



INFORMATION BROCHURE

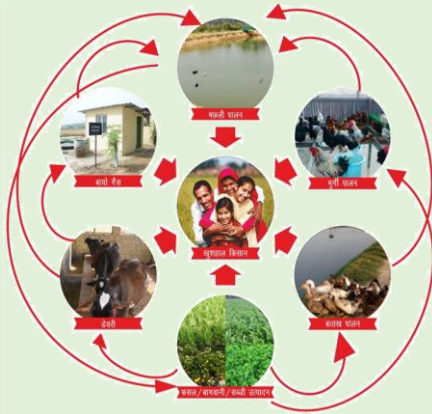


ICAR-Summer/Winter School Training Programme

on

“Integrated Farming System and Crop Diversification: An Approach Towards Doubling Farmer’s Income”

(14 February - 6 March 2023)



Sponsored by

Indian Council of Agricultural Research
New Delhi

Course Director

Dr. Rajiv Kumar Singh, Principal Scientist

Course Coordinators

Dr. Raj Singh, Head and Pri. Scientist	Dr. Kapila Shekhawat Senior Scientist
Dr. P K. Upadhyay Scientist	Dr. Subhash Babu Senior Scientist

Organized by

Division of Agronomy
ICAR-Indian Agricultural Research Institute
New Delhi-110 012

Background

Climate change, shrinking natural resources, and declining factor productivity threaten the profitability of Indian agriculture. Despite the high total arable land (156.0 M ha) per capita, land holding in India is very low at the global scale. Small and marginal farmers comprise the major land holding and represent > 86% of Indian farm families. But the livelihood of small and marginal farmers is threatened due to poor crop productivity and profitability. Contemporary agricultural technologies are not able to produce enough food to sustain the farm family. Hence, scientists and policy planners need to search for a circular economy based productive and environmentally robust agro-technologies, which can cater to the farmer's needs without compromising environmental health.

Agriculture has the onus of providing household food and nutritional security to the billion-plus population. A paradigm shift in agricultural research through integrating locally available farm resources along with environmental restoration is essential to address multipronged issues faced by Indian agriculture. The farming systems approach to agricultural research and development efforts will accelerate agricultural growth and will provide an opportunity to leverage poverty-prone rural India into a prosperous India.

Therefore, this is high time to diversify the existing production system with compatible enterprises. Complementarity in interaction among the enterprises will certainly enhance the total farm productivity and profitability. Integrated Farming Systems (IFS) and crop diversification are based on a holistic and innovative approach to improving the total farm productivity and profitability of existing systems with need-based induction of suitable components. Vertical expansion in small farms is only possible by integrating appropriate farming systems and crop diversification components requiring less space and time and ensuring periodic income to the farmers. IFS and crop diversification is considered to be powerful tool and holds the key to ensuring income, employment, livelihood, and nutritional security in a sustainable mode. The IFS includes dairy, poultry, duckery, goat rearing, and fruit trees with dominant cropping systems to judicious use of inputs and natural resources to provide regular income. employment to

The IFS and crop diversification are considered as an approach to meet the multiple objectives of poverty reduction, food security, competitiveness, and sustainability of small and marginal farmers. The approach aims at increasing income and employment by integrating various farm enterprises and in-situ farm waste recycling. Above all, the IFS and crop diversification are a practical way forward for agriculture that will benefit society, not just those who practice it. The significance of the IFS and crop diversification approach is supportive in enhancing productivity to meet the food, feed, fuel, and fiber requirement of the ever-increasing population. However, IFS and crop diversification will be required to be tailor-made and designed in such a manner that they lead to substantial improvement in energy efficiencies at the farm and help in the maximum exploitation of synergies through the adoption of close cycles. These systems also need to be socially acceptable, environment-friendly, and economically viable. Based on the consideration of small and marginal farmers' conditions, ICAR-IARI, New Delhi has designed a one ha & one-acre IFS Model for the diverse situation, which has proved potential in enhancing and doubling the farmers' income sustainably.

