ICAR-SPONSORED WINTER SCHOOL

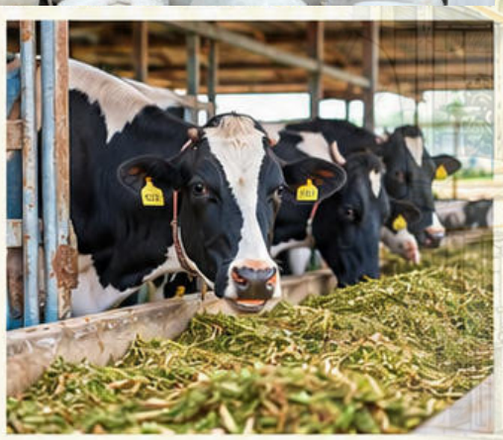
Feed, Fodder, Fuel: Maize-based Solution for Healthy Livestock and Indigenous Energy

A 21-days Intensive Learning Programme

05-25 JANUARY 2027







भाकृअनुप
ICAR

Funded by:
ICAR (Agricultural Education Division)

Organized by
ICAR-Indian Institute of Maize Research (ICAR-IIMR), Ludhiana

Venue: ICAR-IIMR, Village Chahar, Near Food Park, Ladhowal, Ludhiana–141008, Punjab



About ICAR-IIMR, Ludhiana

The ICAR–Indian Institute of Maize Research (ICAR-IIMR), Ludhiana, under the Indian Council of Agricultural Research, is the premier national institute dedicated to maize research in India. The Institute undertakes multidisciplinary research to enhance maize productivity, profitability, quality and competitiveness while promoting its diverse applications in food, feed, fodder and industrial sectors. Its mandate encompasses crop improvement, production, protection, post-harvest management, value addition, technology development and transfer, capacity building and national research coordination. Through its extensive research network and collaborations with universities, research organizations, industry and farming communities, ICAR-IIMR contributes to developing climate-resilient and resource-efficient maize-based technologies. The Institute's vision emphasizes expanding food, feed and industrial applications of maize for wealth and employment generation.

