

Application of a community-based management approach for sustainable governance of Ja-kotu fisheries in Sri Lanka

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Community-based fisheries management has a well-established and comprehensive range of management measures that have been implemented by the indigenous communities to effectively manage fishery resources in different regions of Sri Lanka. The institutional robustness of the community-based management systems of the Kraal (Ja-kotu) fisheries in Madu Ganga, Bolgoda Lake, and Jaffna lagoon in Sri Lanka were assessed for compliance with Ostrom's modified design principles through the utilization of their knowledge in resource management. Semi-structured questionnaire was used to interview 90%, 88% and 10% of fishers from Madu Ganga, Bolgoda lake and Jaffna lagoon and focus group discussions (n=10) were conducted over one year (2020) with the view of assessing the existing traditional fishery management practices and socio-demographic information of Ja-kotu fishers. The socio-demographic profile of Ja-kotu fishers in Madu Ganga, Bolgoda Lake and Jaffna lagoons indicated that most fishers (88%, 57% and 72%, respectively) were over-40 age group, respectively, with 41%, 43% and 54% of fishers in three lagoons having over 20 years of experience in fishing. Many (57%) in Bolgoda Lake have sufficient formal education (up to General Certificate of Education: Ordinary Level). Almost all fishers interviewed, 94%, 71% and 98% of fishers in Madu Ganga, Bolgoda Lake and Jaffna lagoon, stated that the ownership of the ja-kotu fishery was passed down from generation to generation. Individual fishers voluntarily monitor fishing activities and resources, and there were strong mechanisms to share the cost among fishers in three lagoons proportionally. Though there is no proper legislation to define user boundaries for Ja-kotu fishers in all lagoons, the multi-layer institutional structure of Ja-kotu fishers in the Jaffna lagoon was comparatively strong enough to support their own decision-making process. After declaring Madu Ganga as a Ramsar wetland site, the traditional community rights and institutional structures of Ja-kotu fishers are not supported by responsible fishing management. The customary institutions reconnoitre the general weakness of key interactions with organizations, suggesting that a community may need strong institutional support to face socioeconomic, political, and institutional challenges to govern some common pool resources.

Keywords: community-based management, fisheries management, Ja-kotu fishery, local ecological knowledge, Ostrom's design principles

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