

Marine Turtle Project Cabo Delgado ZSL

Within the Western Indian Ocean (WIO) region, there is a lack of scientific information about marine turtles, especially on the long-term monitoring of marine turtle populations, migrations, and habitats. This is particularly true for Mozambique and many of its surrounding countries, where there is also a lack of suitably trained and experienced personnel working in turtle conservation. Researchers in the region report an expected decline in turtle populations and emphasise the importance of protecting nesting areas.

Globally, marine turtles are endangered with all of the five species found in the WIO occurring on the IUCN Red List either as Endangered or Critically Endangered (IUCN, 2002). Turtles are threatened by incidental capture in fishing nets, intensive harvesting of eggs, degradation of nesting and foraging habitats and rising sea levels that threaten the existence of breeding beaches.

The Cabo Delgado Biodiversity and Tourism Project (CDBTP) was initiated to ensure the sustainable conservation of an exceptionally pristine and diverse coastal ecosystem in the Querimbas archipelago in northern Mozambique. Until now, this isolated area has been deficient of sound scientific exploration. CDBTP is a collaboration between the Zoological Society of London and a group of private individuals. CDBTP was founded on the premise that the key to successful conservation lay in sustainability, ecological - through scientifically-based management, socio-economic - through a real partnership with local communities, and financial - through revenues derived from high-revenue tourism. Bed-leaves will be used to finance the conservation and community initiatives.

The project area comprises three of the largest islands in northern Mozambique (Vamizi, Rongui and Macaloe) located 30-100km south of the Tanzanian border, which represent important nesting grounds for turtles. Preliminary marine surveys in the area confirmed the presence of the five WIO species of marine turtles with at least two of the species nesting on the project beaches. These are the hawksbill *Eretmochelys imbricate* and green *Chelonia mydas* turtles.

Prior to the establishment of CDBTP, the turtle populations on the islands of Vamizi and Rongui were highly threatened through the nests being raided and the eggs harvested by transient and resident non-national fishermen, who also killed the nesting adults. By working with the resident communities to realise the benefits associated with the protection of the marine resources, such as employment and potential tourist revenue, a successful community-based turtle conservation programme has been established. Local fishers were selected by the community leaders to be employed and trained as turtle monitors. This has been highly successful resulting in the protection of over 170 nests in 2002 and the transient -fishers no longer operate in the area.

Protection of the nesting beaches and basic monitoring has now been ongoing on Vamizi and Rongui Islands for over two years and has been very successful, especially in terms of creating awareness and including resident communities in the programme. In January 2004, a turtle tagging component was initiated and is already providing important biological data on hatch rate and site fidelity.

This proposal is aimed at intensifying the existing programme on Vamizi and Rongui and initiating one on Macaloe Island and Paqueve beach to acquire relevant scientific data for the regional management of sea turtles while improving their protection through community-based mechanisms. There is a strong foundation for the development of further research and conservation activities for marine turtles in the future.