



Director's Desk

ICAR-National Institute of Animal Nutrition and Physiology (ICAR-NIANP) has been working on "Basic and strategic research" for enhancing production potential of livestock through physiological and nutritional interventions. The productive and reproductive performance of animals is intricately linked to the plane of nutrition and physiological status. Nutritional and physiological research play a crucial role in improving the efficiency of animal production systems thereby contributing significantly to the livestock revolution.

I am happy to share that the Animal Nutrition Division of ICAR-NIANP was conferred with "Best Department of Animal Nutrition Award 2025" of Animal Nutrition Society of India. The institute had commercialized five technologies which include "Harit Dhara, Tamarind seed husk enriched complete feed block, Brewery waste, PhytoVridhi and WastG" through AgrInnovate India, New Delhi. The first three technologies address at the reduction of enteric methane emission from ruminants while "PhytoVridhi," a phytogenic growth promoter help in minimizing the use of antibiotics in the broiler production. The fifth technology "WastG," is an instrument helps in measuring methane and nitrous oxide emissions from animal excreta. The scientists at the institute applied for three patents during the reporting period, of which one was granted. Three national conferences viz., "Livestock nutrition and health care translating to human wellbeing", "Climate resilient livestock production: Emerging concepts and technologies for sustenance" and "Bio agricultural research" were organized by the institute. Furthermore, the institute also organized three training and skill development programmes as capacity building with a focus on the advanced technologies in animal nutrition and physiology.

The institute is actively working on the "Development Action Plan for Scheduled Castes and Scheduled Tribes (DAPSC and DAPST)," reaching out over 1600 farmers across the nation. Several on- and off-farm training programs were organized for the farmers with an aim to disseminate the scientific methodology for feeding dairy animals, guaranteeing clean milk production, and fodder production. Besides the trainings, farmers were also provided with some critical material inputs such as milk cans, dairy animal floor mats, cattle feed, feed supplements, fodder seeds and veterinary medicines.

I am confident that scientific innovations developed by our institute will enhance the overall productivity by catering to the requirements of livestock farmers of the country.



Artabandhu Sahoo
Artabandhu Sahoo
Director

In this issue

Research News
Major Events
Copyrights & Patent
Commercialization
Overseas Visits
Awards & Recognition
Animal Health Camp
Personal
Hindi Programme
Swachh Bharat Abhiyan
Other Activity
Staff Welfare Activity

Editorial Board

KVH Sastry
G Krishnan
M Bagath
C Devaraj
M Gopi

Published by

Dr Artabandhu Sahoo
Director, ICAR-NIANP



ICAR-National Institute of Animal Nutrition and Physiology
Aduodi, Bengaluru - 560030

Tel: 080-25711303, 25711164; Fax: 080-25711420. Email: director.nianp@icar.gov.in | www.nianp.res.in

Research News

Black soldier fly larvae / pre pupae as a protein source in the diet of chicken (Black soldier fly- Converting waste into feed wealth)

There has been a constant search for newer feeds throughout the world to reduce the burden on conventional feeds in the poultry industry. Insects as a protein source can contribute to global food security via feed to poultry. Among the insects, one of the most promising is the Black Soldier fly that has a good potential to thrive on organic waste like vegetables, fruits and garbage and convert into biomass rich in protein and fat (Fig 1). Under a collaborative project with ICAR-NBAIR, Bengaluru, BSF prepupae meal was produced from vegetable and fruit wastes and its suitability as a feed supplement was explored in broiler and layer chicken at our institute. Based on our broiler and layer chicken experimentations at our institute, it was concluded that the black soldier fly prepupae meal having a good amino acid profile similar to soybean meal. It can be incorporated up to 10% in



Figure 1: Black Soldier fly larvae in decaying organic wastes.

the diet of layers and 15% in broilers replacing part of dietary maize-soybean meal. Insects with a rapid rate of multiplication and with superior nutrient value is gaining attention globally as an alternative feed for poultry. BSF can play a significant role in converting waste into feed and add to the feed basket in future.

