DESIGNING SUSTAINABLE WASH SYSTEMS IN TAJIKISTAN



THE PROBLEM

Tajikistan is a small mountainous country that is rich in hydrological resources thanks to its many glaciers, which provide the hydropower for over 90% of its electricity. Yet, despite this abundance of freshwater, access to drinking water and sanitation services is the lowest in the region.

In Tajikistan, access to improved water sources is limited; less than half the population of over 9 million people has access to safe drinking water.

Most systems built during the Soviet era are severely dilapidated. Partly due to civil war, little has been invested in infrastructure and social services for decades.

To help address this, between 2009 and 2022 Tajikistan's WASH Programme built **15 WATER SUPPLY SYSTEMS FOR 26 VILLAGES AND A TOWN, SERVING 56,028 PEOPLE**:



This brochure explains, in brief, how we did this and what we learned.

This work is part of the Tajikistan Water Supply and Sanitation (TajWSS) project. This aims to improve the health status of the population by delivering long-lasting WASH services, while addressing market systems and strengthening institutions.

WHAT WE DID | Water supply system construction

The project constructed 15 water supply systems across three districts over 11 years. The process comprised 8 key stages and took around 2 years.



Village Pre-selection: Project team selects potential villages based on socioeconomic, health, environmental and financial factors and scalability. *1 month*



Village Applications: The team invites expressions of interest and community committees apply for project tender through district governments. *1 month*



Village Selection: Water Trust Fund meeting convened (made up of local government, private sector, community members/organisations and project staff); final villages selected. *1 month*



Technical Design: The project announces a tender for private companies to design the water supply systems. Prequalified participants are added to a roster of potential bidders, who undergo a rigorous selection process. 3 months



Water Management Model: Appropriate models (based on service availability and community preferences) are agreed by the Water Trust Fund. Community-based systems with more user involvement perform better. 3 months



Finance Mechanism: Financial terms and co-financing obligations are agreed: local government contributes 25%, communities 5%, investors 70%. *3 months*



Construction: Construction takes place with regular external monitoring. *9 months*



Handover and Ownership: Technical passport on the system is provided for state registration, ensuring the right to communal facilities. This is given to the water operator for maintenance. *3 months*



WHAT WE LEARNED

- Stakeholders appreciated using a participatory approach for the village selection process.
- 2 Specialists are crucial for monitoring construction quality and detecting defects.
- 3 Local government staff cooperation was vital for project success.
- Water users associations' commitment and enthusiasm were key to smooth implementation.
- 5 Disaster risk reduction mitigation measures are vital.
- Contractors and operators were resistant to change. Involving the project's engineers was the only guarantee of quality of work.
- The local administration's contribution was difficult to secure and often delayed.
- Communities must be engaged in construction to guarantee interest in the system's functionality and knowledge transfer.
- New water systems risk failure unless initial funds, spare parts and trained water operators are in place.