



Partners



Shifting Grounds:

Institutional transformation, enhancing knowledge and capacity to manage groundwater security in peri-urban Ganges delta systems

Project Website: <http://saciwaters.org/shiftinggrounds>

Contact details

Principal Investigator
Prof. dr. ir. Wil Thissen
TU Delft

Scientific Coordinator
Dr. ir. Leon Hermans
TU Delft

Regional Coordinator
Prof. Sucharita Sen
SaciWATERS

w.a.h.thissen@tudelft.nl

l.m.hermans@tudelft.nl

sucharita@saciwaters.org

Funded by:



Background

Urbanizing deltas in South Asia have seen rapid growth and change over the past decades. The Ganges delta, which is the world's largest delta, is no exception. This delta, located in Bangladesh and the state of West Bengal, India, is one of the most densely populated areas on earth. Uninterrupted emigrations from rural areas and rapid population have put increasing pressures on cities such as Kolkata in India and Khulna in Bangladesh. As a natural solution, more and more people are living in the peripheries of the cities. These peri-urban areas, originally rural in nature, work as the interface of urban centres and rural villages. These peri-urban areas are increasingly linked to nearby urban centres by flows of goods, services and resources.

As in other Asian mega-deltas, groundwater provides an important source of water in the urbanising Ganges delta. However, groundwater storage is declining precipitously due to the unprecedented growth of urbanization coupled with intensive water abstraction and fluctuation of rain. The stress is felt particularly in the peri-urban areas.

In this rapidly changing environment, the existing policies and institutions fail to ensure an equitable sharing and sustainable use of groundwater resources. Government actors, urban and peri-urban communities are therefore looking for new or modified policies and institutional structures to improve the management of groundwater resources. Although crucial, little is documented of these rapidly evolving processes of concentrated groundwater use and institutional transformations in peri-urban delta areas of South Asia.

Objectives

Funded by the Netherlands Organisation for Scientific Research (NWO), the Shifting Grounds project is executed by a group of academicians, researchers and civil society organisations. Delft University of Technology (TU Delft) leads the consortium and SasiWATERs is the regional coordinator for the project. Other project partners are Bangladesh University of Engineering and Technology (BUET), Both ENDS, Jagrata Juba Shangha (JJS) & The Researcher.

The overall objective of the project is to build knowledge and capacity among local actors to support a transformation process in peri-urban delta communities in Bangladesh and India for a sustainable and equitable management of groundwater resources. This will be based on an improved understanding of the dynamic interplay between local livelihoods, the groundwater resource base, existing institutional systems and links with nearby urban centres in Khulna and Kolkata.

Project outcomes

Deliver empirically grounded insights into the co-evolution of groundwater, socio-economic and institutional systems of peri-urban communities in Kolkata and Khulna.

Identify different possible configurations and feasible pathways for a more sustainable use of groundwater resources by various competing users.

Build awareness among government officials and community representatives towards local needs and concerns.

Find possible institutional structures that might help achieve a fair balance between the varied and conflicting needs and interest of peri-urban groundwater users.