Transgenic chicken for expression of Leukemia Inhibitory Factor (LIF) in eggs

The production of recombinant proteins for research and therapeutic applications in the heterologous microbial and mammalian cell fermenter culture has drawbacks of huge expenses due to the requirement

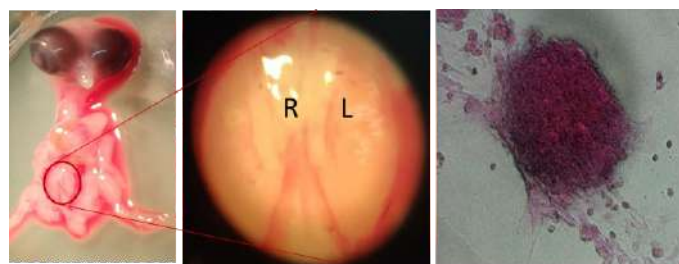


Figure 2: (A) Primordial Germ cells derived from day 7.5 embryos (B) Gonads as seen under 65X magnification (C) Periodic acid Schiff's (PAS) stained gonadal germ cells colonies grown in suitable media for 21 days as seen under microscope.

of infrastructure, 24 h vigilance, and skilled technical manpower.

Transgenic plant and animal model developed to circumvent these issues. The development has taken a back seat due to the problem of expressed protein purification from the transgenic plant due to the complex nature of the plant cell wall. Except in pigs, the farm animal species thought to be used for the expression of recombinant proteins in milk suffer the disadvantage of a long generation interval and low success rate due to the demanding skill on the technologies such as somatic nuclear transfer. Chicken is the most promising transgenic model as a bioreactor for the production of recombinant proteins in eggs. The advantage of this model is the high protein production efficiency and the ease of upscaling by the use of highly efficient reproduction of the chicken. The discovery of chicken primordial germ cells (PGCs) as the only germline compatible cells made all the differences in the development of transgenic birds (Fig 2). The discovery of these cells dates back a century; the true potential in genetic breeding, reproduction research, and transgenesis has been realized and expanded throughout the world following the development of the *in vitro* culture system late in the year 2006.

Utilizing the modern biotechnology tools, transgenic birds are produced by modifying the PGC genome either by direct *in ovo* introduction of expression machinery into the blastoderm of the pre-incubation early embryos or by an indirect *in vitro* culture system. In the PGC-based approach, the cells are harvested during their distinct origin and migratory pathway, and their genomes are modified either by random or targeted integration genome employing all advanced delivery methods, then transplanted into the recipient embryos, where they colonize into the gonads and then produce the transgenic germ cells that, when get fertilized, produce the offspring with

the desired genetic makeup. The main advantage of the PGC-based approach is that the tested cells with the desired insert can be tested before transplanting into the recipient embryo. The chicken germ cell precursors (PGCs) were isolated from the blood vessels of day 2.5 embryos, the genital ridge of day 3.5 embryos, from the mesonephros (primitive gonads) of 5.5-day-old embryos, and from the gonads of day 6.5 up to 11.5-day embryos, successfully cultured *in vitro* in the feeder and without feeder cell support. The germ cell precursors collected from different origins are termed differently; the gonads isolated cells are called the gonadal germ cells (GGCs). The immunoglobulins, interferon, β -defensin, lysozyme, and a few other molecules are produced successfully in the eggs through PGC/GGC modification approaches. Through our effort, we could successfully isolate the white leghorn layer chicken germ cell precursors from all the origins and cultured them *in vitro* to the level of producing transgenic cells. In further



Figure 3: Transgenic birds having Leukemia Inhibitory Factor (LIF) expression construct in their genome

advancement, we collaborated with ICAR-Indian Veterinary Research Institute and produced multiple females and males having the Leukemia inhibitory factor (LIF) expression constructs in transgenic chickens (Fig 3). In our effort we designed LIF expression construct under the oval promoter with a lentiviral backbone for efficient transduction. The cloned vector was packaged, the lentiviral particles were produced, and the titre was determined before the use of a fixed titre virus to generate transgenic birds using an innovative method. The transduction capability of the particles was tested in mammalian cells, chicken primordial germ cells, and the embryos before use. The presence of the LIF expression constructs in the male and female genomes is confirmed by PCR, and the presence of immunoreactive LIF in the egg white is confirmed by Western blot preliminary screening. This model can be used for the production of other biomedicines for human and animal use.

