



NAVS NEWS VIBES

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)

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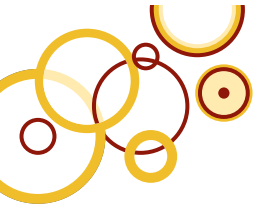
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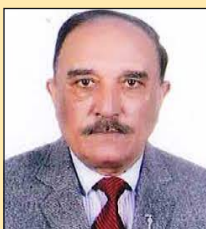
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Dear Esteemed Fellows and Valued Readers,

As we step into a time of reflection, renewal, and preparation for the year's final stretch, we at News Vibes are proud to present another edition that brings together insights, achievements, and voices from across our veterinary and animal sciences community.

The past months have once again highlighted the vital role of the field veterinarians, academicians researchers, extension specialists, and allied professionals supporting animal production, health management, ensuring food security, and safeguarding public well-being. We are tackling emerging diseases, promoting welfare oriented livestock production systems, strengthening disease surveillance networks, or advancing scientific knowledge, thereby our collective contribution continues to shape a healthier and more resilient society.

National Academy of Veterinary Sciences (India) [NAVS(I)] is planned to involve increasing engagement from young professionals who bring fresh ideas, curiosity, and passion to the profession. Their participation in scientific events, knowledge-sharing activities, and community outreach reflects a promising future for veterinary and animal sciences in India. As a community, it is our collective responsibility to nurture this enthusiasm by providing mentorship, opportunities, and platforms that allow their potential to flourish. News Vibes remains committed to amplifying their voices and highlighting their role and achievements.

At the same time, the broader global conversations around climate adaptation due to global warming, sustainable livestock management, antimicrobial stewardship, and the One Health Concept remind us of the evolving responsibilities that rest on our profession. India's rich biodiversity and vast animal population facilitate our scientific expertise to continue evidence-based policies and practices. It is attempted through innovative diagnostic technologies, improved epidemiological tools, climate-smart farming, or enhanced extension services, and also each advancement we make contributes to a more secure and sustainable future.

We must also record the everyday realities faced by the practicing veterinarians across rural and urban landscapes including unpredictable emergencies, limited human resources, and the emotional and physical demands of the profession. Their resilience, dedication, and compassion often go unseen but remain foundational to our animal-health ecosystem. Strengthening institutional support, infrastructure, fostering professional well-being, and ensuring continuing learning opportunities are vital priorities that NAVS(I) remains committed to achieve championship.

This issue of News Vibes features a rich blend of perspectives professional activities and knowledge that capture the spirit and diversity of our community. From research summaries and expert commentaries to field experiences and institutional updates, each contribution reflects the dynamism of our profession. We extend our sincere appreciation to all contributors and readers whose strong and positive enthusiasm keeps this newsletter thriving as a platform for collaboration and knowledge exchange.

As we move forward, let us do so with renewed purpose of embracing innovation, upholding scientific integrity, and leading with empathy. These values form the cornerstone of veterinary professional services, and they are what make our fraternity uniquely impactful. Together, we can continue to build a strong professional ecosystem, support one another, and uphold the legacy of professional excellence that NAVS(I) represents.

Your voice matters. We warmly invite your contributions and insights for future newsletters. Share your thoughts, experiences, and suggestions at: ldsinglanavs@gmail.com; ldsingla@gmail.com. Together, we can elevate the vibrant spirit of NAVS News VIBES and advance our noble profession to new heights.

Wishing all our readers a productive and inspiring season ahead.

L.D. Singla
Editor, NAVS News VIBES

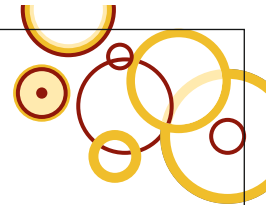
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HORIZON PRESIDENT'S VIEWS & VISION

Dear Fellow Members and Stakeholders,

The past quarter has been one of profound engagement and strategic advocacy for the veterinary and animal husbandry sectors. As we consolidate our efforts toward Viksit Bharat @2047, NAVS(I) has remained steadfast in its commitment to scientific excellence, policy reform, and institutional strengthening.

A Call for Institutional Reform

In July 2025, I articulated a critical perspective in the Economic Times on the urgent need for a dedicated Indian Council for Veterinary and Fisheries Research (ICV&FR). The veterinary and fisheries sectors contribute over 30% to agricultural GVA and support more than 300 million farmers and pastoralists, yet receive less than 18% of ICAR's institutional and budgetary allocation. This structural asymmetry has resulted in a 36% cut in animal sciences research and 30% in fisheries research, a concerning trend that undermines national priorities in animal production, health, rural livelihoods, and export competitiveness.



Currently, veterinary sciences is not an agricultural subset but a distinct biomedical and public health discipline operating at the critical interface of animal husbandry, human safety, and environmental protection. The misalignment between ICAR's mandate and that of the Ministry of Fisheries, Animal Husbandry and Dairying weakens our ability to deliver on national goals, including the Hon'ble. Prime Minister's vision of "Sahakar Se Samridhhi" for livestock and dairy cooperatives. A unified council will remove structural hurdles, align research with ministerial priorities, and unlock the full potential of these vital sectors.

Vision Document for Sustainable Livestock Growth

In 2025, NAVS(I) releasing a comprehensive vision document that outlines an integrated roadmap for accelerated and sustainable growth in animal health, production, livestock, poultry, and meat sectors. Rooted in science and guided by principles of inclusivity, resilience, One Health, and innovation-led transformation, this document represents our collective resolve to address unprecedented challenges from emerging diseases and climate variability to land scarcity affecting feed and fodder production. I extend my gratitude to Prof KM Bujarbaruah, Prof KML Pathak, Prof Suresh S Honnappagol, Prof Inderjeet Singh, and all Executive and Governing Council members for their invaluable contributions to this policy framework.

One Health and Antimicrobial Resistance

Antimicrobial Resistance (AMR) is no longer a looming threat, it is a present-day crisis. The World Health Organization ranks it among the top ten global public health threats. In my address on "Antimicrobial Use and Antimicrobial Resistance in the One Health Context," I emphasized three critical action areas: robust nationwide surveillance systems, responsible use of antimicrobials with investment in alternatives such as vaccines, probiotics, prebiotics, phytoextracts, and organic acids, and convergence of awareness, capacity building, and policy across human, animal, and environmental sectors.

If we fail to act, the world risks returning to a pre-antibiotic era, where minor infections become life-threatening. But if we act wisely and in unison, AMR can drive innovation, healthier farming systems, cleaner environments, and stronger public health. NAVS(I) pledges to provide scientific leadership and evidence-based policy in collaboration with ICAR, government agencies, and international organizations.



Welcome Address and Assuming Responsibilities as Honorary Consul of the Kyrgyz Republic for Tamil Nadu in the Presence of its Ambassador Askar Beshimov

New Diplomatic Frontiers

On September 29, 2025, I had the honour of assuming responsibilities as Honorary Consul of the Kyrgyz Republic for Tamil Nadu.

This role presents unique opportunities to strengthen India-Kyrgyz relations in education, research, tourism, trade, and most relevant to our profession agriculture and animal husbandry. Both regions share an agrarian base, and collaborative ventures in dairy, poultry, fisheries, and food processing can yield mutual benefits. I see this not as ceremonial but as an active responsibility to build durable partnerships rooted in knowledge, culture, and prosperity.

As we move forward, NAVS(I) remains committed to fostering interdisciplinary research, accelerating grassroots adoption of innovative technologies, and building resilient livestock production systems aligned with Sustainable Development Goals. The livestock sector's contribution to agricultural GDP has reached 32%, and to national GDP stands at 5% a testament to its economic significance and transformative potential.

Let us work together scientists, policymakers, industry leaders, and practitioners to ensure that animal health and welfare remain national priorities, intrinsically tied to food security, public health, and rural prosperity.

Jai Hind

(Dr DVR Prakash Rao)

THE ACADEMY

EVENTS & ENDEAVOURS

11th Governing Council Meeting of the Academy

The 11th Governing Council (GC) Meeting of the National Academy of Veterinary Sciences (India) [NAVS (I)] was convened online on July 14, 2025 at 2:30 PM.

