

## Social and ecological factors influencing small-scale fisheries in the Bay of Bazaruto, Mozambique

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This study aimed at describing the social and ecological factors shaping small-scale fisheries (SSF) in the Bay of Bazaruto, Mozambique, and at identifying current management needs. Semi-structured interviews with fishers and other key stakeholders, as well as participatory mapping, were conducted at three main fishing areas: Vilankulo town, the peninsula of São Sebastião, and Bazaruto Island. Seagrass beds were identified as the main fishing habitat, and beach seine nets as the most important gear type. The main catches consisted of small pelagic, seagrass-associated species as well as reef-associated species of juvenile life stages. The study identified some key differences in the local fisheries, particularly in terms of gear use, boat technology, and dependence on the sector for food security. These differences were linked to local variation in infrastructure development, access to markets, exposure to tourism and other alternative livelihoods. The rural communities, particularly those on Bazaruto Island, depended heavily on beach seining in seagrass habitats, while the urban area of Vilankulo showed a more diversified fishery. With regards to the role of gender in the SSF, women were strongly involved in the sector and participated in full-time, boat-based beach seining as well as in subsistence fishing. In Bazaruto Island, women also performed traditionally man-dominated duties, suggesting a shift in traditional gender roles due to the lack of alternative livelihoods. The fishers have reported a decline in fish abundance and size in the last 5-10 years, which was attributed to overfishing and beach seining. Highly vulnerable communities such as those in Bazaruto Island, whose livelihoods and food sources virtually depend on beach seining in seagrass areas, require urgent attention to increase socio-economic resilience and decrease fishing pressure. Seagrass beds need to be included in management plans based on the features of the local socio-ecological system