

## HALDA, MORE THAN A RIVER

**The only source of naturally laid carp eggs in the country, Halda ensures the livelihood of a large population of the area, and nutrition for the country as a whole. On one hand, man-made reasons stand behind its rampant pollution, destroying its biodiversity to the core and the livelihoods of egg collectors. On the other hand, humans are the ones to jump right on to save the river and the people whose livelihoods depend on it, be it through surveillance or research. In today's Chattogram page, we highlight this contradiction, the perils of the Halda, and the efforts to save it.**



PHOTO: RAJIB RAIHAN

## Crisis of wells, crisis of livelihoods

SIFAYET ULLAH

Hundreds of fish egg collectors at Halda river, the only natural carp breeding ground in Bangladesh, are currently going through a huge crisis because of the limited allocation of wells.

The brood fishes release eggs during the last week of April or in the beginning of May every year. There are certain conditions for the proper releasing of eggs, including congenial temperature, heavy rain, tide, increased water flow from the upstream in the river etc. Then the collected eggs need to be kept in another waterbody in appropriate conditions for hatching, and that's where the wells come in handy.

That is the crisis that egg collectors of the area currently find themselves in. They fear that if wells are not allocated as per their demands, the eggs extracted from Halda will be wasted, resulting in a huge loss.

"I have eight boats to collect eggs. So, I applied for an allotment of eight wells but got only four. It's not enough for the eggs I'm collecting," said Ashu Barua, an egg collector.

And this is not the case for Ashu only.

Majority of the egg collectors are on the verge of losses due to the issue.

According to the district fisheries office, there are 151 wells in four hatcheries on the bank of the Halda. But egg collectors of the



area have claimed that at least 400 wells are needed.

During a recent visit to the Middle Madarsha Baruapara hatchery, this correspondent talked to Gazi Selim, hatchery in-charge. "We have 32 wells here," he said.

"All have already been allocated and we have made all kinds of preparations for the hatching," he added.

According to the data of Halda River Research Laboratory (HRRL), the river is the source of eggs worth about Tk 800 crore every year. Egg collection has become the primary earning activity for a large population along the bank of Halda, driving them towards self-reliance. Egg collectors will have to spend a total of Tk 40 lakh to collect

the eggs which will go in vain if they fail to hatch the eggs in time.

"Egg collectors informed us about the well crisis after the allocation was completed. We have advised them to make wells on the lands," said Farhana Lovely, district fisheries officer.

Halda researcher Prof Manzoorul Kibria said wells could be made on the ground at Halda's bank earlier but the embankment has made it impossible now.

"But egg collectors do need the wells, and relevant government agencies have to come forward in this regard. Otherwise the livelihood of the egg collectors will be destroyed," he added.

## CCTV cameras protecting Halda from poachers

FM MIZANUR RAHMAN

Protecting Halda River's broodfish and dolphins from poachers has become much easier, thanks to a small technological initiative. Chattogram region's river police are now using CCTV cameras to monitor activities in the river.

Through the cameras -- installed at different points of the river, which is the lone source of natural carp breeding in South Asia -- police are surveilling around eight kilometres of the river round the clock.

Police officials said movement of sand-lifting dredgers, engine-run trawlers and poachers have been strictly controlled, and immediate action can now be taken following the initiative.

This initiative has been taken for the first time in the country. Eight high-resolution cameras, which cost Tk 4.65 lakh, were installed last year, said police.

Superintendent Md Monimul Islam of Chattogram river police told The Daily Star, "We have installed the cameras so that no one can catch fish or dolphins, and operate sand-lifting dredgers by



dodging police."

"We have installed cameras that have 360-degree movement from Madunaghat area to Amtua area. They can be accessed from the SP office and local police outpost," he said.

"Apart from that, we are patrolling the river regularly and destroying nets and other fishing tools, so that no one can interrupt breeding," he added.

ABM Mizanur Rahman, officer-in-charge of Sadarghat River Police Station, told this newspaper, "We have a temporary police outpost at Ramdas Munshirhat, where around 10 officers are working to protect the natural water body."

"Using live footage from SP and deputy inspector general's office, the local force is given directives during drives," he said. "We have also identified some key spots to install more cameras; the process is underway."

Unfortunately, despite monitoring and regular drives, a section of fishers are still casting illegal and harmful fishing nets in the river, said police and local sources.

A 10-kilometre area, from Ramdas Munshirhat to Sattar canal, is considered to be the breeding ground of brood fish during peak breeding period, say experts.

