

Workshop Report 4th ISAE in India

The 4th Regional ISAE India Workshop on HAPPY ANIMALS, HEALTHY YIELD: INSIGHTS ON SCIENCE OF ANIMAL BEHAVIOR, held on **13 September 2025** at the **International Convention Centre, Gautam Buddha University**, Greater Noida focused on advancing the science of animal behavior to enhance livestock, welfare and productivity. The event gathered experts, scientists, and practitioners from diverse institutes, alongside 110 enthusiastic students and delegates representing prestigious institutions including Hansraj College (Delhi University), Jawaharlal Nehru University (JNU), ICAR-NDRI, IIT Delhi, Galgotia University, Gautam Buddha University and many more. This broad participation underscored the workshop's importance as an academic and practical platform for animal behavior science.

The day began at 9:30 AM with registration of participants, including the 110 students and delegates from the above institutions. Followed by registration, the ceremonial lamp lighting at the 4th Regional ISAE India Workshop marked a traditional and auspicious inauguration of the event, symbolizing the dispelling of darkness and the ignition of knowledge, wisdom, and hope in the field of animal behavior science. This revered ritual was graced by distinguished dignitaries, including Chief Guest, Dr. Inderjeet Singh, Honourable Vice Chancellor, BASU, Professor Rana Pratap Singh, Honourable Vice Chancellor, GBU, Professor Rajeev Varshney, Dean USoBT, Professor S. Dhanalakshmi, and Dr. Vijay Pal Singh, Regional Organising Secretary.



After the lamp lighting ceremony, **Dr. Vijay Pal Singh**, the Regional Organising Secretary, formally introduced the ISAE Workshop's objectives to the gathered participants. Dr. Singh outlined the workshop's focus on scientific insights into animal behavior and how these translate into improved welfare standards and sustainable livestock yields. He also presented the vision and mission of the ISAE, drawing attention to its commitment toward promoting animal welfare science globally. To encapsulate the essence of the workshop and inspire all participants, Dr. Singh shared a powerful tagline: “दयालु व्यवहार, उज्ज्वल संसार” which translates to "Compassionate Behavior, Bright World." This tagline resonated deeply with the workshop's goals, underscoring that humane and empathetic treatment of animals leads to a better and sustainable world for all living beings.

Professor Maria Hotzel, President of the International Society for Applied Ethology (ISAE), delivered the Presidential address online during the workshop, underscoring the critical global significance of behavioral science in advancing animal health and productivity. She highlighted the depth and breadth of applied ethology as a scientific discipline, stressing how evidence-based behavioral research translates into practical strategies for better management and care of livestock.

Following this, at 10:30 AM, **Dr. Oluwaseun Serah Iyasere**, Development Officer of ISAE, presented online on recent development activities within the society. Dr. Iyasere provided an update on ISAE's ongoing initiatives aimed at expanding the association's reach and impact across continents. Her detailed efforts to increase member engagement, foster collaboration among international researchers, and enhance knowledge dissemination through workshops, conferences, and digital platforms. Emphasizing capacity building, Dr. Iyasere outlined ISAE's programs designed to support early-career scientists and promote animal welfare science in underrepresented regions.

The inaugural address was delivered by **Professor Rana Pratap Singh**, Vice Chancellor of GBU. He welcomed all participants and emphasized the importance of animal behavior science in improving livestock welfare and productivity. He highlighted the role of academic institutions in advancing research and encouraged collaboration to address challenges in animal welfare. Professor Singh reaffirmed GBU's commitment to supporting such initiatives, setting an inspiring tone for the workshop.

The address by the Chief Guest, **Dr. Inderjeet Singh**, Honourable Vice Chancellor of BASU, focused on several important aspects of animal welfare and behavior. Dr. Singh shared insights from his extensive research experience, particularly highlighting his studies on buffalo behavior and management conducted in Ludhiana. He emphasized the significance of understanding natural buffalo behaviors to improve their welfare and productivity in Indian farming systems. Dr. Singh noted that his research in Ludhiana provided valuable data on buffalo social interactions, feeding habits, and stress responses, which have direct implications for optimizing husbandry practices.