Exploring the potentiality of Oat Brewery Waste as a partial replacement of concentrate in the ruminant diet

Feeding of concentrate represents a major cost component incurred towards the feeding of livestock. Efforts are being made in search of a suitable alternative which can partially or fully substitute the expensive concentrate in the diet of ruminants. The alternative resources should have excellent protein and energy content to replace the expensive concentrate in the diet. Therefore, the potential of oat brewery waste to replace the concentrate in the diet of livestock was assessed. The utilization of brewery waste as livestock feed can help to mitigate the health hazards arising from the accumulation of brewery biowaste in the environment. Additionally, the feeding cost due to the excellent protein and energy profile of brewery waste can be economized (Fig 4). The oat brewery waste had significantly higher crude protein content (28%) than the concentrate mixture. Safety of the fresh oat brewery waste during storage and feeding was evaluated by monitoring the aflatoxin B1 up to three days post-collections. During drying, the content of AFB1 was below the permissible limit of 20 ppb. Additionally, oat brewery waste contained more protein (~28%) than the concentrate and a comparable energy content. The *in vitro* studies indicated a significant decrease in methane production (ml/g DM, ml/g OM) by replacing

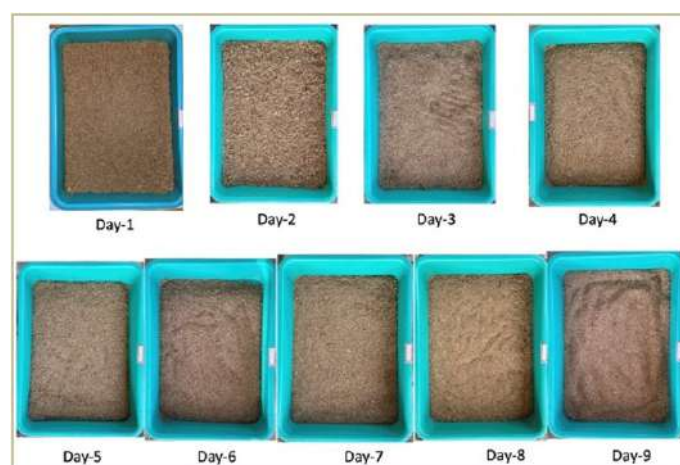


Figure 4: Oat brewery waste at different stages of shade drying.

concentrate with oat brewery waste at a minimum level of 20% in the diet. However, the replacement of concentrate with oat brewery waste also led to a significant decrease in the dry matter and organic matter digestibility. Comparison of methane production (ml) among the treatments per g of digestible dry matter (DDM) and digestible organic matter (DOM) revealed a marginal decrease at 20



Figure 5: Metabolic trial in sheep at experimental livestock unit of ICAR-NIANP.

and 30% replacement level and significant decrease at 50% level. The *in vivo* study was conducted in growing sheep and a significant decrease in nutrient intake and digestibility was observed at 20% replacement of concentrate with oat brewery waste (Fig 5). Daily enteric methane emission (g/d) was significantly decreased with the replacement of concentrate with oat brewery waste in the groups of 20 and 30% replacement. However, the enteric methane emission in 20 % replacement group was similar to the control group when compared per 100 g of DDM or DOM. Similarly, the replacement of concentrate with oat brewery waste led

to a significant decrease in rumen protozoal numbers including *Entodiniomorphs* and *Holotrichs* and a significant shift in the abundances of rumen microbial diversity explored through metagenome and metatranscriptomics approaches. The studies concluded that, the replacement of concentrate with oat brewery waste at 20% of the diet did not affect the intake, nutrient digestibility, rumen fermentation, microbiota, growth performance and marginally decrease the enteric methane emission in growing sheep as compared to the sheep fed on concentrate without oat brewery waste.

