

Biodiversity In India Vol 7

The Himalaya has profoundly shaped the cultures of the Indian subcontinent, with many Himalayan peaks considered sacred in Hinduism and Buddhism. Some of the world's major rivers - the Indus, the Ganges and the Brahmaputra rise in the Himalayas. These rivers have abundant seasonal and annual water supply. The mountain ranges and river basins share trans-boundary connectedness. Still, mountain people living on hills have limited access to water for drinking and agriculture. Covering around 27% of the Earth's land surface, the mountains contribute to the sustenance and wellbeing of over half the human population for water, food, and clean energy. Yet mountains are under threat from climate change, land degradation, overexploitation, and natural disasters, with potentially far-reaching and devastating consequences, both for mountain communities and downstream populations. The book covers interdisciplinary domains of science, humanities and commerce, hence beneficial for all types of readers equally. Promotion of awareness and education on conservation and sustainable utilization of bioresources and strengthening networks, coordination with the help of central government departments, state governments, NGOs and local institutions is urgently needed. Limits to expansion of protected area systems underline the importance of seeking new ways to conserve biodiversity. The twelve case studies ranging from the High Andes to Viet Nam support the view that certain traditional agricultural and pastoral systems can succeed in attaining a sustainable level of production while at the same time maintaining both a high level of biodiversity and most functional aspects of the ecosystems.

Biodiversity research and prospecting are long-standing activities taking place in a new legal and ethical environment. Following entry into force of the Convention on Biological Diversity in 1993, and other recent policy developments, expectations and obligations for research and prospecting partnerships have changed. However, to date there are few guides to integrating these concepts with practice. This book offers practical guidance on how to arrive at equitable biodiversity research and prospecting partnerships. Drawing on experience and lessons learned from around the world, it provides case studies, analysis and recommendations in a range of areas that together form a new framework for creating equity in these partnerships. They include researcher codes of ethics, institutional policies, community research agreements, the design of more effective commercial partnerships and biodiversity prospecting contracts, the drafting and implementation of national 'access and benefit-sharing' laws, and institutional tools for the distribution of financial benefits. As part of the People and Plants initiative to enhance the role of communities in efforts to conserve biodiversity and use natural resources sustainably, Biodiversity and Traditional Knowledge will be invaluable to students, researchers and local communities, academic institutions, international agencies, government bodies and companies involved in biodiversity research, prospecting and

conservation.

Fungi are an essential, fascinating and biotechnologically useful group of organisms with an incredible biotechnological potential for industrial exploitation. Knowledge of the world's fungal diversity and its use is still incomplete and fragmented. There are many opportunities to accelerate the process of filling knowledge gaps in these areas. The worldwide interest of the current era is to increase the tendency to use natural substances instead of synthetic ones. The increasing urge in society for natural ingredients has compelled biotechnologists to explore novel bioresources which can be exploited in industrial sector. Fungi, due to their unique attributes and broad range of their biological activities hold great promises for their application in biotechnology and industry. Fungi are an efficient source of antioxidants, enzymes, pigments, and many other secondary metabolites. The large scale production of fungal pigments and their utility provides natural coloration without creating harmful effects on entering the environment, a safer alternative use to synthetic colorants. The fungal enzymes can be exploited in wide range of industries such as food, detergent, paper, and also for removal toxic waste. This book will serve as valuable source of information as well as will provide new directions to researchers to conduct novel research in field of mycology. Volume 2 of "Industrially Important Fungi for Sustainable Development" provides an overview to understanding bioprospecting of fungal biomolecules and their industrial application for future sustainability. It encompasses current advanced knowledge of fungal communities and their potential biotechnological applications in industry and allied sectors. The book will be useful to scientists, researchers, and students of microbiology, biotechnology, agriculture, molecular biology, and environmental biology.

