A survey of the Sunderban mangrove wetlands of India - an environmental treat

B. Bandyopadhyay

The Asiatic Society, 1, Park Street, Kolkata, India. E-mail: bbaisakhi@hotmail.com

Abstract

The Ganga-Brahmaputra delta at the interface of the Bay of Bengal harbors the world's largest single chunk of mangrove wetland of India and Bangladesh, the Sunderban-a world heritage site as designated by the UNESCO in 2002. Increased anthropogenic influences like withdrawal of river water from the upstream region and increase in organic and inorganic pollutants have further led to deterioration of health of the wetland. Potential benefits of the Sunderban wetland come from its luxuriant resources, which include forestry, agriculture, aquaculture, wildlife, birds and fishes. Energy producing resources include peat and fuel wood. The wetland offers beautiful sites for recreational and tourism activities. It is also an excellent ground for research and education related to conservation and natural balance of various ecosystems. Being highly productive and having genetically diversified ecosystems, the wetland provides important benefits of both goods and services. Gradual environmental degradation, loss of biological diversity, poaching of wild life, felling of mangroves and other fuel wood trees are posing serious threats to the Sunderban for the last few decades. Because of rich resource potential and strategic importance, the Sunderban mangrove wetland is threatened by multiple anthropogenic factors. In addition to its setting in a highly vulnerable, hostile and dynamic coastal environment, multiple manmade activities leading to increasing concentration of pollutants in the aquatic and sediment matrices have become a matter of great concern during the recent decades. It is essential that together with legislation, mass awareness programs through seminars, newspapers and electronic media with local participation be conducted at regular intervals. Under a threatened pollution level, regular monitoring of the pollution status of Sunderban wetland is suggested in order to check its further environmental degradation.

Keywords

biochemical cycle, Sundari trees, environmental impact, slum sewage, localized fishing