IX th

KVA Annual Congress

THE KENYA VETERINARY ASSOCIATION

KVA

Advancing Health Through Veterinary Excellence

CONGRESS BOOK

THEME: "VETERINARIANS: GUARDIANS OF FOOD AND HEALTH"

21ST – 24TH APRIL 2026

DIAMONDS
HOTELS & RESORTS

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Message from the President

It is my great honor and privilege to welcome you to the 60th Congress of the Kenya Veterinary Association (KVA). This milestone offers us a valuable opportunity not only to reflect on our journey and achievements, but also to reaffirm our collective responsibility to society and to the future of our profession.

As we convene under a shared vision, this Congress underscores the immense strength that lies within KVA and its membership. Our diverse expertise, commitment, and reach position us uniquely to drive meaningful impact across public health, animal health and welfare, and national economic development. By leveraging this collective capacity, we can more effectively address emerging challenges such as zoonotic diseases, food safety, climate change impacts, and sustainable livestock production.

The veterinary profession sits at the critical intersection of human, animal, and environmental health. Through stronger collaboration, knowledge sharing, and innovation, we can enhance our contribution to the One Health agenda and support resilient health systems. Equally, by advancing animal welfare and productivity, we strengthen livelihoods, improve food security, and contribute significantly to Kenya's economic growth.

The abstracts and proceedings presented in this Congress reflect the depth of research, field experience, and practical solutions generated by our members. As these insights are shared with key stakeholders, including policymakers, partners, and industry leaders, they will serve as an important resource to inform decision-making and shape progressive policy directions.

I encourage all participants to actively engage, exchange ideas, and build partnerships that extend beyond this Congress. Together, let us harness our collective strength to advance our profession and deliver lasting impact for the communities we serve.
Thank you, and I wish you a productive and inspiring Congress.

Dr. Kelvin Osore - The President, Kenya Veterinary Association

Messages Honorary Secretary

Esteemed members, welcome to the 60th KVA Annual Congress and World Veterinary Day Celebrations. This year's theme, **"**Veterinarians: Guardians of Food and Health," underscores the indispensable role of collaboration in advancing animal health and welfare. As the challenges facing our profession continue to evolve—from emerging zoonoses to climate variability—so too must our approaches, grounded in multidisciplinary and cross-sectoral partnerships.

This year's theme, "Veterinarians: Guardians of Food and Health," reaffirms the central role of the veterinary profession at the interface of animal health, food systems, and public health. It highlights our responsibility in safeguarding food safety and security, preventing and controlling zoonotic diseases, and supporting resilient livelihoods. In the face of evolving challenges—from emerging zoonoses to climate variability—this role calls for strengthened, multidisciplinary and cross-sectoral collaboration.

A key highlight of this year's congress is the introduction of hands-on practical sessions (wetlabs) designed to enhance clinical competencies. These will include ultrasonography and vaginal cytology, offering participants valuable experiential learning opportunities to complement the scientific programme. The KVA remains steadfast in its mission to champion the welfare of its members, promote animal health and welfare, and safeguard public health. This mission continues to affirm the central role of veterinary professionals in ensuring food security, supporting sustainable livelihoods, and protecting communities.

This congress provides a unique platform to share knowledge, exchange ideas, and forge strategic partnerships that will shape the future of animal health in Kenya and beyond. I commend all participants, presenters, sponsors, and partners for their commitment to this shared vision. KVA is delighted to host this year's congress at Diamonds Leisure Beach & Golf Resort, set along the stunning coastline of Diani Beach. As you engage in the congress sessions, we warmly encourage you to take time to enjoy the pristine white sands, the Indian Ocean's turquoise waters, and the many attractions that make Diani one of Kenya's premier coastal destinations.

I wish you all a productive, engaging, and memorable congress.

Dr. Ambrose Kipyegon - Honorary Secretary

Messages From the CEO

It is my great pleasure to warmly welcome you to this year's Congress under the theme Veterinarians: Guardians of Food and Health. We are honored to bring together distinguished professionals, partners, and stakeholders committed to advancing our shared goals in animal health, public health, and sustainable development. This Congress provides a valuable platform for knowledge exchange, collaboration, and innovation, particularly as we continue to embrace the One Health approach recognizing the interconnectedness of human, animal, and environmental health. As we engage in these discussions, we also underscore the critical importance of food safety in safeguarding public health and strengthening our food systems. I encourage you all to actively participate, share insights, and forge meaningful partnerships that will drive impactful outcomes beyond this forum.

Dr Samson E Muchelule - BVM (UoN) , MBA (UoN), CM (MTI)
Chief Executive Officer

Message from Honorary Treasurer

As we reflect on the past year, I am pleased to share that our Association has continued to demonstrate financial stability and responsible stewardship of resources. This has been made possible through your continued support, timely subscriptions, and active participation in our activities.

Over the past financial year, we maintained a strong focus on accountability, transparency, and prudent financial management. Through careful control of operational expenses, Strategic allocation of funds to priority programs that advance our shared objectives while maintaining a healthy financial position.

This year, we also placed emphasis on improving efficiency in our operations and exploring ways to strengthen our revenue base. These efforts are aimed at ensuring the long-term sustainability of the Association and enhancing the value we provide to our members.

As we look ahead, we will continue to prioritize sound financial management, while seeking new opportunities for growth and development. I encourage all members to remain engaged and supportive as we work together to build an even stronger Association.

Thank you for your trust and commitment.

Dr. Godfrey Wamai - Honorary Treasurer

Message from the Science & CPD Committee

It is my pleasure to welcome you to the 60th KVA Annual Congress and World Veterinary Day celebrations. Building on the success of the 59th well-attended conference in Kisumu, the 2025 One Health Conference in Nairobi, and the World Rabies Day conferences of 2024 and 2025, we continue to strengthen our commitment to scientific excellence, knowledge exchange, and continuous professional development.

This year's congress, under the theme "Veterinarians: Guardians of Food and Health," highlights the importance of collaboration in advancing animal, public, and environmental health. The programme reflects this through diverse scientific sessions, practical wetlabs, and emerging areas such as artificial intelligence, mental wellbeing, and financial health. I encourage all the delegates to actively engage, share insights, and translate knowledge into impactful practice that supports the One Health agenda and sustainable development. Wishing you a productive and enriching congress.

Dr. Daniel Muasya – Chairman Science & CPD Committee

The Kenya Veterinary Association secretariate

1. Dr. Samson Muchelule – Chief Executive Officer
2. Dr. Jesse Muiruri – Personal Assistant to the KVA President
3. Dr. Valentine Ochar – Projects Manager
4. Dr. Joseph Kimatu – Projects Coordinator
5. Dr. Gillian Muiruri – Projects Assistant
6. Ms. Bettina Kioko – Projects Assistant
7. Mary Malonza – Administrator
8. Joseph Kiplimo Mwei – Accountant
9. Millicent Kimiti – Administrative Assistant
10. Davis Kiprono – IT & Social Media Officer

Science and Program Committee members

1. Dr. Daniel Muasya - Chairperson
2. Prof. Charles Kimwele - Member
3. Dr. Ambrose Kipyegon - Member
4. Dr. Felix Kibegwa - Member
5. Dr. Brenda Machoka - Member
6. Dr. Cecilia Njoroge - Member
7. Dr. Samantha Opere - Member
8. Dr. Peter Kimeli - Member
9. Dr. Mukami Ruoro - Member

The Kenya Veterinary Association, National Executive Council - Years 2024 – 2026

Dr. Kelvin Osore
President

Dr. John Flookie
Vice President

Dr. Ambrose Kipyegon
Honorary Secretary

Dr. Agnes Maina
Assistant Secretary

Dr. Godfrey Wamai
Honorary Treasurer

Dr. Carol Khaemba
Council Member and Chair Governance Committee

Prof. Charles Kimwele
Council Member and Chair of KVA plot development Committee

Dr. Samantha Opere
Council Member and Chair of Welfare Subcommittee

Dr. Daniel Muasya
Council Member and Chair of Scientific Committee

Dr. Nick Langat
Council Member and Chair of Publicity Committee

Dr. Joel Rutto
Council Member and Head of the PETS project at KVA

Dr. Sakwa Kamama
Council Member and Chair of Stakeholder engagement Committee

Day 1: Tuesday, April 21, 2026			
Theme: Emerging Trends in Veterinary Medicines			
Parallel Sessions/Streams			
	Moderator: Dr. Sakwa Kamama, Dr. Joel Rutto and Dr. Godfrey Wamai		
08:00 to 12:00	***Industry Pre-conference Workshops and poster presentation***		
12.00 to 1300	***Lunch***		
13:00 to 13:30	***Registration & Exhibition Opens***		
	Moderator: Dr. Ambrose Kipyegon and Prof. Charles Kimwele		
13:30 to 13:35	***Welcome Remarks***		
13:35 to 14:10	**Keynote Lecture**: Snakebite Research and management – Antivenoms & Field Responses – ***Dr. George Omondi-Lead, Kenya Snakebite Research and Intervention Centre- Kenya Institute of Primate Research (KIPRE)***		
14:10 to 14:45	**Interactive Session**: Reproductive Biotechnology and Innovations in Cattle & Goats- ***Dr. Greg Awanda***		
14:45 to 15:20	**Lecture**: Grant writing & Project Management for Veterinary Practices and the animal resources Industry – ***Dr. Sam Owili BVM (UoN), MBA(Strathmore)***		
15:20 to 15:30	**Change – over /Transition**		
Time	**Companion Animal Health & Welfare (Hall A)**	**Farm Animal Health, Production & Agribusiness (Hall B)**	**Poultry and Aquaculture & Wildlife (Hall C)**
	Moderator: Dr. Mary Gichure	***Moderator: Dr. Felix Kibegwa***	***Moderator: Dr. Mukami Ruoro***
15:30 to 16:00	**Interactive Session**: Companion Animal Trends: Focus on managing Obesity, diabetes mellitus, allergies, and the increasing popularity of "niche" pets – ***Dr. Anderson Gitari, Andys Vet Clinic***	**Interactive Session**: Azolla, Black soldier flies and other Innovative animal feed solutions - ***David Mworia - Operations Manager, Sanergy Ltd***	**Lecture**: Advancing Wildlife Medicine Through Technology and Innovation - ***Dr. Shaleen Angwenyi, Smithsonian Institute***
16:00 to 16:30	**Case rounds**: Oncology Updates – From Diagnosis to Treatment to palliative care solutions - ***Dr. Alice Kithika, Petwell Vet Clinic***	**Lecture**: Advancing Livestock Health Systems through Integrated Genomics and Predictive Analytics: Applications in East African Livestock Systems - ***Dr. Dennis Makau, Assistant Professor - Biomedical and Diagnostic Sciences Department, University of Tennessee***	**Lecture**: Fish Disease Diagnostics and postmortem - ***Dr. Kamundia Waweru-Maasai Mara University***
16:30	***Coffee/Tea Break Poster Presentations & exhibitions***		

Day 2: Wednesday, April 22, 2026	
Theme: Future of Veterinary Medicine – Sustainability, Wildlife & Global Impact	
	Moderator: Dr. Agnes Maina and Dr. Kellen Asena
8:00 am to 8:20 am	***Registration, Coffee, Exhibition Opens***
8:20 am to 8:40 am	**Lecture:** Improving access to quality ruminant vaccine via better regulation - ***Dr. Noel Aineplan- Senior Manager, GALVmed***
8:40 am to 9.20 am	**Lecture**: Leveraging PPPs to Scale-up Ruminant Vaccination – Lessons from Egypt's FMD Success - ***Prof. Mohamed Fawzy-Professor of Virology, Suez Canal University, Egypt***
9.20 am to 10.00 am	**Lecture:** Increasing ruminant vaccine coverage – Making Market system functional – ***Dr. Enrique Pando - Head of Commercial Development & Impact, Galvmed***
10.00 am to 10.20 am	Interactive Plenary discussion on ruminant vaccination
10:20 am to 10:50 am	☕ ***Coffee/Tea Break Poster Presentations & exhibitions***
	Moderator: Dr. Ambrose Kipyegon/ Dr. Samson Muchelule/ Dr. John Flookie Owino
10:50 am to 11:35 pm	Opening Ceremony & Welcome Addresses (Main Hall) 1. Kwale County Official 2. Director of Veterinary Services-**Dr. Allan Azegele** 3. KVA President- **Dr. Kelvin Osore** ***4.*** Chief Guest - Cabinet Secretary-**Sen. Mutahi Kagwe**
11:35 am to 12:35 pm	GALVmed Industry Symposium – Innovations around ruminant vaccines – *Large and Small ruminant combo Vaccines* *1.* ***Dr. Alex Sabuni,*** *MD, KEVEVAPI.* *2.* ***Prof. Ahmad Almajali-****Professor of Infectious Diseases and Epidemiology, Jordan University of Science and Technology.* *3.* ***Dr Baksi Surajit -*** *Associate vice president of Technical Services at Hester Biosciences India.* ***4. Dr. Taha Hamratou-*** *Technical and Marketing Manager - Ruminants and Companion Animals, MCI Animal Health.*
12:35 pm to 13:50	🍴 ***Lunch***

	Streams/Parallel Sessions		
Time	**Companion Animal Health & Welfare (Hall A)**	**Farm Animal Health, Production & Agribusiness (Hall B)**	**Poultry and Aquaculture & Wildlife(Hall C)**
	Moderator: Dr. Willy Mwagi	***Moderator: Dr. Peter Kimeli***	***Moderator: Dr. Sophie Masika***
13:50 to 14:20	**Video Presentation**: Minimally Invasive Surgery in Practice (Laparoscopy & Endoscopy) – ***Dr. V. M. Chariar - Lariox Healthcare***	**Interactive session:** Sustainability models, carbon trading & Climate-Smart Livestock Farming ***- Dr. Pauline Gitonga-Senior Research Fellow, Center for Epidemiological Modelling and Analysis (CEMA)***	**Debate*:*** Wildlife in Ecosystem Health-The Pressure of Food Security & Urbanization vs The Need to Conserve. Where do we draw the line? ***- Dr. Victor Yamo - Executive Director, Global One Health Advocacy Alliance & Dr Shaleen Angwenyi - Smithsonian's Global Health Program***
14:20 to 14:30	***Transition***		
	Moderator: Dr. Samantha Opere and Dr. Machoka		
14:30 to 15.20	**Panel Discussion**: Animal Welfare & Ethics: Exploring the evolving understanding of animal sentience and the human-animal bond-Brooke East Africa ***Dr. Raphael Kinoti-Regional Director*** ***Dr. James Kithuka, Animal Welfare Officer (Brooke East Africa),*** ***Dr. Christopher Wanga – Director, Policy and Research, State Department for Livestock Development, Ministry of Agriculture and Livestock Development.***		
15.20 to 15.50	**Video session*:*** The Psychology and Philosophy behind love, pain, loss & Understanding Grief – ***Dr. David Kessler***		
15:50 to 16:30	***Special Hubs : Wellbeing Hub*** – Guided mindfulness & resilience workshops – ***Fred Ochieng-Mental 360***		
16:30	***Coffee/Tea Break Poster Presentations & exhibitions***		

