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Community-Based Management Strategies in The Brush Parks Fishery of Negombo Estuary, Sri Lanka

M. Gammanpila^{1*}, U. S. Amarasinghe², M. J. S. Wijeyaratne²

The objective of this study was to investigate how fishers optimize resource use in the brush park fishery of Negombo estuary, Sri Lanka through community based management. In this regard, a questionnaire survey was carried out during 2014-2016 including semi-structured interviews and participatory observations. A five-point Likert scale was used to measure the attitudinal levels of 20 brush park fishers on the resource use for sustainability of the fishery. Ownership of a brush park and fishing rights are controlled solely by a given family for generations, and are handed down from father to son. Encroachment by externalities is prevented as long as a brush pile exists in a given site. Although there was no specific authority for governing the brush park fishery, owners themselves hold rights to implement and monitor traditional community-based fishery management (CBFM) strategies. Traditional brush park fishing activities were found to be carried out with unwritten territorial boundaries by single or joint owners following certain customary rules, where fishing rights are socially accepted. Based on the local ecological knowledge including fish feeding and migratory behavior, habitats of fish aggregation, and co-occurrence of certain fish species, brush park fishers were found to be able to predict their fishing time using weather conditions and certain other environmental characteristics such as tidal flow. Traditional demarcation of territories and appreciation of fishing rights for equity sharing of the resource have therefore ensured the governance of the dilemma of common pool resources. Results also indicated that the major threat to the CBFM was the disturbance of fish movement caused by other fishers due to the nature of their fishing practices. Hence, it is necessary to establish co-management strategies, where centralized fisheries management authorities also play a significant role in the decision making process.

Keywords: Brush parks, community-based fisheries management, coastal fisheries, local ecological knowledge

¹ National Aquatic Resources Research and Development Agency, Sri Lanka *menakegammanpila@gmail.com

² University of Kelaniya, Sri Lanka