Major Events

NPGET Project Training Programme

A capacity building training programme entitled “Emerging biotechniques for animal science



research” was organized under the SCSP component of the ICAR funded “Network programme on application of genome editing technology for improvement in livestock health and production” at ICAR-NIANP, Bengaluru from 17th to 26th September 2025. The training programme was designed with incorporation of the theoretical and practical aspects of 'Animal Biotechnology', where the participants got exposure to various biotechniques used in livestock research.

National Conference

The ICAR-NIANP, Bengaluru hosted the VII National Conference of the National Academy of Veterinary Nutrition and Animal Welfare (NAVNAW) during 16th - 17th October 2025. The two-day national level event



themed “Livestock nutrition and health care translating to human wellbeing”, brought together over 234 delegates from various ICAR institutions, Veterinary Universities, Colleges, Research organizations, farmers and industry personnels across the country. The conference was inaugurated by Dr Manmohan Singh, IAS, Former Special Chief Secretary, Government of Andhra Pradesh and Vice-Chancellor, Sri Venkateswara Veterinary University in presence of Dr KC Veerana, Vice-Chancellor, KVASU, Dr MC Sharma, Former Vice-Chancellor, IVRI, Dr N Ramaswami, IAS, Secretary, Animal Husbandry and Dairy Development Department, Government of Maharashtra. Dr NN Pathak, Founder President of the Academy, Dr SP Tiwari, President and Dr Artabandhu Sahoo, the Director, ICAR-NIANP had graced the occasion. The valedictory function was held on the second day, Dr R Narendra Babu, I/C Vice-Chancellor, Tamil Nadu Veterinary and Animal Sciences University and Dr JV Ramana, I/C Vice-Chancellor, Sri Venkateswara Veterinary University participated in the programme as Chief Guest and Guest of Honour, respectively. The awards, best research paper presentation and student elocution were presented to the awardees in the different sessions.

Hands on Training

A training programme for skill development entitled “Hands on training on molecular techniques” was conducted at ICAR-NIANP during 27th – 31st October 2025. The five days training programme was carried out under TSP component of ICAR-Network Programme on Genome Editing Technology (NPGET). Dr Binsila BK was the course director and Selvaraju S, Atul P Kolte and Krishnappa B were Course coordinators for the training programme. Dr A Sahoo,



the Director, ICAR-NIANP in his inaugural address emphasized the importance for the skill development in the molecular biology and genome editing techniques. Dr NH Mohan, the Director, ICAR-NBAGR, Karnal graced the valedictory function. There were eleven participants from five different states completed the Hands-on training on molecular techniques. A training manual on Molecular biology techniques was released during the training programme.

Skill Development Programme

ICAR-NIANP organized a ten days skill development programme on “Cell culture and molecular techniques” from 12th to 21st November 2025 under ICAR-Network Programme on Genome Editing Technology (NPGET) SCSP plan. The programme was inaugurated by Prof Utpal Tatu, Chairman, Department of Biochemistry, Indian Institute Science, Bengaluru. Dr A Sahoo, the Director, ICAR-NIANP emphasized the significance of



biotechnological tools and genome editing techniques for augmenting livestock production and reproduction. Dr Binsila BK was course director and Dr S Selvaraju, AP Kolte and Krishnappa B coordinated the programme. A total of eighteen research scholars and faculties from seven different states of the country participated in the training programme. Valedictory address was delivered by Dr PK Gupta, Principal Scientist, ICAR-NPGET programme Co-ordinator. He stressed on the need and importance of genome editing research in animal health and production.

Krishi Mela

ICAR-NIANP, Bengaluru showcased different technologies developed by the institute scientists in Krishi mela organised by UAS, Bengaluru during 13th – 17th November 2025. Leaflets in local language were also distributed to farmers visiting the stall.