Dr DVR Prakash Rao, President NAVS (I), warmly welcomed all GC Members, Ex Officio member Maj Gen Devender Kumar, VSM Offg DGRVS, IHQ and special invitee Maj Gen Shri Kant SM, VSM (Retd), Past President NAVS (I).

Progress on Pending Points from Previous Meeting

1. Promotion of Continuing Veterinary Education (CVE):

The Secretary General informed the House that Short Term Courses for Field Veterinarians have been successfully conducted for the Government of Punjab and Tamil Nadu. A similar course is scheduled to be conducted at BASU, Patna during the last week of July 2025. Additionally, the Academy has approached the DG Animal Husbandry, Haryana to consider conducting Short Term Courses for Field Veterinarians of Haryana State, with a proposal being forwarded for the same.

2. Committee Proceedings:

The Secretary General requested GC Members to complete the proceedings of various committees constituted during the 10th GC Meeting held on April 21, 2025.

Agenda Points

1. Finalization of Vision Document:

The President apprised the House that the Draft Vision Document, prepared by him in consultation with the Patron and other committee members, has been circulated among GC Members. A committee comprising Maj Gen ML Sharma (Retd), Dr Yashpal Singh Malik, Dr LD Singla, and Dr Manish Kumar Chatli has been constituted to review and finalize the document incorporating suggestions and comments received from various GC Members.

2. Constitution of Committees for Evaluation of Applications for Various Awards:

Multiple evaluation committees were constituted for different awards including Fellowship, Associate Fellowship and Membership, Dr CM Singh Award, Dr DVR Prakash Rao Memorial Award cum Late Smt Sundari Prakash Rao Endowment Lecture, Young Scientist Award, Dr Vallabh Mandokhot Memorial Award, Dr RK Sharma Memorial Award, and Dr KK Baxi Outstanding Scientist Award, with specific members assigned to each committee.

3. Review of Guidelines for Carcass Disposal:

The Draft document on Guidelines for Carcass Disposal forwarded by FSSAI was circulated among GC Members. Comments and suggestions received will be forwarded to the concerned agency for incorporation in the final document.

Additional Agenda Items

1. Establishment of ICF&VR:

The President briefed the House regarding recent discussions held in NAAS against the establishment of ICF&VR. It was decided to hold a meeting with eminent Fellows and stakeholders to form a strategy and action plan to pursue this matter. GC Members were

requested to forward names with contact details of proposed stakeholders for the meeting.

2. Regulation for Carcass Disposal:

The Secretary General informed about his participation in a "One Health" seminar organized by RVC Centre and College, Meerut on July 12, 2025, where he raised issues regarding implementation challenges of Guidelines on Carcass Disposal. Following suggestions from Dr Sangeeta Aggarwal, Scientist-F, representative of Principal Scientific Advisor to Government of India, it was proposed that the Academy should organize a seminar on One Health by inviting the Principal Scientific Advisor, legal experts, and policy makers from concerned Ministries to deliberate on formulating "Regulations" for Carcass Disposal. The President approved this proposal.

The meeting concluded with productive discussions aimed at advancing the Academy's mission and addressing critical issues in veterinary sciences and animal health management.

NAVS PRESIDENT DR DVR PRAKASH RAO APPOINTED AS HONORARY CONSUL OF KYRGYZ REPUBLIC: A Historic Milestone in International Veterinary Sciences Diplomacy

The National Academy of Veterinary Sciences (India) proudly announces and congratulates its esteemed President, Dr. D.V.R. Prakash Rao, on his prestigious appointment as the Honorary Consul of the Kyrgyz Republic in Chennai. This landmark appointment, officially confirmed by the Ministry of Foreign Affairs of the Kyrgyz Republic and duly concurred by the Ministry of External Affairs, New Delhi, marks a significant milestone in fostering international cooperation in veterinary sciences.



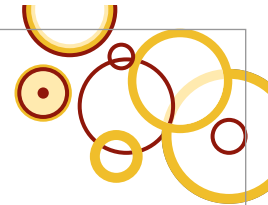
Officially Hon Consul as declared by His Excellency Ambassador

Dr. Prakash Rao's appointment as Honorary Consul with jurisdiction over Tamil Nadu reflects international recognition of his exceptional contributions to veterinary sciences and visionary leadership. The five-year consular commission positions him to facilitate bilateral cooperation in trade, education, culture and scientific collaboration between India and Kyrgyzstan.

A distinguished scientist with a PhD in Animal Nutrition, Dr. Prakash Rao has been conferred D.Sc. degrees by three premier institutions viz. GADVASU Ludhiana, NDRI Karnal, and OUAT Bhubaneswar - for his outstanding contributions to Animal Nutrition and Feed Technology. As Chairman & Managing Director of Prakash Foods & Feed Mills Pvt Ltd, he exemplifies successful integration of scientific excellence with entrepreneurial acumen, contributing significantly to animal health, rural livelihoods, and national food security.

Under Dr. Prakash Rao's presidency, NAVS(I) has gained unprecedented visibility and direction through his unique integration of science, enterprise, and public policy. This has positioned NAVS as a leading voice in science-based policy formulation, promoting sustainable animal husbandry activities and fostering international collaboration in veterinary sciences.

This appointment opens collaboration avenues between India and Kyrgyzstan in trade (particularly animal products and feed technologies), educational partnerships, cultural cooperation, and



scientific research initiatives. As Honorary Consul, Dr. Prakash Rao will facilitate trade opportunities, promote research collaborations, provide consular services to Kyrgyzstani citizens in Tamil Nadu and strengthen bilateral relations through his scientific expertise and diplomatic acumen.

The National Academy of Veterinary Sciences (India) congratulates Dr. D.V.R. Prakash Rao on this prestigious honour, confident that his leadership will further strengthen India's international standing in veterinary sciences and foster meaningful cooperation with Kyrgyzstan.

Brooke India Enhances Veterinary Skills Through NAVS(I) Collaboration: Building Capacity for Equine Welfare Across Bihar

Brooke India recently participated in a significant four-day Continuing Veterinary Education (CVE) training program organized by Bihar Animal Sciences University (BASU) in partnership with the National Academy of Veterinary Sciences (India) [NAVS(I)]. This collaborative initiative brought together 20 veterinary professionals from Bihar's Animal Husbandry Department to enhance their expertise in livestock health management with a specialized focus on equine welfare.



The comprehensive training programme centered on "Promoting Animal Health: Key Livestock Concerns and Practical Solutions," where Brooke India's experts delivered specialized sessions covering equine welfare science, animal behavior understanding, and safe handling techniques. The program's practical approach was demonstrated through hands-on field training in Rajgir, where participants learned compassionate handling practices and developed skills to identify indicators of good and poor welfare in working equines.

Through interactive discussions and practical demonstrations, veterinary professionals gained valuable insights into addressing common welfare challenges faced by working horses and donkeys across Bihar. This knowledge transfer initiative represents Brooke India's continued commitment to strengthening veterinary capacity and improving the health, welfare, and working conditions of equines throughout the region.

The collaboration between Brooke India, BASU, and NAVSI exemplifies the power of partnerships in advancing animal welfare standards and equipping veterinary professionals with essential skills to make a meaningful difference in the lives of working animals across Bihar and beyond.

CAREFUL THOUGHTS:

VETERINARY SPECIALIZATIONS IN INDIA

A way Forward for Board Certified Veterinary Specialists in India

Dr Ashwani Kumar

Professor Veterinary Surgery and Radiology

Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana

With the creation of Veterinary and Animal Sciences Universities in most of the states of India, it opened scope for creating Board Certified Veterinary Specialists in India on the pattern of Europe and North America. This will improve teaching research and clinical practice.

At present, various departments / divisions of Veterinary and Animal sciences involve multiple sub-areas in addition to dealing with various animal species. For example, a veterinary surgery and radiology Professor is delivering specialized clinical services, research and teaching in the areas of Anaesthesiology, Radiology and Surgery of various species viz. avian, bovine, canine, equine, feline, small ruminants, swine, zoo and wild animals. Similar practice is applicable to other disciplines as well. Such multi-specialized responsibilities, I believe, is a major reason adversely impacting teaching and research output. Simple answer to these serious concerns is - adoption of concept of super specialization or board certified veterinary specialists as practiced in various developed countries for better teaching and research output and efficient utilization of technical manpower.

