

# Fishery Based Eco-tourism: Scope and Potential

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## Introduction

Tourism has emanated as industry attaining immense significance today leading to the development and growth of a particular area and region. It is a social phenomenon with huge economic, social and cultural benefits. Tourism also provides international understanding, national integration, goodwill and friendship. Tourism is world's largest export industry, it accounts for about 10% of total world exports and more than 38% international trade in services. Himalayas are bestowed with natural resources including gurgling rivers and dense forest. This natural environment and involvement of local community offers the opportunity of eco-tourism in the Himalayan region in India. The UN International year of Eco-tourism during 2002 reviewed eco-tourism experiences worldwide, highlighting **three significant aspects; nature, tourism and local community**. In contrast to conventional tourists (Gossling, 1999; Kochi, 1997) eco- tourists stay in facilities that are likely to be owned and managed by local people rather than multinational corporations and often eat local food and consume local services. Thus eco-tourism can be explained as nature conservation, benefit to the local people as well as entertain tourists. Similarly, fishery based eco-tourism is one of the important emerging sector, where travel and amusement of the tourist are centered on the activities like sport fishing, angling, swimming, boating rafting etc. emphasizing sustainability and conservation of aquatic diversity along with economic gain to local people. Angling or recreational fishing has a long tradition and is now enjoyed by millions of people worldwide. It is defined as "Fisheries conducted by individuals primarily for sport but with a possible secondary objective of capturing fish for domestic consumption but not for onward sale." In the United States, over 34 million people participated in recreational angling and 29.4 million recreational fishing licenses were issued. The revenues from fishing licenses support fish and wildlife management agencies

at all levels of government and the expenditures from recreational fishing contribute to local and regional economies, especially in regions where fisheries have been preserved in pristine or near-pristine conditions.

Eco-tourism is a sustainable form of resource use, which contributes to environmental conservation, while providing accrued socio-economic benefits to the people through the non-consumptive uses and indirect values of the natural biological resources. Considering the vulnerable nature of our environment eco-tourism based on optimum multiple uses of the resources on sustainable basis must be encouraged. Fishery based eco-tourism is emerging potential area for employment generation. Valuable mahseer, exotic brown trout available in coldwater regions of the country are highly demanded among the anglers. Several kilometers long stretch of Beas river in Himachal Pradesh (HP) is very popular for angling.

The Indian Himalayas are an abode for sport fishing. Anglers from all over the world flock to the Indian rivers to try and hook the mighty mahaseer or trout. About 3,800 km lengths of river and stream stretches in the upland region of our country are holding sizeable mahseer and brown trout, for angling purpose. Among the Himalayan streams and rivers, Beas and its tributaries in the foot hill region and the river Giri (HP), Yamuna between Tajwala (Haryana) to



Dhak Pathar, Ganga between Rishikesh to Tehri and its tributaries, the Kali, Saryu, East & Western Ramganga, East & Western Nayar, Song, Kosi (Uttarakhand), river Chenab and its tributaries, and rivers Jia-bhoreli, Dibang, Subansiri and Manas (NEH Region) are important fishing sites for mahseer. Apart from these, the lakes of Kumaon (Bhimtal, Khurpatal, Naukuchiatal, Nal Damyantital and Sattal) also contribute substantially to mahseer fishery and provide ample scope for fish sport, thereby prompting ecotourism and fishery together.

In the Indian Sub-continent two main types of trout viz. brown trout (*Salmo trutta fario*) and rainbow trout (*Oncorhynchus mykiss* (Walbaum)) were transplanted from Europe by British settlers during the beginning of the last century primarily to meet their needs for sport fishing or recreational angling. The transplantation of brown and rainbow trout was attempted independently in the Himalayan and in the non-Himalayan States. In the Himalayan States the brown trout (*Salmo trutta fario* Linnaeus) was first brought in Kashmir through the private efforts of F.J. Mitchell in 1899. These introductions in the hill states could be considered as the formal beginning of coldwater fisheries or mountain fisheries development in India. Later on, hatcheries were setup for the production of trout seed and hatchery reared seed of the trout was used to stock the natural water bodies. The important brown trout streams and rivers includes Liddar, Simal, Erin, Madhmati, Tricker, Kokernag, Berinag (J & K), upper reaches of Beas & Sutlej (HP), Ashiganga, Birehi, Pinder, Bhagirathi, Rupin, Supin (Uttarakhand). Some higher altitudinal lakes in Sikkim such as Menmecho, Tsongmo have also natural stock of brown trout.

Besides natural water bodies, the suitable ponds available along the picturesque valleys, mountains or riverbanks in the region could also be utilized for development of mahseer or trout based sport fishery units with development of infra-structural facilities like parking, restaurants, hotels, transport and quality could be augmented with development of aqua-sports. Presently a few enthusiastic farmers in Kullu-Manali (H.P) and some high altitude destinations in Sikkim have developed their trout farms located near highways or tourists places as a sport fishery enterprises. They have completely transformed the mode of operation from mere stocking and harvesting to stocking, rearing



up to suitable size and angling. Besides the thrill of angling they also provide suitable resting places, eatables and other basic amenities to the wealthy tourists on handsome prices. In similar way a progressive farmer in Pithoragarh district of Uttarakhand has also developed an excellent exotic carp based sport fishery enterprise with integration of boating and swimming facilities. There is further scope for development of such sport fishery enterprises in the region. The farmers have converted their fish farms into a multi-dimensional venture with beautification of the landscape and addition of infrastructure like restaurant, boating and angling facilities, besides the routine annual fish production. As a result a source of small-scale one time little earning has been transformed to an enterprise with round the year livelihood earner for the owners. Now such enterprises are emerging as a good source of income not only for its owner, but also to some workers engaged in the enterprise. There is further scope to enhance the income significantly through addition of aqua sports, trekking, and mountaineering in the endeavor.

Bird watching, fish watching also has scope for its expansion. Moving shoals of different size, colour and shaped fishes always provide joy to the visitors particularly to children. Many of the religiously protected water bodies in the hills like Mattan in Jammu & Kashmir; Renuka lake in Himachal Pradesh; river stretch of Ganga at Haridwar and Rishikesh, Gomati river at Baijnath, Naldamayanti tal in Uttarakhand are some examples of fish watching spots, which attracts thousands of tourists. Similar spots need to be developed near tourist sites for visitors.

The aquatic resources in hills are quite valuable for the development of sport fishery, but scientific

management of these resources is necessary for sustainable development of this enterprise. Practically, all the water resources suitable for sport fishery are owned by the forest/irrigation department. For implementation of sport fishery development programme, there is a need to place them under the management of fishery department. A balanced strategy for lakes fishery, for tourism and sport fishery development is required. Most forms of ecotourism are owned by foreign investors and corporations that provide few benefits to local communities. An overwhelming majority of profits are put into the pockets of investors instead of reinvestment into the local economy or environmental protection. A participatory approach is required on sustainable basis

with benefit to the local people. The primary management measures for sport fishery are stock enhancement, increase in fishing diversity through species introduction, habitat improvement and elimination of unwanted pest species. Identification and development of ideal locations, environmentally friendly catch and release technique and mass seed production for ranching is necessary further development. The development of sport fishery is constrained by conflicts with commercial fisheries, water resource development schemes and habitat and water quality degradation. If the status of the sport fishery is to be maintained it is essential that more appropriate strategy should be adopted to provide sound economic valuation to this enterprise.

## References

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