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 to not to bring family members with them, as the institute has limited 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 / Rani Kamalapati 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 8-10 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-March, moderate (~25°C) during day time and cool in the night (~15°C).

Important Dates

- 1. Last date for receipt of application: 05-01-2025
- 2. Intimation of selection of participants: 10-01-2025

All correspondence should be addressed to

Dr. Bharat Prakash MeenaSenior Scientist & Course Director

ICAR-Indian Institute of Soil Science

Nabi Bagh, Berasia Road, Bhopal-462 038, Madhya Pradesh Mobile: 09981136727

Email: bharatmeena24@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 WINTER SCHOOL

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)
- Teaching/research/professional experience (mention post held during last 5 years and number of publication)
- Field of specialization and current area of research/ teaching
- 11. Mention if you have participated in 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

Date

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

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

WINTER SCHOOL

on

Recent advances in conservation agriculture for regenerating soil health and climate change mitigation

27 February - 19 March 2025



Course Director
Dr. Bharat Prakash Meena

Course Co-Directors

Dr. Pramod Jha Dr. S.K. Behera

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 (0)
Fax: 0755-2733310; Web: https://iiss.icar.gov.in



Background

Increase in food production in India is one of the greatest achievements of the second half of the 20th century but with substantial impact on natural resource base. The negative effect of faulty agricultural production practices on ecosystem is the major constraint in achieving food and nutritional security, environmental sustainability and societal well-being in 21st century. Indian agriculture is under tremendous pressure to feed its burgeoning population. Moreover, India faces a critical imbalance in its natural resource base with about 18% (human) and 15% (livestock population) of the world being supported only on 2.4% (geographical area), 1.5% (forest and pasture lands) and 4.2% (water resources). A serious threat is being predicted in meeting the food, fibre, fuel and fodder requirements of the growing population due to climate change effects. In this context, the Sustainable Development Goals (SDGs) provide clear guiding principles and targets to encourage sustainable food production under the global theme of eradicating poverty. Therefore, there is a need to adopt soil regenerative practices that can improve resource (water, labour and energy) use efficiency by advanced crop management technologies while maintaining the natural resource base. Conservation agriculture (CA) is one of the viable options for regenerating soil health and climate change mitigation for improvement in soil health and crop productivity. It is designed with use of three linked principles, viz., (i) providing permanent soil cover to mitigate soil erosion and to improve soil fertility and soil functions, (ii) minimum mechanical soil disturbance i.e. reduced tillage or Zero tillage and direct seeding (iii) diversified crop rotations. These principles are very specific to prevailing agro-climatic conditions, bio-physical and socio-economic conditions of the farmers. CA-based management techniques have proved the potential to boost productivity at lower costs, reduce environmental impact, enhance concurrent use of organics (to avoid residue burning), and encourage the timely sowing of winter crops. CA leads to improvement in water infiltration, enhanced ground water storage, reduced soil erosion, improved soil surface aggregates, and reduced soil compaction through promotion of biological tillage, enrichment in soil organic carbon (SOC), moderated soil temperatures, and enhanced the microbial diversity and weed suppression besides mitigation of raising concentration of CO₂ in atmosphere. CA also helps in reducing costs of production, saves time, increases yield through timely planting, reduces diseases and pests through stimulation of biological diversity, and reduces greenhouse gas emissions.

It also reducing the water footprint of crops by improving soil water infiltration, increasing soil water retention and reducing runoff and contamination of surface and ground water. 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 conservation agriculture, 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

- To apprise concepts and methods in conservation agriculture.
- 2. To impart knowledge and skills in critical aspects of conservation agriculture
- 3. To brief potential of soil carbon sequestration and climate change mitigation under the practices of conservation Agriculture.

Course Content

- Relevance of conservation agriculture research
- Resource conservation and soil organic carbon buildup under CA.
- Management practices for crops under CA
- Recent advance in CA for input use efficiency
- Conservation agriculture and carbon sequestration
- Advance engineering approaches for implementing CA
- Carbon footprint and energy budgeting for life cycle assessment under CA
- Practical exposure to conservation agriculture tools and use of simulation models.

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 Winter School. 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 Winter School

Duration of the Winter School is 21 days with effect from **27 February-19March 2025** (both days inclusive). The participants are expected to arrive at ICAR-IISS, Bhopal latest by the evening of 26th February and can leave after 17:00 hrs on 19th March 2025.

Application and Registration

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

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

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

B. Login on CBP Portal:

- 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:

- After login, click on 'Participate in Training' button/menu, list of trainings will be displayed.
- 2. Click on 'Training Title "Recent advances in conservation agriculture for regenerating soil health and climate change mitigation".
- 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.
- Click on 'Save' button to save the information then click on 'Next' button.
- 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.
- 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.
- After approval from competent authority, upload the scanned copy of duly approved application form and click on 'Next' button.
- 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. Bharat Prakash Meena**, Course Director, ICAR- Winter School or Director, ICAR-IISS, Bhopal.