

**ORL-EB&C-07****Conservation, Research and Development Status of Himalayan Golden Mahseer in Nepal**

Jay Dev Bista\*, Tek B Gurung, Sadhu R Basnet, Arun K Baidya, Subhash K Jha and Madhav K Shrestha.

Agriculture and Forestry University  
Rampur Chitwan, Nepal  
jdbista@gmail.com

The Himalayan Golden Mahseer (*Tor putitora*), often referred to as the "Tiger of the River," is a highly valuable fish species endemic to the Himalayan River systems. Nepal is one of well-known destinations of the Mahseer, a long migratory massive sport and high value food fish in rivers and lakes. Nepal has two species of Mahseer, *T. tor* and *T. putitora* with relatively higher abundance of later in most in all river systems and lakes of mid-hills of Nepal. In recent years, there has been a significant increase in national and international efforts to conserve the iconic golden Mahseer through research, conservation, and development initiatives. However, there has been only sparse activities performed on Mahseer in Nepal. The major agencies working are Center Fisheries Promotion and Conservation Center, Nepal Agricultural Research Council and Agriculture and Forestry University etc. Conservation efforts in the country are focused on habitat restoration, regulation of fishing practices, and awareness campaigns among local communities. Several protected areas and river sanctuaries, including the establishment of no-fishing zones, have been recommended to safeguard Mahseer critical habitats. National legislation, along with community-based fisheries management (CBFM) programs although are in practice for example in lakes of Pokhara Valley, but require more extensive projects in future for restoration of Mahseer population. Efforts from government are limited to strengthen to prevent illegal fishing and ensure sustainable resource use.

On the research front, advancements on the biology, behavior, and genetics of *Tor putitora* have opened new avenues for conservation. Major success in research was on its spawning biology. Now Nepalese scientist can identify the locations of natural spawning grounds as well as they can perform artificial breeding on Mahseer from the stock they reared in ponds in captive environment. On request NARC stations can produce massive number of fry from hatcheries. The technology has been outspread to the Agriculture and Forestry University where fisheries bachelors and masters' students now can perform and study the artificial breeding of the golden Mahseer. Recently the breeding technology is also adopted in one of the private farm Center for Aquaculture Agriculture Research and Production (CAARP) Chitwan in subtropical region and producing fry. Future studies would focus on the species' life history traits, spawning behavior, and habitat preferences in different locations. These subjects may help to obtain the knowledge on targeted conservation strategies. There has been also the studies on identifying distinct populations and their connectivity across river basins, which is critical for maintaining genetic diversity and ensuring species resilience in the face of environmental changes.



There are another venue awaiting to further explore the economic venues of Himalayan Mahseer in the development of ecotourism. As the Mahseer is well renowned as one of the greatest game fish of the earth because of its highly sporting fighting characteristics. Sport fishing, when managed sustainably, offers substantial economic incentive for local communities to participate in conservation efforts. To promote the Mahseer further collaborations among government agencies, inter-governmental, international agencies and NGOs, academic institutions, and local stakeholders would be pivotal. The integration of scientific research, policy development, and community engagement would be the key to ensuring the long-term survival of this iconic species.