

Balanced and sustainable development of river ecosystem through bio-monitoring efforts

Problem statement: The presence and growth of flora and fauna in rivers to a large extent depends on the quality of river water. Hence, it is important to monitor the presence of bio-organisms in the river to assess river health.

Intervention: Odisha State Pollution Control Board (OSPCB) regularly undertakes biomonitoring of rivers. The mechanism involves sampling flora and fauna such as micro invertebrates and calculation of a bio-diversity index based on the population of different types of samples. The higher the bio-diversity index, the more diversity of micro-organisms in the river water, which indicates cleaner river water.

Impact: Regular bio-monitoring mechanism has helped OSPCB in assessing the river health and taking appropriate measures in notifying the concerned department about actions.

Replicability: Such bio-monitoring mechanisms can be adopted by other State Pollution Control Boards to assess the health of the river ecosystem and presence of flora and fauna in the rivers.

(Reference: KII with Odisha State Pollution Control Board)