

CLEAN AND SAFE WATER FOR DHAKA

Improving water quality management in Dhaka City



Context and problem
 Cities in Bangladesh suffer from severe water pollution due to untreated industrial and domestic wastewater, leachate from waste dumps and urban runoff entering the rivers. Though environmental policies are in place, due to lack of implementation the problem persists. Better water management is necessary to ensure safe water for the citizens.

Researching this question
 This project for improvement of water quality management has three components, namely, (i) Developing Innovative strategies to monitor hazardous pollutants in rivers (ii) Detailed assessment and modelling of pollution loads within the catchment areas (iii) Developing strategies for pollution control through scenario studies.

Water pollution is severe in Bangladesh due to leaching from waste dumps and untreated wastewater discharged into the rivers. Dutch and Bangladeshi institutes are working together to curb pollution and ensure better water quality management.

"This tool could really help us assess pollution hotspots and develop water pollution control strategies."

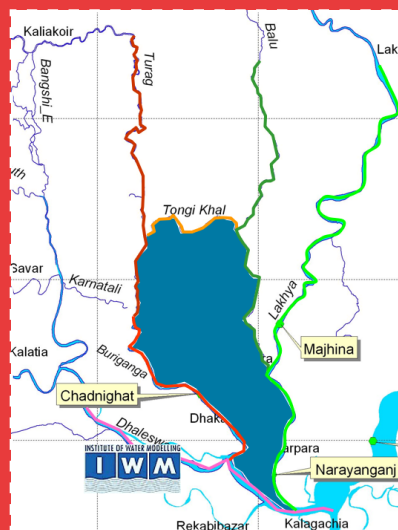
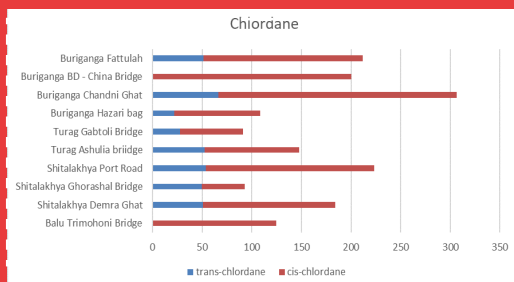
Chairman, DWASA

How to improve water quality in Dhaka, Bangladesh?

IMPROVING DHAKA'S WATER QUALITY

1. Monitoring pollutants

Through an innovative passive sampling process river water was tested. The samples, taken during monsoon and dry seasons, showed pesticide and pharmaceutical pollution, indicating the need for routine, cost-effective monitoring and future investments in water treatment technology.



2. Modelling for pollution loads

Hotspots of pollution sources were mapped based on the Deltares D-Emission model, which had been linked to IWM's water quality model. While this integrated model is an efficient tool to assess pollution loads, refining the model is desirable in the long term.

Study area covering peripheral rivers of Dhaka City

3. Strategies for safe water

Adaptation Pathways for mitigating water pollution around Dhaka city were prepared by CEGIS and IWM, following BDP2100 scenario narratives. Stakeholder feedback, attained through workshop on Clean & Safe Water, was incorporated in the pathways. This showed that pollution control strategies linked with adaptive planning needs to be devised for managing the different types of pollution (e.g., agricultural, industrial, domestic wastewater etc.).

KEY MESSAGE

Minimise and segregate waste to prevent pollution of water bodies

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