

## SESSION - IV - ENVIRONMENT

### ENVIRONMENTAL POLLUTION AND ITS IMPACT ON FISHERY MANAGEMENT - LUNAWA LAGOON

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Lunawa Lagoon is one of the major lagoons located in close proximity to Colombo which provided the livelihood for the fishing community in the area upto the 1970s. The degradation of the water body and its aquatic resources were experienced over the last two and a half decades, along with increases in the number of industrial establishments with little regard to environmental planning. The wastes generated at these industries released untreated to the water bodies resulted in detrimental effects not only to the lagoon but also on the ground water resources.

A survey was done to ascertain the present status and to study the damage to the aquatic resources as a result of this unplanned industrial development in the area. Results indicated that more than one hundred *Ja-Kotu fishery* activities which harvested prawns were destroyed by the industrial releases into the drainage system. Fish catches of 50 Kg/boat/day are lost since 1979 and a severe reduction of bio-diversity in the lagoon. In addition some areas of the lagoon have become vector breeding grounds threatening the health aspects of the surrounding population. Furthermore, deterioration of water quality and contamination of water with heavy metals are also observed. Dissolved oxygen availability in water was different from one sampling station to another station in the lagoon. Values varied from zero to 14.6 mg/l indicating eutrophic conditions in some parts of the lagoon. pH values indicated slightly acidic conditions in some stations and slightly alkaline in others. No threatening levels of pH were observed at any station during this study.

For the rehabilitation of the area, an acceptable programme of treating liquid wastes generated by the industries and appropriate safe disposal of the treated effluent into the environment is needed without further delay.