



INFORMATION BROCHURE



ICAR SUMMER/WINTER SCHOOL TRAINING PROGRAMME ON

Conservation agriculture for efficient resource use and climate-resilient farming (15 February-07 March, 2022)

Course Director

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Background

Providing nutritious food to ever-burgeoning population through increased foodgrains production remains a challenge even after almost 50 years of the Green Revolution. The key issue of Indian agriculture is to sustain crop productivity at higher level under changing climate, for which maintaining soil health is indispensable. Intensive tillage for soil pulverization, removal of crop residue, and exhaustive cropping cycle followed under conventional tillage (CT) systems have led to a host of second generation problems in agriculture such as inefficient use of natural and man-made resource bases/ inputs, and declining factor productivity.

Conservation agriculture (CA), involving three principles such as minimum soil disturbance, permanent soil cover through crop residues or cover crops, and diversified crop rotation using a legume is a paradigm shift from conventional agriculture. As described by FAO (<http://www.fao.org/ag/ca>), this is a concept for resource-saving agricultural crop production, which is based on enhancing natural and biological processes above and below the ground. CA can conserve natural resource bases and lead to higher agricultural productivity and resource-use efficiency through improving soil health, carbon sequestration, and adaptation and mitigation of climate change effects. However, the adoption of CA in India is less and its large-scale adoption needs policy interventions, awareness and strong scientists-stakeholders linkage. There are needs of sound capacity building programme among the farmers and adoptive research on CA.

The three principles of CA can be met through the adoption of various need-based practices like laser land levelling, zero/ minimum tillage, strip tillage, bed planting, crop residue management, inclusion of legume crops etc. These energy-efficient and cost-effective system-based resource conservation technologies (RCTs) can play vital roles for improving system productivity, profitability, soil health, and environmental quality, and ultimately sustaining intensive cropping systems.



Objectives

Adoption of conservation agriculture (CA) for enhancing resource use efficiency and crop productivity is the need of the hour as a powerful tool for management of natural resources and to achieve sustainability in agriculture. The objectives of this training programme are : (i) to provide advanced training to the scientists of ICAR/ SAUs/ CAUs and improve their skills and capacity towards adoption of CA, (ii) to provide exposure on location-specific CA practices for enhancing productivity and profitability, (iii) to show the trainees live demonstrations/ experiments on CA on improved resource-use efficiency, and (iv) to provide an opportunity to discuss and exchange ideas/ share knowledge between the academics and learned experts/ resource persons, who have made notable contributions in this area.



Organizing by
DIVISION OF AGRONOMY
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Course Content

The transition from conventional system to conservation system requires some site-specific alterations in sowing methodologies, nutrient, water, pest and disease management. Thus, to advocate a region-specific CA package addressing productivity enhancement and soil health sustainability must be developed by the scientists and popularized among the stakeholders. Through this course, the attempts would be made to acquaint the participants with the latest issues and recent innovations in CA. This course would offer the theory and practical oriented understanding of the technologies for CA. This will help the participants to understand management strategies and interventions of the most critical input for better execution of CA principles for judicious resource utilization. The course is designed in a way that it would be immensely useful. Its broadly covers following topics: (i) Importance, concept, definition, procedures and methodology for conservation agriculture, (ii) CA practices in predominant cropping systems in India, (iii) Economic, input uses and energy analysis of different CA systems, (iv) Carbon sequestration and mitigation of climate change effects, (v) Integrated weed management strategies. The training is designed with an aim to provide theoretical as well as practical experiences in the ratio of 60:40, respectively. The trainees will be exposed to field demonstration and experiments on conservation agriculture.

Duration and venue

This 21-day summer/winter school will be conducted during **15 February - 07 March, 2022**. The venue will be Division of Agronomy, ICAR-Indian Agricultural Research Institute, New

Eligibility

The scientific staff of ICAR institutes/ SAUs/ CAUs/ Agricultural faculty of AMU, BHU, Vishwa Bharti and Nagaland University in the cadre of Assistant Professors or equivalent and above are eligible for participation. All the applications must route through proper channel. The total number of participants will be restricted to 25.

Travel, Boarding and lodging

The boarding, lodging, and TA expenses of the selected participants will be met from the funds provided by the ICAR as per norms and operational guidelines for organization of Summer/Winter School training courses. Participants will be paid for to-and-fro journey, restricted to AC-II tier train fare or bus or any other means of transport in vogue on production of actual travel documents. TA may be paid for the shortest route from the place of duty to the summer/winter school location and back. The participants will be provided shared accommodation in the Sindhu /other guest house of the Institute.

About IARI

Indian Agricultural Research Institute, popularly known as 'Pusa Institute', is the country's premier institution for research and higher education in the field of agricultural sciences. The primary mission of the Institute is to explore new frontiers of science and knowledge, and develop quality human resources to provide leadership to the country in technology development and policy guidance. The Institute conducts basic and strategic research, serves as a centre for academic excellence, and provides national leadership in agricultural research, education and extension through development of new concepts, hypotheses and technologies.

How to apply

Interested candidates can apply for ICAR Summer/Winter School training programme directly through **Capacity Building Programme' (CBP) vortal** (<https://cbp.icar.gov.in/applyDetails.aspx>) as follows:

- Create account on CBP vortal.
- Login on CBP Vortal.
- After login, click on 'Participate in Training' button/ menu, list of trainings will be displayed.
- Click on any 'Training Title' to view the details of training program.
- To apply in training program, click on 'Apply' link.
- A form will be opened with all your personal details filled in.
- Click on 'Save' button to save the information and then click on 'Next' button.
- Fill the 'Academic details' and 'Experience details' information. Click on 'Next' button.
- Advance Application form will be generated in system.
- Take printout of this form by click on 'print' link. Submit this copy in your office for approval of competent authorities.
- Click on 'Submit' button, advance copy will be submitted to Course Director
- After approval from competent authorities, scan the proforma, and upload scanned copy of approved application form. Click on 'Participate in Training' menu. List of training programs will be displayed. Click on 'upload' link and upload the scanned copy of the approved application form in pdf/doc/jpg/jpeg/docx.
- Click on 'Submit' button for final submission. Successfully applied in training program' message will be shown.
- The selected participants will have to pay Rs. 50/- as registration fee at the time of their registration in the summer/winter school.
- COVID-19 Protocol (as per MHA guideline, Govt. of India and State government) must be followed during the summer/winter school.

Important Dates

- Last date of receipt of application: 10 January, 2022
- Intimation of selection to participants: 15 January, 2022
- Confirmation of participation by candidates: 20th January, 2022

Correspondence should be directed to

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