

# CENTRAL UNIVERSITY OF ODISHA, KORAPUT

## OFFICE OF THE PUBLIC RELATIONS

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### **First Record of Two Mahseer Fish Species from Southern Odisha: A Success Story from Central University of Odisha**

In an important biodiversity assessment study, researchers led by Prof. Sharat Kumar Palita, Dean, School of Biodiversity and Conservation of Natural Resources (SBCNR), Central University of Odisha, Koraput, has, for the first time, recorded two Mahseer fish species from the Indravati River system of southern Odisha. These two new Mahseer fish species belong to the Cyprinidae family, which are large-bodied and big-scaled carps, often called 'King of the Indian Aquatic system' and are included under 20 mega fishes of the world. It inhabits fast-flowing cold, clear, hilly riverine water with pebbly, stony, and rocky bottoms and intermittent rocky pools. It is a sacred fish and is worshipped in many Hindu temples in India.

In Odisha, Mahseer fish species have earlier been reported from the Mahanadi, Brahmani, and Similipal regions. However, they have not been reported earlier from any rivers in South Odisha. Major rivers of South Odisha, such as Kolab, Indravati, and Machhkund, are a part of the Godavari River system, being its major tributaries, whereas Nagabali and Vamshadhara arise in Odisha and join the Bay of Bengal in Andhra Pradesh. Prof Palita, after joining the Central University of Odisha, started research on Mahseers six years back, and work was given to the scholar Alok Kumar Naik. During the search, these fishes were documented from Indravati Market at Khatiguda (Khatiguda Market) in Nabrangpur of Odisha. Later, these were documented from Indravati Reservoir at Mukhiguda in Kalahandi and Kapur Dam in Nabarangpur. Under close scrutiny by Prof. Palita in the laboratory of Central University of Odisha, these fishes were identified as Mahseer fishes and later confirmed by the Zoological Survey of India, Kolkata. ZSI as two species of Mahseer, *Tor tor* and *Tor putitora*.

While *Tor* Mahseer *Tor tor* has earlier been recorded from Similipal, Mahanadi River System, and Brahmani River, the present discovery is a new record from Indravati River, an interstate river that flows through southern Odisha. This species is comparatively widespread, being distributed from Jammu in the West to Brahmaputra valley in the east and distributed in the rivers of the Indian peninsula. The Golden Mahseer *Tor putitora* is found in the Brahmaputra and Ganga River systems in Himalayan foothills and in northeastern states of Meghalaya and Manipur and the river Narmada in central India was thought to be its southern limit. The earlier report of *Tor putitora* from Mahanadi River is no more valid, as the species is now recognised as *Tor mahanadicus*, a new species. The present record of *Tor putitora*, therefore, is not only a new record from the Godavari basin of Odisha, but it is a new record for the entire Godavari River system of India. The

findings have been published in the prestigious journal Asian Journal of Conservation Biology.

The mahseer species of the world are divided into three genera, *Tor*, *Neolissochilus* and *Nazirtor*. The members of the *Tor* genus are recognised as 'True Mahseer'. Globally, 17 valid species of the *Tor* genus are found in countries like India, China, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand, Indonesia, Pakistan, and Afghanistan. India is now home to nine (09) species of *Tor* Mahseer. With the present record, Mahseer species in Odisha are four (04): *Tor tor*, *Tor mahanadicus*, *Tor putitora* and *Tor khudree*.

Locally these fishes are called as "kainsari", 'Khaiser' in Khatiguda area Nabrangupur, whereas Begali people of the region call it as "Mahasol". The term Mahseer from 'maha-sir' meaning big head is now erroneous and the term 'Mahasol' meaning big scales are more accepted.

In India, *Tor* fishes are recognised as principal game and food fishes. In Golden Mahseer, the maximum recorded length is 275 cm, and the maximum weight is 54 kg. Mahseer has been identified as a candidate species for aquaculture because of its sporting quality and excellent flavour of flesh. In India, as well as in Odisha are currently undergoing significant alterations in their natural and hydrological characteristics, largely due to various human activities such as untreated sewage, waste disposal, and discharge of polluted water from various sources. While Golden Mahseer *Tor putitora* is declared as Endangered and *Tor tor* is declared as Near Threatened by IUCN, they require conservation attention. It is a matter of happiness, that many state Governments in India are declaring Mahseers as state Fish (Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir, Uttarakhand, Nagaland and Sikkim), Govt of Odisha has declared the Mahanadi Mahseer as 'State Fish' of Odisha. This discovery by the researcher Alok Kumar Naik, supported by another researcher, Anirban Mahata, under the guidance of Prof. Palita, further highlights the rich untapped biodiversity research of Southern Odisha and, more particularly, Koraput region. Prof. Palita says that while genetic analysis of these fishes of southern Odisha is nearing completion, steps need to be undertaken for their conservation. Hon'ble Vice-Chancellor, Prof. Chakradhar Tripathi and The Vice-Chancellor I/c. Prof. N. C. Panda has congratulated the team of researchers of the Dept. of Biodiversity and Conservation of Natural Resources and has highlighted the importance of this basic research under the Sustainable Development Goals (SDG) and stressed for further research, which can help build livelihood security for the common man.

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