

Fish diversity of an agriculturally influenced river in Bangladesh: current profile, threats and management perspectives

ABSTRACT

Aim: Local and global stressors such as agricultural activities, climate change, habitat loss, eutrophication and pollution are the major causes of declining fish diversity. Therefore, for the management of fisheries and ecosystems, it is important to know the fish diversity of Little Feni River. The study was performed to know the diversity status of fishes in Little Feni River, Bangladesh during April - December, 2015. **Methodology:** Fishes and their related data were collected from the Little Feni River of fish landing centers, fish markets, interviewing fishermen and arottdar (or known as commission agent). **Results:** From this study, 47 species under 24 families were recorded in which 31 (66%) species were from freshwater and the remaining 16 (34%) species were from marine sources. Of the collected fishes, 26 species were categorized as not threatened (NT), 9 vulnerable (VU), 4 critically endangered (CR), 4 endangered (EN) and the remaining 9 could not be classified under the said list due to data deficient (DD). The results indicated the alarming decline of fish diversity in the investigated area in general and/or perhaps in the country as whole. **Interpretation:** Long-term investigation, appropriate evaluation and proper documentation are urgently needed so that the public, investigators and policy makers would be able to know about the current status of fish diversity, and can take initiatives for proper conservation management practices towards the gradual decline of wild fish abundance in Little Feni River.

Keyword: Anthropogenic factors; Ecosystem; Endangered species; Fish conservation; Fish diversity