Boarding, Lodging and TA

The selected participants will be provided free boarding and lodging in the institute guest house. Food expenses will be borne by the organizers as per ICAR norms. All participants will be reimbursed to and fro travel fare for the journey to Bhopal by rail or bus by shortest route. The payment will be made as per the entitled class of travel, but restricted to the maximum of AC-II tier train fare/bus fare (as per actuals). Local participants are not eligible for boarding and lodging, however, they will be provided lunch and inter-session tea. Participants are requested tonot to bring family members with them, as the institute haslimited hostel facilities. No DA will be paid to participants.

Location and climate

Bhopal, a sprawling and picturesque capital city of Madhya Pradesh, is well connected by air, rail and roadways to different parts of country. Participants travelling by train/bus should alight at Bhopal railway station/Bhopal bus stand from where taxi/ auto-rickshaws can be hired to reach ICAR-IISS Campus located near Karond Chowraha on Berasia Road at a distance of 8 km from railway station and 7.5 km from Bus Stand. The Raja Bhoj Bhopal airport is located at a distance of 10 km from the campus. The participants are advised to make their return journey reservations in advance before leaving for Bhopal. The climate is pleasant during the month of February, moderate (~20°C) during day time and cool in the night (~10°C).

Important Dates

1. **Last date for receipt of application: 25-01-2023**
2. **Intimation of selection of participants: 31-01-2023**

All correspondence should be addressed to

Dr. A K Vishwakarma
Principal Scientist & Course Director
ICAR-Indian Institute of Soil Science
Nabi Bagh, Berasia Road, Bhopal-462 038, Madhya Pradesh
Mobile: 08989097364
Email : Anand.Vishwakarma@icar.gov.in or
akvish16@gmail.com
or
The Director
ICAR-Indian Institute of Soil Science
Nabi Bagh, Berasia Road, Bhopal-462 038, Madhya Pradesh.
Phone : 0755-2730946, 2730970 (O)
Fax : 0755-2733310 https://iiss.icar.gov.in

Registration form

APPLICATION FORM FOR PARTICIPATION IN SHORT COURSE TRAINING

Organizing Institute: ICAR-Indian Institute of Soil Science, Bhopal

1. Full name (In block letters) :
2. Designation :
3. Present employer and address :
4. Address to which reply should be sent :
   Postal address with PIN :
   Phone/ Mobile No. :
   Fax No. :
   E-mail :
5. Permanent address :
6. Date of Birth :
7. Sex (Male/Female) :
8. Marital status (Married/Unmarried) :
9. Teaching/research/professional experience (mention post held during last 5 years and number of publication) :
10. Field of specialization and current area of research / teaching :
11. Mention if you have participatedin any Research seminar, Summer/Winter School/Short Course, etc. during the previous years under ICAR/Other organization :
12. Postal order No. ---------- dated ----------of Rs 50/- (non-refundable) in favour of ICAR unit IISS Bhopal for registration of application
13. Academic record :

Degree	Subjects	Year of passing	Class ranks, distinction etc	University/ Institution	Other information
Ph.D.					
Post Graduation					
Graduation					

Signature of the applicant

Date & Place

14. Recommendation of the Head of the Department/Institute

Signature & Seal

CERTIFICATE

It is certified that the information has been verified from the office record and is found correct.

Signature and designation of sponsoring authority

Date

Note: Application may be sent to the Course Director of the training or to the Director, ICAR-IISS, Bhopal.

ICAR SHORT COURSE

on

Integrating Precision Agriculture Tools with Conservation Agriculture for Improving Input Use Efficiency, Resource Conservation and Farmers Income.

15 - 24 February 2023

Course Director
Dr. A. K.Vishwakarma

Course Co-Directors
Dr. Pramod Jha
Dr. A.K. Biswas

Sponsored by
Agricultural Education Division
Indian Council of Agricultural Research
New Delhi-110 012

Organized by
ICAR-Indian Institute of Soil Science
Nabi Bagh, Berasia Road, Bhopal-462 038, M.P.
Phone: 0755-2730946, 2730970 (O)
Fax: 0755-2733310; Web: https://iiss.icar.gov.in

Background

The major challenges in 21st century are food security, environmental quality and soil health. Indian agriculture is under tremendous pressure to feed its burgeoning population. Extractive farm practices such as higher use of agro-chemicals and burning of crop residues are degrading soil health. Soil health, an attribute of several physical, chemical and biological processes, is showing signs of fatigue due to intensive cultivation, over-mining of nutrients by crops with lesser replenishments through organic and inorganic sources. Under such situations, there is an urgent need to adopt a soil regenerative practice such as conservation agriculture which sustains crop productivity with concomitant increase in soil health attributes. Conservation agricultural systems are gaining increased attention worldwide as a way to reduce the water footprint of crops by improving soil water infiltration, increasing soil water retention and reducing runoff and contamination of surface and ground water.

