

1. Record Nr.	UNINA9910373941903321
Titolo	Ecology, Conservation, and Restoration of Chilika Lagoon, India // edited by C. Max Finlayson, Gurdeep Rastogi, Deepak R. Mishra, Ajit K. Pattnaik
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-33424-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (xx, 441 pages, 93 illustrations, 75 illustrations in colour, colour maps)
Collana	Wetlands: Ecology, Conservation and Management, , 1875-127X ; ; 6
Disciplina	577.68
Soggetti	Physical geography Biotic communities Biodiversity Conservation biology Ecology Geographic information systems Earth System Sciences Ecosystems Conservation Biology Geographical Information System
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references
Nota di contenuto	Preface -- Introduction -- An overview of the restoration and management of Chilika Lagoon: successful application of the Ramsar wise use guidelines -- Ecological characterization of Chilika: defining strategies and management needs for wise use -- Ecosystem services: implications for managing Chilika -- Sedimentologic, chemical, and isotopic constraints on the Anthropogenic influence on Chilika Lake, India -- Modelling of hydrodynamics and salinity characteristics in Chilika Lagoon -- Assessment of runoff and sediment yield from selected watersheds in the Western Catchment of the Chilika Lagoon -- Long-term analysis of water quality in Chilika Lagoon and application of bio-optical models for cyclone impact assessment -- Spatio-

temporal variation in physicochemical parameters of water in the Chilika lagoon -- Geomorphology, land use/land cover and sedimentary environments of the Chilika Basin -- Spatiotemporal Assessment of phytoplankton communities in the Chilika lagoon -- Fish and fisheries of Chilika: post-restoration scenario -- Avifauna of Chilika, Odisha: assessment of spatial and temporal changes -- Biodiversity of benthic fauna in Chilika lagoon -- Microbial ecology of Chilika Lagoon -- Survey, characterization, ecology, and management of macrophytes in Chilika lagoon -- Index.

Sommario/riassunto

This book chronicles the decades-long work of studying, analyzing, and reversing the environmental pressures that threatened India's Chilika Lagoon, the largest brackish-water lagoon in the region, and the second largest in the world. Designated as one of India's first Ramsar Sites in 1981, Chilika Lagoon continued to degrade for a decade longer. Then, the Chilika Development Authority (CDA) was established to gather information and devise a restoration plan that benefits the ecosystems of the lagoon, with sensitivity to the needs and livelihoods of local communities. Expert contributors detail the work of analysis, planning and implementation, including extensive coverage of such topics as: Devising a plan for implementing Ramsar wise use guidelines Sedimentologic, chemical, and isotopic impacts Hydrodynamics and salinity Runoff and sediment in watersheds of the Lagoon's Western Catchment Long-term analysis of water quality and continued water quality monitoring Bio-optical models for cyclone impact assessment Studies of geomorphology, land use, and sedimentary environments Spatiotemporal assessment of phytoplankton communities Creation of a post-restoration scenario for fish and fisheries Assessing status of waterbirds, species diversity and migration patterns The result was a major hydrological intervention to re-establish hydrological and salinity regimes, biodiversity, and fish catches, and help protect the livelihood of lagoon-dependent communities. The story of the rehabilitation and management of Chilika Lagoon demonstrates that it is possible to halt and reverse the encroachment and degradation of wetlands, to restore biodiversity and to provide benefits for large numbers of people. Ecology, Conservation, and Restoration of Chilika Lagoon goes beyond scientific research articles to explore institutional and governance issues, political ecology, and the Ramsar Convention's guidelines for ecosystem restoration. The book will benefit researchers, wetland managers, government policy makers and more general readers concerned with restoration and conservation of wetlands around the planet.