Ecosystem Goods and Services from Plantation Forests

An Indigenous People's Struggle for Forest and Identity in Sub-Himalayan Bengal

Biodiversity in India

Environmental Politics and Impacts of National Parks and Protected Areas

Cracking IAS Prelims Revision Files - Art, Culture & Panorama (Vol. 7/9)

Equitable Partnerships in Practice

Civil Violence in Emerging Global Realities

Plantation forests often have a negative image. They are typically assumed to be poor substitutes for natural forests, particularly in terms of biodiversity conservation, carbon storage, provision of clean drinking water and other non-timber goods and services. Often they are monocultures that do not appear to invite people for recreation and other direct uses. Yet as this book clearly shows, they can play a vital role in the provision of ecosystem services, when compared to agriculture and other forms of land use or when natural forests have

been degraded. This is the first book to examine explicitly the non-timber goods and services provided by plantation forests, including soil, water and biodiversity conservation, as well as carbon sequestration and the provision of local livelihoods. The authors show that, if we require a higher provision of ecosystem goods and services from both temperate and tropical plantations, new approaches to their management are required. These include policies, methods for valuing the services, the practices of small landholders, landscape approaches to optimise delivery of goods and services, and technical issues about how to achieve suitable solutions at the scale of forest stands. While providing original theoretical insights, the book also gives guidance for plantation managers, policy-makers, conservation practitioners and community advocates, who seek to promote or strengthen the multiple-use of forest plantations for improved benefits for society. Published with CIFOR

The discovery of the pharmacy of the Australian bush began when humankind first set foot on the continent. Later, the first European visitors found a plethora of plants new to science, with a resultant fervour for unique and unusual finds that erupted into botanical circles. The records of those pioneers, combined with Aboriginal experience, led to the formation of an extensive, if informal, Australian materia medica with widespread practical and clinical appeal. In many instances, the value of the medicinal discoveries of the eighteenth and nineteenth centuries has been enhanced by contemporary research, summarised in each chapter, which lends increasing support to their traditional uses.

Deals with the modern predicament of the Rabha (or Kocha) people, one of India's indigenous peoples, traditionally practising shifting cultivation in the jungle tracts situated where the Himalayan mountains meet the plains of Bengal. When the area came under British rule and was converted into tea gardens and reserved forests, Rabhas were forced to become labourers under the forest department. Today, large-scale illegal deforestation and the global interest in wildlife conservation once again jeopardize their survival. Karlsson describes the development of the Rabha people, their ways of coping with the colonial regime of scientific forestry and the depletion of the forest, as well as with present day concerns for wilderness and wildlife restoration and preservation. Central points relate to the construction of identity as a form of subaltern resistance, the Rabha's ongoing conversion to Christianity and their ethnic mobilisation, and the agency involved in the construction of cultural or ethnic identities. Biodiversity in India
Fundamentals and Applications

Handbook of Strategic Environmental Assessment

Gums, Resins, Tannin and Essential Oils

BIODIVERSITY IN INDIA

Berkshire Encyclopedia of Sustainability Vol. 10/10

Genetic Resources and International Relations

Ecology and Conservation of Tropical Marine Faunal Communities

This book Trends in Wildlife Biodiversity and Conservation and Management has been edited in two volume, on most important aspects of wildlife. It contain 32 chapter contributed by many eminent scientists, officers and teachers from India and United Kingdom. Volume 1 contains information on the topics namely: Status of wildlife management in India, Karnataka, Bhadra wild life sanctuary in the Western Ghats, Parental care in asiatic elephants, Territory protection and scent marking in big cats, Child lifting wolves, Medicinal smuggling for tiger bones, Acoustic communication in anurans, Conflicts between man and elephants, Protection strategies for migratory birds, Mugger crocodiles of Dandell WLS, and Ornamental orchids of India. The Volume 2 comprises information on Basic concepts of biodiversity, Biodiversity of Drosophila, Ants in the Western Ghats, Biodiversity of hillstream fishes of Srinagar Garhwal-Himalaya, Medicinal plants of Western Ghats, Ecology of endangered Gangaitic dolphin, Problems and perspective of avian and vertebrate pest management, Deforestation problems in Santhal Pargana, Siberian cranes, Bird census methods and Role of Zoo s National Parks and Sanctuaries in the conservation and management of wildlife in India. These books apart from providing good references, these also serve as a guide and inspire future research on wildlife. The students, teachers, scientists and forest officers are expected to find this as a very useful source, in the field of wildlife studies. Vol 1 Chapter 1: Status of Wildlife Management in India: An Overview by B B Hosetti and Gina Caplen, Chapter 2: Wildlife Management in Karnataka: An Appraisal by Venkateshwarlu, M, Chapter 3: Conservation and Management of Wildlife in Bhadra Wildlife Sanctuary, Karnataka by Gina Caplen and Frost S, Chapter 4: Capative Breeding of Asian Elephants (*Elephas maximus*): The Importance of Producing Socially Competent Animals by Paul A Rees, Chapter 5: Scent Marketing by Big Cats: Chemical Communication and Eco-ethological Implications by R L Brahmachari, Chapter 6: Child Lifting Wolves in India: A Strategy for Their Management and Control by Kishan Singh Rajpurohit, Chapter 7: Prospects and Perspectives of Project Tiger in India by B B Hosetti and B C Somanath, Chapter 8: Acoustic Communication in Indian Anurans by Ravishankar D Kanamadi, Chapter 9: Conflicts Between Man and Elephants by B B Hosetti, Chapter 10: Conservation and Management Strategy for the Water Flows of Minor Irrigation Tank Habitats and Their Importance as Stopover Sites in

