ICAR Sponsored Winter School

on

Innovations in Digital Extension and Smart Farming

(15 January - 04 February, 2026)

Sponsored by

Agricultural Education Division

Indian Council of Agricultural Research

Organized by

Joint Directorate of Extension Education

ICAR- Indian Veterinary Research Institute, Izatnagar

Bareilly-243122 (U.P.) INDIA

Background

Innovation in agriculture is being redefined by the convergence of digital extension services and smart farming technologies, which together are revolutionizing the way farmers, particularly in the livestock sector, access knowledge, make decisions, and enhance productivity. Digital extension refers to the use of modern communication tools to complement traditional extension systems, making information dissemination more accessible, cost-effective, and timely. Mobile applications now provide real-time livestock management solutions, veterinary services, and market price updates, while SMS and voice services ensure that even farmers without smartphones receive critical alerts on weather, disease outbreaks, and recommended practices. Social media platforms foster peer-to-peer learning and experience sharing, while web portals act as one-stop resources offering advisory services, e-training, and research-based guidelines. Online learning modules, webinars, and digital classrooms are strengthening the capacity of farmers and rural youth by bringing expert knowledge directly to their phones or computers. Complementing this, smart farming introduces a more data-driven and technology-enabled approach to managing agricultural and livestock operations. Internet of Things (IoT) devices and sensors allow for continuous monitoring of animal health, nutrition levels, and environmental conditions, enabling precision livestock farming that minimizes risks and optimizes outputs. Geospatial technologies and satellite imagery provide detailed insights into grazing land quality, fodder distribution, and disease mapping, while drones are increasingly being deployed for herd surveillance and pasture assessment. Artificial intelligence plays a critical role by offering predictive analytics on disease risks, reproduction cycles, and feed optimization, thereby empowering farmers with foresight and planning capacity. Blockchain technology is also transforming livestock value chains by ensuring transparency, authenticity, and traceability from farm to consumer, thus boosting market trust and food safety. Together, these innovations move beyond the limitations of traditional extension services by ensuring real-time, personalized, and actionable advice that empowers farmers to make informed decisions. More importantly, they integrate localized knowledge with global innovations, promoting climate-smart practices, sustainable resource use, and resilience against climate variability and market fluctuations. By bridging digital extension with smart farming, farmers in even the most remote areas are being connected to a wider ecosystem of knowledge, technology, and markets, making agriculture not only more efficient and profitable but also inclusive and sustainable. Ultimately, this synergy represents a paradigm shift in agricultural development, where technology-driven innovation transforms farming from being labour-intensive and uncertain to being knowledge-intensive, precise, and future-ready.

About the Institute

The Indian Veterinary Research Institute, Izatnagar is one of the premier institutions in veterinary and animal sciences in the world. Founded in 1889, the Institute is the oldest among the institutions governed by Indian Council of Agricultural Research. The institute has played a significant role in the eradication of several dreaded animal diseases, including Dourine, Rinderpest, CBPP, and African Horse Sickness. This ISO 9001:2015 certified Institute conducts basic and strategic research to enhance animal health and productivity, as well as improve farmers' livelihoods through technology dissemination. The institute has a very rich IP portfolio with 35 patents granted & 47 technologies commercialized to various commercial houses. The institute is now advancing towards the development of combined and next-generation marker vaccines using modern technologies. IVRI has also been at the forefront of integrating Information and Communication Technologies (ICTs) into livestock development through its various digital extension initiatives. These include mobile apps, AI-based chatbots, expert and information systems, interactive tutorials, educational videos, and podcasts, along with other ICT tools to provide timely livestock advisories, capacity building, and digital knowledge dissemination to farmers and field functionaries.

About the Course

The Winter School will focus on strengthening participants' knowledge and skills in using digital technologies for effective outreach. The programme will cover a wide range of topics under broad themes like digital and e-extension resources, online tools and content development, digital platforms for learning and outreach, emerging technologies in agriculture and animal husbandry, and data science and artificial intelligence in agriculture. The course will focus on e-extension resources, communication strategies, and digital literacy, along with hands-on training in online content creation, blogging, vlogging, podcasting, and video-based communication. Participants will learn to utilize social media, online education portals and conduct remote trainings and webinars. The program will explore modern technologies like AR/VR, drones, IoT, precision dairy and poultry farming, and smart tools for disease detection, with special emphasis on innovations for hilly and high-altitude regions. It will also introduce participants to data analysis using R, Big Data, AI, ML, image processing, and blockchain applications in agriculture. Overall, the course aims to build participants' capacities in using digital innovations and ICT tools for effective agricultural extension, research, and development.

