

One week training program on
“Application of Remote Sensing & GIS in Land Resource Management”
(16-12-2024 to 21-12-2024)



Organized by
ICAR-NBSS&LUP, Regional Centre, Delhi, IARI Campus, Delhi-110012

Training Patron : Dr N. G. Patil , Director , ICAR-NBSS&LUP, Nagpur
Training Director : Dr Jaya N Surya, Head, ICAR-NBSS&LUP, RC Delhi
Training coordinator : Dr Sunil Kumar, Scientist, NBSS&LUP, RC Delhi

Sponsored by
Department of Agriculture, Jammu, UT Jammu & Kashmir under Holistic Agriculture Development Program (HADP)

OVERVIEW OF TRAINING PROGRAMME :

The Training program on "Application of Remote Sensing & GIS in Land Resource Management" was carried out during the period 16-12-2024 to 21-12-2024 at ICAR-NBSS&LUP, Regional Centre Delhi to state agriculture department officers of Directorate of Agriculture, Jammu, Union Territory of Jammu & Kashmir. The Training was organized by the team of ICAR-NBSS&LUP as *Training Patron* was Dr N. G. Patil , Director, ICAR-NBSS&LUP; *Training Director* was Dr Jaya N Surya, Head, ICAR-NBSS&LUP, Regional Centre Delhi & *Training Coordinator* was Dr. Sunil Kumar, Scientist, NBSS&LUP, RC Delhi and *Co-coordinators* were Dr Ashok kumar , Sr Scientist & Dr.RK. Meena,Sr. Scientist. The Training objectives & aim is to familiarize participants with latest tools & techniques of Remote Sensing (RS) and Geographic Information Systems (GIS) and their application in the management of land resources. The course provided insights into how these technologies can support sustainable land use planning, environmental monitoring, and resource management. The training was designed for practitioners involved in land management and agriculture of. The one week training program, first two days focused on basics of satellite imagery and sensor technology, overview of GIS softwares, geo-referencing, projection & digitization, field visit and Soil profile studies, It pays particular attention on soil survey and mapping related to soil morphology and the geographic distributions of soils. Second two days was emphasized on digital image processing, digital terrain analysis and supervised classification in practical mode. Last two days of the training was focused on land degradation, DSM, thematic map preparation and crop suitability evaluation. The training involved a combination of theoretical lectures, practical hands-on sessions, and field visit (Soil profile studies).

Inauguration of training program



Inaugurated by Dr A. Velmurgan, ADG (SWM), NRM Division, Krishi Bhavan, KAB-II, NEW Delhi

Training Lectures & lead lectures



Field exposure & soil profile study



RS & GIS Practical's and hands on training



Valedictory Function



Valedictory function : Chaired by Dr A Bhamhanand , Project Director, WTC, ICAR-IARI, New Delhi certificate Director, ICAR-NBSS&LUP & Director –Directorate of Agriculture, J&K -HADP;; Certificate distribution

OUTCOME OF TRAINING:

At the end of the training, participants were well acquired knowledge /information about latest tools/techniques of RS & GIS in its application in natural resource management, soil survey & mapping, soil and water conservation, crop management and land use planning:

1. Understand the Basics of Remote Sensing and GIS and its Application: Participants gained a strong foundation in RS and GIS concepts, including the types of data and their applications in land resource management.
2. Practical application of remote sensing & GIS software's for interpretation and data analysis: Participants were able to use remote sensing software to classify land cover, detect changes over time, and analyze satellite imagery for soil resource mapping & management.
3. Apply GIS in Land Resource Management: The participants learned & quite confident to use GIS for spatial analysis, creating maps, performing overlay analysis, and making informed decisions in land resource management, site-specific/hill & mountain ecosystem, local/regional level planning for Holistic agriculture development



Group of trainee officers :- ICAR-NBSS&LUP, Regional Centre Delhi organized training programme on “Application of Remote Sensing and GIS in Land Resource Management” during 16-21, December, 2024 to State Govt. officers/officials OF Directorate of Agriculture , Jammu , UT Jammu & Kashmir sponsored by Holistic Agriculture Development Program (HADP).