Dharwad District by J C Uttangi, Chapter 11: The Re-introduction of the Wolf (*Canis lupus*) and the Beaver (*Castor fiber*) into Scotland by Arjuna Korale and Stan Frost, Chapter 12: Ecology of Marsh Crocodile *Crocodylus palustris* in the Kali River of Western Ghat, Dandeli, Karnataka by S Basavarajappa, Chapter 13: Eco Biology of Weaver Bird *Ploceus philippinus* in the Western Ghat Area of B R Project by K L Naik and B B Hosetti, Chapter 14: Eco-ornithological Studies on Gudavi Bird Sanctuary Shimoga, Karnataka by B B Hosetti, Somanath B C and K L Naik, Chapter 15: Eco-biology of a Pentatomid Bug *Cyclopelta cissifolia* W. by B B Hosetti and Naveed A, Chapter 16: Ecology and Wildlife Status of Orchids by Sulabha Phatak. Vol II Chapter 17: Biodiversity: An Introduction by Arvind N A and Dinesh Rao, Chapter 18: Biodiversity and Conservation of Ants: An Overview by T M Musthak Ali and A K Chakravarthy, Chapter 19: Biodiversity of *Drosophila* of South India by Hegde S N, Vasudev V and M S Krishna, Chapter 20: Biodiversity in Hillstream Fishes of Garhwal Himalaya: Their Food and Feeding Behaviour by N Singh and R Subbaraj, Chapter 21: Biodiversity of Threatened Species of Medicinal Plants in India: An Appraisal by P E Rajasekharan, Chapter 22: Ethological Studies of Dolpin (*Platinista gangaitica*) with Reference to Conservation Strategies by Arvind Kumar and A K Singh, Chapter 23: Impact of Deforestation on Wildlife Resources and their Conservation in Santal Pargana of Jharkhand Pradesh by P K Verma and Arvind Kumar, Chapter 24: Vertebrate Pest Management in Karnataka by A K Chakravarthy, Chapter 25: Shifting Cultivation (Jhooming) and Wildlife Conservation: A Case Study from North-East India by A K Gupta, Chapter 26: Bird Depredation and Management in Karnataka by A K Chakravarthy, Chapter 27: Dooming Mandagadde Bird Sanctuary (MBS) Karnataka by M Venkateswarlu and D C Savita, Chapter 28: The Conflicts Between Man and Birds by B B Hosetti and M B Nadoni, Chapter 29: Siberian Crane: Whether It Will Survive in the Next Century? by B H Bhaghya, Chapter 30: Bird Counting Methods by D S Sunil, Chapter 31: Glimpses of Earthworm Bioresources of India by G Tripathi and Poonam Bhardwaj, Chapter 32: Role of Indian Zoos, National Parks and Sanctuaries for Conservation of Some Wild Mammals by A Chakravarthy, G R Saha and A K Panigrahi.

This handbook provides an overview of Indian Agriculture comprehensively covering the diverse issues ranging from environment to culture and dealing with contemporary issues on poverty and subsidies. The Future of Sustainability, the tenth and final volume of the Berkshire Encyclopedia of Sustainability, brings together essays from a group of renowned scholars and well-known environmentalist thinkers. Crucial topics are considered in terms of the future of humanity and its relationship with the natural world, from the outlook for nuclear energy, cities, energy, agriculture, water, food security, mobility, and migration; the

role of higher education; and the concept of collective learning. The volume concludes with a resource guide for teaching materials at several levels, a directory of leading undergraduate- and graduate-level programs in sustainability, and a combined index of the 10-volume set.

