



# BURIGANGA

## choked with waste even in monsoon

PHOTO: PALASH KHAN

PINAKI ROY

Even at the peak of monsoon, the Buriganga water remains almost pitch-dark at Doleshwar point in Dhaka's Shyampur area.

The water should have appeared normal at this time of the year, as torrential rains have caused the river to swell, significantly improving its flow. But the relentless discharge of liquid waste from nearby industrial units continues to take a heavy toll on the river, a lifeline for the capital.

In addition to pollutants from industrial units, household waste is being dumped into the river through a large sewage pipe.

"Officials from the Department of Environment [DoE] visited the area after one of my video clips on river pollution went viral on social media. But nothing has been done yet to stop the pollution," Mizanur Rahman, a local environmental activist, told The Daily Star last week.

Kalu Molla, a boatman who ferries people from Keraniganj to Kadamtali station, said the water quality was good before factories were built in the area.

"We used to catch a wide variety of fish in the river, but it's all gone now. Things are getting worse day

**102 industrial waste outlets, 75 municipal sewer lines, and 216 small private outlets discharge untreated waste into Buriganga, Turag, Shitalakkhya, and Dhaleshwari as well as other water bodies in and around Dhaka city, shows a study by the River and Delta Research Centre, a non-profit organisation.**

by day," he said.

In the 1990s, industrial plots were allocated for setting up steel re-rolling mills and dyeing and chemical factories in the Shyampur area.

DoE sources said around 150 industrial units are operating in the area, and 33 of them are required to have effluent treatment plants (ETPs) as they generate liquid waste.

Of the 33 units, 27 have installed ETPs. The remaining ones were asked by the DoE to halt production for violating environmental regulations, but have since been allowed to continue operations under court orders, the sources added.

When Asked, DoE Assistant Director Hossain Shuvo Munjuri, tasked with monitoring factories in Shyampur industrial zone, said they have only five inspectors to monitor around 4,000 industrial units, hospitals and clinics in Dhaka city.

Regarding the rampant pollution at Doleshwar point, he said, "It is hard to catch the polluters, as the discharge points of the factories in the area are connected to sewage lines that channel waste into the river."

The situation in Shyampur reflects the dismal state of not

only the Buriganga, but also other rivers around Dhaka city, indicating the severity and scale of the toxic waste being dumped by industrial units.

A recent study by the River and Delta Research Centre, a non-profit organisation, uncovered alarming levels of pollution in Buriganga, Turag, Shitalakkhya, and Dhaleshwari last year.

Through field surveys and satellite imagery, the study identified 102 industrial waste outlets, 75 municipal sewer lines, and 216 small private outlets that discharge untreated waste into the four rivers and other water bodies.

Moreover, contaminants are being channelled to the rivers through 38 sluice gates, 62 service canals and 441 dumping stations and points. The pollution is compounded by waste from dockyards and kitchen markets.

The DoE has recently finalised the draft of "Surface and Groundwater Quality Report 2023", which reveals poor water quality in four rivers -- the Buriganga, Shitalakkhya, Turag and Dhaleshwari -- especially during the dry season.

Samples from 21 locations across the four rivers were collected and analysed in

laboratories for 12 parameters, including the level of dissolved oxygen and salinity.

Industrialisation and urbanisation, along with seasonal variation in flow, are cited as key factors behind the deteriorating water quality in rivers around Dhaka, according to the draft report.

The level of dissolved oxygen in the Buriganga dropped to as low as 0.1 milligram per litre (mg/L) at Postogola bridge point in March 2023. It rose to 6.01 mg/L at the same location during monsoon in July.

In March 2022, the dissolved oxygen level was also 0.1mg/L at the same point.

Water samples from Turag, Shitalakkhya and Dhaleshwari showed similar results.

A decrease in the dissolved oxygen level below 5.0mg/L causes stress to aquatic life. If the level falls below 1mg/L for a few hours, it could result in large-scale fish kills.

Direct discharge of untreated industrial, municipal and tannery waste into rivers and a reduced flow of water are among the reasons for depletion of dissolved oxygen during the dry season, the report states.

Currently, 2,500 industrial

units, which account for 86 percent of industrial units in Dhaka and its suburbs, have ETPs, but most of them don't treat waste to maximize profits, said a DoE official seeking anonymity.

Asked about the rampant pollution by industrial units, DoE Deputy Director Abul Kalam Azad blamed manpower shortages for the lax monitoring.

"If we want to cover only Shyampur area properly, we will need at least four inspectors," he said.

Kalam further said the DoE now has 80 inspectors against 157 sanctioned posts to monitor whether industrial units are following environmental regulations across the country.

Mujibur Rahman, who has been working on water pollution for over two decades, said that not only industrial waste, almost all household waste is dumped into the rivers around Dhaka city.

"In the past, we proposed setting up cluster ETPs in industrial areas, including Shyampur, and treating liquid waste centrally. But none of the successive governments implemented those suggestions," added Mujibur, also a professor of civil engineering at the United International University.



PHOTO: STAR

## Khowai river gasps for life

Encroachment, waste dumping choke the once vibrant waterway

MINTU DESHWARA, Moulvibazar

The Khowai river, once a vibrant waterbody flowing through the heart of Habiganj town, is now choked by indiscriminate dumping of waste and relentless encroachment on both banks.

Over the years, the river has been turned into a dumping site for household, commercial and clinical waste, particularly at the Kibria Bridge point. With no dedicated dumping ground, the municipality disposed of garbage collected from across the area by discarding it in the river.

Although the municipality stopped using the river for waste disposal three years ago, many locals continue to dump garbage along its banks. Meanwhile, influential groups have encroached on the river's land by building structures on both banks.

Even slight rainfall now submerges parts of the town due to the damaged embankments and clogged drainage system.

"The river once supported my livelihood. Now it is almost dead due to pollution and illegal grabbing. The stench is unbearable. The ghat is now abandoned and piled up with garbage. There is no fish in the river anymore," said Rafiq Ahmed, a local fisherman.

Latif Mia, who lives near Kibria Bridge, echoed him.

Sharif Jamil, central member secretary of environmental group Dhoritri Rokhaya Amra (DHORA), said, "Before any restoration effort,



encroachment must be stopped, and waterlogging must be addressed."

Experts stressed the need for a comprehensive plan.

Since there is no Cadastral Survey data available for Habiganj, they called for a scientific and transparent survey to demarcate the river's original boundaries, with local environmentalists and community leaders involved in the process.

Professor Dr Mohammad Zahirul Haque, vice-chancellor of Sylhet Metropolitan University, said the name "Khowai" originated from the Tripura language as a combination of two words -- "Kho" (up) and "Yai"

(stream) -- meaning "a stream of water coming down from above".

The Khowai is a transboundary river originating from the Atharmura hills of India's Tripura state and entering Bangladesh through the Bangladesh India border before merging with the Meghna. The river stretches 94 kilometres in Bangladesh with an average width of 106 metres.

It is not only the main river of Habiganj but also the third largest in Tripura.

The Khowai, if restored, could help address many of the city's infrastructural problems, including

drainage and waterlogging, he added.

Tofazzal Sohel, waterkeeper of the Khowai river, called for efforts to restore the river and transform its banks into community space.

Contacted, Sayedur Rahman, executive engineer of the Water Development Board in Habiganj, said a tender has been invited for a comprehensive feasibility study to assess the river's current state and identify interventions needed to restore and protect it.