



NAVS NEWS VIBES

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)

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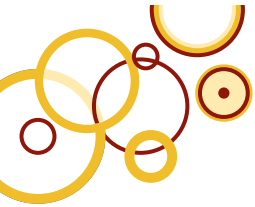
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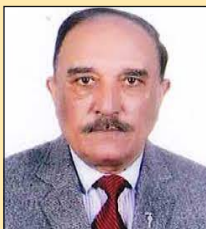
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Dear Esteemed Fellows and Valued Readers,

As we celebrate the remarkable achievements of the livestock and poultry industry in India, a silent crisis threatens to undermine decades of progress in animal production and health. Antimicrobial resistance (AMR) has emerged as one of the most formidable challenges facing industry today, with potentially catastrophic implications for both animal and human health. In a nation where livestock forms the backbone of the rural economy and veterinarians serve as the primary service providers of animal health, our future plan for this crisis will define the future of veterinary practice.

India stands among the highest consumers of antibiotics in livestock production globally, yet awareness about AMR remains alarmingly low across the veterinary ecosystem. Recent research reveals three critical gaps that perpetuate this crisis: inadequate awareness among farmers about the consequences of continuous antimicrobial misuse, multiple factors influencing inappropriate antibiotic application in animal production system and the absence of infrastructural support in current governance frameworks to address AMR effectively. This trifecta of challenges creates a perfect storm where well-intentioned treatments become inadvertent contributors to a global health emergency.

The World Health Organization's stark warning needs due attention. If current trends continue unchecked, AMR could claim 10 million lives globally by 2050. With over 200 zoonotic diseases already posing threats to public health, the emergence of antimicrobial-resistant microbes amplifies the risk exponentially. This crisis is particularly insidious due to its invisibility; unlike an outbreak that generates immediate alarm, AMR spreads silently through our farms, clinics and communities, questioning treatment efficacy and creating reservoirs of resistance that respect no boundaries.

As veterinarians, we find ourselves at the epicenter of this challenge, uniquely positioned to serve as both professional visionary and catalysts for transformation. Our prescribing decisions directly impact the development and spread of resistance, yet we also possess the knowledge and authority to implement solutions. The responsibility extends beyond individual practice to encompass farmer motivation, policy framing and interdisciplinary collaboration under the One Health framework that defines the interconnected nature of human, animal and environmental health.

The plan to action demands immediate and sustained action. We must champion responsible antibiotic use through evidence-based prescribing, promote alternatives such as improved husbandry practices and vaccination protocols, and actively engage in farmer extension education programs. Diagnostic capabilities need strengthening to enable targeted therapy rather than empirical treatment. Equally important is our role in advocating for stricter regulatory frameworks governing antibiotic sales and distribution, while supporting research into novel therapeutic approaches.

The National Academy of Veterinary Sciences (India) has a pivotal role in leading this transformation. We must establish comprehensive AMR awareness programs that integrate responsible usage of antimicrobial in veterinary curricula and establish professional norms that set new standards for practice. Our collective efforts can influence policy makers, educate stakeholders and drive the systemic changes necessary to combat this crisis.

The response to AMR transcends professional obligation; it represents an ethical mandate that will influence the sustainability of veterinary practice and the protection of public health for generations to come. The time for action is now and the professional responsibility rests with each of us. Let us rise to this challenge with the same dedication and scientific rigor that has always defined our noble profession.

The silent crisis demands a vocal response, from every veterinarian, in every clinic, across every farm in India to counteract the AMR.

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.

With profound appreciation and warmest regards,

L.D. Singla

Editor, NAVS News VIBES

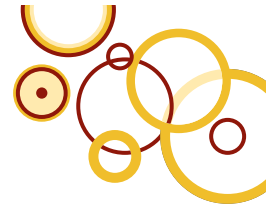
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HORIZON

PRESIDENT'S VIEWS & VISION

Presidential Address at Indo-German Dialogue for International Cooperation in Veterinary and Animal Sciences, Leipzig, Germany

Standing before distinguished veterinary luminaries in Leipzig, a city that embodies scientific excellence, I was reminded that veterinary science is no longer a background discipline. It stands at the forefront of global health security, climate action and food system transformation. As President of the National Academy of Veterinary Sciences (India) [NAVS(I)], I had the privilege to address the convergence of vision, science, and societal responsibility between India and Germany, representing a broader dialogue between the Global South and North.



My professional trajectory has taught me invaluable lessons that shape my vision for international collaboration. As a scientist turned entrepreneur, I learned early that credible science, when made accessible and adaptable, speaks louder than marketing. When I first ventured into manufacturing protein feed supplements, winning farmers' trust with effective and affordable products was my greatest challenge. The dramatic improvement in feed conversion ratios that I achieved opened doors to major integrators and institutions, reinforcing my belief in science-driven solutions.



This corporate journey exposed me to the challenges of scalability, sustainability and innovation in animal nutrition and health areas where Indo-German collaboration can bring transformative results. My subsequent work with the United Nations Industrial Development Organization in Vienna further broadened my perspective on integrating science with policy and enterprise, emphasizing capacity building, technology transfer and inclusive growth dimensions critical for countries like India.

India's livestock sector, one of the world's largest, contributes significantly to rural livelihoods, nutritional security and our national economy. The rapid growth of poultry and aquaculture sectors is central to meet the protein requirements of 1.4 billion people affordably and sustainably. However, I confront complex challenges: emerging diseases, antimicrobial resistance (AMR), climate-related vulnerabilities and the urgent need for innovation in nutritional health.

Germany, with its advanced research institutions, cutting-edge technology and focus on sustainability, presents an ideal partner for collaboration. Our partnership potential spans five critical areas:

- **One Health Initiatives:** Joint research programs on zoonotic diseases, AMR surveillance and integrated disease management can strengthen our preparedness. With zoonoses accounting for 60% of emerging infectious diseases, the post-COVID world has underscored the need for integrative frameworks where veterinary, human and environmental health disciplines co-create solutions. Germany's European leadership in One Health architectures, combined with India's dense human-animal interface, creates opportunities for an Indo-German Center for One Health.
- **Sustainable Animal Nutrition:** Collaborative innovations in feed additives, precision feeding technologies and climate-smart nutrition strategies can be co-developed and customized for

Indian conditions.

- **Veterinary Education and Training:** Exchange programs, capacity building and collaborative curriculum development will help raise global standards of veterinary science.
- **Joint Research and Development:** Bilateral centers of excellence in biotechnology, genomics, vaccine development and digital livestock management can drive breakthrough innovations.
- **Policy and Knowledge Sharing:** Platforms for policy dialogue, regulatory harmonization, and cross-learning will enhance evidence-based decision-making.

Our collaboration can develop:

- Low-emission feed technologies and biotech-based supplements to reduce methane emissions, addressing livestock's 14% contribution to global greenhouse gas emissions
- Prototype resilient breeding programs aligning productivity with adaptability
- Climate-smart dairies linked to carbon credit markets

This approach transforms us from vulnerability to visionary leadership, co-authoring a new era in veterinary sciences that is transdisciplinary, transcontinental and transformational.

The science that does not touch the farmer or consumer fails its moral obligation. Science must serve the silent stakeholders: our farmers, animals and the ecosystems they inhabit. Collaboration is wisdom in a world fractured by inequities and crises. International collaborations must not be confined to elite exchanges; they must reach grassroots levels.

As President of NAVS(I), I am committed to transform our academy into a platform for global dialogue and local action. Such a platform could refine our global capacity to detect, prevent and manage health threats that know no borders.

