

Country Overview: Sri Lanka

Introduction

The GEF Dugong and Seagrass Conservation Project will focus on the northwest of Sri Lanka, namely the Gulf of Mannar and Palk Bay. The area includes the largest of Sri Lanka's Marine Protected Areas – the Bar Reef MPA, west of the Kalpitiya peninsula in the vicinity of Puttalam lagoon – which covers approximately 306.7 km². Project site selection was based on results of the Dugong MoU survey carried out in 2013 by the Convention on the Conservation of Migratory Species of Wild Animals (CMS), as well as long-term studies and field surveys implemented by the project partners.

Dugong Population

Large herds of dugongs were reported to have occurred in the Palk Strait between India and Sri Lanka in the early 1900s; however, none were sighted during aerial surveys conducted of Palk Bay and the waters off western Sri Lanka in the 1980s, and their current status and distribution are unknown.

Seagrass Habitat

Seagrass meadows and dugong habitats have not been mapped. The principal studies carried out so far have been conducted through interviews with local fishermen. Palk Bay and the Gulf of Mannar have been identified as areas where seagrass meadows are present and similar habitats may exist in other parts of the coastal areas of the island. Hence, an urgent need exists for a comprehensive survey to assess presence/absence, map the extent of seagrass meadows and determine population sizes, movements and threats to dugongs.

Cultural Significance

In Sri Lanka, the continuing demand for dugong meat creates a high market value which adds impetus to illegal hunting to supplement incomes. Dugong meat is considered to have medicinal and aphrodisiac properties. Traditionally dugongs have also been prized for their hides and oil (valued as a treatment for the hulls of wooden boats). Before 1970 a commercial dugong fishery existed, and as recently as the 1950s up to 150 individuals were reportedly taken annually in the Mannar district.

Current Threats and Conservation Measures

Dugongs are protected under the Fauna and Flora Protection Ordinance. However, they still face direct threats from targeted hunting, incidental by-catch and various destructive fishing practices, including prawn trawling, indiscriminate netting, blast fishing and a general over-exploitation of fishery resources. In particular, dugongs are highly threatened in the Gulf of Mannar and Palk Bay.

Key legislation	Content
Wildlife Policy of Sri Lanka	Provides provision for the protection and conservation of the fauna and flora of Sri Lanka and their habitats to prevent their commercial (and other) misuse.
Fisheries and Aquatic Resources Act (1996)	Provides provisions to protect marine mammals and Turtles in Sri Lankan waters. It also provides provisions to manage and regulate fishing activities.
Marine Pollution Prevention Act No. 59 of 1981	Provides for the prevention, reduction and control of pollution in Sri Lankan waters and to give effect to international conventions for the prevention of marine pollution.
Coast Conservation Act No. 57 of 1981 and Amendment act No 64 of 1988	Any development activity within the coastal Zone of Sri Lanka requires a permit. Although this is not directly related to the conservation of dugongs, the marine environment is protected under this law, particularly as it totally prohibits coral mining.
The National Environmental Act No. 48 of 1980 (amended by act No 56 of 1988, No 53 of 2000)	The Central Environmental Authority, The Environment Council, District Environmental Committee is found under this statute, which also empowers Environmental Impact Assessment procedures.

GEF Projects

The GEF Dugong and Seagrass Conservation Project comprises eight components. LK1 will work with local communities in north-west Sri Lanka, providing relevant education on the importance of dugongs and their habitat to discourage direct hunting of dugongs as well as negative fishing practices including the use of dynamite and other illegal equipment. The project also aims to improve the conservation of dugong and seagrass hotspots by strengthening legal, administrative and technical capacity with the participation of relevant government institutions, local communities and businesses, and non-governmental organisations.

LK2 will establish a marine conservation coordination centre in north-west Sri Lanka, featuring computerised communication systems to overcome the current lack of communication between the head office of the Department of Wildlife Conservation (DWC), the Navy and Coast Guard, and local communities. The centre will facilitate the recording of incidents such as sightings and animal or habitat destruction, allowing immediate responses and remedial measures to be implemented.

An additional 10,000 hectares of Marine Protected Area will be established by LK4 to support the conservation of dugongs and their seagrass habitat in the Gulf of Mannar and Palk Bay. This project component will involve the preparation of a multiple-community-based management plan in conjunction with government, fishing communities and the tourism industry.

LK5 and LK6 aim to eradicate knowledge gaps that prevent effective management, conservation and policy initiatives concerning dugongs in Sri Lanka. LK6 will conduct field surveys of the Bay of Bengal/Palk Bay area using divers and supported by community interviews to identify dugong and seagrass hotspots, while LK5 will generate baseline seagrass maps illustrating the distribution and abundance of seagrasses in Palk Bay, the Gulf of Mannar and Kalpitiya in order to support coastal planning. The maps will be generated using currently available information, data collected in situ,

GIS techniques and satellite remote sensing, and will identify hotspots for detailed studies of seagrass areas.

In the Puttalam lagoon area LK7 will attempt to reduce the impacts of destructive fishing practices on seagrass habitats and provide income generation opportunities to local communities in return for their commitments to wise habitat and natural resource use. Following socio-economic and ecological surveys, a comprehensive education and awareness programme will be devised and implemented, targeting specific areas of the lagoon. Communities will be actively engaged in alternative livelihood and capacity development programmes to discourage Illegal fishing practices such as the use of push nets, monofilament nets, cage nets, etc.

Finally, LK8 will facilitate and coordinate the work carried out by the seven other project partners by establishing a National Facilitating Committee. This component will also conduct training programmes to improve the capacities of management staff at the Department of Wildlife Conservation, the Department of Fisheries and Aquatic Resources (DFAR), the Coast Conservation & Coastal Resources Management Department (CC&CRMD), and other relevant organisations.

Project Partners

Project	Title	Partner
LK1	Raising awareness and respect for dugongs and their seagrass habitat in Sri Lanka	Biodiversity Education and Research (BEAR)
LK2	Establishing a marine conservation coordination centre in north-west Sri Lanka	Department of Wildlife Conservation (DWC)
LK3		
LK4	Establishing dugong and seagrass conservation areas in Palk Bay and the Gulf of Mannar	International Union for Conservation of Nature and Natural Resources (IUCN)
LK5	Increasing seagrass ecosystem knowledge to enhance dugong conservation	National Aquatic Resources Research and Development Agency (NARA)
LK6	Increasing knowledge on dugong distribution at selected sites in north-western Sri Lanka	Ocean Resources Conservation Association (ORCA)
LK7	Providing incentives to local communities for wise stewardship of coastal habitats	Sri Lanka Turtle Conservation Project (SLTCP)
LK8	National Facilitating Committee for the GEF Dugong and Seagrass Conservation Project	Department of Wildlife Conservation (DWC)