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**NUTRIENTS AND SOURCES OF POLLUTANTS OF
MADUGANGA ESTUARY, SRI LANKA**

A PROJECT REPORT PRESENTED BY

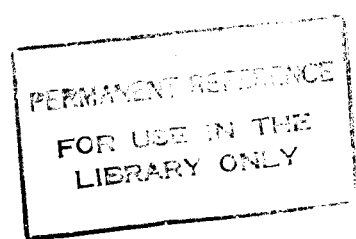
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ABSTRACT

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Maduganga Estuary is situated in the southern coast of Sri Lanka. The conservation value of the estuary was included as site No 70 in the local listing of wetlands and more valuable flora and fauna available in the area. Major freshwater sources to the estuary are Mudali Ela and Magala Ela which run through agricultural and home lands.

The water of the estuary has been investigated from August to November, 2006 by studying the physical and chemical parameters of 11 locations. The physical characteristic of samples and dissolved oxygen were measured in the field and the collected samples were analysed for nitrite (NO_2^-), ammonium (NH_4^+), nitrate (NO_3^-) and phosphate (PO_4^{-3}).

The results of the analysis indicate their physico-chemical characteristics of estuary water are highly variable with the time and space, depending on the fresh water discharge, tidal effects and anthropogenic activities. Some samples show higher concentrations of nutrients indicating there is a possible threat on the quality of the water.