Effectiveness of Marine Protected Areas on fisheries management: Fishers' opinions in Mafia Island Marine Park, Tanzania

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Abstract

How fishers perceive the outcomes of Marine Protected Areas (MPAs) is fundamental in evaluating the effectiveness of management practices. This study examined the perceptions of fishers on the outcomes of the multi-use Mafia Island Marine Park (MIMP) including no-take zones. The results of structured open-ended interviews with fishers randomly selected from two communities indicate that perceptions are influenced by area of residence, age and fishing gear in use. Fishers were positive about coastal habitat conditions and the elimination of dynamite, poison and beach seine fishing; and they showed a high level of understanding about MIMP regulations. Perceptions about the effects of the MPA on fishers' own activities, fisheries in general, and the violation of MPA regulations differed with age, gear used and among fishers from the two villages. Respondents who reported being affected by the MIMP were more likely to be those from the community with high reliance on fisheries resources, young fishers, and those using nets and motorized boats. Perceptions about fish catch trends, involvement in planning, enforcement of regulations, and level of conflict did not differ among communities and gear users, but deviated negatively from MIMP goals. Thus, efforts focusing on improving access to sustainable income sources, promoting sustainable fishing gear and developing legal frameworks that support local knowledge and practices may enhance the effectiveness of fisheries management.

Keywords: fishery closure, fisheries management, small-scale fisheries, fishers' perceptions, Marine Protected Areas