

SECTION C

301/C

Sustainable management of lagoon resources – A study of Puttalam lagoon and associated coastal resources

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Puttalam lagoon is one of the productive estuaries in the Northwest coast of Sri Lanka and is very rich in natural resources such as fish, shellfish, coral reefs, sand dunes, mangroves, sea grass beds, salt marshes and beaches. Human activities within and outside the system have resulted in the degradation of these valuable resources.

A study was carried out to investigate the issues related to the degradation of coastal resources in Puttalam lagoon and to propose management options that can be implemented for managing the coastal resources in the lagoon in a sustainable manner.

A literature survey on coastal resources and the present management plans of Puttalam lagoon was carried out. Various organizations were contacted for collecting necessary data. In addition, socio-economic surveys and focus group discussions were conducted at four different places around Puttalam lagoon, meeting various categories of people.

Major issues contributing to the degradation of coastal resources in Puttalam estuarine system can be classified into four categories as aquaculture, fishing and lagoon resources, ecological habitats and lagoon water quality. Some of the important issues are, unauthorized shrimp farm development, water source pollution & sedimentation due to untreated farm effluent, use of harmful fishing methods & gears, over fishing, catching & discarding trash fish, difficulties in entering into sea fishing, increase in number of fishermen, destruction of ecological habitats for livelihood & commercial activities such as shrimp farm development, increased threat to lagoon resources due to influx of refugees, destruction of habitats lead to reduction of fish varieties & affect wild life, dumping of garbage into the lagoon & pollution caused by chemical usage in the agricultural sector.

In addition, poverty and increase in population, lack of alternatives, lack of awareness, paucity of funds, non-compliance with the laws, political interferences, legal/institutional constraints and poor coordination among different institutions and agencies are some of the general issues that directly influence the sustainable use of lagoon resources.

Some of the proposed management options are, mandatory EIA for shrimp farm development, regular water-quality monitoring program, new methods for shrimp farm effluent treatment, desiltation of the most crucially silted areas, a land-use master plan for aquaculture, immediate licensing of all fishing crafts/gears, limiting fiber reinforced plastic boats, control of harmful fishing practices, restriction of the minimum mesh size to 20mm, support from government to setup fisheries committees, zoning mangrove patches, restriction of utilization of ecological habitats, resettlement of refugees from echo-resources rich areas, Introducing environmental friendly alternatives for livelihood and proper treatment of shrimp farm effluent before discharging into the lagoon.

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