Presently, 2-year MVSc program, is considered a specialized degree program and MVSc degree holders in any clinical subjects is expected to serve as specialist(s) in their respective subjects such as veterinary medicine, gynaecology or surgery. But the major question is, does the present MVSc curriculum adequate to fulfil the objective of creating specialists? The present MVSc degree curriculum is academic and research oriented, rather than creating specialists. A graduated student, who is not confident enough to conduct basic clinical procedures, is expected to conduct research (based on proper synopsis approval) during 2 year MVSc degree program which is not even followed in other parallel subjects Master's programs such as MD, MS or M Tech. Moreover, all the assessments in MVSc degree programs in India are based on either theoretical knowledge i.e. comprehensive examination or thesis research work performance. At present, no clinical / paraclinical MVSc student is assessed for practical or clinical proficiency for the award of an MVSc degree.

Adoption of concept of residency in various subjects of veterinary sciences that ensures rigorous training followed by board certification is the need of the hour to create competent specialists in respective clinical / para-clinical subjects. However, there are several questions including how to start creating Board Certified Veterinary Specialists in India or how to shift gradually from the existing system of education to the new system. For that we need to peep into the past of the developed countries to know the answer to this question - how various developed countries have started specialties in veterinary science.

Who are Board Certified Specialists or Diplomates?

According to American Board of Veterinary Practitioners (ABVP), Diplomates are those who have earned the privilege to

specialize in the treatment of one or more categories of animals, proven knowledge and expertise above and beyond what is required to practice veterinary medicine.

Diplomates may get certification in one or more recognized Veterinary Specialties (practice categories) from the respective boards. Currently several countries of the world such as Australia, Austria, Brazil, Canada, Finland, France, Germany, Hong Kong, Israel, Italy, Jordan, Netherlands, New Zealand, St. Kitts, United Arab Emirates, the United Kingdom and USA follow the concept of board specialization that is recognized by the ABVP.

North American Board of Veterinary Specialization was established in the year 1960, while the European Board of Veterinary Specialization (EBVS) was established in 1996, and currently there are 27 specialist colleges. To maintain their EBVS status, European Veterinary Specialists must demonstrate their proficiency once every 5 years.

Several other countries have their own board of examiners (not aligning with North America) like Mexico. Other countries like Russia and China does not utilize a national system of "board certification" in the same way as the USA or other Western countries do, where veterinarians pursue an additional, formal board exam to become a specialist.

India can follow the pattern of the European Board of Veterinary Specialists (EBVS) for creating specialization. Lumeij and Hertridge (2006) and Romagnoli (2010) described the detailed requirements / procedures followed by the EBVS. Actually EBVS is a highest authority like ICAR/VCI in India that approves a particular specialization or called 'College' or can say 'Specialization' for example European College of Animal Reproduction (ECAR), European College of Veterinary Surgeons (ECVS), European College of Bovine Health Management (ECBHM). So these 'Colleges' are similar to various professional societies in India but have different duties like conducting competency specialist exams apart from organizing annual conferences.

Requirements for Establishing a European College:

To be established, a European specialist college must demonstrate the ability to

- (1) improve the veterinary medical service offered to the public in a specific aspect of the veterinary profession;
- (2) represent a distinct and identifiable specialization of veterinary medicine;
- (3) fulfill a specific need in the veterinary profession; and
- (4) count on a sufficient number of potential diplomates.

If these conditions are satisfied, a request is sent by the European specialist college to the EBVS with a Statute and Policies and Procedures. If the EBVS approves the proposal, a provisional recognition is granted for a period of 10 years. For full recognition, a provisional college must demonstrate that it is fully functional, having properly organized training institutions and examinations with normal and standard residency programs.

Duties of a European Specialist College

In general, the constitutions and bylaws of all European colleges are very similar and include the following objectives:

- To establish guidelines for experience prerequisites and post-graduate training to become a specialist in a defined field of veterinary medicine;
- To examine and certify veterinarians as specialists; and

- To encourage research and dissemination of knowledge.

A European specialist college must ensure that each diplomate has undergone a specified, high-quality rigorous training and can prove her or his ability in the veterinary profession at a specialist level by passing an examination. Therefore, each college must

- Organize training programs at recognized institutions;
- Monitor the quality of training programs; and
- Organize and administer the diplomate examination.

Furthermore, every five years, each college must go through the process of re-certification, by which each diplomate must prove her or his continuous activity as specialist during the previous five years through publications, teaching in continuing education events, supervision of residents, serving on college committees etc.

The American Veterinary Medical Association (AVMA) recognizes 22 veterinary specialty organizations through its American Board of Veterinary Specialties (ABVS), while EBVS is currently composed of 27 specialist colleges, divided according to discipline (internal medicine, surgery, anesthesiology, pathology, etc.), animal species (bovine, swine, poultry, etc.), or organ or function (neurology, reproduction, dermatology, dentistry, behavior, etc.).

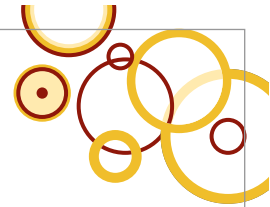
How European Diplomate Program Started?

In the start, EBVS initiated creating specialists using stage I (Romagnoli, 2010).

Stage I: Before the foundation of a college, those veterinarians who have been working (and publishing) for years in the same discipline (or topic or organ or animal species) were considered for the role of founding members and joined the college as invited specialists. So we can equate the stage I in India as Fellows of the respective Societies or Academies who have contributed significantly in a particular subject or species. However, stringent amendments in the fellowship granting application proforma is required equating desirable competencies of a Diplomate / Specialist status for the time being and he/she can serve as resource person / examiner for granting further Diplomates. Currently one veterinary professional society (Indian Association of Veterinary Pathologists) have started Indian College of Veterinary Pathology (ICVP) in 2008 for conducting examinations and awarding Diplomate status.

Stage II: Subsequently, during the first five years after the college's foundation, those who have a curriculum vitae of a satisfactory level may apply to be recognized as a defacto diplomate. From the sixth year onward, the only way to become a diplomate is by working in close contact with a diplomate for a period of at least three years. Such a training period is called 'Residency', and the trainee is called a 'Resident'.

Residencies can be standard (enrolled at specialist college/university) or alternative (working with a diplomate for 3 years in any specialist hospital) but it requires the presence of diplomates in more than one discipline (i.e., a training institution in diagnostic imaging must have diplomates in diagnostic imaging and also in internal medicine, surgery, and pathology). Basically in Europe / North America veterinary graduation is a 4 year degree program and internship is not mandatory. However, before starting a residency, completion of minimum of one year internship, rotating clinical training in various divisions / veterinary specialties in mandatory.



At the end of the (standard or alternative) residency, all candidates must pass an examination (written and viva voce) conducted by the respective college during annual meetings, and successful are awarded the title of 'European Diplomat' in a particular specialty. Diplomates attend annual meetings to share their experiences and frame recommendations and policies.

Veterinary Specialty Board in Asia

On the similar pattern of the EBVS, the Asian countries like Japan, Taiwan, South Korea took initiative to create some specialization in Asian region (AiCVIM, 2024) and formed an organization Asian Association of Veterinary Schools (AAVS) that maintains following:

- The Asian College of Veterinary Internal Medicine (Internal Medicine, Cardiology, Neurology, and Oncology)
- The Asian College of Veterinary Dermatology
- The Asian Society of Veterinary Ophthalmology
- The Asian Society of Veterinary Surgery (Small Animal Surgery; Small Animal Anaesthesiology)

The dream of India as developed nation in 2047 need aggressive veterinary reforms in education beyond syllabus revision for improving teaching, research, extension and training activities. Creating board certified veterinary specialists in India will definitely help to realize its dream of Vikshit Bharat @ 2047.

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FOOD FOR THOUGHT:

LIVESTOCK WELFARE AND HEALTH

Collaborative Approach to Safeguard Soldiers, Animals and Environmental Health

RVC Centre & College, Meerut Cantt, successfully conducted a day-long seminar on "Safeguarding Soldiers, Animals and Ecological Health: One Health, One Earth, One Future" on July 12, 2025. The event brought together military veterinary professionals, researchers and experts to address critical health challenges through an integrated One Health approach.