Day 3: Thursday, April 23, 2026			
Theme: Technology, Innovation & One Health			
Time	**Companion Animal Health & Welfare (Hall A)**	**Farm Animal Health, Production & Agribusiness (Hall B)**	**Poultry and Aquaculture & Wildlife(Hall C)**
7:45 am to 8:05 am	***Registration & Exhibition Opens***		
	Moderator: Dr. Moses Olum		
8:05 am to 8:35 am	**Keynote Lecture*:*** SMART Herd Health: Predictive analysis, sensor technology, data analytics, AI, and machine learning for health management & livestock production - ***Dr. Michael Mahero- Assistant Professor of Public Health & Infectious Disease Epidemiology, Biomedical and Diagnostic Sciences, University of Tennessee***		
8:35 am to 8:55 am	**Lecture:** AI and implications of indigenous interest in its co-creation - ***Dr. Madi Hewitson-Epidemiologist, ILRI***		
8:55 am to 9:25am	***Lecture****: Application of AI in Veterinary Medicine*-***Dr Adele Williams-Xavier BVSc MRCVS PhD- Equine Internal Medicine Specialist and Veterinary AI and Clinical Data Expert***		
	Panel Moderator: Prof. Charles Kimwele		
9:25 am to 10:15am	**Panel Discussion***:* GMO and the Future of Biotech – ***Dr. Joel Ochieng, Secretary General, Kenya*** ***Mr. Joseph Muchiri, Chief Executive Officer, National Biosafety Authority*** ***Dr. Martin Mwirigi, KARLO Biotech.***		
10:15 am to 10:45am	**Keynote Lecture**: One Health for Health Security: Emerging Frontiers in Infectious Diseases Research at the Human–Animal Interface–***Prof. Mark Nanyingi- Technical Director, Center for Global Health and Pandemic Intelligence (CGP), Ass. Professor of Epidemiology and Global Health, University of Michigan***		
10:45 am to 11:15 am	***Coffee/Tea Break & AGM Registration***		

Time	Companion Animal Health & Welfare (Hall A)	Farm Animal Health, Production & Agribusiness (Hall B)	Poultry and Aquaculture & Wildlife(Hall C)
	Moderator: Dr. Mercy Baraza	***Moderator: Dr. Khadijah Chepkorir***	***Moderator: Dr Edward M. Musya***
11:15 am to 11:45 am	**Lecture**: Dentistry – Dental Extraction, Root Canal Techniques & Imaging - ***Dr. Steve Ndurumo-Hardy Group***	**Lecture**: Sports Medicine, Rehabilitation & Performance in Equines – ***Dr. Hassan Mohammed***	**Video Presentation*:*** Poultry Disease Diagnostics and postmortem – ***Dr. Paul McMullin-Consultant, Poultry Health International***
11.45 am to 12.15 pm	**Interactive Session***:* Medical, Surgical & Imaging Innovations and their cross applications in human and veterinary medicine –***Dr. Lilyan Mathai, University of Nairobi***	**Masterclass:** Pain Management & Anaesthesia Protocols in field settings and safe handling procedures – ***Prof. Eddie Mogoa, University of Nairobi***	**Masterclass:** Poultry production tips for Africa-Efficiency in farming - ***Dr. Apollo Gichane-Regional Sales Manager, Kenchic***
12:15 pm to 13:15	***Lunch***		
	Moderator: Dr Kelvin Osore & Dr. Ambrose Kipyegon		
13:15 to 15:15	**AGM (Main Hall)**		
15:15 to 17:00	**KVA NATIONAL ELECTIONS (Main Hall)**		
17:00	***Coffee/Tea Break, Poster Presentations & exhibitions***		
NETWORKING EVENING RECEPTION: DINNER & COCKTAILS			

Day 4 – Friday, April 24, 2026			
Theme: Practice Management, Entrepreneurship & One Health			
8:00 am to 8:15 am	***Registration, Coffee, Exhibition Opens***		
	Moderator: Dr. Francis Gakuya		
8:15 am to 8:45am	**Court Case Workshop:** Forensic Medicine-From Crime Scenes to Courts; a crime investigation – ***Dr. Jeremiah Poghon, Kenya Wildlife Service***		
8:45 am to 9:15 am	**Masterclass:** Advanced & alternative Therapeutics-veterinary regenerative medicine, hydrotherapy, Acupuncture, laser therapy **– *Dr. Krishna Kasheria -Tails of the City***		
9:15 am to 09:50 am	**Masterclass**: Leadership & Emotional Intelligence in Veterinary Practice - ***Dr. Michael Powell-Director, Lincoln Institute of Veterinary Business***		
	Moderator: Dr. Mary Muthoni and Dr. Kelvin Mbai Francis		
09:50 am to 10:30 am	**Wet-Labs:** 1. Ultrasonography in Large Animal Practice – ***Prof. David Kihurani, University of Nairobi*** 2. Canine Vaginal Cytology – ***Dr. Ambrose Kipyegon, University of Nairobi***		
10:30 am to 11:00 am	***Coffee/Tea Break Poster Presentations & exhibitions & Special hub The KVA Cultural Gala & Art Showcase: Showcasing Art & Performances by KVA members***		
Time	**Companion Animal Health & Welfare (Hall A)**	**Farm Animal Health, Production & Agribusiness (Hall B)**	**Poultry and Aquaculture & Wildlife (Hall C)**
	Moderator: Dr. Lilyan Mathai	***Moderator: Dr. Shepelo Getrude***	***Moderator: Dr. Peterkin Nzomo***
11:00 am to 11:30am	**Interactive Session:** Advanced Soft Tissue Surgery & Recent advances in hemostasis – ***Dr. Willy Mwangi, University of Nairobi***	**Masterclass***:* Future of Niche value chains; Production of Propolis, Royal Jelly and other apiculture products – ***Ezra Owiti Onyango-National Beekeeping Institute***	**Masterclass***:* Handling and Rehabilitation of Wild Birds of Prey in Kenya - ***Dr. Laura Wessman, Raptor Rehabilitation Trust Kenya***
11:30 am to 12:00 pm	***Video Presentation:*** *The role of therapy & Emotional support animals in human medicine-* ***International Association of Animal Behavior Consultants***	**Masterclass:** Optimising Pig Management for best results ***–Dr. Sharon Tsigadi-General Manager, Farmers Choice***	**Lecture**: Marine Mammal Research and Conservation: Insights from Kenyan Waters***. - Michael Mwang'ombe - Program Manager at Kenya Marine Mammal Research & Conservation (KMMREC)***

12:00 pm to 12:35 pm	**Panel Discussion:** Recovery pathways in small animal orthopedics and pain management in ER – ***Dr. Willy Mwangi & Dr. Anderson Gitari and Dr. Alice Kithika***	**Masterclass**: Beef Production & Feedlot Management- Lessons from African & Global Systems –***Dr. Thomas Odera-Key Account Manager, Kemin Industries -East Africa***	**Industry Talk:** Next-Gen Vaccines for Poultry & other Livestock- ***Dr. Daniel Muchendu, CEVA Key Accounts Manager***
12:35 pm to 13:45	🍴 ***Lunch***		
	Moderator: Prof Charles Kimwele		
13:45 to 14:30	**Lecture**: Financial Freedom-Financial Planning & Investments for Veterinarians-Building Wealth While Saving Lives- ***Timothy Macharia, Head of Wealth Management, KCB Group***		
14:30 to 15:05	**Lecture**: HIV Research: Lessons for Immunodeficiency Syndromes in Animals - ***Prof. Thumbi Nd'ung'u - Director of Science, Africa Health Research Institute; Professor of Infectious Diseases, University College London; Scientific Director & Victor Daitz Chair, HIV Pathogenesis Programme, University of KwaZulu-Natal; and Programme Director, Sub-Saharan African Network for TB/HIV Research Excellence (SANTH)E.***		
15:05 to 15:25	**Lecture**: Can donkey farming ever provide a sustainable supply-chain for the donkey skin trade? - ***Dr. Joe Collins MVB PhD, FRSB MRCVS, Chief Veterinary Advisor, The Donkey Sanctuary***		
15:25 to 16:15	**Keynote Lecture:** Udder Health for Profitable Dairy: Practical Management from Lactation to Dry-Off - ***Dr. Bitsu Mekete, Medical Lead, Ruminants – Northwest East Africa, Zoetis***		
16:15 to 17:00	***Closing ceremony***		
17:00	☕ ***Coffee/Tea Break-***		

EXPERT SPEAKERS

Day 1: Tuesday, April 21, 2026 Theme: Emerging Trends in Veterinary Medicines

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Dr. George Omondi (KIPRE)
Topic: Snakebite Research and Management – Antivenoms & Field Responses

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Dr. Greg Awanda (Urus Group LP)
Topic: Reproductive Biotechnology and Innovations in Cattle & Goats

Dr. Greg Onyango is a veterinarian with over a decade of experience in animal breeding and applied reproductive technologies. He holds a Bachelor of Veterinary Medicine from the University of Nairobi and a Master of Biotechnology of Assisted Reproductive Techniques and Embryology from the University of Valencia, Spain. He also holds a MicroMBA Certification from Strathmore University.

He has previously served as a bovine embryo transfer specialist in two pioneering IVF-ET laboratories in Kenya and Uganda, and as a Bovine Reproduction Specialist at Nbryo Pty Ltd in Queensland, Australia.

Currently, Dr. Onyango is the Country Lead for Kenya at Urus Group LP, where he leads a team of highly skilled professionals implementing the Urus Bovine Genetics Market Development Program, a project funded by the Bill & Melinda Gates Foundation. This initiative focuses on accelerating genetic improvement and enhancing the productivity of dairy and beef cattle across Kenya by facilitating access to high-quality semen and embryos for small-, medium-, and large-scale farmers.

Dr. Onyango is deeply passionate about leveraging assisted reproductive technologies to improve livestock productivity and contribute to sustainable food security.

David Mworia (Sanergy Ltd)
Topic: Azolla, Black Soldier Flies and Other Innovative Animal Feed Solutions

David Mworia is an Operations Manager at Sanergy Limited with over five years of experience in Black Soldier Fly (BSF) farming. His work focuses on translating circular economy principles into practical, large-scale operations by converting organic waste into sustainable agricultural inputs, while developing operational frameworks that support the growth and commercialisation of the BSF sector.

Dr. Sam Owilly (Chief Executive Offier BOMA)

Topic: Grant Writing & Project Management for Veterinary Practices and the Animal Resources Industry

Dr. Sam Owilly is a practitioner in International Development with over 18 years' experience advancing climate resilience, economic inclusion and community development programs across the drylands of Africa. Dr Owilly holds a Bachelor of Veterinary Medicine from University of Nairobi, an MBA from Strathmore Business School, training in Climate Change and Adaptation, Project Planning and Management and is a Perennial Fellow. Dr Owilly brings a rare combination of scientific grounding and strategic leadership to complex development challenges with a particular focus in Designing and Implementing Impactful development programs, Resource Mobilization, Strategic Partnerships, Negotiations and Bargaining, Competitive Strategy and Game Theory. He has a strong track record of mobilizing significant multi-donor funding across governments, multilateral and bilateral institutions, and philanthropic foundations including GoK, WB, USAID, UKAID/FCDO, IKEAF among others.

Dr. Anderson Gitari (Andys Vet Clinic)

Topic: Companion Animal Trends: Focus on Managing Obesity, Diabetes Mellitus, Allergies, and Niche Pets

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Dr. Shaleen Angwenyi (Smithsonian Institution)

Topic: Advancing Wildlife Medicine Through Technology and Innovation

Dr. Shaleen Angwenyi is a wildlife veterinarian and wildlife health surveillance specialist holding a Bachelor of Veterinary Medicine from the University of Nairobi and a Master of Science in Global Wildlife Health and Conservation from the University of Bristol. She works with the Smithsonian's Global Health Program serving as the Programme Lead for Wildlife Health Watch. In this capacity she leads efforts to strengthen community-based wildlife disease surveillance across Kenya through the integration of digital tools, ranger-led reporting systems, and epidemiological intelligence. With experience in field veterinary medicine, stakeholder engagement, and cross-sector collaboration, Dr. Angwenyi is particularly interested in advancing technology-driven, locally led innovations that enhance early detection and response to emerging diseases at the wildlife–livestock–human interface. Her work sits at the forefront of reimagining wildlife medicine in Africa — shifting the field from reactive response to data-driven, anticipatory systems that strengthen conservation, public health, and policy resilience. She also serves as the Chair of the Wildlife Disease Association Africa and Middle East Section.

Dr. Alice Kithika (Petwell Veterinary Clinic)

Topic: Oncology Updates – From Diagnosis to Treatment to Palliative Care Solutions

I am a veterinary surgeon at Petwell Veterinary Clinic with 38 years of experience, specializing in small animal care, mainly dogs and cats and also skilled in treating exotic pets. I graduated with a Bachelor of Veterinary Medicine in 1988 and am currently pursuing a Master's in Veterinary Surgery at the University of Nairobi. My career focus is on companion animal medicine and surgery, pairing extensive clinical work with ongoing academic growth to ensure high-quality care and expertise.

Dr. Dennis Makau (Assistant Professor, University of Tennessee)

Topic: Advancing Livestock Health Systems through Integrated Genomics and Predictive Analytics: Applications in East African Livestock Systems

Dr. Dennis N. Makau is an epidemiologist whose work focuses on integrating genomics, epidemiology, and data science to understand and anticipate disease risks across animal and human health systems. He is an Assistant Professor in the Department of Biomedical and Diagnostic Sciences at the University of Tennessee, Knoxville. Dr. Makau leads the Population and Epidemiology Data Innovation Lab (PEDIL), where his research combines genomic data, epidemiological modeling, and predictive analytics to strengthen disease surveillance and support data-driven decision-making in health systems. Through collaborations across Africa, Asia, and North America, his work advances scalable approaches to improving livestock health, strengthening zoonotic disease surveillance, and building more resilient One Health systems capable of proactive, data-driven responses to emerging disease threats.

Dr. Patrick Waweru Kamundia (Maasai Mara University)

Topic: Fish Disease Diagnostics and Postmortem

Dr. Patrick Waweru Kamundia is a Lecturer, researcher, and mentor in the Department of Animal Health and Production at Maasai Mara University, Kenya, with a career dedicated to advancing veterinary science and aquatic animal health. He holds a Bachelor of Veterinary Medicine and a Master of Science in Fish Science, and a PhD in Pathology, Microbiology, and Parasitology. His expertise spans aquatic pathobiology, antimicrobial resistance, ecotoxicology, and the promotion of robust science and research ethics. Dr. Kamundia is committed to applying the One Health approach through his teaching, his leadership on the University's Science and Research Ethics Committee, and his contributions to national technical working groups. Beyond the university, he integrates his professional knowledge with practical experience as a farmer, bridging the gap between academic research and grassroots application in livestock and fisheries management.