CLIMATECON 2025

National Conference-cum-Workshop on “Climate resilient livestock production: Emerging concepts and technologies for sustenance” during 23rd to 24th November 2025. This programme was organized by the institute in collaboration with National Innovations on Climate Resilient Agriculture (NICRA). A distinguished scientist, Dr B Venkateshwarlu, Former Director of ICAR-CRIDA and Former Vice Chancellor of VNMKV, Parbhani graced the inaugural function as the Chief Guest. The conference provided a scientific platform which



brought researchers, academicians, policymakers, and industry stakeholders together who deliberated on the challenges posed by climate change to the livestock sector. It facilitated the sharing of knowledge on advanced research findings, innovative technologies, and practical interventions in key areas such as heat stress management, climate-smart nutrition, precision livestock farming, sustainable housing, and methane mitigation. This platform also paved way for developing interdisciplinary collaboration, thereby contributing to the advancement of sustainable and climate-resilient livestock production systems.

Foundation Day Celebrations

ICAR-NIANP, Bengaluru was celebrated its foundation day on 24th November 2025 with great enthusiasm and academic spirit. This event brought together distinguished dignitaries, scientists, staff, and stakeholders to commemorate the institute's achievements and its contributions to the fields of animal nutrition and physiology. Dr Artabandhu Sahoo, the Director, ICAR-NIANP highlighted significant achievements of the institute. He also accounted some of the farmer's friendly technologies which have been widely adopted in the field. On the eve of the 31st Foundation Day, the institute organized several events such as launching



of institutional publications, signing of Memoranda of Understanding (MoUs) and honouring outstanding staff members. The Chief guest of the programme, Dr KML Pathak, Former DDG (AS) and Vice Chancellor DUVAS, Madura appreciated the growth and development of institute at national and global scales.

ISGCT Conference

ICAR-NIANP, Bengaluru organized 7th Annual Conference of International Society of Gene and Cell Therapy on the theme "Bio agricultural research" on 12th December 2025. The conference was inaugurated by Justice Umesh Kumar Sirohi, Retired Judge, Allahabad High Court, Dr Baldev Raj Gulati, the Director, ICAR-NIVEDI, Dr Artabandhu Sahoo, the Director, ICAR-NIANP and Dr Sunita Rana



Agarwal, President, Gene Research Foundation, Bengaluru. The conference theme was bio-agritech research, stem cell research and toxicology. The professional experts presented keynote address followed by the invited talks from the outstanding researchers of the country.

National Farmers Day

ICAR-NIANP organized one day Farmer-scientist interaction meet under Developmental Action Plan for Schedule Caste/Schedule Tribes (DAPSC/DAPST) Scheme on 23rd December 2025 to mark the occasion of "Kisan Day". The programme aimed to bring awareness among farmers on feeding practices and reproductive management of dairy cows and



small ruminants. One hundred and one farmers were provided with input materials such as Fertimin Plus and veterinary medicines. Further, six progressive farmers from Karnataka and Tamil Nadu were felicitated for their exemplary contribution to animal husbandry. Dr A Sahoo, Director ICAR-NIANP, inaugurated the programme and interacted with the farmers. The Chief guest, Dr NKS Gowda, the Dean, Veterinary College, Hebbal, Bengaluru and guest of honour Dr A Dhali, SRS NDRI graced the occasion and interacted with the famers, and emphasized the importance of animal husbandry. All the participating farmers also attended the virtual meeting addressed by honourable Shri Shivraj Sigh Chouhan, Minister of Agriculture and Farmers Welfare.

Short Course

A short course on “Frontier technologies to improve fertility in livestock” was organized at ICAR-NIANP, Bengaluru from 22nd to 31st December 2025 as a part of ICAR-National Fellow Project entitled “Development of buffalo bull fertility diagnostic chip based on sperm transcripts signatures”. During the inaugural program, Dr Artabandhu Sahoo, Director, ICAR-NIANP, Bangalore and Chairman of the training program deliberated about the importance of reproductive technologies and nutritional strategies



for improving reproductive efficiency in farm animals. The inaugural program was graced by Dr Suresh Honnappagol, Former AH Commissioner, GOI, and VC, KVAFSU emphasized the importance of developing technical skills in higher educational program and appreciated the initiative taken up at NIANP. The short course was aimed at training the young researchers for enhancing their technical skill and competence in the state-of-art reproductive technologies. A total of 15 trainees representing from Rajasthan, UP, Bihar, Karnataka, Tamil Nadu including from abroad, Nigeria attended the training program. A book on “Essential protocols in reproductive biology” was released and distributed to the trainees attending the short course.

