

About the Book

Lakes and coastal wetlands play vital role in the global ecosystems. Their importance has been recognized in the maintains of biodiversity, ecology, hydrology and recreation. They provide habitat for wide variety of flora and fauna and help maintain the life cycle of many species. As rapid development and population growth continue in coastal areas, environmental degradation and over-exploitation will further reduce the biodiversity and undermine the productivity of these unique ecosystems. Lakes and coastal wetland are transitional areas between dry terrestrial and permanent aquatic ecosystems and are recognized as highly productive. Due to increased use of lakes and wetland and exploitation of their resource for various economic growth, these ecosystem are under severe stress.

Contents:

Biodiversity

- 1. Biodiversity assessment of algae in Chilika lake east of coast India*
- 2. Eco-restoration impact on fishery biodiversity and population structure in chilika lake*
- 3. Fishery of the Mud Crab Scylla Serrata with reference to its growth and maturation in Chilika Lagoon, East coast of India*
- 4. Bioprospecting of biotoxins from coastal fishes*

Limnology

- 5. Sediment dispersion in the Bay of Bengal*
- 6. Spatial heterogeneity of biogeochemical parameters in a subtropical lake*
- 7. Mixing and internal waves in a small stratified Indian lake:*
- 8. Physical process in Large Lakes*
- 9. Eutrophication of lake Victoria in relation to Hydrology of the Winam Gulf watershed*

Monitoring and modeling

- 10. Modeling coastal ecology*
- 11. Adaptation to salinity change induced by sea-level Rise in Hinuma Lake Japan*
- 12. Wave interaction with floating and submerged rectangular dykes in a two –layer fluid*
- 13. Numerical simulation of salinity structure in Chilika Lake*
- 14. The role of benthos and epiphyte on the material cycle in Akkeshi Lake, Japan*
- 15. Reef- An ecofriendly and coast effective hard option for coastal conservation*

Remote sensing and geographical information system

- 16. Lake Chilika: GLS and the challenge of spatial management*
- 17. Mapping lagoonal features and their variability: field observation and remote sensing implications*
- 18. Aquatic vegetation monitoring oc chilika through remote sensing technique*

19. *Assessment and monitoring the coastal wetland ecology using RS and GIS with reference to Bhitarkanika mangroves*
20. *Water quality*
21. *Socio-economic considerations: People's participation and awareness*
22. *Management of Lakes and coastal wetlands*