Online International Training Programme on

RECENT ADVANCES IN AGRICULTURAL SURVEYS: REMOTE SENSING AND GIS APPLICATIONS

AFRICAN-ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)
Recent Advances in Agricultural Surveys: Remote Sensing and GIS Applications

Sponsoring Organization

African Asian Rural Development Organization (AARDO)  
(https://aardo.org/)

Training Institute (Venue)

ICAR-Indian Agricultural Statistical Research Institute (IASRI),  
New Delhi, India  
(https://iasri.icar.gov.in/)

Duration

Session Timing

(Indian Standard Time)  
(Please Check Local Time Zone)

Deadline for Application

Background

Systematic and comprehensive compilation of statistics is necessary for planned development of agriculture, forests, grasslands, rural settlements, urban spreads, industries and other land-based programmes and activities. The recent advances in the field of space and information technology like Remote Sensing (RS), Geographic Information System (GIS) and Global Positioning System (GPS) have considerably increased the potential to study the geographical realities and handle spatial data. The remote sensing techniques gained popularity because of its extensive coverage of geographical area. GIS, capable of handling geographical data through its geographical coordinates, obtained from various sources like Census, Survey and Remote Sensing is one of the important tool having capabilities of integrating different kinds of data and assisting in the spatial analysis of data for geographical characters. Remote sensing and GIS techniques are being effectively utilized in India since several decades for generating agricultural statistics specially estimation of crop acreage and yield, yield forecasting etc. Besides, it also provides spatial frame work for planning and conducting large scale agricultural surveys. ICAR-IASRI is engaged in research on various aspects of Remote Sensing, GIS and agricultural surveys which includes crop acreage estimation, crop yield estimation, spatial stratification, spatial sampling, spatial modelling, various classification techniques, integrated surveys for hilly regions and Web GIS.
COURSE OBJECTIVES

- to familiarize participants with basic concepts of remote sensing and GIS;
- to acquaint participants with use of GIS and remote sensing software package;
- to expose participants to the applications of remote sensing and GIS in agricultural surveys;
- to impart knowledge on institutional mechanisms for efficient utilization of these technologies for optimum results through case analysis

MAIN COURSE CONTENTS

- Planning and Organizational Aspects of Sample Surveys;
- Estimation Using Crop Cutting Experiments Technique;
- National Agricultural Statistical System in India vis-à-vis other African-Asian countries;
- Principles of Remote Sensing and Digital Image Processing;
- Overview of Geographic Information System (GIS), Data Models and Spatial Data Analysis;
- Indian Space Programme;
- Knowledge based Resources Information Systems Hub for Innovations in Agriculture (KRISHI)- Geo Portal of ICAR;
- Applications of Remote Sensing and GIS in Indian Agriculture and Agricultural Surveys;
- National Program on Crop Acreage and Production Estimation Using Remote Sensing: FASAL and CHAMAN;
- Remote Sensing Based Crop Growth Monitoring System;
- Hyper Spectral Remote Sensing & its Application in Agriculture;
- Application of Microwave Remote Sensing in Agriculture;
- Drone Remote Sensing for Smart Agriculture,
- Big Data Analytics for Agriculture; and
- Indian Earth Observation (EO) Programme to Support Agricultural Monitoring;

PROGRAMME METHODOLOGY

The programme is highly participatory and interactive and ensures maximum involvement of the participants. Important technologies and modules will be presented through lecture cum discussions, case presentations, and brainstorming through virtual platform.

MEDIUM OF COMMUNICATION

The medium of communication is English only. The participants are expected to have a good working knowledge of English.

TARGET AUDIENCE

The training programme will be attended by mid and senior-level officials working in the relevant field in their respective countries. Resource persons from the host Institute (IASRI) and other institutions in India having rich experiences on the subject will be invited to share their experiences and expertise with the participants.
ESSENTIAL QUALIFICATIONS

⇒ Bachelor Degree in Agricultural Sciences/GIS and Remote Sensing or its equivalent with a considerable working experience in planning and executing the programmes related to subject of the training;
⇒ Must be subject specialist;
⇒ Proficiency in English; and
⇒ Must be conversant with ICT and willing to undertake online training course.

HOW TO APPLY

Step 1
Log on to the link:
http://aardo.org/formDD.php

Step 2
Fill up the details and submit. Take print out of the filled in application form.

Step 3
Applicants are required to sign their applications and send them along with the recommendation letter of the Nodal Ministry of AARDO to our email: researchdivision_aardo2013@yahoo.com

SELECTION OF PARTICIPANTS

The participants of the training programme will be selected by AARDO and IASRI. Thereafter, selected participants will be provided with login ID and password to access the programme.

CERTIFICATE

E-Certificate authenticated with signature of H.E. Secretary-General, AARDO and IASRI authorities will be provided after the successful completion of the training programme.

ABOUT THE HOST INSTITUTE (IASRI)

ICAR-Indian Agricultural Statistics Research Institute (IASRI) is a pioneer institute of Indian Council of Agricultural Research (ICAR) undertaking research, teaching and training in Agricultural Statistics, Computer Application and Bioinformatics. ICAR-IASRI has been mainly responsible for conducting research in Agricultural Statistics and Informatics to bridge the gaps in the existing knowledge. It has also been providing education/ training in Agricultural Statistics and Informatics to
develop trained human resources in the country. The research and education are used for improving the quality and meeting the challenges of agricultural research in emerging areas.

The Institute occupies a place of pride in the National Agricultural Statistics System (NASS) and has made several important contributions in strengthening NASS, which has a direct impact on the national policies. The Institute has contributed significantly by providing excellent human resources to NARES in India in the disciplines of Agricultural Statistics and Informatics for meeting the challenges of Agricultural Research in the emerging areas. Conducting postgraduate teaching and in-service courses in Agricultural Statistics, Computer Application and Bioinformatics for human resource development are also core activities. For more information, its website (https://iasri.icar.gov.in/) could be visited.

**IMPORTANT NOTES**

- Application without recommendation of the AARDO’s Nodal Ministry/Center of Excellence in participant’s country will not be considered.
- Application, duly completed, must reach the AARDO Secretariat before or on the closing date, 25 February 2021.
- Due to limitation of number of participants, only selected candidates would be intimated through the Nodal Ministry and AARDO’s Centres of Excellence.
- Selected candidates will be required to actively attend all the live sessions of e-training programme to be eligible to obtain e-certificates.

**CONTACT**

H.E. the Secretary General, AARDO

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