Day 2: Wednesday, April 22, 2026

Theme: Future of Veterinary Medicine – Sustainability, Wildlife & Global Impact

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Dr. Noel Aineplan (Senior Manager, GALVmed)
Topic: Improving Access to Quality Ruminant Vaccines via Better Regulation

Dr. Noel Mategyero Aineplan is a regulatory science expert specializing in veterinary medicines regulation, with extensive experience in policy development, regulatory harmonization, and international collaboration. He currently serves as Senior Manager for Better Regulation at GALVmed and previously held senior positions at the Uganda National Drug Authority, where he contributed significantly to advancing regional regulatory initiatives within the East African Community (EAC) and other international initiatives. Trained in veterinary medicine, he also holds advanced degrees in International Animal Health and Quality Management, and is a certified Project Management Professional (PMP).

Prof. Mohamed Fawzy (Professor of Virology, Suez Canal University)
Topic: Leveraging PPPs to Scale-up Ruminant Vaccination – Lessons from Egypt's FMD Success

Prof. Mohamed Fawzy holds a Ph.D. and serves as a Professor of Virology and Immunology at the Faculty of Veterinary Medicine, Suez Canal University. A prolific researcher, he has authored 52 scientific articles in virology, immunology, and vaccinology, boasting an H-Index of 17. Dr. Fawzy holds a Diploma in One Health from Duke University, North Carolina, USA, and a Diploma in Vaccinology from Geneva University, Switzerland, and Fondation Merieux, Lyon, France. He has completed numerous vaccinology courses across Africa, Asia, and Europe. His commitment to global health is further demonstrated by his participation in many international conferences (including in USA, UK, Spain, France, Portugal, Italy, Turkey, Tanzania, Nigeria, South Africa, Uganda, India, Thailand, South Korea, Oman, Vietnam, and Argentina) and several national conferences in Egypt.

Dr. Enrique Pando (Executive Director, GALVmed)

Topic: Increasing Ruminant Vaccine Coverage – Making Market Systems Functional

Enrique Hernández Pando is the Executive Director of Commercial Development & Impact at GALVmed. Enrique brings over two decades of leadership experience in the global animal health industry, with deep expertise in commercial strategy, market development, and expanding access to veterinary health solutions in African markets. Prior to joining GALVmed, he held senior leadership roles with Merial and Boehringer Ingelheim, including leading the business for these two companies in Africa. Throughout his career, Enrique has championed innovative partnerships and sustainable commercial models to improve livestock health and productivity across developing markets. Enrique is a livestock vet and cattle farmer as well.

Dr. Alex Sabuni (Managing Director, KEVEVAPI)

Topic: Innovations around Ruminant Vaccines – Industry Symposium

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Prof. Ahmad Almajali (Professor, Jordan University of Science and Technology / JOVAC)

Topic: Large and Small Ruminant Combo Vaccines

Prof. Ahmad Al-Majali is Professor of Epidemiology and Infectious Diseases at the Jordan University of Science and Technology. He holds a DVM from JUST and a PhD from Purdue University, USA. With over 20 years of experience in veterinary epidemiology and animal health, he has authored more than 70

scientific publications and currently serves as WOAH Regional Representative for the Middle East (since August 2024).

Dr. Surajit Baksi (Associate Vice President, Hester Biosciences Ltd)
Topic: Large and Small Ruminant Combo Vaccines

Dr. Surajit Baksi is a renowned veterinarian specializing in poultry and animal science, with over 25 years of extensive experience. He earned his bachelor's degree in veterinary science from the West Bengal University of Animal and Fishery Sciences, Kolkata, India, Master's degree in Veterinary Microbiology, and Ph.D. in Veterinary Microbiology from the same university. Dr. Baksi has vast experience in research, quality control, quality assurance, and technical services in the poultry and livestock industry. He is a well-known veterinary doctor and technical expert. Deeply involved in research, he has published 70 research papers in national and international journals. He is a Fellow of the Society of Environmental Sciences (F.S.E.Sc.) and the Society for Sciences (F.S.Sc.). He has contributed to the development of many new products, as well as training programs and audits in the poultry and animal health industry. Additionally, he is a professional member of 25 different scientific societies engaged in research and development in the animal health sector.

Dr. Taha Hamratou (Technical & Marketing Manager, MCI Santé Animale)
Topic: Large and Small Ruminant Combo Vaccines

Dr. Taha Hamratou is a veterinarian and Sales Director at MCI Santé Animale, with extensive expertise in large animal health and ruminant production systems. He serves as Sales Director, where he oversees commercial strategy, market development, and stakeholder partnerships. He remains deeply committed to connecting technical expertise with field-level impact, with a particular focus on vaccination strategies and disease control programs. His areas of professional interest include infectious disease management in ruminants, vaccination protocols, and the optimization of herd health programs under field conditions.

Dr. Pauline Gitonga (Senior Research Fellow, CEMA – University of Nairobi)
Topic: Sustainability Models, Carbon Trading & Climate-Smart Livestock Farming

Dr. Pauline Gitonga is a veterinarian and dryland one health systems researcher with over 15 years of experience and serves as the Managing Director of ASAL eXtension Limited. Her work applies rangeland mapping and participatory disease surveillance approaches to inform climate-smart livestock systems, strengthen veterinary service delivery, and support zoonotic disease surveillance and response. She has conducted numerous technical consultancies with organisations including WOAH, FAO, AU-IBAR, IGAD, Zoetis, Concern Worldwide, and ACTED. She also coordinated a five-year Defense Threat Reduction Agency (DTRA)-funded project on laboratory capacity building for zoonotic disease risk mitigation in Kenya, including capacity building for frontline human and animal health workers. She is affiliated with the Centre for Epidemiological Modelling and Analysis (CEMA), University of Nairobi, and the Department of Biomedical Sciences, Colorado State University.

Dr VM Chariar (Pets Speciality Clinic, Maharashtra India/Lariox Healthcare)
Topic: Minimally Invasive Surgery in Practice (Laparoscopy & Endoscopy)

Dr VM Chariar runs Two Purpose-built Speciality Hospitals in the Mumbai Region. Pioneering work in Surgical Technology, Endoscopy, Laparoscopy, Orthopedics – shaped or Mission to enable each patient and professional to access the value of Finest Surgical care, Orthopaedic Repair, Minimal Access Surgery and Reconstructive Surgery

Dr Chariar's International Fellowships & Training includes Orthopedics at Purdue University, Joint Surgery at GCVS, Houston, Minimal Access Surgery at Utrecht University, THR Fellowship at Moscow, Russia.

Dr Chariar has been bestowed ECVS Young Surgeon Scholarship, Exchange Professor at Purdue University, USA and Invited to 35 University Surgical Workshops in India as Key Faculty.

Dr Chariar bagged two University Gold Medals and established Twin Limca National records in Laparoscopic Surgery. Dr Chariar has Guided Six University Masters students in Surgical Research Dissertations and has Published Six International Scientific Publications and 30 Indian Scientific Publications.

Dr. Victor Yamo (Executive Director, Global One Health Advocacy Alliance)
Topic: Wildlife in Ecosystem Health Debate

Dr. Victor Yamo is a University of Nairobi trained Veterinary Surgeon who has spent the better part of his career spanning over three decades within the animal production and the global food systems arena. He is a consummate animal welfare and one health practitioner who has worked across various sectors from corporate entities to governmental agencies and public benefit organizations. Throughout his distinguished career, his work has continued to extend beyond the confines of traditional veterinary practice, delving into the intricate interplay between animal welfare, animal health, public health and environmental sustainability. He continues to be at the forefront of initiatives aimed at enhancing the well-being of farmed animals while simultaneously safeguarding public health, ensuring environmental sustainability and promoting food security and livelihoods for producers.

He is the founder and current Executive Director of Global One Health Advocacy Alliance (GOHAA), part time lecturer for Animal Welfare, Ethics and Law at Jomo Kenyatta University of Agriculture & Technology (JKUAT), Member of the Poultry Sector Skills Advisory committee of the Technical and Vocational Education Training (TVET) Curriculum Development, Assessment and Certification Council (CDACC) of Kenya and Councilor for Kenya to the Commonwealth Veterinary Association (CVA).

He is a member of the Kenya Veterinary Association (KVA) and Kenya Institute of Management (KIM). He is a past Chairman of the Kenya Veterinary Board (KVB) and the professional association (KVA) and last year (2025) he was named the Veterinarian of the Year.

Dr. Sophie Masika (World Federation for Animals)
Topic: Wildlife in Ecosystem Health Debate

Dr. Masika Sophie is the Global Health Policy Manager at the World Federation for Animals (WFA), where she leads high-level policy engagement across the food–health–environment nexus. She has served at an advisory role on global processes such as the WHO Pandemic Agreement, the UNGA Political Declaration on AMR, the FAO Resolution on AMR in agrifood systems, WOAH's animal welfare standards, and UNEP's One Health integration into environmental governance.

She serves on the Steering Committee of the Quadripartite-led AMR Multi-Stakeholder Partnership Platform. In addition, she is an Advisory Committee member of the Alliance for Human and Animal Co-Existence (AHAC), an e-trainer with FAO on Women's Leadership in One Health, and an alumna of the Gates Foundation's WomenLift Health Fellowship.

Dr. Raphael Kinoti (Regional Director, Brooke East Africa)

Topic: Animal Welfare & Ethics: Exploring Animal Sentience and the Human-Animal Bond

Dr. Raphael Kinoti is a seasoned expert in livestock production and veterinary medicine with over two decades of experience spanning animal welfare, biodiversity conservation, environmental stewardship, and community development. He has worked extensively with both national and international NGOs, contributing to initiatives that integrate sustainable natural resource management with climate change resilience. He has contributed to the design and implementation of strategies that protect biodiversity, particularly in remote and vulnerable ecosystems, while also supporting peacebuilding and conflict management efforts linked to environmental sustainability. Dr. Kinoti is a strong advocate for women's empowerment, youth engagement, and sustainable agriculture. He has led programs that have enhanced the capacity of thousands of women and young people across diverse communities. He currently serves as Regional Director at Brooke East Africa, where he provides strategic leadership to promote animal welfare and sustainable livelihoods across the region.

Dr. James Kithuka (Animal Welfare Officer, Brooke East Africa)

Topic: Animal Welfare & Ethics: Exploring Animal Sentience and the Human-Animal Bond

Dr. James Mutiiria Kithuka is a seasoned veterinarian with over two decades of experience in animal health, welfare, and livestock-based livelihood development across East and Southern Africa. He currently serves as a Programme Coordination and Quality Assurance Advisor at Brooke East Africa, where he leads capacity building, mentoring frameworks, and regional animal health initiatives. His expertise spans animal welfare, veterinary public health, project management, monitoring and evaluation, and stakeholder engagement. Dr. Kithuka is also a dedicated educator and mentor, contributing to the growth of animal health professionals. His work focuses on improving animal welfare, strengthening veterinary systems, and advancing One Health approaches to enhance sustainable community resilience.

Dr. David Kessler (Grief.com)

Topic: The Psychology and Philosophy Behind Love, Pain, Loss & Understanding Grief

Dr David Kessler is a world-renowned death and grief expert, author, speaker specializing in grief and loss, trauma, and healing, and educator who expanded the five stages of grief to include "finding meaning" as a sixth stage. He founded Grief.com and offers online training and support groups to help people navigate loss and trauma, focusing on living with grief rather than simply overcoming it He holds an MA from Loyola Marymount and is a Honorary Fellow at the University of Bristol. He is the author of seven books, including the bestselling Finding Meaning: The Sixth Stage of Grief and its accompanying workbook, and he coauthored two books with Elisabeth Kübler-Ross, including On Grief and Grieving, which helped adapt her groundbreaking work to the experience of grief. His first book, The Needs of the Dying, received praise from Mother Teresa

Fred Ochieng (Mental 360)

Topic: Wellbeing Hub – Guided Mindfulness & Resilience Workshops

Fred Ochieng' is a dedicated Counselling Psychologist and Programs Officer at Mental360, a leading mental health organization in Kenya. With a strong background in facilitating mental health interventions and educational curriculum development.

His expertise lies in bridging the gap between clinical psychology and community-based psychosocial support, focusing on building resilience and "Inner Strength" within underserved populations.

Day 3: Thursday, April 23, 2026

Theme: Technology, Innovation & One Health

Dr. Michael Mahero (Assistant Professor, University of Tennessee)

Topic: SMART Herd Health: Predictive analysis, sensor technology, data analytics, AI, and machine learning for health management & livestock production

Dr. Michael Mahero is a board-certified public health and preventive medicine veterinarian and tenure-track faculty member at the University of Tennessee College of Veterinary Medicine (UTCVM). He serves as an infectious disease epidemiologist and chairs the UTCVM Veterinary Teaching Hospital Infection Control Committee.

His core expertise involves epidemiological modeling, combining quantitative and qualitative tools to assess the risk behaviors drivers and their influence on the micro-epidemiology of multi-host infections. Additionally, he applies a One Health (OH) approach to lead multidisciplinary teams and collaboratively translate research into policy.

He previously served as Director of the Veterinary Public Health and Preventive Medicine Residency - University of Minnesota and worked as a technical advisor for the USAID-funded Emerging Pandemic Threats program, building capacity for infectious disease control across Africa and Southeast Asia. He is a recipient of the NIH Fogarty Global Health Fellowship and serves on the public policy committee of the American Public Health Association's OH Section.

Dr. Madi Hewitson (Epidemiologist, ILRI)

Topic: AI and Implications of Indigenous Interest in its Co-creation

Dr Madi Hewitson BVMS BVM BVS MSc (Epi) is a veterinary surgeon and PhD researcher at The International Livestock Research Institute, where her work sits at the intersection of spatial epidemiology, One Health, and Indigenous knowledge systems. Funded by BBRSC, her doctoral research focuses on tick-borne zoonoses risk among Samburu pastoralist communities in Northern Kenya, integrating Artificial Intelligence (AI) models with GPS livestock tracking, participatory mapping, and cross-sectional serosurveillance for pathogens. Her research is grounded in CARE principles for Indigenous data sovereignty and a commitment to decolonial, community-led approaches to global health.

Dr. Adele Williams-Xavier (Equine Internal Medicine Specialist & Veterinary AI Expert)
Topic: Application of AI in Veterinary Medicine

Dr. Joel Ochieng (Programme Leader, Agricultural Biotechnology, University of Nairobi)
Topic: GMO and the Future of Biotech

Joel Ochieng is a biotechnology, biosafety and food security expert involved in training, research, product development and policy formulation. He is currently the Programme Leader, Agricultural Biotechnology, University of Nairobi, and Secretary General for the Kenya University Biotechnology Consortium (KUBICO), a guild of biotechnology experts in Kenya using biotech approaches and innovations for improvement in agriculture, health and the environment. Joel completed PhD in Genetics & Applied Biotechnology in 2010 at Southern Cross University/University of New England, Northern Rivers, Australia. His current research focuses on application of genetic engineering and a range of other biotechnologies to accelerate agricultural productivity and improve food and feed safety, Biosafety and Biotechnology Stewardship, National Food Security Analysis, and enhancing the enabling agricultural policy environment for remunerative agriculture. The programme currently hosts two Fulbright Scholars on secondment, two local Postdoctoral Fellows, and seven PhD students working on various crop and animal genetic engineering, conservation and agricultural policy projects.

