

FACTSHEET

H2O: A SOCIAL BUSINESS MODEL FOR SAFE DRINKING WATER IN BANGLADESH



Photo: A Woman collecting water from Community water kiosk using ATM machine

H2O: A Systemic Water Project is a 35-month project (February 2022–December 2024) in Bangladesh, funded by Lokales Wasser 37. The project aims to provide residents in low-income, water crisis-prone areas with sustainable access to safe and affordable drinking water. The project provides access to safe drinking water through a social enterprise co-ownership mechanism and raises awareness about water hygiene in these areas and among the residents of the catchment zones. The project has piloted two models: one focused on the community and another on a school.

H2O: A SYSTEMIC WATER ENTREPRENEURSHIP PROJECT

This project is financed by Lokales Wasser 37 AG and co-financed by the Swiss Agency for Development and Cooperation (SDC), Federal Department of Foreign Affairs FDFA.

COUNTRY/PROVINCE

Shyamnagar and Satkhira Sadar upazila (sub district) of Satkhira district in Bangladesh.

PROJECT DURATION

February 2022–December 2024.

IMPACT

- 527 households (2 267 people) have collected 723 935 Liters of safe drinking water from the water kiosks at a rate of 0.34 cent per litre.
- Incidence of water-borne illnesses reduced by 37%.
- Out-of-pocket medical expenses by 70% (USD 9.7) per months.
- Absenteeism among school-going children has decreased by 3%.
- Water collection time has reduced by 7 minutes per trip, and the average travel distance has decreased by 105 meters; and
- 10.6 megawatt-hours of electricity generated using solar panels installed on the rooftops of the water plants, saving a total of USD 1034 in utility expenses.

CONTEXT

Satkhira, a disaster-prone southwestern coastal district in Bangladesh, frequently experiences cyclones and floods, worsening water salinity and access issues. Additionally, a recent increase in shrimp farming has created environmental and freshwater resource challenges. This dependence on agriculture, aquaculture, and susceptibility to natural disasters makes Satkhira highly vulnerable to water crises and saltwater intrusion, particularly concerning sustainable groundwater management.

School children in Satkhira face difficulties during school hours. Unlike urban areas where students bring water from home, this practice is uncommon and unaffordable in rural Satkhira. As a result, students either rely on unsafe water sources or endure thirst until they return home. To address this issue, reverse osmosis (RO) plants have emerged, but they are not affordable, leaving a gap in meeting water needs.

SDG & SWISSCONTACT RELEVANCE

The H2O project addresses Sustainable Development Goal (SDG) 6, focusing on safe water and sanitation, particularly target 6.1 for safe and affordable drinking water and target 6.8 for supporting local engagement in water and sanitation management. It also creates local jobs, fosters good governance, and opens new market opportunities. H2O involves public, private, and educational institutions, promoting cooperation between these sectors to build a robust mechanism to address the systemic shortages of affordable and safe drinking water in crisis-prone areas.

WHAT MAKES THE PRODUCT UNIQUE?

The H2O project stands out for its two innovative social enterprise models to provide safe and affordable drinking water to local communities: the community model and the school model. These models integrate market-led solutions, co-ownership structures, and collaboration with local stakeholders to ensure sustainability and community ownership, enabling effective management of water enterprises and regulation of water prices.

By blending a business model, modern technology, and community engagement mechanisms, the H2O project comprehensively and inclusively addresses water challenges in crisis areas. The project aligns with Bangladesh's national goals and plans, ensuring long-term sustainability and government support. Overall, incorporating market-led solutions and business models in both cases promote financial viability and self-sufficiency. Additionally, the establishment of management committees and collaboration with local stakeholders contribute to the effective management and sustainability of water enterprises.

PARTNERS

LEADERS, a local partner NGO supports us in community engagement activities. Two water technology companies, EasySense and Drinkwell, provide technical support to develop and implement water treatment systems. Additionally, the project collaborates with government stakeholders such as the Directorate of Secondary and Higher Education (DSHE) to align with their goal of improving the health and well-being of school children in local communities.



SUCCESS FACTORS

The H2O project's school model has proven to be a sustainable business model, reaching its breakeven point within seven months of operation, and generating an average monthly revenue of USD 166 with consistent growth. The management committee, which includes local community members, school authorities and local government also supports the operation of both community and school enterprises. They have taken ownership of the project, willingly holding monthly meetings, monitoring activities, and contributing to key decisions to improve both water models. Additionally, other Swisscontact Bangladesh projects, such as DBLP, M4C and PRABIDDHI (LED), are interested to implement the H2O project's water enterprise model in their project locations, further indicating its potential for replication in similar contexts.



