



World Organisation
for Animal Health



Towards a More Resilient Veterinary Workforce for Africa 2024

Continental Conference
26 – 28 November 2024 Nairobi, Kenya



PROCEEDINGS

Recommended Citation

WOAH. *Africa Continental Conference: Towards a more resilient veterinary workforce for Africa 2024 (“the Africa Continental Conference”). Report, 26 - 28 November 2024, Nairobi.*

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Disclaimer. This project was sponsored by the United States Department of Defense, *Defense Threat Reduction Agency* (DTRA). The content of the information does not necessarily reflect the position or the policy of the Federal Government of the United States, and no official endorsement should be inferred. We would also like to acknowledge the United States DoD DTRA Cooperative Threat Reduction Program’s support of project HDTRA1-22-1-0043 - Strengthening Veterinary Workforce Development (WFD) through Regional Capacity Building.

This report can be downloaded from the WOAHAfrica website here :

<https://rr-africa.woah.org/app/uploads/2025/04/WOAH-2024-WFD-Conference-Proceedings.pdf>

The final recommendations, as endorsed by WOAHAfrica in January 2025, can be downloaded here :

<https://rr-africa.woah.org/app/uploads/2024/11/WOAH-Final-recommendations-vet.-workforce-2024.pdf>

The detailed recommendations can be downloaded here :

<https://rr-africa.woah.org/app/uploads/2025/04/WOAH-Refined-DETAILED-Recommendations-14.01.2025.pdf>

The detailed recommendations can be browsed here :

[Africa Continental Conference on Veterinary Workforce Development - Detailed recommendations](#)

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List of Acronyms

2A2E-V	African Association of Veterinary Education Establishments (AU)
2AVSB	African Association of Veterinary Statutory Bodies (AU)
AF3P	Africa PPP Forum in the Veterinary Domain (AU, WOAH)
AfCFTA	African Continental Free-Trade Area / Agreement (AU)
AfDB	African Development Bank
AHG	Ad-hoc group (WOAH)
AHSA	Animal Health Strategy for Africa (AU)
AI	Artificial Intelligence
AMR	Antimicrobial resistance
AMU	Antimicrobial use
AST	Antimicrobial susceptibility test(ing)
AU	African Union
AUC	African Union Commission
AU-IBAR	Interafrican Bureau for Animal Resources (AU)
AU-PANVAC	Pan-African Veterinary Vaccine Centre (AU)
AVE	<i>Agent Vétérinaire d'Élevage</i> (in French)
AVTA	Africa Veterinary Technicians Association
AWSA	Animal Welfare Strategy for Africa (AU)
CAADP	Comprehensive Africa Agriculture Development Programme (AU)
CAHP	Continental Animal Health Platform of Public and Private Actors (AU)
CAHW	Community-based Animal Health Worker
CEO	Chief Executive Officer
CGIAR	Consultative Group for International Agricultural Research
COHESA	Capacitating One Health in Eastern and Southern Africa
COHFE	One Health Field Epidemiology Competency Framework
CPD	Continuous Professional Development
CSO	Civil-Society Organisation
CVO	Chief Veterinary Officer
DHIS ₂	District Health Information System (2)
DVM	Doctor in Veterinary Medicine
DVS	Department or Directorate of Veterinary Services
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EISMV	<i>Ecole Inter-états de Sciences et Médecine Vétérinaires</i>
ERFAN	Enhancing Research for Africa Network (IZSAM)
EU	European Union
EUR	Euro (currency)
FAO	Food and Agriculture Organisation (of the UN)
FAO-RAF	FAO Regional Office for Africa
FCFA	Franc CFA (Central Africa) (currency)
FETP	Field Epidemiology Training Program(me)
GALVmed	Global Alliance for Livestock Veterinary Medicines
GDP	Gross Domestic Product
GEDSI	Gender, disability, and social inclusion
GPS	Global Positioning System
ICPALD	IGAD Centre for Pastoral Areas and Livestock Development (IGAD)
ICT	Information and Communications Technology
IGAD	Inter-Governmental Authority on Development
ILO	International Labour Organisation
ILRI	International Livestock Research Institute (CGIAR)
IPC	Infection prevention and control
ISCO	International Standard Classification of Occupations
IVSA	International Veterinary Students' Association

JPA	Joint Plan of Action (OH)
LIDES	Livestock Development Strategy for Africa (AU)
LVIF	Livestock Vaccines Innovation Fund (IDRC)
MEL	Monitoring, Evaluation and Learning
MoU	Memorandum of Understanding
NAP	National Action Plan
NGO	Non-Governmental Organisation
OH	One Health
OHHLEP	One Health High-Level Expert Panel
OIE	<i>Office International des Epizooties</i> (WOAH)
P3V	<i>Professionnalisation des Para-Professionnels Vétérinaires</i> (WOAH, AFD)
PACE	Pan-African programme for the Control of Epizootics (FAO, OIE, AU)
PCTAD	Prevention and Control of Transboundary Animal Diseases for the benefit of smallholder farmers (WOAH, BMZ)
PPE	Personal protection equipment
PPP	Public-private partnership
PVS	Performance of Veterinary Services (WOAH)
PVSIS	PVS Information System (WOAH)
REC	Regional Economic Community
SADC	Southern African Development Community
SDG	Sustainable Development Goals (UN)
SSA	Sub-Saharan Africa
STC	Specialised Technical Committee (AUC)
STDF	Standards and Trade Development Facility
STEM	Science, technology, engineering, and mathematics
SWOT	Strengths, weaknesses, opportunities and threats
TLU	Tropical Livestock Unit
UHC	Universal Health Care
UN	United Nations
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
USD	United States Dollar (currency)
VEE	Veterinary Educational Establishments
VLC	Virtual Learning Centre (FAO)
VLSP	Veterinary Legislation Support Programme (WOAH)
VLU	Veterinary Livestock Unit
VPH	Veterinary Public Health
VPP	Veterinary Paraprofessional
VS	Veterinary Services
VSF	Veterinary Statutory Body
VUCA	<i>Vétérinaires Sans Frontières</i> volatile, unpredictable, complex, ambiguous
WAHIS	World Animal Health Information System (WOAH)
WHO	World Health Organisation
WHO-AFRO	WHO Africa Regional Office
WOAH	World Organisation for Animal Health
WTO	World Trade Organisation
WVA	World Veterinary Association

COUNTRY SPECIFIC ABBREVIATIONS

AFD	<i>Agence Française de Développement</i>	France
ASAL	Arid and Semi-Arid Lands	Kenya
AVMA	American Veterinary Medical Association	United States
BMZ	<i>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung</i>	Germany
CAHFS	University of Minnesota Centre for Animal Health and Food Safety	United States
CAR		Central African Republic
CIRAD	<i>Centre de Coopération Internationale en Recherche Agronomique pour le Développement</i>	France
CNFTEIA	<i>Centre National de Formation des Techniciens de l'Élevage et des Industries Animales</i>	Senegal
DRC		Democratic Republic of Congo
DTRA	Defense Threat Reduction Agency	United States
ENSV	<i>Ecole Nationale des Services Vétérinaires</i>	France
FVI	<i>France Vétérinaire Internationale</i>	France
IDRC	International Development Research Centre	Canada
IZSAM	<i>Istituto Zooprofilattico Sperimentale dell Abruzzo e del Molise</i>	Italy
KVA	Kenya Veterinary Association	Kenya
KVB	Kenya Veterinary Board	Kenya
KWS	Kenya Wildlife Services	Kenya
KWVA	Kenya Women's Veterinary Association	Kenya
MAAIF	Ministry of Agriculture Animal Industry and Fisheries	Uganda
MINEPIA	<i>Ministère de l'Élevage, de la Pêche et des Industries Animales</i>	Cameroon
NVMA	Nigerian Veterinary Medical Association	Nigeria
OSU D-CAT	Ohio State University (Digital curriculum alignment tool)	United States
SAVC	South African Veterinary Council	South Africa
UK		United Kingdom
US		United States
UVB	Uganda Veterinary Board	Uganda
VCN	Veterinary Council of Nigeria	Nigeria

