About the Book

In the rapid growing society the need for judicious management of the essential natural resources becomes a big challenges to planners, managers and scientists/researcher. This book brings out the multi disciplinary approach for managing the water, energy and bio-resources through papers contributed by distinguished and academicians from reputed universities and institutions globally. It has 28 papers grouped under three sections_ water resources management: energy and bio-resources management and climate and natural resources management___ with case studies from all over the world. These papers address the present world challenges with contemporary techniques to manage these resources in various geographical regions.

This volume will be an asset to research and students, managers, environmentalists, hydrologists, water resource and energy managers, governmental and other regulatory bodies dealing with water, energy and bio-resources.

Contents:

Section I: Water resources management

1. *3D geological and hydrological modeling- integrated approaches in Urban groundwater management*
2. *Long-term saltwater intrusion modeling- case studies from North Africa, Mexico and Halle*
3. *Hydrogeochemical characterization and evaluation of seasonal variation in groundwater chemistry in Upper Panda River*
4. *Assessment of groundwater vulnerability in the Borazjan Aquifer of Bushehr, south of Iran, Using GIS technique*
5. *Geochemical variations of groundwater quality in coastal and karstic aqifer in Jaffna Peninsula*

Section II: Energy and Bio-resources management

6. *Production of renewable energy and waste water management*
7. *Replacing conventional fuels through biogas for mitigating the threats related to climate change in India*
8. *Chronic Arsenicosis induced oxidative stress in cattle*
9. *Macro-Benthos diversity in a headwater stream affected by tea and pady agricultural*
10. *Bioremediation and detoxification of xenobiotic organic compounds in Landfill leachate by pseudomonas sp*
11. *Identifying knowledge gaps in assessing health risks due to exposure of nanoparticles from contaminated edible plants*

Section III: Climate and Natural resources management

12. *Effect of ozone on biotic stress tolerance potential of wheat*
13. *Isolation and characterization of thermo-alkalotolerant bacillus sp strain ISTS2 for carbon dioxide sequestration*
14. *Carbon footprints of rice cultivation under different tillage practices in rice wheat system*
15. *Trend analysis of rainfall in over the himalayas*