

REMOTE SENSING AND GIS Applications A Starter Guide



Remote Sensing and GIS Applications:

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**Dedicated to the Memory of wife
Pushpa (late)**

For support at every walk of life

Preface

Although satellite remote sensing and Geographical Information System (GIS) technology is new, within a short span of time it has become indispensable tool for natural resources and environmental studies. The satellite images provide real time, synoptic view, and repeat coverage of earth resources, even of inaccessible areas, which makes it a handy tool for their mapping and monitoring. Besides, the satellite data are amenable to computer processing and compatible with GIS.

Looking to its merit and utility, the technology has been included in the curriculum of engineering, agriculture, forestry, geology, geography and environmental sciences, at graduate and post graduate degree of various Universities. During last two decades, there have been fast developments in the quality of satellite images and their interpretation techniques. While interacting with the students and faculty of above courses, necessity of a book with latest development in the remote sensing and GIS technology and their applications was expressed. To meet the requirement, this book has been written in simple language with comprehensive treatment to all aspects of remote sensing and GIS technology and its applications so that it is helpful as starter guide to a novice.

The book is an outcome of years of experience working on the remote sensing application projects with the colleagues at ICAR-CAZRI, Jodhpur and SRSAC, Jodhpur. I owe my gratitude to all of them. A number of books, reports and research papers have been consulted during writing the book. Related information and some figures have been downloaded from internet. All the sources cited or quoted in the book have been indicated and acknowledged by means of a comprehensive list of references. Dr. N.K. Kalra, (ex.) Project Director, Rajasthan State Remote Sensing Application Centre (SRSAC), Jodhpur, deserves all appreciations for help and suggestions.

I have not enough words to express my feeling and gratitude to my (late) grand parents and parents for their blessings. I fondly remember company of wife (late) Mrs. Pushpa during initial stage of this book. My wonderful children have emotionally supported at all stages of book writing. Last but not the least; I bow before the almighty God to enable me to complete the book.

D. C. Joshi

Contents

1. Eye in the Sky	1
2. The Space, Earth and Atmosphere	7
Atmosphere	
Constituents of atmosphere	
Layers of atmosphere	
3. Solar Electro-magnetic Radiation	13
Electromagnetic radiation	
Black body emission	
Interaction of electromagnetic radiation with atmosphere	
Interaction of electromagnetic radiation with objects on earth surface	
Atmospheric windows	
4. Spectral Reflectance Characteristics of objects on Earth Surface	23
Spectral signature of vegetation, water bodies, soil and land surface	
Spectral reflectance measurement	
Laboratory measurement	
Ground based in situ measurement	
Airborne based measurement	
Space borne measurement	
Hyperspectral reflectance	
5. Aerial Photographs and their Interpretation	31
Factors affecting quality of aerial photographs	
Characteristics of aerial photographs	
Stereo or three dimensional image	

Aerial photo mosaic
Basic elements of aerial photo-interpretation
Visual interpretation of aerial photographs
Characteristic image of vegetation, soils and water bodies on aerial photographs
Methodology of aerial photo-interpretation for natural resource Mapping
Advantages of aerial photographs
Limitations of Aerial Photographs

6. Satellite and sensors

45

Earth resources satellite
Sensors
Scanning of ground features
Whisk broom scanner
Push broom scanner
Classification of sensor systems
Landsat series satellites
Sensors employed on Landsat satellites
Indian Remote Sensing (IRS) Satellite
Sensors employed on IRS satellites
Thermal infrared sensor
Microwave sensor
Other earth resource satellites
Telecommunication and meteorological satellites
INSAT system satellite

7. Satellite Data and their interpretation techniques

65

Satellite Data
False Colour Composite
Satellite image interpretation
Visual image interpretation
Visual interpretation of paper prints
On screen visual interpretation of images
Digital image interpretation
Image processing
Image Enhancement
Contrast enhancement

Band rationing
 Normalization Difference Vegetation Index (NDVI)
 Principal Component Analysis
 Filtering
 Density slicing
 Image classification
 Supervised classification
 Unsupervised classification
 Ground truth

