

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 718/2024

News Item titled "सर्वेक्षण यमुना नदी में देसी प्रजाति की मछलियां घटी, विदेशी बड़ी, सर्वे में मिली 126 प्रजाति की मच्छलिया " appearing in Amar Ujala dated 09.05.2024

Date of completion of hearing and reserving of order: 24.12.2025

Date of pronouncement of order: 29.01.2026

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON  
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondent: Ms. Soni Singh, Adv. for R - 1 (Through VC)  
Ms. Suhasini Sen & Ms. Masooma Rizvi, Advs. for R - 2  
Mr. Praveen Swarup, Adv. for R - 3 (Through VC)  
Mr. Gigi. C. George & Mr. Sunil Kumar, Advs. for M/o Jal Shakti & M/o Fisheries

**ORDER**

1. This original application has been registered in *suo motu* exercise of power on the basis of the news item titled "सर्वेक्षण यमुना नदी में देसी प्रजाति की मछलियां घटी, विदेशी बड़ी, सर्वे में मिली 126 प्रजाति की मच्छलिया".

2. The news item mentions that there are 126 species of fishes in 1368 km stretch of river Yamuna from Yamunotri to Prayagraj. The Central Inland Fisheries Research Centre, (for short, "CIFRI"), Prayagraj had conducted a survey of fish species in Yamuna River and found that the fishes are affected by climate change and the number of Indian species of fishes have decreased and whereas number of exotic - foreign species of fishes have gone up. During this survey, five-member team had taken samples of fishes from the designated point thrice a year. The survey was conducted for three years and in the survey 126 species of fishes were found. In river Yamuna, there is decrease in the population of Indian species of fishes such as Catla, Rohu, Nayan, Padin, Gonch,

Chital, Rengan, Reetha, Bamchar or Eel, Mahasheer etc. As against this, the population of eight types of foreign fishes, namely, Common Carp, Silver Carp, Big Head, Thai Mangur, Grass Carp, Tilapia, Crocodile Fish and Bass has gone up which has affected the Indian species.

3. The newspaper report further states that the minimum fishes in river Yamuna are in the stretch from Delhi to Mathura and in this also from Wazirabad to Okhla only Thai Mangur is found which can live in polluted water because in this stretch Yamuna is most polluted. The report further states that Chambal, Sindh, Pahuj and Kuwari rivers meet river Yamuna on the border of Etawah and Jalaun Districts from there to Prayagraj there is maximum flow of water and maximum population of fishes.

4. The news item raises a serious issue concerning declining native fish population in river Yamuna.

5. The Tribunal by the orders dated 03.07.2024 and 07.11.2024 had impleaded the respondents and had issued notices to them. The replies on behalf of the concerned respondents have been filed and the parties have been heard finally.

#### **Reason for decline of native fishes in Yamuna**

6. One of the main reasons for declining of fishes especially native fishes in river Yamuna is the pollution in river Yamuna. The Central Pollution Control Board (for short, "CPCB") has developed designated best use classification classifying the quality of surface water body in five classes as under:

***"Annexure-I  
Designated Best Use Water Quality Criteria***

<b>Designated-Best-Use</b>	<b>Class of water</b>	<b>Criteria</b>
<i>Drinking Water Source without conventional treatment but after disinfection</i>	<b>A</b>	<i>Total Coliforms Organism MPN/ 100ml shall be 50 or less pH between 6.5 and 8.5 Dissolved Oxygen 6mg/l or more Biochemical Oxygen Demand 5 days 20C 2mg/l or less</i>
<i>Outdoor bathing (Organised)</i>	<b>B</b>	<i>Total Coliforms Organism MPN/ 100ml shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5mg/l or more Biochemical Oxygen Demand 5 days 20C 3mg/l or less</i>
<i>Drinking water source after conventional treatment and disinfection</i>	<b>C</b>	<i>Total Coliforms Organism MPN/ 100ml shall be 5000 or less pH between 6 to 9 Dissolved Oxygen 4mg/l or more Biochemical Oxygen Demand 5 days 20C 3mg/l or less</i>
<i>Propagation of Wild life and Fisheries</i>	<b>D</b>	<i>pH between 6.5 to 8.5 Dissolved Oxygen 4mg/l or more Free Ammonia (as N) 1.2 mg/l or less</i>
<i>Irrigation, Industrial Cooling. Controlled Waste disposal</i>	<b>E</b>	<i>pH betwun 6.0 to 8.5 Electrical Conductivity at 25C micro mhos/cm Max.2250 Sodium absorption Ratio Max. 26 Boron Max. 2mg/ 1</i>