NAVS stands ready to act as a catalyst in this collaboration through: Indo-German working groups, joint fellowships, scientific symposia and cross-institutional linkages between academies and universities

I invite our German colleagues to engage with NAVS(I) and allied Indian institutions in creating a roadmap that is visionary yet grounded in deliverables. Together, we have the expertise, experience, and ethical imperative to ensure that our collaboration becomes a driver of equity, resilience and scientific progress.

Let us work together, scientists, educators, industry partners, and policymakers, to shape a better world for animals, humans, and the ecosystems we serve. The future of veterinary science lies not in isolated excellence but in collaborative wisdom that transcends borders and serves humanity's greatest needs.

(Dr DVR Prakash Rao)

THE ACADEMY

EVENTS & ENDEAVORS

10th Governing Council Meeting of the Academy

The 10th Governing Council (GC) Meeting of the National Academy of Veterinary Sciences (India) [NAVS (I)] was convened online on April 21, 2025 at 2:30 PM.

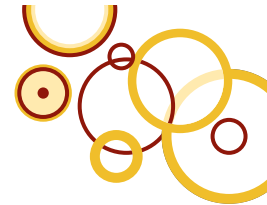
Dr DVR Prakash Rao, President NAVS (I), warmly welcomed all GC Members and thanked them for sparing their valuable time for the meeting. The President apprised the House of his recent interactions with various authorities and organizations. He informed the House that, as a member of the Board of Management of TANUVAS, he had interacted with the visiting team from the German Veterinary University in Chennai. The visiting team invited him to attend the forthcoming Indo-German Veterinary Workshop in his capacity as President NAVS (I). He, along with representatives from TANUVAS, GADVASU, WBUAFS, BASU, NDRI, IVRI, NIANP, and ICAR, attended the Workshop from April 28-30, 2025 at Leipzig, Germany. The President mentioned that this would be an opportunity for him to seek funding from the German University for the Academy to undertake collaborative projects. Furthermore, the President sought proposals from GC members to make the Delhi office more active and functional.

Progress on Pending Points from Previous Meeting

1. **Promotion of Continuing Veterinary Education (CVE):** The NAVS(I), GADVASU and the Director of Animal Husbandry, Punjab, has conducted two short-term courses of 4 days duration in August 2024 and February 2025 for forty field veterinarians. The feedback from the participants has been quite positive. Similar courses were conducted at TANUVAS, Chennai, during March 2025. These courses were sponsored by Brooke India, an Associate of our Academy.
2. **NAVS (I) Zonal/Regional Chapters:** A committee has been constituted as certain the feasibility of establishing Zonal Centers of the Academy at GADVASU, Ludhiana and BASU, Patna:
 - (a) Dr DVR Prakash Rao - Chairman
 - (b) Dr AC Varshney - Member
 - (c) Dr Ravindra Sharma - Member
 - (d) Dr Yashpal Singh Malik - Member
 - (e) Maj Gen ML Sharma (Retd) - Member
3. **NAVS(I) Vision Document:** The President apprised the House that he has received the Draft Vision Document from the Chairman, Dr KM Bujarbaruah. This document will be reviewed by the committee.
4. **Publication of Periodicals/Journals/Technical Books:** A committee has been constituted to examine the feasibility of publication of the NAVS (I) Scientific Journal:
 - (a) Dr Gajraj Singh - Chairman
 - (b) Dr LD Singla - Member
 - (c) Dr Yashpal Singh Malik - Member
 - (d) Dr Ravindra Sharma - Member
 - (e) Dr Jyoti Palod - Member

- (f) Dr Ashwani Kumar - Member
- (g) Maj Gen ML Sharma (Retd) - Member

5. **Recommendations of Scientific Convention held at KVAFSU, Bengaluru:** A committee has been constituted to review the recommendations of the NAVS (I) Scientific Convention held on March 8-9, 2025 at KVAFSU, Hebbal, Bengaluru, for preparation of recommendation:
 - (a) Dr Gaj Raj Singh - Chairman
 - (b) Dr Ashok Kumar - Member
 - (c) Dr Yashpal Singh Malik - Member
 - (d) Dr Ravindra Sharma - Member
 - (e) Maj Gen ML Sharma (Retd) - Member
6. **Corporate-Academia Interaction:** A committee has been constituted to formulate a strategy for collaboration with various corporate sectors:
 - (a) Dr DVR Prakash Rao - Chairman
 - (b) Dr AC Varshney - Member
 - (c) Dr Sushanth Rai - Member
 - (d) Dr Arun Atrey - Member
 - (e) Dr PK Shukla - Member
 - (f) Dr AK Pattanaik - Member
 - (g) Dr MK Chaitly - Member
 - (h) Dr SB Barbuddhe - Member
 - (i) Dr Jitendra Verma - Member
 - (j) Maj Gen ML Sharma (Retd) - Member
7. **Review of Government Policies on Animal Health, Welfare and Production:** A committee has been constituted to examine the scope of reviewing Government Policies on Animal Health, Welfare and Production:
 - (a) Dr DVR Prakash Rao - Chairman
 - (b) Dr Raghendra Bhatta - Member
 - (c) Dr Abhijit Mitra - Member
 - (d) Dr KML Pathak - Member
 - (e) Dr AC Varshney - Member
 - (f) Dr Mandeep Sharma - Member
 - (g) Maj Gen ML Sharma (Retd) - Member
8. **Weightage of NAVS (I) Fellowship in various Selection/Promotion in Veterinary Universities:** The President informed that he will approach various Vice Chancellors of Veterinary/Agricultural Universities to consider allocating weightage to candidates granted Fellowship by the Academy for promotions/selections. Furthermore, he apprised the House that he has invited the Hon'ble Vice Chancellor of Nanaji Deshmukh Veterinary Sciences University, Jabalpur to become an Institutional Member of the Academy. He intends to approach the Vice Chancellors of Hyderabad and Kolkata Veterinary Universities soon for discussing Institutional Membership of the Academy.
9. **Collaboration of various Veterinary Associations with the Academy:** The President requested GC members to forward names and email addresses of the Presidents of various Veterinary Associations to enable him to correspond regarding membership and collaboration.



Agenda Points

1. **Change of Eligibility for Associate Fellowship:** The issue of reducing the requirement of duration of holding the appointment of Associate Professor from 5 years to 3 years as an eligibility criterion for applying for Associate Fellowship of the academy, raised during the GB meeting held on March 8, 2025 at KVAFSU, Hebbal, Bengaluru, was deliberated. The proposal has been accepted.
2. **Academy's Award:** Recognition of outstanding Veterinary Graduates for their exceptional contributions to the Veterinary Profession in various sectors viz. Industries, Corporate Sectors, Veterinary Field Services, Entrepreneurships etc. A committee has been constituted to formulate guidelines and application format for the Academy's award for Veterinary Graduates who have excelled in various professional fields:
 - (a) Dr DVR Prakash Rao - Chairman
 - (b) Dr AC Varshney - Member
 - (c) Dr Gaj Raj Singh - Member
 - (d) Dr Ravindra Sharma - Member
 - (e) Maj Gen ML Sharma (Retd) - Member

The meeting concluded with the President expressing his gratitude to all members for their active participation and valuable contributions toward advancing the Academy's mission of excellence in veterinary sciences.

Major Breakthrough: Government of India Proposes Indian Council of Fisheries and Veterinary Research (ICFVR): A Milestone Achievement in NAVS(I)'s Advocacy Journey

We are delighted to share an encouraging development that reflects the success of our Academy's persistent efforts. The Ministry of Fisheries, Animal Husbandry & Dairying, Government of India has formally proposed the establishment of the Indian Council of Fisheries and Veterinary Research (ICFVR) or the Bharatiya Fisheries & Livestock Research Council (BFLRC). This groundbreaking initiative represents a significant validation of NAVS(I)'s consistent advocacy for strengthening India's veterinary academic research and extension ecosystem.