As a token of appreciation and respect, a memento, along with a sapling and a traditional shawl, was presented to the Chief Guest **Dr. Inderjeet Singh** by **Professor Rana Pratap Singh**, the Vice Chancellor of GBU during the workshop. The memento symbolized gratitude for their valuable presence and contributions to the event.

The vote of thanks was delivered by **Dr. Imteyaz Qamar**, who expressed sincere gratitude to all the dignitaries, speakers, delegates, and participants for their valuable contributions to the workshop. He acknowledged the efforts of the organizing committee, volunteers, and the venue staff for their support in making the event successful.

A high tea break was scheduled from 11:00 to 11:20 AM, providing participants a chance to relax, network, and engage in informal discussions following the inaugural and early session presentations. This break also included a group photograph session to commemorate the event.



After high tea break, **Dr. Madan Lal Kamboj, Principal Scientist at NDRI**, delivered an insightful address titled **“Natural buffalo behaviours and their implications for production and welfare.”** In his talk, Dr. Kamboj highlighted the importance of understanding the inherent behaviors of buffaloes in their natural environment to optimize their management and welfare in farming systems. He discussed how recognizing natural social interactions, feeding patterns, and stress responses can directly influence productivity and health outcomes. Dr. Kamboj emphasized integrating behavioral knowledge into husbandry practices as essential for improving both animal welfare and economic returns, aligning closely with the workshop's overarching theme of enhancing yield through better animal care. His address provided valuable scientific perspectives with practical implications for buffalo management in India. After his talk, Dr. Madan Lal Kamboj held an interactive Q&A session where he addressed questions about which extensive farming system is better for animal welfare, explaining that systems allowing natural behaviors and adequate resources generally promote better welfare.

After Dr. Madan Lal Kamboj's talk, he was presented with a memento, a sapling, and a certificate as tokens of appreciation for his valuable contribution to the workshop and the field of animal welfare.



Dr. Anamika Sharma's talk at the ISAE workshop titled **“Human-Animal Relationship: Dairy Animal's welfare and productivity”** highlighted the importance of the human-animal relationship (HAR) in dairy animal welfare and productivity. She explained how animals respond differently to familiar and unfamiliar humans based on rewarding (like feeding, grooming) or punishing events and why HAR is crucial for animal well-being. She covered how positive preparatory habituation improves milking behavior and milk yield in Sahiwal cows and showed that heifers prefer familiar handlers after positive treatment (74% in treatment group preferred familiar handlers vs 34% in control). She also noted the significant impact of HAR on postpartum licking behavior and overall animal performance. The talk was supported by high-quality data and videos. After her talk, an interactive Q&A session was held. She was honored with a memento, a sapling, and a certificate in recognition of her contributions to the workshop and the advancement of animal welfare.



The workshop participants took a break for **lunch from 1:20 PM to 2:00 PM**, allowing them to refresh, network, and discuss the morning sessions. This interval provided an opportunity for attendees, including researchers, students, and dignitaries, to recharge for the afternoon sessions.

Following the lunch break, **Dr. Vijay Pal Singh**, the Regional Organising Secretary, delivered his talk on **“An Introduction to Animal Welfare Law.”** The talk addressed the legal and moral status of animals, emphasizing the relevance of law in securing animal welfare. Key concepts discussed included the legal classification of animals, the nature of anthropomorphism in animal studies, and the differentiation between necessary and unnecessary suffering. The discussion covered the property status of animals, the need for regulation, and the types of animals (mainly vertebrates and domestic animals) covered under existing acts, along with exceptions. The speaker also highlighted the importance of organizations in India and outside India that monitor and collect data on animal suffering and related regulations. The interactive session included questions on which animals suffer most, criteria for better captive conditions, and distinctions between welfare and protection frameworks.



