



# ICAR-NIVEDI

## Transforming Animal Health



# Newsletter

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## Director's Desk

It gives me great pleasure to present this issue of the ICAR-NIVEDI Newsletter, capturing the institute's activities and achievements from January to June 2025. This period has been marked by significant progress in our research, capacity building, and national and international collaborations.

Our scientists have delivered impactful outcomes, including the development of the updated NADRES V2.0, which earned the prestigious Gold Award in the National Awards for e-Governance, and the development of the CYSTISURE ELISA kit for early detection of porcine cysticercosis. We also characterized a new virulent *Leptospira* strain for use in challenge experiments for vaccine development. The initiation of nine new national and international research projects, supported by agencies including ICMR, the World Bank, and the Gates Foundation, reflects our growing role in One Health and livestock disease epidemiology and informatics.

Major events included the inauguration of the WOAHP Reference Laboratory for Leptospirosis by Dr. Himanshu Pathak, Former Secretary DARE & DG ICAR, and the launch of the INLEAD Program. We hosted expert missions, review meetings, and specialized trainings, while our scientists actively contributed to global dialogues on PPR and other transboundary diseases. Outreach initiatives such as NaaViC's entrepreneurship programs and SC & ST farmer-level engagements further strengthened our societal impact.

ICAR-NIVEDI is proud of its excellent pool of scientists and committed administrative staff, whose dedication extends beyond research to excelling in institutional sports and cultural activities, adding to the institute's vibrant and dynamic environment.

I extend my sincere thanks to Dr. Mangi Lal Jat, Secretary DARE & DG ICAR, Dr. Raghavendra Bhatta, DDG (Animal Science), and Dr. Divakar Hemadri, ADG (Animal Health), for their constant guidance. I also acknowledge the Department of Animal Husbandry & Dairying, Government of India, for their unwavering support. I commend the Newsletter Publication Team for their dedicated efforts in bringing out this edition.

JAI HIND!



Baldev Raj Gulati

## Research Achievements

### ICAR-NIVEDI Develops ELISA Kit 'CYSTISURE' for Early Detection of Porcine Cysticercosis

ICAR-NIVEDI has successfully developed an indigenous ELISA kit named 'CYSTISURE' for the early detection of porcine cysticercosis, a zoonotic disease caused by *Taenia solium* with significant public health impact, especially in developing countries. Since pigs serve as the intermediate hosts for *T. solium*, early and accurate detection of infection in pigs is crucial to interrupt the transmission cycle to humans. Addressing the gap of affordable and reliable diagnostic tools in India, the institute

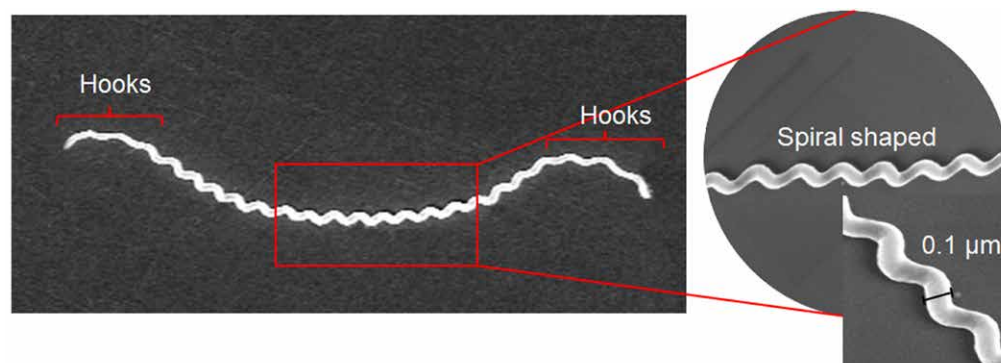
designed a recombinant GP50 antigen-based indirect ELISA to detect antibodies against *T. solium* in pigs. The developed assay demonstrated excellent diagnostic performance, achieving 96.2% sensitivity and 98% specificity. It has been rigorously validated by 3 external laboratories, including ICAR-IVRI, Izatnagar, IAH&VB, Bengaluru, and Veterinary College, Bengaluru. The CYSTISURE is expected to play a vital role in improving animal health monitoring and safeguarding public health.



### New Virulent *Leptospira* Strain Characterized to Boost Vaccine Development in India

Leptospirosis remains a major public health and veterinary concern, with disease severity and circulating serovars differing across regions and host species. In India, effective control of leptospirosis in livestock and companion animals requires vaccines tailored to region-specific strains. However, vaccine development has been hampered by the lack of virulent, well-characterized challenge strains and standardized protocols for efficacy testing. Reference strains often lose their virulence after prolonged laboratory culture, limiting their reliability for vaccine evaluation. Addressing this critical gap, the ICAR-NIVEDI team recently isolated a pathogenic *Leptospira*

strain from a Greater Bandicoot Rat (*Bandicota indica*) in Dakshina Kannada district, Karnataka, following a severe human leptospirosis case in 2024. The isolate's virulence was restored through serial passages in Golden Syrian hamsters, providing a robust challenge model. Experimental infections confirmed systemic multi-organ damage typical of leptospirosis, and the strain belongs to the *Leptospira* Autumnalis serogroup. The lethal dose 50 (LD<sub>50</sub>) was determined, confirming the strain's high virulence. This development offers a crucial tool for development and standardization of challenge protocols, crucial for development of vaccine for leptospirosis.