Deforestation and forest degradation represent a significant fraction of the annual worldwide human-induced emission of greenhouse gases to the atmosphere, the main source of biodiversity losses and the destruction of millions of people's homes. Despite local/regional causes, its consequences are global. This book provides a general view about deforestation dynamics around the world, incorporating analyses of its causes, impacts and actions to prevent it. Its 17 Chapters, organized in three sections, refer to deforestation impacts on climate, soil, biodiversity and human population, but also describe several initiatives to prevent it. A special emphasis is given to different remote-sensing and mapping techniques that could be used as a source for decision-makers and society to promote forest conservation and control deforestation.

Basics of Marine and Estuarine Ecology

Medicinal Plants in Australia Volume 1

Biodiversity and the Precautionary Principle

Intellectual Property Regime Evolution in China and India

Medicinal Plants in Australia Volume 2

Landscapes, People and Power

Advances in Macrofungi

Offers an overview of the issues and a conceptual framework for addressing poverty reduction in the context of conservation, and conservation in the context of poverty reduction. This book is suitable for professionals working in the field as well as to students across the fields of conservation, development and sustainability.

The present Volume 7 of Biodiversity in India includes 18 chapters covering broad spectrum Biodiversity. It includes Balsaminaceae in Tamil Nadu, Loranthaceae and Viscaceae in Karnataka, Bryophytes of Western Ghats, Pholidota in Himalayas, Lepisorus in Nilgiris, Macrofungi in Kodagu region and Snakes of Sri Krishnadevaraya University campus. A few chapters deal with Non Timber forest produce, medicinal plants and wild edible plants are also dealt with. Ex situ conservation of wild medicinal plants and Biotechnological approaches for rescue of Ceropogia have also been included in the book. The book is profusely illustrated with colour photographs and line drawings. This is the first ever monumental and scientific documentation of the faunal wealth of the Indian Desert state of Rajasthan. This volume, the second of two, provides a comprehensive picture of the conservation efforts undertaken to prevent further degradation of the condition of Rajasthan's faunal wealth. A scholarly contribution to the field of knowledge, it provides novel and vital information on wildlife preservation initiatives in India's largest state. Broadly falling under the Indo-Malaya Ecozone, the three major biomes of Rajasthan include deserts and xeric shrublands, tropical and subtropical dry broadleaf forests, and tropical and subtropical moist broadleaf forests. The corresponding ecoregions to the above biomes are, respectively, the Thar Desert and northwestern thorn scrub forests, the Khathiar-Gir dry deciduous forests, and the Upper Gangetic Plains moist deciduous forests. Contrary to popular belief, the well-known Thar or Great Indian Desert occupies only a part of the state. Rajasthan is diagonally divided by the Aravalli mountain ranges into arid and semi-arid regions. The latter have a spectacular variety of highly diversified and unique yet fragile

ecosystems comprising lush green fields, marshes, grasslands, rocky patches and hilly terrains, dense forests, the southern plateau, fresh water wetlands, and salt lakes. Apart from the floral richness, there is faunal abundance from fishes to mammals. In this volume, the various flagship and threatened species are described in the 20 chapters penned by top notch wildlife experts and academics. The world famous heronry, tiger reserves, wildlife sanctuaries and some threat-ridden biodiversity-rich areas shall certainly draw the attention of readers from around the world.

What is behind the changing attitudes towards intellectual property in India and China? This exploration of empirically-based research comparisons on the character of intellectual property systems found in these two countries, offers answers to three key questions: what are the drivers that have moved them towards a closer embrace of IP norms, how have domestic and systemic influences shaped the character of this embrace, and how have state and non-state actors interacted within the international system to promote this transformation? Focusing on the software and IT services industries, it illuminates the policy drivers that have influenced IP regime adoption, and helps our understanding the process by providing a clear framework of distinctive phases of technological, political and social development.

