

Floating Treatment Wetland System (FTWS)

Sustainable green technology to remediate polluted surface water bodies

Background

FTWS is a collaborative research project funded by the Asia-Pacific Network for Global Change Research (APN), lead by The Small Earth Nepal (SEN) and collaborated with CURAJ, CREEW, DU, KVWSMB, TU, URI and UY.

Objectives

To remediate the polluted lake water through application of FTWS

Project sites

1. Dhanmondi and Gulsan Lake, Dhaka, Bangladesh
2. Nayagaon Lake, Rajasthan, India
3. Nagdaha Lake, Lalitpur, Nepal

Approach



Collaborative and applied research



Capacity building



Knowledge exchange



Community participation



Local government engagement

Activities

- Engage graduate student in research
- Training on water quality test and analysis
- FTWS experimental setup
- FTWS microcosm study
- Installation of floating rafts in the lakes
- Water quality analysis
- Sharing workshops

Outputs



Graduate level thesis - 3



Experimental setup - 3



Policy briefs - 3



Floating rafts - 4 lakes



Research articles - 3



Videos - 2



Workshops/meetings - 10

Outcomes

- Regional cooperation and partnerships among researchers, academia and research organizations strengthened
- Preliminary evaluation of FTWS approach in remediating lake water pollution generated
- FTWS as a sustainable and low-cost green technology promoted

Project duration

1 October 2021 to 30 December 2023