ICAR Sponsored
Winter Short Course
on
"Next Gen Livestock Conservation: Integrating Genomics, Cryobanking, and Biotechnological Innovations"



07-16 December, 2026

Course Director

Dr Monika Saini

Senior Scientist, Division of Animal Genetic Resources, ICAR-NBAGR

Course Coordinators

Dr Rekha Sharma

Principal Scientist, AGR Division

Dr Mahesh Shivanand Dige

Senior Scientist, AGR Division

Registration Link

https://forms.gle/6PaZWrb5YGLLRYkW7

Organized by

Director

ICAR- National Bureau of Animal Genetic Resources

Karnal-132001 (Haryana) INDIA

Organizing Committee

Chief Patron

Dr. N.H. Mohan
Director, ICAR-National Bureau of Animal Genetic Resources, Karnal, Haryana

Patrons

Dr. A.K. Mishra
Head, Division of Animal Genetic Resources, ICAR-NBAGR, Karnal

Dr. S.P. Dixit
Head, Division of Animal Genetics, ICAR-NBAGR, Karnal

Dr. Monika Sodhi
Head, Division of Animal Biotechnology, ICAR-NBAGR, Karnal

Course Director

Dr. Monika Saini
Senior Scientist, Division of Animal Genetic Resources
Email: saini.monika@icar.org.in; saini.abtc@gmail.com
Phone: 7027928284

Course Coordinators

Dr. Rekha Sharma
Principal Scientist, Division of Animal Genetic Resources
Email: rekvik@gmail.com; Rekha.sharma1@icar.org.in
Phone: 9255482422

Dr. Mahesh Shivanand Dige
Senior Scientist, Division of Animal Genetic Resources
Email: maheshdige@gmail.com;
Phone: 9720978970

Important dates

Last date of application: 25th November 2026

Commencement of the training course: 7th Dec 2026

Bank account details

Beneficiary Name: I.C.A.R. Unit NBAGR, Karnal
Bank Name: State Bank of India (SBI)
Account Number: 10093065125
IFSC Code: SBIN0001761
Branch: Model Town, Karnal

Scan and Pay

About the Institute

ICAR-National Bureau of Animal Genetic Resources (ICAR-NBAGR)

Established in 1984, the ICAR-National Bureau of Animal Genetic Resources (ICAR-NBAGR) is one of the six premier bureaus under the Indian Council of Agricultural Research (ICAR). It is the national nodal institution for the management of India's rich diversity of indigenous livestock and poultry genetic resources, with a mission to ensure their long term conservation, sustainable utilization, and contribution to agricultural resilience, food and nutritional security, and rural livelihoods.

ICAR-NBAGR works with the following core mandates:

1. Identification, evaluation, characterization, conservation, and sustainable utilization of livestock and poultry genetic resources of the country.
2. Coordination and capacity building in animal genetic resources management, including policy support and advisory roles.

The Bureau undertakes nationwide field surveys to explore, identify, and characterize potential livestock and poultry populations. It prepares comprehensive documentation on their phenotypic attributes, production performance, adaptive traits, and molecular genetic profiles, thereby facilitating their recognition and registration as distinct breeds.

National Gene Bank and Biobanking

ICAR-NBAGR curates the National Gene Bank, which serves as the designated national repository for the ex situ conservation of animal genetic resources. The Bank maintains cryopreserved germplasm, including semen, embryos, somatic cells, and DNA, from indigenous livestock and poultry breeds for medium- to long-term conservation and future research use. The Bureau has developed standardized protocols for germplasm cryopreservation, somatic cell banking, and assisted reproductive technologies. These capabilities strengthen national conservation strategies and provide a scientific basis for the restoration, multiplication, and genetic improvement of indigenous breeds.

Advanced Research Infrastructure

ICAR-NBAGR is equipped with state-of-the-art laboratories for animal somatic cell culture, cryopreservation, molecular genetics, genomics, DNA genotyping, and reproductive biotechnology. This infrastructure enables cutting-edge research, breed characterization, genetic diversity assessment, and the development of advanced conservation and reproductive technologies.