7. The primary water quality criteria for outdoor bathing has been notified by the Ministry of Environment, Forest and Climate Change (for short, "MoEF&CC") by Notification dated 25.09.2000 under the Environment (Protection) Amendment Rules, 2000. This criteria include Faecal Coliform (2500 MPN/100 ml Maximum Permissible), Faecal Streptococci (500 MPN/100 ml Maximum Permissible), pH (6.5-8.5) Dissolved Oxygen (5 mg/1 or more) and Biochemical Oxygen Demand (3 mg/1 or less). The CPCB in its report dated 19.09.2024 has disclosed that at several monitored location, the parameters concerning Dissolved Oxygen and Total Coliform have been found to be non-complying. The disclosure so made by the CPCB in its report is as under:

"xxx .....xxx.....xxx

8. That, Water quality data of river Yamuna monitored for the year 2023 is compared with Designated Best Use Water

*Quality Criteria: Class D (Propagation of Wild life and Fisheries) for the matter involves the issue of rearing of fishes. Based on the water quality analysis of river Yamuna during 2023, it is observed that out of 32 monitored locations, 06 locations (01 in Haryana at Khojkipur Panipat and 05 in Delhi at Nizamuddin, ISBT Bridge, ITO Bridge, Okhla Barrage D/s and Asgarpur) are not complying for parameter Dissolved Oxygen (DO) and one location in Haryana at Sonapat for parameter pH were non-complying w.r.t the Designated Best Use Water Quality Criteria for propagation of wildlife and resources (Class D: Propagation of Wild life and Fisheries).*

9. *That, the water quality data of river Yamuna is also compared with notified criteria for bathing standards i.e Designated Best Use Water Quality Criteria: Class B (Outdoor bathing (Organised)). The results indicated that out of 33 locations, 13 locations (01 in Haryana, 06 in Delhi and 06 in Uttar Pradesh) are not complying for parameter Dissolved Oxygen (DO); 01 location in Haryana for parameter pH; 24 locations (02 in Himachal Pradesh, 05 in Haryana, 06 in Delhi and 11 in Uttar Pradesh) for the parameter Bio-chemical Oxygen Demand (BOD) and 20 locations (02 in Himachal Pradesh, 05 in Haryana, 01 Delhi and 12 in Uttar Pradesh) for parameter Total Coliform (TC) were non-complying w.r.t the Designated Best Use Water Quality Criteria: Class B (Outdoor bathing (Organised)).”*

8. The Respondent No. 3 – ICAR – CIFRI, Prayagraj in its reply dated 19.09.2024 has stated that the exotic fish have the ability to tolerate wide range of environmental condition, ability to feed on a wide variety of food items, reproduce frequently at lesser size (6 months old) rapidly which favoured their growth, establishment and proliferation in the river. While Indian Major Carps and large sized commercially important fish reproduce only once in a year and that also at larger size (more than 2 years old). The report further states that the pollution has reduced fish populations, especially between Delhi and Mathura.

9. The other reasons contributing to the decrease of native fish population are disclosed by the Respondent No. 5 – Department of fisheries, Government of India in its reply as competition for water, habitat alteration, and pollution, Dam construction, in particular, fragments major rivers and blocks essential fish migration routes,

preventing species from reaching spawning grounds and leading to local extinctions. Poor water quality due to nutrient pollution and contaminants poses a major threat to aquatic life. Additionally, overexploitation, indiscriminate harvesting, and the use of illegal fishing gear contribute to the decline of fish stocks. The encroachment of riverine land and climate change also exacerbate the challenges faced by native fish species. The reply further states that the introduction of exotic fish species whether through aquaculture escapes, pet releases, or recreational fishing practices often compounds existing environmental stresses. These multiple pressures collectively contribute to the decline in native fish populations. Globally, similar scenarios are observed in the Mekong Delta, Yangtze River Basin, Laguna Lake, and Lake Victoria, where native biodiversity is under threat due to such cumulative impacts.