## ICAR-NIVEDI Secures National and International Research Projects

In a significant boost to its research portfolio, ICAR-NIVEDI initiated nine new research projects between January and June 2025, with a cumulative funding of ₹3735.62 lakhs. These projects, funded by premier

national and international agencies including the World Bank, Indian Council of Medical Research, and the Gates Foundation, will advance research in livestock health, zoonotic diseases, and One Health.

Project Title	Funding Agency	Amount Sanctioned (₹ Lakhs)
System Dynamic Modelling for African Swine Fever and Lumpy Skin Disease in India	World Bank	42.98
Advanced Diagnostic and Omics Strategies for Surveillance and Characterization of Leptospira Carriers in Livestock and Their Environments	ICMR-NOHM	246.86
Production of Recombinant Antigens of Nipah Virus (NiV) and Evaluation of Their Utility in Immuno-Diagnostics for Sero-Surveillance Among Livestock Under One Health approach	ICMR-NOHM	85.69
Quantifying the risk of zoonotic diseases at wildlife-livestock-human interface using One Health Approach	ICMR-NOHM	179.20
Establishment and Characterization of Pig Lymphoid Organoids as Ex Vivo Preclinical Animal Model for Screening of Influenza Vaccines	ICMR-NOHM	87.03
Exploring the possibility of utilizing domestic poultry as a sentinel host for surveillance of zoonotic flaviviruses in India: A pilot study	ICMR-NOHM	73.96
Development of Indigenous recombinant adenovirus vector-based oral rabies vaccine intended for free-roaming dogs	ICMR-NOHM	56.86
Development of novel multiplex-based point of care (M_POC) diagnostic for brucellosis, Leptospirosis, Scrub typhus and Coxiellosis (Q fever) and to unravel zoonotic diseases dynamics at human and animal interface in Assam, Northeast India	ICMR-NOHM	71.99
National Livestock Disease Epidemiology and Disease Modelling Program	Gates Foundation	2891.05

## Scientific Activities

### Secretary DARE Inaugurates New Facilities at ICAR-NIVEDI

Dr. Himanshu Pathak, Secretary DARE and Director General, ICAR, visited ICAR-NIVEDI on 2<sup>nd</sup> January 2025 and inaugurated the 'Hoof & Health Gate', a symbolic gateway representing the collaborative spirit between ICAR-NIVEDI and ICAR-IVRI. He was accompanied by Dr. Baldev R. Gulati, Director, ICAR-NIVEDI, and Dr. Pallab Chaudhury, Joint Director, ICAR-

IVRI. During his visit, Dr. Pathak reviewed the institute's progress and praised its leadership in livestock disease epidemiology, modeling, AMR/AMU surveillance, and zoonotic disease research. He also commended NIVEDI's success in mobilizing national and international research grants, positioning it as a benchmark institute in livestock health research.



On the same day, Dr. Pathak inaugurated the **WOAH Reference Laboratory for Leptospirosis** at ICAR-NIVEDI, marking a major milestone in India's diagnostic and surveillance capabilities for this important zoonotic disease. The laboratory is supported by a dedicated team, led by Dr. V. Balamurugan, WOAH Designated Expert,

and offers cutting-edge diagnostics, training, and technical support for leptospirosis control across India. Dr. Gulati expressed gratitude to ICAR and the Department of Animal Husbandry and Dairying, GoI for their critical support in achieving this milestone.

### WOAH Expert Mission Visits ICAR-NIVEDI to Strengthen PPR Eradication Strategy

A delegation from the World Organisation for Animal Health (WOAH) visited ICAR-NIVEDI as part of their expert mission to review and support India's Peste des Petits Ruminants (PPR) Control and Eradication Programme. The visit aimed to assess the country's progress and offer technical recommendations to strengthen its national efforts toward PPR eradication. On 18<sup>th</sup> February 2025, the WOAH team—led by Dr. Henry M. Wamwayi—visited ICAR-NIVEDI and its WOAH Reference Laboratory for PPR. During the visit, the delegation engaged in detailed discussions on the implementation of India's PPR control strategy. Dr. Baldev R. Gulati, Director of ICAR-NIVEDI,

presented an overview of the institute's contributions to PPR eradication, highlighting its role in outbreak investigations, disease surveillance, and monitoring of vaccination programs. Dr. V. Balamurugan, Designated Expert of the WOAH Reference Laboratory for PPR, shared a comprehensive presentation on the laboratory's technical capabilities and achievements in combating PPR. The visit included participation from officials of ICAR-NIVEDI, WOAH experts, project scientists, and representatives from DAHD and the Karnataka State Animal Husbandry Department.



