

## **VIII.2.A.1. Socio-Ecological Propsects of East Calcutta Wetlands- A Case Study**

**Saptarsi Biswas**

**Naresh Chandra Dutta**

1/1 Moument Road, Dumdum, Calcutta-700 028

Resource recycle and recovery coupled with an alternative cost effective viable and self regulatory option for the disposal of waste is the principal philosophy behind the management of wetlands using municipal sewage- The wetlands of East Calcutta are one of the most outstanding examples of such philosophy put into practice.

In the present context a wetland in this region has been chosen to study the socio ecological activities which are orchestrated around such a water body. The water body in question is a pond which utilizes domestic sewage for fish culture. A detailed investigation has been carried out on this pond with special reference to water quality, biotic communities (Plankton, benethos and fish) and economic activities to elucidate the importance of such water body in maintaining ecological and socio economic balance in the region.

It has been observed that (a) The pond in question functions as a natural bio treatment unit for the sewage (b) There is a rich diversity of planktonic, benthick and fish communities. The planktonic community is dominated by Rotifers; the benthic community has been found to be dominated by oligocheates and chironomids and the fish community by bottom feeders like Mrigal and Common carp, (c) There is a great potentiality for fish production with low economic input, (d) About 40 families comprising of about 1600 people earn their living through piscicultural activities in the water body.

The present study indicates that such wetlands if properly managed and manipulated can help to combat the ever increasing pollution threat by functioning as a selfregulatory waste disposal and recovery unit and also this is the best land use pattern for the region under the present circumstances.