TARGET GROUPS

The community model ensures equitable access to affordable and safe drinking water for households within its cluster. The school model provides free safe drinking water and female hygiene products to school children and offers them at an affordable price to community members. Additionally, the project creates income opportunities for aspiring water entrepreneurs by providing them with the technology and resources necessary to operate a sustainable business model.

Photo: School children are collecting water from a kiosk using their ATM cards.



APPROACH AND ACHIEVEMENTS

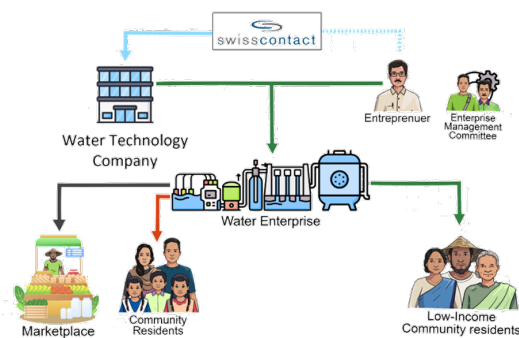
Given that people are willing and able to pay for drinking water, Swisscontact has previously helped local entrepreneurs to build and operate water kiosks with safe and affordable water in crisis-prone areas. The water kiosk business model has proven extraordinarily successful in the urban context, therefore Swisscontact, through the H2O project piloted two water kiosk models in the rural areas.

In the community water kiosk model, the H2O project supports a local entrepreneur to establish a water kiosk. The kiosk offers residents an affordable subscription to safe drinking water, with subscribers becoming co-owners. As members of the water kiosk management board, their representatives gain decision-making rights in business and operational matters, playing a key role in sensitizing the local population.

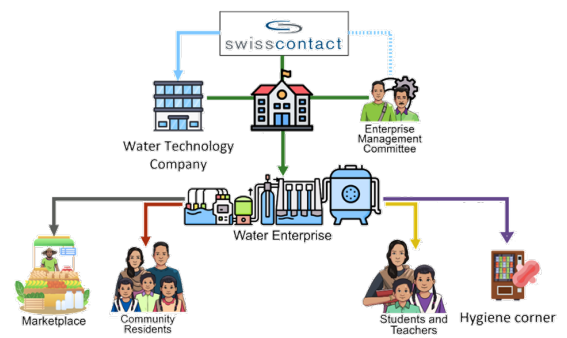
In the school water kiosk model, the H2O project supports a local entrepreneur to build a water kiosk at a school. The school provides the land, water, and power access. The water committee consists of representatives of the school management, the local community, and the entrepreneur. This committee guides the kiosk's activities and regulates the water price. The kiosk has two windows: one facing the recreational area for school children and teachers, and the other facing the road. It sells water in bottles and canisters to residents at lower prices and to commercial clients and retailers at higher prices. Through the schoolyard-facing window, the kiosk offers all school children and teachers a free daily ration of drinking water.

Additionally, the project has established a hygiene corner in the school, where adolescent girls have access to free menstrual hygiene products. This minimises the school absenteeism of girls' students.


Community co-ownership based social water enterprise



School based social water enterprise




Key innovation

 Local co-ownership structure

 Solidarity based mechanism

 Multiple Distribution Methods

 Solar powered

 Digital payment mechanism

 Replicability and adaptability

 Repair & Maintenance Fund

POTENTIAL FOR REPLICATION

The replication of a water enterprise model holds significant potential for addressing water crises in saline-affected communities across various districts in Bangladesh. Moreover, it has the potential to empower local entrepreneurs and create their economic and livelihood opportunities.

Photo: Woman collecting water from Community water kiosk using their jar.



SUSTAINABILITY CRITERIA

Gender Equality & Social Inclusion

Financial Capability

Environmental Responsibility

Good Governance

WORKING PRINCIPLES

Evidence based adaptive management

Learning Culture

Inclusive Systems Development

Private Sector Engagement

- Partially addressed
- Addressed, but doesn't play a vital role
- Central to the product

FOR MORE INFORMATION OF H2O'S IMPACT

Project Reference and Media Publications

[H2O: A Systemic Water Project](#)
[Accelerating Access to Safe Drinking Water](#)

Video Documentaries

[Ensuring Access to Safe Water: The H2O Project's Journey in Bangladesh](#)
[Revolutionising Education and Community Welfare: Sustainable Water Solutions in Bangladesh](#)
[Empowering Communities: Sustainable Safe Drinking Water Solutions for Low-Income Residents](#)



RAZIK FAZLE

Head of Quality Assurance South and Southeast Asia, and
Head of Programme Bangladesh
fazle.razik@swisscontact.org