The seminar was inaugurated by Major General SS Balaje, Commandant of RVC Centre & College, followed by an inaugural address from Lieutenant General VMB Krishnan, PVSM, AVSM, YSM, QMG, IHQ of MoD (Army). The comprehensive program featured two technical sessions covering diverse aspects of health, security and disease prevention.



Secretary General of NAVS(I) Maj Gen ML Sharma (Retd.) chaired the technical session I of the seminar and Governing council member of the academy Dr Yashpal Singh Malik was the speaker during the session.

Key highlights included Major General Devender Kumar's (who is Director General, RVS, Min. of Defence and Ex-Officio Member of the academy) keynote address on integrated national and regional responses for future epidemics, drawing valuable lessons from the COVID-19 pandemic. Dr Chandrakant Lahariya presented insights on developing coordinated responses, while Brigadier MM Ramchandra discussed the crucial role of multiple stakeholders in One Health implementation and civil-military cooperation.

The technical sessions addressed contemporary challenges including zoonotic disease surveillance and prevention, biotechnological applications in disease investigation, wildlife health interfaces, and national pandemic preparedness strategies. Distinguished speakers included experts from various institutions who shared practical insights on food safety, bio-defense technologies, and forest health safeguarding measures.

The seminar concluded with a valedictory session emphasizing the importance of collaborative approaches in addressing complex health challenges facing military personnel, animals, and the environment. This initiative demonstrates the Indian Army's commitment to adopt holistic health strategies that protect both human and animal populations while maintaining ecological balance.

The event successfully facilitated knowledge exchange among veterinary professionals and reinforced the significance of One Health principles in military and civilian contexts.

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Supreme Court Revises Delhi-NCR Stray Dog Policy After Public Outcry

The Supreme Court of India has significantly modified its controversial stray dog order for Delhi-NCR, reversing course after widespread criticism from animal rights activists and celebrities. The three-judge bench led by Justice Vikram Nath replaced the earlier "round-up and shelter" directive with a more balanced approach, calling the previous order barring release as "harsh".



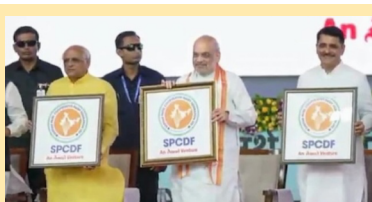
The original August 2025 order had mandated authorities to round up all stray dogs and relocate them to permanent shelters within eight weeks, with no provision for release. This directive faced intense backlash from animal welfare organizations and public figures, prompting the court to reconsider. The revision comes amid rising concerns over dog bites and rabies cases, with government data showing 37 lakh dog bites and 54 suspected rabies deaths reported in 2024.

Under the revised policy, stray dogs will now be sterilized, vaccinated, and dewormed before being released back to their original territories as part of a catch-neuter-release program. Only dogs exhibiting aggressive behavior or those infected with rabies will be kept in designated shelters. The court has also imposed strict feeding regulations, prohibiting public feeding of stray dogs while mandating municipal authorities to create dedicated feeding zones within each ward. Violators will face legal action under relevant frameworks, with the Municipal Corporation of Delhi directed to establish a helpline for reporting violations.

PETA India welcomed the decision with their statement that "every dog has her day," while former Union Minister Maneka Gandhi urged the court to clearly define criteria for declaring dogs "aggressive." The court has also expanded the matter's scope, transferring all similar cases from high courts to the Supreme Court for a comprehensive national policy on stray dog management. For participation in future hearings, individual dog lovers and NGOs must deposit Rs 25,000 and Rs 2,00,000 respectively within seven days.

Sardar Patel Cooperative Dairy Federation, Ushering New Era in Dairy Movement Launched

Hon'ble Union Home and Cooperation Minister, GoI, Amit Shah launched the Sardar Patel Cooperative Dairy Federation Limited (SPCDFL) during the Ministry of Cooperation's Fourth Foundation Day celebration at the iconic Amul Dairy premises in Anand. This landmark initiative marks the beginning of a transformative phase in India's dairy cooperative sector, aiming to establish cooperatives as the third pillar of the national economy alongside public and private sectors.



The newly formed multi-state cooperative body, headquartered in Anand, will unite milk producer cooperatives from over 20 states, encompassing more than 20,000 dairy societies and handling upwards of 100 lakh litres of milk daily. Shah emphasized that the

federation will serve as a national platform to facilitate organized market access, build a circular dairy economy, and implement uniform quality, pricing, and processing systems across states. The initiative aims to standardize milk procurement practices, ensure transparent payments to farmers, and enhance value chain efficiencies through a centralized yet farmer-owned cooperative framework.

Drawing inspiration from Sardar Vallabhbhai Patel's vision of self-reliant rural India and Dr. Verghese Kurien's Amul revolution, the SPCDFL follows the core philosophy of "By the Farmers, For the Farmers, With the Farmers." The federation prioritizes empowering rural producers, especially women and small farmers, while promoting gender-inclusive policies similar to Amul's success model with over 50% women participation.

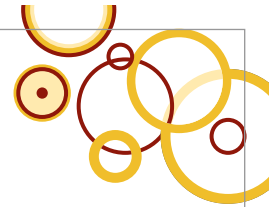
The celebration also witnessed significant infrastructure developments, with GCMMF inaugurating a Rs 105 crore chocolate plant expansion at Mogar and a Rs 260 crore cheese plant at Kheda. Additionally, the National Dairy Development Board launched a new Ready-to-Use Culture Plant worth Rs 45 crore and laid the foundation for its upcoming headquarters in Anand, while the National Cooperative Dairy Federation of India inaugurated the Rs 32 crore Maniben Patel Bhawan office building.

With dairy being the largest agri-sector contributor to rural income, this comprehensive initiative is expected to lift millions out of poverty, stabilize rural livelihoods, and position India as a global dairy powerhouse with the cooperative model at its core.

Integrating Ethnoveterinary Approaches for Rational Use of Antibiotics in Livestock

A recent study titled "Antibiotics use and ethnoveterinary practices in pig farming" (doi:10.1186/s12917-025-04865-y) examines how pig farmers in the Federal Capital Territory (FCT) of Nigeria integrate conventional antibiotics and traditional medicinal approaches. Through surveys, the authors document demographic profiles of farmers, patterns of antibiotic usage (including types, frequency, and sources), and the prevalence of ethnoveterinary practices-herbal or locally derived treatments used for animal ailments. The study reveals a widespread and partly unsupervised application of antibiotics, often without veterinary oversight, alongside a persistent use of traditional remedies.

This paper is timely in highlighting the dual-use reality of pig health management in low- and middle-income settings, where antibiotics and traditional remedies coexist. Exploring how traditional remedies can complement modern strategies to curb antimicrobial resistance is the global demand. The insights underscore the urgent need for stronger regulatory frameworks on antimicrobial use in livestock, capacity building for farmers in rational drug application, and more rigorous scientific evaluation of ethnoveterinary therapies. While traditional practices may offer cost-effective and accessible alternatives, their safety, dosage standardization, and effectiveness require empirical validation. Future research should prioritize integrative trials comparing conventional and ethnoveterinary treatments, explore mechanisms of action of herbal compounds, and assess the role of extension services in bridging knowledge gaps. The study thus contributes to debates around antimicrobial resistance in agriculture and the potential of validated traditional medicine in sustainable livestock health system.



Revolutionizing Yak Science: India Decodes the Complete Genetic Blueprint of the Himalayan Yak

In a landmark achievement, four Indian Council of Agricultural Research (ICAR) institutions have successfully assembled the first chromosome-level genome of the Indian yak (*Bos grunniens*), opening up new vistas in yak breeding, conservation, and ecological research. The project, led by ICAR-NRC on Yak (Dirang, Arunachal Pradesh) with contributions from ICAR-IIAB (Ranchi), ICAR-CIRC (Meerut), and ICAR-CICR (Nagpur), employed advanced long-read sequencing and bioinformatics tools to map yak genes precisely onto chromosomes.

