



Strengthening Institutions for Climate Change Adapted Water Resource Management in Dhaka

The Challenge

Dhaka, the capital of Bangladesh, home to approximately 20 million inhabitants, primarily relies on groundwater for its safe drinking water supply. However, this vital source is under threat due to over-extraction, and the effects of climate change. In the past, the water level has been declining by 2–3 meters per year. According to the projections, the groundwater will further decline by 5 meters annually by 2030. Therefore, there is an urgent need to utilize the surface water for the water supply of Dhaka.

The rivers (Buriganga, Sitalakhya, Dhaleshwari, Balu, Turag, etc.) around Dhaka suffer from severe pollution. Main contributors to this pollution are rapid urbanisation, unplanned development along riverbanks including industries without or with non-functional effluent treatment plants and settlements without sewerage treatment facilities. Insufficient capacity and lack of integrated collaboration among responsible organisations and authorities to monitor water quality and enforce environmental regulations add to the pollution. The lack of incentives, capabilities, and awareness of industries to develop and execute pollution reduction strategies further exacerbates this issue.

The Government of Bangladesh has identified water resources management as a key sustainable development objective. To ensure long-term, sustainable safe drinking water supply for Dhaka's residents, the Government of Bangladesh is working on conjunctive use of ground water and surface water as a strategic measure for adapting to climate change.

For this purpose, water is to be taken from the Meghna River outside of Dhaka, which is the only remaining water source of acceptable quality. The water will be piped from Haria Intake point of Meghna River to the Saidabad Water Treatment Plant-III. Thus, maintain a good water quality in the vicinity of the Haria intake point is vital to keep the treatment efforts at Saidabad-III efficient and cost-effective.

The Objective

Improve institutional and technical foundations for safeguarding the water quality of the Meghna River at the level of concerned stakeholders in Bangladesh.

Project name	Strengthening Institutions for Climate Change Adapted Water Resource Management in Dhaka
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Commission value	EUR 4.5 million
Project region	Dhaka, Bangladesh
Partner ministry	Ministry of Local Government, Rural Development and Cooperatives (MoLGRDC)
Implementing partner	Dhaka Water Supply & Sewerage Authority (DWASA)
SDG contribution	Good health and wellbeing (SDG – 3), Clean water and sanitation (SDG – 6), Climate action (SDG -13)
Duration	2022 - 2025



Expected Outputs and Main Activities



Output 1: A coordination process is established

- It is expected that improved coordination between the water and environmental authorities, the private sector and local authorities enable a better water resource protection.
 - Main stakeholders are supported to set up a formal coordination body with the aim to protect the water quality of the Meghna River in the long-term.
 - A process for advising on action and development plans in exchange with local governments of the project area, civil society organizations, companies and other stakeholders and affected parties is established.
 - Local lessons learned are processed and incorporated into action plans at national level.



Output 2: An integrated system for water quality monitoring is established.

- It is expected that an integrated monitoring system provides important technical and institutional fundamentals for the management of water resources in the Meghna River basin.
 - The water authority is advised on a process for continuous collection and analysis of data to verify water quality at the point of withdrawal, including a necessary process for permanent funding and quality assurance.
 - The water and environmental authorities are advised in the development and set-up of an integrated monitoring system for the supervision of the water quality of the Meghna River.
 - The water and environmental authorities are advised on knowledge management the set-up of a website with online data on the water quality of the Meghna River with free access for the public.



Output 3: Capacities of industrial companies and SMEs to reduce surface water pollution are improved.

- It is expected that strengthened capacities of the private sector linked to environmental management, safe and resource saving production approaches as well as more transparent wastewater treatment led to less pollutant discharge in the Meghna River.
 - Information and training on the impact of surface water pollution, ways to reduce it, as well as costs and benefits of possible measures are conducted for relevant stakeholders.
 - Industrial companies, SMEs and relevant authorities are advised on the identification, commissioning and use of wastewater treatment plants.



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Strengthening Institutions for Climate Change
Adapted Water Resource Management in Dhaka
GIZ Bangladesh
PO Box 6091, Gulshan 1
Dhaka 1212, Bangladesh
T +880 2 5506 8746 - 52
E giz-bangladesh@giz.de
I www.giz.de/bangladesh

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Design PATHWAY, Dhaka
Text Mohammad Ishtiuq Hossain,
Sarazina Mumu, Joana Helms,
Fatema Begum

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