### INLEAD Program Launched to Boost Livestock Epidemiology and Modelling

ICAR-NIVEDI launched the National Livestock Epidemiology and Disease Modelling (INLEAD) Program with the support of the Gates Foundation. The launch was marked by a two-day international workshop held on 24–25<sup>th</sup> June 2025, focusing on advancing disease modelling, surveillance, and data integration for improved livestock health management in India. The event was inaugurated by Dr Divakar Hemadri, Assistant Director General (Animal Health), ICAR, and attended by experts from national and international institutions, including Penn State University, Gates Foundation and various national institutes, including Indian Institute

of Science, International Centre for Theoretical Sciences, Institute of Mathematical Sciences, NIHSAD (ICAR), Manipal Academy of Higher Education, Institute of Animal Health and Veterinary Biologicals and various State Animal Husbandry Departments. The workshop facilitated discussions on capacity development on modelling methodologies, data infrastructure, and the epidemiology of priority livestock diseases such as FMD, PPR, LSD, ASF and Avian Influenza. Participants emphasized the need for collaborative, evidence-based approaches to enhance disease forecasting and control.





### ERAzTB Review Meeting Highlights Collaborative Efforts in Bovine Tuberculosis Control

The annual review meeting of the network project titled “*Estimation of Risk and Assessment of Burden of Zoonotic TB in India (ERAzTB)*” was held at ICAR-NIVEDI, Bengaluru, on 26<sup>th</sup> June 2025. The project focuses on understanding the burden and transmission dynamics of bovine tuberculosis (bTB), with the goal of informing effective, science-based control strategies in India. Led by ICAR-NIVEDI, the ERAzTB initiative involves multiple national partners including Nagpur Veterinary College, Mumbai Veterinary College, ICAR-National Meat Research Institute, ICAR-IVRI and its Eastern Regional Station, and West Bengal University of Animal and Fishery Sciences. The progress made in the surveillance of bTB in slaughter house animals and organized farms was reviewed. The meeting featured updates on ongoing field activities such as sample collection, lesion detection, and molecular testing for *Mycobacterium tuberculosis* complex (MTBC). Experts from ICMR and the biotechnology

industry shared their experiences and technical insights. Dr. Kannan P. from ICMR-NIRT, Chennai, spoke on MTBC isolation techniques, while Dr. Maroudam V. from CisGen Pvt. Ltd., Chennai, presented progress in the development of in-tube IGRA and multi-antigen lateral flow assay kits for improved diagnostics. Deliberations during the meeting focused on enhancing coordination across institutions, ensuring timely availability of reagents and diagnostics, and moving toward integrated, One Health-based approaches suited to India’s dairy systems. The importance of standardizing protocols and accelerating validation of field-ready diagnostic kits was also emphasized. Dr. Baldev R. Gulati, Director of ICAR-NIVEDI, underscored the importance of collaborative research in addressing the complex challenge of bTB and controlling bovine tuberculosis is essential to protecting animal and public health.



## NIVEDI Seminar Club Hosts Lecture on Bovine Antibody Gene Technology

As part of its ongoing Seminar Club activities, ICAR-NIVEDI organized a guest lecture on 10<sup>th</sup> March 2025, featuring Dr. Azad Kumar Kashik, DSc (Paris), a distinguished immunologist, who delivered a talk on “Bovine Antibody Gene Technology in Health and Disease”. The seminar was attended by scientists, research scholars, and students, and provided valuable insights into the applications of antibody gene technology in livestock health. The event was further enriched by the presence of two eminent guests—Dr. Inderjeet Singh, Vice Chancellor of Bihar Animal Sciences University, Patna, and Prof. Dr. A.C. Varshney, Vice President of the National Academy of Veterinary Sciences (India)—who

interacted with participants and shared their perspectives on emerging trends in veterinary science.



## Hands-on Training on Zoonotic Disease Diagnosis, Surveillance, and Mapping Organized

ICAR-NIVEDI organized a five-day training programme on “Techniques for Zoonotic Disease Diagnosis, Surveillance, and Mapping” during 3-7<sup>th</sup> March 2025, aimed at strengthening the technical capacity of professionals engaged in zoonotic disease control under the National One Health Programme for Prevention and Control of Zoonoses (NOHPPCZ) of NCDC. A total of 32 participants from Integrated Disease Surveillance Programme (IDSP) units and sentinel surveillance centres of NOHPPCZ across various states took part in the training. The programme focused on practical approaches to

laboratory diagnosis, field-level surveillance, and spatial mapping of priority zoonotic diseases to support rapid and reliable detection at the state and district levels. Dr. V. Balamurugan, Nodal Officer, and Dr. Chethan Kumar, Course Director, outlined the objectives and content of the training, underscoring its significance for field-level implementation. In his inaugural address, Dr. Baldev R. Gulati, Director of ICAR-NIVEDI, emphasized the importance of equipping medical and veterinary personnel with skills in surveillance planning, disease mapping, and early diagnosis to enhance One Health preparedness.