In an official letter dated June 23, 2025 (D.O.No. K-2022/5/ICVR), Secretary Alka Upadhyaya has reached out to stakeholders seeking inputs on this transformative proposal. The letter acknowledges that livestock and fisheries sectors are critical pillars of India's food security, rural livelihoods, and economic resilience, emphasizing the need for a dedicated apex research body modeled after the Indian Council of Medical Research (ICMR). This initiative aims to complement existing efforts by the Indian Council of Agricultural Research (ICAR) while providing a sharper institutional focus specifically on the livestock poultry and fisheries sectors.

The proposed ICFVR/BFLRC will strengthen academic research and extension coordination and educational reforms, support evidence-based policy development, and enhance entrepreneurship development. The Ministry is actively seeking stakeholder inputs, particularly regarding the integration and promotion of fisheries sciences research and education through this mechanism, with plans to undertake further consultations to develop the

detailed concept and structure.

This development has been met with tremendous enthusiasm from our community members. As noted by our esteemed colleagues, "This is an excellent development. The consistent efforts of our Academy are now showing results. Hope to see the establishment of ICFVR soon," and "The day is not very far when NAVS(I) will get recognition from the Government of India, at par with NAMS & NAAS." The overwhelming response reflects our shared optimism that this initiative will advance research and innovation in fisheries and veterinary and animal sciences.

We compliment to all Governing Council members and NAVS(I) fellows for this promising initiation step. This milestone reflects our unwavering dedication to strengthen India's veterinary research landscape and represents a significant step forward in our journey toward greater institutional recognition. Together, we continue to work towards a future where veterinary and fisheries research receives the recognition and institutional support it deserves, bringing us closer for achieving parity with other prestigious national academies.

World Zoonoses Day Observed with Visit of Patron and President of NAVS(I) to ICAR-NIVEDI

ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI) marked World Zoonoses Day with the distinguished presence of two eminent leaders of veterinary science ie Dr. Kamal Malla Bujarbaruah, Patron, National Academy of Veterinary Sciences (India) and former DDG (Animal Science), ICAR, and former Vice-Chancellor, Assam Agricultural University; and Dr DVR Prakash Rao, President, National Academy of Veterinary Sciences (India). They were accompanied by Dr Triveni Dutt, Director, ICAR-Indian Veterinary Research Institute (IVRI), along with senior scientists from ICAR-IVRI.

Dr. Baldev R. Gulati, Director, ICAR-NIVEDI, welcomed the dignitaries and highlighted the institute's leading role in livestock disease epidemiology, zoonotic disease research, and collaborations with ICMR, NCDC, and international bodies. He also shared progress on WOA Reference Laboratory recognition and NIVEDI's pioneering work in livestock disease modelling and forecasting.

During the interaction, Dr. Bujarbaruah lauded NIVEDI's pivotal contributions and called for greater synergy among veterinary institutions to maximize resources and eliminate duplication of efforts. Dr. Prakash Rao emphasized the urgency of robust disease monitoring systems, particularly to achieve India's ambitious goal of Foot-and-Mouth Disease eradication by 2030.



The visit reinforced NIVEDI's position as a national hub for zoonotic disease research and livestock health surveillance, and the occasion underscored the importance of collective scientific leadership in safeguarding both animal and public health.

CAREFUL THOUGHTS:

TRANSFORMATIVE WELFARE INITIATIVE

New Equine GoI Guidelines in India Set Welfare Standards for Religious Pilgrimages

Brooke India, an Associate member of Our Academy, Leads the Transformative Welfare Initiative

The Department of Animal Husbandry & Dairying, Government of India has released comprehensive guidelines ensuring the humane treatment of working equines during religious pilgrimages across the country. This landmark initiative, supported by Brooke India, an esteemed associate of our Academy, represents a significant forward step in animal welfare standards.



(<https://www.indiatoday.in/india/story/stop-use-of-mules-ponies-in-vaishno-devi-route-maneka-gandhi-to-mehbooba-mufti-1222384-2018-04-28>)



(Source: https://www.telegraphindia.com/life/mule-fuel-amarnath-yatra-has-started-and-the-mules-are-busy-but-thats-not-all-they-do-prnt/cid/2111651#goog_rewarded)

Challenge

Thousands of horses, donkeys and mules serve pilgrims during major religious journeys, including the Amarnath Yatra, Char Dham Yatra, Vaishnodevi Yatra, and Manimahesh Yatra. These animals often work under extreme conditions in high-altitude mountainous regions, carrying pilgrims and supplies through challenging terrain.

Key Welfare Provisions

The GoI new guidelines establish rigorous registration and health standards requiring all working equines to be registered with State Animal Husbandry Departments and undergo microchipping, along with comprehensive health certification. Each Horse must pass monthly endurance and altitude fitness assessments, with compulsory testing for Glanders and Equine Influenza to prevent disease outbreaks during pilgrimages.

Extensive infrastructure support forms the backbone of these welfare measures. Veterinary check-posts with trained professionals

will be stationed every five kilometers along pilgrimage routes, complemented by weather-protected shelters equipped with adequate water, fodder, and lighting facilities. Specialized infirmaries for injured or sick animals ensure immediate medical attention.

The guidelines establish humane working conditions with specific load limits tailored to each species: horses and mules may carry 80-90 kilograms, ponies are limited to 50 kilograms. In comparison, donkeys should not bear more than 25 kilograms. Daily walking distances are capped at 20 kilometers with no night movement permitted and movement speed is restricted to 3-4 kilometers per hour depending on elevation. A convoy system organizing groups of 5-20 animals with 10-minute intervals between groups prevents overcrowding.

Comprehensive care protocols mandate a one-week acclimatization period before deployment, allowing animals to adapt to high-altitude conditions. Complete vaccination schedules, including tetanus, rabies, and equine influenza, must be administered at least 21 days before service. Universal insurance coverage protects all working animals, while the use of spiked equipment and heavy ornaments is strictly prohibited to prevent unnecessary suffering.

Disease Management & Emergency Response

The guidelines establish robust surveillance systems with dedicated diagnostic laboratories, ensuring 48-hour result turnaround times. Rapid Response Teams are stationed for emergencies, while quarantine facilities protect against disease outbreaks.

Enforcement & Accountability

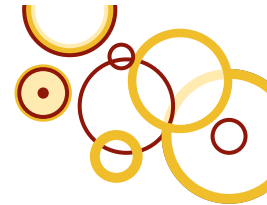
State Animal Welfare Boards will monitor compliance through comprehensive documentation systems that track daily injury, death and cruelty cases while publishing weekly progress reports for public transparency. This accountability framework relies on enhanced collaboration amongst veterinary authorities, law enforcement agencies and the Society for Prevention of Cruelty to Animals (SPCA), ensuring strict adherence to the Prevention of Cruelty to Animals Act, 1960.

Training & Capacity Building

The initiative incorporates mandatory training programs for veterinarians and para-veterinary staff before each pilgrimage season. These comprehensive programs focus on disease identification and treatment protocols, emergency response procedures, proper sample collection and diagnostic techniques and best practices for humane animal handling. Every management team stationed along pilgrimage routes must include at least one trained veterinarian to ensure professional oversight and immediate medical intervention when needed.

This comprehensive framework demonstrates India's commitment to establish religious traditions with compassionate animal welfare standards. Through the dedicated efforts of organizations like Brooke India and our Academy's network, working equines will receive the protection and care they deserve while continuing to serve pilgrims safely.

For more information about animal welfare initiatives, contact NAVS or visit our partner Brooke India's programs supporting working equines across India.



