

Socio-Economic Assessment of Artisanal Shrimp Fishery of the Malindi Ungwana Bay

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The importance of Malindi Ungwana Bay prawn fishery is indisputable, given that it hosts Kenya's only prawn trawling industry and supports livelihoods of thousands of artisanal fishers and their dependants. While the contribution of the prawn trawl fishery has generated data for management, the artisanal shrimp fishery which is conducted along the near-shore areas that are also the feeding and nursery grounds of critical larval and juvenile stages of these shallow water penaeid shrimps has not been fully understood thus resulting in difficulties in coming up with effective management regimes. This study focused on the socio-economic conditions of the artisanal prawn fishermen and their perception towards bottom trawl in order to understand the effectiveness of the Prawn Fishery Management Plan 2010 in minimizing resource-use conflicts and to guide in revision of the existing management plan. A combination of questionnaire survey, participant observation, and key informant interviews were used to collect data. Results reveal that the prawn fishers are involved in professional, seasonal or subsistence fishing. Prawn catches from the bay have declined significantly because of climate change (54%), use of destructive fishing gears (25%), and overfishing (21%), thereby threatening the health of the bay's ecosystem as well as the future of small-scale fishery. We evaluate various social, economic and ecological challenges faced by the prawn fishers and propose a conceptual framework that recognizes linkages among social, economic and ecological aspects in devising a sustainable prawn fishery management system. We recommend effective enforcement of policies and regulations, strong institutional collaboration and active fisher community participation in management to ensure sustainable use of the resource base.

Keywords: prawn fishery; management plan