Awards & Recognitions

The Animal Nutrition Division of ICAR-NIANP, Bengaluru has been awarded as “**Best Department of Animal Nutrition**” by Animal Nutrition Society of



India (ANSI) in the 21st Biennial International Conference (ASICON 2025) on “Global resilience in animal nutrition: Innovations for sustainable future” during 19th – 21st November 2025 at College of Veterinary Science & Animal Husbandry, AND University of Agriculture & Technology, Kumarganj, Ayodhya, UP.

Dr PK Malik, Head, BE&ES was conferred on the “**Best Researcher Award 2025**”.



Dr D Rajendran, Principal Scientist, also received “**ANSI Fellow 2025**” in the same conference.



Dr Gopi M, Scientist received “**Young Scientist Award 2025**” in the 11th International Conference on “Recent advances in agricultural, biological and applied sciences for eco-friendly development” during 25th – 27th July 2025 held at School of Agriculture and Technology, Maya Devi University, Dehradun, Uttarakhand.

Copyrights & Patents

ICAR-NIANP, Bengaluru received a certificate of Registration of Design patent for “A device for quantifying greenhouse gases” on 8th August 2025 from the Patent Office, Government of India.

ICAR-NIANP, Bengaluru received 10 Copyright Certificate for its



publications and products during July – December 2025.

ICAR-NIANP, Bengaluru filed a Design and Utility Patent for a “Device to trap volatilize ammonia from livestock excreta under natural storage settings” on 8th August 2025.

Commercialization

The ICAR-NIANP, Bengaluru commercialized its technology “**Harit Dhara**” an anti-methanogenic feed supplements to M/s Zeroearth Pvt. Ltd., Trivendram, Kerala on a non-exclusive basis through AgrInnovate India. A MOU was exchanged on '97th ICAR Foundation Day'.



The ICAR-NIANP, Bengaluru commercialized two technologies “**Tamarind Seed Husk Enriched Complete Feed Block**” and “**Brewery Waste**” for reducing enteric methane emissions from ruminants to M/s Gou Agritech Pvt Ltd, Bengaluru on a non-exclusive basis through AgrInnovate India on 15th August 2025.



The ICAR-NIANP, Bengaluru developed an instrument and named as “**WastG**” for quantifying methane and nitrous oxide emissions from animal excreta. and it was commercialized to M/s Eaga Tools and Instruments, Pvt. Ltd., Chennai, Tamil Nadu on a non-exclusive basis through AgrInnovate India on 17th December 2025 in the august presence of Dr Raghavendra Bhatta, Deputy Director General (Animal Science), ICAR, New Delhi.



The ICAR-NIANP, Bengaluru developed a potential phytogenic growth promoter “**PhytoVridhi**” which helps in reducing the use of antibiotics in the broilers. The technology was commercialized to M/s Keshav Merchandise, Krishnagiri, Tamil Nadu on a non-exclusive basis through AgrInnovate India on 22nd December 2025.



Overseas Visits

Dr Sumanta Nandi, Principal Scientist visited the Institute of Biology, Vietnam Academy of Science and Technology, Hanoi, Vietnam during 15th to 23rd October 2025 under DST-AISTDF funded project, entitled “Biotechnological interventions to improve livestock ovarian tissue, follicle and oocyte cryosurvivability for successful embryo production”. He trained the staff and students of the institute on isolation and culture on ovine preantral follicles. He also received training on handling and processing of the porcine ovaries during the visit.



Dr PK Malik, Head, Bioenergetics and Environmental Sciences Division attended World Bank Sponsored workshop on “Livestock production and climate change” organised by International Livestock Research Institute, Nairobi, Kenya from 11th to 14th December 2025.