Bioprospecting for biomolecules

Bush Pharmacy

Conserving Biodiversity Outside Protected Areas

Volume 1: Diversity Patterns and Distribution Ecology

Terricolous Lichens in India

Biodiversity and Traditional Knowledge

Handbook of Agriculture in India

Great uncertainty typically surrounds decisions and management actions in the conservation of biodiversity and natural resource management, and yet there are risks of serious and irreversible harm for both biodiversity and the humans that rely on it. The precautionary principle arguably underlies all international conservation efforts and promotes acting to avoid serious or irreversible environmental harm, despite lack of scientific certainty as to the likelihood, magnitude or cause of harm. This book is the first to examine the application of the precautionary principle to biodiversity conservation and natural resource management, incorporating perspectives from scientists, economists, lawyers and practitioners from both developing and developed countries. It analyses the application and impacts of the principle in many areas including forestry, invasive alien species, wildlife trade, protected areas and fisheries, in a range of national and international contexts. Particular attention is drawn to issues of equity, livelihoods, science and politics, and the book provides guidelines for applying the precautionary principle to biodiversity conservation and natural resource management. Farmers have developed a range of agricultural practices to sustainably use and maintain a wide diversity of crop species in many parts of the world. This book documents good

practices innovated by farmers and collects key reviews on good practices from global experts, not only from the case study countries but also from Brazil, China and other parts of Asia and Latin America. A good practice for diversity is defined as a system, organization or process that, over time and space, maintains, enhances and creates crop genetic diversity, and ensures its availability to and from farmers and other users. Drawing on experiences from a UNEP-GEF project on "Conservation and Sustainable Use of Wild and Cultivated Tropical Fruit Tree Diversity for Promoting Livelihoods, Food Security and Ecosystem Services", with case studies from India, Indonesia, Malaysia and Thailand, the authors show how methods for identifying good practices are still evolving and challenges in scaling-up remain. They identify key principles effective as a strategy for mainstreaming good practice into development efforts. Few books draw principles and lessons learned from good practices. This book fills this gap by combining good practices from the research project on tropical fruit trees with chapters from external experts to broaden its scope and relevance.

This is a book designed to enhance our appreciation of the medicinal history of Australia's flora, its unique contributions to everyday life, and its extraordinary future potential. The renewed importance of the medical importance of Australian Plants is discussed particularly in relation to the advent of drug-resistant strains of bacteria, fungi, and viruses. New Eucalypts that can yield higher grade oils, essential oils from the Melaleuca and Leptospermum show excellent therapeutic potential, and the success of Tea Tree oil in the international market is also discussed.

Commercial value of resins, gums and tannins is covered. This original book examines the experiences cities and urban areas have had with two principal concerns that confront them today: sustainability and competitiveness. Featuring a wide-ranging set of contributions from top researchers, this book discusses and analyzes the issues that different cities face, such as social cohesion, tolerance and cultural diversity, and how this will determine their developmental trajectories through the coming decade. Towards a Competitive, Sustainable Modern City will be an invaluable read for scholars and professors in urban economics and urban studies more broadly, particularly those who are

focusing on the importance of sustainability in both areas

The Flora of British India

Technological, Political and Social Drivers of Change

More than Just Trees

Introduction to Biodiversity

Risk, Uncertainty and Practice in Conservation and Sustainable Use

Industrially Important Fungi for Sustainable Development

This Handbook, first published in 2005, provides standard procedures for planning and conducting a survey of any species or habitat and for evaluating the data.

The common idea for many people is that forests are just a collection of trees. However, they are much more than that. They are a complex, functional system of interacting and often interdependent biological, physical, and chemical components, the biological part of which has evolved to perpetuate itself. This complexity produces combinations of climate, soils, trees and plant species unique to each site, resulting in hundreds of different forest types around the world. Logically, trees are an important component for the research in forest ecosystems, but the wide variety of other life forms and abiotic components in most forests means that other elements, such as wildlife or soil nutrients, should also be the focal point in ecological studies and management plans to be carried out in forest ecosystems. In this book, the readers can find the latest research related to forest ecosystems but with a different twist. The research described here is not just on trees and is focused on the other components, structures and functions that are usually overshadowed by the focus on trees, but are equally important to maintain the diversity, function and services provided by forests. The first section of this book explores the structure and biodiversity of forest ecosystems, whereas the second section reviews the research done on ecosystem structure and functioning. The third and last section explores the issues related to forest management as an ecosystem-level activity, all of them from the perspective of the "other" parts of a forest.

