Progress report for the Sea cucumber (*Holothuria scabra*) Project in Mafia Island, Tanzania

Project title: Community-Based Conservation of High Value Endangered sea cucumber (*Holothuria scabra*) and it's habitats in Mafia Island, Tanzania

ID: 43989-1

Project team leader: Yussuf Yussuf

Project activities conducted from August to November 2024 at Mafia, Island

i. Permit processing and project launching

Immediately after receiving the fund, the team leader travelled to Mafia island in the second week of August and started to process the permit. While waiting for the permit to be processed, the team leader meet potential stakeholders to discuss the conservation status of the sea cucumber and main threats for its existence in the Mafia island (**Fig 1: a- d**). After the office of Mafia District Executive Director approved the permit on 1^{st} September 2024, the team immediately started to implement the project activities.



Fig 1. (a-d): Consultation of key stakeholders in Mafia island.

ii. Field visit

The team visited mangrove forests covering 4 villages (Chunguluma, Tumbuju, Kilwa road and Jojo) and adjacent seagrass meadows to assess their current status and identify new threats to *H. scabra* such as ongoing anthropogenic activities. The team have found degradation of coastal ecosystem including mangroves and seagrass meadows which are essential for protecting the sea shores from erosion (Fig 2: a-d). Apart from being used for cooking in many households, the firewood sourced from mangrove forest is commercially used for boiling sardines (dagaa) while the mangrove poles are used for construction of fish drying racks (Fig 3: a-d). Similarly, large quantity of mangrove poles are harvested to build temporary house during sardine camping seasons where over a thousand fishermen camp in Mafia Island. Additionally, we found that due to lack of control, some of these fishermen use illegal nets with mesh sizes below standards, which deteriorate the aquatic ecosystem (Fig 4: a-b). Large number of dhow present in the study villages during causing seagrass degradation due to anchoring of their boat and trampling on seagrass by the fishermen

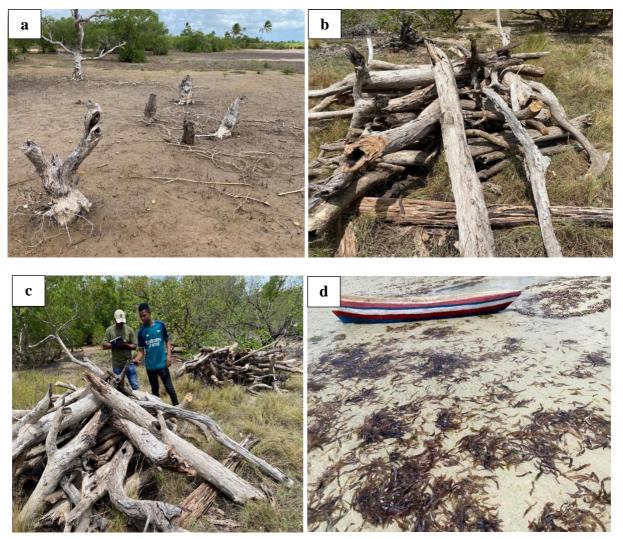


Fig 2. (a-d): Degradation of mangroves and seagrass meadows due to ongoing human activities.



Fig 3. (a-d): Unimproved local cooking stoves and fish drying racks contribute largely to the deforestation of mangrove forests.

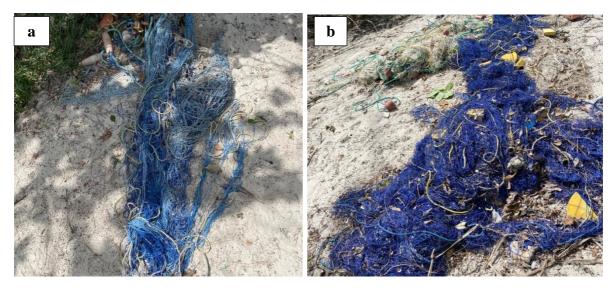


Fig 4. (a-b): Abandoned Illegal fishing nets which deteriorate habitat for *H. scabra* and other marine species.

Ongoing/upcoming project activities

i. Field survey

The project team is currently conducting a social survey to evaluate the awareness of local fishermen, tree loggers and sea weed farmers regarding conservation status of *H. scabra*, their habitat and the roles played by this species in sustaining the marine ecosystem. In each of the 4 villages, twenty five (25) villagers (fishermen, farmers and tree loggers) will be interviewed making a total of 100 respondents. The information from respondents will be supplemented by KIIs with fisheries officers, marine park officers, Beach Management Unit officer, WWF, any other key stakeholders who will be identified as we continue to implement this project in Mafia.

ii. Raising awareness to local communities in the project site- Mafia

The project will provide education to key stakeholders such as local fishermen, farmers, tourist operators and tree loggers in effort to rescue the population of *H. scabra* and its sensitive habitat in Mafia island. The group of farmers who are targeted here are the sea weed farmers whose farms are located within *H. scabra* habitat. Also, the project team will train villages' environmental and fisheries committees with improved local and modern conservation techniques for sustainable protection of the vulnerable marine ecosystem.

Challenges

There was a delay in carrying out social surveys due to preparation for general election for local government leaders which took place in November. However, the team has resumed its activities in early December and the progress is very well.