8. Geographical Information System (GIS) 75

Elements of Map
 Survey of India topographic maps
 Geographical Information System
 Components of GIS
 Functions performed by GIS
 GIS data: spatial data and attribute data
 Data input methods
 Format for data input
 Vector format
 Raster format
 Components of geographic data
 Geo-Referencing
 Database management system
 Relational data base system
 The GIS output
 Advantages of GIS

9. Landform Identification and Mapping 89

Landform mapping with aerial photographs
 Landform Mapping with satellite images

10. Soil Resource Classification and Mapping 93

Soil series: Basic mapping and classification unit
 Land capability classification
 Soil resource appraisal
 Reconnaissance soil survey
 Semi detailed soil survey
 Detailed soil survey
 Soil resource mapping and remote sensing

Soil resource mapping with aerial photographs
Satellite images interpretation for soil mapping
Soil mapping with Landsat MSS Images
Soil mapping with IRS LISS images
Small scale soil mapping at national level
Soil series mapping
Physiography- soil relationship study
Soil mapping in complex geological formations
Soil resources mapping in hilly and densely covered forest area
Detailed soil mapping of micro watershed
Physiography -soil resource mapping of watershed
Identification of soil resources constraints
Soil resource information system
NRIS code for soil series
Soil data files system
Identification and mapping of salt affected soils
Salt affected soils mapping with aerial photographs
Salt affected soils mapping with Landsat images
Landsat and IRS images for recognition of kind of salt affected soils
Visual discrimination of surface features of natural salt affected soils

11. Water Resources Appraisal and Management **121**

Surface water
Identification and delineation of water bodies
Monitoring reservoir sedimentation
Rainfall-runoff modelling
Potential sites for surface water harvesting
Groundwater
Groundwater potential areas
Groundwater recharge
Potential sites for groundwater recharge structures
Hydro-geomorphological mapping
Identification of palaeo-channels

12. Forest Resources Monitoring and Management **131**

Forest mapping and monitoring
Delineating boundaries of forest blocks and sanctuaries
High potential forest fire area mapping
Carbon sequestration in forests

13. Land use/ Land cover Classification and Wasteland Mapping	135
National land use/ land cover classification and mapping	
Monitoring land use and land cover changes	
Monitoring land reclamation	
Urban sprawl	
Urban sprawl of Bikaner city during 1970-2008	
Urban growth of Tiruchirapalli city during 1989-2010	
Changes in land use / land cover of northwest district of Delhi for the period of 1972- 2003	
Urban sprawl, the cause of Mithi river 2005 floods in Mumbai	
Wastelands mapping	
14. Integration of Natural Resources	147
Major Land Resources Unit (MLRU)	
Integrated Mission for Sustainable Development (IMSD)	
Integration of natural resources in GIS environment	
Resource Management Domains (RMDs)	
15. Crop Identification and Acreage Estimation	157
Crop acreage estimation	
Assessment of crop disease and insect infestation	
Mapping of orchards	
16. Watershed Development Planning and Impact Assessment	165
Delineation of watershed boundary	
Selection of sites for water harvesting structures	
Watershed development planning	
Impact assessment of watershed development	
Indicators for impact assessment	
Methodology for impact assessment	
Impact assessment of integrated watershed development	
17. Command Area Monitoring and Management	171
Waterlogged and saline area mapping in command of irrigation projects	
IGNP command area in Rajasthan	
Mahanadi command area in Odisha	
18. Combating Land Degradation and Desertification	177
Land degradation processes, type and severity	
Satellite images for land degradation mapping	

Landsat TM image for land degradation mapping
Soil degradation mapping with IRS-1A FCC
Land degradation mapping at National level
Desertification mapping
Desertification and land degradation Atlas of India
Desertification/land degradation mapping under UNCCD programme

19. Natural Calamities and Disaster Management **189**

Floods
Flood affected area mapping
Flood damage assessment
Droughts : Monitoring and assessment

References **195**

Subject Index **207**