DISEASES

ASF	African Swine Fever
COVID-19	Corona Virus Disease (2019)
ECF	East Coast Fever
FMD	Foot and Mouth Disease
HPAI	High Pathogenicity Avian Influenza
MERS-CoV	Middle-East Respiratory Syndrome (Corona Virus)
NCD	Newcastle disease
ND	Newcastle disease
PPR	<i>Peste des Petits Ruminants</i> (goat plague)
RP	Rinderpest
RPV	Rinderpest virus
RVF	Rift Valley Fever
SARS-CoV	Severe Acute Respiratory Syndrome (Corona Virus)

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EXECUTIVE SUMMARY

BACKGROUND

The *Africa Continental Conference: Towards a more resilient veterinary workforce for Africa 2024* (“the Africa Continental Conference”) (November 2024, Nairobi) aimed to address the evolving needs of Africa's veterinary workforce, focusing on enhancing integration of *veterinary paraprofessionals* (VPPs) and improving collaboration with veterinarians. While progress has been made since the 2015 conference, challenges persist in education, legislation, gender equality, and workforce competencies.

The conference emphasised the importance of adapting to future workforce changes, including technological advancements, mental health considerations, and the need for lifelong learning. The event aimed to engage the next generation of veterinary professionals in shaping the future of the sector.

Conference objectives included:

- **Highlight** the relevance and timeliness of investing in veterinary workforces to improve animal and human health, meet disease eradication goals (e.g. rabies), ensure appropriate *antimicrobial use* (AMU) and contribute to the One Health Workforce.
- **Share** challenges and good practices around veterinary workforce development and opportunities for regional harmonisation amongst Members and sub-regions in Africa;
- **Share** new knowledge, tools and opportunities amongst Members, partners and donors;
- **Explore** issues relevant for a work-ready and future-ready workforce;
- **Coalesce** partners, networks, and donors for sustainable planning around identified priorities.

The conference featured five plenary sessions, and 23 technical sessions along six themes (full agenda in **annex 1**):

- i) workforce assessment and development
- ii) education
- iii) sustainable services, public-private partnerships
- iv) technical themes and enabling environment for effective veterinary workforce
- v) regional discussions, and
- vi) thematic discussions (different categories and cadres of veterinary paraprofessionals).

With 187 participants from diverse stakeholder groups, including veterinary statutory bodies, veterinary professional and paraprofessional associations, educators, and policymakers, the conference underscored the need for sustainable workforce planning that is adaptable, inclusive, and responsive to future challenges in the veterinary domain.

Global Perspectives on Veterinary Workforce Development

The Africa region has demonstrated strong engagement with the WOAHP *Performance of Veterinary Services* (PVS) Pathway, enhancing transparency and enabling performance measurement and monitoring. WOAHP's tools and methodologies now require action and sustainable engagement to yield new insights.

Recommendations from the 2015 Continental Conference

WOAH presented recommendations from the 2015 conference. For WOAH, these included supporting members in implementing PVS Pathway recommendations, advocating for long-term donor funding, and developing minimum competencies and training curricula for *veterinary paraprofessionals* (VPPs). For Members, the recommendations included addressing human resource gaps identified in PVS reports, harmonizing legislative frameworks for *veterinary statutory bodies* (VSBs), and establishing VPP associations. They also recommended VSBs include VPPs in decision-making processes and develop continuing education programmes for VPPs.

Veterinary Workforce Development in Asia and the Pacific, Eastern Europe, Central Asia

WOAH insights from the Asia-Pacific region, where a regional approach to veterinary workforce development is underway, were shared. This includes awareness events, national workshops, engaging with veterinary education institutions, and adhering to WOAH guidelines. *Gender, Disability, and Social Inclusion* (GEDSI) were highlighted as essential components of the workforce development.

In Eastern Europe and Central Asia there are many more veterinarians (87%) than VPPs (13%). The main challenges the region is facing include a general shortage of personnel in the workforce in some Members (6%) and a high retirement rate indicated by 71% of Members with fewer new recruitments.

THEMATIC SESSION 1

WORKFORCE ASSESSMENT AND DEVELOPMENT

SPECIAL EVENT : Youth perspectives on the future of the veterinary workforce in Africa

Plenary session (panel discussion)

The plenary session on youth perspectives emphasised the importance of including young people in workforce planning to make the veterinary sector more adaptive and sustainable. It focused on resilience, adaptability, and meaningful planning for the future. Preliminary consultations had included interviews, workshops (online and in-person - **Annex 4**), and a prioritisation exercise to identify the most pressing issues for the next generation. The consultation process was inclusive, involving diverse participants, and used foresight methodologies, including storytelling and a "Futures Wheel" diagram to explore issues such as skills, workforce, regulation, and work tools.

Recommendations from the youth-focused futures consultations include:

- Promote inclusivity and establish mechanisms for youth perspectives in veterinary workforce strategies and planning.
- Create continuous professional development strategies for veterinarians, paraprofessionals and farmers
- Support mental health of animal health professionals

- Develop training for animal health professionals and farmers on biosecurity and pandemic preparedness and response
- Implement equitable and transparent vaccine distribution
- Update veterinary curricula to reflect trends like animal welfare, antimicrobial resistance, and bioterrorism preparedness
- Design inter-disciplinary One Health training for veterinary and human health professionals and increase opportunities and investment in veterinary research.
- Advocate for regular salary reviews for animal health professionals by relevant authorities
- Formulate strategies to enhance African Members' competitiveness in global animal product markets.
- Enact policies to boost collaboration among veterinary professionals for better service delivery.

Workshop session

The session explored the future of the veterinary workforce, focusing on trends, challenges, and opportunities in education and practice, with input from African youth in the animal health sector. Key discussions included integrating AI and technology, adapting curricula to competency-based models, promoting One Health collaboration, and addressing infrastructure needs in rural areas. Intergenerational mentoring, networking, and partnerships between local and international institutions were emphasised to foster innovation and inclusion. Recommendations highlighted digitalisation, scalable service delivery models, and aligning training with global health challenges to prepare the next generation of veterinary professionals.

Workforce assessment

The Workforce Assessment session focused on the need and value of conducting veterinary workforce assessments to strengthen national Veterinary Services and ensure access to animal healthcare. Presentations covered available tools for workforce assessment in both human and veterinary health sectors, along with a participatory simulation exercise aimed at identifying gaps in the national veterinary workforce. Key insights emphasised the importance of systematic, evidence-based workforce planning, including WHO's Labour market analysis and WOA's veterinary workforce assessment tool (in development). Discussions highlighted challenges, such as workforce distribution and data availability, and emphasised the need for demand-based and need-based planning. Recommendations included gathering data to inform policy, establishing working groups for workforce assessments, and offering support from WOA to assist its Members in conducting these assessments.

