- Watershed characterization (DEM applications, erosion assessment, watershed management, etc.)
- Disaster applications (flood forecasting, flash flood studies, flood disaster mapping and monitoring, etc.)
- Snow cover mapping, snow dynamics study, snow runoff modelling, and GLOF studies.
- Groundwater prospectus mapping, hydro-geological studies, groundwater modelling, etc.
- Water resources web-portal, dash-boards, mobile apps. etc.

About NRSC

National Remote Sensing Centre (NRSC), an entity of Indian Space Research Organization under Department of Space, Govt. Of India, is engaged in the acquisition of Remote Sensing Satellite data, processing , dissemination and value addition for monitoring & management of natural resources, natural disaster management support services besides use of space inputs in various application domains. NRSC operates through its six wings, namely, Satellite Data Reception & Ingest Systems Area, Data Processing Products Archival & Web Applications Area, Remote Sensing Applications Area, Earth & Climate Sciences Area, Aerial Survey Digital Mapping & Outreach Area and Regional Centers.

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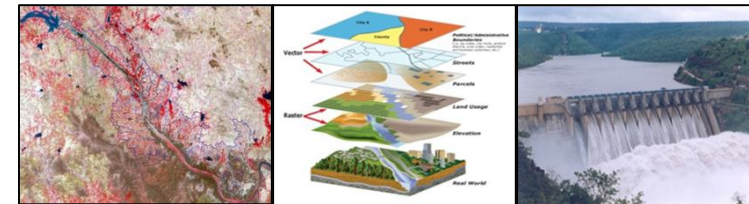E-mail: shanker_m@nrsc.gov.in
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nrsc

Training programme on
Effective Utilisation of Space Technology for Water Resources Management

Organised & Conducted By
Water Resources Group, RSA,
National Remote Sensing Centre (NRSC)
Indian Space Research Organisation (ISRO)
Balanagar, Hyderabad – 500037
Telangana State

Background

National Hydrology Project (NHP) is being taken up by Ministry of Water Resources, Govt. of India. The mission is to assist the effective water resources planning, development and management within each implementing agencies based on sound scientific driven framework. In this connection, NRSC has taken up the task to support NHP upon the request from Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR) through capacity building training programs, which consists of Remote Sensing & GIS fundamentals, customized water resources applications, and advanced topics in water resources.

Objectives

The present two training programmes are aimed at capacity building of stake holders in understanding and effective utilization of space technology products relevant to water resources. These programmes are;

a) Two training programs per year (one week duration) on RS & GIS fundamentals and state of art Geospatial technologies with 25 participants per batch (2017-18 to 2023-24)

b) Two customized training programs per year (two weeks duration) on RS & GIS applications in water resources management with 25 participants per batch (2017-17 to 2023-24)

Targeted Audience

Working level officials from the State and Central Government Organisations (Implementing agencies under NHP) across India and working in the field of water resources / hydrology or relevant fields

Training Schedule: 2018-19

Training Programme	Batch 1	Batch 2
One week training programme on RS&GIS fundamentals	Apr 09 - Apr 13 2018	Oct 29 - Nov 02 2018
Two week training programme on RS&GIS Applications to Water Resources	Jul 30 - Aug 10 2018	Feb 18 - Mar 01 2019

Training Focus

1. *One week training programme*
   - Fundamentals of Remote Sensing, Satellite & Sensors
   - Principals of Image Interpretation & Visualization
   - Basics of Digital Image Processing
   - Concepts of Grographics Information System
   - Fundamentals of GPS and Mobile Applications
   - Introduction to Bhuvan and other web Applications

2. *Two week training programme*
   - Basics of Remote Sensing, DIP, GIS, and Remote Sensing and GIS applications to..
   - Water resources assessment (hydrological modelling, surface water budgeting, etc.)
   - Water resources management (Irrigation water management, drought monitoring, reservoir sedimentation, etc.)
   - Water resources development (water body mapping, command area development, water harvesting, etc.)