

Educative Learning Program for Agriculture Executives

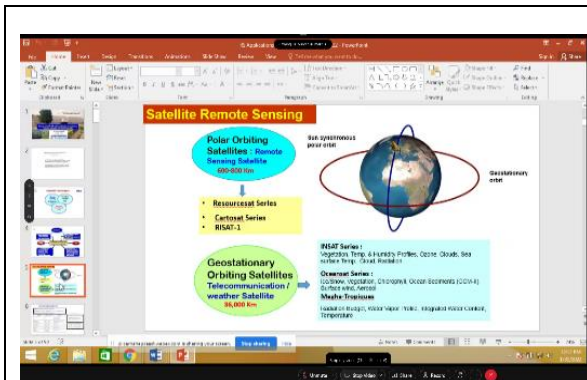
(28th Feb 2022 to 05th Mar 2022)

The 6 days “Educative Learning Program for Agriculture Executives” was organized by NAHEP CAAST JNKVV Jabalpur from 28th Feb 2022 to 05th Mar 2022 for Agriculture officers of Department of Farmer Welfare and Agriculture Development, Government of Madhya Pradesh. The program was designed to cover the fundamentals of RS and GIS and to provide participants with the skills necessary to efficiently interpret and use the data contained on various classified maps that are currently available or will become accessible in the future for various planning reasons.

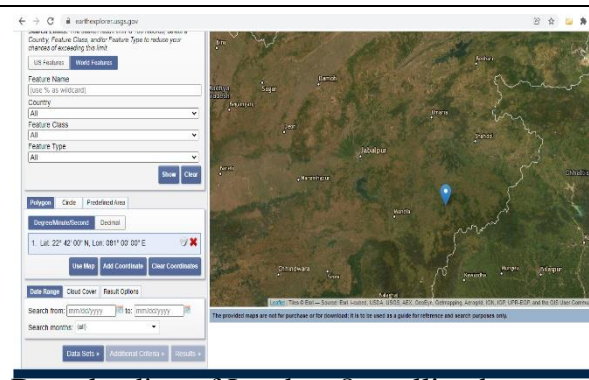
The training covered the following topics:-Concept of RS, Satellite Sensor & Resolution and Its Application in Agriculture, Introduction to GIS, Thematic Mapping, and RS applicability on planning, execution, and monitoring tasks, Groundwater potential zone maps, Lineament maps for water harvesting site selection in watersheds, Vegetation Index maps for crop yield modeling, crop condition assessment/stress assessment, crop classification, monitoring, and acreage estimation, Crop water requirements through RS & GIS, satellite data availability at open source, Collection of field data and verification of satellite data (Table 1). The training was attended by 26 agriculture officers belonging to different districts of Madhya Pradesh. (Table 2.)

Table 1: Table 1: Detailed Training schedule (28th Feb 2022 to 05th Mar 2022)

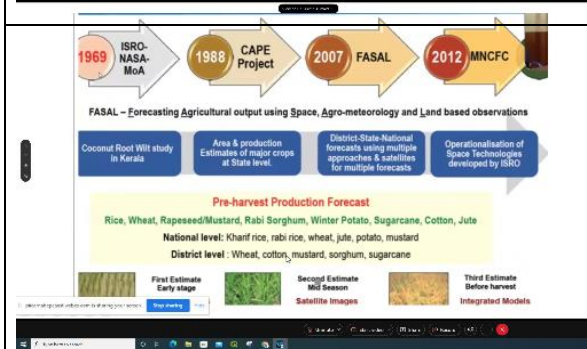
Date	Topic	Time
Day1	Concept of RS & GIS and Its application in Agriculture,	12 Noon – 2.00 pm
Day2	Classified Land use land cover maps, Classified Crop maps & Crop area identification	12 Noon – 2.00 pm
Day3	Groundwater potential zone maps, Lineament maps for Water harvesting site selection in watersheds	12 Noon – 2.00 pm
Day4	Vegetation index maps for crop yield modeling, Crop condition and stress assessment using RS & GIS	12 Noon – 2.00 pm
Day5	Crop inventory and crop resource management	12 Noon – 2.00 pm
Day6	Satellite data availability at open source, Collection of field data, and verification of satellite data	12 Noon – 2.00 pm



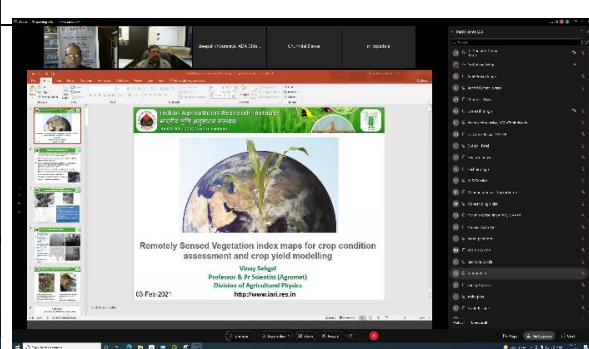
Basic of Remote sensing



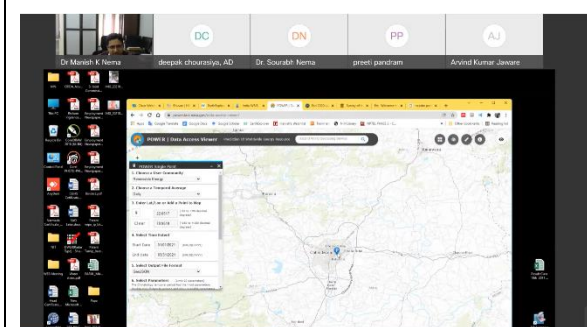
Downloading of Landsat-8 satellite dataset