10. The reply of Respondent No. 3 also reveals that since *Clarias Gariepinus* (Thai Mangur) is hardy and obligate air breather, they have developed specialized respiratory/air breathing organs which allows them to thrive in the oxygen deficient water. It is an omnivorous fish which helps it to feed on broad range of feeding materials, which is a possible reason of its presence in the river between Wazirabad and above Okhla barrage.

11. Thus, the above reasons have primarily contributed to the decline in native fish population in river Yamuna and increase in the exotic fish number.

### **The status and type of fishes found in River Yamuna**

12. The Respondent No. 3 – ICAR – CIFRI, Prayagraj had conducted study during 2020–2024 under project “Eco-Variability and Impact Study

of River Yamuna on River Ganga with Special Emphasis on Fisheries.” In that study, following status of the fishes in river Yamuna was found:

“xxx.....xxx.....xxx

4. *That it is submitted and admitted that ICAR-CIFRI conducted study during 2020-2024 under the project 'Eco-Variability and Impact Study of River Yamuna on River Ganga with Special Emphasis on Fisheries. That it is submitted that total of 126 fish species, belonging to 13 orders, 34 families, and 82 genera, were recorded across nine sampling sites in the River Yamuna. The species richness at each site was as follows: Barkot (13 species), Yamuna Nagar (102 species), Above Wazirabad Barrage (Delhi) (79 species), ITO (Delhi) (1 species), Mathura (54 species), Pachnada (101 species), Hamirpur (99 species), Chilla (99 species), and Prayagraj (99 species). The highest species richness was observed at the Yamuna Nagar stretch, attributed to the presence of migratory species such as *Tor putitora* and *Neolissochilus hexagonolepis*, which migrate upstream to spawn and feed at higher altitudes before returning to lower feeding grounds.*

*Pachnada also exhibited high species richness (101 species), likely due to the diverse habitats created by the confluence of the Chambal, Sind, Kuwari, and Pahuj rivers into the Yamuna, along with relatively good water quality compared to the Delhi and Mathura stretches. Conversely, the lowest species richness was recorded at ITO (Delhi), the most polluted site, where dissolved oxygen levels and water flow were nearly zero or below detectable levels.*

### **Mahseers**

*The Mahseer fishery, found in the upper reaches of the River Yamuna at Yamuna Nagar, is predominantly composed of *Tor putitora*. The size and population of Mahseer have been declining drastically since the construction of the Hatnikund Barrage in 1999. Between 1997 and 1999, Mahseer contributed an average of 9% to the total catch. However, this contribution has fallen to just 1.7% in 2023-24. This decline is likely due to the destruction of breeding and feeding grounds caused by siltation and dam construction, which have impeded their migration.*

### **Indian Major Carps**

*In the 1960s and 1970s, Indian Major Carps (IMCs) contributed nearly 50% of the total catch. At Prayagraj and Agra, IMCs accounted for approximately 43% of the total annual landings. However, their contribution, both in terms of composition and size, has declined in the upper and middle reaches of the River Yamuna. In various locations, the contribution of IMCs has varied as follows: Yamunanagar (2.8 to 4.5%), Delhi (0 to 0.5%), Mathura (1.5 to 3.7%), Pachnada (0.2 to 3%), Hamirpur (0 to 8%), Chilla Ghat (7.6 to 14.1%), and Prayagraj (12.3 to 19.8%).*

Among the IMCs, *Cirrhinus mrigala* (Mrigal/Nain) contributed the most, followed by *Labeo calbasu* (Karaunchh/Kalboss), *Labeo rohita* (Rohu), and *Labeo catla* (Bhakur/Katla). Notably, *Labeo catla* has experienced the most significant decline in abundance, indicating ongoing habitat degradation in the River Yamuna.

