

## IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. Currently, 3200+ universities / institutions spread across India. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- State agriculture/horticultural/forest Professionals
- State climate change department/stakeholders
- Research Institutes
- Geospatial Industries
- NGOs

## Feedback Mechanism

The participants can submit their feedback through online portal. Feedbacks are critically analyzed and implemented in next courses. For one to one feedback the participants and participating organizations are invited to attend annual IIRS User Interactive Meet (IUIM) at IIRS Dehradun.



Feedback session during IIRS User Interaction Meet (IUIM)-2020

## Awards of Appreciation

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1<sup>st</sup> National Symposium on Excellence in Training conducted during April 11-12, 2015 in New Delhi by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).

## About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS also conducts e-learning programme on Remote Sensing and Geoinformation Science (<https://elearning.iirs.gov.in>).

## Contact Details

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## 119<sup>th</sup> IIRS Outreach Programme



## Geospatial Technology for Climate-Smart Agriculture

July 10 – July 14, 2023



## Organised by

Agriculture & Soil Department  
Indian Institute of Remote Sensing  
Indian Space Research Organisation  
Department of Space, Govt. of India  
Dehradun  
[www.iirs.gov.in](http://www.iirs.gov.in)

## About the Course

Climate-smart agriculture (CSA) is an integrated approach to managing landscapes—cropland, livestock, forests and fisheries—that address the interlinked challenges of food security and climate change (World bank, IBRD-IDA). The food security will become more difficult with growing population of world, thus CSA is need of hour to brain-storm and implement through policy making and strategy planning. A concept of climate-smart agriculture among policy makers and stakeholders in order to support the economic growth, social capital asset and human well-being of the people and deepen the spirit of community in the Nation/ globe to build on and complement the work of other relevant regional and global institutions for the climate-smart agriculture.

In the current time, climate challenges result to variable seasonal weather; decreased productivities; increased pest-disease incidence; and reduced biodiversity of ecosystem. Therefore, intelligent technologies are essential to be applied under extreme climate challenge conditions. In recent advances in scientific domain of Earth Observation (EO) satellite data acquisition, analytics, implementation using geospatial technology at local to global scale boost the understanding of weather & climate, its dynamics, variability in relation to agriculture practice under open sky. This synthesized knowledge may help in development framework of climate-smart agriculture and its ultimately use in policy planning and implementation for the food security.

## Curriculum

The topic and schedule of each course is as follows

- Space and Geo-informatics for Climate Smart Agriculture- An Overview
- Earth Observation for Agricultural Monitoring & Food Security Assessment
- Geospatial Technology for Agro-climate Risk Assessment and Climate-Resilient Agriculture

- Geospatial Inputs for Agricultural Drought Monitoring and Vulnerability Assessment
- Crop Water, Water Stress & Irrigation Water Requirement Studies using Earth Observations and Geospatial Technology

## Target Participants

This course is designed for professionals from Central / State Govt. / Private Organizations / NGO/ students & researchers engaged in Agricultural Sciences/ Agricultural Engineering/ Environmental Science/Information Technology/Climate Change Studies/ Meteorology/Climatology/ Applications of participants have to be duly sponsored by university/institute and forwarded through coordinators from respective centres.

## Course Study Material

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through IIRS ftp link. Video lectures will also be uploaded on YouTube Channel (<http://www.youtube.com/user/edusat2004>).

## Course Fee

The Course is free of cost.

## Course Registration

- Course updates and other details will be available on URL- <http://www.iirs.gov.in/Edusat-News/>.
- To participate in this programme the interested organizations/ universities/ departments/ Institutes has to identify a coordinator at their end. The identified coordinator will register online his/her Institute as nodal center in IIRS website.
- All the participants has to register online through registration page by selecting his/her organization as nodal center.

## Course Funding & Technical Support

The programme is sponsored by Indian Space Research Organisation, Department of Space, Government of India

## Programme Reception

Programme can be received through e-class platform of IIRS-ISRO using internet connectivity. No specific hardware/software required. However, it is recommended good internet connectivity at user end. To run the programme in class room, following hardware will be required:

- Desktop computer with web camera microphone and output speakers or laptop with microphone camera and output speaker.
- Large display screen/projector/TV.

## Important links

Courses updates and other details will be available on URL – <https://www.iirs.gov.in/EDUSAT-News>

To participate in this programme the interested organisations/universities/departments/institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal centre in IIRS website

(<https://elearning.iirs.gov.in/edusatregistration/coordinator>)

All the participants have to register online through registration page by selecting his/her organization as nodal center.

<https://elearning.iirs.gov.in/edusatregistration/student>

## Award of Certificate

Working Professionals and Students: Based on 70% attendance.