Workforce development

The session on workforce development emphasised the importance of veterinary workforce assessments to ensure effective national veterinary services and access to animal healthcare. Participants explored tools like WHO's Health Labour Market Analysis Tool, alongside examples from Members like Cameroon and Zimbabwe, to address workforce gaps and challenges such as data availability, uneven workforce distribution, and migration. Discussions highlighted approaches like demand- and need-based planning, rural workforce retention, and the role of private sector investments and government incentives. Recommendations included forming working groups to conduct assessments and leveraging WOA support for workforce planning through the PVS Pathway.

THEMATIC SESSION 2

EDUCATION

Competencies for Digital Learning: Challenges and Opportunities to Transform Lifelong Learning in Africa

The session focused on enhancing digital learning strategies for African Veterinary Services by building inclusive learning communities, addressing accessibility barriers, and promoting engagement through innovative digital tools. Key insights highlighted the importance of learner self-assessment for fostering accountability and connecting learning to practical application. Recommendations emphasised adopting learner-centred designs, fostering collaboration, addressing technological and language challenges, enhancing engagement, and employing diverse methods to measure training outcomes. Additional suggestions included leveraging digital tools for Veterinary Services, strengthening regulatory frameworks, promoting gender inclusion, and exploring emerging technologies like the [Metaverse](#) to improve learning and professional collaboration.

SPECIAL EVENT : Launch of the WOA Community Animal Health Workers' Guidelines

Plenary launch ceremony

This session introduced the Competency and Curriculum Guidelines for *Community Animal Health Workers* (CAHWs), outlining the steps from the project's conception to the publication of WOA Guidelines for CAHWs. It emphasised the importance of CAHWs in underserved areas, performing animal health services, disease surveillance, and public health functions, particularly in regions with limited veterinary personnel. The session encouraged further engagement in the next session to explore practical aspects of related handbooks and guidelines, aiming to standardise CAHW training and integrate them into national Veterinary Services. Key objectives include ensuring consistent training and establishing criteria for CAHW qualification and registration.

Workshop session : the Guidelines and how to use them

The WOA CAHW Guidelines session focused on the pivotal role of Community Animal Health Workers (CAHWs) in enhancing animal health services, particularly in underserved areas. It highlighted how CAHWs complement veterinarians and *veterinary paraprofessionals* (VPPs) by addressing community-specific challenges. Participants explored the WOA Competency and Curricula Guidelines for CAHWs and learned how to tailor these guidelines to design relevant training curricula. Key discussions emphasised the need for harmonizing standards for CAHWs and VPPs, clarifying their roles to avoid conflicts, and ensuring adequate training accessibility.

Recommendations included updating definitions, improving training, and avoiding creating "silos" within CAHWs.

Recruitment, retention, and incentives in veterinary education

The session on recruitment, retention, and incentives in veterinary education focused on addressing the challenges of attracting and retaining students in veterinary and veterinary paraprofessional training programmes, particularly in aligning admissions policies with national workforce needs. Key issues include a lack of awareness among primary and secondary school students about animal health careers, outdated teaching methods, and insufficient communication between educators and employers about the evolving skills required in the workforce. Innovative approaches discussed included efforts to recruit women into veterinary paraprofessional programmes in Senegal, networking among *veterinary education establishments* (VEEs) and *veterinary statutory bodies* (VSBs) in Asia for workforce development, and the importance of extracurricular activities at institutions like the University of Gondar. The session emphasised the need for improved accreditation, gender-sensitive recruitment policies, and collaboration between VEEs, VSBs, and other stakeholders to better align training with workforce demands. Additionally, mentoring, public outreach, and gender-inclusive policies were highlighted as essential for sustaining student interest and addressing workforce gaps, particularly in remote or underserved areas.

Veterinary and veterinary paraprofessional education

The session on veterinary and veterinary paraprofessional education focused on sharing success stories from WOAHP VEE Twinning Programme and VPP Curricula missions, discussing innovations to engage interest in the sector, and addressing challenges faced by training institutions. Key issues included the availability and retention of skilled trainers, gender inclusion, practical training, and enhancing curricula to address national needs, such as animal welfare and entrepreneurship. Recommendations included mentorship programmes, quotas for women, technological integration, and infrastructure improvements to support gender equity and remote area access. The session highlighted WOAHP Twinning's role in skill transfer and curriculum revision, and strategies like incentives for trainer retention and engaging youth through innovative modules and mentorship.

THEMATIC SESSION 3

SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS

Business skills and sustainable deployment of private sector veterinarians, VPPs and CAHWs

The session focused on the sustainable integration and professional development of veterinarians, VPPs and CAHWs in Africa, emphasizing entrepreneurship, business skills, and public-private partnerships. Insights from Senegal, Togo, Nigeria, Burkina Faso, and Uganda highlighted challenges such as limited business acumen, counterfeit drugs, and regulatory gaps, alongside successes like gender-sensitive training and mentorship programmes. Recommendations included capacity building for VPPs in veterinary practices and entrepreneurship, stronger collaboration with veterinary associations, improved access to quality veterinary products, and regulatory frameworks to ensure consistent standards. Public-private partnerships and access to finance were identified as critical for fostering innovation, enhancing service delivery, and addressing barriers to professional growth.

SPECIAL EVENT: GALVmed

Plenary session (introduction)

The GALVmed workshop emphasised the importance of *Public-Private Partnerships* (PPPs) in driving innovation and improving access to animal health products, particularly in sub-Saharan Africa. GALVmed, a non-profit focused on animal health product and business development, collaborates with various stakeholders to enhance the wellbeing and economic progress of small-scale livestock producers. The session highlighted the challenges of limited access to veterinary products, complex value chains, and the need for effective PPPs to foster innovation and sustainable livestock production systems. Dr. Schumacher called for greater collaboration to overcome these barriers and improve livestock sector development.

Workshop session

The GALVmed workshop focused on the critical role of PPPs in developing sustainable veterinary products and services in Africa. The session highlighted how PPPs can address region-specific animal health challenges by combining the strengths of both sectors, particularly in developing vaccines and improving veterinary service provision. Examples of successful PPPs, such as the commercialisation of thermostable vaccines, were showcased, emphasizing the need for collaboration, capacity building, and innovation. Challenges like limited cold chain access, lack of education, and the need for sustainable vaccination programmes were discussed, along with strategies to overcome them, such as policy development, improved value chain understanding, and investment in technology. Recommendations included harmonizing vaccine regulations, promoting regional PPPs, and developing guidelines for auditing vaccine quality.

Deployment of the veterinary workforce for disease control and eradication

Effective deployment of the veterinary workforce is critical for the control and eradication of transboundary animal diseases and zoonotic diseases¹, which have severe socioeconomic impacts, including increased rural poverty, malnutrition, and economic stress. However, challenges such as inadequate workforce deployment, unclear roles, lack of legal recognition for CAHWs and insufficient collaboration between private and public veterinarians hinder progress. This session explored barriers to workforce optimisation and proposed solutions, emphasising the importance of clear role definitions, legal frameworks, PPPs, improved training, and resource allocation. Recommendations included recognising CAHWs, fostering collaboration through trust-building initiatives, adopting telehealth for disease reporting, and securing government investment in animal health services. Structured collaboration and sustained funding are essential to ensure the veterinary workforce's impactful engagement in disease control and eradication efforts globally.

