

## STUDIES ON THE EFFECT OF AQUATIC POLLUTION ON ICHTHYOFAUNAL DIVERSITY OF THE EAST KOLKATA WETLANDS

SOMSUVRA DASGUPTA<sup>1</sup> & ASHIS KR. PANIGRAHI<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Zoology, Fisheries and Aquaculture Extension Laboratory, University of Kalyani, Kalyani, Nadia, West Bengal, India

<sup>2</sup>Head and Associate Professor, Department of Zoology, Fisheries and Aquaculture Extension Laboratory, University of Kalyani, Kalyani, Nadia, West Bengal, India

## ABSTRACT

East Kolkata wetlands, an ecologically important Ramsar site in West Bengal, India include a rich floral and faunal diversity and act as kidney of Kolkata through recycling of waste water and sewage water come from Kolkata city through different canals. These sewage fed wetlands are threatened by aquatic pollution, renovation, developmental activities and large scale commercial aquaculture. These wetlands which are famous for fishery activities receive Pollutants like heavy metal, sulphate, oil, grease etc. through effluent of different industries like tannery, electroplating, plastic and dye industries of surroundings and alter the Ecosystem. Here, the organic load of city sewage and industrial effluents are used as nutrients for fish. During Ichthyofaunal survey 23 commonly cultured species and 14 wild fish species are recorded. Now few no. of fishes are in threatened condition due to aquatic pollution and economically less feasible fishes are also declined due to extensive culture of Indian Major Carp. Few indigenous fishes show severe indications of decline over the years. Now, about four fish species are endangered and eleven are vulnerable (CAMP report 2010). Declining ichthyofaunal diversity is destructive to the entire food chain of the wetland as well as the livelihood of fisher folks and the local people.

KEYWORDS: Ichthyofaunal Diversity, Wetlands, Sewage, Pollution, Industrial Effluent, Ecosystem Degradation