### **Large Catfishes**

The large catfish fishery in the River Yamuna includes *Sperata aor* (Tengan/Singhara), *Sperata seenghala* (Tengan/Singhara), *Wallago attu* (Padhin), *Rita rita* (Ritha), *Silontias silontia* (Sinda), *Bagarius bagarius* (Gaunchh), and *Pangasius pangasius* (Piyasi). Among these, *Sperata* was the primary species, with *S. seenghala* being dominant throughout the river except in Delhi, Mathura, and Chilla. In Delhi, the leading catfish species was *Clarias gariepinus* (Thai Mangur), while in Mathura, *Wallago attu* was predominant, and in Chilla, *Rita rita* was the most common.

The fishery for *Wallago attu* was relatively less important in the lower stretch of the river between Pachnada and Prayagraj. During 1958-66, catfish contributed 39% of the total catch at Agra and 22.6% at Prayagraj. However, their contribution has declined in both composition and size, likely due to the increasing presence of exotic species and other miscellaneous fish groups.

### **Hilsa fishery**

*Tenualosa ilisha* (Hilsa/ Ilish) fishery which recorded on an average annual catch of 0.03 t at Agra and 20.16 t at Prayagraj has been totally wiped out from the riverine stretch since 2010 due to construction of the Farakka barrage.

### **Exotic Fishery**

The exotic fishery in the River Yamuna is primarily represented by common carp (*Cyprinus carpio*), Nile tilapia (*Oreochromis niloticus*), and *Clarias gariepinus*. Other significant contributors include *Hypophthalmichthys molitrix* at Chilla and Yamuna Nagar, *Hypophthalmichthys nobilis* at Yamuna Nagar, and *Clarias gariepinus* (Thai Mangur) at Delhi (Wazirabad).

Exotic fish were not recorded in catches during 1958-66, but their presence has been noted since 1990. The contribution of *C. carpio* averaged 6.5% of the total catch at Yamuna Nagar during 1997-99 and has increased to nearly 40% at Mathura. At Agra, its contribution was 0.1% but rose to 84% at Mathura. Common carp's annual estimated catch ranged from 20.81 to 60.29 tons between 2002 and 2015 at Prayagraj.

Nile tilapia began appearing in catches at Prayagraj from July 2005, with an initial catch of about 100 kg. This increased to 36.3 tons in 2010 and further to 10.13 tons and 25.28 tons in 2014 and 2015, respectively. Nile tilapia has become the dominant species in the river Yamuna between Delhi and

*Prayagraj. Its contribution to the catch was 81% in Delhi (above Wazirabad Barrage), 82% in Agra, 87% in Mathura, 91% in Etawah, and 44% in Prayagraj during 2011-13.*

*Recent studies show a drastic reduction in the catches of Nile tilapia, while there has been a notable increase in the catch of common carp, except at Delhi (above Wazirabad Barrage). This indicates an overall dominance of exotic fish species in the River Yamuna.*

5. *That it is submitted that exotic fishery in the river is primarily represented by common carp (*Cyprinus carpio*) and Nile tilapia (*Oreochromis niloticus*). These species have established themselves in the river, with all life stages-eggs, spawn, fry, fingerlings, and adults-being observed. In contrast, for the other six exotic species, breeding individuals and their early life stages (eggs, spawn, fry, and fingerlings) have not been observed. Their presence in the river may be attributed to escapees from aquaculture facilities.”*

#### **The Ministries/Departments/Agencies responsible to take effective steps**

13. The effective steps to increase the number of native fishes and to control the exotic fishes in river Yamuna can be taken by the Ministry of Jal Shakti, MoEF&CC, National Mission for Clean Ganga, Delhi Jal Board, Central Water Commission, Department of Fisheries, National Fisheries Development Board, State Irrigation Departments, State Fisheries Departments, ICAR-CIFRI and National Bureau of Fish Genetic Resources (NBFGR).

