BACKGROUND

A rapidly growing economy and population are putting enormous strain on the city of Dhaka’s freshwater resources. These resources are heavily polluted by a combination of industrial and residential wastewater, including poor faecal sludge management systems and insufficient wastewater treatment capacity. This has severe impacts on the quality of Dhaka’s freshwaters as a source of drinking water, public health needs and well-being, and overall social and economic development.

This project looked at the attitudes and perceptions of households, industry, government and non-governmental organizations to freshwater pollution in Dhaka. The findings from this project aim to help identify critical areas for investment and improvement and offer policy recommendations for more sustainable urban water management.

KEY FINDINGS

Institutions
- Freshwater management and water pollution is addressed by as many as 16 different government Ministries, in addition to other related agencies, NGOs and private sector actors
- There is a lack of clarity regarding the institutional arrangements, coordination and leadership for water pollution management, including monitoring, enforcement and infrastructure development
- Current institutional arrangements are mostly top-down
- Water pollution management activities do not seem well connected across actors and agencies at different management and administration levels
- Current consultation mechanisms occur mainly on an ad-hoc project basis and provide limited opportunities for stakeholders to collaborate

Industry
- There is a low level of general knowledge and understanding about water quality and water pollution
- Companies place more importance on business and profit than water pollution
- Small industry owners cannot afford to pay for the installation and operation costs of wastewater treatment, and it’s often cheaper to pay a fine
- Lack of land is another barrier to investing in individual wastewater treatment facilities
- Getting clearance from the Department of Environment is a lengthy and time consuming process
- Implementation and monitoring of water policies by government agencies is not consistent
- Foreign buyers and international standards are an important motivator for complying with environmental standards

Households
- 60% has its own piped water supply
- 20% shared piped water, while another 20% has no piped supply
- 39% perceive their water source as unsafe to drink and always boil their water before drinking
- 62% treat their water before drinking, 28% filter it, and 34% boil it
- 25% express health concerns about nearby open waters
- 10% relate their family’s health problems to poor water supply quality and report significantly higher medical expenses
- 44% identified themselves as the main water polluter and 43% pointed to industry
- 63% identified the government as responsible for protecting water quality in Dhaka
- Almost 80% are willing to pay substantially more for improving the quality of the water supply and rivers and lakes in Dhaka

25 interviews with government departments/agencies, NGOs, academic/research institutions
21 interviews with industry, garments, textile, tannery, pharmaceutical, chemical, hospitals
2000 interviews with individual households in 11 districts across Dhaka city
Adopt a collaborative management approach that embraces new or more effective modes of interaction amongst different stakeholders, with clearly defined roles and responsibilities and a dedicated coordinating mechanism. Top-down and not well connected decision-making processes should be exchanged in favour of a collaborative approach that includes the relevant stakeholders across all levels to ensure a coordinated approach to water pollution management.

Establish streamlined procedures for the implementation, monitoring and enforcement of policies and regulations of industrial water pollution. Consistent regulatory oversight is needed in order to ensure compliance by polluting industries. This can be done through monitoring and evaluation systems that use established international water quality standards and simple but effective industry licensing tools.

Invest in wastewater infrastructure and capacity in order to ensure better wastewater management and treatment. A shortage of wastewater treatment plants in Dhaka is a significant barrier to managing freshwater pollution. Potential solutions include the construction of centralized plants for shared access and use, especially for smaller companies, and the planned relocation of factories to centralized zones. Investments in capacity building and technical training of skilled workers are needed to ensure the ongoing running and maintenance of plants.

Work with international buyers to ensure the adoption of global standards and best practices for wastewater treatment. Foreign buyers make up an important segment of the global supply chain, with many facing consumer pressure to adhere to and comply with stricter environmental standards. Working with these actors, including cost-sharing arrangements, offers an opportunity to ensure more widespread support for regulatory compliance of wastewater treatment.

Raise awareness, build a sense of collective responsibility, and ensure strong political will and leadership about the impacts of water pollution. Industry, government and households alike need to understand that Dhaka’s freshwater systems that receive wastewaters are the same ones that support industrial, economic and residential activities, and are fundamental to the city’s sustainability. Strong political leadership is needed to encourage enhanced collaboration, while training sessions with industry can create a sense of shared responsibility towards freshwater pollution management.

**RECOMMENDATIONS FOR POLICY-MAKERS**

**SUSTAINABLE DEVELOPMENT GOALS**

Water pollution management is essential to achieving the Sustainable Development Goals. While Bangladesh has made significant progress in access to adequate water and sanitation (SDG 6), the current freshwater pollution situation in Dhaka threatens to undermine these achievements – as well as those related to SDG 3 (good health and well-being) and SDG 11 (sustainable cities and communities).