

About the Book

“Climate change and Island and coastal Vulnerability” is the outcome of a selection of peer reviewed edited papers presented at the international workshop on climate change and Island vulnerability (JWCC) held at Kadmat Island, Lakshadweep, India on October 2010. Marine and coastal biodiversity, sea level rise vulnerability, fishers, climate change impact on livelihood options, water sanitation in Island ecosystems and mitigation, adaptations and governance are the focal themes. The basic concept conveyed in the book is that biodiversity of Islands is to protected as a natural mechanism to mitigate climate change. Probability of mass coral balancing and the management of coral reefs and their future protection are discussed in this book. Marine productivity and climate change for the last ten thousand years in the Arabian sea have been examined with core records. Green technology is suggested as an important tool for mitigation and adaptation programmers is climate change. Measures taken to project biomass utilization of Islands as an energy source is delineated. Climate change may pose a potential threat on human health. Improved sanitation packages and models that are cost effective and environment-friendly for Islands are uniquely presented in this book.

Contents:

Part I: hydrological regime changes and water woes

- 1. Projected precipitation changes over Malaysia by the end of the 21st century using PRECIS regional climate model*
- 2. Monsoonal fluctuations vs Marine productivity during Past 10,000 years- study based on sediment core retrieved from southeastern Arabian Sea*
- 3. Prediction of rain on the basis of cloud liquid water, precipitation water and latent heat in the perspective of climate change over two coastal stations*
- 4. Inter-annual Variability of sea surface temperature in the Arabian Sea*
- 5. Paleoclimate of peninsular India*

Part II: Biotic changes and response

- 6. Marine biodiversity : climate impact and conservation planning*
- 7. Inventory and monitoring of coral reefs of united Arab Emirates (UAE), Arabian Gulf, Usong remote sensing Techniques.*
- 8. Impact of climate changes in the Sundarban aquatic ecosystems: phytoplankton as proxies*
- 9. Elevated CO₂ and temperature affect leaf anatomical characteristics in coconut*
- 10. Biochemical composition of seaweeds after the Influence of oil spill from ‘Tasman sprit’*
- 11. Distribution of ostracoda in the mmullipallan lagoon near muthupet, Tamil Nadu, southeast coast of India implications on microenvironment*

Part III: coastal dynamics

- 12. Influence of suspended solid on in situ and ex situ chlorophyll-a: A case study of Indian sundarbans
Climate and sea level changes in a Holocene Bay Head delta Kerala, southeast coast of India*
- 13. Climate and sea level changes in a Holocene Bay head Delta, Kerala southeast coast of India*
- 14. Role of sea level rise on the groundwater quality in Coastal areas of Sri Lanka*

Part Iv: Livelihood options

- 15. Hatchery production of marine Ornamental fishes: an alternate livelihood option for the Islad community Lakshadweep*
- 16. Living in Harmony with nature: complication of climate change and governance*