This conference provides an opportunity to converse with the public on the research, development and benefits of genetically engineered crops and livestock; and to address concerns on safety and socioeconomics of technology. The theme of the conference complements his focus on outcomes that align with climate change and resilience, applying biotechnology to improve food and nutritional security, mitigate footprints of agricultural practices and climate change, and to invigorate public education for an enhanced understanding on biotechnology and risk mitigation, within the one-health framework. With the veterinary professionals, we will converse on how best to manage modern biotechnology products for the benefit of Kenya, especially as many of these products head to commercialization.

Dr. Martin Kiogora Mwirigi, PhD (Senior Chief Research Scientist- KALRO)

Topic: GMO and the Future of Biotech

Dr. Kiogora is a Senior Chief Research Scientist at the Kenya Agricultural and Livestock Research Organization (KALRO) and serves as the Director of the Biotechnology Research Institute. He holds a BSc in Biochemistry and Chemistry, an MSc in Applied Parasitology, and a PhD in Applied Parasitology (Immunology) from the University of Nairobi.

With over 20 years of research experience, Dr. Kiogora is a Principal Investigator on projects focused on developing vaccines and diagnostic tools for livestock diseases using modern biotechnology approaches, including molecular techniques. He is also actively involved in crop biotechnology, particularly the TELA maize project aimed at developing insect-resistant varieties. In addition, he serves as an Associate Editor of the East African Agricultural and Forestry Journal.

Dr. Kiogora has previously worked as a Visiting Scientist at the International Livestock Research Institute (ILRI)–BeCA Hub and at the Vaccine and Infectious Disease Organization–International Vaccine Centre (VIDO) in Canada.

He is passionate about food safety and currently chairs the Biotechnology Technical Committee at KEBS and the Agriculture and Biotechnology Technical Committee of ARSO. He has also served on PAC University's Governing Council and Board of Trustees.

Dr. Joseph Muchiri (Chief Executive Officer, National Biosafety Authority)

Topic: GMO and the Future of Biotech

Prof. Mark Nanyingi (Technical Director, Center for Global Health and Pandemic Intelligence - CGP)

Topic: One Health for Health Security: Emerging Frontiers in Infectious Diseases Research at the Human–Animal Interface

Dr. Mark Nanyingi is the Technical Director for Global Health Security at the Center for Global Health and Pandemic Intelligence (CGP). He is an infectious disease epidemiologist and public health expert with a PhD in Epidemiology, an MPH, an MSc, and a Bachelor of Veterinary Medicine, complemented by Postdoctoral advanced training in One Health, Infectious disease modelling, Global Public Health, and Health security governance. He is an adjunct professor of Epidemiology and Global Health at the Center for Global Health Equity, University of Michigan, and the American University (USA), he focuses on advancing global health equity by strengthening epidemic preparedness and response systems through integrated One Health surveillance, epidemic intelligence, and data-driven decision-support tools. His expertise spans One Health surveillance integration, epidemic and pandemic intelligence, Artificial

Intelligence, Spatio-temporal disease modelling, Digital Health, health security systems strengthening, and multisectoral coordination frameworks, where he has led technical initiatives at World Health Organization (WHO), Global Fund, US CDC, Wellcome Trust, FAO, University of Liverpool, KEMRI and Kenya Public Health Institute (KNPHI). He works at the interface of human-animal-environmental health to design and operationalize integrated surveillance systems, structured response decision-support tools, and capacity-building frameworks that strengthen evidence-informed emergency preparedness and response at national, regional, and global levels.

Dr. Steve Ndurumo (Hardy Group)

Topic: Dentistry – Dental Extraction, Root Canal Techniques & Imaging

Dr. Ndurumo M Stephen is a veterinary professional for over twenty years. Having a bachelor's degree in veterinary medicine and a Master's degree in Veterinary Surgery, he has been in several fields of academia, veterinary practice and management in his long career both in the country and globally. With his interest in new fields in academia and practice, he specialised in canine and equine dentistry studies after graduation to elevate the scope for veterinary dentistry locally. During this period he enjoyed teaching and shaping new graduates in the profession.

Taking advantage of the diversity in veterinary training, he had a career spanning ten years in private security management and product development before retiring and setting up Small Animal practice in Nairobi.

Seeing the veterinary profession grow by improvement of professional welfare and recognition, and mentorship are areas that are close to his heart. With the changing global trends, he is an intentional advocate for change in the veterinary profession in Kenya to ensure its robustness to be future proof.

Dr. Hassan Mohammed (Egerton University)

Topic: Sports Medicine, Rehabilitation & Performance in Equines

Dr. Mohamed Hassan S. is a veterinarian with a deep-seated commitment to advancing surgical standards and clinical education in Kenya. His journey began at the University of Nairobi, where he earned his Bachelor of Veterinary Medicine (BVM) in 2013. Driven by a particular interest in advanced diagnostics and surgical intervention, he went on to specialize further, obtaining his Master of Veterinary Surgery (MVetSurg). His master's thesis allowed him to dive deep into the world of equine radiology, a field that remains a cornerstone of his professional life.

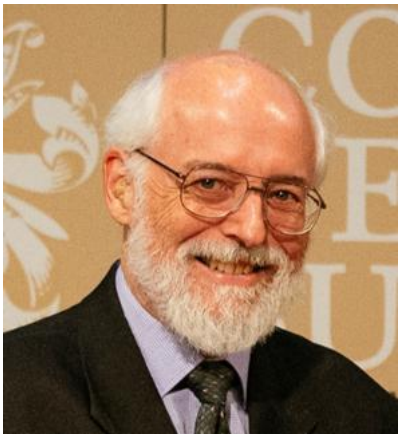
Since 2013, he has worked as a mixed animal practitioner, which has allowed him to cultivate a truly diverse skillset. On any given day at his clinic in Nakuru - where he serves as one of the Directors - you might find him treating domestic cats and dogs, or managing the unique needs of birds and exotic reptiles. However, his true passion has always been with horses.

Beyond the clinic, he is honored to help shape the next generation of veterinarians as a Lecturer at Egerton University. He works closely with third, fourth, and fifth-year students, leading both their surgery lectures and their hands-on clinical practicals.

For him, the most rewarding part of his career is being able to bridge the gap between the classroom and the operating theater, ensuring future surgeons have the practical skills they need to succeed.

Dr. Paul McMullin (Consultant, Poultry Health International)

Topic: Poultry Disease Diagnostics and Postmortem



Paul McMullin is an internationally recognized specialist in poultry health and production and a European diplomate in poultry veterinary science. After qualifying as a veterinarian in Dublin, he worked in Brazil for 12 years before returning to the UK. He joined the in-house veterinary practice of the Hillsdown Group in 1992 and led a management buyout in 2002 to form Poultry Health Services, a leading poultry practice in the UK. He also holds an MSc in Livestock Health and Production from the Royal Veterinary College and acted as veterinary consultant to the British Egg Industry Council for around 14 years. He sold PHS in 2014 and retired from full-time veterinary practice in 2017. He continued to act as a scientific consultant to industry bodies, poultry companies, and the pharmaceutical industry, and still participates in, and presents, at relevant scientific meetings while supporting some organisations with their web-site development and maintenance.

Dr. Lilyan Mathai (University of Nairobi)

Topic: Medical, Surgical & Imaging Innovations and Cross Applications

Dr. Lilyan Mathai is a veterinary surgeon with over a decade of experience in small animal medicine and surgery. She graduated from the University of Nairobi with a Bachelor of Veterinary Medicine in 2010 and a Master of Veterinary Surgery in 2015 and is currently pursuing a PhD in Veterinary Surgery. Her clinical and academic work has a strong focus on diagnostic imaging, with particular emphasis on advancing the use of ultrasound in small animal practice in Kenya. Through this work, she has contributed to improving diagnostic accuracy and enhancing patient outcomes in the region.

Dr. Mathai is a Certified Cat Friendly Veterinarian accredited by the American Association of Feline Practitioners and holds further certification in veterinary practice management. Her contributions to the profession have been acknowledged through multiple honours, including a nomination for Clinician of the Year (2017), the Colin F. Burrows International Scholarship (WSAVA, 2018), a Royal Canin Small Animal Nutrition Ambassadorship (2018), and her selection as a USDA Faculty Exchange Scholar (2018). She has also been recognised as a Vet of the Year nominee.

Her academic and clinical interests centre on strengthening standards of care in small animal practice through evidence-based diagnostic imaging. She is also actively engaged in mentoring and advocating for mental well-being within the veterinary profession.

Prof. Eddy Mogoa (University of Nairobi)

Topic: Pain Management & Anaesthesia Protocols in Field Settings

Eddy Geoffrey Mosoti Mogoa obtained his Bachelor of Veterinary Medicine in 1986 and Master of Science in Clinical Studies in 1990 from the University of Nairobi. He obtained his Doctor of Philosophy degree in Veterinary Surgery, specializing in Veterinary Anaesthesiology from the University of Pretoria, South Africa in 1999. He has been a staff member at the Department of Clinical Studies, Faculty of Veterinary Medicine, University of Nairobi, since 1988. At the moment, he is an Associate Professor in Veterinary Surgery where he is involved in training both undergraduate and postgraduate students in Veterinary Science, Wildlife Health and Management / Wildlife Management and Conservation, Biomedical Science; undertaking research; and offering consultancy services in various areas in the livestock industry / animal health sector.

He is also involved in supervision of undergraduate student projects, Masters and Doctorate students. He has carried out research and published more than 50 papers in various local and international journals, and presented more than 70 papers in conferences/workshops. His work spans anaesthesia, pain management, disaster preparedness, veterinary education, animal welfare, One Health, livestock policy issues, and zoonoses.

Dr. Apollo Gichane (Regional Sales Manager, Kenchic)

Topic: Poultry Production Tips for Africa – Efficiency in Farming

Dr. Apollo G. Mirera, BVM (UoN), is the Day Old Chicks Sales Manager at Kenchic Plc. A specialist in poultry health and production, Dr. Apollo blends clinical mastery in disease management with commercial strategy. He is a strong advocate for stakeholder education, viewing animal health as a primary pillar for achieving regional food security and economic growth.

Day 4: Friday, April 24, 2026

Theme: Practice Management, Entrepreneurship & One Health

Dr. Jeremiah Poghon (Kenya Wildlife Service)
Topic: Forensic Medicine – From Crime Scenes to Courts

Dr. Krishna Kesheria (Tails of the City)
Topic: Advanced & Alternative Therapeutics – Regenerative Medicine, Hydrotherapy, Acupuncture & Laser Therapy

Dr. Krishna Kesharia is a small animal veterinarian and practice owner based in Nairobi, Kenya. She is the founder of Dr. Krishna Veterinary Clinic and Tails of the City, an integrated pet care facility that combines clinical medicine with nutrition, rehabilitation, training, and community engagement.Her work extends beyond traditional veterinary practice, integrating medicine with nutrition, hydrotherapy, and behavior to deliver a more holistic and multidisciplinary approach to patient care.

Dr. Krishna is passionate about advancing veterinary standards in emerging markets and is focused on building scalable, high-quality systems that combine medical excellence with client education and community-driven care

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Dr. Michael Powell (Director, Lincoln Institute of Veterinary Business)
Topic: Leadership & Emotional Intelligence in Veterinary Practice

Michael Powell is a veterinarian, business thought-leader and a co-director at Lincoln Institute of Veterinary Business. A practitioner with over 30 years experience and a former owner of a multiple award-winning ASAV Hospital of Excellence, Michael's professional passion and focus now lies in provision of empowering education and support of veterinary professionals around the world. Since 2011, his company has been shaping an even brighter future for the veterinary industry through evidence-based training and support. Michael is a researcher, industry advocate and highly regarded international speaker on the subjects non-technical competency development, organizational leadership and strategic business management.

Prof. David Kihurani (University of Nairobi)
Topic: Ultrasonography in Large Animal Practice

Prof. David O. Kihurani, a veterinarian, has PhD, MSc and Bachelor of Veterinary Medicine degrees from the University of Nairobi, Kenya. He began his career as an Assistant Lecturer in 1984 at the Clinical Studies Department, University of Nairobi, rising through the ranks to become an Associate Professor in 2004, a position he still holds. While there he has taught subjects in Clinical Veterinary Surgery to undergraduate and postgraduate students, as well as supervising degrees by the latter. He also has extensive clinical experience of over 40 years in large animal surgery (particularly cattle and horses) and equine medicine within the department.

This experience has been extended to other institutions, including Del Monte Kenya Ltd. Company, Thika, where he has attended to the health and welfare of the horses for 34 years. In addition, he was appointed Consultant Clinical Veterinarian at the International Livestock Research Institute (ILRI) on various occasions from 1995 to December, 2006, to provide animal health care and perform experimental surgeries in cattle for various research projects. He also performed Embryo Transfer (ET) services at ILRI to generate calves with specific genetic traits important for research in East Coast Fever and dairy productivity.

He has trained many practitioners from Kenya, Uganda, Tanzania and Zambia in embryo transfer and veterinary imaging techniques. His international experience includes study visits to Leipzig, Germany, and a sabbatical at the University of Pretoria, South Africa focusing on imaging modalities such as Ultrasound, Endoscopy, CT, Scintigraphy and MRI. He has published over 30 scientific papers and currently serves as Chairman of the Faculty Biosafety, Animal Use and Ethics Committee and Coordinator of PhD programs at the University of Nairobi.

Dr. Ambrose Kipyegon (University of Nairobi)

Topic: Canine Vaginal Cytology

Dr. Ambrose Kipyegon Ngeno is a Veterinary Surgeon and Senior Lecturer in the Department of Clinical Studies at the University of Nairobi, with over 15 years of teaching and research. A specialist in theriogenology, he holds a PhD in Clinical Studies and has published widely, with particular involvement in animal reproduction, including assisted reproduction and reproductive diagnostics. He is a registered practitioner with the Kenya Veterinary Board and a current honorary secretary of the Kenya Veterinary Association.

Dr. Willy Mwangi (University of Nairobi)

Topic: Advanced Soft Tissue Surgery & Advances in Hemostasis

Dr. Willy Mwangi is a trained veterinarian and specialist in small animal surgery. He is a faculty member at the University of Nairobi, Faculty of Veterinary Medicine, where he teaches small animal surgery, and also serves as a consultant surgeon at the University of Nairobi Small Animal Hospital.

He is a founding member of the Kenya College of Consultant Veterinary Surgeons, established in 2022. Dr. Mwangi has a strong professional interest in both orthopedic and soft tissue surgery, with a particular fascination to the biology of tissue regeneration and healing.

Beyond clinical practice, he is deeply committed to mentorship and capacity building. He founded and leads AO Vet Kenya, an initiative that delivers high-level, hands-on training in a wide range of small animal orthopedic procedures.