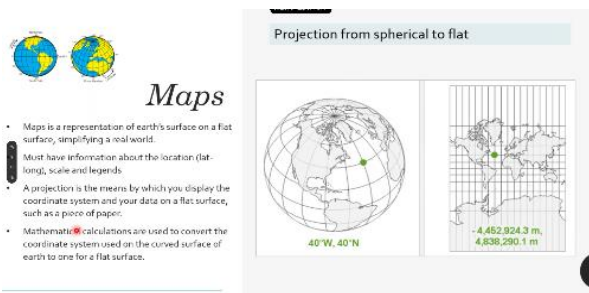
Crop forecasting portals



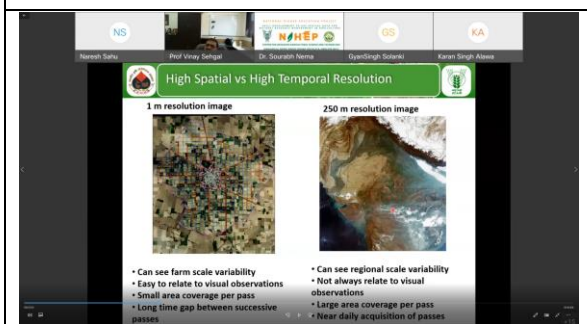
Assessment of crop condition & Crop yield



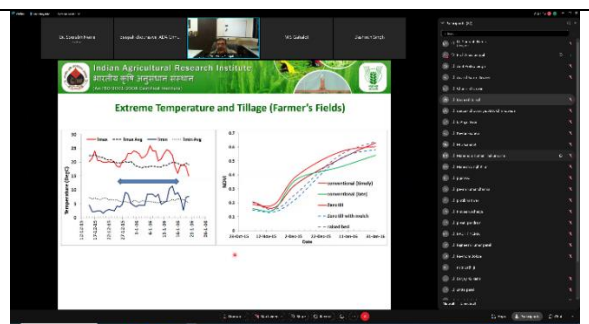
Open Data Source Availability



Coordinate system



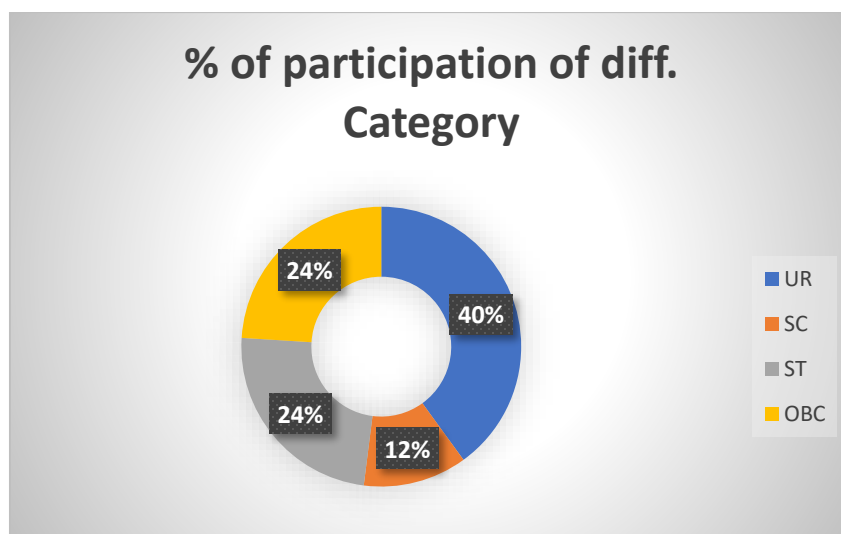
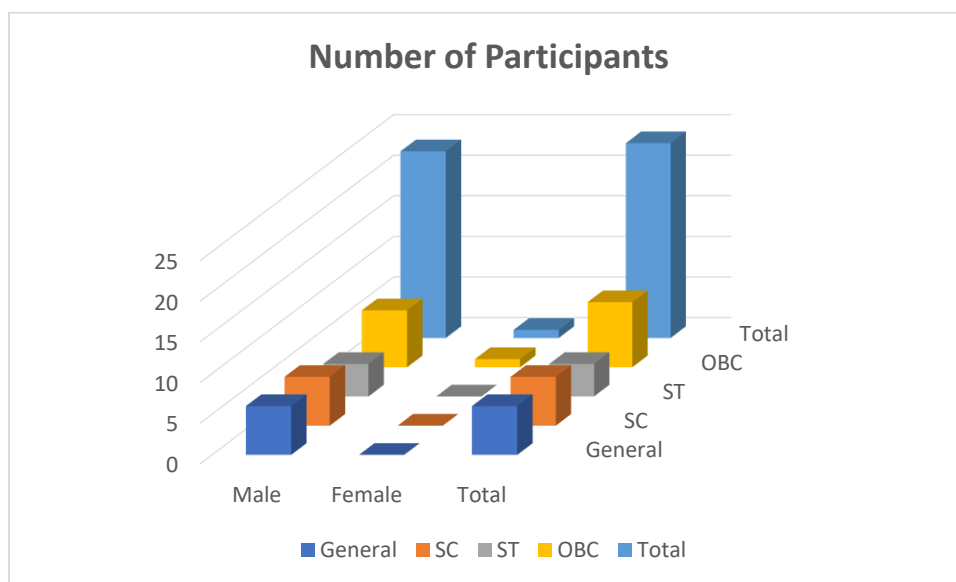
High Spatial & Temporal resolutions



