NUTRIENT DISTRIBUTION IN THE NEGOMBO LAGOON

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A study was carried out to determine the spatial and temporal distribution of nutrients (-NO3, -PO4,-NO2 and -SiO2) and to find out possible sources in the Negombo Lagoon 20 stations were studied for a period of one year at weekly intervals.

Except -NO2 concentrations of all the other nutrient parameters showed a marked seasonal rythem. Minimal values of -No3 were recorded when the conditions in the Estuary were predominently marine suggests that -N03 contribution from the sea is low. Higher concentration of Inorganic phosphate observed during the monsoonal periods indicate that the phosphate contribution to the estuary is largely dependent upon external fresh water sources. A marked increase in Silica values was observed when the total discharges of fresh water into the lagoon was high, suggestive of a possible landward source. Though -NO2 shows no seasonal variations, marked differences were observed between the surface and bottom values. Decomposition of organic nitrate is suggested as a possible source of -NO2.