## CU HALDA RIVER RESEARCH LABORATORY Country's first research centre to study rivers

ARUN BIKASH DEY

The journey of Halda River Research Laboratory started on August 20, 2017 in two abandoned rooms at the Department of Zoology at Chittagong University (CU).

Supported by Palli Karma Sahayak Foundation (PKSF) and Integrated Development Foundation (IDF), the Halda River Research Laboratory is the first research centre of its kind to pursue research on rivers in the country.

Since its inception, the centre has been researching on the Halda and creating mass awareness to protect the river's ecology.

The 1,000-sq ft research centre has three branches. The specialised laboratory branch has equipment for water quality testing and river biological analysis.

Documents, published articles, project papers of all kinds of scientific research done on the Halda so far are being kept in the river museum and archive branch. The third branch is the Digital Conference Center where scientific discussions, presentations and video documentaries are held.

Mohammad Manzoorul Kibria, a professor and chairman of Department of Zoology at CU, was behind establishing the research centre.

Asked about the importance of Halda river, Prof Kibria said, Halda is the only river in the world from where indigenous carp eggs are collected directly. It's the lone natural



gene bank of indigenous carp fishes in the country.

"It's one of the main sources of drinking water supply to the port city."

Chattogram Wasa through two projects at Mohra and Madunaghat areas collects 18 crore litre water from the river per day. So the river's called the city's lifeline," he said.

He added that it's also an important habitat of the endangered freshwater Ganges dolphins (Platanista Gangetica).

Prof Kibria said this laboratory is continuously running activities, including -- Halda dolphin survey; evaluating Halda's water quality, creating awareness and coordination between stakeholders.

Fifty university students have completed their academic research on various topics

under this lab.

In 2022, full genome sequencing of four major carp fishes -- rui, katla, mrigal and kalibaus, and dolphins of the Halda were unveiled under this lab. In the same year, the Halda River Management Plan was formulated for the river's management. The lab in collaboration with Jahangirnagar University, completed the DNA bar coding of the Katla Brood fish in Halda river. According to Prof Kibria, this is a breakthrough in the river's research history.

"Our previous generation did some works on Halda but they are outdated. We'll have to depart one day. Does that mean research on Halda will stop? The next generation needs to be prompted to keep it going. The research centre was made from this thought," Prof Kibria said.

## Haunted by pollution

SIFAYET ULLAH

Halda is the only river in the country from where naturally laid carp eggs are collected for hatching. And yet, the river is being regularly polluted by industrial waste, posing a serious threat to its biodiversity.

The Halda originated at the Badnai Hill Ranges in Ramgarh upazila in the Chattogram Hill Tracts. It flows through Fatikchhari, Hathazari and Raozan upazilas and Chandgaon Thana of the port city, and falls into the Karnaphuli.

The 81-kilometre long river is the only natural carp breeding ground in Bangladesh, from where fertilised carp eggs are collected by local fishermen and egg collectors during April to June almost every year.

However, the ever-rampant pollution has led to 200 egg collectors losing their livelihoods.

According to a DoE report, wastes from various factories and residential blocks in Bayezid-Oxygen area are being dumped in Halda through Bamanshahi canal. Earlier, the canal used to flow directly into the Karnaphuli. But now it flows directly into Halda through Kwaish canal and the



residential areas' drains.

Engine-run boats and excavation from the river are among the other major reasons behind the pollution.

DoE analysis also suggests that according to almost every parameter, the water quality of the river and the canals were found unsafe for humans as well as the aquatic life.

Meanwhile, engine-run boats are still plying on the river even after the government banned them and sand mining on the river to protect the mother fish and endangered dolphins.

Researchers claimed that the river which was once a haven for brood fish to release their eggs has seen a drastic fall in the availability of eggs belonging to the natural species as the number of brood fish coming here to lay eggs has decreased in recent years due to all the pollution.

According to Halda River Research Laboratory's data, 8,500kg eggs were collected from the river last year, whereas the number exceeded 25,000kg in 2020.

"We recommended re-excavation of Bamanshahi canal and connecting it with the Karnaphuli to protect Halda. If the pollution continues this way, Halda will become fishless in near future," said Prof Manzoorul Kibria, noted Halda researcher.

Mufidul Alam, director of DoE-Chattogram region, told this correspondent that they will take necessary action regarding this as per law.

"We are always active in protecting the biodiversity of Halda. If something is illegal is going on, actions will be taken by the administration," he said.