Title: Biodiversity of river Ganga (India): An Environmental Economist Perspective

Author(s): Rama Shanker Shrivastava

Abstract:

The Ganga, one of the most important rivers of India, is considered as heaven for rich biodiversity of fisheries and economically rewarding aquatic species. An investigation looked into ecology and habitat degradation of fisheries affecting biodiversity. It has been found that more than 35 fish species commonly available in river Ganga are at the edge of extinct. Some of them are Hilsa (Tenualosa ilsa), Mahaseer (Tor putitora), Tiger prawns (Macrobrachium rosenbergii) and Indian trout (Raiamas bola). Among other species, more than 60 in numbers declined to the extent of 10 to 90 percent in total fish stock. The implication of this change was noted in decrease in availability of fish and fish catch by fishermen adversely affecting employment and livelihood of fishing community. Prices of fishes has shoot up and variety of fishes liked by consumers declined. An economic valuation of biodiversity loss indicated a decreased level of consumer and producers surpluses an indicator of economic welfare. Hedonic pricing and total economic valuation technique were used for analysis. While including the diverse aquatic germ plasma resources needed for genetic research and variety of protein having medicinal implications, the loss of magnitude of biodiversity overweigh the claims of development through intervention in river Ganga. Construction of dams for electricity generation, high siltation and decreased flow of tributaries, industrial effluents were identified as major cause of environmental degradation affecting the biodiversity of river Ganga. There is immediate need of Government intervention through policy initiatives. Key Words: Biodiversity, river Ganga, Hedonic Pricing