This new genome resource is expected to transform yak breeding by helping identify genetic markers for traits like milk yield, disease resistance, and cold adaptation, traits critical for survival in the harsh environments of the Himalayas. It also holds promise for conserving genetic diversity that is under threat from shrinking grazing lands, climate change, and disease. For yak-herding communities in Ladakh, Sikkim, Arunachal Pradesh, and Himachal Pradesh, regions where yaks play vital roles in livelihood, nutrition, and transport, this scientific breakthrough could support more resilient livestock systems and more sustainable incomes.

India's Biotech Breakthrough: First Animal Stem Cell Biobank and Advanced Veterinary Diagnostics

The establishment of India's first Animal Stem Cell Biobank and Laboratory at National Institute of Animal Biotechnology (NIAB), Hyderabad, signals more than an infrastructure milestone. It marks a strategic shift toward cutting-edge veterinary biotechnology. Stem cells hold immense promise for regenerative therapies, reproductive enhancement, and advanced disease models in livestock. By creating a centralized Biobank, India positions itself to accelerate translational research that can directly benefit farmers through healthier, more productive animals.



Union Minister Dr. Jitendra Singh Inaugurated India's First-of-its-Kind State-of-the-Art Animal Stem Cell BioBank and Laboratory at NIAB, Hyderabad

Equally significant is the launch of five novel veterinary diagnostic tools, targeting priority challenges such as brucellosis, mastitis, antimicrobial resistance, toxoplasmosis, and Japanese Encephalitis. These innovations respond to urgent needs for field-ready, rapid, and affordable diagnostics, particularly critical in a country where livestock diseases directly impact rural livelihoods and national food security.

From a broader perspective, the integration of these technologies under the BioE3 policy and One Health framework demonstrates India's intent to align veterinary health with public health imperatives. Rapid diagnostics and stem cell-based interventions not only protect livestock but also help mitigate zoonotic risks and reduce indiscriminate antimicrobial use.

Taken together, these initiatives highlight a forward-looking vision, one that positions India as a leader in applying biotechnology for sustainable animal health, productivity, and global One Health goals.

(<https://www.insightsonindia.com/2025/08/11/indias-first-state-of-the-art-animal-stem-cell-biobank-and-laboratory/>)

Global Animal Food Demand Surges: Bridging Nutritional Gaps Amid Rising Emissions

Global demand for animal source foods is set to rise significantly over the next decade, according to the OECD-FAO Agricultural Outlook 2025-2034. Middle income countries will be the key drivers while low income nations are expected to remain well below recommended nutritional benchmarks, highlighting persistent inequalities in food access.



Currently, animal source food consumption is uneven across various regions of the world. High income countries already have saturated intake levels, while many low income countries remain far below healthy diet benchmarks (around 143 kcal/day from livestock and fish). Middle income economies, especially in Asia and Latin America, have been driving recent growth through rising incomes and dietary diversification. Over 2025-2034, global per capita intake of animal foods is projected to rise by 6%, but nearly 24% in lower middle income countries, narrowing gaps though inequalities will persist.

Production of meat, dairy and eggs is expected to increase by 17%, with livestock inventories up 7%, mainly in emerging economies. This will improve nutrition in many regions, yet by 2034 low income countries will still fall short of recommended levels (~300 kcal/day). On the environmental side, direct agricultural greenhouse gas emissions are projected to grow 6%, although emission intensity per unit output will decline due to productivity gains. Overall, while animal source foods will play a greater role in reducing undernutrition in emerging economies, challenges of affordability, access, and sustainability will remain central.

The OECD-FAO Outlook projects a 14% rise in food production by 2034, with poultry leading gains. India and Southeast Asia are projected to account for nearly 40% of the world's consumption growth, underscoring the shifting weight of global food systems toward emerging economies..

(https://www.oecd.org/en/publications/2025/07/oecd-fao-agricultural-outlook-2025-2034_3eb15914.html)

SPLENDOUR SHINING VETERINARIANS

ICAR National Professor Dr. Samit Kumar Nandi Honored with Prestigious Rashtriya Krishi Vigyan Puraskar 2025

Dr. Samit Kumar Nandi, Fellow NAVS(I) (2010-21) and ICAR National Professor at West Bengal University of Animal and Fishery Sciences, Kolkata, has been conferred the coveted Rashtriya Krishi Vigyan Puraskar (RKVP) 2025 for Research in Agriculture and Allied Sciences (Animal & Fisheries Sciences). The award was presented in New Delhi on ICAR Foundation Day, July 16th, 2025.



Besides Fellow of NAVS(I), a distinguished Fellow of the Royal Society of Chemistry, UK, Royal Society of Medicine, UK, and National Academy of Agricultural Sciences (NAAS) Dr. Nandi also serves as Tata Innovation Fellow (DBT, Government of India) and former Adjunct Faculty at Washington State University, USA. The RKVP, instituted by the Indian Council of Agricultural Research, recognizes exemplary contributions of scientists in agriculture, education, extension, and allied sciences.

Dr. Nandi has revolutionized biomedical research through his innovative work in developing affordable calcium phosphate-based scaffolds, polymeric biomaterials, bioactive glasses, and marine-based bone graft substitutes in collaboration with orthopedic and plastic surgeons. His groundbreaking research includes cost-effective wound dressings and cartilage grafts from fish skin collagen, floral carbon dots, animal cartilage, and eggshell membranes, yielding effective outcomes in patients.



His remarkable innovations encompass biodegradable magnesium bone plates, silk-based diabetic wound healing materials, artificial vascular grafts, peptide-based sealants, and 3D-printed biomaterials, significantly enhancing biomedical research and national healthcare. Some products are commercially available in India, with others ready for commercialization.

Recognized with seven national awards, Dr. Nandi has led 18 government-funded projects, holds five patents, authored 150 research papers in international high-impact factor journals apart from 68 publications in national peer reviewed journals, and contributed 30 book chapters cited 6,624 times.

The NAVS(I) fraternity congratulates Dr. Nandi on this well-deserved national recognition.

Prof Hari Mohan Saxena Receives International Distinguished Lifetime Achievement Award

Dr. Hari Mohan Saxena, Fellow NAVS(I) (2005-06), has been honored with the prestigious International Distinguished Lifetime Achievement Award for his outstanding contributions to immunology and infectious disease research.



The award was presented by Prof. Luis G. Luna (Mexico) and Prof. Shizuyo Sutou (Japan) representing the Scopus Index Conclave and Asia Research Awards at a ceremony in Tiruchirappalli. A retired Professor of Immunology and former Head of Veterinary Microbiology at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Dr. Saxena has served as Counsellor (S&T) at the Embassy of India in Russia and Director cum Dean at Bihar Animal Sciences University, Patna. Currently, he serves as a National Level Monitor with the Ministry of Fisheries, Animal Husbandry & Dairying and as an FSSAI expert.

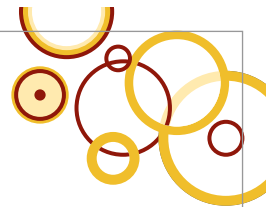
Dr. Saxena's groundbreaking research includes developing bacteriophage-based immunotherapy for bovine brucellosis and non-invasive molecular methods for assessing antibacterial therapy efficacy. His innovations address the critical challenge of antimicrobial resistance. He holds American and European patents and has authored 110 research papers and three books. Selected from 2,350 global applicants through a rigorous process, this recognition celebrates his exceptional contributions to veterinary immunology and infectious disease control. The NAVS(I) fraternity extends heartfelt congratulations to Dr. Saxena on this well-deserved recognition.

LEST WE FORGET OBITUARY

Professor Jawahar Lal Vegad, a distinguished Fellow of the Academy elected in 1996 for his exceptional contributions to Veterinary Pathology, peacefully departed for his heavenly abode on the morning of August 29, 2025, at the remarkable age of 89. He was set to enter his 90th year on August 30, 2025. The veterinary fraternity has lost a legendary person whose contributions are unaccountable and knowledge unmatched. He was a vital member of the Governing Council from 2004 to 2010 and from 2014 to 2016.