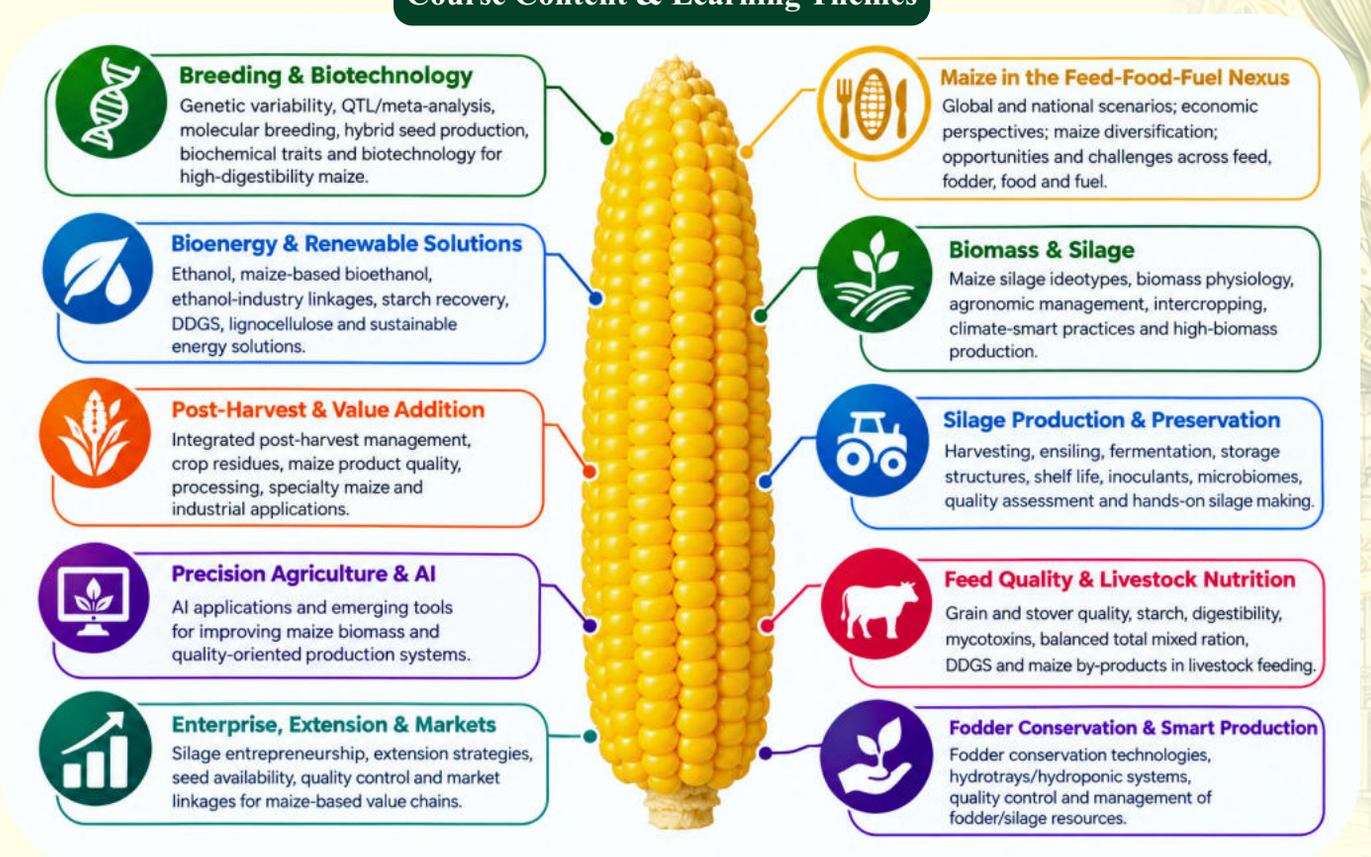
Course Background

Maize is emerging as a strategic multipurpose crop that connects food, feed, fodder, livestock, industry and energy. Its high biomass productivity, nutritional diversity, adaptability and processing potential offer significant opportunities to address emerging challenges in Indian agriculture. The theme “Feed, Fodder, Fuel: Maize-based Solutions for Healthy Livestock and Indigenous Energy” focuses on the integrated Feed–Fodder–Fuel nexus, positioning maize as a key resource for a sustainable and circular agricultural bioeconomy.The livestock sector faces challenges arising from seasonal fodder scarcity, rising feed costs, declining crop-residue quality and climate variability. Maize offers sustainable solutions through high-biomass fodder, nutritious silage, grain, stover, specialty maize and biofortified maize. The programme covers the complete continuum, from genotype and ideotype development, biomass production and climate-smart agronomy to harvesting, silage making, preservation, quality assessment, storage, feed formulation and livestock utilization. It also highlights emerging technologies, including microbial inoculants, silage microbiomes, AI- and sensor-based monitoring, hydroponic fodder production and advanced quality-control methods. The Fuel dimension extends maize utilization beyond livestock nutrition to renewable energy and industrial applications. Maize-based bioethanol, the use of distillers dried grains with solubles (DDGS) in livestock feeding, valorization of maize biomass and lignocellulosic residues, and sustainable residue management offer opportunities for value addition, resource recycling and indigenous energy production. By integrating crop improvement, livestock nutrition, processing industries and bioenergy, the programme promotes efficient resource utilization, reduced agricultural waste, enhanced farmer income and sustainable rural livelihoods.

Programme objectives

- Strengthen knowledge of maize-based feed, fodder, silage and bioenergy systems.
- Promote improved maize production, biomass management and silage practices for livestock nutrition and fodder security.
- Build practical understanding of silage harvesting, preservation, quality assessment, storage and feeding.
- Introduce breeding, biochemical, molecular and biotechnological approaches for high-biomass, high-quality and high-digestibility maize.
- Understand maize-based bioethanol, DDGS, maize by-products and lignocellulose pathways for indigenous energy.
- Develop capacity for value-chain development, entrepreneurship, extension and market linkages.

