

## **LESSONS LEARNED FROM MANAGEMENT OF CORAL REEFS FOR TOURISM BY A PRIVATE RESORT IN THE GULF OF THAILAND**

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The establishment of marine protected areas on coral reefs has increasingly been considered an advantage for management. This paper provides a case study in Thailand concerning management of coral reefs by a private company. Tao Island group is located approximately 70 km, east of Surat Thani Province in the South of Thailand. It is one of the most popular tourist destinations for decades, especially for snorkeling and SCUBA diving. The coral reef area around the islands is 1.919 Km<sup>2</sup>. The landholder of Tao Island group is Treasury Department, Ministry of Finance. A private resort leased a small island of Tao Island group, Koh Nang Yuan for resort and diving business. The resort managed the land and coral reefs around the island by controlling area and collecting the entrance fee from all visitors. The visitors are requested to protect natural resources and environment. These include: 1) do not bring any plastic containers and cans; 2) do not collect or remove any shells, corals, etc.; 3) do not anchor on coral reefs, use buoys or floats provided; 4) do not use flippers or fins to walk on coral reefs; 5) do not use weighted fishing nets on coral reefs; 6) do not use spear guns; 7) do not go into restricted areas without permission and 8) do not feed the marine life and bird life living on and around the island. These rules could protect species that are very sensitive to fishing and tourism, improve habitat quality and enhance overall reef biodiversity. However the resort owner has right to control only on land, not in the coral reef areas. Therefore the greatest constraints on coral reef protection are poaching because of lack of effective enforcement. Poaching may emerge from inside the local communities and outsiders fishing and diving in the area. In this situation, there is no involvement of local communities in planning, design, establishment and management of the area. Based on the coral reef monitoring by field surveys and application of remote sensing techniques, the live coral coverage decreased remarkably due to mainly the severe coral bleaching phenomenon in 1998. Recovery of coral reefs in 2002 and 2005 differed among the study sites of Tao Island group. Live coral areas at Ko Nang Yuan and Hat Sai Ri increased considerably while those at Ao Chalok Ban Kao, Ao Thian and Ao Mae Hat showed no sign of recovery. The socio-economic aspects of coral reef degradation in Tao Island group were also carried out by field observations, semi-structured interviews and focus group interviews. Major threats to coral reef in the study sites were coral damages caused by divers, waste from boats, trawling, boat anchoring, sediment and waste from coastal and tourism development, using fishing traps in coral reef areas, collecting reef organisms, dynamite fishing and chemical fishing. Research on diver perceptions and tourism related benefits are urgently needed. Moreover co-operation of the resort owner, tourism businessmen and local communities should be improved.