The book presents recent research on marine ecology in different parts of the world. It aims to shed light on relevant topics for budding marine ecologists. The "blue soup" of Planet Earth, which comprises both biotic and abiotic components, is essential to keeping the wheel of civilization running. Four major ecosystem service categories have been identified within this context, namely provisioning services such as water, food, mangrove timber, honey, fish, wax, fuel wood, fodder and bioactive compounds from marine and estuarine flora and fauna; regulating services such as the regulation of climate, coastal erosion, coral bleaching and pollution; cultural services encompassing recreational (tourism), spiritual and other non-material benefits; and supporting services such as nutrient cycling and photosynthesis. These valuable services are obtained from various resources that must be conserved for the sake of humanity. This book presents data for each resource type, not just in the form of a simple description, but also

through case studies that resulted from several research projects and pilot programs carried out in different parts of the world.

Statistical tools were also used to critically analyze the influence of relevant hydrological parameters on the biotic community. Advanced research in marine and estuarine ecology is based on the use of sophisticated instruments, sampling precision, statistical tools, etc., which have also been highlighted in the book.

Cracking IAS Prelims Revision Files - Art, Culture & Panorama (Vol. 7/9) is the 1st ebook of a series of 9 eBooks specially prepared to help IAS aspirants cross the milestone of Preliminary Exam. The ebook is aimed at Revision cum practice so as to develop confidence to crack the IAS Prelim Exam. • The eBook is divided into 3 Topics • Each topic provides 5-6 Revision Modules ensuring complete revision of the topic. Thus in all around 15 such Modules are provided. • Each topic will end up with a Quiz containing 15 questions to test your topic preparedness. • Further Solved Questions of the last 5 years on Art, Culture & Panorama are also provided. • In the end 2 Tests are provided on Art, Culture & Panorama to test your revision of the entire section This ebook, along with the 8 other ebooks of this series, will definitely help you improve your score in the IAS Prelim Exam.

Intellectual Property, Biogenetic Resources and Traditional Knowledge
Tropical Fruit Tree Diversity

Sustainable Agriculture

Linking Conservation and Poverty Reduction

Lessons from MFF Small Grant Facility Projects in Sri Lanka
(2011-2013)

Trends in Wildlife Biodiversity Conservation and Management

Conservation and Management of Vertebrates

"Originally published in Social analysis, vol. 48."

Sacred Groves and their medicinal, commercial values known through the indigenous community and some of the medicinally valuable literature. In the conservation aspect we conducted awareness program for the local peoples, students of schools and colleges, teachers, pujari, traditional healers and land owners. Few groves were planted with water holding capable rich species and Oxygen producing species. These species were protected by local peoples and pujari of the concern grove.

A comprehensive resource to sustainability and its application to the environmental, industrial, agricultural and food security sectors Sustainability fills a gap in the literature in order to provide an important guide to the fundamental knowledge and practical applications of sustainability in a wide variety of areas. The authors – noted experts who represent a number of sustainability fields – bring together in one comprehensive volume the broad range of topics including basic concepts, impact assessment, environmental and the socio-economic aspects of sustainability. In addition, the book covers applications of sustainability in environmental, industrial, agricultural and food security, as well as carbon cycle and infrastructural aspects. Sustainability addresses the challenges the global community is facing due to population growth, depletion of

non-renewable resources of energy, environmental degradation, poverty, excessive generation of wastes and more. Throughout the book the authors discuss the economics, ecological, social, technological and systems perspectives of sustainability. This important resource:

- Explores the fundamentals as well as the key concepts of sustainability;
- Covers basic concepts, impact assessment, environmental and socio-economic aspects, applications of sustainability in environmental, industrial, agricultural and food security, carbon cycle and infrastructural aspects;
- Argues the essentiality of sustainability in ensuring the propitious future of earth systems; and
- Authored by experts from a range of various fields related to sustainability.

Written for researchers and scientists, students and academics, *Sustainability: Fundamentals and Applications* is a comprehensive book that covers the basic knowledge of the topic combined with practical applications.