Crop yield forecasting under different tillage operations

Educative Learning Program for Agriculture Executives

Number of Participation						% of participation of diff. Category			
Gender	UR	SC	ST	OBC	Total	UR	SC	ST	OBC
Male	6	6	4	7	23	26	26	17	30
Female	0	0	0	1	1	0	0	0	100
Total	6	6	4	8	24	25	25	17	33



Performance Evaluation:

To provide participants with a broad understanding and experience of RS and GIS application, the program covered a variety of critical issues related to RS application in particularly agriculture field. Additionally, various guest speakers delivered lectures during the workshop, including Dr. P. S. Tiwari (IIRS, Dehradun), Dr. V. K. Sahgal (IARI, New Delhi), and Dr. M. Nema (NIH, Roorkee). The daily attendance of 24 registered participants ranged from 14 to 24. Prior to and following the 6-Day RS & GIS educative training on RS & GIS, participants' performance was tested to determine their level of awareness and the effectiveness of the training. The average score attained by participants on the pre-training test was approximately 60%, ranging from 9 to 18 points. The post-assessment revealed an overall improvement, with participants achieving an average of 75% of marks, ranging from 12–18 marks.

Feedback from participants:

All participants were asked to respond online related to training, learning experience, knowledge before and after the training and application of RS & GIS. There were feedbacks of participants indicates the following:

- Training provides very interesting elements for those participants who are willing to learn everything related to GIS.
- The quality of the material and presentation was good.
- Great experience, interactions with scientists having expertise in Remote sensing & GIS

They learned:

- How to access the remote sensing data and used for Agricultural application.
- Different open-source data
- Different agriculture applications of RS
- A good exposure to the latest technology GIS and Remote sensing.

Table 2 Name of nominated candidates who were attended the training.

	Nominated Participants	Participants attended
1	Shri Amit Pandey	Mrs. Geete Patel
2	Shri M. L. Jatav	Shri Amit Pandey
3	Shri R. D. Tripathi	Shri Ankit Rawat
4	Shri Ankit Rawat	Shri Ashok Singh
5	Shri Pan Singh Karoriya	Shri Ashoke Kumar Sharma
6	Shri Devi Singh Verma	Shri Brijesh Pratap Singh
7	Shri R. K. Shende	Shri C. S. Patle
8	Shri Ashoke Kumar Sharma	Shri Devi Singh Verma
9	Shri Prem Chandra Kewda	Shri Dr. Vimilesh Yadav
10	Dr. Vimilesh Yadav	Shri Gyasi Lal Ahirwar
11	Shri V. R. Mujalde	Shri Kailash Pachaya
12	Shri Ashok Singh	Shri Khudiram sanodiya
13	Shri J. S. Rawat	Shri M. L. Jatav
14	Shri Gyasi Lal Ahirwar	Shri Mukesh Kumar Shakya
15	Shri Rajendra Prasad Dubey	Shri Pan singh Karoriya
16	Shri Santosh Kumar Jain	Shri Prem Chandra Kewda
17	Shri Khudiram sanodiya	Shri R. D Prajapati
18	Shri Brijesh Pratap Singh	Shri R. K. Shende
19	Shri Shiv Kumar Singh	Shri Rajendra Prasad Dubey
20	Dr. Ravikant Singh	Shri S. P. Bhardwaj
21	Shri Champalal Patil	Shri Santosh Kumar Jain
22	Shri Dinesh Shrivastava	Shri Vilas Patil
23	Shri A. K. Shakya	Shri J. S. Rawat
24	Shri shusheel Kumar Udiwal	Shi M. S. Dharve
25	Shri S. P. Bhardwaj	
26	Mrs. Geete Patel	
27	Mr. Kapil Beda	
28	Shri Deepak Kumar Gamad	

29	Shri Kailash Pachaya	
30	Shri Mukesh Kumar Shakya	
31	Shri V. D. Patidar	
32	Shri C. S. Patle	
33	Shri Vilas Patil	
34	Shi M. S. Dharve	
35	Shri R. R. Sharma	