## Hands-on Training on Point-of-Care Diagnostics Organized

ICAR-NIVEDI conducted a three-day hands-on training programme from 18–20<sup>th</sup> June 2025 for collaborators from Guwahati Medical College and Hospital and Assam Agricultural University, Guwahati, under the ICMR-funded National One Health Mission (NOHM) project. The training was coordinated by Dr. Rajeswari Shome, Project Coordinator, with a focus on the development and

application of point-of-care (PoC) lateral flow assays for four priority zoonotic diseases—brucellosis, leptospirosis, scrub typhus, and Q fever. Participants received practical exposure to laboratory techniques, field diagnostic protocols, and biosafety and biosecurity practices relevant to zoonotic disease diagnosis.





### NaaViC Empowers Agri-Startups and Students Through Innovation and Mentorship

NaaViC, the Agri Business Incubator at ICAR-NIVEDI, continues to play a vital role in nurturing early-stage agri-preneurs and promoting innovation-driven entrepreneurship in the agriculture sector. During the reporting period, five startups from the 9<sup>th</sup> Cohort were recommended for a grant-in-aid of ₹38.5 lakh under the Ministry of Agriculture and Farmers Welfare, Government of India. These included FYSI Technologies Pvt. Ltd. and Krishijeev Agri Product Pvt. Ltd. under the NEST category, and Amboos Software Pvt. Ltd., Herbeeday Beverages Pvt. Ltd., Pixel, and Feroma Technologies Pvt. Ltd. under the NEO category.

Following this, NaaViC launched the 10<sup>th</sup> Cohort call for

proposals, receiving an overwhelming 328 applications (205 under NEST and 123 under NEO), along with 76 business ideas submitted under the student-focused NUZEN Program. To build entrepreneurial capacity, NaaViC conducted 3 Entrepreneurship Development Programs (EDPs) for over 165 farmers and Orientation Programs (EOPs) for more than 270 students from various academic institutions. It also expanded outreach by participating in major expos and academic forums, including the Livestock, Poultry and Fisheries Expo, SOCDAB, the National Horticulture Fair, the Faculty Development Program at UAS Dharwad, and an International Conference on Entrepreneurship.



## IRC Reviews Research Progress and Approves New Initiatives

The 19<sup>th</sup> Institute Research Committee (IRC) meeting of the ICAR-NIVEDI was successfully held on 21-22<sup>nd</sup> May 2025 under the chairmanship of Dr. Baldev R. Gulati, Director, ICAR-NIVEDI. The meeting aimed to critically review the progress of ongoing research projects for the year 2024–25 and to chart the course for research initiatives in the coming year. Dr. S.C. Yadav, Retired Principal Scientist, ICAR, participated as the external expert, contributing valuable insights and recommendations throughout the two-day deliberations. Scientists from four Thematic groups (Bovine Disease Epidemiology, Small Ruminant Disease Epidemiology, Swine Disease Epidemiology and Disease Informatics & Socioeconomics) of the institute presented a total of

54 research projects, comprising 10 institute-funded and 42 externally funded projects. These included ongoing, completed, and newly proposed studies. Each thematic group's presentations were thoroughly evaluated with a focus on scientific quality, progress achieved between April 2024 and March 2025, and alignment with national and institutional priorities. The committee emphasized a target-driven, timeline-oriented approach to ensure timely achievement of research milestones. Constructive suggestions were provided to enhance the relevance and impact of ongoing studies. The review process concluded with the completion of six projects and the approval of two new research proposals for implementation in 2025–26.



## ITMC Evaluates Innovations and Approves Proposals for Certification

Two meetings of the Institute Technology Management Committee (ITMC) were held to assess intellectual property and technology certification proposals submitted by institute scientists. The ITMC meeting, held on 26<sup>th</sup> March 2025, reviewed three patent and two copyright proposals. After detailed examination, the committee recommended that all five proposals be revised and resubmitted to the ITMU for further necessary action. In the subsequent meeting, conducted on 26<sup>th</sup> May 2025, focused on the evaluation of proposals for certification

of developed products, technologies, processes, methodologies, and models. Five out of six proposals on diagnostics methodology categories were approved for submission to the Animal Science Division of ICAR for certification. These meetings reflect the institute's continued emphasis on promoting innovation, securing intellectual property rights, and facilitating technology transfer through rigorous review and certification mechanisms.



