

ORL-EB&C-19**Ichthyofaunal Diversity in The Narayani River and Its Tributaries, Nepal**

Dilip Kumar Jha* and Rahul Ranjan

Agriculture and Forestry University
Rampur, Chitwan, Nepal
dkjha@afu.edu.np

The Narayani river is one of the largest rivers in Nepal which supports diverse fish species and contributed to the riverine ecosystem. Collection of fish species were done from seven sampling sites for the period of two years from September 2022 to August 2024

A total of 111 fish species belonging to 13 orders, 30 families and 75 genera. The order Cypriniformes had the highest number of species (48.6%) followed by Siluriformes (29.7%), Anabantiformes (7.2%), Synbranchiformes (3.6%), Osteoglossiformes (1.8%), Perciformes (1.8%), Mugiliformes (1.8%), while Anguilliformes, Beloniformes, Clupeiformes, Cichliformes, Gobiiformes and Tetraodontiformes represented each by 0.9%. Cyprinidae has the highest number of species (39.6%) among the families followed by Sisoridae (11.7%), Bagridae (7.2%), Cobitidae (5.4%), Channidae (3.6%), Nemacheilidae (2.7%), Mastacembelidae (2.7%), Siluridae (2.7%), Notopteridae (1.8%), Ambassidae (1.8%), Mugilidae (1.8%), Schilbeidae (1.8%), and Ailiidae (1.8%). Other families accounted for about 1% were Anguillidae, Belonidae, Clupeidae, Psilorhynchidae, Anabantidae, Gobiidae, Belontidae, Synbranchidae, Amblycipitidae, Pangasidae, Clariidae, Heteropneustidae, and Tetraodontidae.

The exotic fishes *Oreochromis niloticus* and *Hypophthalmichthys molitrix* were collected for the first time from the Narayani River. Different fish species are naturally maintained in aquatic systems and support livelihoods of the people. Catches of major food fishes are declining due to overexploitation of resources, therefore, appropriate measures are needed at once to maintain and conserve the indigenous stock.

Table: Summary of fish diversity in Narayani and Rapti river

| S.No. | Order | Families | Genus | Species | Percentage |
|-------|-------------------|----------|-------|---------|------------|
| 1. | Anguilliformes | 1 | 1 | 1 | 0.9 |
| 2. | Beloniformes | 1 | 1 | 1 | 0.9 |
| 3. | Clupeiformes | 1 | 1 | 1 | 0.9 |
| 4. | Cypriniformes | 4 | 33 | 54 | 48.6 |
| 5. | Cichliformes | 1 | 1 | 1 | 0.9 |
| 6. | Osteoglossiformes | 1 | 2 | 2 | 1.8 |
| 7. | Perciformes | 1 | 2 | 2 | 1.8 |
| 8. | Anabantiformes | 5 | 5 | 8 | 7.2 |
| 9. | Gobiiformes | 1 | 1 | 1 | 0.9 |
| 10. | Mugilliformes | 1 | 2 | 2 | 1.8 |
| 11. | Siluriformes | 10 | 22 | 33 | 29.7 |
| 12. | Synbranchiformes | 2 | 3 | 4 | 3.6 |
| 13. | Tetraodontiformes | 1 | 1 | 1 | 0.9 |
| | Total | 30 | 75 | 111 | 100 |