Born on August 30, 1937, in Jabalpur, Madhya Pradesh, Dr Vegad embarked on his illustrious academic journey at Jabalpur Veterinary College, where he earned his BVSc. in 1958 as a Gold Medalist in the Final BVSc examination. He further pursued his MVSc from the Indian Veterinary Research Institute, Izatnagar, in 1960. His academic excellence earned him the prestigious New Zealand Commonwealth Scholarship for PhD (1965-1967), leading to his PhD from Massey University, New Zealand, in 1968. He also obtained a Postgraduate Diploma in French from Jabalpur University in 1970.



Dr Vegad's distinguished career spanned over three decades in veterinary education and research. He began as a Demonstrator in Pathology at Veterinary College, Jabalpur (1960-1964), progressed to Assistant Professor in Preventive Medicine at Veterinary College, Mhow (1964-1967) and served as Officer-in-Charge of the Ambulatory Clinic at Veterinary College, Jabalpur (1967-1971). His career culminated as Professor and Head of the Department of Pathology at Veterinary College, Jabalpur (1971-1996), followed by his tenure as Dean (1994-96). He also served as a Visiting Professor at the University of California, Davis, USA (1988-89) and later as Emeritus Scientist, ICAR, and Consultant with the Phoenix Group.

His contributions to veterinary science were widely recognized through numerous prestigious awards and honors. He received the Rafi Ahmed Kidwai Memorial Award from ICAR in 1987 for outstanding contributions in Veterinary Pathology, the "Dr. Nemi Chand Jain Lifetime Achievement Award" under the auspices of Indian Association of Veterinary Pathologists (IAVP) in 2004, and the "Dr. C.M. Singh Samman" for lifetime achievements in 2001. He also received the Best Teacher Award from JNKVV, Jabalpur, in 1992.

Prof. Vegad's leadership in the veterinary pathology community was exemplary. He served as President of IAVP from 1996-2003 and was a Fellow of the Indian Association of Veterinary Pathologists since 1999 and the Society for Immunology and Immunopathology since 2004. His editorial contributions included serving on the Editorial Board of "Comparative Haematology International" (a journal published from England) from 1990-2000 and "The Indian Journal of Animal Sciences," ICAR, from August 1, 2010, until his passing.

His research specialization in Veterinary Pathology, particularly in avian and sheep inflammation and immune-haematology, resulted in significant scholarly contributions. He authored three comprehensive textbooks in Veterinary Pathology (General, Systemic, and Special) and two books on poultry diseases, which became invaluable resources for students and practitioners alike. His mentorship was equally remarkable - three of his Ph.D. students received the prestigious "Jawaharlal Nehru Award" of the ICAR for their outstanding contributions on avian inflammation, testament to his exceptional guidance and expertise.

The veterinary community has lost a luminary, an educator, mentor, researcher, and leader whose impact on veterinary pathology will be felt for generations to come. His legacy of academic excellence, research innovation, and dedication to the advancement of veterinary science will continue to inspire future generations of veterinary professionals.

NAVS (I) earnestly prays to the Almighty to grant eternal peace to the soul of Professor Jawahar Lal Vegad and to bestow strength upon his bereaved family and friends, helping them bear this profound loss. His extraordinary legacy will forever resonate in the field of veterinary science.

DISCLAIMER

The views expressed by various authors in this publication are their own and not necessarily that of the NAVS(I). Further, news items related to selected scientific and academic advances published in this newsletter are extracted from varied sources, including scientific journals, newspapers, websites etc. They are solely meant for developing educational awareness among the members of the Academy.

GROUNDBREAKING DISCOVERIES

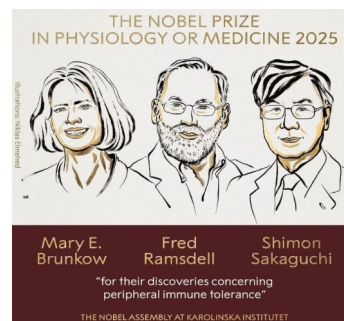
A NOBEL LEGACY

2025 Nobel Prize in Medicine Honors Immune System Breakthrough

The Nobel Assembly at Karolinska Institutet has awarded the 2025 Nobel Prize in Physiology or Medicine to three scientists who revolutionized our understanding of how the immune system avoids attacking our own bodies.

The Laureates and Their Discovery

Mary E. Brunkow (Institute for Systems Biology, Seattle), Fred Ramsdell (Sonoma Biotherapeutics, San Francisco), and Shimon Sakaguchi (Osaka University, Japan) received the prize for discovering regulatory T cells, the immune system's "security guards" that prevent immune cells from mistakenly attacking our own tissues.



In 1995, Shimon Sakaguchi made the first breakthrough, swimming against the tide when most researchers believed immune tolerance only developed in the thymus. He discovered a previously unknown class of immune cells protecting against autoimmune diseases.

In 2001, Brunkow and Ramsdell identified the crucial FOXP3 gene, discovering that mutations cause severe autoimmune disease including IPEX. Two years later, Sakaguchi proved this gene controls regulatory T cell development, connecting all the discoveries.

Transforming Medicine

"Their discoveries have been decisive for our understanding of how the immune system functions and why we do not all develop serious autoimmune diseases," said Olle Kämpe, Nobel Committee chair.

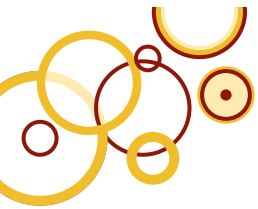
This fundamental knowledge has spurred revolutionary treatment development. In cancer therapy, researchers are working to dismantle the wall of regulatory T cells that tumors attract for protection, allowing the immune system to attack cancer cells.

For autoimmune diseases, scientists are taking the opposite approach, promoting regulatory T cell formation. Pilot studies are testing interleukin-2, a substance that helps regulatory T cells thrive, with potential applications in preventing transplant rejection.

The three laureates will share 11 million Swedish kronor equally, with the formal ceremony on December 10, 2025, in Stockholm. Several therapies based on their discoveries are currently undergoing clinical trials. (<https://www.nobelprize.org/prizes/medicine/2025/press-release/>)

Veterinary Science and the Nobel Legacy

No veterinarian, except Dr. Peter Doherty, has received a Nobel Prize, though veterinary science has profoundly influenced many Nobel-winning discoveries. Sir Arnold Theiler (1867-



1936), the pioneering South African veterinarian who controlled Rinderpest and African Horse Sickness, was nominated for the 1927 Nobel Prize in Physiology or Medicine, highlighting the discipline's global significance.

From the use of animal models in immunology and vaccine development to breakthroughs in insulin, transplantation, and zoonotic disease control, veterinarians have been silent partners in the progress of modern medicine. The evolving One Health approach-uniting human, animal, and environmental health-epitomizes this shared legacy.

As research in comparative medicine, regenerative therapies, and emerging infections expands, the next Nobel recognition may well honor a veterinarian's contribution. Although, only one veterinarian, Dr. Peter Doherty from Australia, has received the Nobel Prize, veterinary science continues to drive innovations that safeguard both human and animal health.

Japanese Scientists Develops Revolutionary Universal Artificial Blood That Works for All Blood Types

In a groundbreaking medical advancement, Japanese scientists have created artificial blood compatible with all blood types; a breakthrough that could transform emergency medicine worldwide by 2030.

Researchers at Nara Medical University have developed this innovative product using expired donor blood that would otherwise be discarded. The team, led by Professor Hiromi Sakai, extracts hemoglobin which is the oxygen-carrying component from red blood cells and encapsulates it in tiny fat-based bubbles that mimic natural blood cells.



Hiromi Sakai, a professor at Nara Medical University, says his team aims to put artificial red blood cells into practical use by around 2030. (Photo: The Japan Times)

What makes this development truly revolutionary is its practical advantages. While conventional donated blood expires in just 42 days and requires constant refrigeration, this artificial alternative can last up to five years refrigerated or two years at room temperature. This extended shelf life makes it invaluable for disaster zones, remote areas, battlefield medicine, and regions with limited medical infrastructure.

Because the artificial blood lacks the specific markers that determine blood type compatibility (A, B, AB, or O), it eliminates the critical time spent on blood-type matching during emergencies. It's also virus-free, dramatically reducing infection risks.