Precision agriculture is an integrated crop management system that attempts to match the kind and quantity of inputs with the actual crop needs to meet out the point-to-point variation within field by integrating the new information communication technologies with agricultural technologies to take the advantage of precision agriculture in a practical production system. Precision agriculture often has been often referred to as GPS (Global Positioning System) agriculture or variable-rate farming. Adoption of precision agriculture technologies can play a substantial role in increasing production productivity and resource conservation in all aspects of agriculture. The type of precision agriculture varies from region to region depending on available technologies, knowledge levels and mindsets of the people and tremendous opportunities exists in advancement of this science in agriculture. A number of precision agriculture technologies have shown promising results viz. use of soil and plant sensors for nutrient and water management, as well as use of satellite imagery, GIS and crop-soil simulation models for site-specific management. These technologies have been found to be crucial in attainment of appropriate management strategies in terms of efficiency and effectiveness of resource optimization which are important in supporting sustainable agricultural development under conservation agriculture. Precision agriculture systems are dynamic management systems evolved to assist in increased number of 'correct' decisions per unit area of land per unit time with increase in quantity and/or quality of production and/or the environment along with more efficient use of inputs and to assist researchers and farmers to solve a wide spectrum of problems in conservation agriculture by integrating wide range of precision agriculture tools that users need to master to get maximum benefit.

ICAR-Indian Institute of Soil Science has pioneered in various aspects of conservation agriculture research and its impact on soil carbon and climate change mitigation. It has an excellent faculty to train researchers on soil carbon sequestration and stabilization for mitigating the adverse effect of climate change. The laboratories of the institute are well equipped with modern instruments. The scientific and technical staff is experienced with state-of-the-art analytical methods and techniques.

Objectives

1. Concepts and methods in conservation agriculture.
2. Crop management practices under CA.
3. Potential of Soil carbon sequestration and mitigation of climate change.
4. Precision agriculture tools and their integration with CA practices.
5. Practical exposure to CA and precision agriculture tools and use of simulation models.

Course Content

- Relevance of conservation agriculture research
- Resource conservation and soil organic carbon buildup under CA.
- Best management practices for crops under CA
- Precision agriculture tools
- Integration of precision agriculture tools with CA for sustainability.
- Conservation agriculture and carbon sequestration
- An overview of simulation modeling

Eligibility

The officers in the cadre of Scientists / Assistant Professors / Subject Matter Specialists or equivalent and above from ICAR institutes, SAUs, CAUs, Agricultural faculty of AMU, BHU, Vishwa Bharati and Nagaland University who are actively engaged in research, teaching and extension in the areas of Soil Science, Agronomy, Soil Physics, Microbiology, Environmental Sciences and other relevant Agriculture subjects are eligible to attend the short course training. The total number of participants will be restricted to 25. For speedy disbursement of selection letters, participants are requested to apply online at CBP portal of ICAR and provide email ID and FAX number.

Duration of short course

Duration of the Short Course Training is 10 days with effect from **15 - 24 February 2023** (both days inclusive). The participants are expected to arrive at ICAR-IISS, Bhopal latest by the evening of 14th February and can leave after17:00 hrs on 24th February 2023.

Application and Registration

Participants are requested to apply online at CBP vortal (https://cbp.icar.gov.in/)

A. Create account on CBP vortal, if your account is not created on CBP vortal:

1. Click on 'Create New Account' link on home page.
2. Fill the form.
3. Click on 'Create Account' button. User will get the message 'Successfully created account' after account is created on the CBP vortal.

B. Login on CBP vortal:

1. Enter the 'User Id' and 'Password' in the candidate login window on the home page.
2. Click on 'Login' button.

C. Participate in training programme:

1. After login, click on 'Participate in Training' button/menu, list of trainings will be displayed.
2. Click on 'Training Title - "Integrating precision agriculture tools with conservation agriculture for improving input use efficiency, resource conservation and farmers income".
3. Click on 'Apply' link.
4. A form will open with all your personal details filled in. In case, user want to change any of these information then click on 'Edit' button and do the desired changes.
5. Click on 'Save' button to save the information then click on 'Next' button.
6. Fill the 'Academic details' and 'Experience details' information. Click on 'Next' button.
7. Fill 'Draft/Postal' order for Rs. 50/- drawn in favour of ICAR unit IISS Bhopal and click on 'Next' button.
8. Advance Application form will be generated in systemand click on 'print' link. Submit this print out copy in your office for approval of competent authority. Click on 'Submit' button, advance copy will be submitted to course director.
9. After approval from competent authority, upload the scanned copy of duly approved application form andclick on 'Next' button.
10. Click on 'Upload Approved Application File' button to upload signed 'Advance Application form' (Approved Application Form) in pdf/ doc/ jpg/ jpeg/ docx and click on 'Submit' button for final submission.

Additionally, interested candidates may send their applications in the prescribed format duly nominated / forwarded by the competent authority to Dr. A K Vishwakarma, Course Director, ICAR- Short Course Training or Director, ICAR-IISS, Bhopal.