### List of Technologies recommended by ITMC for submitting to SMD.

Title of the technology	Developers
Recombinant GP50 Protein-based Indirect ELISA for detecting Porcine Cysticercosis.	Dr. Siju Susan Jacob (Lead) Dr. P P Sengupta (Associate) Dr. S S Patil (Associate)
Recombinant Cathepsin B-based Indirect ELISA Kit for detecting Fasciola gigantica in bovines.	Dr. P P Sengupta (Lead) Dr. Siju Susan Jacob (Associate)
LumpyScreen rELISA Kit (NIVEDI-rLSD-01)	Dr. Manjunatha Reddy G B (Lead) Dr. Yogesharadhya R (Associate) Dr. S B Shivachandra (Associate) Dr. Chethan Kumar HB (Associate) Dr. Shivasharanappa N (Associate) Dr. S S Patil (Associate) Dr. B R. Gulati (Associate)
LumpySure wELISA Kit (NIVEDI-wLSD-02)	Dr. Manjunatha Reddy G B (Lead) Dr. Chethan Kumar H B (Associate) Dr. Yogisharadhya R (Associate) Dr. B.R. Gualti (Associate)
Capripox-Detect sELISA (Polyclonal Sandwich ELISA for Capripoxviruses).	Dr. Manjunatha Reddy G B (Lead) Dr. Chethan Kumar H B (Associate) Dr. S B Shivachandra (Associate) Dr. B R Gulati (Associate)

### Copyright Secured for NEST Logo

The logo for “NEST” (Nurturing Entrepreneurs with Sustainable Technologies), the flagship Start-up Agri-Business Incubation Program of NaaViC, ICAR-NIVEDI, was officially copyrighted on 3<sup>rd</sup> February 2025 (RoC No. A-157835/2025). The stylized word art embodies the mission to foster innovation and sustainability in agri-based entrepreneurship.



### IAEC Meeting Approves Animal Use for Research Proposals

The 27<sup>th</sup> meeting of the Institutional Animal Ethics Committee (IAEC) at ICAR-NIVEDI was held on 22<sup>nd</sup> January 2025 to review and approve new research proposals involving the use of animals in scientific studies. Following detail review, discussions and clarifications from the respective Principal Investigators, the IAEC granted ethical clearance for all nine proposals after due deliberation. The approved studies involved the use of laboratory animals such as rabbits, guinea pigs, hamsters,

and mice, as well as the collection of field samples from livestock including cattle/buffalo, sheep, goats, and poultry. The IAEC emphasized strict adherence to ethical guidelines and the scientific justification for animal use, ensuring compliance with CPCSEA regulations and institutional protocols for animal welfare. The committee reiterated the importance of ethical and humane treatment of animals in research.

## Important Events

### 76<sup>th</sup> Republic Day Celebrated with Patriotic Fervour

ICAR-NIVEDI marked the 76<sup>th</sup> Republic Day on 26<sup>th</sup> January 2025 by hoisting of the national flag by the Director Dr. Baldev R. Gulati, in the presence of employees. In his address, Dr. Gulati urged the team to channel their efforts toward strengthening

the livestock sector and improving the welfare of farming communities. He emphasized the critical role of modern tools in disease diagnosis, surveillance, and veterinary epidemiology.



### International Women's Day Celebration Focus on Women's Empowerment

ICAR-NIVEDI celebrated International Women's Day on March 20, 2025. The event was organized by the Women's Cell, chaired by Dr. Rajeswari Shome, and saw the active participation of around 100 women staff members. Dr. Baldev R. Gulati, Director, addressing the gathering, reaffirmed the

institute's commitment to gender equality. This year's celebration revolved around the global theme "Accelerate Action," emphasizing the need to advance gender equality and empower women across all sectors. The program featured a series of inspiring talks by eminent speakers: Mrs. Savithri S Mani,





Retired Director, Department of Atomic Energy, spoke on “Personal Re-engineering and Women Empowerment,” stressing the importance of self-growth and resilience. Mrs. Rampriya Manikandian, Director of Operations, Gremach Aerospace, and President, Rotary Bangalore Skyway, delivered a talk on “Career Choices and Journey Forward,” encouraging entrepreneurship and informed career planning, while highlighting various government

schemes supporting women. Dr. R. Jayashree, Professor, Veterinary College, Hebbal, shared her journey in the veterinary profession and highlighted the vital role of animal husbandry in uplifting rural women. All speakers addressed key themes of women’s empowerment, career development, and rural livelihoods, delivering thought-provoking insights that resonated with the audience.