Dr. Mwangi has published widely and regularly delivers lectures both locally and internationally. Outside of his professional work, he enjoys football, swimming, and hiking.

Ezra Onyango (Deputy Principal, National Beekeeping Institute)

Topic: Future of Niche Value Chains – Propolis, Royal Jelly & Apiculture Products

Ezra O. Onyango is a Kenyan apiculture specialist and Deputy Principal at the National Beekeeping Institute, Lenana, with extensive experience in apiculture training and research within the livestock and agricultural sectors. He plays a key role in strengthening Kenya's apiculture niche value chain through capacity building of farmers, students, and extension officers, with a strong emphasis on productivity, bee colony management and quality assurance in bee production systems.

In his institutional role, he supports curriculum development and practical training programmes that align apiculture with emerging livestock value chain priorities, including animal health, pollination services, and sustainable ecosystem management. He actively collaborates with government agencies, research institutions, and private sector stakeholders to promote modern beekeeping technologies and improve standards across honey and other bee products.

His work demonstrates the intersection between apiculture and veterinary science, particularly in bee health management, biosecurity, and disease prevention. He advocates for integrating apiculture into broader livestock health frameworks and positioning it as a high-value niche enterprise within Kenya's agricultural transformation agenda.

Dr. Laura Wessman (Raptor Rehabilitation Trust Kenya)
Topic: Handling and Rehabilitation of Wild Birds of Prey in Kenya

Dr. Laura Wessman is a veterinary surgeon and Board Member of the Raptor Rehabilitation Trust Kenya, working at the intersection of clinical medicine, wildlife conservation, and public health. She holds a DVM from Finland and an MVetSci in Conservation Medicine from the University of Edinburgh, complemented by advanced training in raptor orthopaedics, avian abdominal surgery, shelter medicine and a Professional Master in Avian Medicine and Surgery.

Her research spans rehabilitation and shelter medicine, animal welfare, raptor and wildlife medicine and antimicrobial resistance. Current projects focus on avian conservation, human-wildlife interface management, and building raptor medicine capacity across East Africa.

With a career dedicated to bridging veterinary science and ecosystem health, Dr. Wessman is an advocate of advancing raptor medicine in the region. She has lived in East Africa most of her life and is additionally involved in rabies eradication projects and giraffe conservation.

Dr. Sharon Tsigadi (General Manager, Farmers Choice)
Topic: Optimising Pig Management for Best Results

Michael Mwang'ombe - (KMMREC)
Topic: Marine Mammal Research and Conservation: Insights from Kenyan Waters

Michael Mwang'ombe is a marine mammal scientist with over 10 years of experience in marine conservation, research, and community-based resource management along the Kenyan coast. He has worked with the Kenya Marine Mammal Research and Conservation (KMMREC) since 2015, where he leads multidisciplinary programs in marine mammal research, community engagement, and marine mammal welfare. His work integrates scientific research with applied conservation, with a strong focus on marine mammal stranding response and disentanglement.

Michael has played a key role in strengthening national response capacity by supporting the development and coordination of Kenya's marine mammal stranding network, enabling rapid and effective responses to marine mammal incidents. He is also a co-developer of the Kenya Marine Mammal Network, a citizen science initiative that combines local ecological knowledge with scientific monitoring to improve marine mammal data collection and surveillance.

Dr. Daniel Muchendu (Key Accounts Manager, CEVA Santé Animale)
Topic: Next-Gen Vaccines for Poultry & Other Livestock

Dr. Daniel G. Muchendu is a veterinary Surgeon and experienced poultry health specialist with over 15 years in animal health and commercial leadership across East Africa, currently serving as Key Accounts Manager – Poultry at CEVA Sante Animale. He has received advanced training in poultry production from the University of Luxembourg, complementing his Bachelor of Veterinary Medicine and ongoing MBA in Strategic Management.

Representing CEVA, the global leader in poultry vaccination—renowned for its innovations in hatchery vaccination, immune complex vaccines, and vectorised vaccine technologies—he works closely with hatcheries and large-scale poultry producers to implement advanced vaccination programs and optimize flock health. His key areas of focus include poultry disease control, vaccination strategy, hatchery health management, and translating scientific knowledge into practical, high-impact solutions that enhance productivity and sustainability in the poultry industry.

Dr. Thomas Odera (Key Account Manager, Kemin Industries – East Africa)

Topic: Beef Production & Feedlot Management – Lessons from African & Global Systems

Dr. Odera Owino is a veterinary surgeon and livestock production specialist with over 18 years of experience advancing commercially competitive, investment-ready beef enterprises across East Africa. He has led and advised high-performance feedlot operations—including a fully integrated 3,000-head facility—where he strengthened nutrition strategies, herd health systems, feed milling operations, and market-driven production efficiencies.

Dr. Owino holds a Bachelor of Veterinary Medicine (BVM) and a Master of Science in Livestock Production Systems from the University of Nairobi, alongside a Master of Management in Agribusiness from Strathmore University; he is also a registered veterinary surgeon and active member of the Kenya Veterinary Board (KVB) and the Kenya Veterinary Association (KVA). His areas of expertise include commercial feedlot design and advisory, preventative herd health in high-density fattening systems, traceability and animal welfare standards, advanced beef genetics through fixed-time artificial insemination, and the development of agribusiness financial models and market-linkage systems.

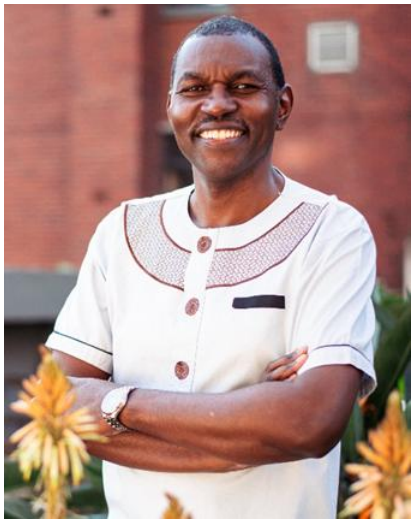
A former Kenya National Rugby Team player, Dr. Owino brings a unique blend of discipline, strategic thinking, and industry insight to modern livestock agribusiness and beef value-chain transformation.

Timothy Macharia (Head of Wealth Management, KCB Group)

Topic: Financial Planning & Investments for Veterinarians

Prof. Thumbi Ndung'u (University of KwaZulu-Natal / AHRI)

Topic: HIV Research: Lessons for Immunodeficiency Syndromes in Animals



Thumbi Ndung'u is Director of Science at the Africa Health Research Institute (AHRI) in Durban, South Africa; Professor of Infectious Diseases at University College London; Scientific Director, Professor and Victor Daitz Chair at the HIV Pathogenesis Programme of the University of KwaZulu-Natal; Provost's Visiting Professor of HIV Virology and Immunology at Imperial College London; Programme Director for the Sub-Saharan African Network for TB/HIV Research Excellence (SANTHE); Associate Member of the Ragon Institute; and Adjunct Professor of Immunology and Infectious Diseases at Harvard T.H. Chan School of Public Health.

He graduated with a Bachelor of Veterinary Medicine degree from the University of Nairobi, Kenya, completed a PhD in Biological Sciences in Public Health from Harvard University, USA and performed post-doctoral research in Virology at Harvard Medical School. He has received several awards for scientific excellence and leadership contributions, including the South African Medical Research Council Gold Scientific Achievement Award, the Leadership Award in Public Health Practice from the Harvard T. H. Chan School of Public Health, and the KT Jeang Retrovirology Prize. He is a member of the Academy of

Science of South Africa, a fellow of the African Academy of Sciences and a member of the United States National Academy of Medicine. His research focuses on understanding interactions between HIV and the immune system and how these may be harnessed for prevention or cure.

Dr. Joe Collins (Chief Veterinary Advisor, The Donkey Sanctuary)
Topic: Can Donkey Farming Provide a Sustainable Supply Chain?

Joe graduated as a veterinary surgeon from University College Dublin in 1987. Following seven years in private veterinary practice he spent three years at Cambridge University Veterinary School as an equine clinical resident. Thereafter he returned to private equine practice before completing a PhD titled 'Equine Health and Welfare in Ireland', working in the veterinary pharmaceutical industry and conducting research on donkeys.

He is currently President of the Federation of European Equine Veterinary Associations (FEEVA) and has travelled extensively conducting workshops and presenting on equine welfare across Africa, Asia, Europe and the Americas. He has also visited donkey farms and ejiao producers in China as part of his advisory work.

Dr. Bitsu Mekete (Medical Lead – Ruminants, Zoetis)
Topic: Udder Health for Profitable Dairy: Practical Management from Lactation to Dry-Off

Dr. Bitsu Kiflu Mekete is a veterinarian from Ethiopia with over a decade of experience across public and private sectors. He holds a DVM from Hawassa University and an MVPH from Jimma University.
He currently works at Zoetis as the Medical Lead–Ruminants for North, West, and East Africa, serving as the primary technical, scientific, and strategic expert for the ruminant portfolio and providing regional technical leadership, training, and stakeholder support.
Across Sub-Saharan Africa, Dr. Bitsu has led initiatives on udder health and mastitis management, including training on mastitis prevention, dry-cow management, rational antimicrobial use, and sustainable dairy productivity.

Oral Presentations

Feline Mammary Adenocarcinoma with Lymphatic Invasion: Case Report and Prognostic Insights

Alice Kivinya Kithika*[1&2], Dr Kareen Sikuku[2]

[1]University of Nairobi, Faculty of Veterinary Medicine, Department of Clinical Studies

[2] Petwell Veterinary Clinic

*Corresponding author: Alice Kivinya Kithika

Abstract

Feline mammary tumours are the third most common neoplasm in cats, with 80–90% classified as malignant adenocarcinomas. Prognosis is influenced by size, histological grade, and evidence of vascular or lymphatic invasion. Staging guides prognosis, treatment, and communication in oncology. Thoracic X-rays and abdominal ultrasound are used to find metastases. Spaying six months or before estrous cuts mammary neoplasia by up to 91%. Two years offers little benefit; Lulu's diagnosis illustrates this clinical reality. Present a case of feline mammary adenocarcinoma with lymphatic invasion, highlighting histopathology, staging, prevention, clinical management, and owner communication. Lulu, an 8-year-old spayed female cat with a history of hind limb amputation. She was presented with caudal abdominal mammary glands, 95x70x25mm and 17x25mm masses. There were ulcerated and oozing serous fluid. Parameters were normal. Surgical excision was performed, and the tissue was submitted for histopathology. Post-operative recommendations included thoracic radiographs, abdominal ultrasound, and structured monitoring. Histopathology identified mammary adenocarcinoma. It displayed papillary architecture, areas of necrosis, and focal calcification. Mitotic activity was observed (1–2 per high-power field). Infiltration of tumour into lymphatic channels were observed. Metastasis to the lymph nodes was identified, indicating spread. Surgery removed the visible mass, but recurrence risk remains high. Monitoring every 2–3 months, alongside owner education for early detection of recurrence guides quality of life matrix. Lulu's case illustrates the aggressive biology of feline mammary adenocarcinoma and prognostic significance of lymphatic invasion. While surgical excision remains the cornerstone of management, staging diagnostics and vigilant follow-up are essential. Preventive strategies, particularly early spaying before six months of age, remain the most effective means of reducing incidence. This case underscores the need for integrating histopathology, clinical staging, and owner communication into feline oncology practice.

Keywords: Feline mammary adenocarcinoma, lymphatic invasion, histopathology, staging, preventive strategies

Can donkey farming ever provide a sustainable supply-chain for the donkey skin trade?

Dr Joe Collins

The Donkey Sanctuary

*Corresponding author: Dr Joe Collins

Abstract

The growing popularity and demand for ejiao has led to increased production, putting pressure on donkey populations globally. In 2016, it was estimated that 4.8 million donkey skins were needed to meet production rates of 5600 tonnes of ejiao per year (Pfuderer, 2019), unsustainable numbers for existing Chinese donkey farms, therefore precipitating the rise in international trade in donkey skins. As several countries close supply routes due to concerns about dwindling donkey populations, more countries are considering the viability of farming donkeys to supply production of ejiao.

Extensive small-scale farming has existed in some parts of the world for many years but the recent shift towards farming donkeys in large intensive units brings with it numerous potential health and welfare concerns.

The Donkey Sanctuary have produced a report highlighting the realities of donkey farming, exploring the pitfalls of farming a species that have questionable suitability to intensive reared systems. Donkeys have well-evidenced physical and behavioural requirements which may not be satisfied under intensive farmed conditions and risks compromising donkey welfare.

Donkeys naturally live in small groups of closely bonded individuals which is at odds with the herd sizes on large farms. Farming donkeys can result in stress, leading to poor growth, low reproduction rates and increased risk of disease outbreaks, all of which will negatively impact productivity and the viability of farming donkeys. Even if we were to assume high levels of welfare, the likes of which would be difficult to achieve for donkeys in intensive systems, long gestation periods and poor fertility rates suggest that it could take over twenty years to realise the level of production necessary to provide for the ejiao industry. Donkey farming does not represent a quick return on investment, nor is it a solution to the currently dwindling supply of donkeys.

Key Words: Donkeys, Donkey farming

One Health for Health Security: Emerging Frontiers in Infectious Disease Research at the Human–Animal Interface

Mark Nanyingi [1,2]

[1] Center for Global Health and Pandemic Intelligence (CGP), Nairobi, Kenya
[2] Center for Global Health and Equity (CGHE), University of Michigan, USA

*Corresponding author: Dr. Mark Nanyingi

Abstract

Emerging infectious diseases continue to arise at the human–animal–environment interface, driven by climate variability, land-use change, population mobility, and intensifying livestock–wildlife interactions. While advances in infectious disease research including genomic epidemiology, digital surveillance, artificial intelligence, and vaccinology have enhanced the capacity to detect and characterize outbreaks, persistent gaps in system integration limit their impact on timely response and overall health security.

Experiences from Kenya and the East African region, including Rift Valley fever ecology, community-based surveillance, and cross-border disease dynamics, illustrate how risk emerges through converging drivers. At the same time, systemic bottlenecks such as siloed surveillance systems, fragmented data architectures, and delayed decision-making continue to impede effective outbreak response.

Emerging approaches in decision intelligence, including structured escalation frameworks such as the Decision-Making Tool for Public Health Emergencies (DMT-PHE), offer pathways for translating multi-sectoral signals into coordinated action. Complementary performance frameworks such as 7-1-7 provide measurable benchmarks for detection, notification, and response speed, enabling identification of operational gaps across systems.

Applied veterinary sciences including vaccinology, diagnostics, antimicrobial stewardship, field epidemiology, and vector ecology remain central to this integrated architecture. Effective One Health implementation requires embedding these capabilities within interoperable systems, supported by institutional coordination, shared decision-making, and performance accountability to strengthen prevention, preparedness, and response at the human–animal interface.

