



## Pre-Conference Workshop

# A Roadmap for Decentralised Wastewater Treatment in Nepal: Learning from the South Asian Experience

Presentation of the Findings of the Research Project “Small-Scale Sanitation Scaling-Up (4S)” and Discussion of Conclusions and Recommendations for Nepal

**Date and Time:** 9 April 2018, 8:00 am to 1:15 pm

(Ahead of the International Conference on “Water, Environment and Climate Change: Knowledge Sharing and Partnership”, 10-12 April, 2018)

**Location:** Durbar Hall, Hotel Yak and Yeti, Kathmandu, Nepal

### Background and Objectives:

Ever-growing South Asian cities are facing enormous water and sanitation challenges, ranging from the supply of sufficient quantities and qualities of water, the treatment of used water and sludge, to the protection of aquatic environments. For wastewater treatment alone, huge financial resources are needed to construct and operate the required infrastructure. Achieving the ambitious Sustainable Development Goal 6.3 target (halving the proportion of untreated wastewater by 2030) requires making well-thought-out investments with the available funds.

The benefits of small-scale (often called decentralised) sanitation systems have long been recognised. These systems that typically serve 10 to 1000 households allow for cost-effective local wastewater treatment and re-use, as well as stage-wise implementation. Small-scale sanitation systems are therefore increasingly considered in both rural and neighbourhood-level urban planning.

While the number of small-scale sanitation systems in South Asia is growing, the list of reports on failed or poorly performing installations is also increasing. Scaling-up small-scale sanitation entails more than replicating a large number of discrete projects. Efficient institutional frameworks are needed to monitor the systems’ design, establishment and long-term operation and maintenance (O&M). However, a sound understanding of how small-scale sanitation can be systematically and effectively planned, implemented and managed at a scale that optimises their role in urban sanitation service delivery is currently lacking.

Since 2016, a research consortium consisting of Eawag, ENPHO, BORDA, IIT Madras and CDD Society has been working on the project “Small-Scale Sanitation Scaling-Up” (4S). The objective of the BMGF-funded project is to develop policy recommendations for the implementation, operation, management and financing of small-scale sanitation systems at scale. This was done through an evaluation of more than 300 existing systems and their enabling environment. The project ends in June 2018. Further information: [www.sandec.ch/4S](http://www.sandec.ch/4S)

This workshop aims to present the findings and conclusions from 4S and to share recommendations on how small-scale sanitation can fulfil its potential at scale. A discussion with the audience and invited panellists seeks to answer key questions on how to move forward with small-scale sanitation in Nepal.



**Co-Convenors:**

- Society of Public Health Engineers (SOPHEN), Nepal
- Environment & Public Health Organization (ENPHO), Nepal
- Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland
- 500B Solutions Pvt. Ltd., Nepal
- Bremen Overseas Research and Development Association (BORDA), Germany

**Target Audience and Expected Participants:**

- Government representatives and decision makers from Nepal
- Engineers, planners and urban sanitation professionals
- Participants of the international conference on “Water, Environment and Climate Change: Knowledge Sharing and Partnership”

**Programme Schedule (8:00 to 13:15):**

Time	Programme Item	Speakers
8:00	Breakfast and registration of participants	
<b>Opening Session:</b>		
9:00	Chairperson, chief guest, special guests at dias	Rosy Singh (MC)
9:05	Inauguration of the workshop	
9:10	Welcome speech and objectives of the workshop	Bhushan Tuladhar (ENPHO)
9:15 – 9:40	Remarks from special guests	
9:40 – 9:50	Remarks by chief guest	Minister of Forest and Environment (Mr. Shakti Basnet)
9:50 – 10:00	Final remarks by chair	Ram Deep Sah (SOPHEN)
10:00	<i>Tea &amp; Coffee</i>	
<b>Technical Session:</b>		
10:30	<b>1</b> – The 4S project – overview and approach	Lukas Ulrich (Eawag)
10:45	<b>2</b> – Small-scale sanitation in Nepal: Evaluation results and conclusions	Jagam Shrestha (ENPHO)
11:15	<b>3</b> – Institutional analysis with respect to small-scale sanitation systems in Nepal	Anjali Manandhar Sherpa (500B Solutions)
11:45	<b>4</b> – Small-scale sanitation in Bangladesh and Pakistan: Evaluation results and conclusions	Dr. Mingma G. Sherpa (500B Solutions)
12:00	<b>5</b> – Small-scale sanitation in India: Evaluation results and conclusions	Lukas Ulrich and Marius Klinger (Eawag & BORDA)
12:15	<b>6</b> – Conclusions and policy recommendations for Nepal	Bipin Dangol (ENPHO)
12:30	Panel discussion: Roadmap for decentralised wastewater treatment in Nepal	GoN representatives and sector experts
13:00	Synthesis and closing remarks	ENPHO, BMGF, SOPHEN and Chief Guest
13:15	<i>Lunch</i>	