### ISO 9001:2015 Surveillance Audit of NIVEDI Conducted

ICAR-NIVEDI successfully completed its ISO 9001:2015 Surveillance Audit II, conducted by IRCLASS, Chennai on 3<sup>rd</sup> June 2025. The audit team, comprising Mr. Vivek R. Gurjar (Team Leader) and Mr. S. Satheesh Kumar (Team Member), rigorously evaluated various departments and functions. This included management representative activities, project monitoring and evaluation, R&D, disease

informatics, customer-related processes, serum bank, marketing, HR and training, purchasing and stores, maintenance, and administrative operations. Impressed by the systematic approach and dedication of the staff, the audit team recommended continuation of the ISO 9001:2015 certification and appreciated the institute’s strong focus on innovation, quality assurance, and excellence in veterinary science.

## Outreach Activities

### NIVEDI Participates in VKSA Campaign at ICAR-IIHR

At the launch of the *Viksit Krishi Sankalp Abhiyan – Pre-Kharif 2025* campaign on 8<sup>th</sup> June at ICAR-IIHR, Bengaluru, Hon’ble Union Minister of Agriculture and Farmers Welfare, Shri Shivraj Singh Chouhan visited the exhibition area, where ICAR-NIVEDI showcased its pioneering animal disease forecasting system, which drew appreciation from the dignitaries and visitors. Through this event, NIVEDI highlighted the national significance of developing a disease-resilient livestock sector.



### Hon’ble Minister Ms. Shobha Karandlaje Appreciates Livestock Disease Forecasting of ICAR-NIVEDI



During the National Horticulture Fair 2025 at ICAR-IIHR, Bengaluru, Union Minister of State for Labour & Employment and Micro, Small and Medium Enterprises, Ms. Shobha Karandlaje, visited the ICAR-NIVEDI stall. She was briefed on NIVEDI’s cutting-edge animal disease forecasting system, designed to safeguard livestock health and reduce economic losses for farmers. Deeply impressed, the Minister expressed strong interest in the innovation and encouraged NIVEDI to expand its reach through nationwide digital outreach.

## ICAR-NIVEDI Creates Livestock Health Awareness among Karnataka Farmers during VKSA-2025

As part of the national *Viksit Krishi Sankalp Abhiyan (VKSA) – Pre-Kharif Campaign 2025*, held from 29<sup>th</sup> May to 12<sup>th</sup> June 2025, fifteen scientists from ICAR-NIVEDI actively participated in extension and awareness programs across 11 districts of Karnataka, including Bagalkote, Bidar, Belagavi, Haveri, Hassan, Davanagere, and Chikkaballapur. The campaign began with a *Padyatra*, promoting livestock farming in collaboration with local departments. The region-specific problems in livestock rearing were identified. In Mysuru, farmers raised concerns about repeat breeding, mastitis, and

papilloma. In Vijayapura, discussions focused on gaps in livestock insurance, women's participation, and mastitis control. Haveri saw pressing issues around antibiotic resistance, fodder scarcity, and disease surveillance. Farmers in Hassan and Chikkamagaluru emphasized the need for synchronized vaccination models and affordable biosecurity measures. In response, ICAR-NIVEDI plans to intensify region-specific epidemiological research, aiming to empower farmers through science-led, location-specific livestock health strategies.



## Strengthening Livelihoods of SC & ST Farmers through Livestock Farming in Karnataka

Reaffirming its commitment to the upliftment of Scheduled Caste and Scheduled Tribe communities, ICAR-NIVEDI implemented a series of socio-economic interventions under the Development Action Plan for Scheduled Castes (DAPSC) and Scheduled Tribes (DAPST). During 27-29<sup>th</sup> January, a three-day training-cum-workshop on biosecurity practices in pig farming was held at the Veterinary College, Hassan, equipping SC farmers with scientific knowledge for disease prevention in pig husbandry. On 3<sup>rd</sup> February, cow mats and milk cans were distributed to 100 SC beneficiaries in Srinivasapura Taluk, Kolar District, to promote hygienic milk handling and reduce udder-related ailments. Under the DAPST project, 150

ST beneficiaries received 20 chicks per household on 22-23<sup>rd</sup> March in Srinivasapura Taluk, encouraging backyard poultry as a sustainable livelihood option. Additionally, through the AINP-OHSD project, awareness programs and animal health camps were conducted in Malur and Chikkaballapura (21<sup>st</sup> March) offering preventive care, disease management guidance, and health inputs to rural livestock farmers. Further support followed on 25<sup>th</sup> March, with cow feed distribution to 90 SC beneficiaries in Srinivasapura and 60 in Tumakuru District, aimed at enhancing animal nutrition and milk productivity.





