

Mapping the utilization pattern of Unguja island coastal zones, Zanzibar

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This study has attempted for the first time to map the key coastal habitats and activities around Unguja Island, with the purpose of elucidating areas that deserve management attention. Data were gathered through community mapping protocols, field observation, Google Earth searches, and use of spatial features from the Institute of Marine Sciences GIS database. The habitats mapped include beaches, mangroves, rocky shores, muddy flats, coral reefs and the shallow water dominated by sea grasses. Human activities mapped were fishing, mariculture, coconut husk retting, diving/snorkelling, water motorcycle riding and kitesurfing. It was revealed that many activities conducted by coastal people are done in the near shore zones concentrating around fish resource rich coral reefs and sea grass meadows. Interviewed fishers agreed that most of the shallow water habitats are facing high use pressures. In Paje, conflicting activities included the use of beach by tourists, seaweed farming and passage of fishing boats. Water sports, motorcycle riding and fishing conflicted each other in Nungwi. Beach hotels and fishers are competing for beach area in Mangapwani. The produced maps can be used to develop spatial plans, hence reduce conflicts among users. Furthermore, the management of the habitats will be simplified because their spatial locations are known. This study has demonstrated that, GIS can be used for resources management in Tanzania.