the water tank is filled to the brim, it only drips. "It's probably due to a porous sealing ring," says Nabila Al-Shibami, grabs a pair of pliers and begins to unscrew the tap.

She learned how to do this in a course for domestic water and sanitation targeting specifically female heads of households, which was organised by a NGO in Sana'a and financed by GIZ. 30 female trainees learned to maintain and install their household water and sanitation systems independently. This offers an opportunity to use their skills on community-level. Two months after the training, 86 percent of the women already used their acquired skills, replacing or repairing household pumps, taps or faucets, therefore contributing with a sustainable asset for their communities.

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