

Gulf of Mannar Biosphere Reserve

Gulf of Mannar Biosphere Reserve is one of the world's richest regions from a marine biodiversity perspective. The Reserve harbours marine biodiversity of global significance and is renowned for its coral reef, sea grass and algal communities

The Gulf of Mannar is an arm of the Indian Ocean, lying between the southern tip of India and the west coast of Sri Lanka at a width of between 160 and 200 km (100 to 125 mi). A chain of low islands and reefs known as Adam's Bridge, separates the Gulf of Mannar from the Palk Strait, which lies to the north between India and Sri Lanka. The gulf receives the Tambaraparani River from the coast of India and the Aruvi Aru from the coast of Sri Lanka.

Located on the southeastern tip of the subcontinent, the Gulf of Mannar is known to harbour over 3,600 species of flora and fauna, making it one of the richest coastal regions in Asia. 117 hard coral species have been recorded in the Gulf of Mannar. Sea turtles are frequent visitors to the gulf as are sacred sharks, dugongs, and dolphins. However, the combined effects of 47 villages, with a total population of around 50,000 has meant that overharvesting of marine species has become a problem. Fish catches have declined, as have pearl oyster, gorgonian coral, and acorn worm populations. Local fishermen rely on the reef to feed their families, but destructive fishing methods combined with the stress of pollution and coral mining have meant both nearshore and offshore catches have decreased. Among the species that figure in the endangered list include dolphins, Dugongs (*Dugong Dugon*), whales and sea cucumbers.

In 1986, a group of 21 islets lying off the Tamil Nadu coast between Thoothukudi and Dhanushkodi were declared Gulf of Mannar Marine National Park; the park was declared a Biosphere Reserve in 1989. The Gulf of Mannar Biosphere Reserve [1] covers an area of 10,500 km², with a larger buffer area that includes the adjoining coastline. The islets and coastal buffer zone includes beaches, estuaries, and tropical dry broadleaf forests, while the marine environments include algal communities, sea grass communities, coral reefs, salt marshes and mangroves.

The chief seaports on the Gulf of Mannar are Thoothukudi (Tuticorin) in Tamil Nadu, and Colombo in Sri Lanka. While these ports can accommodate deep-draft vessels, the shallow Palk Strait can only accommodate small shallow-draft vessels. In July 2005, the Indian Government took preliminary steps to go ahead with the Sethusamudram Shipping Canal Project, which would create a deep channel linking the Gulf of Mannar to the Bay of Bengal. Project boosters emphasize the benefits of a direct shipping route that connects India's east and west coasts without the long trip around Sri Lanka; environmentalists have warned against the grave damage such a project could cause to the sea life and fisheries of the Palk Strait and the Gulf.