## Empowering Socially Backward Women Farmers in Tamil Nadu through Dairy Entrepreneurship

As part of a collaborative initiative under the DAPSC-funded program of ICAR-NIVEDI, a one-day capacity-building workshop titled “*Empowerment and Sustainable Growth of Rural Scheduled Caste Women through Technological Interventions*” was conducted on 27<sup>th</sup> March 2025 at Gundalapatti village, Tiruvannamalai district, Tamil Nadu. Organized by TANUVAS-VUTRC, Tiruvannamalai and ICAR-NIVEDI, the program benefited 40 Scheduled Caste women farmers. Dr. V. Appa Rao, Director of Extension Education, TANUVAS, inaugurated the event, highlighting the potential of sustainable dairy farming. He also distributed essential inputs including mineral mixtures, salt licks, fodder seeds, parasiticides, first-aid kits, and milk cans. Dr. Narayanan G, from ICAR-NIVEDI, served as a key resource person to coordinate sessions on balanced animal nutrition, disease risk communication, early warning systems, and technology-driven income generation.



## Miscellaneous Events/Activities

### NIVEDI Signs MoUs for Strengthening Research Collaborations

ICAR-NIVEDI has signed three strategic Memoranda of Understanding to boost research and training in veterinary and public health domains with following organizations viz.,

- Garden City University (GCU) – 28<sup>th</sup> February 2025 (Student training and postgraduate research in veterinary epidemiology and disease informatics).
- BeST (Foundation for Bengaluru Science and Technology) – 1<sup>st</sup> April 2025 (Joint efforts in healthcare,

environmental health, and the One Health framework)

- Siksha ‘O’ Anusandhan (SOA) – 21<sup>st</sup> May 2025 (Collaborative research initiatives in veterinary and allied sciences)
- Global Incubation Services (GINSERV) – 26<sup>th</sup> March 2025 (foster innovation and entrepreneurship with NIVEDI’s NaaViC)



## ICAR-NIVEDI Bags National Award for e-Governance 2024-2025

ICAR-NIVEDI has been conferred the Gold Award in the *National Awards 2024-25 for e-Governance* to be presented by the Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pensions, Government of India. The award recognizes excellence in implementing innovative digital solutions for citizen-centric services.

The recognition is for the institute's National Animal Diseases Referral Expert System (NADRES V2), an AI-driven platform for livestock disease surveillance and predictive analytics, developed entirely by ICAR-NIVEDI. The system has significantly advanced veterinary epidemiology and disease forecasting in the

country. The award comprises a certificate, trophy, and a cash prize of ₹10 lakh for the institution, along with certificates for all team members. The Team comprising Dr. K.P. Suresh, Dr. Divakar Hemadri, Dr. Baldev Raj Gulati, and Dr. S.S. Patil, will receive the award during the 28<sup>th</sup> National Conference on e-Governance (NCeG) to be held in August/September 2025 at Visakhapatnam, Andhra Pradesh.

The Director, ICAR-NIVEDI, expressed gratitude to ICAR leadership and the Department of Animal Husbandry and Dairying, GoI, for their continued support, which played a key role in achieving this prestigious recognition for the institute.

## Fellowships for NIVEDI Scientists

Dr. P.P. Sengupta and Dr. S.S. Patil have been conferred the prestigious Fellow Award of the National Academy of Biological Sciences (NABS) during its 14<sup>th</sup> Annual Conference, held at ACRI (TNAU), Kudumiyamalai, Pudukottai, Tamil Nadu, on 28–29<sup>th</sup> January 2025.

This honour stands as a testament to their exceptional contributions to biological sciences and veterinary research, adding to ICAR-NIVEDI's legacy of scientific excellence.

## NIVEDI Scientists Share Experiences in Global Dialogues on PPR and TADs

During the first half of 2025, ICAR-NIVEDI scientists played an active role in international forums, sharing India's expertise and strengthening the country's voice in global strategies for Peste des Petits Ruminants (PPR) and other transboundary animal diseases (TADs).

In January, Dr. G. Govindaraj, Dr. V. Balamurugan, and

two project staff members (Dr Rakshit Ojha & Dr K Vinod) participated in the 7<sup>th</sup> Annual PPR GREN Meeting during 20-22<sup>nd</sup> January 2025 in Abu Dhabi, UAE, organized by FAO and WOAH, to review global research progress and foster collaboration. The event focused on reviewing global progress in PPR research and enhancing international collaboration among member countries.





In May, Dr. Govindaraj presented on the “Socio-Economic Impact of PPR in Asia and Asia-Pacific” at the FAO-hosted Socio-Economic Technical Group Meeting by ILRI in Nairobi, Kenya, during 12-13<sup>th</sup> May, showcasing India’s strategies and economic assessments for PPR control.

In June, Dr. Balamurugan attended the Global Laboratory and Epidemiology Networking Workshop (GLENW 2025) in Vienna, Austria during 17-19<sup>th</sup> June, organized by FAO-IAEA, contributing to discussions on strengthening global diagnostic and epidemiological networks for TADs.

Also in June, Dr. P. Krishnamoorthy presented ‘India’s

episystem-based approach to PPR control’ at the FAO-sponsored “Cross-border Harmonization and Mano River Episystem Workshop” in Abidjan, Ivory Coast, during 23-25<sup>th</sup> June, emphasizing vaccination strategies, surveillance, and India’s roadmap toward PPR eradication by 2030.