Keywords: One Health, Zoonoses, Health Security, Human–Animal Interface, Decision Intelligence Systems

Poster presentations

A decade of Brucellosis: Implications of human brucellosis trends to inform animal health control strategies in pastoral Kenya

Buke Yussuf Wako[1,2], Shauna Richards [1], Henriette van Heerden [2]

[1]International Livestock Research Institute, Kenya
[2]University of Pretoria

*Corresponding author: Buke Yussuf Wako

Abstract

Brucellosis remains endemic in Kenya's pastoral livestock systems, where human infection reflects animal health, production losses and weak zoonotic control. Human hospital data are frequently used to guide One Health policy and evaluate control efforts, yet these trends are rarely interpreted in relation to diagnostic capacity and healthcare access. This study assessed temporal trends and burden of human brucellosis in Isiolo County and examined whether observed patterns reflect true changes in transmission or are influenced by health system factors.
A mixed-methods retrospective study was conducted using laboratory records from three hospitals in Isiolo County (2014–2023) where brucellosis diagnosis was based on the Febrile antigen Brucella agglutination test (FBAT). Multiple burden indicators were generated, including number tested, number positive, positivity proportion, and positives relative to total hospital admissions. Key informant interviews with clinicians, laboratory personnel and community health promoters explored testing criteria, diagnostic availability and treatment access.
A total of 6,817 patients were tested for brucellosis, of whom 1,254 were positive. Reported cases increased over time, coinciding with periods of expanded testing. However, positivity proportions and cases relative to total hospital admissions remained low and stable. Variation between hospitals reflected differences in test availability and clinician-driven testing practices. Limited access to confirmatory diagnostics and barriers to care constrained accurate detection and case management.
Hospital-based human brucellosis trends in Isiolo are largely shaped by diagnostic practices and healthcare access rather than clear changes in transmission. Routine human data alone are therefore insufficient to infer livestock infection pressure or evaluate vaccination impact. Strengthening confirmatory diagnostics, harmonizing case-definitions across sectors, and integrating human and animal surveillance systems are essential for effective brucellosis control.

Keywords: Brucellosis; One Health, Surveillance; Zoonoses; Kenya

Animal Welfare and Occurrence of Subclinical Mastitis in Smallholder Dairy Cows: A Cross-Sectional Study in Njoro Sub-County, Kenya

Collins Kevin Ouma[1]*, Wyckliff Ngetich[2], Joshua Orungo Onono[1]

[1]Department of Public Health, Pharmacology and Toxicology, Faculty of Veterinary Medicine, University of Nairobi

[2]Department of Veterinary Surgery, Theriogenology and Medicine, Faculty of Veterinary Medicine and Surgery, Egerton University

Corresponding author:

Abstract

Animal welfare remains a critical yet under-examined component of smallholder dairy production in Kenya, with important implications for herd health and productivity. Poor welfare practices are associated with subclinical mastitis, a common but underdiagnosed disease affecting dairy cattle in smallholder systems. This study assessed farmers' knowledge, attitudes, and practices on animal welfare and determined the prevalence and risk factors of subclinical mastitis in Njoro Sub-County, Kenya. It also included farmer training to promote sustainable animal welfare practices. A cross-sectional study was conducted among 179 dairy farmers using structured questionnaires. Milk samples were collected from 248 lactating cows and tested using the California Mastitis Test. Data were analyzed in R software using descriptive statistics and logistic regression to identify risk factors associated with subclinical mastitis. Farmer awareness of animal welfare was low, with only 30% having heard of the concept and 62% rating their knowledge as poor. However, most farmers showed positive attitudes and willingness to adopt improved practices. The overall prevalence of subclinical mastitis was 58%, with higher rates observed in Kihingo Ward (72%) and among cows below six years (64%). Significant risk factors included poor hind limb hygiene, prolonged lactation beyond seven months, and co-rearing of sheep. A farmer-friendly animal welfare manual was co-developed to support practical and affordable interventions in resource-limited settings. Low awareness of animal welfare and poor management practices contribute to the high prevalence of subclinical mastitis. Strengthening farmer training and promoting improved welfare practices can reduce disease burden and enhance dairy productivity in smallholder systems.

Keywords: Animal Welfare, Subclinical Mastitis, Smallholder dairy farmers, Risk factors, and Herd health

Anthrax Outbreak Associated with Meat Trade in Urban Setting: Implications for Urban Food System Governance

Sakwa Kamama, [1]; Elyas Yussuf, [1]; Komu Mutunga, [2]; Cameline Mwai, [3]; Maurice Owiny,[4]

[1]Field Epidemiology and Laboratory Training Program–Kenya;

[2]Ministry of Health–Kenya;

[3]Directorate of Veterinary Services;

[4]Africa Field Epidemiology Network

Corresponding author: Sakwa Kamama

Abstract

Globally, it is estimated that 20,000–100,000 human anthrax cases occur annually, predominantly in low- and middle-income countries. In Kenya, a single confirmed case of anthrax constitutes an outbreak warranting public health action. On November 10, 2025, a human anthrax case was confirmed in Nairobi City County, prompting multidisciplinary outbreak investigation to establish magnitude and transmission risk of the outbreak. The outbreak investigation was conducted in Shauri Moyo market serving as point of meat trading for Makadara and Kamukunji sub-counties. Case finding involved facility and community based active case search and contact tracing. Food system governance factors were assessed through: review of meat transport and inspection documentation, key informant interviews, and market observation. Laboratory confirmation was done using microscopy, culture, and polymerase chain reaction. Data was analysed qualitatively and organized into themes. One confirmed case of cutaneous anthrax was identified in a 31-year-old male meat loader at Shauri Moyo meat market. Exposure occurred through occupational handling of beef imported from rural Bomet county, an anthrax-endemic region reporting active outbreaks in livestock. The meat market lacked proper design and condemnation pit/incinerator. There were inadequate protocols for handling condemned carcasses, controlling meat access to market and low food defence measures to protect intentional contamination or tampering. Many meat transport carriers were poorly maintained, unlicensed, and unsuitable for meat transportation. The market had two meat inspectors covering over 78 meat stalls and four gates. Meat was delivered to the market from nationwide predominantly at night hindering visual inspection. Inconsistent and non-standardized meat transport certification across counties was observed. The investigation demonstrates how weaknesses in urban food system regulation can facilitate transmission of zoonotic diseases. The outbreak was a sentinel event indicating deeper systemic weaknesses in food systems governance and failures along supply chain between endemic areas and urban markets.

Keywords: Anthrax; Outbreak, Urban, One Health; Food systems governance

Antimicrobial Resistance Profiles of Bacterial Pathogens Isolated from Bovine Milk Samples in Kenya, 2025

Kamau Mwangi*, Bridgit Muasa, Eunice Omondi, Romona Ndanyi, Allan Azegele

Directorate of Veterinary Services, National Veterinary Laboratory, Kenya

Corresponding author: Kamau Mwangi

Abstract

Bovine mastitis is a major economic burden in Kenya's dairy industry, yet treatment is often guided by empirical choice rather than laboratory data. With antimicrobial resistance (AMR) on the rise, multidrug-resistant (MDR) and extensively drug-resistant (XDR) pathogens pose a growing concern. This study draws on Kenya's 2025 national AMR surveillance data to describe resistance patterns in bovine mastitis pathogens. To characterise AMR, MDR, and XDR phenotypes in bovine milk isolates across Kenya, identify the highest-risk pathogens, and generate evidence to guide culture-based mastitis management and antimicrobial stewardship. We conducted a retrospective analysis of antimicrobial susceptibility testing (AST) data from bovine milk samples submitted to Kenya's national veterinary laboratory network (January–December 2025). Samples came from passive (clinical mastitis) and active herd-level surveillance across 30 counties. AST was performed by disk diffusion (Kirby–Bauer, CLSI breakpoints). MDR was defined as resistance to ≥3 antimicrobial classes; XDR as susceptibility to ≤2 classes. We identified 2,939 isolates (42 species/genera) from 2,698 milk samples across 30 counties, yielding 17,944 AST results. Overall, 58.2% were susceptible, 10.0% resistant, and 31.6% intermediate. The five most prevalent organisms were S. epidermidis (28.6%), S. aureus (20.3%), E. coli (10.2%), Staphylococcus spp. (6.6%), and K. pneumoniae (6.5%); staphylococci collectively accounted for 55.5% of isolates. Of 2,736 qualifying isolates, 176 (6.4%) were MDR and 3 (0.1%) XDR; no PDR was detected. MDR was most pronounced in K. oxytoca (25.5%), K. pneumoniae (12.6%), and P. aeruginosa (12.8%). While most isolates remained susceptible, gram-negative organisms — especially Klebsiella spp., P. aeruginosa, and E. coli — carried the highest MDR and XDR burden. Gentamicin and ciprofloxacin retained strong in vitro activity (<2% resistance) and remain viable empirical options. The high intermediate rate (31.6%) warrants caution in susceptibility interpretation. Kenya's dairy sector needs routine culture-guided mastitis therapy, county-level AMR action plans, and targeted stewardship programmes.

Keywords: bovine mastitis; antimicrobial resistance; Staphylococcus spp.; dairy cattle; Kenya

Antimicrobial Resistance Profiles of Bacterial Pathogens Isolated from Poultry Production Systems in Kenya, 2025

Kamau Mwangi*, Bridgit Muasa, Eunice Omondi, Romona Ndanyi, Allan Azegele

Directorate of Veterinary Services, National Veterinary Laboratory, Kenya

*Corresponding author: Kamau Mwangi

Abstract

Kenya's poultry sector is expanding rapidly, but heavy reliance on empirical antimicrobial use is creating conditions for resistance to take hold. Antimicrobial resistance (AMR) in poultry threatens not only bird health, but food safety and human health through the food chain. This study uses Kenya's 2025 national AMR surveillance data to characterise resistance patterns, MDR, and XDR profiles in poultry-associated pathogens. To characterise AMR, MDR, and XDR profiles of poultry-associated pathogens across Kenya, identify high-burden species and geographic resistance hotspots, and generate evidence to guide antimicrobial stewardship decisions. We conducted a retrospective analysis of AST data from avian samples — domestic poultry, wild birds, turkeys, doves, and parrots — submitted to Kenya's national veterinary laboratory network (January–December 2025). Surveillance included active (76.2%), diagnostic (18.1%), and passive (5.7%) submissions across 23 counties. AST was performed by disk diffusion (Kirby–Bauer, CLSI breakpoints). MDR was defined as resistance to ≥3 antimicrobial classes; XDR as susceptibility to ≤2 classes. From 1,711 isolates across 23 counties, E. coli (47.0%) and Enterococcus spp. (38.4%) together comprised 85.4% of all isolates. Resistance rates were highest for quinupristin-dalfopristin (55.4%), tetracycline (39.0%), TMP-SXT (32.1%), and erythromycin (31.7%). Ciprofloxacin resistance stood at 10.2% and vancomycin resistance at 5.4%. Of 1,496 qualifying isolates, 348 (23.3%) were MDR, 95 (6.4%) XDR, and 5 (0.3%) PDR. MDR and XDR rates were most pronounced in Pseudomonas sp. (54.5%), K. pneumoniae (39.1%), and E. coli (24.5%). Kenya's poultry pathogens carry a substantial resistance burden — nearly a quarter of isolates were MDR. The 10.2% ciprofloxacin resistance rate and detection of vancomycin-resistant Enterococcus (5.4%) are important One Health signals that extend beyond animal health. Third-generation cephalosporins remain effective and should be preserved for severe infections. Poultry practitioners across Kenya need culture-guided prescribing and structured AMR stewardship programmes as a matter of urgency.

Keywords: poultry; antimicrobial resistance; multidrug resistance; Escherichia coli; Kenya

Clinostomum Species Metacercariae Infection of Farmed Nile Tilapia in Central Kenya

Robert M. Waruiru[1*], Finnan O. Ageng'o[2], Nicodemus M. Kamuti[1], Isaac I. Mulei[1], Beatrice M. Munde[1], Joel K. Gatagwu[3] and Paul G. Mbuthia[4]

[1]Department of Veterinary Pathology, Microbiology and Parasitology, Faculty of Veterinary Medicine, University of Nairobi, P.O. Box 29053-00625, Kangemi, Nairobi, Kenya
[2]Kenya Fisheries Service (KeFs), Nakuru County, P.O. Box 12261-20100, Nakuru, Kenya
[3]Kenya Marine and Fisheries Research Institute (KMFRI), Aquaculture Division, P.O. Box 451-10230, Sagana, Kenya
[4]Consultant Veterinary Pathologist, P.O. Box 67063 – 0020, Nairobi, Kenya

*Corresponding author: Robert Waruiru

Abstract

Oreochromis niloticus (Nile tilapia) is a major source of animal protein for humans, contributing about 17% of global animal protein intake and up to 30% in developing countries. However, tilapia aquaculture faces many challenges, including poor quality seed and feed, and diseases caused by bacteria, viruses, fungi and parasites. Despite their negative effects on growth, survival, and fish welfare, parasitic infections remain underreported. On 7 May 2025, the Department of Veterinary Pathology, Microbiology and Parasitology (DVPMP), University of Nairobi (UoN), investigated a commercial fish farm in Sagana town, Kirinyaga County, Kenya, following reports of yellowish skin lesions in farmed Nile tilapia. Nile tilapia reared in earthen ponds exhibited numerous yellow grub cysts on the skin surface. Large populations of piscivorous birds such grey heron (Ardeacinerea), little egret (Egretta garzetta), African sacred ibis (Threskiornis aethiopicus), and hamerkop (Scopus umbretta) were observed around the ponds, and snail shells belonging to the family Lymnaeidae were recovered from the ponds. To identify the etiological agent responsible for massive the occurrence of yellow cysts in farmed Nile tilapia. Twenty fish were randomly sampled from multiple earthen ponds and transported alive to the DVPMP, UoN, for necropsy, parasite identification, and histopathology. Tissue samples were processed and stained with haematoxylin and eosin (H&E). Gross examination revealed numerous cysts in the skin, fins, and musculature. The causative agent was identified as Clinostomum sp. metacercariae, with 100% prevalence, a mean intensity of 40.1 larvae per fish, and a range of 6–152 larvae. Histopathology revealed encapsulated metacercariae in the skin, associated with intensive inflammation characterized by mononuclear cellular infiltration by macrophages, lymphocyte, fibroblasts and heterophils. Clinostomum sp. was confirmed as the cause of yellow grub disease in farmed O. niloticus. Routine surveillance, control of snails and piscivorous birds, consumer awareness, and proper fish processing are recommended due to the parasite's economic and potential zoonotic importance.

