## **Country Overview: Mozambique**

#### Introduction

Mozambique manages over 20,000 km² of Marine Protected Areas (MPAs), comprising: the Bazaruto Archipelago National Park (1,463 km²); Qurimba National Park (9,130 km²); Ponta do Ouro Partial Reserve (673 km²); and the Ilhas Primeiras and Segundas Environmental Protection Area (10,490 km²). The dugong population in the greater Bazaruto region is considered to be the last viable population in the Western Indian Ocean region.

#### **Dugong Population**

Mozambique hosts the largest East Africa Dugong Population, estimated at 300 individuals. A survey in 1969 relying on the reports of local fishers concluded that dugongs were relatively common along the country's coast. However, dugongs are now only rarely sighted. Aerial surveys conducted in the mid- to late-1990s suggested around 130 dugongs inhabited Bazaruto Bay, but that the dugong population was declining rapidly throughout Mozambique waters. A Later aerial census of Bazaruto National Park conducted in 2001 reported only thirteen individuals in nine sightings.

#### **Seagrass Habitat**

The total extent of seagrass areas in Mozambique's waters is unknown. While there is an improving level of data on the extent of seagrass cover, few studies consider growth rate or the impact of beach seine fisheries on the seagrasses, and systematic studies of the long-term dynamics of seagrass habitats and the valuation of ecosystem services are lacking. Possible additional seagrass habitats yet to be surveyed include the waters near Mongicual, Moma, Maganja da Costa, Quelimane, Chinde and Chidenguele.

## **Cultural Significance**

Both targeted and by-caught dugongs have traditionally been sold and eaten in Mozambique. Fishers do not openly admit to catching dugongs, but their meat is prized and there are reports that it is illegally sold in restaurants disguised as pork.

#### **Current Threats and Conservation Measures**

Dugongs face a number of threats in Mozambique, not least the lack of data concerning their numbers and distribution. A large gap in information on dugongs and seagrasses exists for the Primeiras and Segundas Archipelago, Inhambane Bay, Bartolomeu Dias, the Quirimba Archipelago and Pemba Bay, and there is little information on feeding habitats and preferred seagrass species. Only weak and unreliable information exists on the biology, overall population structure and genetic diversity of the dugong population in Mozambique.

Dugongs face the threats of deliberate hunting and by-catch in gill net and beach seine fisheries, as well as acoustic and boat traffic disturbance from coastal development. Their habitats are threatened by pollution as well as siltation and sedimentation caused by river erosion.

Key legislation	Content	
Decree 40/040 of 20 January 1955	Entitled the Veterinary Services (Now Wildlife and Forest protection services) to be responsible for dugong protection and urged the fisheries administration services to collaborate in dugong protection through the creation of sanctuaries and by enforcement of the decree among fishers.	
Law No.19/97, October 1	Land Law	
Law 20/97, October 1	Framework Environmental Law	
Law No. 10/99	Forestry and Wildlife Law	
Decree No. 12/2002 of June 6	Regulation of the Forestry and Wildlife Law	
Law 30/90 of September 30	Fisheries Law	
Decree 431/2003 of December 10	General Regulation of Maritime Fisheries	
Decree 45/2006 of November 10	Regulation for Prevention of Pollution and Protection of Coastal and Marine Environment	

### **GEF Projects**

The GEF Dugong and Seagrass Conservation Project in Mozambique comprises six sub-projects. Both MZ1 and MZ4 will develop and introduce incentives for local communities to abandon the use of detrimental fishing practices, while in the Bartolomeu Dias Point area, Inhassoro, a community-based management committee will be established (MZ1) and local people will be trained in dugong and seagrass monitoring techniques as well as participative monitoring and surveillance for effective management. An Environmental Education and Awareness programme will also be provided and a viable alternative livelihoods scheme piloted amongst local communities.

In the Bazaruto Archipelago area, a Dugong Protection Forum will be established and operated to build capacity and coach local authorities, operators and community fishing associations to undertake sustainable long-term dugong protection (MZ4).

Also in the Bazaruto Archipelago, MZ2 will gather data on dugong distribution in order to reduce existing knowledge gaps, while MZ3 will deliver a public awareness, education and social marketing campaign which will appoint community monitors to gather fisheries catch and bycatch information.

At Vilanculos and Inhassoro, at least three participatory workshops will be undertaken with Community Fisheries Committees to discuss management gaps, identify and rank socially acceptable additional management measures and agree these with fishers (MZ5).

MZ6 will establish a National Facilitating Committee to coordinate the work of the other subprojects and train committee members and key government stakeholders on the importance of sustainable management of seagrass ecosystems (MZ6).

# **Project Partners**

Project	Title	Partner
MZ1	Development of community-based activities to improve local engagement in marine management in the Bazaruto archipelago	Blue Ventures Conservation (BV)
MZ2	The distribution of dugongs in the coastal waters of Mozambique	Dugongs.org
MZ3	Developing an education and awareness campaign to conserve dugongs in the Bazaruto Archipelago and Mozambique	Dugongs.org
MZ4	The Bazaruto Dugong protection project	The Endangered Wildlife Trust (EWT)
MZ5	Participatory research of additional methods to reduce the impact of the beach seine fisheries on seagrass beds at Vilanculos and Inhassoro	Ministry of Land, Environment and Rural Development/National Directorate of Environment (MITADER / DINAB)
MZ6	National Facilitating Committee for the GEF Dugong and Seagrass Conservation Project	Ministry of Land, Environment and Rural Development/National Directorate of Environment (MITADER / DINAB)