FOOD FOR THOUGHT:

LIVESTOCK HEALTH AND PRODUCTION

India Celebrates World Veterinary Day 2025: "Animal Health Takes a Team"

India joined the global veterinary community in celebrating World Veterinary Day 2025, honoring the invaluable contributions of veterinary professionals to animal health, public safety, and environmental well-being. This year's inspiring theme, "Animal Health Takes a Team," emphasized the collaborative spirit essential to modern veterinary practice.



The Department of Animal Husbandry and Dairying (DAHD) under the Ministry of Fisheries, Animal Husbandry and Dairying, GoI organized National Workshop in New Delhi to mark this important day. Prof S P Singh Baghel, Union Minister of State for Fisheries, Animal Husbandry and Dairying and Panchayati Raj, inaugurated the event, praising veterinarians as the "backbone of the rural economy and national biosecurity." The Minister emphasized how this year's theme reflects the reality of veterinary practice, where veterinarians, para-veterinary staff, scientists, and public health professionals must work together to ensure integrated animal, human and environmental health under the One Health approach.

Ms. Alka Upadhyaya, Secretary DAHD delivered a compelling virtual address calling for a comprehensive transformation of India's veterinary ecosystem. She highlighted veterinarians' significant contributions to livestock productivity while stressing their critical role as the "first line of defence in ensuring national biosecurity." Her call for stronger surveillance systems and synchronized vaccination programs across states underscored the urgent need for coordinated efforts against zoonotic diseases.

The event gained international significance with virtual participation from Dr. Thanawat Tiensin, Assistant Director-General and Chief Veterinarian at the Food and Agriculture Organization (FAO), joining from Rome. Dr. Tiensin lauded India's pivotal role in global One Health efforts and praised the country's recent recognition under the Pandemic Fund for Animal Health Preparedness, a major endorsement of India's leadership in veterinary public health.

Dr. Abhijit Mitra, Animal Husbandry Commissioner and Chairman of the Animal Welfare Board of India, highlighted India's remarkable progress in mass vaccination campaigns, early disease detection and digital tracking systems. He reinforced the vital role of veterinarians as unseen protectors of food systems and crucial defenders against future pandemics.

The celebration attracted more participation, with over 250 delegates attending in person and more than 3,000 virtual attendees including veterinary professionals, students,

researchers, and farmers. The event was attended by distinguished dignitaries from ICAR, National Veterinary Councils, FAO, WOAH, WHO, and directors of national research institutes and vice chancellors from veterinary universities.

Across the nation, veterinary institutions organized meaningful activities. GADVASU's Teaching Veterinary Clinical Complex conducted free vaccination and deworming camps, demonstrating the theme's practical application through community service. As India commemorates World Veterinary Day 2025, the focus remains on strengthening the veterinary sector through enhanced education, research, and policy support. The celebration serves as a powerful reminder that achieving optimal animal health, protecting public health, and ensuring environmental sustainability truly requires a dedicated team effort, with veterinarians leading the charge as guardians of our collective well-being.

India and Germany Join Forces in Veterinary Science: InDeVet Workshop Charts Path for AI-Driven Animal Health Collaboration

The Indo-German Science & Technology Centre (IGSTC) sponsored the landmark InDeVet Workshop, held in Leipzig, Germany, from April 28 to 30, 2025. The workshop was a major step toward strengthening Indo-German collaboration in veterinary science, with a special focus on harnessing Artificial Intelligence (AI) for animal health, disease preparedness, and One Health initiatives.



The workshop brought together 38 distinguished participants, representing leading universities, research institutes, industry partners, and professional organizations from India and Germany. The high-level engagement of professors, directors, scientists, researchers and CEOs highlighted the commitment of both countries to jointly act to advance veterinary sciences in line with global challenges.

From India, eminent institutions such as the National Academy of Veterinary Sciences (NAVS), West Bengal University of Animal and Fishery Sciences (WBUAFS), Indian Veterinary Research Institute (IVRI), National Dairy Research Institute (NDRI), National Institute of Animal Nutrition and Physiology (NIANP), Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Bihar Animal Sciences University (BASU), Gujarat Biotechnology Research Centre (GBRC), and the CSIR-Institute of Genomics and Integrative Biology (IGIB) were represented.

German participants came primarily from Leipzig University, Freie Universität Berlin, and the University of Veterinary Medicine Hannover (TiHo), along with industry partner Xpedite Diagnostics GmbH. The workshop also featured contributions

from the Indo-German Science & Technology Centre and the University of Saskatchewan, Canada, underlining its international outlook.



Key Outcomes and Recommendations

The three-day workshop produced a rich set of actionable outcomes designed to institutionalize Indo-German veterinary collaboration under the InDeVet framework. Among the major recommendations were:

- **Steering Committee & Focal Points:** Each participating institute will designate decision-making representatives and focal points to ensure effective coordination.
- **Monthly Seminars:** Beginning May 2025, a monthly Indo-German seminar will be held every second Wednesday, with joint presentations by Indian and German partners. These seminars will also be integrated into postgraduate veterinary training.
- **Databases and AI Tools:** Development of publication databases and an AI Animal Health database were approved, with leadership from Leipzig University, BASU and FU Berlin.
- **Data Sharing & Standardization:** Experts from TiHo Hannover and TANUVAS will spearhead work on data harmonization and secure sharing across countries.
- **Joint Research Initiatives:** Applications will be pursued under IGSTC schemes, DST-DFG Indo-German Research Training Groups, and three EU Horizon projects focusing on digital health solutions, AI-based pandemic preparedness and infectious disease research.
- **Global Engagement:** Leipzig University will contribute to GloPID-R, aligning InDeVet with global infectious disease preparedness efforts.
- **Exchange Programs:** Student and staff exchanges will begin immediately with local funding, while joint DAAD funding will be sought.

A Roadmap for the Future

The next InDeVet meeting will be hosted by the National Academy of Veterinary Sciences (India) in New Delhi, further strengthening institutional partnerships. In addition, the Memorandum of Understanding (MoU) will expand annually, bringing in new partners every October to widen the collaboration network.

The InDeVet workshop successfully laid the groundwork for a transformative Indo-German partnership in veterinary sciences, where AI, digital tools, and data-driven approaches will be harnessed to enhance animal health, food security, and global disease preparedness.

Bird Flu in India Takes Alarming Turn: Cross-Species Infections Spark Urgent Biosecurity Protocol

India is facing a critical escalation of bird flu crisis as the deadly H5N1 strain demonstrates a terrifying ability to leap across species boundaries. What began as a poultry outbreak has now exploded into a multi-species emergency, with the virus infiltrating wild animals and even family pets. The tragic death of a child in Andhra Pradesh has sent caution across the country, starkly demonstrating that this is no longer just an animal health crisis but also human lives.

Between January and April 2025, confirmed outbreak have ravaged multiple species in a shocking development that has left experts stunned. Tigers and leopards, apex predators who ruled the jungle, are now succumbing to this deadly virus, while pet cats have become carriers of this lethal pathogen. Jungle cats and numerous bird species across five major states are falling victim to what experts warn may be a mutated strain with dramatically increased infectivity and host range. This is not the same H5N1 we've seen before, this virus has evolved into something far more dangerous and unpredictable.

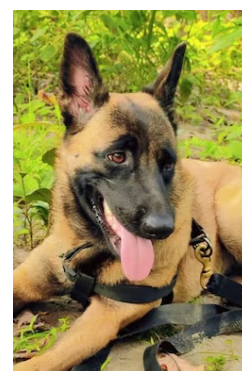
Maharashtra, Madhya Pradesh, Rajasthan, Bihar and Goa have become ground zero for this expanding outbreak, with 34 infection epicentres mapped across these crisis zones and six still actively spreading like wildfire through animal populations. Authorities have been forced to implement emergency poultry movement restrictions as they desperately try to contain what has become an unprecedented biological crisis. The Department of Animal Husbandry & Dairying has launched an urgent three-pronged containment offensive, deploying fortress-level biosecurity protocols on farms, implementing mandatory surveillance of all poultry operations and activating cutting-edge early warning systems using predictive AI models. While scientists race against time to develop domestic vaccines, authorities continue the brutal but necessary test-and-cull protocol, the only proven method to halt this viral assault.

