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Designation :

Title : Economic Valuation of the Use and Non-use Attributes of a Coastal

Wetland for Better Management of its Resources

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Bangladesh possesses an extensive network of wetlands which are generally highly productive ecosystems providing many important benefits, described as goods and services of wetlands. Among the wetlands of the country, Chanda Beel is an important coastal wetland in Gopalganj district which is now under threat due to over-exploitation of its resources as there is no wetland resource management plan in the country.

The degradation of wetlands is also due to undervaluation of wetlands in decision making. Therefore, the objectives of the present study were to estimate the total economic value of the use and non-use attributes of the beel at the present and proposed states for developing wetland resource management strategies. For this sake, the study has employed a spectrum of wetland valuation methods, such as market analysis, income estimation, replacement cost and contingent valuation. The results of the study show that the present annual total economic value of the beel is about Tk. 3.17 billion, while such value for the proposed state is about Tk. 6.55 billion. So, the total economic value of the two states of the beel suggests that the value at the proposed state is greater than the value of the present state. In addition, the present annual economic value of Chanda Beel per unit area is estimated to be Tk. 0.29 million/ha, while the annual value for the proposed state will be Tk. 0.60 million/ha.

The study has developed resource management strategies that include no fishing in the beel area during a specific period, stopping of the fishing of fingerlings and brood fishes, conservation of vulnerable fish species in the canals during the dry season, prohibition of the collection of snails, prohibition of bird hunting for at least five years from the beel area, controlling frog collection from the beel area, use of organic manures and reduction of dependency on chemical fertilizers and pesticides by adopting the integrated pest management farming technique. The study concludes that the proposed state of the beel is a better state for Chanda Beel. Finally, the study suggests that if the developed strategies are implemented in the Chanda Beel area, a better economic and environmental outcome will result which is socially acceptable. This demonstrates that the resource management of the beel is not only an environmental imperative, but is also a social and economical justification.