

# **Variations in Water Quality in the Coastal Regions of Sri Lanka**

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## **Abstract**

Water quality along the coastal region from the Kala oya river north of Puttalam at Eluwankulam in North Western Sri Lanka to the coastal sea at Pulmuddai in the North East covering about two thirds of the coastline was studied over a period of four years. Sampling locations were selected to cover estuaries, lagoons, sensitive areas, and tourist resorts, recreational, industrial, agricultural, urban and rural areas. The parameters studied included general water quality parameters as well as nutrients and trace elements. Impacts of development of the aquaculture industry have altered the general water quality while stress on biota due to poor environmental conditions has affected the industry too.

While the study serves as a database of baseline water quality in the coastal regions, variations in pH, Dissolved Oxygen, Turbidity, Metals such as Zinc, Copper, Cadmium, Manganese and Iron as well as Nitrogen and Phosphorous concentrations and the possible likelihood of occurrence of algal blooms leading to eutrophic conditions and likely sources of pollution to the coastal region are discussed.