Terricolous lichens, a habitat specialist group of lichens play a vital role in maintenance and ecological stability of soil crusts with reference to their physical stability, hydrology and growth of soil microflora. Terricolous lichens in Indian lichenological studies haven't been taken up as a functional group. *Terricolous Lichens in India, Volume 1: Diversity Patterns and Distribution Ecology* is the first ever publication dealing with soil lichens of India. Divided into five chapters, this volume discusses the lichenological researches in India with reference to terricolous lichens, the altitudinal distribution patterns of terricolous lichens, comparative assessment of distribution with global patterns, and the photobiont diversity and influence of novel molecular clades of photobiont in determining ecological preferences of soil lichens in India. Written by experts in the field and supplemented with numerous photographs, *Terricolous Lichens in India, Volume 1: Diversity Patterns and Distribution Ecology* is a comprehensive resource that addresses the major drivers of terricolous lichens distribution in India.

Towards a Competitive, Sustainable Modern City

Biodiplomacy

Good practices for in situ and on-farm conservation

Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation

Deforestation Around the World

The Future of Sustainability

Survey, Evaluation and Monitoring

Mangroves for the Future (MFF) is a partnership-based regional initiative promoting investments in coastal ecosystems that support sustainable development. This booklet documents selected MFF Small Grants Facility Phase 2 projects, implemented in Sri Lanka, with emphasis on the sharing of good practices and lessons learnt. The projects are categorized into four thematic areas, namely, Generating Knowledge, Education and Awareness, Ecosystem Restoration, and Livelihood Enhancement. The booklet is based on information gathered from project progress reports,

mid-term reviews, notes made during field monitoring visits and lessons learnt workshops.

The book discusses protected areas and conservation policies, critically reviewing protected areas management and the concepts of conservation. Drawing on case studies from North America, Europe, Asia and Africa, it shows how they affected local people - their customary rights, livelihoods, well-being and social cohesion. The book argues for an overhaul of conservation thinking and practice.

This book provides insights into various aspects of marine faunal communities in India, which are extremely diverse due to the geomorphologic and climatic variations along the Indian coasts. Consisting of 30 chapters by experts in their respective fields, it is divided into two parts: · Part I: Tropical Marine Faunal Communities · Part II: Ecology and Conservation Part I highlights the diversity and distribution of Foraminifera; sponges associated with seagrass; Polychaeta; Opisthobranchia; oysters; copepods; horseshoe and brachyuran crabs; echinoderms; ascidians; fishes; fish parasites; and sea mammals. Topics of Part II include the status and environmental parameters of benthos; the status of coral reefs; the invasion of snowflake coral; the recovery of bleached corals; the socioeconomics and management of dugong; marine biodiversity conservation and management in India; the assessment of the marine fauna of the Indian Wildlife Protection Act; and marine biodiversity protected areas in India. This book will serve as a valuable reference work for marine scientists, as well as for environmental managers and policy makers.

Plants have been a source of medicines and have played crucial role for human health. Despite tremendous advances in the field of synthetic drugs and antibiotics, plants continue to play a vital role in modern as well as traditional medicine across the globe. In even today, one-third of the world's population depends on traditional medicine because of its safety features and ability to effectively cure diseases. This book presents a comprehensive guide to medicinal plants, their utility, diversity and conservation, as well as biotechnology. It is divided into four main sections, covering all aspects of research in medicinal plants: biodiversity and conservation; ethnobotany and ethnomedicine; bioactive compounds from plants and microbes; and biotechnology. All sections cover the latest advances. The book offers a valuable asset for researchers and graduate students of biotechnology, botany, microbiology and the pharmaceutical sciences. It is an equally important resource for doctors (especially those engaged in Ayurveda and allopathy); the pharmaceutical industry (for drug design and synthesis); and

the agricultural sciences.

Social Change and Conservation

SACRED GROVES OF NAMAKKAL DISTRICT WITH SPECIAL REFERENCE TO THEIR MEDICINAL USES

State, Sovereignty, War

Faunal Heritage of Rajasthan, India

The Role of Traditional Agro-ecosystems

Forest Ecosystems

Small grants, large gains

Protected areas and conservation policies are usually established with only local nature and wildlife in mind. Yet they can have far reaching consequences for local populations, often undermining their access to resources and their livelihoods. This book is the first comprehensive discussion of the social consequences of protected area schemes and conservation policies. Drawing on case studies from North America, Europe, Asia, Central America and Africa, it critically reviews current trends in protected area management, and shows how local people have been affected in terms of their customary rights, livelihoods, wellbeing and social cohesion. The loss of secure livelihoods ultimately threatens conservation, as poverty and environmental degradation intensify in and around protected areas. The leading authorities who have contributed to this ground breaking volume argue for a thorough overhaul of conservation thinking and practice.