Keywords: Earthen ponds, Histopathology, Oreochromis niloticus, Piscivorous birds, Snails

Combating the Illegal Donkey Hide Trade through a One Health Enforcement and Community Engagement Approach in Kenya

Wakhu Sylivester[1]*

[1]Farming Systems Kenya, Nakuru, Kenya

*Corresponding author: Wakhu Sylivester

Abstract

The illegal donkey hide trade in Kenya is a significant animal welfare concern with far reaching implications for public health, livelihoods, and environmental sustainability. Illegal slaughter exposes communities to uninspected meat and zoonotic diseases such as anthrax, while widespread donkey theft undermines rural transport, income generation, and food security. Addressing this complex challenge requires an integrated One Health approach linking animal welfare, public health, and law enforcement systems. To evaluate the effectiveness of a One Health based stakeholder engagement model in strengthening enforcement, improving community awareness, and reducing risks associated with the illegal donkey hide trade.

A programmatic intervention was implemented between January and December 2025 across selected counties in Kenya. Twelve multi-agency sensitization workshops were conducted, involving 360 participants drawn from law enforcement, National Government Administrative Officers, veterinary services, community leaders, and donkey owners. Qualitative data were collected through stakeholder consultations, structured reports, and feedback forums, and analysed using thematic content analysis. Pre- and post-intervention Likert scale tools assessed changes in knowledge, while enforcement coordination and reporting pathways were also evaluated.

The intervention improved inter-agency collaboration and awareness across key domains: animal welfare laws (+50%), zoonotic disease risks (+43%), socioeconomic value of donkeys (+40%), and reporting confidence (+52%). Reported donkey theft cases increased from 12 to 22 (+83%) and illegal slaughter reports from 4 to 11 (+175%). Joint enforcement operations increased to 5–6 per month, while community reporting tripled, indicating enhanced surveillance and coordinated response.

A One Health, multi-sectoral approach is effective in addressing the illegal donkey hide trade. Scaling up integrated enforcement and community engagement can sustainably improve animal welfare, protect public health, and safeguard livelihoods.

Key Words: Donkey welfare; Illegal donkey hide trade; One Health; Law enforcement; Zoonotic diseases

Effect of Selected Plant Extracts (Carica papaya and Moringa oleifera) on the Growth and Survival of Nile Tilapia (Oreochromis niloticus) Fry

Alphine Mbodze [1], Kamundia Waweru [2]*, Eshitera Eric [2], Neema Mwangi [2]

[1] COMRED (Coastal and Marine Resource Development)
[2]Maasai Mara University, Department of Animal Health and Production

*Corresponding author: Kamundia Waweru

Abstract

Synthetic hormones used to control precocious breeding in Nile tilapia (Oreochromis niloticus) face environmental and regulatory opposition, driving interest in plant-based alternatives such as Carica papaya and Moringa oleifera seeds, which possess antifertility properties but may contain growth-inhibiting compounds. This study evaluated the effects of dietary incorporation of C. papaya and M. oleifera seed powders on the growth performance and survival of Nile tilapia fry. A 30-day feeding trial was conducted with 600 fry (initial weight 0.026 g) in a randomized block design, comparing a control diet against diets containing 6 g/kg of either pawpaw (PPM) or moringa (MOM) seed powder. Results indicated that both supplemented diets enhanced growth compared to the control. Fry fed the MOM diet achieved the highest final mean weight (0.275 g), while those on the PPM diet recorded the highest specific growth rate (4.64 %/day) and survival rate (98.3%). All groups exhibited positive allometric growth. Although the MOM diet showed a better food conversion rate (2.02), it resulted in a significantly lower survival rate (92.9%) than PPM. Water quality parameters remained within optimal ranges. The study concludes that at low inclusion levels, both C. papaya and M. oleifera seed powders can be effective feed additives for enhancing growth performance and survival in O. niloticus fry.

Keywords: non-conventional feed, Oreochromis niloticus, plant extracts, condition factor, growth performance

Enhancing Early Detection of Animal and Zoonotic Disease Threats through Community Event-Based Surveillance (CEBS) in Kenya

Mumbua Mbithi*, M.Muturi, K.Chepkorir, A. Mudamba, C.Asiba, A. Moranga, P.Mochama, G.Njogu, A.Azegele

Directorate of Veterinary Services, Nairobi, Kenya

*Corresponding author: Mumbua Mbithi

Abstract

Early detection of animal health and zoonotic threats is critical for preventing disease spread and reducing morbidity and mortality in animal and human populations. In Kenya, many emerging and re-emerging animal diseases originate at the community level, where unusual events are first observed by livestock keepers and community members. Indicator-based surveillance often misses these early signals, particularly in underserved areas. To address this gap, Community Event-Based Surveillance (CEBS) was implemented to capture and report unstructured information on unusual animal health events that may pose risks to animal and human health. To describe the implementation of CEBS in Kenya and assess its contribution to early detection and reporting of animal health and zoonotic threats. CEBS was implemented through training of Community Health Promoters (CHPs), Community Disease Reporters (CDRs), and Animal Health Service Providers (AHSPs) on standardized signal definitions. Signals including clustered illness, sudden animal deaths, abortions, and animal bite incidents were reported via digital platforms such as Mdharura and the Kenya Animal Bio-surveillance System (KABS). Signals were verified by Animal Health Assistants, with response coordinated at sub-county and county levels and escalation to the national level. CEBS established community-level detection and reporting of animal health signals. Digital tools enabled timely transmission and verification. Key gaps included limited refresher training (average interval of four years) and weak feedback mechanisms, with only 13% of respondents reporting provision of feedback. Logistical constraints such as lack of transport, poor connectivity, and limited resources affected timely response, while inter-sectoral collaboration remained suboptimal. CEBS enhances early detection of animal and zoonotic threats but is constrained by gaps in training, feedback, logistics, and coordination. Addressing these through sustained investment and strengthened One Health collaboration is critical for improving surveillance performance and national health security in Kenya.

Keywords: Community Event-Based Surveillance, Zoonotic Diseases, Early Detection, One Health, Kenya

Gastrointestinal Helminth Profiles and Efficacy of Selected Anthelmintics in Goats under Semi-intensive Management

Wilfred Mutisya*, Emma Kitonga, Beatrice Kipsang, Fredrick Agutu, Alexander Kipronoh, Ruth Waineina, and Samuel Mbuku

Kenya Agricultural and Livestock Research Organization (KALRO), Naivasha, Kenya

*Corresponding author: Wilfred Mutisya

Abstract

Gastrointestinal helminth infections remain a major constraint to goat productivity in low and middle-income countries, where anthelmintics are central to parasite control. However, increasing anthelmintic resistance threatens the sustainability of these interventions, underscoring the need for routine monitoring of parasite populations and drug efficacy. This study assessed the efficacy of routinely used benzimidazole (10% albendazole). It examined the prevalence and gastrointestinal helminth profiles in weaner and mature goats under semi-intensive management at Kenya Agricultural and Livestock Research Organization, Naivasha, using pre- and post-deworming fecal egg counts. A longitudinal fecal-based diagnostic study was conducted, and fecal samples were collected from 46 goats (26 weaners and 20 mature goats) before treatment and from 43 goats post-treatment following administration of a benzimidazole fortified with trace elements (zinc, copper, and selenium). Coprological analyses were performed using standard fecal egg count methods, and efficacy was assessed using the fecal egg count reduction test. Pre-treatment helminth egg prevalence was 56.5% (n = 26), with weaners more affected both pre- and post-treatment (61.5% and 65.5%, respectively) than mature goats. Haemonchus spp. was the most predominant genus both pre-treatment, 47.8% (n = 22), and post-treatment, 51.2% (n =22). Post-treatment, helminth prevalence increased to 67.4% (n = 29). The overall Fecal Egg Count Reduction was 8.4%, with a limited reduction in mature goats (23.1%) compared to (6.0%) in weaners. Weaner goats were identified as the high-risk group, and Helminth infestation remained persistently high despite deworming. The efficacy of the anthelmintic (albendazole) was severely compromised in this herd. Thus, targeted selective treatment, improved pasture management, and routine Fecal Egg Count Reduction Test-based surveillance are recommended to guide evidence-based control and slow resistance progression in semi-intensive dairy goat systems in Kenya.

Keywords: Helminths, Fecal egg counts, Fecal egg count reduction test, Anthelmintics, Efficacy

Guidelines for Sustainable Tick Control and Acaricide Resistance Management in Livestock

Mercy Murigu *et Al.*

*Corresponding author: Mercy Murigu

Abstract

Ticks are a major constrain that hinder achieving profitable and sustainable livestock production. Acaricide resistance in ticks has been reported against almost all acaricidal classes which results in economic losses for cattle producers, health risks, production losses, food safety concerns with potential residues, and pathogen transmission to humans. A collective pathway, including effective stewardship programs to reduce overuse and misuse and to slow the emergence of resistance is more essential. In 2004, FAO published guidelines on resistance management and integrated parasite control in ruminants. Since then, published studies have increased substantially, indicating enhanced interest and importance of the issue. In November 2021, FAO organized a virtual expert consultation on the "sustainable management of parasites in livestock challenged by the global emergence of resistance", highlighting the situation and the need to consider it as a priority. The meeting recommended formation of a group of 45 international experts to update the guidelines for sustainable tick control and acaricide resistance management in livestock. FAO community of practice on acaricide resistance management for ticks was also established in 2023 to bring together relevant stakeholders with a shared vision through the One Health approach, implement integrated tick and acaricide resistance management in livestock and support the development of these guidelines. The guidelines, technical document and policy brief were launched on 19th August 2025 to support farmers and communities affected by cattle ticks and animal health service providers, whose mission is to collectively develop sustainable solutions that strengthen the efficiency and resilience of agri-food systems.

Keywords: Acaricide, ticks, sustainable, FAO, resistance

How KABS is Reshaping Animal Disease Intelligence in Kenya

Caesar Asiba*, M. Muturi, K. Chepkorir, A. Morangá, A. Mudamba, M. Mumbua, P. Mochama, G. Njogu, A. Azegelle

Directorate of Veterinary Services, Nairobi, Kenya

*Corresponding author: Caesar Asiba

Abstract

Animal disease surveillance in Kenya is implemented using the Kenya Animal Bio surveillance System (KABS), an electronic, near-real-time animal health event reporting platform. KABS has revolutionized animal disease intelligence by improving the timeliness, completeness, and geographical coverage of disease reporting. The system supports both active and passive surveillance and contributes to an early warning system for animal diseases. To describe the structure, data flow, analytical processes, and contributions of KABS to animal health surveillance in Kenya. KABS consists of a mobile application used for reporting and a web-based dashboard that serves as the convergence point for all collected data, enabling real-time data visualization. Data is collected at community level by Community Disease Reporters (CDRs) and Animal Health Service Providers (AHSPs). CDRs submit syndromic reports using the Community Disease Report Form, while AHSPs verify these reports and submit the Notifiable Disease (ND1) form, which captures syndromic, temporal, spatial, and diagnostic information. Additional data sources include veterinary laboratories reporting via standardized Excel templates through VETINFO-DVS and the Systema Laboratorio (SiLab) laboratory information management system. Animal disease data is collated, cleaned and analysed by the Veterinary Epidemiology and Economics Section (VEES) to generate weekly, monthly, and annual bulletins disseminated to stakeholders. The system has significantly improved animal health intelligence; however, reporting rates remain low in some counties, and approximately 90% of reports are based on clinical diagnosis. Strengthening laboratory capacity, improving reporting rates, developing case definitions for priority diseases, incentivizing reporting, involving private sector and wildlife stakeholders, and strengthening legal collaboration frameworks are critical to fully realizing the potential of KABS as a comprehensive One Health–oriented animal disease surveillance system.

Keywords: animal disease surveillance, Kenya Animal Bio-surveillance System (KABS), One Health, syndromic surveillance, veterinary epidemiology

Impact of Zero-Grazing Transitions on Herd Health and Productivity in Smallholder Dairy Systems of Meru, Kenya

Kipyego Essau Serem[1]*, John VanLeeuwen[1], Caroline Ritter[1], David Hall[1], Luke Haydon[1] & Daniel Muasya[1&2]

[1]University of Prince Edward Island

[2]University of Nairobi

*Corresponding author: Kipyego Essau Serem

Abstract

Smallholder dairy farmers in Kenya are increasingly adopting zero-grazing to boost productivity. Despite high entry costs, the long-term impacts on animal health and yield remain under-researched. This study evaluates the health and production benefits of transitioning to zero-grazing within the smallholder sector. A retrospective cohort study was conducted across 120 farms in Buuri, Meru, comparing zero-grazing cohorts to traditional grazing systems. Data from 217 cows were analyzed. To address the research gap in management efficacy, multivariable logistic regression was employed to determine the association between the production system (zero-grazing vs. traditional) and the likelihood of clinical illness. The model adjusted for potential confounders, including breed, age, and parity, to isolate the effect of the management system on animal health outcomes. The average farm size was 1.56 (±2.44) acres, with a typical herd of 1–4 milking cows. The monitored population (n=217) had a mean age of 6.5 (±2.55) years and consisted primarily of Holstein Friesian (65.8%), Ayrshire (17.5%), and Sahiwal (13.3%) breeds. Analysis revealed that zero-grazing cohorts experienced a significantly lower frequency of clinical illness compared to traditional grazing cohorts. Furthermore, zero-grazing facilitated superior nutritional precision and improved manure recovery for fodder production. While parity reached up to 11 (mean 3.0 ±1.7), intensive management was strongly correlated with better health maintenance in older, high-producing cows. Transitioning to zero-grazing significantly enhances milk output and animal health management. These findings suggest that technical and financial support for this transition is a vital pathway for strengthening Kenya's dairy value chain.

Keywords: Zero-grazing, Smallholder dairy, Meru-Kenya, Animal health, Productivity

Improving Animal Health Surveillance in Kenya: A Five-Step Action Plan

Mathew Muturi[12*], Allan Azegele[1], George Njogu[1], Khadija Chepkorir[1], Anna Mudamba[1], Mumbua Mbithi[1], Alexina Moranga[1], Caesar Asiba[1]

[1]State Directorate of Veterinary Services, Nairobi, Kenya

[2]Centre for Epidemiological Modelling and Analysis, University of Nairobi, Nairobi, Kenya

*Corresponding author: Mathew Muturi

Abstract

To develop a practical and scalable action plan to strengthen animal health surveillance in Kenya by addressing gaps identified through international capacity assessments. Findings from international evaluations, including the Joint External Evaluation (JEE) and Performance of Veterinary Services (PVS) assessments, were reviewed to identify key weaknesses in surveillance system performance. A five-step action plan was developed, aligned with national priorities and international best practices, to improve core surveillance attributes including timeliness, reporting rates, representativeness, data quality, and system sensitivity. The proposed action plan comprises five key interventions: (1) Dissemination of the Animal Health Integrated Disease Surveillance and Response Technical Guidelines to standardize case definitions, reporting thresholds, and surveillance procedures across sectors; (2) Formal identification, training, and institutionalization of County Animal Health Surveillance Coordinators to enhance coordination, data analysis, and feedback mechanisms; (3) Upgrading the Kenya Animal Biosurveillance System to KABS 2.0 to improve data capture, management, visualization, and automated reporting through an integrated dashboard; (4) Establishment of an Animal Health Information and Emergency Operations Center to support risk-based surveillance and advanced analytics, including the use of artificial intelligence and machine learning; and (5) Strengthening community-based surveillance through a One Health approach by training community health promoters to support reporting of animal health events. The five-step action plan provides a comprehensive framework for improving animal health surveillance in Kenya. Its implementation is expected to enhance early detection and response to animal health threats, strengthen data-driven decision-making, and contribute to improved health security and trade outcomes. This approach may serve as a model for other countries seeking to strengthen integrated animal health surveillance systems.

