

THE STATUS OF THE ENVIRONMENT AND THE SOCIO ECONOMIC ASPECTS OF THE FISHERMEN FROM THE BATTICALOA LAGOON

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A large proportion of the coastal population of Batticaloa district depends on Batticaloa lagoon for their daily bread from time immemorial. This has been made possible due to the availability of high degree of biological diversity of the lagoon.

In this study an attempt was made to characterize the diversity of fauna viz. fish and shell fish, diversity of flora viz. mangroves and also included the diversity of ecological services provided by Batticaloa lagoon to humanity. Eleven sampling points were chosen randomly to collect data in which twenty fishermen were considered for this study in addition to the survey carried out at the fish landing centers along the lagoon. The fish catch statistics of fin fish and shell fish were collected for a long period but to compare the impact of tsunami upon fisheries the data from 1993 to 1995 and from 2004 to 2005 are considered in this study. The average catch per unit effort were recorded from the Batticaloa lagoon as 2.55 Kg, 2.14 Kg, 2.9 Kg and 1.98 Kg per person per day for the period from 2004 - 2005, 2003-2004, 1993-1994, and 1994- 1995. *Tilapia* sp and *Etroplus* sp constituted more than 55% of the catches.

However, during December to February shrimps especially *Penaeus indicus*, *Penaeus semisulcatus* were dominated in the catch. The fish catch and its market value impacts the economy and life style of the fishermen.

The analysis reveals that the lagoon water still retains reasonable standards of water quality in many areas except in selected pockets where industries are heavily concentrated. The shocks imposed by the modern stakeholders through industrial activities are unbearable most of the time, but the system does not show any serious signs of collapse due to the free delivery of ecosystem services such as delivery of lagoon consumable products to human. The water quality of different locations also studied where at some places the nitrate, phosphate were abnormally higher in Kattankuddy and Thiruperumthurai, where the untreated municipal garbage, industrial wastes are pumped.

The scenario is likely to be worsening if proper environmental governance is not adopted by the stakeholders including the public.

Key words: Batticaloa lagoon, Fins Fish, Shell Fish, Water Quality, Catch Per Unit Effort, Tsunami.

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