Prof. **Rosangela Pelitto**'s online session, titled "**Thinking out of the box for farm animal welfare assessment: a practical approach,**" addressed innovative and practical strategies for objectively evaluating farm animal welfare. She emphasized the significance of third-party animal welfare certification and the roles of various stakeholders such as producers, retailers, the hospitality sector, and consumers. Key points included targeting health and function (adaptability), natural living conditions, and affective (emotional/sentient) states as the main criteria for welfare assessment. Prof. Pelitto highlighted the importance of ensuring animal access to essential resources like protected water tanks, adequate water supply, and the quality of drinking water. She discussed the need for alternative housing systems and environmental enrichment for commercial laying hens as examples of practical welfare improvement. She also spoke about hands-on approaches to animal welfare, stressing the importance of management, handling, and overall health. The discussion included the need to detect abnormal conditions and the root causes of welfare problems. Staff training was identified as fundamental for achieving animal welfare, with academia playing a crucial role in developing and disseminating effective hands-on welfare tools.

Prof. **Dr. Janice Siegford**'s online session, titled "**Automation on cattle farm: A perspective on opportunities and risks**" addressed advancements and statistics in dairy cow adaptation to robotic milking technologies, highlighting monitoring approaches and sensor-based animal management. The speaker shared data showing that approximately 78% of milking sessions are successful with robotic milkers, while 2% are unsuccessful, 1% require backup, 5% are dedicated to cleaning, and 14% of sessions are AMS (automatic milking system) empty or idle. The application of drones for monitoring, moving animals, and generating heat maps to detect herd changes was presented as a digital agriculture advancement. The presenter detailed several types of sensors used in livestock monitoring: Necklace sensors, Pedometers, Aerial monitors (drones), Udder sensors for milk yield and health tracking. The concept of the "connected cow" was introduced, where integrated sensor platforms allow continuous data transmission for activity, health, and productivity monitoring.

Professor Mark Rutter delivered a talk on "**The motivation of dairy cows for pasture access and comfortable lying spaces.**" Prof. Rutter emphasized that dairy cows are motivated to access free stalls and open pastures, which allow them to exhibit natural behaviors. The lecture differentiated between preference and motivation, indicating that while cows may prefer certain conditions, motivation reflects the strength of their drive to access those conditions. Key factors influencing this motivation include distance to pasture and the

availability of herbage. Several research studies were discussed, highlighting findings such as cows with access to pasture producing 25% more milk compared to housed cows. The implication is that systems designed to allow pasture access and comfortable lying spaces improve both animal welfare and production efficiency.

Professor Donald M. Broom delivered an online live talk on “**Sentience and attitudes to animals used by humans**”. Prof. Donald M. Broom’s lecture discussed sentience, awareness, and attitudes towards animals, focusing on the cognitive abilities required for animals to have feelings and awareness. He explored the shift from a push to a pull economy, obligations for sustainable animal use, and examined beef production systems. He compared different beef production systems, spoke about sustainability in both meat and plant-based food, and addressed the future of global agriculture and products. The talk was followed by an interactive question and answer session.



The evening’s final lecture by **Dr. Thai Nguyen Van Quoc** on “**How to publish with Elsevier -A brief guide over the process**” outlined three main topics: journal answer, journal update, and policy on generative AI. He noted an increase in submissions and publications, highlighting positive development in the field without overstressing editors. The talk emphasized the need for trusted evidence-based medicine (EBM). CAS ranking remains consistent, positioning the journal in the second tier for Agricultural, Animal Science, and Veterinary fields. Looking ahead, a sharp increase in hybrid open access is expected from 2024.

The workshop concluded with the Valedictory Session, marking the successful completion of the *4th Regional ISAE India Workshop 2025* on the theme “*Happy Animals, Healthy Yield: Insights on Science of Animal Behaviour*”. The session began with expressions of gratitude to the distinguished speakers, guests, and participants whose active involvement and insightful discussions enriched the event. The Organising Committee highlighted the key takeaways from the day—ranging from animal welfare, human-animal interactions, and automation in livestock farming, to global perspectives on ethical publishing and ISAE’s continuing mission.



The proceedings ended with a Tea Session, offering a relaxed space for networking and reflection. The workshop concluded, with a shared resolve to advance research and practices in animal welfare and productivity.