

**COMPARATIVE STUDY OF THE PHYSICO-CHEMICAL
PARAMETERS OF THE COASTAL WATERS IN RIVERS
MATLA AND SAPTAMUKHI: IMPACTS OF COASTAL WATER
COASTAL POLLUTION**

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A qualitative and quantitative research has been performed on the physico-chemical parameters of the neighboring coastal waters of the rivers Matla and Saptamukhi in the Sunderban district, West Bengal. The distribution pattern of eight physico-chemical parameters, namely pH, salinity, dissolved oxygen, suspended solids, nitrogen and phosphorus concentrations (inorganic and total) has been graphed and compared for the two rivers over a time period of ten years ('90s decade). A statistical analysis has been carried out and the correlation data between these parameters has been rationalized based on both natural and man-made activities during that time. This has pointed to various causes behind coastal pollution of river waters. The changes in water quality have been related to flood impacts, storm surge, eutrophication, domestic sewage, agricultural and industrial wastes. In order to avoid coastal degradation and maintain environmental balance, it is very important to understand the impact of these parameters on coastal zones.

Keywords: algal bloom, Bengal, coastal impact, coastal zon, physico-chemical parameters, pollution, Sunderban.

1. Introduction

Coastal pollution is one of the serious problems retarding coastal development which can lead to severe environmental imbalance. Polluted effluents are often the most common source of adverse effects on coastal and marine ecosystems. Here, the physico-chemical parameters of the rivers Matla and Saptamukhi has been analyzed for the first time. The Bengal delta is the