Course Content & Learning Themes



Course Director



Dr. Pardeep Kumar
Senior Scientist
(Genetics & Plant Breeding)
ICAR- Indian Institute of Maize Research,
Ludhiana - 141008



Dates to Remember

Last date for receipt of applications: November 30th 2026

Intimation to selected candidates: December 5th 2026

Eligibility criteria

Faculty and researchers in agricultural sciences and related disciplines from State Agricultural Universities/ICAR Institutes/Central/State fisheries and veterinary universities/ KVKs under NARES, not below the rank of Assistant Professor/Scientist or equivalent in the concerned subject are eligible to apply.

Selection of Participants

Maximum of 25 participants will be selected for the programme. Candidates with experience in fields pertaining to training will be given preference. Participants' nomination from the respective heads of organizations does not entail confirmed participation in the programme. The ICAR-IIMR will provide an official confirmation letter outlining the candidates' selection.

How to apply

Eligible candidates are required to register and submit their application online through the Google form : https://forms.gle/YRR5WmuZzp5LsR248

Applicants should:

- Submit the advance copy of the application through the online form
- Obtain approval from the competent authority of their organization and upload the scanned copy of the approval application through the provide via response mail.
- Send the original approved application by post to : ***ICAR-IIMR, Village Chahar, Near Food Park, Ladhowal, Ludhiana–141008, Punjab***

Important: The application will be considered for final selection only after receipt of the approved original application before the prescribed last date. For correspondence and clarifications: iimrludhianawinterschool2027@gmail.com

Boarding and Lodging

Free boarding and lodging will be provided to the participants during the training programme as per the approved ICAR norms for Winter School. The candidates are eligible for Travelling Allowance only for travelling by train to the maximum of AC II-tier (AC III-tier for Rajdhani/Duronto train/Vande Bharat) fare by the shortest route. Please note that, strictly, no accommodation in the guest house will be provided to the family members or guests of the participants.

Host City and Weather

Ludhiana popularly known as Manchester of India is on the bank of river Sutlej and is centrally located on the map of Punjab. Ludhiana is located about 100 km west from the state capital Chandigarh on NH 95 and is centrally located on National Highway-1 from New Delhi to Amritsar and is well connected to New Delhi by road, frequent train service and air. City is famous for its hosiery and textiles, bicycle and sewing machine industries.

Note: Ludhiana in January is ready to give you a chilly welcome,so pack your warmest winter clothes and get ready to enjoy the cold in style

Places to visit around



For more information, contact:

Dr. Nachiket Kotwaliwale
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Course Director

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Course Co-Directors

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APPLICATION FORM

ICAR- SPONSORED WINTER SCHOOL

Feed, Fodder, Fuel: Maize-based Solutions for Healthy Livestock and Indigenous Energy

(05–25 January 2027)

Full Name (in block letters):.....
Designation:.....
Present employer and address:.....
.....
Address to which reply should be sent (in block letters):.....
Permanent Address:.....
.....
Telephone No. (off.): (Res.):.....(Mob):.....
Fax No.:.....E-mail:.....
Date of Birth:.....Sex (Male/Female/Other):.....
Marital Status: Married/Unmarried:.....
Teaching/Research/Professional Experience (mention the post(s) held during the last 5 years and the number of publications):.....
Have you participated in any training (Summer/Winter School/Short Course, etc.) during the last 5 years under ICAR/other organizations: Yes/No
(Name of the Institute, Title of the training):.....

Academic Record:.....

Exam. passed	Subjects Main/ Subsidiary	Year of Passing	Class rank/ Distinction etc.	University/ Institution
Ph.D.				
Master's degree				
Other (specify)				

Discipline:

Level of knowledge of Statistics and Computer usage: Excellent/Good/Average

Signature of the Applicant with Date

Recommendations of the forwarding Institute

Signature of the Forwarding Authority
with Seal and Date

CERTIFICATE

It is certified that the information furnished above is correct. Travelling allowances will/will not be paid by this office.

Signature of the Sponsoring Authority
with Seal and Date