#### **The efforts made by different agencies till now**

14. The CPCB has developed the designated best use classification classifying surface water in five classes from “A” to “E” providing for the water quality criteria. The CPCB with the State Pollution Control Boards/State Pollution Control Committees has established water quality monitoring network under National Water Quality Monitoring Programme (NWMP) to assess status of water quality of water resources in the respective States/Union Territories. The report of the CPCB states that water quality of river Yamuna is monitored on monthly basis by the

SPCBs/PCCs of Uttarakhand, Himachal Pradesh, Haryana, Delhi and Uttar Pradesh under NWMP. The CPCB has placed on record the water quality monitored for the year 2023 which discloses the locations where Total Coliform, Dissolved Oxygen, pH and other parameters are not found to be complying.

15. The ICAR-CIFRI has conducted the study during 2020-2024 and recorded total 126 fish species belonging to 13 orders, 34 families, and 82 genera across nine sampling sites of the River Yamuna. The details of which are as under:

*“4. ....The species richness at each site was as follows: Barkot (13 species), Yamuna Nagar (102 species), Above Wazirabad Barrage (Delhi) (79 species), ITO (Delhi) (1 species), Mathura (54 species), Pachnada (101 species), Hamirpur (99 species), Chilla (99 species), and Prayagraj (99 species). The highest species richness was observed at the Yamuna Nagar stretch, attributed to the presence of migratory species such as Tor putitora and Neolissochilus hexagonolepis, which migrate upstream to spawn and feed at higher altitudes before returning to lower feeding grounds.*

*Pachnada also exhibited high species richness (101 species), likely due to the diverse habitats created by the confluence of the Chambal, Sind, Kuwari, and Pahuj rivers into the Yamuna, along with relatively good water quality compared to the Delhi and Mathura stretches. Conversely, the lowest species richness was recorded at ITO (Delhi), the most polluted site, where dissolved oxygen levels and water flow were nearly zero or below detectable levels.*

16. The Respondent No. 5 – Department of fisheries, Government of India has constituted National Committee to oversee and regulate introduction of exotic aquatic species in Indian water by order dated 17.07.1996. The Committee has been constituted with the following objectives:

*“i) to objectively review and assess the pros and cons of introduction of exotic aquatic species (fin and shell fishes, Molluscs, Seaweeds etc.) into the country;*

- ii) to regulate and monitor the introductions through ICAR research institutes or any other agency deemed suitable for the purpose; and to develop guidelines/Code of ethics for future introductions, both from outside the country and also from one region to the other within the country.”*

17. The National Committee is responsible for approving the introduction of new species and developing important protocol based on comprehensive risk assessments to minimize potential, ecological and economic impacts.

18. The reply of Respondent No. 5 further reveals that on the basis of the recommendation of the National Committee cultivation of exotic magur (*Clarias gariepinus*) and Bighead Carp (*Hypophthalmichthys nobilis*) has been prohibited by the letter dated 19.12.1997. Subsequently, by the orders dated 10.01.2013 and 20.02.2019 the Department of Animal Husbandry & Dairying (Fisheries Division), Ministry of Agriculture has reaffirmed the ban on exotic Magur/Catfish and Bighead because these species are a threat to native eco-systems and aquaculture. The Department of Animal Husbandry & Dairying, Ministry of Agriculture, Govt. of India considering the unauthorized introduction of exotic Red Piranha (*Pygocentrus natterii*) and other members of the sub-family Serrasalminae, has issued an advisory to closely monitor the trade, breeding, and further spread of these species.