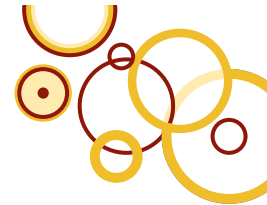
This outbreak has exposed dangerous weaknesses in India's biosecurity defenses, particularly in wildlife monitoring systems, where the virus has found and exploited every vulnerability. Authorities are now demanding immediate cross-sector collaboration and reinforced "One Health" frameworks because the time for half-measures is over. With the COVID-19 pandemic's devastation still haunting global memory, H5N1's expanding reach serves as a stark warning that zoonotic diseases are the new reality of global health threats that could strike anywhere, anytime.

CRPF Sniffer Dog and Bull Dies After Bee Attack

In a tragic incident, a CRPF sniffer dog named Rolo died after being stung over 200 times by a swarm of bees during a major anti-Naxal operation in the forests along the Chhattisgarh-Telangana border. The 2-year-old Belgian Shepherd, part of the elite K9 unit, was assisting forces during a 21-day combing mission dubbed 'Operation Black Forest'.

Despite swift efforts by handlers to shield her, the bees swarmed and attacked, leading to severe anaphylactic shock. Rolo was evacuated but died en route to medical care. She was the sole casualty in





the anti-Naxalite operation. Rolo's sacrifice highlights the vital yet perilous role of service animals in frontline operations (<https://www.indiatoday.in/india/story/crpf-sniffer-dog-rolodies-after-stung-200-times-in-bee-attack-during-anti-naxal-operation-2725204-2025-05-15>).

In 2023 (USA), a two-year-old Rottweiler-Pit Bull mix died after being stung by a swarm of bees at least 700 times (<https://www.foxla.com/news/dog-stung-hundreds-of-times-hospitalized-after-bee-attack-in-perris>). However, in another incident that occurred in 2022 in South Africa, a police dog stung by a swarm of bees survived, thanks to timely medical intervention. The swift response and actions of South African Air Force personnel and medics on board the rescue craft saved the K9's life (<https://iol.co.za/dailynews/news/kwazulu-natal/2022-05-16-police-dog-handlers-and-k9-recovering-after-being-stung-by-bees-while-on-the-job/>). Such life-threatening emergencies highlight the urgent need for timely veterinary aid and easy access to emergency medicines to save the lives of valuable, highly trained dogs deployed in rescue and combat operations.

India Airlifts Four Elephants to Japan in Landmark Global Wildlife Exchange

As part of an international animal exchange program promoting biodiversity and wildlife conservation, India has successfully transferred four young elephants from Bengaluru's Bannerghatta Biological Park to Japan. The jumbos, Suresh, Gauri, Shruthi, and Tushi, were airlifted in July 2025 aboard a Qatar Airways Boeing 777-200F cargo plane, traveling in specially designed crates under strict veterinary supervision.



Courtesy: Dr VM Anand, Veterinary Officer, Bannerghatta Biological Park

A dedicated team of zoo veterinarians, wildlife officials and elephant keepers accompanied the animals, ensuring their comfort, safety and smooth acclimatization. Officials confirmed that all four elephants reached Himeji Central Park in Japan in good health.

The exchange marks a significant step in global conservation collaboration. In return, Bannerghatta Biological Park will receive exotic species, including jaguars, pumas, cheetahs, and capuchin monkeys from partner zoos abroad.

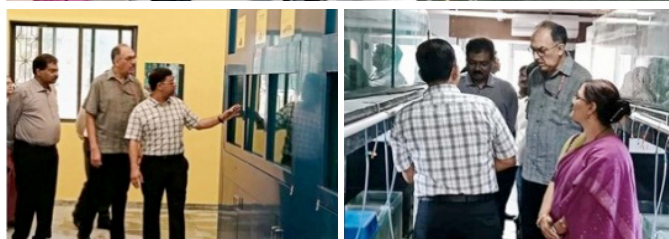


Courtesy: Dr VM Anand, Veterinary Officer, Bannerghatta Biological Park

Transforming Wastelands into Wealth: GoI Accelerates Saline Aquaculture Drive in Northern States

In a strategic push to harness untapped saline lands, the Ministry of Fisheries, Animal Husbandry & Dairying is championing saline aquaculture in Haryana, Punjab, Rajasthan, and Uttar Pradesh. Dr. Abhilaksh Likhi, Union Secretary during a review meeting held at ICAR-CIFE, Mumbai, emphasized transforming over 58,000 hectares of saline-affected land, largely unfit for traditional farming, into thriving aquaculture hubs.

Farmers shared pressing challenges, including high setup costs, restrictive 2-hectare cultivation limits, inadequate subsidies, poor seed availability, and weak market linkages. In response, states proposed expanding the area limit to 5 hectares, increasing unit costs to ₹25 lakh, and forming a National Committee for sustainable shrimp culture guidelines.



Progress has already begun: Haryana reported 13,914 tons of production under PMMSY; Rajasthan, Punjab, and Uttar Pradesh showcased expanding operations, diagnostic labs, and cold storage investments. With India earning 65% of seafood export value from shrimp, leveraging saline aquaculture could be transformative for rural employment, food security, and export growth.

Officials highlighted the urgency of coordinated action, capacity building via Krishi Vigyan Kendras, and public awareness campaigns to fuel adoption. The initiative aims to convert saline "wastelands" into economic engines of "blue revolution" prosperity.

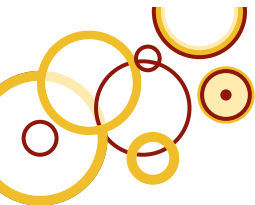
INSTITUTIONAL LIFE MEMBERS (NGO)



CORPORATE LIFE MEMBERS



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SPLENDOUR SHINING VETERINARIANS

Dr Inderjeet Singh: Honored with ICAR Society Membership; A Testament to Excellence in Veterinary Leadership

The veterinary fraternity celebrates another remarkable milestone as Dr Inderjeet Singh, Fellow (2000) NAVS(I) and Vice-Chancellor of Bihar Animal Sciences University (BASU), Patna, has been nominated as a member of both the General Body and Governing Body of the ICAR Society by the Honorable Union Minister of Agriculture and Farmers Welfare.



This prestigious appointment, formalized through an official letter dated June 26, 2025, from the Additional Secretary, DARE & Secretary, ICAR, represents a significant recognition of Dr Singh's exceptional contributions to veterinary education, research and agricultural development.

The nomination acknowledges his visionary leadership and pioneering impact on veterinary sciences throughout his distinguished four-decade career

Known affectionately as the "Murrah Man" for his revolutionary contributions to buffalo development, Dr Singh's appointment to these influential ICAR bodies comes as no surprise to those familiar with his transformative work. His tenure as the third Vice-Chancellor of GADVASU, Ludhiana, and his groundbreaking research at the Central Institute for Research on Buffaloes (CIRB) in Hisar have left an indelible mark on India's livestock development landscape.

The ICAR General Body, which convenes annually and the Governing Body, meeting quarterly, play crucial roles in shaping agricultural research and education policy across the nation. Dr Singh's inclusion in these decision-making bodies ensures that veterinary sciences and animal husbandry will have strong representation at the highest levels of agricultural governance.

The Bihar Animal Sciences University community has expressed immense pride in this achievement, with colleagues and well-wishers highlighting how this appointment reflects Dr Singh's unwavering commitment to advancing veterinary education and rural development through innovative livestock production systems.