Animal Health Camp

Animal Health and Livestock Fertility Camp

The ICAR-NIANP, Bengaluru organized “Animal health camps” during July to December 2025 at Doddathandya village of Kanakpura Taluk, Ramanagaram District, Karnataka under DAPSC and DAPST. The progressive dairy farmers brought their animals for routine health checkup and reproductive issues. The clinical cases like pregnancy diagnosis, anoestrus, repeat breeder cows and infantile genitalia were diagnosed and treated. In addition, small ruminants were also treated and dewormed. Further, input materials such as feed supplements



and veterinary medicines were distributed to 100 scheduled caste farmers. Further, the farmers were made awareness on heat deduction and timely artificial insemination to avoid incidence of infertility in dairy cows.

Kisan Gosthi

The ICAR-NIANP, Bengaluru, organized “Kisan Gosthi cum Input Distribution” program under DAPSC Scheme at Mysore in collaboration with Karnataka



State Animal Husbandry and Veterinary Department and Sarovijay Fuel Station BPCL Saragur, HD Kote under the Development Action Plan for Schedule Caste on 10th December 2025. A total of 200 Scheduled Caste dairy farmers actively participated in the programme from the nearby villages (Thumbasogey, Magudilu, Antharasanthey, Bidugal and Nivagilu). Dr Arthabandhu Sahoo, the Director and the scientists of ICAR- NIANP and the Veterinary Officers interacted with the farmers and emphasized the need of feeding management to achieve high milk yield and to ensure the animals health and hygienic milk production. Input materials such as 50 kg of concentrate cattle feed, 5 kg of feed supplement Fertimin plus and veterinary medicines with first aid kit were distributed to individual famers.

Personnel

Dr Melody Lalthriatpui joined as Scientist in the Animal Nutrition Division of ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru on 7th July 2025.



Shri DR Govinda, Technical Officer (T-5), Estate and Maintenance Section of ICAR- National Institute of Animal Nutrition and Physiology, Bengaluru was superannuated on 31st December 2025.



Hindi Programme

Quarterly meetings of the OLIC were held on 29th September and 18th December 2025 to review the progress of implementation of the Official Language in various divisions and sections. The minutes of the meetings were forwarded to the ICAR Headquarters, New Delhi, the Town Official Language Implementation Committee (TOLIC-O-1), Bengaluru, and the Regional Implementation Office



(South) for observation and recommendations. To encourage the use of Hindi in official correspondence. Concurrently, two Hindi workshops on “Open session on the usage of software for Hindi translation” and “Moving forward: Literature, sensitivity and inspirations for the new year” were also conducted.

Hindi Diwas was celebrated on 14th September 2025 and a drawing competition was organized for the children of institute staff. Further, the institute observed Hindi Week from 8th to 15th September 2025 wherein various competitions such as singing, poem recitation, slogan writing, quiz, translation, and extempore speech were conducted. The winners of the Hindi Week competitions and the Hindi Incentive Scheme were announced during the Hindi Diwas closing ceremony held on 20th September 2025. The programme was chaired by Dr Arthabandhu Sahoo, the Director and Col. Manoj K Das, Commanding Officer, 49 Army Veterinary Hospital, ASC Centre and College, Bengaluru acted as chief guest.

Swachh Bharat Abhiyan

Swachhata Hi Seva Campaign 2025 (17th September to 2nd October 2025): The Program commenced with hoisting of banner and administration of “Swachhata Pledge”. The spread of fortnight long programme featured: transformation of neglected utility points of neighbourhood - ATM kiosk, milk parlour and a green belt zone of social forestry; engagement with High School students of Karnataka public school, Aduvodi through literary activities raising awareness on environment. The



programme was ended on 2nd October 2025 with Prabhat Pheri to promote community participation in raising awareness and implementation of “Clean India” with campus school-goers carrying a placard with a hand-made poster of a drawing with slogan depicting care and concern for the Nation.

