

As a river runs shallow, it squeezes livelihoods dry, leaves city parched

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A BOATMAN SAYS

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New Delhi: Some 10km north of Signature Bridge, Saadan Haldar, a fisherman, was seen struggling along with his mates to push his boat stranded in the middle of whatever was left of the Yamuna. His boat was barely floating in the shallow water. Earlier, there used to be many fishing boats, but it's now just team Haldar trying its luck with others watching from the forsaken ghat.

"There are hardly any fish left. Currently, we barely manage a catch of 30kg. In normal days earlier, we used to get over two quintals of fish. Over 50 bikes used to carry our catch in two shifts daily, but there are hardly 5-6 left now. The catch started dropping about a month ago. I had never seen Yamuna so shallow," said Haldar.

Given the low catch, retail suppliers were seen returning empty-handed. A small share of Haldar's catch was

sold to one buyer and the rest was consumed by the boatmen and their families.

As the Yamuna level has dropped drastically, both the ecology and sustenance of people relying on the river for livelihood has been threatened. Neither scientists nor the people dependent on the river remember seeing it in such a condition.

"The river often gets shallow during summers, but I don't remember it getting this bad. The boat can hardly float," said Mahanand Malah, a 55-year-old boatman. "We used to procure 80kg of

catch in a day in two shifts, but today I got just 10kg. We have been losing business for a month," said Javed, who buys fish from Haldar to sell it in the local market.

Faiyaz Khudsa, scientist in-charge of Yamuna Biodiversity Park, said, "I don't remember seeing the river like this. Yamuna maintains a certain flow and depth, but it has gone below the level where phytoplankton and zooplanktons, like copepods, daphnia, diatoms, etc, may vanish. When the water level goes down, the temperature rises, which the organisms are not accustomed to. Besides, this is the time for fish breeding and absence of planktons may impact that."

"Yamuna had already lost species like rohu, katla, mrigal, calbasu, etc, and only non-natives like Thai mangur and Tilapia Mozambique are left. The entire ecology and allied systems, like floodplain, marshes and wetlands are getting compromised," added Khudsa.

Delhi University geologist professor Shashank Shekhar said when the river rises, groundwater gets recharged. "Yamuna has a flow of 13 billion cubic metres, nine billion of which is diverted to canals. At Hathnikund barrage, there is hardly any water left. At Delhi-Haryana border, Munak canal feeds the river. The desired environmental flow in Yamuna should be at least 50% of the total flow available in any season. However, states sharing Yamuna water have agreed to maintain a flow of 10 cubic metres per second or 0.86 million cubic metres per day, which is not even in tune with the desired minimum environmental flow," he added.

[Meanwhile, a Delhi Jal Board official said Haryana was not releasing water and the heat had worsened the situation. "About 352 cusecs of water is being released from upstream, which dries up in summers and does not even travel 20km," he added.]

VANISHING YAMUNA

Photos: Piyal Bhattacharjee

Zero flow

- The Yamuna is getting 189 MGD of water at present
- Warm and dry weather evaporates this volume of water within 20 km
- Hathni Kund barrage where the water is released is 222 km from Wazirabad

Depth of the river

Current average depth | Less than 6 inches

Normal depth | 10 feet maximum; 1.1 feet or 23.6 inches minimum

- Siltation/sand level at places is over 6 feet in height, resulting in islands to appear
- Situation has worsened in last 25 days

Reasons

- Less water being released from Haryana
- No pre-monsoon rainfall

Water demand

- 920 MGD procured after running tubewells/borewells for 24 hours
- Demand | Over 1,250 MGD



Environmental impact

- Zooplankton and phytoplankton, small floating organisms of flora and fauna, may die
- Fish breeding season; they feed on zooplankton and phytoplankton
- Ground water depletion
- River ecosystem disturbed