Dr Singh's academic credentials, including his PhD in Animal Reproduction from the University of Liverpool as a Commonwealth Scholar, combined with his extensive field experience and administrative acumen, position him ideally to contribute meaningfully to ICAR's mission of promoting agricultural research and education excellence.

This nomination not only honors Dr Singh's individual achievements but also brings pride to the entire NAVS(I) community, reinforcing the organization's commitment to fostering leaders who shape the future of veterinary sciences in India.

The NAVS(I) fraternity extends heartfelt congratulations to Dr Inderjeet Singh on this well-deserved recognition and looks forward to the valuable contributions he will undoubtedly make in his new role within the ICAR Society's governance structure.

ACADEMIA SCHOLASTIC CONNECTIONS

India Secures Second Spot in Asia by Scopus for Veterinary and Animal Sciences Research Publications

According to Scopus-Elsevier's 2024 data (assessed in June 2025), India ranked second in Asia for total documents published, total citations and H-index obtained in the subject category 'veterinary', (Table) after China. South Korea and Japan were ranked third and fourth, respectively, in the list. (Source: https://www.scimagojr.com/countryrank.php?area=3400&year=2024®ion=Asiatic%20Region#google_vignette)

At the global level, India secured fifth position for total documents published in the subject of 'veterinary'; however, the ranking slipped to 11 when the criterion of total citations was considered, questioning the quality of the published research in the veterinary subject.

In the broader subject area of Agricultural and Biological Sciences, India maintained the second position in Asia and stood third worldwide for total documents published and citations count (Source: <https://www.scimagojr.com/countryrank.php?year=2024&area=1100>).

Overall, India's research output, measured by the total number of documents published across all subject areas, was ranked second in the Asian region. However, based on the h-index criterion, India slipped to the fourth position in Asian Region. At the global level, Indian research achieved the third position in terms of total documents and citations across all subject areas, but this rank dropped to 19th when assessed by the h-index.

In conclusion, India's performance in research publications has achieved a respectable rank at the Asian and global levels; however, there remains a need to improve research quality.

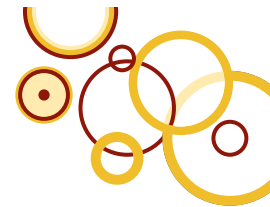
Subject category	Region	Scopus Rank of Indian Research Output		
		Total Documents	Total Citations	h-index
Veterinary	Asia	2	2	2
	Worldwide	5	11	16
Agricultural and Biological Sciences	Asia	2	2	3
	Worldwide	3	3	14
All subjects	Asia	2	2	4
	Worldwide	3	3	19

(Compiled by Dr. Ashwani Kumar, Professor, Veterinary Surgery and Radiology, GADVASU, Ludhiana)

India Emerges as Global Education Leader: QS 2026 Rankings Show Record Growth

India's higher education system has recorded remarkable recognition in the QS 2026 rankings, demonstrating exceptional growth that positions the country as a global educational powerhouse. The latest edition features 54 Indian institutions, representing a significant increase from 46 in 2025 and 45 in 2024. This growth trajectory is truly extraordinary, marking a substantial 390% increase from just 11 ranked universities in 2014, which establishes India as the fastest-growing higher education system among all G20 countries.

The achievement extends beyond mere numbers, as India has now secured its position as the fourth most represented nation globally in the QS rankings. This places Indian higher education in elite company, trailing only the United States with 192 institutions, the United Kingdom with 90 and Mainland China with 72. The



inclusion of eight new Indian universities in the 2026 edition, more than any other country, further underscores the broader institutional momentum driving the nation's higher education sector forward.

While the total number of ranked institutions has increased impressively, it's worth noting that the number of Indian universities in the global top 500 experienced a marginal decrease from 12 in 2025 to 11 in 2026. However, this slight adjustment doesn't diminish the overall positive trajectory of Indian higher education on the world stage. Three prestigious institutions continue to maintain their excellence among the top 200 globally: IIT Delhi, IIT Bombay, and IIT Madras, serving as flagship representatives of India's academic capabilities.

The enhanced reputation of Indian graduates among employers and the strengthening of faculty citations are key factors contributing to this success, reflecting the practical value and research excellence that Indian higher education institutions are delivering to the global academic and professional community.

Compassion: The Hidden Key to Organizational Innovation

A groundbreaking Finnish research study has revealed that compassion plays a pivotal role in fostering innovation within organizations. The study, conducted by researchers from the University of Helsinki and Aalto University, explored what promotes and prevents innovation in modern workplaces through focus group interviews across private, public, and third-sector organizations.

The research identified four core factors affecting innovation: organizational strategy and structures, resources (particularly time), working culture, and interpersonal dynamics. Most significantly, the study found that compassion-defined as responding to both the suffering and joy of others-is crucial for innovation to flourish.

According to the findings, compassion occupies a unique position in organizational innovation: its presence actively promotes creative thinking and breakthrough solutions, while its absence becomes a significant barrier to innovation. The researchers emphasize that compassion is not merely a single practice but requires cultivation throughout the entire organization.

For veterinary organizations like NAVS(I), this research highlights the importance of fostering compassionate workplace cultures that support both animal welfare and professional innovation. The study suggests that organizations seeking innovation should develop multifaceted understanding and skills in compassion among their teams. (Spännäri et al., University of Helsinki & Aalto University, Finland)

The analysis further reveals that compassion is deeply interwoven across organizational levels-from interpersonal interactions to culture, resource management, and structures. Its presence enhances flexibility in times of uncertainty, improves performance, and drives learning. Conversely, its absence can stifle creativity and innovation. While the study was based in Finland, the findings suggest compassion is a universal human need, equally relevant across workplaces and cultural contexts. The researchers argue that compassion should not be viewed as an expense or an add-on but as a key organizational asset essential for flourishing creativity and sustained innovation.

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

SKUAST-Kashmir Achieves Historic Milestone: India's First Gene-Edited Sheep Born

In a groundbreaking scientific achievement that places India at the forefront of global reproductive biotechnology, the Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir (SKUAST-K) has successfully produced India's first gene-edited sheep, marking a revolutionary milestone in Indian biotechnology! This historic gene-edited lamb was born using advanced CRISPR-Cas9 technology, with researchers modifying the myostatin gene to regulate muscle growth, positioning India among the elite nations in genome editing technologies under the pioneering leadership of Vice Chancellor Prof. Nazir Ahmad Ganai.



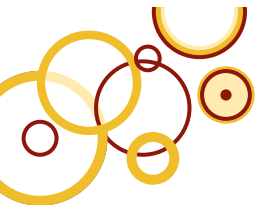
This landmark achievement represents a technological leap comparable to the Artificial Intelligence revolution of the 21st century, opening unprecedented possibilities for enhanced livestock productivity through improved muscle development and growth efficiency, future applications in disease resistance research including cancer, HIV, and sickle cell disease, revolutionary potential for sustainable livestock production, and establishing India as a global biotechnology powerhouse. The successful gene editing creates a pivotal role in ensuring livelihood, food security, and sustainable development for future generations, demonstrating India's unwavering commitment to excellence in research and innovation at both national and global levels.

As emphasized by the Vice Chancellor, "Biotechnology, in association with Artificial Intelligence and other next-gen technologies, is emerging as a key driver towards achieving a sustainable bioeconomy," highlighting the transformative potential of this breakthrough. Lieutenant Governor Shri Manoj Sinha has commended this breakthrough research and the team's contribution to advancing scientific frontiers in the region, with this achievement building upon the university's previous success in cloning India's first Pashmina goat clone "Noori" in 2012.