Through these global engagements, NIVEDI continues to position itself as a key contributor to international animal health initiatives, enhancing India’s leadership in transboundary disease management.

### NIVEDI Scientists Continue Sharpen Skills through Trainings and Expert Roles

ICAR-NIVEDI scientists upgraded their skills and contributed expert knowledge through specialized trainings and national scientific forums during this period.

#### Training in Laboratory Quality and Standards:

- Dr. P. Krishnamoorthy, Senior Scientist, attended a *Laboratory Quality Management System and Internal Audit* training at the National Institute of Training for Standardization (NITS), BIS, Noida (5–8<sup>th</sup> May 2025), focusing on ISO-based quality systems and internal audits.
- Dr. Chethan Kumar H.B., Senior Scientist, and Dr. Arun Y.P., project staff, participated in a two-day programme on *Inter-Laboratory Com-*

*parison, Proficiency Testing, and Evaluation of Scores (ILCPT)* at NITS, BIS, Noida (25–26<sup>th</sup> June 2025), covering ISO/IEC 17043 standards and Z-score interpretation.

#### Expert Contributions:

- Dr. Rajeswari Shome served as a panel expert on *Animal Disease Management* during the Golden Jubilee celebrations of ICAR-NEH, Barapani, Shillong (8–9<sup>th</sup> January 2025).
- Dr. P. Krishnamoorthy was an expert speaker on *Laboratory Animals and Ethics in Bioscience Research* at a workshop organized by ICAR-NIANP, Bengaluru (27<sup>th</sup> February 2025).

### ICAR-NIVEDI Shines at ICAR–South Zone Sports Tournament

The ICAR-NIVEDI Sports Contingent delivered an exceptional performance at the ICAR–South Zone Sports Tournament-2024, held at ICAR–Sugarcane Breeding Institute (SBI), Coimbatore, Tamil Nadu, during 8 - 11<sup>th</sup>

April 2025. The 18-member team, led by Chief-de-Mission Dr. Sathish B. Shivachandra and managed by Ms. Aachal Palewar, competed in a range of events including athletics, cricket, table tennis, shuttle badminton, carrom,



and chess. The contingent secured an impressive two gold and two silver medals: Gold Medals: Ms. Aachal Palewar – 200m Race (Women); Mr. Abhishek Tomar – Shot Put (Men); Silver Medals Ms. Aachal Palewar – 100m Race and Long Jump (Women). In recognition of her outstanding performance, Ms. Aachal Palewar was honored with the Overall Athletic Champion Trophy

(Women). Competing against over 1000 sportspersons from 28 ICAR institutes, the NIVEDI team demonstrated exceptional skill, discipline, and sportsmanship. The ICAR-NIVEDI family proudly congratulates all medal winners and team members for their dedication and for bringing laurels to the institute.

### Joining/Transfers

- Shri Navneet Agarwal, Administrative Officer, Joined ICAR-NIVEDI on 17<sup>th</sup> April 2025 (F/N).
- Shri K. Vijayaraj, Stenographer Grade 'D', was relieved from ICAR-NIVEDI on 1<sup>st</sup> January 2025 (A/N)
- Mr. Purshotam Yadav, Technician (T-1), was relieved from ICAR-NIVEDI on 17<sup>th</sup> January 2025 (A/N).

### Forthcoming Events

**Hands-On Training on Laboratory Diagnosis of Leptospirosis.** 11–14<sup>th</sup> August 2025 | ICAR-NIVEDI, Bengaluru. ICAR-NIVEDI will be organizing this training in collaboration with National Centre for Disease Control (NCDC, GOI) for enhancing the laboratory diagnostic capability of Leptospirosis involving various stakeholders from medical and veterinary fraternity.

**Annual Review Meeting of the AINP-CEDA and OHZD** is scheduled to be held on 25<sup>th</sup> and 26<sup>th</sup> August 2025 at ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI), Yelahanka, Bengaluru.



*Concept and Guidance*

: Dr Baldev Raj Gulati  
Director, ICAR-NIVEDI

*Editorial Team*

: Dr. U. Balamurugan, Principal Scientist  
Dr. G. Narayanan, Senior Scientist  
Dr. H. B. Chethan Kumar, Senior Scientist  
Dr. P. Krishnamoorthy, Senior Scientist

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### Contact Details

#### ICAR-National Institute of Veterinary Epidemiology and Disease Informatics

Ramagondanahalli, Yelahanka, Bengaluru - 560 119, Karnataka.

Phone: 080-23093110, 23093111, 23093100

Email:director.nivedi@icar.org.in Website:www.nivedi.res.in

Follow us on  @icar\_nivedi  /icarnivediofficial  @icarnivedi3383  icar\_nivedi