19. The reply of Respondent No. 5 also states that the National Fisheries Development Board (NFDB), is implementing the River Ranching Programme under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) aiming at restoring native fish stocks, conserving biodiversity, improving fish productivity in rivers, and supporting the livelihood of fisher communities. Under this scheme, financial assistance is provided for stocking fingerlings of native fish species at the rate of Rs. 3 per

fingerling (80-100 mm in size) in major river basins across the country, including the River Yamuna. It is stated by the Respondent No. 5 that the Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, under PMMSY has so far sanctioned ranching of 1386 lakh fingerlings at a total cost of Rs. 41.57 Crore in 17 states, namely, Uttar Pradesh, Odisha, Chhattisgarh, Bihar, Tripura, Uttarakhand, Assam, Himachal Pradesh, Karnataka, Tamil Nadu, Gujarat, Maharashtra, Sikkim, West Bengal, Nagaland, Manipur and Arunachal Pradesh with specific approvals of 1.15 crore for Himachal Pradesh, 12.95 crore for Uttar Pradesh and 0.25 crore for Uttarakhand to support their river ranching efforts. As on date 1180.94 lakh fingerlings of *Labeo rohita*, *Catla catla*, *Cirrhinus mrigala*, brown trout and other locally available native species have been ranched in the river Ganga and its tributaries including Yamuna River, Mahanadi River and, adjoining rivers Brahmaputra and Barak River distributaries and other adjoining rivers, Indus River and Vainganga and Wardha rivers.

20. The reply of Respondent No. 5 further states that the Fisheries Department of Uttarakhand is actively engaged in the conservation and propagation of native fish species, with particular emphasis on Mahseer, which is designated as the State Fish. Between 2020 and 2024, the Department has stocked approximately 17.5 lakh Mahseer fish fingerlings, including in the Yamuna River, to support species conservation. Similarly, the Fisheries Department of Himachal Pradesh has taken steps to restore native aquatic biodiversity by ranching 22,000 fingerlings of Indian Major Carps into the Yamuna River during the financial year 2022-23. It is disclosed that to promote the conservation of native fish fauna, the Department of Fisheries, through the National Fisheries Development Board (NFDB), is also promoting the concept of

State Fish introduced by Indian Council for Agricultural Research-National Bureau of Fish Genetic Resources (ICAR-NBFGR), which encourages States to adopt and conserve regionally important fish species. The programme aims to replenish native fish stocks, restore ecological balance, and raise awareness about species at risk. At present, 21 aquatic species are designated either as State fish, State aquatic animal or State animal. Out of the 36 States and Union Territories of India, 22 have either adopted or declared their State fish and 3 have declared State aquatic animal.

21. Thus, it is noticed that though different agencies have taken steps for preservation of the native fishes in river Yamuna, but inspite of these programmes, the population of native fishes in river Yamuna has shown a declining trend. Hence, there is a need to re-evaluate and ensure that the programmes which have been undertaken are effectively implemented at the ground level.

### **Suggestions and Directions**

22. The Respondent No. 3 – ICAR-CIFRI, Prayagraj has made following suggestions for compliance by the local governments:

*“7. That in order to address the current situation, the following suggestions may kindly be considered for compliance by the local government authority:*

- (i) **Prohibit or Regulate Illegal Fishing Gears:** The juvenile fishing through illegal fishing gears/practices, such as using mosquito drag nets etc. should be stopped.*
- (ii) **Enhanced monitoring, control and surveillance during fishing ban period:** A key requirement for the successful implementation of the ban period by the state fisheries department is needed to monitor and regulate the illegal catch of the brooders during the fishing ban period.*
- (iii) **Implement Strategic Ranching Practices:** Ranch Mahseer in the upper stretches of the river, and stock IMC and commercially important large fish species like Channa*