Biogenetic resources - the critical biological and chemical materials that underpin so much of medicine, both modern and traditional, agriculture, and wider economic activity in so many fields - are at the centre of heated debate regarding their use, development, and ownership, and the issues of ethics and equity that impinge on all of these factors. This book is a comprehensive examination of the key issues, institutions and ideologies in this area, presenting definitions and explanations of the fundamentals of intellectual property rights (IPRs), biogenetic resources and traditional knowledge. It uses the insights from this to build a picture of how these factors interact in practice, bringing to the surface issues such as: the conservation and sustainable use of biodiversity, benefit sharing from the commercial use of biodiversity, biotechnological innovation and the transfer of technology, agriculture, food security, rural development, health and international justice. Part 1 describes the relevant international IPR laws, highlights the extent to which modern commerce depends on such resources, and traces the way in which modern IPR law has evolved to accommodate this dependence. Part 2 shows how stronger IPR protection in the area of life science innovation has given rise to controversies such as 'biopiracy', 'terminator' genes and genetic uniformity. Part 3 focuses on traditional knowledge, its nature, its importance, and the applicability of IPR-style protection. Part 4 covers the international negotiation and policy-making of the WTO, WIPO and CBD and the legislative initiatives of national governments of Asia, Africa and Latin America. Finally, Part 5 focuses on two developing country case studies - of India and Kenya - assessing whether they will be able to gain economic benefit from development of their natural resources within the current regulatory system and whether this will encourage the conservation and sustainable use of the resource base. With its multidisciplinary approach and breadth of coverage, this book will appeal both to those new to the subject and to those with professional and specialist interest, including

students, academics, legal practitioners, government policy-makers and the private sector.

Advances in Macrofungi: Diversity, Ecology and Biotechnology discusses the diversity and ecology of edible, toxic, medicinal and mycorrhizal macrofungi; the impact of ectomycorrhizal fungi in terrestrial ecosystems, ectomycorrhizal complex in Boreal forests and commercial application of *Pseudotsuga* in silviculture; the nutritional evaluation and cultivation of edible wild mushrooms; the diversity of novel metabolites of macrofungi useful in food, pharmaceutical and cosmeceutical industries; mushrooms as tool for eco-friendly synthesis of nanoparticles and proteomics of edible and medicinal mushrooms. In addition, it covers experimental designs, methodological approaches, biogeochemical cycles, conceptual/hypothetical models and life history strategies, linking mycorrhizal diversity to plant performance, chemotaxonomy, role of mycorrhizae in forestry and macrofungi in nanotechnology. It provides a valuable resource to graduate, post-graduate and researchers (in botany, microbiology, ecology, biotechnology, forestry, life sciences and environmental sciences) to understand the diversity, ecology, therapeutic value, mutualistic associations and biotechnological potential of macrofungi.

This authoritative handbook surveys the full breadth and depth of SEA, bringing together a range of international perspectives and insights on the theoretical, methodological and institutional dimensions and practical issues of the field. It then subjects this conventional wisdom to a critical reappraisal, looks at the vast lessons of experience and offers new ideas and interpretations as to where the field is going. The volume is organized into six major sections, beginning with an introduction and overview of the development of the field and a framework for evaluating SEA good practice. Part I comprises a review of SEA frameworks in leading countries (Australia, Canada, New Zealand and the USA), the European Union and developing regions (Africa, Asia, Latin America and Newly Independent States). Part II reviews SEA practice in several major sectors (energy, minerals, transport, water, development assistance and coastal zone management). Part III addresses the linkages between SEA and other comparable tools such as spatial planning and environmental management. Part IV probes key cross-cutting issues in SEA, including how to address cumulative and trans-boundary effects. Part V identifies ways and means of SEA process and capacity development, focusing on how to improve and upgrade the theory and practice of the field. Part VI examines the shift from conventional SEA towards more integrative approaches, drawing on experience and examples from a number of countries. Published with IAIA

Handbook of Biodiversity Methods

Rethinking Himalaya: Its Scope and Protection

Diversity, Ecology and Biotechnology

Contested Belonging

Sustainability