Sustainable management of natural resources is an urgent need, given the changing climatic conditions of Earth systems. The ability to monitor natural resources precisely and accurately is increasingly important. New and advanced remote sensing tools and techniques are continually being developed to monitor and manage natural resources in an effective way. Remote sensing technology uses electromagnetic sensors to record, measure and monitor even small variations in natural resources. The addition of new remote sensing datasets, processing techniques and software makes remote sensing an exact and cost-effective tool and technology for natural resource monitoring and management.

*Advances in Remote Sensing for Natural Resources Monitoring* provides a detailed overview of the potential applications of advanced satellite data in natural resource monitoring. The book determines how environmental and ecological knowledge and satellite-based information can be effectively combined to address a wide array of current natural resource management needs. Each chapter covers different aspects of remote sensing approach to monitor the natural resources effectively, to provide a platform for decision and policy. This important work:

- Provides comprehensive coverage of advances and applications of remote sensing in natural resources monitoring
- Includes new and emerging approaches for resource monitoring with case studies
- Covers different aspects of forest, water, soil-land resources, and agriculture
• Provides exemplary illustration of themes such as glaciers, surface runoff, ground water potential and soil moisture content with temporal analysis

• Covers blue carbon, seawater intrusion, playa wetlands, and wetland inundation with case studies

• Showcases disaster studies such as floods, tsunami, showing where remote sensing technologies have been used

This edited book is the first volume of the book series *Advances in Remote Sensing for Earth Observation*.

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