

## FISH PRODUCTION TREND IN COLD WATER STRETCH OF THE GANGA RIVER

ABSAR ALAM<sup>1</sup>, UPENDRA SINGH<sup>1</sup>, VIKAS KUMAR<sup>1</sup>, JEETENDRA KUMAR<sup>1</sup>,  
DHARM NATH JHA<sup>1</sup>, VENKATESH RAMA RAO THAKUR<sup>1</sup>, DURGESH  
KUMAR VERMA, SUSHIL KUMAR VERMA<sup>1</sup>, SANDEEP KUMAR MISHRA<sup>1</sup>,  
PRANAY PARIDA<sup>1</sup> AND BASANTA KUMAR DAS\*<sup>2</sup>

---

*The fisheries of the Ganga River, including small-scale and artisanal practices, play a significant role in the inland capture fisheries sector. In its upper stretches, the river flows through diverse climatic and geographical regions, fostering a variety of fisheries. As water temperatures in the hilly areas drop below 20°C, the upper stretch of the Ganga is dominated by coldwater fish species such as Mahseer and others that thrive in cooler conditions compared to Indian Major Carps (IMCs). The coldwater fisheries here comprise species like exotic brown trout (*Salmo trutta fario*), snow trouts (*Schizothorax* and *Schizothoraichthys* spp.), Mahseer (*Tor putitora*), Indian hill trouts (*Barilius* spp.), sisorids (*Glyptothorax* spp.), and minor carps (*Labeo dyocheilus*, *L. dero*, *Garra* spp., *Crossocheilus latius*). Unfortunately, many of these species are categorized as threatened due to their declining wild populations. They face multiple challenges, including overfishing, illegal fishing practices, ecosystem disruption, and the far-reaching effects of climate change. Conservation measures are crucial to safeguarding these fish populations and ensuring the long-term sustainability of fisheries in the Ganga River.*

---