INFORMATION BROCHURE



21 Days Training Programme

on

Advances in Soil Resource Information Using RS & GIS for Agricultural Land Use
Planning
20/01/2026 to 09/02/2026





Course Coordinators

Dr. Arijit Barman Dr. K.K. Mourya

Organized by

ICAR-National Bureau of Soil Survey & Land Use Planning, Regional Centre, Jamuguri Road, Borbheta, Jorhat - 785004, Assam

About the Course

It is an advanced course on soil resource information using remote sensing and GIS for agricultural land use planning. It focusses on application of remote sensing and GIS techniques for preparing the base map (TMU) and soil profile study for the generation of soil and other thematic map. Crop suitability maps generated will help to propose alternate land use option. Other outputs include soil acidity, soil erosion, degradation and conservation of soil in a relatively shorter time. The soil information system generated will be helpful in efficient utilization of soils for improved crop productivity as well as for maintaining soil health.

This is a compact 21 days course comprising theory and practical sessions on basics of remote sensing and GIS technology, soil profile study, soil correlation, laboratory analysis, soil taxonomy, soil nutrient and crop suitability mapping, alternate land use option and their application in soil erosion conservation techniques. The main focus of this course is to impart advanced knowledge in the use of geospatial techniques in land resource management for professionals, researchers and students related to agriculture, soil conservation, land resource inventory and land use planning.

Objectives

- 1. To enable the participants to interpret and identify the land resources using latest technologies of RS, GIS and GPS.
- 2. To sensitize and orient the participants in the field of RS and GIS application for land resource mapping for LUP programmes.
- 3. To create expert manpower to cater to the needs of development agencies for better utilization of land resources.

Course content

- 1. Principles and Concepts of GIS
- 2. Basic of Remote Sensing
- 3. Base map (TMU) preparation
- 4. Basics of digital soil mapping
- 5. Basic of pedology
- 6. Morphological study of soil profile
- 7. Soil correlation
- 8. Laboratory analysis
- 9. Data interpretation
- 10. Soil taxonomy
- 11. Soil and other thematic map preparation based on TMU
- 12. LCC and Crop suitability mapping
- 13. LUP concept and approach
- 14. Soil conservation techniques

About the Centre

ICAR-NBSS&LUP Jorhat is a Regional Centre of ICAR-NBSS&LUP Nagpur. Our mission is to conduct and promote research in the National Agriculture Research System in the areas of soil survey and mapping, pedology, soil classification, remote sensing, geographic information system, land evaluation and land use planning. The operational jurisdiction of the Centre is in 8 states of North Eastern region comprising Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. This Regional Centre is entrusted to develop information on soil and land resources of this region. Its activities are grouped into three categories, viz. research, human resource development and capacity building of farmers through farmers - scientist interaction.

How to Reach ICAR-NBSS&LUP

Jorhat is well connected by air, rail and road. The Guest house is located at Jamuguri Road, Borbheta, Rowriah, Jorhat-785004, Assam and is about 1.5 km from Jorhat Airport, 8 km from Jorhat Railway Station, 20 km from Mariani Railway Station and about 320 km from Guwahati. Buses and pre-paid taxi can be availed from railway station and Airport to reach to the guest house.

Travelling Allowance, Boarding and Lodging

The cost of travelling, boarding and lodging of the selected participants will be sponsored by the host institute. All the participants will be reimbursed to-and fro- travel fare for the journey to Jorhat by the shortest route. The payment will be restricted to maximum of AC-II tier train fare/ bus fare (on producing proof of travel). Tickets must be booked from IRCTC or Balmer & Lawrie or Ashoka Travels for reimbursement.

Boarding and lodging will be provided free of cost to the outside participants at the institute's guest house on sharing basis and local participants will be provided lunch, inter session tea and course materials only free of cost. Participants are requested not to bring family members with them, as the Institute has limited guest house facilities. No DA will be paid to the participants.

How to Apply

There is no course fee. Interested candidate may send the scanned copies of their applications along with a brief CV duly signed by the candidates and their higher authority to applynbssjorhat@gmail.com.

Participants are requested to bring their personal

Participants are requested to bring their personal laptop for RS&GIS practical. For any query write mail to the Course Coordinators.

Eligibility

Participants should be at the level of Scientists/Assistant Professor/Technical officer/ Research scholar / Project staff (with equivalent minimum qualification AP) / Government officials from state line departments.

Selection will be based on merit and number of applications received. Decision of Director, Head and Course Coordinators will be final.

Number of seats: 20

Important dates:

Last date of application: December 22, 2025 Intimation of selection: December 23, 2025 Confirmation by participants: December 24, 2025

Publishing final list of participants: December 24, 2025

2025

Course commencement: January 20, 2026 Course completion: February 09, 2026

Correspondence

All the correspondence should be addressed to:
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Dr. K. K. Mourya, Scientist (SS)

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Email: <u>kkm.iari@gmail.com</u>
For more details visit our website
https://icar-nbsslup.org.in

APPLICATION FORM

Affix recent colour passport size photograph

- 1. Full name (in block letters):
- 2. Designation:
- 3. Present employer and address:
- 4. Address for communication:
- 5. Mobile no. with WhatsApp facility / email ID:
- 6. Permanent address:
- 7. Date of birth:
- 8. Sex (Male / Female):
- 9. Marital status (married/unmarried):
- 10. Experience in relevant field:
- 11. Academic qualification:

Date:

Place:

Signature of Applicant

Recommendation of the higher authority:

Signature of the higher authority with designation and seal