Eligibility

Candidates working in the capacity of Scientists, Assistant Professors or in equivalent positions and above in the National Agriculture Research System (NARS) including ICAR Institutes /SAUs / SVUs/ CAUs along with Agriculture faculty of AMU, BHU, Vishva Bharati and Nagaland University area of Agriculture, Veterinary, Animal Sciences, Fishery sciences or Community Sciences and other relevant disciplines, actively engaged in research, teaching, or extension activities are eligible to participate in the Winter School. The total number of participants will be limited to 25.

Duration of Winter School

Duration of Winter School is 21 days with effect from **15 January, 2026** to **4 February, 2026** (both days inclusive). The participants are expected to arrive at ICAR-IVRI, Izatnagar, latest by the evening of 14 January and can leave after 17.00 hrs on 04 February, 2026.

Application and Registration

1. **Download and Fill the Application Form**
   Download the official Winter School Application Form (available in the brochure). Else scan the QR Code in the brochure. Fill in all the required details and get Approval from Competent Authority.

2. **Make the Online Payment**
   Pay the training/registration fee through any online bank transfer method (NEFT / IMPS / UPI). Use the following bank details:

Beneficiary Name	:	I.C.A.R. Unit IVRI Izatnagar
Bank Name	:	State Bank of India (SBI)
Account Number	:	10148035293
IFSC Code	:	SBIN0007027
Branch	:	CARI Branch, Bareilly

   Save the payment proof/receipt (screenshot or PDF format).

3. **Fill Out the Google Form**
   Scan the QR code given in the brochure. Fill in all the personal and professional details accurately. Upload the required documents:
   i. Scanned copy of the approved Application Form (PDF)
   ii. Payment proof/receipt (PDF or image)
   Review the information carefully, then submit the form.

4. **Email Submission (Optional)**
   After submitting the Google Form, you may additionally email your duly approved and scanned application form to either of the following
   Email: innovationsindigitalextension@gmail.com or jdeeivri@gmail.com

Location and Climate

Izatnagar, situated in the Bareilly district of Uttar Pradesh, is a well-connected and easily accessible destination by air, rail, and road. Participants traveling by train or bus can conveniently arrive at Bareilly Junction Railway Station or the Bareilly Bus Stand. From these points, taxis, cabs, or auto-rickshaws are readily available to reach the ICAR–Indian Veterinary Research Institute (IVRI) Campus, which is located approximately 7 km from the railway station and 6 km from the bus stand. For those traveling by air, the Bareilly Airport is situated around 12 km from the IVRI Campus. Participants are advised to book their return tickets in advance to avoid last-minute inconvenience. The climate in Izatnagar during January is cool and pleasant. Daytime temperatures typically range between 15°C and 22°C, providing a comfortable atmosphere for outdoor sessions and sightseeing. However, the evenings and nights can be quite chilly, with temperatures dropping to 5°C–8°C. Participants are therefore encouraged to carry adequate warm clothing, especially for early mornings and late evenings.

Important dates

Last Date for receipt of application	:	30 November, 2025
Intimation of selection	:	15 December, 2025
Confirmation of participation by candidate	:	17 December, 2025
Commencement of training programme	:	15 January, 2026

Note: Once selected, the candidates will be intimated through email to which they should promptly reply with firm acceptance and travel plan.

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 for the to and fro travel fare for the journey to Izatnagar by rail or bus via the 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 not to bring family members with them, as the institute has limited hostel facilities. No DA will be paid to participants.

Course Director

Dr. Rupasi Tiwari

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Course Coordinators

Dr Bablu Kumar, Principal Scientist, In charge ITMU & ABI
Dr Anuj Chauhan, Principal Scientist, LPM Section
Dr Shruti, Scientist, JDEE
Dr Madan Singh, Scientist (SS), DEE

Best weekend getaways

APPLICATION FORM

for

ICAR Sponsored Winter School

Innovations in Digital Extension and Smart Farming

15 January- 04 February, 2026

(Fill in CAPITAL LETTERS)

1. Full Name: ……
2. Designation: ……..
3. Discipline: ……
4. Present employer and address: ……
5. Address for correspondence (along with mobile/telephone No. and email)
   ……..
   ……..
6. Date of Birth: ……..…… 7. Sex: (Male/Female): ……
8. Teaching/Research/Professional experience ……
   ……..
   ……..
9. Marital Status: (Married/Unmarried)
10. Online Payment transaction ID. …….. for Rs. 50/-
    Dated ……
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. Academic Record

Degree	Discipline	Year	University
PhD			
Masters			
Graduation			

Date:

Place:

Signature of Applicant

Recommendation of the Forwarding Authority

It is certified that information furnished by the candidate has been verified and found correct.

Date

Signature of Sponsoring Authority with Seal