

**A PRELIMINARY SURVEY ON THE POSSIBLE IMPACT OF THE MAHAWELI RIVER DIVERSION SCHEME ON THE FAUNA OF KALA OYA ESTUARY WITH AN ESPECIAL REFERENCE TO THE OYSTER, Crassostrea madrasensis (Preston)**

by

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Nearly 37900 ha of land have been developed and newly constructed in the north central province (system H area) under the Mahaweli Project for settlers. After the commissioning of the Mahaweli Project in 1976, reservoirs in these areas annually receive more than 450 MCM (Million cubic metre) capacity of water from the Mahaweli river through Dambulu Oya and Bowatenna (Oct. - Sept. Yala and Maha Season). Before 1976 settlers in the Mahaweli System H area totally depended on the monsoon rains which was hardly sufficient even for a single annual crop (mean annual rainfall 100-150 cm). However, the introduction of the Mahaweli to these areas for agricultural purposes, considerable amount of water regularly collected in Kala Oya which runs through cultivated Mahaweli system H area to Puttalam Lagoon. According to observation the excess water reached Puttalam - Kala Oya estuary throughout the year bringing heavily silted water, large amount of organic matter and sometimes fertilizers and pesticides. These factors can easily effect the fauna and floral community in the lagoon. The observation reveals that nearly 80% of oyster beds (Crassostrea madrasensis) which disappeared may be due to these factors and most areas show low salinity, (less than 15%) throughout the year. Many places were observed to have thick muddy bottoms and also mangrove community with dead oysters. Distribution of green algae and blue greens such as microcystis sp. Oscillatoria sp. also appeared almost throughout the year.