

**Visit Report to Indrayani River, Dehu for inputs to National Green Tribunal
case on “Hundreds of Fish Found Dead in Indryani River at Dehu”**

Dated. 11.10.2024

- A team of scientists from ICAR-Central Institute of Fisheries Education, Mumbai, including Dr. Arun Sharma, Senior Scientist (Fish Health), Dr. Karankumar Ramteke, Scientist (Fisheries Resource Management), and Dr. Kapil Sukhdhane, Scientist (Aquaculture), visited fish mortality incident sites along the Indrayani River in Dehu, Pune, Maharashtra. During their visit, they collected samples for microbiological and water quality analysis. However, since the samples were taken in October 2024, determining the exact cause of the earlier fish mortality events may prove challenging (Photos attached).
- The primary and secondary information gathered regarding the sudden mass fish mortality in the Indrayani River was reviewed. Discussions with officials from the Department of Fisheries, Pune region, Government of Maharashtra, revealed that a detailed report on the fish mortality incident was promptly submitted by state fisheries officials to the Maharashtra Pollution Control Board. The report, referenced as F.No. 875/2024 and dated 18.03.2024, is attached for further information. Discussion with locals revealed that fish species such as Rohu, Catla, Mrigala, and Mahseer were commonly found during the fish mortality event that occurred in March.
- Mass fish mortality is often observed in lakes and rivers during the early morning hours, typically due to low levels of dissolved oxygen due to significant increment in anthropogenic inputs, untreated or partially treated sewage released into the rivers, accelerate hypoxia and the eutrophication processes. Other contributing factors include elevated levels of ammonia, nitrite, algal blooms, disease as well as sudden fluctuations in water temperature. Fishes in the water bodies likely evade adverse environmental conditions to overcome the harmful surroundings. However, if a large proportion of the water bodies are suddenly affected, fishes cannot absorb the ecological stress and relocate, resulting in mass mortality.

- As per Entry 21 of List II of the Constitution of India, fisheries fall under the jurisdiction of the state. Therefore, the District Fisheries Development Officer from the Department of Fisheries, Maharashtra, serves as the primary authority responsible for addressing any such incidents occurring within their respective districts in the state. The ICAR-Central Institute of Fisheries Education, an educational institution under the Indian Council of Agricultural Research (ICAR), New Delhi, is primarily focused on teaching and research for postgraduate and PhD students in fisheries. In this particular case, no representatives from ICAR-CIFE were physically called to inspect the incident sites of mass fish mortality. As a result, it is not possible to provide a definitive explanation for the cause of the occurrence in this case.



Plate 1.



Plate 2.



Plate 3.

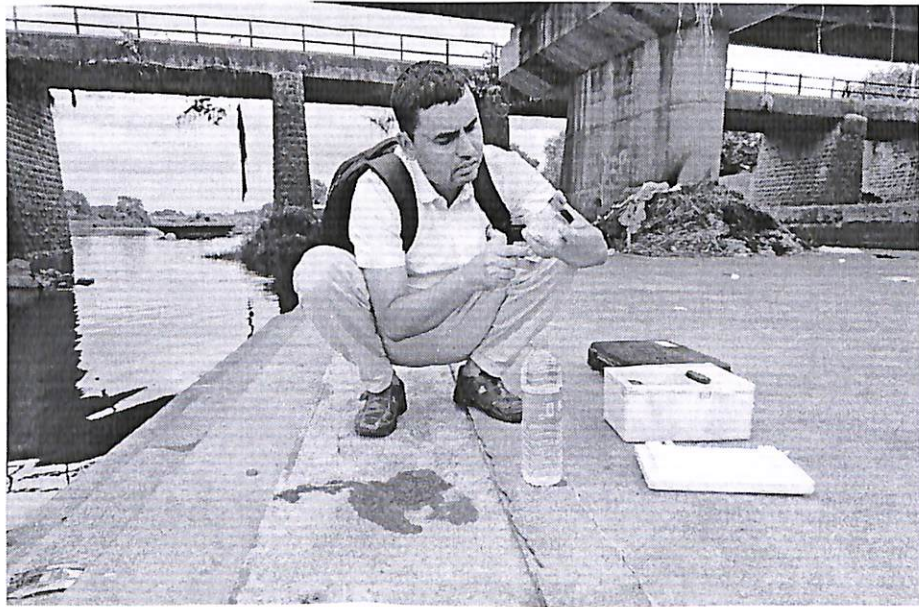


Plate 4.

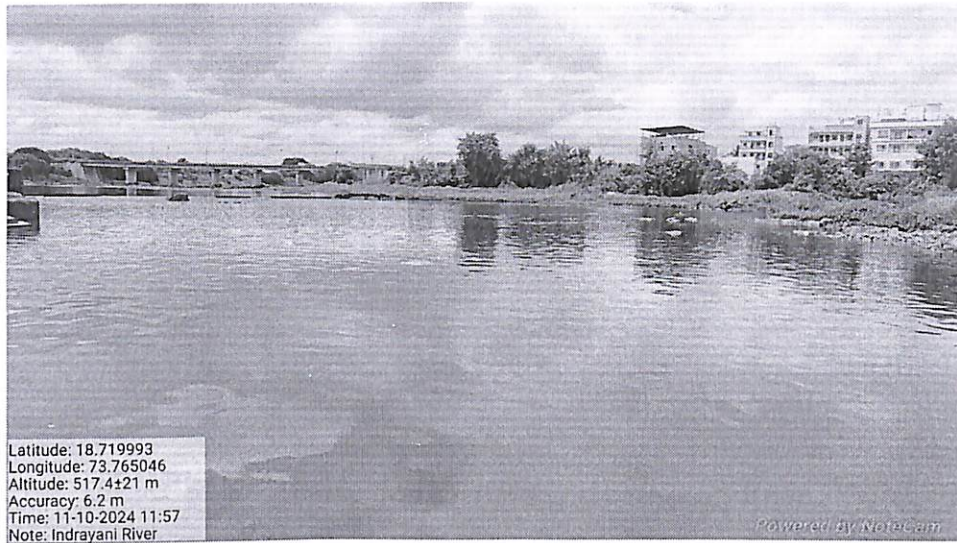


Plate 5.

Dr. Kapil Sukhdhane,
Scientist, Aquaculture
Aquaculture Division

Dr. Karankumar Ramteke,
Scientist, Fisheries Resource
Management
FRHPHM Division

Dr. Arun Sharma,
Senior Scientist
Fish Health
AEHM Division

Received

11/10/2024

Submitted to Dr. N.P. Sahoo, JD for
further necessary action.