"When a blood transfusion is urgently needed, it takes some time before starting the transfusion because the patient's blood type needs to be examined," Professor Sakai explained. "With the artificial red blood cells, there is no need to worry about blood types, so the transfusion procedure can be performed quickly."

Clinical trials that began in 2022 have shown encouraging results. Healthy volunteers safely received the artificial blood with no serious side effects. Current trials are testing larger doses (100 to 400 milliliters) to evaluate efficacy and safety thoroughly.

If testing continues successfully, Japan could become the first nation to deploy artificial blood in real-world medical systems by 2030. This innovation addresses the global blood shortage highlighted by the World Health Organization and could revolutionize trauma care, surgery, and emergency response worldwide; ensuring lifesaving transfusions are available quickly and safely, regardless of blood type or location. (<https://www.indiatoday.in/health/story/japanese-scientists-develop-universal-artificial-blood-for-emergency-use-2750702-2025-07-04>)

TIDBITS SOUPCON

GoI Withdraws Approval for 11 Animal-Based Biostimulants Over Religious Concerns

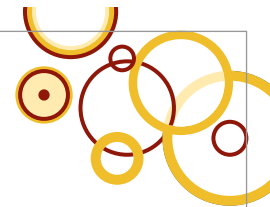
The Union Agriculture Ministry has revoked approval for 11 biostimulants derived from animal sources, citing religious and dietary restrictions. The withdrawn products were made from chicken feathers, pig tissue, bovine hide, cod scales, sardines, and other animal by-products.

Biostimulants improve crop yields, quality, and help plants withstand environmental stresses like drought and salinity. Common examples include seaweed extracts, humic acids, and microbial inoculants.

These animal-based products, previously cleared for crops including paddy, tomato, potato, cucumber, chilli, cotton, and grapes, were removed from Schedule VI of the Fertiliser Control Order (FCO), 1985. The Indian Council of Agricultural Research (ICAR), which had initially cleared them, later withheld permission citing ethical, religious, and dietary concerns, emphasizing the need for pre-harvest interval data before allowing animal-derived foliar sprays.

India's biostimulants market, valued at \$355.53 million in 2024, is projected to reach \$1,135.96 million by 2032. However, the sector faced significant regulation challenges. Union Agriculture Minister Shivraj Singh Chouhan revealed that nearly 30,000 unregulated biostimulant products were in circulation earlier. After the 2021 FCO amendment mandated registration and safety proof, this number dropped to around 8,000, and recent crackdowns have further reduced it to approximately 650 products.

The regulation of biostimulants now falls under the Central Biostimulant Committee, with manufacturers required to provide detailed data on chemistry, bio-efficacy, toxicology, and heavy metal content before approval. (<https://share.google/0m0XZqjGjFGTdYzE5>)



Groundbreaking Discovery: Dogs Perceive the World Through an Extraordinary Fusion of Smell and Sight

A new study has revealed that dogs' sense of smell is closely linked to their vision, providing them with a unique way of perceiving the world. This discovery, made by veterinary neurologist Philippa Johnson and colleagues at Cornell University, shows that there are neurological connections between the olfactory bulb (which processes smells) and the occipital lobe (which handles vision) in the brains of dogs. These connections suggest that dogs integrate their sense of smell into their visual processing, a link not found in humans or any other species studied so far.

This ability may explain why blind dogs can still navigate familiar environments effectively, as their sense of smell helps compensate for their loss of sight. The study also indicates that dogs likely experience their surroundings in a way fundamentally different from humans, combining both scent and sight to understand their environment.

Future research is planned to explore whether similar connections exist in animals like cats and horses, which also rely heavily on their sense of smell. This discovery underscores the idea that a dog's olfactory sense is not only vital but also intertwined with other sensory systems, enhancing their overall perception and ability to function, even when visually impaired.

The study highlights how dogs' superior sense of smell may have played a role in their domestication, offering early humans key survival advantages like improved hunting abilities and protection from predators. This discovery provides a new understanding of how dogs experience the world, suggesting they "see" through a unique combination of smell and sight.

(<https://www.nbcnews.com/science/weird-science/dogs-can-see-noses-study-suggests-rcna39333>)

Revolutionary Finding: Elephants Call Each Other by Unique Names, A First in the Animal Kingdom

Scientists have made a groundbreaking discovery: African elephants use individual names for each other, communicated through low frequency rumbles. This is the first time such behavior has been observed in any animal species. While other animals, such as dolphins and parrots, mimic sounds, elephants create unique vocal identifiers, enabling them to communicate across long distances.

Dr. Joyce Poole, part of the research team, explained that elephants, like humans, live in complex social structures where family members may separate and reunite. By using these vocal "nicknames," elephants can call each other back to the herd or relay important information. Recordings made by Poole's team reveal these rumbles, including an elephant named Shirley calling for another named Sandy. Each call is unique in tone and duration, providing evidence of individual recognition.

Researchers utilized artificial intelligence to analyse the calls, accurately predicting which elephant was being addressed about 28% of the time, significantly higher than random chance. This discovery, published in *Nature Ecology & Evolution*, offers fascinating insight into the intelligence and social complexity of elephants. Elephants' ability to communicate using distinct vocalizations could also lead to further findings, such as potential "place names" for familiar locations.

The findings, based on over 35 years of data from Amboseli National Park and Samburu National Reserve in Kenya, deepen our understanding of how animals interact and emphasize the intricate ways in which elephants navigate their social environments.

(<https://news.sky.com/story/elephants-have-nicknames-for-each-other-scientists-find-in-really-exciting-discovery-13151294>)

INSTITUTIONAL LIFE MEMBERS



Bihar Animal Sciences University
Patna



Dau Shri Vasudev Chandrakar Kamdhenu Vishwavidyalaya, Durg



Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana



Kamdhenu University Gandhinagar



Karnataka Animal, Fishery & Veterinary Sciences University, Bidar



Kerala Veterinary and Animal Sciences University Pookode



Khalsa College of Veterinary & Animal Sciences Amritsar



Lala Lajpat Rai University of Veterinary & Animal Sciences Hisar



Maharashtra Animal & Fisheries Sciences University Nagpur



Rajasthan University of Veterinary & Animal Sciences Bikaner



Sri Venkateshwara Veterinary University Tirupati



Uttar Pradesh Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go-Anusandhan Sansthan, Mathura.

BEYOND THE BOUNDARIES

SISTER SCIENCES

Breakthrough in Reversing Aging in Primates

Chinese scientists have reported a remarkable advance in anti-aging research by using Senescence-Resistant Mesenchymal Progenitor Cells (SRCs) in elderly Cynomolgus monkeys. Over a 44-week intravenous treatment, the engineered human stem cells produced no adverse effects while improving health across 10 body systems and 61 tissues.



A representative photo. Image Source: <https://www.youtube.com/watch?v=BoGyQvPYkoU>

The therapy enhanced memory, bone strength, reproductive activity, and reduced fibrosis, lipid buildup, and brain atrophy. Cellular analyses showed fewer senescent cells, lower inflammation, and stronger regenerative capacity. Strikingly, biological "aging clocks" suggested the treatment reversed neuronal age by 6-7 years and oocyte age by 5 years.

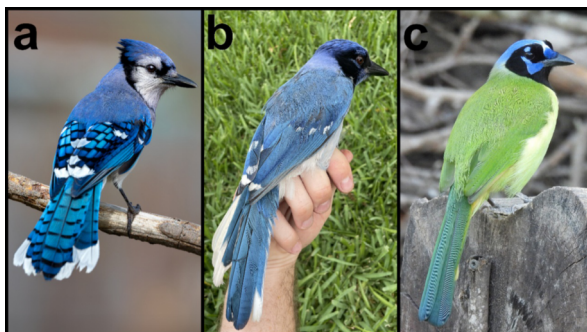
Further experiments revealed that exosomes released by SRCs played a critical role, rejuvenating aged tissues in mice and even restoring human neurons, liver, and ovarian cells in the laboratory.

This is the first demonstration of sustained anti-aging effects in a primate model, bridging the gap between rodent studies and human application. While challenges remain—long-term safety, dosage optimization, and ethical considerations—this breakthrough highlights the transformative potential of regenerative medicine.

For academia, the study is a reminder that targeting biological aging itself may become central to future therapies, opening both opportunities and debates in medicine, biotechnology, and ethics.