The gene editing was performed using CRISPR-Cas9 technology and adhered to international biosafety protocols, ensuring that the edited sheep contains no foreign DNA and is distinguished from transgenic organisms, paving the way for regulatory approval under India's evolving biotech policy framework. This extraordinary scientific milestone exemplifies the innovative spirit and cutting-edge research capabilities that continue to elevate Indian veterinary and agricultural sciences on the world stage, serving as a beacon of what Indian science can achieve as the world watches this remarkable advancement in reproductive biotechnology!

IVRI Achieves Groundbreaking Milestone: India's First Indigenous Hip Replacement Surgery for Dogs

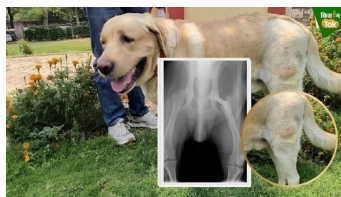
The Indian Veterinary Research Institute (IVRI) has created veterinary history by successfully performing India's first indigenous hip transplant surgery on dogs, marking a revolutionary breakthrough in affordable canine orthopedic care.



Led by Dr. Rohit Kumar and his dedicated research team, this landmark achievement represents nearly three years of comprehensive indigenous research and development, culminating in a cost-effective solution that reduces treatment expenses from Rs. 5 lakh to just Rs. 25,000-30,000.

Previously, artificial hips for dogs were unavailable in India and required expensive imports, making this life-changing surgery accessible only to a privileged few pet owners. Dr. Kumar's team overcame this challenge through collaboration with renowned human orthopedic surgeon Dr. Alok Singh and technical partners, including Bareilly Medicare Firm and Life Ortho Care in Gujarat, developing both the cemented hip implant suitable for Indian dogs and the specialized surgical instruments required for implantation.

The research was conducted under the AINP-DIMSCA project by a distinguished team including Dr. Amarpal, Dr. A.C. Saxena, and Dr. A.M. Pawde, with technical design contributions from Dr. T. Sai Kumar and Dr. Kamlesh



Kumar. Three successful surgeries have been performed in Dehradun, Bareilly, and on a police dog in Sambhal, giving these animals renewed mobility and quality of life. IVRI Director Dr. Triveni Dutt has praised the team's collective efforts and emphasized the urgent need to make this indigenous technology widely available to dog owners nationwide while facilitating industry transfer for commercial production. (<https://www.kisantak.in/animal-husbandry/story/dogs-at-ivri-bareilly-were-fitted-with-indigenous-artificial-hips-earlier-they-were-imported-from-abroad-nsr-1226235-2025-06-09>)

IVRI Scientists Pioneer Bioactive Bone Glue for Complex Fracture Repair

Scientists at the Indian Veterinary Research Institute (IVRI) have achieved a remarkable breakthrough in bone tissue engineering with the development of an innovative bioactive bone glue. Spearheaded by Dr. Rekha Pathak, Principal Scientist, Division of Surgery and her team, this novel material shows tremendous potential in treating severe bone injuries, including simple, compound and comminuted fractures.



Different stages of tibia compound fracture treatment with the bioactive bone glue without any internal fixation technique. The x ray is 25th postoperative day showing excessive callus formation

Developed from collagen type I and natural polymers enriched with growth factors, the bone glue provides a biocompatible and biodegradable alternative to conventional metallic implants. Its application accelerates fracture healing by promoting early callus formation and mineralization, as demonstrated in tibia fracture cases where healing occurred within 25 days-without internal fixation.

In small animals weighing under 10 kg, the technique can be

applied with external coaptation alone, eliminating the need for metallic implants. The glue exhibits osteoconductive, osteoinductive, and osteogenic properties, serving as a substrate for host cells to migrate, attach, and proliferate. This ensures enhanced biological osteosynthesis and reduces the risk of complications.

Importantly, the innovation has shown success even in badly crushed limbs, where amputations could otherwise have been the only option. By supporting both bone and soft tissue regeneration, it provides a comprehensive solution not currently available in the market.

The bioactive bone glue developed at IVRI stands as a path-breaking advancement in veterinary orthopedics and is now available to academicians and researchers for further study and application. (<https://www.jagran.com/uttar-pradesh/bareilly-city-ivri-bone-glue-a-new-treatment-for-fractures-in-small-animals-23984936.html>)

LEST WE FORGET

OBITUARY

Padma Shri Dr Subbanna Ayyappan (1955-2025): Father of India's Blue Revolution

It is with profound grief that we remember Padma Shri Dr Ayyappan, former Director General of the Indian Council of Agricultural Research (ICAR), who passed away on May 10, 2025, under tragic circumstances. The agricultural science community has lost one of its most distinguished leaders, whose pioneering contributions fundamentally transformed India's research landscape. Dr S Ayyappan holds the unique distinction of being the first non-crop scientist to lead ICAR, breaking new ground as a fisheries specialist who brought fresh perspectives to agricultural research administration. His remarkable journey encompassed leadership roles across India's most prestigious agricultural institutions, serving as Director General of ICAR, Director of the Central Institute of Freshwater Aquaculture (CIFA), Director of the Central Institute of Fisheries Education (CIFE), Secretary of the Department of Agricultural Research and Education (DARE), Chairman of the National Accreditation Board for Testing and Calibration Laboratories and Vice-Chancellor of Central Agricultural University in Imphal.

Dr S Ayyappan's most enduring legacy remains his pivotal role in India's "Blue Revolution", the transformation of the country's fisheries and aquaculture sector. His visionary leadership helped establish India as a global leader in fish production, significantly contributing to food security and improving livelihoods for millions of farmers and fishermen across the nation. Under his guidance, numerous research institutions flourished and innovative agricultural policies were formulated that continue to benefit rural communities today. His work extended beyond research, encompassing institution building and nurturing young scientists who have carried forward his vision.

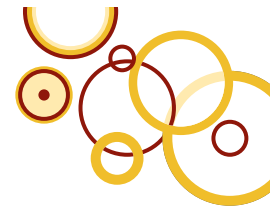
Those who worked with Dr Ayyappan remember him not just for his scientific acumen, but for his extraordinary personal qualities.



Remembering

"FATHER OF INDIA'S" BLUE REVOLUTION

Padma Shri
Dr Subbanna Ayyappan



His humility, simplicity, honesty and compassionate leadership style inspired generations of agricultural researchers. He believed in mentoring young scientists and was known for his accessibility and willingness to guide anyone seeking his counsel. Dr Ayyappan's untimely passing at the age of 70 has shocked the scientific community. His body was discovered in the Cauvery River in Srirangapatna, with his scooter found on the riverbank. He had been reported missing three days earlier after leaving his Mysuru home. While police investigations continue, the circumstances remain a mystery, adding to the profound sadness surrounding his departure.

The void left by Dr S Ayyappan's passing extends far beyond research institutions. His contributions to agricultural policy, his role in shaping India's food security framework and his mentorship of countless scientists have created ripple effects that will benefit the nation for generations to come. As we remember this remarkable scientist and administrator, we honor not just his professional achievements but his embodiment of the values that define true scientific leadership, integrity, humility and an unwavering commitment to serving society. The veterinary and agricultural science communities stand united in mourning this tremendous loss. Dr S Ayyappan's pioneering spirit and dedication to excellence will continue to inspire future generations of researchers working toward a more food-secure and prosperous India.

On behalf of NAVS(I), we extend our heartfelt condolences to Dr Ayyappan's family and the entire agricultural research fraternity during this difficult time.

TIDBITS SOUPCON

Asian Elephants have a Bigger Brain than African

In an eye-opening study published in *PNAS Nexus*, researchers from Humboldt University of Berlin and the Leibniz Institute for Zoo and Wildlife Research (Leibniz IZW) have revealed that Asian elephants (*Elephas maximus*), despite their smaller body size, possess brains about 20% heavier than those of African savanna elephants (*Loxodonta africana*). Normally, African elephants are larger, with males typically weighing 4,000-6,300 kg, while Asian elephants are smaller, with males weighing around 1,800-4,500 kg.