¹ A zoonosis is any disease or infection that is naturally transmissible from vertebrate animals to humans.

SPECIAL EVENT: Launch of the Africa PPP Forum in the Veterinary Domain

Plenary session (introduction)

The launch of the 'Africa *Public-Private Partnership* (PPP) Forum in the Veterinary Domain' (AF3P) was a landmark event emphasizing the need for collaboration between public and private sectors to address challenges in Africa's veterinary and livestock sectors. The forum aims to facilitate legal frameworks, resource mobilisation, and innovation in service delivery while fostering trust and synergy between sectors. AU-IBAR highlighted the criticality of PPPs as a unifying framework for strengthening Veterinary Services, echoing the metaphor of the "three-legged African stool". Discussions covered the potential of Africa's USD 150 billion livestock sector, legislative progress in PPPs across Africa, and the critical role of the AU-IBAR in fostering an enabling environment. Panellists underscored the need for robust policies, capacity building, and technology adoption to modernise Veterinary Services.

Workshop session

The session on the 'Africa PPP Forum in the Veterinary Domain' focused on operationalizing the forum through co-creation, emphasizing governance, sustainability, and stakeholder collaboration. Key discussions highlighted the need for harmonised legal frameworks, robust governance structures, and active stakeholder engagement to facilitate PPPs in Veterinary Services. Participants stressed creating a help desk and database for resources, improving communication, and generating awareness of the private sector's role in animal disease control. Priority areas included animal disease prevention and workforce development, with governance and resource mobilisation identified as critical challenges. Recommendations included formalizing the forum's operations through terms of reference, thematic working groups, and stakeholder engagement strategies, alongside establishing an accessible platform for training, resources, and collaboration.

THEMATIC SESSION 4

TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE

Emergency management

The session explored the roles of veterinarians, VPPs and CAHWs in emergency and disease outbreak management, featuring a case study from Malawi and the interactive (board) game "**ALERT**" to illustrate surveillance chain dynamics. Key discussions emphasised the importance of cross-sectoral collaboration, early warning systems, resource mobilisation, and community-level preparedness. Lessons learned included forming local disaster committees, relocating animals and people, establishing sustainable resources like solar-powered boreholes and mobile clinics, and recognising the veterinary workforce's contributions. Recommendations highlighted the need for preventive measures, stakeholder training, multisectoral engagement, community awareness, and a proactive approach to ensure effective, sustainable emergency responses while leveraging lessons from past experiences.

Gender inclusion in Veterinary Services

The session on gender inclusion in Veterinary Services aimed to address the key challenges and opportunities in integrating women and men into the veterinary workforce. It explored strategies to enhance women's access to veterinary education, internships, and recruitment, and discussed how veterinary and paraprofessional associations can foster leadership and mutual support. Gender relations were shown to influence veterinary service quality, with women often holding pivotal roles in early disease detection yet facing barriers such as discrimination, work-life balance struggles, and limited professional opportunities. The session highlighted the need for gender-sensitive policies, mentorship, and training programmes to promote inclusivity, as well as strategies for reducing the risks women face, particularly in zoonotic disease exposure. Recommendations include strengthening mentorship, fostering networking, promoting gender-sensitive curricula, and advocating for equal opportunities in veterinary leadership, alongside using digital platforms and remote learning to overcome logistical barriers for women in rural areas.

From policies to practice: a guide to veterinary legislation and regulation

The session emphasised the critical role of veterinary legislation and regulation through *veterinary statutory bodies* (VSBs) in supporting a well-prepared veterinary workforce to address contemporary and future challenges like pandemic prevention, *antimicrobial resistance* (AMR), food safety, and animal welfare. It highlighted the need for inclusive and harmonised regulatory frameworks that recognise veterinarians, VPPs and other stakeholders, ensuring equitable participation and representation. Key recommendations included establishing unified VSBs, aligning legislation with international standards, promoting collaboration between public and private sectors, and addressing gaps in training, governance, and inclusivity. The session also underscored the importance of clear role definitions, digital registration systems, corruption prevention, and One Health integration to enhance the efficiency and accountability of Veterinary Services worldwide.

One Health in practice: engaging the veterinary workforce to apply One Health principles at national level

The session on *One Health* (OH) principles at the national level emphasised the critical need for a multisectoral approach to address health challenges at the interface of human, animal, and ecosystem health, driven by the rising incidence of zoonotic diseases. Key discussions included the introduction of One Health principles, global frameworks for managing One Health threats, and the competency framework for workforce development. Highlighted case studies demonstrated successful applications of One Health approaches, such as avian influenza management in Senegal and youth-led task forces in Tanzania. Challenges such as limited collaboration across sectors and disparities in surveillance systems were addressed, with recommendations focusing on operationalising One Health platforms, enhancing local-level activities, fostering collaboration among stakeholders, and integrating digital tools to streamline data and training. A participatory approach, including diverse stakeholders, was identified as vital for sustainable implementation.

PARTICIPANT-LED ROUND TABLE DISCUSSIONS (1)

REGIONAL DISCUSSIONS

The discussion across regions highlighted the varying roles, training, and recognition of VPPs in **North, West, Central, Eastern and Southern Africa**. North African Members like Sudan and Morocco have structured categories of VPPs with regulated roles, while in Egypt and Libya, VPPs have limited formal recognition. West and Central African nations identified diverse categories and activities for VPPs, with gaps in training and certification highlighted. Eastern African discussions emphasised gender inclusion, digital literacy, and harmonised professional development. Southern Africa prioritised harmonizing training, technology integration, One Health mainstreaming, and addressing workforce shortages. Key recommendations include standardizing VPP training, fostering collaboration across regions, and leveraging resources to enhance Veterinary Services and address region-specific challenges.

PARTICIPANT-LED ROUND TABLE DISCUSSIONS (2)

DIFFERENT CATEGORIES AND CADRES OF VETERINARY PARAPROFESSIONALS

Surveillance and field activities

The session on surveillance and field activities highlighted the essential role of VPPs and CAHWs in disease surveillance across the African region. VPPs perform tasks like data collection, outbreak management, disease monitoring, sampling, and farmer education, while CAHWs often assist in surveillance, disease reporting, and awareness initiatives. Key challenges include limited training, resources, communication skills, and inadequate reporting systems. Solutions proposed include enhancing training programmes, integrating aquatic animal diseases into curricula and surveillance networks, incentivizing CAHWs' participation, and promoting systematic disease reporting through platforms like WOA. A One Health approach and regional collaboration were emphasised to strengthen surveillance systems and improve veterinary and public health outcomes.

Challenges and opportunities in the use of antimicrobials in the field

The session on antimicrobial use in the field explored challenges such as non-compliance with treatment guidelines, limited awareness of *antimicrobial resistance* (AMR), indiscriminate use without diagnostics, easy access to antimicrobials without prescriptions, counterfeit drugs, and poor storage practices. Emerging solutions included enhancing education and advocacy on AMR, improving access to diagnostics, enforcing regulations to control antimicrobial access, training VPPs and farmers on responsible use, and addressing storage issues with better infrastructure. Recommendations emphasised adopting a One Health approach to AMR, involving social scientists to promote behaviour change, and stepping up preventive measures like vaccination and biosecurity to reduce antimicrobial reliance. WOA was urged to support Members in implementing guidelines, legislative frameworks, and awareness campaigns to address AMR challenges comprehensively.