Training objectives of IFS

Adoption of IFS and crop diversification for enhancing resource use efficiency and crop productivity is the need of the hour as a powerful tool for livelihood and nutrition security, soil health, income, and employment and to achieve sustainability in agriculture. The objectives of this training program are: 1) Maximization of the productivity of all components like crops, dairy, fisheries, poultry, duckery, horticulture, mushroom, and beekeeping, etc. to provide steady and stable income, 2) Rejuvenation/amelioration of the system's productivity and achieve agro-ecological equilibrium, 3) Avoid build-up of insect-pests, diseases, weed population and keep them at a low level of intensity and 4) Maintenance of soil fertility.

Course Content

Concept, importance, and determinants of farming systems. Farming system research designing and resource optimization.

Concept of sustainability informing systems, efficient farming systems, natural resources-identification and management, integrated farming systems for different agro-ecosystems, interactions, and resource recycling among different enterprises, preparation of different farming system models, evaluation of different farming systems, multi-criteria decision making, use of optimization software for developing models, formation of matrix and drawing of different scenarios, the production potential of different components of farming systems, interaction and mechanism of different production factors, stability in different systems through research, crop diversification options and eco-physiological approaches to intercropping.

The course is designed in a way that would be immensely useful. Its content will include IFS practices in predominant farming systems in India. Predominant cropping systems and crop diversification options in India. The training has been designed to provide theoretical as well as practical experiences in the ratio of 60:40, respectively.

Duration and Venue

This 21-day summer/winter school will be conducted during **14 February - 6 March 2023**. The venue will be the Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi.

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 the 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 the organization of Summer/Winter School training courses. Participants will be paid for

the to-and-fro journey, restricted to AC-II tier train fare or bus or any other means of transport in vogue for the 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 houses of the Institute.

About ICAR-IARI

ICAR-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 center for academic excellence, and provides national leadership in agricultural research, education, and extension through the development of new concepts, hypotheses, and technologies.

How to apply

Interested candidates can apply for ICAR Summer/Winter School training program directly through Capacity Building Programme (CBP) Portal (<https://cbp.icar.gov.in/applyDetails.aspx>) as follows: Create an account on the CBP portal.

- Login on the CBP portal
- After login, click on the 'Participate in Training' button/ menu, list of training will be displayed
- Click on any 'Training Title' to view the details of the training program
- To apply for the training program, click on the 'Apply' link
- A form will be opened with all your personal details filled in
- Click on the 'Save' button to save the information and then click on the 'Next' button
- Fill in the 'Academic details' and 'Experience details' information. Click on the 'Next' button.
- The advance Application form will be generated in the system.
- Take a printout of this form by clicking on the 'print' link. Submit this copy in your office for approval of competent authorities

- Click on the 'Submit' button, an advance copy will be submitted to Course Director
- After approval from competent authorities, scan the proforma, and upload a scanned copy of the approved application form. Click on the 'Participate in Training' menu. A list of training programs will be displayed. Click on the 'upload' link and upload the scanned copy of the approved application form in pdf/doc/jpg/ jpeg/docx.
- Click on the 'Submit' button for the final submission. Successfully applied in training program' message will be shown.
- The selected participants will have to pay Rs. 50/- as a registration fee at the time of their registration in the summer/winter school.
- COVID-19 Protocol (as per MHA guidelines, Govt. of India and State government) must be followed during the summer/winter school

Important Dates

- Last date of receipt of application: 20 December 2022
- Confirmation of participation by candidates: 30 December 2022
- Intimation of selection to participants: 15 January 2023

Correspondence should be directed to

Dr. Rajiv Kumar Singh, Cell 91-7042412069
Email: rajivsingh@iari.res.in

For more information, please contact

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Dr. Subhash Babu, Cell 8414876512,
Email: subhiari@gmail.com

Winter School

On

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APPLICATION FORM

1. Name:

2. Designation:

3. Present employer and address:

4. Correspondence address:

E-mail:

Mobile:

5. Date of birth:

6. Sex: Male/Female

7. Work experience: () years

8. Educational qualifications:

Date:

Place:

Signature of the applicant

Recommendation of the Forwarding Authority

Date:

Signature

Name & Designation