First Intergenic Natural Hybridization Between Temperate and Tropical Birds

A revolutionary research published in the Ecology and Evolution (September 2025; <https://doi.org/10.1002/ece3.72148>) journal documents the first known wild hybrid between the Green Jay (*Cyanocorax yncas*) and the Blue Jay (*Cyanocitta cristata*), two species that have historically occupied separate ecological niches in North America. This intergenic hybridization was observed in a suburban backyard northeast of San Antonio, Texas, in May 2023, and confirmed through genetic analysis as a male offspring of a Green Jay mother and a Blue Jay father (Fig.).



a). Blue Jay (father); b). Hybrid Jay (male offspring); c). Green Jay (Mother)

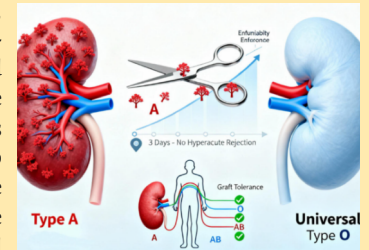
The hybrid exhibits a unique combination of traits from both parent species, including a green jay's crown, a blue jay's tail, and a distinctive blue throat patch. Notably, the Green Jay and Blue Jay diverged approximately 7 million years ago and have not naturally overlapped in range until recent decades. Climate-driven range expansions have brought these species into contact, facilitating this unprecedented hybridization event.

Researchers suggest that such hybridization events may become more common as climate change continues to alter species distributions, leading to novel ecological interactions. The discovery underscores the dynamic nature of ecosystems and the potential for rapid evolutionary responses to environmental changes.

Ground Breaking Discovery in Universal Blood and Kidney Succeeded

A promising advancement in transplant science is reshaping expectations for organ compatibility. Researchers have successfully demonstrated that "enzyme-converted O" (ECO) kidneys—organs treated with specialized enzymes to remove blood-group antigens—can be transplanted safely across ABO barriers in a human decedent model. This approach directly targets one of the major obstacles in kidney transplantation: the risk of hyperacute rejection when donor and recipient blood types are incompatible.

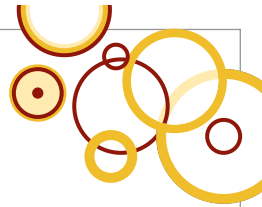
In this proof-of-concept study, kidneys from A or B blood-type donors were perfused with enzymes that cleave the carbohydrate antigens responsible for blood-group specificity. Once treated, the organs effectively behaved like type O kidneys—the universal donor type—since the immune-triggering A/B antigens were no longer detectable on the tissue surface (<https://www.nature.com/articles/s41551-025-01513-6>).



To evaluate the method under realistic clinical conditions, the ECO kidneys were transplanted into human decedent recipients with deliberately mismatched ABO blood types. The outcomes were striking. The converted kidneys exhibited stable perfusion, normal vascular resistance, and none of the rapid inflammatory or clotting responses that characterize hyperacute rejection. Tissue analyses confirmed minimal complement activation and no immediate graft injury, suggesting that the antigen removal process was both effective and gentle enough to preserve organ integrity.

If validated in living recipients, this strategy could meaningfully expand the donor pool. Many viable kidneys are currently declined solely due to ABO incompatibility—even when recipients are otherwise an excellent match. By enabling universal compatibility, enzyme conversion could help reduce wait-list times, improve equity in organ allocation, and ensure that fewer donated kidneys go unused.

While further research, clinical trials, and regulatory evaluation are needed, this study provides a compelling glimpse of a future in which blood type is less of a barrier in transplantation. ECO technology represents a notable step toward more flexible, efficient, and inclusive organ-matching practices.



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BROOKE HOSPITAL FOR ANIMALS (INDIA)

An Organisation Committed to Equine Health & Welfare and the Development of the Marginalised Equine Owning Community

Brooke Hospital for Animals (India) or Brooke India (BI) is an affiliate of the Brooke, which is a United Kingdom-based international equine charity, focusing on the welfare and care of equines (horses, donkeys and mules). Brooke's vision is of a world in which working horses, donkeys and mules are free from suffering and have a life worth living.



Renu Devi, equine owner from Sonipat, with her mule

BI's journey in India towards equine welfare started two decades back when it was registered as a Section 8, Not for Profit Company under the Companies Act. Equids in India mostly work in harsh environments like Brick Kilns and face never-ending health troubles. This situation was mainly due to a lack of financial resources and knowledge on good management practices amongst the equine owners and insufficient understanding of equine health care by Local Health Providers (LHP).

BI's initial step as an intervention involved providing free veterinary services at different congregation points and organising Intensive Equine Care Camps (IECC) to spread awareness on welfare oriented husbandry

practices and preventable injuries & diseases. From 2006 onwards, BI started focusing on establishing permanent intervention units and started expanding its operations to other states such as Andhra Pradesh, Rajasthan,



IECC Camps Luniyavas donkey fair

Hyderabad and other parts of Uttar Pradesh. The BI team also introduced Community Engagement for exploring sustainable solutions for equine welfare and community development. This period saw the formation of male and female Self Help Groups called Equine Welfare Groups, the use of Participatory Rural Appraisal tools and increasing community participation. BI team saw the congregation of equines, equine owners, traders and local service providers at Equine Fairs as an excellent opportunity for a large-scale intervention. BI teams intervened to spread awareness on equine welfare issues, provide quality training on equine care and ensure equine welfare-friendly facilities and resources at these fairs.

BI teams also focused on strengthening the local service delivery system for working equines, including quality farriery services for hoof care, accurate and appropriate veterinary first aid during health emergencies, hair clipping, and welfare-friendly saddlery material. They also ensured compassionate handling while

delivering any of the services. These interventions were incorporated in Brooke's Theory of Change, in 2016. This theory promotes strengthened animal health policy environment and thriving equine owning communities.



Equines working at Brick Kilns

Currently, BI operates directly through 32 Equine Welfare Projects (EWPs) across 10 States and Union Territories in India, thereby reaching out to approximately 3.16 lakhs working equids and the equine owning community that owns/rears them. BI has multi-disciplinary teams with core strengths in Animal Health & Welfare, and Community Development, including Human behaviour Change, Gender Empowerment, Livelihoods and Resilience. Some of the notable achievements made by the team over the years include:

- Advocating the revision of Glander's Compensation- From INR 50 to 25,000 for horses and INR 16000 for mules/donkeys
- Inclusion of Equids in Livestock under the National Livestock Mission Schemes and thereby making them eligible for equine insurance.
- Advocating the issue of Animal Welfare Board of India (AWBI) advisories for Equine Fairs, Shrines & Pilgrim sites
- Introducing BI's innovative projects for ensuring sustainable availability of green fodder, through Azolla cultivation and Hydroponics techniques successfully across its intervention areas.
- BI teams worked throughout the COVID 19 pandemic. They supported the community by providing emergency treatments, alternative livelihood options, first aid kits and feed & fodder for the equines.

In the upcoming years, BI will focus on strengthening the Community Based Organisations, linkages with government welfare schemes, have robust disaster response capacity, advocate policy revisions on equine welfare issues, and enhancing the knowledge and skills of veterinary students on animal welfare, compassionate handling and upskilling the local farriers and animal health providers.



Quality Farriery Services

BI's team is proud of its journey and aspire to keep bringing a positive change for vulnerable and marginalised working equines and the rural communities, whose lives we have not touched yet.

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VetPlasma™

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INDICATIONS AND USAGE

VetPlasma is used primarily to treat acute hypovolemia & shock in conditions like Blood loss, diarrhoea, etc

DOSAGE AND ADMINISTRATION

Daily dose and rate of infusion depend on the animal's blood loss, hemodynamics and on the hemodilution effects

Recommended Dose:

Large Animals (Cattle & Horse) :

8-10 ml/kg body weight/day, up to maximum 20 ml/kg

Small Animals (Dog, Cat, Pig, Sheep & Goat) :

10-20 ml/kg body weight/day

Administer by intravenous infusion only.

The initial 10 to 20 ml should be infused slowly, keeping the animal under close observation due to possible anaphylactoid reactions

PRESENTATION

250 ml & 500 ml plastic bottle.



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