Animal welfare services

The session on animal welfare services explored the roles of VPPs in promoting animal welfare across Africa, highlighting gaps such as inadequate training, poor enforcement of regulations, limited communication skills, and insufficient resources. Key insights included Algeria's establishment of a central animal welfare office, and the potential of socio-cultural dynamics, like religious values, to advocate for welfare improvements. Recommendations emphasised integrating animal welfare into VPP training curricula, optimising the role of WOA's Animal Welfare Focal Points, raising awareness through campaigns and legislative updates, leveraging cultural values, and fostering collaboration among stakeholders. The session also called for providing essential equipment, enforcing humane practices, and aligning national frameworks with international standards. An e-learning module will be developed by WOA within two years.

Meat inspection and laboratory services

The session on meat inspection and laboratory services highlighted the key roles of VPPs in these areas, noting significant regional variations in training and capacity. Challenges include gaps in specialised training, outdated legislation, and workforce shortages. Members like Ghana, Lesotho, and Kenya shared their experiences, with Kenya demonstrating advanced public health training. Recommendations focused on adopting a One Health approach to address workforce shortages, developing specialised curricula for meat hygiene and lab technology, fostering awareness of VPP training as a foundation for specialisation, bridging veterinary and medical lab skills through on-the-job training, and allocating resources for VPP training in these fields.

CONFERENCE OUTCOMES

RECOMMENDATIONS

Conference recommendations were deliberated throughout the Conference through participatory discussions and reviewed by selected representatives. As validated by the Directorate General of WOA, participants recommended:

WOA Members to -

Legislation

1. Ensure that national legislation provides a robust framework to govern all categories of personnel involved in animal health services, including veterinarians, *veterinary paraprofessionals* (VPPs), *community-based animal health workers* (CAHWs), and addresses their education, qualifications, prerogatives and regulation.

Workforce assessment, planning and development

2. Conduct regular veterinary workforce assessments ensuring all relevant stakeholders are involved in the process, using gender-disaggregated data collection, monitoring, exploiting data from the PVS Pathway Information System and including continuing education to ensure appropriate workforce planning and development.

Regulation

- 3.a. Ensure the establishment or strengthening of an independent *Veterinary Statutory Body* (VSB) that regulates all categories of personnel, includes their representation on the VSB Board, and ensures that ethical standards and accountability underlie veterinary practice, and that a Continuing Education framework is in place.
- 3.b. Encourage Veterinary Statutory Bodies across Africa to foster collaboration, harmonisation of standards, and shared resources in the regulation of veterinary practice and recognition of all categories of personnel.

Education

- 4. Develop competency-based frameworks for veterinary and veterinary paraprofessional education and continuing education, aligned with national requirements, WOAHA competency and curricula guidelines and competency-based training frameworks, with attention to lifelong learning and transferable skills for women and men, aspiring towards continental quality assurance and regional harmonisation.

Economic sustainability of Veterinary Services

- 5. Foster economic sustainability of veterinary service delivery, including through leveraging *public-private partnerships* (PPP), creating the enabling environment, providing economic incentives, advocating for investments in adequate staffing, and fostering business and advocacy skills in the private sector.

Gender inclusion

- 6.a. Promote gender equality and gender mainstreaming of the veterinary professions by ensuring equal access to education, continuing education, employment, and decision-making within the workforce, adopting gender-disaggregated data collection, analysis, and reporting and ensure service delivery tailored to meet the needs of both women and men livestock keepers.
- 6.b. Advocate for policies addressing gender-based violence, harassment, and discrimination to ensure that everyone in the workforce feels safe.

Wellbeing and mental health

- 7. Promote the psychosocial resilience of the veterinary workforce by ensuring comprehensive workforce planning, targeted training, adequate staffing, and improved working conditions as well as fostering a supportive infrastructure, an inclusive decision-making environment and integrating mental health support mechanisms.

Collaboration

- 8.a. Enable collaboration between veterinarians, *veterinary paraprofessionals* (VPPs), *community-based animal health workers* (CAHWs), their associations, and other professionals in the veterinary domain, actively including the public and private sectors.
- 8.b. Promote understanding of Veterinary Services scope and impact beyond the veterinary domain, including in One Health approaches.

Inclusion and youth

9. Identify and incorporate youth perspectives in workforce planning and decision-making and ensure affordable access to veterinary education and continuing education, fair compensation and inclusivity in veterinary careers.

Digitalisation

10. Integrate, as appropriate, inclusive digital technologies, across competency-based education frameworks and veterinary service delivery systems, to enhance professional collaboration, strengthen preventive care, regulation and surveillance capabilities, and improve service efficiency.

The World Organisation for Animal Health (WOAH) to -

1. Continue to support WOAH Members for the implementation of these recommendations, through the capacity building programmes PVS Pathway and Training System, including the Platform for the Training of Veterinary Services;
2. Develop indicators for monitoring, evaluation and learning of the Performance of Veterinary Services through the *PVS Information System (PVSIS)*;
3. Continue to make available and encourage Members to access veterinary workforce assessment and development opportunities offered by the PVS Pathway and Training System, acknowledging language and technological barriers;
4. Mobilise resources for WOAH capacity building programmes and their innovation with resource partners;
5. Advocate for sustainable financing and public-private partnerships in Veterinary Services;
6. Continue updating and developing methodologies and tools for competency-based education and continuing education, including competency and curricula guidelines for veterinarians, VPPs and CAHWs, and continuing education frameworks;
7. Advocate for visibility and inclusivity of Veterinary Services, including for gender inclusive recruitment and retention in the veterinary workforce, for Veterinary Services that meet the needs of women and men livestock keepers, and for workforce development that responds to the needs of next generation animal health professionals;
8. Encourage gender-disaggregated quantitative and qualitative data collection, analysis and reporting on veterinary workforce by Members;
9. Monitor and evaluate Members' progress in the implementation of these recommendations, including through the use of data from the *PVS Information System (PVSIS)*;

The Africa PPP Forum in the Veterinary Domain to -

WOAH and AU-IBAR, as co-organisers of the Africa PPP Forum, to -

1. Develop a five-year roadmap for operationalising the forum to enhance animal health and welfare through a comprehensive stakeholder engagement strategy involving government agencies, veterinary authorities, animal health companies, industry associations, and livestock farmers;
2. Facilitate open dialogue and encourage active participation to better identify and address the specific needs and challenges within the veterinary sector across African regions;
3. Enhance trust and transparency and promote the co-creation of solutions that align with international standards, ultimately contributing to a more resilient and thriving livestock sector in Africa;

Members of the Africa PPP Forum in the Veterinary Domain, to -

4. Engage in the Forum's thematic working groups for targeted discussions and actionable outcomes, ensuring that diverse perspectives are considered in developing solutions and sharing feedback to continuously improve and adapt strategies based on participant insights and changing circumstances to make this forum relevant and sustainable;

WOAH Collaborating Centres to -

1. Continue to support the Organisation and its Members in the assessment of education and continuing education needs, development of quality standards for education and continuing education, and delivery of training services, in line with their mandate and through the WOAH Platform for the Training of the Veterinary Services.