Swachhta Pakhwada 2025 (16th – 31st December 2025): The programme “Swachhta Pledge Day” was launched with rendition of “Vande Mataram”, our National Song. Dr Artabandhu Sahoo, Director administered the noble pledge for dedicated 'two hours per week to voluntary work for cleanliness'. The fortnight long program stood sentinel through awareness seminar on “Reduce, Reuse and Recycle”, punctual deliberation of aesthetic office



premises, sanitation drive at the milk parlour and children's play park, plantation drive of chrysanthemum saplings, community outreach through playground cleaning of public school, community involvement in de-littering of the neighbourhood, fostering drawing competition of kids, signature campaigns of farmers in Mysore District, recycling of wastes and rainwater harvesting, massive community mobilization through talks on discarding single use plastics and securing kitchen wastes.

Other Activities

NABL Training

National Accreditation Board for Testing and Calibration Laboratories (NABL) training for Micronutrient Laboratory personnel involved in



sample analysis for minerals by ICP-OES had been conducted by a specialized person, Shri Satheyndra, Former BIS Expert on 16th December 2025 on the topic "Measurement of Uncertainty". The training was comprised of excel sheet formulation and calculation of measurement of Uncertainty for major instruments and equipment such as Analytical balance, Muffle Furnace and ICP-OES. The training was essentially required for laboratory personnel to work in ICP-OES samples analysis for mineral elements under NBAL accreditation.

DAPSC

ICAR-NIANP, Bengaluru organized a series of extension and outreach programmes under the Development Action Plan for Scheduled Caste during July to December 2025 across three states such as Karnataka, Tamil Nadu and Odisha covering of many villages. The institute executed farmer-scientist interaction meets to cater the various needs of farmers such as scientific dairy farming, balanced feeding of dairy animals with locally



available feed ingredients and clean milk production. In addition, on-farm training programmes and animal health camps were organized periodically to enhance the productivity of dairy animals. Further, to promote clean milk production and to enhance the farmers income, input materials such as rubber mats, milk cans, 60 tons of cattle feed, 3.5 tons of feed supplement 'Fertimin Plus' and veterinary medicines were distributed to around 1049 farmers.

DAPST

ICAR-NIANP, Bengaluru organized a series of extension and outreach programmes under the Development Action Plan for Scheduled Tribe during July to December 2025 across many villages such as Bingipura Anshithalli, Thernahalli, Bramanadinni, Malur, T. Hosur, Mallikapura, Neharu Doddu and Mangaluru (Dakshina Kannada). The institute organized periodic "Front line demonstrations" and carried out "On-farm trials" under this programme. The farmer-scientist interaction meets were



conducted to facilitate direct knowledge exchange and awareness programmes across different villages. Several veterinary health camps along with special events such as PM Kisan interaction and Kisan Samman Diwas were also organised. A total of 17 programmes were organized, benefiting 589 farmers (325 male and 264 female). The input materials such as rubber mats, milk cans and veterinary medicines were distributed to farmers to promote clean milk production. Further, feed supplement developed by ICAR-NIANP 'Fertiminplus' was also distributed to augment the reproductive health and productivity in dairy animals. Overall, these activities enhanced awareness, encouraged adoption of improved livestock management practices, and strengthened the linkage between farmers and scientific institutions, contributing to the objectives of the DAPST scheme.

Staff Welfare Activity

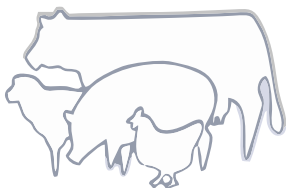
Superannuation – Shri D R Govinda

The staff welfare club of ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru extended best wishes and felicitated Mr D R Govinda, Technical Officer (T-5), Estate and Maintenance on his superannuation on 31st December 2025. Mr Govinda has served in the institute for over 22 years with a total service period of 28 years Indian Council of Agricultural Research system.





Balanced Nutrition - Enhanced Production



संतुलित आहार - प्रवृद्ध उत्पादन



हर कदम, हर डगर
किसानों का हमसफ़र
भारतीय कृषि अनुसंधान परिषद

Agrisearch with a human touch