*marulius and Chitala chitala in the middle and lower stretches.*

- (iv) **Ranch Air-Breathing Fish in Designated Areas:** *Ranch air-breathing fish species such as Channa marulius and Channa striata in the Delhi stretch, specifically below the Wazirabad barrage and above the Okhla barrage.*
- (v) **Maintenance of the proper records of the fish catch data:** *The stretches of the river Yamuna are being leased by the state Fisheries Department. But the storage of proper data viz. date & location wise, species wise etc. by the department is lacking or not being recorded which are imperative for the sound management of the riverine fisheries health.*
- (vi) **Follow Ranching Guidelines for Stocking in Leased Stretches:** *Ensure that stocking in leased river stretches adheres to the ranching guidelines developed by ICAR-CIFRI to prevent genetic pollution.*
- (vii) **Ban the Release of Exotic Fish for Rituals:** *Cease the practice of releasing exotic fish into the river as part of rituals.*
- (viii) **Increase Public Awareness:** *Educate the public about the negative impacts of exotic fish on riverine ecology and biodiversity through the campaign/mass awareness program at regularly.*
- (ix) **Maintain Continuous Water Flow:** *Ensure a continuous flow of water below the barrage throughout the year in accordance with E-flow requirements to preserve the river's pristine condition.*
- (x) **Address Point Source Pollution:** *Take action to manage point sources of industrial and organic effluents to protect biodiversity and maintain ecological balance.”*

23. In view of the above analysis, we issue following directions in the matter:-

- (a) The State Government, especially the States of **Uttarakhand, Himachal Pradesh, Delhi, Haryana, Uttar Pradesh** from where river Yamuna flows are directed to duly consider the suggestions made by Respondent No. 3-ICAR-CIFRI, Prayagraj and take effective steps to implement the same expeditiously.

- (b) The CPCB, NMCG and DJB are directed to ensure strict enforcement of the effluent standard and compliance of norms by the ULBs discharging treated/untreated sewage and throwing solid waste in river Yamuna and the industries which are discharging treated/untreated effluents in river Yamuna. They are further directed to accelerate installation and operationalization of the sewage treatment plants in the ULBs abutting river Yamuna to ensure that the treated water meets the standard fit for aquatic life.
- (c) The CPCB is directed to ensure continuous water quality monitoring at different stretches of river Yamuna to ensure the parameters concerning Dissolved Oxygen, BOD, Ammonia and heavy metals which are crucial for fish survival are maintained and ultimately achieve the aim to restore/bring back Indian native fishes in Yamuna particularly, the Indian Major Carps (IMC).
- (d) The CPCB and NMCG with CIFRI should come out with classification of rivers based on biological indicators including fishes to maintain ecological health of rivers including river Yamuna.
- (e) The MoEF&CC, Central Water Commission and State Irrigation Departments are directed to maintain minimum flow level in river Yamuna to support breeding and migration of native fish species. They are directed to regulate/prohibit sand mining that disturbs the spawning beds. They are further directed to remove obstruction or construct fish ladders at Barrages like Wazirabad, Okhla, Hathnikund to facilitate migration of native fish species such as Mahasheer.
- (f) The Department of Fisheries, National Fisheries Development Board (NFDB) and State Fisheries Department are directed to ensure strict licensing and zoning of aquaculture forms and mandatory physical

barriers to prevent escape into natural river during floods. They are also directed to prohibit and ensure effective implementation of prohibition of farming of highly invasive species like Thai Mangur (*Clarias gariepinus*). They are further directed to promote native fish aquaculture by providing incentives for culture of Catla, Rohu, Mrigal, Chital, Mahasheer and Eel through subsidized seed and feed supply.

(g) The ICAR-CIFRI, National Bureau of Fish Genetic Resources and State Fisheries Department are directed to release fingerlings of native species into identified river stretches especially post monsoon season. They are also directed to consider establishing Mahasheer and Indian carp hatcheries along the Yamuna basin to maintain genetic diversity and declare biodiversity rich stretches as fish conservation zone.

(h) The MoEF&CC, National Bureau of Fish Genetic Resources and the other academic institutions should revamp the research on species decline by conducting scientific studies on ecological interactions between native and exotic fishes, breeding biology and population tolerance. They can take steps to make the local fishermen and aquatic farmers aware about the ecological harm of exotic species and can also suggest them economic alternatives.

(i) The MoEF&CC, Department of Animal Husbandry & Dairying, Ministry of Agriculture and the State Governments should take steps to implement the national inland fisheries policies effectively by integrating Yamuna specific fish conservation plans within river basin management. Strict penal action is required to be taken against those responsible for illegal introduction of exotic species in the river.

24. The OA is accordingly disposed of.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

January 29, 2026  
Original Application No. 718/2024  
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