The final recommendations, as endorsed by WOAH in January 2025, can be downloaded here :

<https://rr-africa.woah.org/app/uploads/2024/11/WOAH-Final-recommendations-vet.-workforce-2024.pdf>









PROCEEDINGS

Context and background

About the *World Organisation for Animal Health* (WOAH)

The *World Organisation for Animal Health* (WOAH) was created as “*Office International des Epizooties*” (OIE) on the 25 January 1924. Its headquarters is based in Paris, France. It comprises 183 *Members* (i.e. Member Countries and Territories) and is present on all continents through 13 Representations in total. WOAH is an intergovernmental organisation subject to public international law. It is responsible for improving animal health worldwide. The standards it develops for the trade of live animals and products of animal origin are recognised by the *World Trade Organisation* (WTO) as reference international sanitary rules. WOAH has an active and evolving programme on veterinary workforce development.

Previous Conference: In 2015, WOAH (then : OIE), together with regional partners, organised a Conference entitled: “*Continental Conference on the Role of Veterinary Paraprofessionals in Africa: Linking veterinary para- professionals and veterinarians*”. It resulted in clear recommendations for WOAH Members and for WOAH as an organisation. Of the seven recommendations assigned to WOAH, all have meanwhile been achieved or advanced. Various efforts been developed in Africa by WOAH, by Members and by technical agencies, yet challenges still prevail to allow fluid, effective integration of *veterinary paraprofessionals* (VPPs) in the workforce and enhanced collaboration with veterinarians. There is further need for harmonised, fit-for-purpose education and training that ensures the graduation of competent, work-ready veterinarians and VPPs, legislation that recognises VPPs, regulation or implementation of appropriate antimicrobial² use, and gender equality in workforce and service provision.

More information : <https://rr-africa.woah.org/en/news/outcomes-oie-conference-on-vpp-in-africa/>

The future of work and the veterinary domain: Workforce development is connected to the future because the workforces of the future are being trained now, and that training can take anything between one to 10 years. Lifelong learning is an essential element of workforce development. As Veterinary Services and veterinary education establishments update their approaches to training and deployment of veterinarians and veterinary paraprofessionals, keeping the future in mind is essential for curricula planning and development, and even for legislation, to ensure that policies and legislative frameworks can evolve. For example, the Covid-19 crisis brought up the question of whether veterinarians were considered essential workers and could vaccinate people against Covid-19 (AVMA, 2021). Since nobody can predict the future, various approaches exist to help actors across disciplinary fields consider the implications of change (and *status quo*), as well as to imagine the range of possible futures and consider how our actions in the present will influence and shape futures and -thereafter- allow us to learn from and prepare for multiple possible futures. Various terms such as a “V.U.C.A. world” (*volatile, unpredictable, complex, ambiguous*) describe the type of environments in which present day workforces need to

² The word *antimicrobial* refers to any agent that kills microorganisms or stops their growth. It includes antibiotics, which are used against bacteria, and antifungals which are used against fungi. Disinfectants and antiseptics are also antimicrobials, as are specific classes -of importance to Africa- such as acaricides (which are used against ticks), trypanocides (which are used against tsetse fly induced trypanosomosis), coccidiostats (which are used against protozoa and more specifically coccidia) and many more.

be ready to operate. In fact, The World Bank's World Development Report "The Changing Nature of Work" (World Bank, 2019) highlights that *"The growing role of technology in life and business means that all types of jobs... require more advanced cognitive skills... Human capital is important because there is now a higher premium on adaptability"* (ibid, p10).

Beyond the veterinary sector, a growing field of research, thought leadership and policy is developing around the concept of 'the future of work'. For example, the Global Commission of the *International Labour Organisation* (ILO) published a report in 2019 entitled "Work for a brighter future" and the World Bank published the "World Development Report 2019: The Changing Nature of Work."

Various themes of relevance to the future of work which also relate to the veterinary domain include the demographics of the working population, access to learning, skill sets required for future workforces, diversity and inclusion, digitalisation of the workforce and veterinary technologies, transition of the workforce to a green economy and mental health. Some studies posit that the mental health burden is normalised in the veterinary professions and there is "the need for mental health to be more centrally incorporated into the veterinary curriculum and professional development" (Connolly, C. E., et al, 2022).

Aligning with UN Agenda 2030 and Africa Agenda 2063: The global framework of the *United Nations'* (UN) *Sustainable Development Goals* (SDGs) include numerous targets which relate to the changing nature of work, such as improving rural economies, lifelong learning and gender parity, amongst others. The African Union's Seven Aspirations for 2063 also include reference to lifelong learning, under **Aspiration 1: A prosperous Africa based on inclusive growth and sustainable development**, identifies the goal of *"well educated citizens and skills revolutions underpinned by science, technology and innovation"*.

Consulting with youth: WOAHA traditionally works through *Chief Veterinary Officers* (CVOs) and senior experts as its key stakeholders within the Veterinary Services. However, WOAHA also supports education by developing guidelines for competencies and curricula for veterinarians, veterinary paraprofessionals and community animal health workers, and provides capacity building support to Members to update their curricula to align with WOAHA guidelines. However, it is very unusual for WOAHA to engage directly with youth or 'the next generation' as a specific stakeholder group. The first major event involving 'the next generation' was the WOAHA Forum, titled *'Is WOAHA Ready for the Future?'* at the 91st General Session (May 2024) which involved representatives from the *International Veterinary Students Association* (IVSA).

Context and background

About the Conference

WOAH and partners hosted the *Africa Continental Conference: Towards a more resilient veterinary workforce for Africa 2024* (“the Africa Continental Conference”) to take stock of progress since the 2015 Conference, share regional experiences, and motivate Members for further investments in workforce development.

Conference objectives

Held at the Radisson Blu Hotel in Upper Hill, Nairobi, Kenya from **26 - 28 November 2024**, the Africa Continental Conference **objectives** were to:

- **Highlight** the relevance and timeliness of investing in veterinary workforces to improve animal and human health, meet disease eradication goals (e.g. rabies), ensure appropriate *antimicrobial use* (AMU) and contribute to the One Health Workforce.
- **Share** challenges and good practices around veterinary workforce development and opportunities for regional harmonisation amongst Members and sub-regions in Africa;
- **Share** new knowledge, tools and opportunities amongst Members, partners and donors;
- **Explore** issues relevant for a work-ready and future-ready workforce;
- **Coalesce** partners, networks, and donors for sustainable planning around identified priorities.

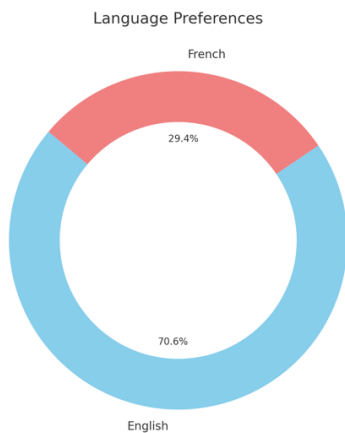
The Africa Continental Conference also showcased WOA’s 100 Years (centenary) and built on WOA’s engagement in the use of foresight methods for exploring implications and anticipating ‘**what is next**’ for the Organisation and its Members. The foresight process at the Africa Continental Conference therefore played a strategic role in giving the next generation a platform through WOA for sharing their diverse perspectives amongst decision-makers, veterinary education professionals and veterinary and VPP associations in Africa. Supporting Members to engage in futures thinking as part of workforce development will help build resilience and adaptability to workforce planning: involving the next generation will help ensure that workforce planning and education is relevant and meaningful to young people.