National and International Linkages

The Bureau collaborates closely with national and international organizations, including the Food and Agriculture Organization (FAO) of the United Nations, on matters related to animal genetic resources. ICAR-NBAGR also serves as India's nodal agency for reporting progress on UN Sustainable Development Goal (SDG) 2, Indicators 2.5.1 and 2.5.2, which relate to the conservation of genetic resources for food and agriculture and the risk status of local breeds.

Through its integrated mandate of research, conservation, capacity building, and policy support, ICAR-NBAGR continues to play a pivotal role in safeguarding India's invaluable animal genetic heritage for present and future generations.

Course content at a glance: Key Highlights

- **Breed Registration & Gazette Notification**- From field identification to official recognition in India.
- **National Animal Gene Bank**- Infrastructure, technologies & visit to ICAR-NBAGR.
- **Smart & Digital Biobanking**- Next-generation approaches for germplasm preservation.
- **In Situ & Ex Situ Conservation**- Integrated strategies for sustainable AnGR management.
- **Advanced Reproductive Technologies**-ART, Somatic Cell Banking, Embryo production & Cryopreservation, Somatic Cell Nuclear Transfer.
- **Conservation Genomics & Bioinformatics**- Genomic tools for breed characterization and conservation.
- **Molecular & Mitochondrial Tools** -Genetic disorder detection, diversity and evolutionary studies.
- **Induced Pluripotent Stem cells (iPSCs) & Genetic Engineering**- Emerging Gene Editing technologies for future conservation and genetic rescue.
- **Poultry Genetic Resource Conservation**-In situ and ex situ approaches.
- **Policy, Regulatory & Biosafety Frameworks**-Governance of livestock genetic resources and biotechnology.
- **Indigenous Knowledge & Genomic Innovation**-Integrating traditional knowledge with modern conservation science.

Eligibility

The candidate must possess a Master's degree in Agriculture or any of its allied disciplines viz. Veterinary Science/Animal Science/Fishery Science. In addition, the applicant should be working at a position not below the rank of Scientist, Assistant Professor or an equivalent post and working under National Agricultural Research System (NARS) including ICAR Institutes, State Agricultural Universities (SAUs), State Veterinary Universities (SVUs,), and Central Agricultural Universities (CAUs). Candidates should be working in the fields of Veterinary and Animal Sciences, and be actively engaged in research, teaching, or extension activities. A total of 25 candidates will be selected for this course. The selection of the candidates will be made by a screening committee as per the available guidelines of the ICAR.

Application procedure

Eligible candidates should submit their application in the prescribed format, duly recommended by the competent authority. The approved application must be emailed to saini.monika@icar.org.in on or before 20th November 2026. There is no course fee, but participants are required to pay a registration fee of Rs. 50/- online to the account "I.C.A.R. Unit NBAGR, Karnal." Details of the online transaction should be shared for verification. A confirmation email will be sent to all selected candidates.

Boarding, lodging, and travel allowance

Selected participants will be provided free boarding and lodging at the Institute Guest House. Food expenses will be covered by the organizers as per ICAR guidelines. Travel costs for participants will be reimbursed for the to-and-fro journey to Karnal by rail or road via the shortest route, as per their entitled class, subject to a maximum of AC-II tier train fare or actual bus fare. Local participants are not eligible for boarding and lodging but will be provided lunch and inter-session tea. No daily allowance (DA) will be paid. Participants are required to produce original receipts/ tickets in support of their claim. The reimbursement will be made as per ICAR guidelines.

APPLICATION FORM

ICAR-sponsored Ten-day Short Course on Next Gen Livestock Conservation: Integrating Genomics, Cryobanking, and Biotechnological Innovations

(07–16 December 2026)

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 and date: .....
11. Number of courses attended in the last five years: .....
12. Academic Record

Degree	Discipline	Year	University
Graduation			
Masters			
PhD			
Any other			

Date:

Place:

Signature of Applicant

Date:

Signature of forwarding authority with Seal