Salient findings of this latest research document that adult female Asian elephants have an average brain weight of approximately 5,300 grams, compared to 4,400 grams in their African female elephants. Having a heavier brain relative to body size may reflect the advanced cognitive capacity and adaptability of Asian elephants, which might explain their domestic use in traditional work, their trainability, and their rich social repertoire.

However, the cerebellum, essential for motor coordination, is proportionally smaller in Asian elephants (about 19% of total brain weight), versus 22% in African elephants. Though African elephants boast a relatively larger cerebellum-possibly contributed by their two "trunk fingers" enhancing trunk dexterity-the overall greater brain mass in Asian elephants could hint at broader cognitive capabilities.

Elephant brains exhibit remarkable postnatal growth, nearly tripling in size from birth to adulthood-surpassed only by humans among primates. The prolonged period of brain growth indicates an extended window for neural development, social learning, and memory formation-hallmarks of elephant social complexity.

"Dr. Peyo": A Healing Presence on Hooves

In an extraordinary example of animal-assisted therapy, a 15-year-old stallion named Peyo is bringing solace and strength to terminally ill patients in France. Affectionately known as "Doctor Peyo," this remarkable horse, alongside his trainer Mr. Hassen Bouchakour, is part of a



therapeutic program that provides emotional and psychological comfort to patients, particularly those in palliative care.

What sets Dr. Peyo apart is his unique, intuitive ability to sense distress and the emotional needs of patients. He often stops unprompted at specific hospital rooms, gently indicating his desire to enter. Once inside, he offers a calming presence, standing still for hours beside patients, allowing them to hold his mane, touch him gently, or simply feel his comforting energy.

The impact of Peyo's visits goes beyond emotional relief. Hospital reports indicate reduced anxiety and even lowered dependence on pain medication for some patients following his presence. For many, he brings a moment of peace in their most difficult hours, not just for the patients but also for their families and caregivers.

Dr. Peyo's story is a compelling reminder of the profound bond between animals and humans, and the healing power that this connection can offer. His work has been hailed across Europe as a pioneering example of compassion in palliative care.

To witness the incredible work of Dr. Peyo, watch this video: The Patient Care Stallion Peyo

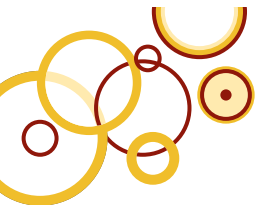
First-Ever Unified Global Bird Species Checklist Revolutionizes Ornithology!

After four years of intensive collaboration, the ornithological world has achieved something unprecedented: AviList, the first-ever unified global checklist of bird species, went live on June 12, 2025. This groundbreaking resource represents a monumental shift in how scientists, conservationists, and birders worldwide understand and classify avian life.

The comprehensive database contains an impressive 11,131 species, 19,879 subspecies, 2,376 genera, 252 families, and 46 orders, effectively replacing the previously fragmented International Ornithological Committee (IOC) and Clements lists. Developed by the Working Group on Avian Checklists-comprising representatives from BirdLife International, Cornell Lab of Ornithology, American Ornithologists' Society, International Ornithologists' Union, and Avibase-this unified approach eliminates decades of confusion caused by multiple competing classification systems.

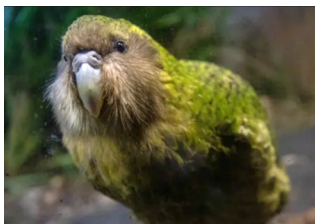
The timing couldn't be more critical for conservation efforts. As Stuart Butchart, chief scientist at BirdLife International, emphasized, this unified list removes current confusion and uncertainty, making it dramatically easier for scientists, policymakers, and conservationists to share information and establish common conservation priorities. Marshall Iliff from Cornell Lab's eBird project reinforced this importance, noting that protecting birds globally requires everyone to "talk the same language" with matching data.

AviList is freely available at <https://www.avilist.org/> and can be downloaded in both full and abbreviated versions in .xlsx and .csv formats, ensuring accessibility for researchers worldwide. With annual updates planned, this revolutionary tool promises to enhance bird conservation efforts and scientific collaboration for years to come.



Kakapo: New Zealand's Critically Endangered Feathered Century Walker

Kakapo, the flightless nocturnal parrot, is only found in New Zealand. They have endearingly round heads and bodies, owl-like faces and sturdy legs. Interestingly, they are the biggest of all species of parrots; males measure up to 25 inches (64 centimeters) long and can weigh nearly 9 pounds (4 kilograms). Kakapo are also one of the longest-lived birds in the world, estimated to reach 90 years.



Though Kakapo cannot fly, they can walk for long distances and are agile climbers, clambering and leaping from trees using their shortened wings for balance.

Kakapo freeze in place on sensing danger of predator, and their mottled emerald-green plumage renders the birds nearly invisible against the leafy forest backdrop. The feathers of the male Kakapo have a distinctive odor that play a role in males' mating success.

Currently, there are about 242 Kakapoes in the wild, and they are recognized as critically endangered with a high risk of extinction.

New Study Reveals Domestic Cats Prefer Sleeping on Their Left Side

A recent multi-institutional collaborative study by the University of Bari Aldo Moro (Italy), Ruhr University Bochum, Medical School Hamburg and other partners in Germany, Canada, Switzerland and Turkey reported that most domestic cats show a strong preference for sleeping on their left side, offering new insights into feline behaviour and brain function. This interesting study was published in the Current Biology journal. (<https://www.cell.com/action/showPdf?pii=S0960-9822%2825%2900507-X>)

Researchers analysed hundreds of videos of cats in natural resting positions and discovered that approximately two-thirds of them chose to sleep on their left side. This lateralized behavior is thought to be linked to brain hemisphere specialization, with the right hemisphere—which controls the left side of the body—being more active in processing spatial awareness and detecting threats.

Since cats spend up to 65% of their lives asleep, the position they choose may offer an evolutionary advantage, allowing them to react more quickly to potential dangers upon waking. The findings contribute to a growing body of evidence showing that lateralization, or side dominance, is not only unique to humans but also plays a key role in animal behaviour and survival.

New Bat Viruses Unearthed in Yunnan Spark Zoonotic Concerns

Bats are natural reservoirs for a wide range of microorganisms, including many notable zoonotic pathogens. Recently, scientists from the Yunnan Institute of Endemic Disease Control and Prevention, China, have identified 20 previously unknown viruses in bats from Yunnan province, China, by analyzing kidney tissues—a largely overlooked source of pathogens.

The study, published in PLOS Pathogens, examined kidney samples from 142 bats across 10 species collected over four years. In total, researchers detected 22 viral species, including two novel henipaviruses genetically similar to the dangerous Hendra and Nipah viruses. These henipaviruses are particularly alarming because they were found in bat kidneys, organs linked to urine production. This raises the possibility of transmission through urine contamination of fruit or water near orchards and villages. In addition to the viruses, the study uncovered a new protozoan parasite named *Klossiella yunnanensis* and a novel bacterial species, *Flavobacterium yunnanensis*, highlighting the complex microbial ecosystem in bat kidneys. Experts warn that the findings broaden our understanding of zoonotic threats and call for intensified surveillance and biosecurity in areas where humans and bats overlap.

(<https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1013235>)

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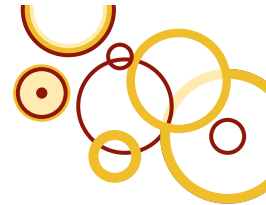
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BROOKE HOSPITAL FOR ANIMALS (INDIA)

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, 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.



IECC Camps Luniyavas donkey fair

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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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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