Role of After-Action Review (AAR) in improving preparedness and response to animal disease outbreaks: African Swine Fever (ASF) investigation in Kitui County, July 2025

Mark Matheka[1*], A. Kivunzya[2], A. Mutembei[3], R. Wangila[3], G. Gitau[4]

[1]Makueni County, [2]Kitui County,

[3]Food and Agriculture Organization (FAO),

[4]Veterinary Epidemiology and Economics Section-Directorate of Veterinary Services Kabete

*Corresponding author: Mark Matheka[1]

Abstract

After-Action Review is a qualitative assessment of actions taken in disease outbreak response, identifying challenges and gaps, best practices, and lessons learned while prioritizing actions in readiness for future outbreaks. With reference to the International Health Regulation Monitoring and Evaluation Framework (IHR MEF) anchored in the Ministry of Health, the Directorate of Veterinary Services conducted an AAR in July 2025 following the response to the ASF outbreak that occurred in October 2024 in Kitui County. The review was conducted using a multidisciplinary approach where core pillars in outbreak preparedness and response were assessed. An overview of the country's ASF Contingency Plan and the investigation report was conducted. Participants analyzed actions undertaken during the ASF outbreak response and documented them in the various pillars, guided by a facilitator. Sticky notes and flip charts were used for documentation. Activities were developed based on ease of implementation and impact, set timelines, assigned focal points, and indicators for monitoring. Various plans and policies, resources, coordination mechanisms, and preparedness activities were in place before the outbreak. Chronology of events mapped key milestones with the outbreak not detected for 90 days. Initial suspect case detected at meat inspection with no report via the Kenya Animal Bio-surveillance System. Turn-around time for response from notification by frontline staff was 7 days. Laboratory confirmation upon sampling took 14 days. Carcasses were primarily disposed of in nearby rivers or through on-farm slaughter for consumption. Most farms were exposed at scavenging or through introduction of new pigs. Quarantine, farmer sensitization, proper disposal, and on-farm disinfections done. A total of 21 activities were identified. The AAR re-assessed the ASF contingency plan and surveillance protocols for early detection and timely interventions, and implementing its lessons and recommendations is expected to enhance the nation's preparedness and response to similar outbreak.

Keywords: After-Action Review, African Swine Fever, Disease outbreak, Surveillance, Laboratory

Seroprevalence of Crimean-Congo Hemorrhagic Fever Virus (CCHFV) in Cattle and Abattoir Workers at Dagoretti Slaughterhouse in Kenya

Ramadhan, F.A[1]., Omondi, G.P[2,3]., Otiende, P.A[2]., Mutisya, C[4]., Wanjira, MN[5]., Akhulunya, IO[5,6]., Parsein, J[7]., Lekolool, I.L[7]., Kingori, E.M[7]., Cook, E.A[4]., Bett, B[4]., Njaanake, H.K[1]

[1]Department of Medical Microbiology and Immunology, College of Health Sciences, University of Nairobi, Kenya.

[2]Animal Health Innovation Lab, Department of Clinical Studies, University of Nairobi, Kenya.

[3]Center for Epidemiological Modelling and Analysis, University of Nairobi, Nairobi, Kenya

[4]International Livestock Research Institute, Nairobi, P.O. Box 30709-00100, Kenya

[5]Department of Clinical Studies, University of Nairobi, Kenya.

[6]ASAL eXtension Ltd

[7]Department of Veterinary Medicine, Kenya Wildlife Services, Nairobi, Kenya

*Corresponding author: Ramadhan Faiza,

Abstract

Crimean-Congo Hemorrhagic Fever Virus (CCHFV) is a tick-borne virus of significant public health concern, especially in endemic regions such as East Africa. However, despite its zoonotic potential, there is a paucity of data on its occurrence and associated risk factors, specifically, among high-risk populations in Kenya, such as slaughterhouse workers. This study aimed to determine the seroprevalence of CCHFV antibodies in workers and in cattle at Dagoretti slaughterhouse, and to characterize putative risk factors and spatial distribution of its occurrence. A cross-sectional study was conducted involving 366 cattle sampled at Dagoretti slaughterhouse and 313 archived human serum samples obtained at the same location. Cattle were selected through a systematic random sampling while human samples and metadata were accessed from the International Livestock Research Institute (ILRI) biorepositories of samples collected in November 2021 and September 2023. Samples were analyzed via ELISA. Logistic regression was used to identify risk factors, and spatial analysis mapped cattle seropositivity by county of origin. The overall CCHFV seroprevalence was 42.6% (95% CI: 37.7%, 47.9%) in cattle and 4.8% (95% CI: 2.7%, 7.8%) in slaughterhouse workers. Cattle from pastoral counties showed higher exposure (43.7%), with crossbreeds exhibiting the highest rates (52.4%). Among humans, seropositivity was higher in males and older age groups. Notably, the use of protective overalls significantly reduced the odds of human seropositivity (aOR = 0.199). Spatial analysis indicated that cattle seropositivity is clustered in arid and semi-arid regions. High CCHFV exposure among slaughtered cattle highlights the risk of underreported virus circulation in Kenyan livestock. Although human seroprevalence was low compared to cattle, the presence of antibodies in abattoir workers highlights occupational exposure risks. These findings highlight the value of surveillance and the need for targeted preventive measures.

Keywords: Crimean Congo Hemorrhagic Fever Virus, Zoonosis, Tick borne viral infection

Social and Economic Impacts of the Donkey Skin Trade on Donkey-Dependent Communities in Kenya

David Obiero Oduori [1,3], Gilbert Kirui [2,3], Robert Ofwete[3], Ronald K Sang[4], Christine Were[2], Solomon C Onyango[5] and Laura Kubasiewicz[6]

[1]Maasai Mara University, Department of Animal Health and Production, Kenya;
[2]Egerton University, Faculty of Veterinary Medicine and Surgery, Kenya;
[3]Africa Centre for One Health-One Welfare Research, Innovation and Sustainable Livelihoods, Kenya;
[4]The County Government of Bomet, Kenya;
[5]The Donkey Sanctuary, Kenya;
[6]Equine Operations, The Donkey Sanctuary, Sidmouth, UK

*Corresponding author: *David Obiero Oduori*

Abstract

Women form a significant proportion of the resource-poor demographic in sub-Saharan Africa. They are a vulnerable cohort, with many surviving on less than $1.90 a day. For them, donkeys are an essential asset, freeing up their time from daily chores to focus on their dual responsibilities of childcare and household management. The emerging threat of the donkey skin trade, driven by demand for ejiao, has, however, led to increased cases of theft and illegal/inhumane slaughter of donkeys. While the recent pan-African memorandum of understanding to restrict the skin trade offers respite, elucidating the trade's impact is important for tailoring policies that serve donkey-dependent communities. This study aimed to assess the socio-economic impact of donkey theft and bush slaughter on select rural communities in Kenya. A descriptive cross-sectional study design employing mixed methods was utilized. Purposive sampling was used to select female respondents who owned/worked with donkeys for the administration of questionnaires and interviews. The study area included Nakuru, Laikipia, Kitui, Narok, and Siaya Counties in Kenya. Thirty questionnaires and three key informant interviews were administered per county. Quantitative data was analyzed descriptively, while audio transcripts were analyzed using a thematic approach. Up to 41% (n = 171) of the respondents had experienced donkey theft. Losses in income ranged from 14% to 73%. Other impacts associated with the trade included emotional distress, health issues, and disruptions to children's education. Replacing lost donkeys often forced families to forfeit school fees, investments, and basic needs, as surging market prices made replacement beyond the means of many households. These findings highlight the need for collaborative efforts between civil society organizations and governments to support community-led initiatives that protect donkeys.

Keywords: Donkeys, Women, Skin Trade, ejiao, welfare

Their nose on their toes? - Understanding the olfactory function and the future of tick repellent technology

Daniella Toroge[1], Moses Olum[1]

[1]VSRI KALRO

*Corresponding Author Angwenyi:

Abstract

Ticks are major vectors of animal and human diseases, whose spread is increasing due to climate change and growing acaricide resistance. Host-seeking behavior in ticks depends heavily on olfaction among other mechanisms. However, the underlying sensory mechanisms remain underexplored. This study was conducted to understand the different organs involved in odor perception and how ticks respond to different odors. A systematic review of Google Scholar, Scopus and PubMed was conducted to identify studies focusing on olfactory function of ixodid ticks from 1982 – 2026. Non-peer reviewed studies and those without full text access were excluded. Publications have increased since 2015, reflecting growing interest in tick olfaction and alternative control methods. Haller's Organ is the primary organ responsible for olfaction and it houses olfactory sensilla which generate and send nerve impulses to the synganglion, ticks' central nervous system. The primary receptor families implicated are Ionotropic receptors (IRs) and Transient Receptor Potential (TRP) channels. There is growing evidence of organic alternatives, both animal and plant based, to synthetic products used in tick control. Since tick olfaction is central to host seeking, understanding how it functions enables scientists to develop next generation repellents as a way to combat acaricide resistance.

Key words: Ixodid ticks, Olfaction, Haller's Organ, Ionotropic Receptors (IRs), Repellents

Training and Research in Fish Health in the Faculty of Veterinary Medicine, University of Nairobi, Kenya

Robert M. Waruiru[1]*, Finnan O. Ageng'o, Joseph M. Wairia, Isaac R. Mulei, Daniel W. Wanja, Joseph M. Ndegwa, Mercy M. Hamisi, Kezia W. Maina, Stephen K. Mavuti, Philip N. Nyaga and Paul G. Mbuthia

[1]Department of Veterinary Pathology, Microbiology and Parasitology, Faculty of Veterinary Medicine, University of Nairobi

*Corresponding Author Angwenyi: Robert M. Waruiru

Abstract

Aquaculture is Kenya's fastest-growing animal industry, providing employment and helping address food shortages and malnutrition. However, the sector faces challenges such as poor-quality and insufficient seed and feed, as well as fish diseases that are relatively new to farmers, fisheries officers, and veterinarians, who primarily focus on terrestrial animal health. The Department of Veterinary Pathology, Microbiology, and Parasitology (DVPMP), University of Nairobi has become a leader in fish health research. It is also reshaping academic programs to produce skilled graduates in fish health. The department aims to promote sustainable aquaculture by improving disease diagnosis, managing biosecurity measures on fish farms, and enhancing production. Furthermore, it raises awareness about fish pathogens of public health significance through community workshops and provides consultancy services to farmers. Research at the DVPMP has successfully isolated/recovered pathogens, including viruses, bacteria, and parasites. Viral diseases such as infectious pancreatic necrosis and the notifiable infectious hematopoietic necrosis have been reported in rainbow trout. Studies have also revealed that commercial and homemade fish feeds contain aflatoxins, which cause fish aflatoxicosis. Additionally, bacteria recovered from fish farms have shown multiple antibiotic resistance raising concerns about antimicrobial resistance source. The Faculty of Veterinary Medicine continues to produce highly trained postgraduate fish health specialists, many of whom work as researchers, lecturers, and extension officers. Their research has resulted in 35 peer-reviewed publications, with others under review. The faculty has trained 13 Master's and 4 PhD fish health scientists to date. The veterinary profession should play a greater role in Kenya's aquaculture to ensure safe and sustainable food production. To achieve this, veterinary institutions, such as universities and tertiary colleges, must integrate more aquaculture and fish health courses into their curricula. The DVPMP is equipped to deliver short courses for practicing veterinarians and fisheries officers.

Keywords: Aquaculture, Fish health, PhD, Research, University of Nairobi

Wildlife Health Watch: A Ranger-Based, One Health Surveillance Model for Early Detection of Wildlife Disease

Shaleen Angwenyi [1,2*] ; Nelly Bargoiyet[1] ; Stephen Chege [3,4] , Francis Gakuya[5] , Samuel Kahariri[6] , Mitchelle Kasudi[7] , Isaac Lekolool[8] , Macon Overcast[1] , Katherine Worsley-Tonks[9] , James Hassell1,[7,10]
Affiliations

[1]Global Health Program, Smithsonian's National Zoo & Conservation Biology Institute, Smithsonian Institution, Washington, DC, USA [2]Mpala Research Centre, Nanyuki, Kenya [3]San Diego Zoo Wildlife Alliance, San Diego, CA, USA [4]VetinWild, Nanyuki, Kenya [5]Wildlife Research and Training Institute, Naivasha, Kenya [6] Directorate of Veterinary Services, Ministry of Agriculture and Livestock Development, Nairobi, Kenya [7] International Livestock Research Institute, Nairobi, Kenya 8Kenya Wildlife Service, Nairobi, Kenya [9] Institut Pasteur, Lyssavirus Epidemiology and Neuropathology Unit, Paris, France [10]Yale School of Public Health, New Haven, CT, USA

*Corresponding Author: Angwenyi

Abstract

Emerging and re-emerging diseases at the wildlife–livestock–human interface threaten biodiversity, livelihoods, and public health. Rangers and community members are often the first to encounter unusual wildlife health events, yet observations rarely reach veterinary authorities. Wildlife Health Watch (WHW) was established to fill this gap by implementing a ranger-based, wildlife surveillance system that links frontline observations to national animal health platforms, including the Kenya Animal Biosurveillance System (KABS). WHW aims to: 1. Strengthen early detection and reporting of wildlife health events. 2. Empower rangers as frontline observers with digital reporting tools. 3. Integrate wildlife data into national surveillance systems to inform cross-sectoral management of disease risks. WHW was piloted in selected conservancies through training rangers in syndromic wildlife health surveillance and use of a mobile data collection tool integrated with EarthRanger. Observations are submitted in near-real time and shared with veterinary and conservation authorities. Data streams are aligned with KABS to ensure wildlife health events contribute to national disease surveillance and support coordinated response with domestic animal health information. Since implementation, WHW has enabled real-time reporting of morbidity, mortality, and unusual behaviour across multiple wildlife species. Over 1000 rangers have been trained across participating conservancies, with over 200 reports submitted across multiple taxa. Early operational outputs indicate enhanced timeliness, consistency, and spatial coverage of wildlife reporting, demonstrating the feasibility and value of integrating wildlife surveillance into national One Health frameworks. Real-time alerts support decision-making for early interventions. Ranger participation has also enhanced local One Health capacity and awareness, building a network of trained frontline observers. WHW illustrates how a ranger-based, digital surveillance system can operationalise One Health in practice. Linking wildlife health intelligence to KABS strengthens Kenya's capacity for early warning, cross-sectoral decision-making, and evidence-informed management of disease risks affecting wildlife, livestock, and human health.

Key words: Wildlife disease surveillance; One Health; Ranger-based monitoring; conservation medicine

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