2nd One Week Workshop

On

"Geoinformatics in Agriculture and Environment"

11–15 March 2024

Organized by:
Department of Agricultural Engineering,
Institute of Agriculture,
Visva-Bharati (A Central University),
Sriniketan, West Bengal, India
in Association with
IQAC, Visva-Bharati, Santiniketan

About the Workshop

2nd One week workshop on "Geoinformatics in Agriculture and Environment" has been contemplated to improve the skill of the participants and delegates on Geoinformatics techniques and its application in the areas of agriculture, environment, forestry, urban planning, rural development, water supply and drainage system etc. There is huge demand of new technologies in agriculture sector to reduce risk and enhance profit margin to the farmers .It is high time for professionals and students in agriculture to have basic and advanced knowledge of GIS, Remote sensing, precision agriculture technologies to attract educated mass towards agriculture. Understanding weather information, analyzing soil health card, protecting crops against emergent threats will be facilitated with knowledge of Geoinformatics. The environmental issues also need to be analyzed in a faster rate with greater accuracy. The 5-day (One week) workshop which includes software like QGIS,ARCGIS, GEE etc. will be beneficial for both the beginners and professionals in the relevant disciplines. There was a lecture on Open source data retrieval, cloud computing, AI tools.

Organizing Committee

Patron
Professor Sanjoy Kumar Mallik
Hon'ble Vice-Chancellor Visva–Bharati, Santiniketan

Co–ordinator
Dr. Kishore Chandra Swain,
Dept. of Agricultural Engineering
Palli Siksha Bhavana, Visva–Bharati, Sriniketan

Asst. Coordinator
Dr. Saran Ishika Maiti, Member, IQAC, Visva–Bharati; Dept. of Statistics, Siksha Bhavan, Visva–Bharati

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Director
Professor Arun Kumar Barik
Head, Dept. of Agricultural Engineering
& Principal, Palli Siksha Bhavana, Visva–Bharati, Sriniketan

Co–coordinator(s)
The Director, IQAC, Visva–Bharati

Dr. Lamneithem Hangshing,
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Dr. Pulak K. Patra,
Dept of Environmental Studies,
Siksha Bhavana, Visva–Bharati, Santiniketan.

The Department of Agricultural Engineering at Visva-Bharati conducted a comprehensive one-week workshop titled "Geoinformatics in Agriculture and Environment" from March 11th to March 15th, 2024. This educational event was organized in collaboration with the Internal Quality Assurance Cell (IQAC) of Visva-Bharati, Santiniketan. The proceedings commenced on March 11, 2024, with an official opening ceremony at 10:30 AM, overseen by the Vice Chancellor of the University, Prof. Sanjoy Kumar Mallick. Dr. Joydeep Mukherjee, a Principal Scientist at the Division of Agricultural Physics, Indian Agricultural Research Institute (IARI), Pusa, New Delhi, delivered the keynote address. Following the inaugural session, the attendees participated in a series of technical discussions and were also offered a one-hour guided heritage tour of the University Campus. The workshop schedule included four technical sessions each day and was structured to run from 10:00 AM to 6:00 PM daily.

The event was graced by the presence of twenty participants from various academic institutions. The diverse group of attendees comprised Assistant Professors, Scientists, Research Scholars, as well as Postgraduate and Undergraduate students. The workshop provided a platform for these participants to explore the applications of geoinformatics within the realms of agriculture and environmental studies, facilitating a rich exchange of knowledge and ideas.

Participants

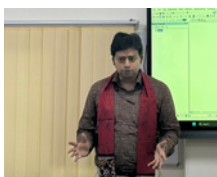| Sl. No	Name	Affiliation
1.	Shuvobrata Majumder	Institute of Life Sciences, Bhubaneshwar
2.	Bhabani Prasad Mondal	Bihar Agricultural University.
3.	Srija Das	Jamia Millia Islamia
4.	Ananya Pati	Jamia Millia Islamia
5.	Akashnil Kaibatra	Visva- Bharati
6.	Ankita Chatterjee	Visva- Bharati
7.	Pappu Majhi	Visva- Bharati
8.	Soumyesh Mandal	Visva- Bharati
9.	Shuchi Kumari	Visva- Bharati
10.	Ananya Ghosh	Visva- Bharati
11.	Rounak Mukherjee	Visva- Bharati
12.	Souvik Mandal	Visva- Bharati
13.	Sayan Bose	Visva- Bharati
14.	Lochumi Kikon	Nagaland University
15.	Imyanglula	Nagaland University
16.	Rojalin Hota	Visva- Bharati
17.	Bibek Raman Behera	Visva- Bharati
18.	Arnab Barman	Visva- Bharati
19.	Chiranjit Singha	Visva- Bharati
20.	Jay Prakash Das	Visva- Bharati

Resource Person

Dr. Joydeep Mukherjee
Principal Scientist, IARI, New Delhi

Mr. Bidhan Nanda
Sr. Business Development Executive. CSS Geospatial, Kolkata

Mr. Ayan Ghosh
GIS Engineer, CSS Geospatial, Kolkata

Prof. ManojKumar Nanda
Professor, BCKV, Mohanpur, West Bengal

Dr. Sayan Choudhary
Assistant Professor, Kalyani University, Kalyani, West Bengal

Dr. Nimai Chand Saha
Librarian, Visva-Bharati Member, IQAC, Visva-Bharati, Santiniketan

Dr. Bikash Ranjan Parida
Associate Professor , Central University of Jharkhand, Jharkhand

Key Features of the Workshop:

The workshop on "Geoinformatics in Agriculture and Environment" covered various topics, starting with the basics of Geoinformatics,including understanding maps and GIS operations, the significance of thematic maps in planning, vector and raster data types, and the essentials of scale, coordinate systems, projections, and datums. It emphasized the role of GIS in analysis, decision-making, and the composition of maps.

The application of geoinformatics in agriculture and environmental management was explored, highlighting precision farming, digital image processing for resource management, and the use of GPS, GIS, and remote sensing (RS) in crop and water resource management. The discussion extended to tackling environmental issues through case studies within the realms of agriculture and environmental studies, facilitating a rich exchange of knowledge and ideas.

Further, the workshop explored into practical applications and tools in image processing using QGIS and Arc GIS/ERDAS Imagine, covering image formats, input, layout, NDVI calculations, change detection, classification, and geo-processing operations. It also introduced participants to machine learning and deep learning's potential in agriculture, including model types, cloud computing, and programming. Finally, the session concluded with insights into artificial intelligence tools beneficial for research work, emphasizing the importance of cloud computing and open-source data retrieval for research publication.

Closing Ceremony & Certificate Distribution

The workshop wrapped up on March 15, 2024, with an official ceremony at 4:30 PM led by Director IQAC, Professor Adinath Majee, and concluded with the distribution of certificates.

Participants with Resource Person

Classroom

GPS MAP CAMERA
MM97+Q52 Burdwan Division West Bengal
Latitude 23.6693401   Longitude 87.6633108
Date: 11 Mar 2024   Time: 11:08 AM

Breakfast / Lunch