

Water, Behaviour Change and Environmental Sanitation (WABES): Sustainable Solutions to Research, Knowledge and Professionalization



Region
Global

Partners
Eawag

Background information

At least 700 million people lack access to improved sources of drinking water and 2.5 billion do not use an improved sanitation facility. Disparities are high, with access being much lower in rural areas and in sub-Saharan Africa.

Project objectives

Generation and validation of new knowledge through applied research by addressing improved sustainable access to safe water, improved access to environmental sanitation, and providing expert knowledge and capacity building.

Beneficiaries

- Experts (practitioners), decision makers, and policy makers at local and national levels, and with international development agencies
- Local stakeholder groups
- Universities and students
- Local communities

Costs

Total: CHF 4,140,534
SDC: CHF 2,600,000

Duration

01.2018 – 12.2021

Contact

Global Programme Water
watereda.admin.ch

Equitable access to safe drinking water and sanitation facilities and services is a human right and a crucial stepping-stone towards better health, economic development and poverty reduction.

The four-year WABES project supports the applied research and capacity development projects of three applied research departments at the Swiss Federal Institute of Aquatic Science and Technology (Eawag).

Research Objectives

The project addresses the improvement of access to water, environmental sanitation and hygiene (WASH), especially for the rural poor and marginalized urban populations. WABES will generate and validate new knowledge on concepts and technologies by addressing improved sustainable access to safe water; improved access to environmental sanitation, and providing expert knowledge and capacity building for the WASH sector.

Eawag maintains a large network with more than 40 partner organizations in developing countries and works towards increasing their research capacity and professional expertise in the field of water supply and environmental sanitation.

Flagship research products

Building upon the achievements of the past research, this proposal will achieve three main outcomes with a great potential for high impact worldwide:

Outcome 1: Improved sustainable access to safe water for the marginalized and rural poor

This outcome will be achieved through:

- Assessing technical and management solutions for safe water in rural, urban and household settings, and evaluating their impact.
- Developing and expanding the geostatistical modelling tool of the Groundwater Assessment Platform (GAP) to test its effectiveness in modelling geogenic and anthropogenic contaminants in groundwater



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Outcome 2: Improved access to environmental sanitation considering concepts of resource recovery and circular economy for the marginalized and poor

This outcome will be achieved through:

- Developing guidelines for dewatering of faecal sludge in dense urban areas in developing cities.
- Validating planning and programming solutions for small towns with a focus on faecal sludge management tools.
- Developing and validating solutions and guidelines for “zero-waste management” using integrated approaches with a focus on waste recycling solutions for schools, which can also support planning for zero waste villages.

Outcome 3: Expert knowledge & built capacity of students and practitioners in selected domains of the WASH sector

This outcome will be achieved through:

- Developing innovative educational methods to enhance environmental engineering and WASH education across the globe. This initiative builds on Eawag’s past experiences with Massive Open Online Courses (MOOCs) and will include the production and testing of embedded eLearning-components into curricula of universities and training centers in low- and middle-income countries.
- Developing and evaluating a toolbox of behavior change techniques that can promote effective habit development and psychological ownership related to water, sanitation, and hygiene behaviors.

Additional information:

www.eawag.ch / www.sandec.ch