

# Chilika Lake: The biggest brackish Water Lake in Asia.

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## Abstract

Chilika lake, the largest brackish water lagoon in Asia is the first RAMSAR site of India. This is a lake of international importance, due to its unique Bio-diversity character. It is situated between the lat. 19°28' to 19°54' north and long 85° 05' to 85° 35' east near the Bay of Bengal coast. It is spread across three district of Orissa i.e. Puri, Khurda and Ganjam. Initially this lake was a part of Bay of Bengal. Due to littoral drift, gradually it was separated from the Bay, due to formation of a sandbar and remained connected to the sea with a 35 km long narrow channel and about 500 m. wide. Two rivers namely Daya and Bhargabi discharge fresh water to the lake from north side. So the water becomes brackish. Its water spread area varies from 800 sq km to 1000 sq.km. It harbours 140 types of aquatic vegetation, both submerged, floating and emergent types. The funal diversities include amphibian, reptiles, fishes, and other mammals. About 151 types of migratory birds and residential birds come from far off places like Kazakhstan, Siberia, and Russia during winter time. There are about 88 varieties of fishes, 3 types of prawns, 2 types of crabs found in the lake. There are also dolphins and 27 types of flying insects (copepods) in the lake. There are 5 types of snakes in the lake. The lake also harbours invertebrate fauna which are divided in to 3 major categories, i) Palagic fauna ii) Benthic fauna and (iii) pthyl fauna.

Wetland like chilika is a highly productive ecosystem. It serves as a potential resource for the livelihood of about 2.5 lakh of people living in peripheral villages.

Over the year, this lake having a natural ecosystem has undergone vast environmental degradations like heavy siltation, eutrophication, weed infestation and change in water quality. This has greatly affected the productivity of the wetland like fishery and as a result, the economic fabric of the people has been adversely affected.

To save the lake from extinction, an effective integrated sustainable environmental management plan is to be implemented with community mobilization and participation for sustainability, so that this lake would be conserved well for posterity.

**Key words:** Wetland, Chilika, Ramsar, brackish, Bio-diversity, littoral, ecology, environmental degradation, integrated sustainable management, community participation.