About the participants

The **Africa Continental Conference** brought together numerous representatives including WOA Delegates, Member³ representatives and/or *Chief Veterinary Officers* (CVOs), representatives of *veterinary statutory bodies* (VSBs), veterinary and *veterinary paraprofessional* (VPP) associations, *veterinary education establishments* (VEEs), continuing education providers, VPP training institutions, workforce planners, regional networks and umbrella organisations, and WOA Collaborating Centres. Moreover, veterinary and veterinary paraprofessional women’s associations, producers’ associations, veterinary and veterinary paraprofessional students/alumni, private companies and civil society organisations promoting the One Health approach were also in attendance.

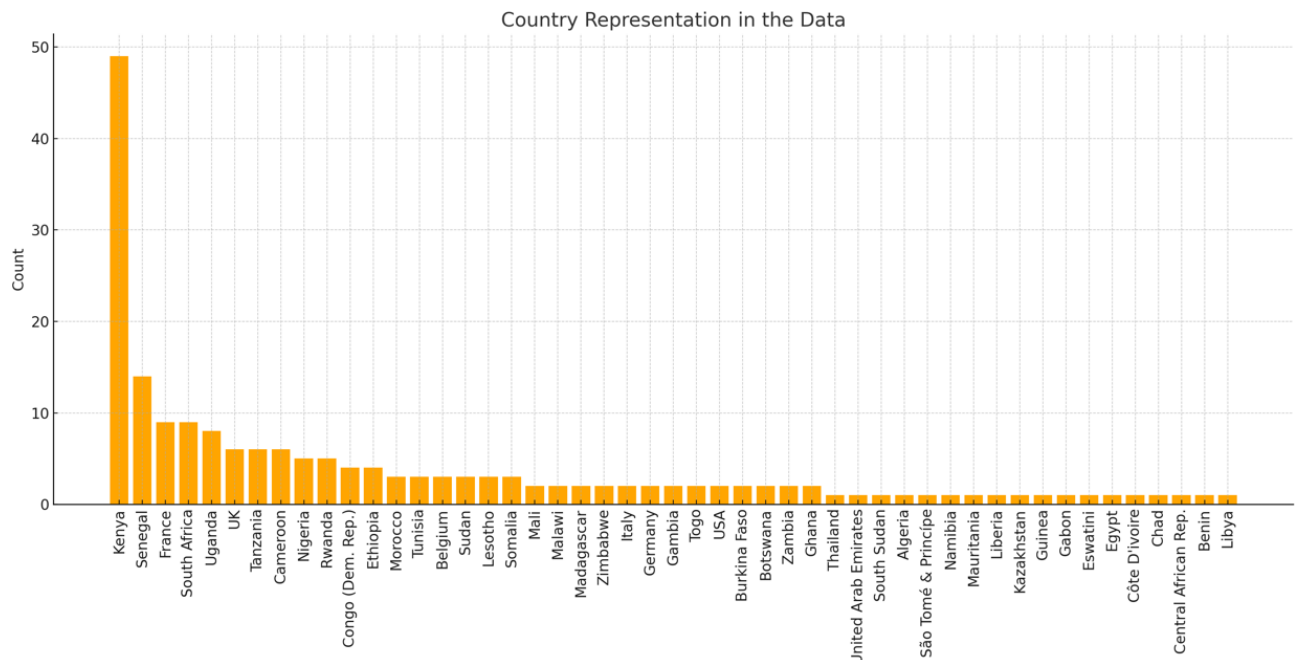
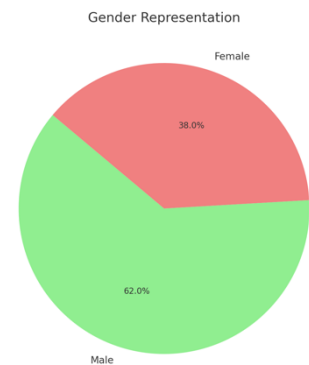
³ The term ‘Member’ represents a WOA Member Country or Territory.

The total number of registered participants was 187, with men (n=116) representing 62% and women (n=71) representing 38 % of participants.



Language Preferences. English was the predominant language preference representing 132 participants (70.59 %) while French was chosen by 55 participants (29.41%).

A total number of 49 Members were present, with Kenyan or Kenya-based participants representing the largest group of participants.



The structure, process and programme overview

The comprehensive programme of the three-day conference balanced high-level presentations, practical workshops, and participatory discussions to address the multifaceted challenges and opportunities in Veterinary Services across Africa. Overall, six special events in the plenary sessions; four parallel thematic sessions and two round table discussions. Six plenary sessions were held. After the high-level official opening there were four other plenary special events spread over the three days. These included the:

- Global and regional perspectives.
- Youth perspectives on workforce futures.
- Launch of WOAHA CAHW Guidelines.
- Introduction to the GALVmed Workshop.
- Launch of Africa PPP Forum.
- Closing ceremony and the reading of the conference recommendations.

The **thematic sessions** (refer to **Annex 1** for the agenda) focused on the different aspects around:

- **Education** covering topics such as digital transition (e-learning), recruitment, retention, and incentives as well as veterinary education;
- **Workforce assessment and development**, with topics such as workforce assessment, workshop development and continuing professional development;
- **Sustainable services and public-private partnerships**, covering the deployment of veterinary workforce for disease control and eradication, business skills and sustainable private sector engagement and the Africa PPP Forum
- **Technical themes and an enabling environment for effective veterinary workforce**, covering emergency management, gender inclusion in Veterinary Services, veterinary legislation and regulation, and One Health principles.

The **participatory round tables** presented parallel regional discussions by geographic areas (West, Central, Eastern, Southern, North Africa) as well as for different categories and cadres of veterinary paraprofessionals with topics such as *Surveillance and field activities*; *Challenges and opportunities in the use of antimicrobials in the field*; *Animal welfare*, as well as *Meat inspection and laboratory services*.

The **Africa Continental Conference** benefited from the support of a five-person team of conference facilitators (Facilitation of Systemic Change Consulting), as well as the WOAHO organising team (below).



Hlami Ngwenya
Moderator



Carole Goulet
Co-moderator



Gillian Koech
Co-moderator



Daniel Adero
Chief rapporteur



Isaac Kabuye
Graphic illustrator



Laibane Dieudonné Dahourou
Scientific coordination



Sonia Fèvre
Scientific coordination



Xyomara Chavez Pacheco
Abstracts and programme



Ann Loko
Logistics



Lyne Iyadi
Communication, press



Patrick Bastiaensen
Logistics, publications



Desmond Rono
Logistics



Carlota Moran
Logistics

Official opening and plenary overview session

Official opening

Official opening and welcoming remarks

Dr. Honoré N’Lemba Mabela, WOAHA Delegate of the Democratic Republic of Congo and President of the WOAHA Regional Commission for Africa



Dr. N’Lemba started his remarks by recognising all dignitaries present in the Conference. He then noted that the *World Organisation for Animal Health* (WOAH) plays a crucial role in Africa by supporting animal health and welfare, which directly impacts public health, food security, and economic development. The Bureau of the Regional Commission for Africa is responsible for ensuring that the Members’ demands are addressed. As Africa’s continental trade continues to grow, one should ensure that its Veterinary Services are equipped to ensure safe trade.

