



Assessing local livelihood and underlying factors for sustainable management of Mangrove forest: Empirical evidence from Satkhira district of Bangladesh

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Abstract

The mangrove forest is a unique ecosystem that supports the local livelihoods of economically disadvantaged people who reside in nearby areas. The purpose of this study was to assess the state of local livelihood and the contributing factors in Shyamnagar upazila (sub-district) under Satkhira district due to the complex interplay between the detrimental effects of climate change and the vulnerable rural livelihood. To fulfil the research purpose, we assessed local livelihood conditions and the contributory factors for sustainable forest management by introducing mixed-methods research. The primary data were collected from 70 local residents following simple random sampling method by using structured questionnaire survey. Besides, we also introduced focus group discussion as a qualitative approach for narrative interpretation of the findings and data triangulation based on the context-specific evidence. The results clarified that the major proportion of the residents (56%) were involved in non-wood forest products (NWFPs) accumulation, indicating poor socio-economic conditions and a high dependency on the mangrove forest. The local households were vulnerable to natural disasters due to lack of income-earning sources and limited ability to adopt climate-resilient livelihood strategies. The factors of land ownership, training exposure, adaptive strategies and access to finance were most crucial for the livelihood conditions of local inhabitants. The policy implications of our study suggest to pay attention to community-centered training and equal access to livelihood assets based on the local demands. Priority should be given to create gender-inclusive income-generating opportunities and enhancing the capacity of economically disadvantaged individuals to increase their adoption of climate-responsive livelihood approaches in the mangrove ecosystems of Bangladesh.

Key Words: Mangrove ecosystem, livelihood conditions, climate-resilient strategies, adoption, community-centered training, Bangladesh

