
Preface

The total water resources of the earth equal to 326 million cubic mile; only 2–5 % of water is fresh water, 97.5 % is salt water. Almost 69 % of fresh water resources are tied in glaciers and ice caps, about 30 % is ground water and a mere 0.27 % is surface water. Water resources are important for the survival of the planet. Aquatic biodiversity is one of the most essential characteristic of the aquatic ecosystem for maintaining its stability and means of coping with any environmental changes.

India is one of the 17 “megadiverse” countries and is composed of a diversity of ecological habitats like forests, grasslands, wetlands, deserts, and coastal and marine ecosystems. From the biodiversity point of view, India is regarded as a mega diversity country. Out of the total estimated species of the world, about 8.4 million species are reported from India. India has a wealth of wetland ecosystems distributed in different geographical regions. Most of the wetlands in India are directly or indirectly linked with major river systems such as the Ganges, Cauvery, Krishna, Godavari and Tapti. India has total of 27,403 wetlands, of which 23,444 are inland wetlands and 3,959 are coastal wetlands. Wetland systems directly and indirectly support lakhs of people, providing goods and services to them. They help check floods, prevent coastal erosion and mitigate the effects of natural disasters like cyclones and tidal waves. They store water for long periods.

Biodiversity and conservation are the key concepts in ecology during the past decades and are considered important elements in elucidating the dynamics of ecosystems disturbed by human activities. Our aquatic ecosystem comprises a major regime due to its diversity, thus needs special attention and conservation approaches. The lakes, marshes, river systems and other wetlands in the country are under threat mainly due to domestic pollution from untreated sewage, industrial pollutant and toxic effluents. India is facing an alarming danger to the loss of aquatic biodiversity, and about 55 % of aquatic species are threatened.

This book is a result of detailed observation by reputed researchers working in the field of aquatic biodiversity in India. There are 19 chapters, and each effort has been made by an expert or professional in their respective

fields. The book offers novel information on aquatic biodiversity of India. We sincerely hope that this book will provide the much needed information in the field of aquatic biodiversity conservation.

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