In the coming years, Dr. N’Lemba said, WOAHA Members in Africa must focus on several key areas to support national, regional, and continental programmes aimed at improving livelihoods in the region. Capacity building of Veterinary Services should be an ongoing process, especially given the high turnover of staff. Improved policies are essential to retain our trained and skilled workforce through tailored training and education programmes. He espoused confidence that the Deans of the education establishments will agree with him. Africa’s animal health services must evolve to tackle new challenges like climate change and digital transformation. By developing sustainable livestock practices, we can mitigate these impacts and make our Veterinary Services more efficient. Africa has made significant strides in the veterinary sector, laying a solid foundation for the future. The eradication of rinderpest in 2011 is a landmark achievement that shows the power of our coordinated, veterinary efforts. This success was made possible by veterinarians, *veterinary paraprofessionals* (VPPs), and *community-based animal health workers* (CAHWs), who brought veterinary care to remote areas.

He concluded by noting that it is essential to recognise the importance of *Public-Private Partnerships* (PPPs), which have facilitated access to affordable vaccines. Controlling the circulation and use of falsified veterinary products requires a well-trained workforce and effective legislation, both of which are essential in Africa to ultimately protect public health. In concluding, he noted he was encouraged that these issues will be part of discussions over the next three days of the Conference. With all relevant stakeholder’s present, we will move forward united in the same vision.

Dr. Karim Tounkara, Regional Representative for Africa (WOAH)



Dr. Tounkara recognised all participants and dignitaries present at the Conference including the Government of Kenya representatives in absentia. He noted that on behalf of the regional representation of WOAH in Africa, he was honoured to welcome everyone to Africa and to Nairobi, Kenya. He noted that the Conference represents a collective will to discuss matters of veterinary personnel in Africa recalling the convening in 2015 where a similar conference was held coming up with recommendations. The 2015 Conference recognised a number of challenges to be addressed and the WOAH Members decided to take this forward by implementing interventions such as improving trainings to equip graduates with

necessary skills to undertake their functions, improvement in institutional frameworks and legislations, and strengthening coordination between veterinarian and other para-veterinary services. As a result, three main projects were put in place and notably these have led to great progress. He concluded his remarks by urging delegates of the importance to pause and reflect and take note of progress made since 2015. *“We need to ask ourselves where we are today”,* he remarked. *“We have been invited here on the topic of the workforce in the veterinary sector. We should therefore identify priorities as well to enhance successes already realised. Key questions need to be addressed by this Conference including strengthening education and training and also involvement of PPPs in the sector”.*

Dr. François Caya, Deputy-Director General (representing the Director General) WOAH



Dr. Caya greeted everyone present and went straight to welcome them to the Conference. He recognised all dignitaries present and the President of WOAH for Africa. He noted that on behalf of the Director General WOAH, he was pleased to welcome everyone to the Conference. He thanked the Government of Kenya for willingness to host and grace this very important convening. He thanked all partners and donors as well for their support that made the Conference possible.

He noted that Africa is home to extraordinary resources which are important to the communities living on the continent. However, challenges such as diseases pose a threat and limit full realisation and utilisation of the resources. Further, human-wildlife conflict also complicates the matter. Unfortunately, challenges in the workforce is also limiting the containment of these challenges hence it is critical to fully recognise and address gaps in the veterinary workforce. The need to have reforms in education, better policies, enhanced PPPs among others are essential. Even though there are more resources from the development partners in the sector, there is a need to move together to craft lasting interventions for the identified challenges. He noted that he was excited to be part of this Conference that looks forward to not only launch global interventions to strengthen human workforce, but also dedicated to ensure stronger PPPs. Addressing global risks such as climate changes also need specialised skills among the workforce. He noted the conference is critical in sharing opportunities and crafting resolutions towards strengthening the veterinary workforce towards a stronger service delivery. He challenged participants to also identify partnerships and individual strengths that are critical for their day-to-day work. He wished everyone a successful Conference.

Dr. Huyam Ahmed Mohammed Elamin Salih, Director of the African Union's Interafrican Bureau for Animal Resources (AU-IBAR)



The Director of African Union's *Interafrican Bureau for Animal Resources* (AU-IBAR), **Dr Salih**, recognised all delegates present and dignitaries in the room. She noted that theme of the Conference could not be as timely as it is. On behalf of the Commissioner of Agriculture, Rural Development, Sustainable Environment and Blue Economy, Her Excellency Ambassador Josefa Sacko and on behalf of the African Union *Interafrican Bureau for Animal Resources* (AU-IBAR), she extended deepest gratitude to the *World Organisation for Animal Health* (WOAH) for convening this pivotal conference and for its unwavering commitment to strengthening veterinary

systems globally and in particular in Africa, and thanked the Government of Kenya for hosting this Conference in Nairobi.

She noted that a resilient workforce is more important in Africa than anywhere else where the role of veterinary professionals and veterinary paraprofessionals cannot be underestimated. A resilient veterinary workforce is not just a backbone for safeguarding animal health; it is also essential for ensuring food and nutrition security, public health, and sustainable development. She noted that in Africa, where the livelihoods of 470 million and more are intricately tied to animal resources, the role of veterinary professionals cannot be overstated. Yet, Africa's veterinary workforce faces challenges that require collective effort—ranging from capacity deficits to systematic vulnerabilities exacerbated by climate change, emerging diseases, and economic pressures.

She noted that in light of AU-IBAR mandate, it has instituted policies and strategies on major veterinary sector frameworks namely the *Animal Health Strategy for Africa* (AHSA) and the *Animal Welfare Strategy for Africa* (AWSA). The two strategies promote the implementation of WOAH Standards and are aligned to the *Livestock development strategy for Africa* (LiDeSA- 2015-2035), CAADP-Malabo and the African Union Agenda 2063. The AHSA strategic objectives include; strengthening animal health policy and institutional frameworks; improving capacities, access to inputs, markets and trade in animal resources; Strengthening science, innovation, research and knowledge management; as well as enhancing partnerships, investment and resourcing of the animal health sector amongst others. Indeed, to ensure **effective, efficient and sustainable** animal health delivery systems, a diversity of interventions and actors are required.

The *veterinary education establishments* (VEEs) and *veterinary statutory bodies* (VSBs) in Africa are operating in a rapidly changing environment with increasing demand for animal and animal products, rapid evolution of technologies and innovations, globalisation, emerging and re-emerging health threats as well as underfunding and climate change.

In Dr Salih's view, the veterinary workforce in Africa faces unique challenges, including:

- A shortage of professionals, specifically in rural and marginalised areas, there are only 5 to 10 veterinarians per million livestock units in Africa, compared to over 100 veterinarians per million livestock units in developed countries;
- The private and public sectors divide in service provision, with insufficient coordination;
- Capacity-building challenges characterised by insufficient training facilities, lack of specialised curricula, and limited practical experience hinder the development of a highly qualified workforce; and
- Limited continuing education and skill upgrading opportunities are limited, affecting the ability of professionals to adapt to evolving challenges such as emerging diseases and climate-related stressors. A recent *continuous professional development* (CPD) survey undertaken by AU-IBAR indicated that out of 54 Member States, only five have developed and activated veterinary CPD programmes.

With all these challenges, there are nonetheless still opportunities, in Africa, for improving the veterinary workforce through different interventions. AU-IBAR has responded to AU Member request and needs, and coordinated the establishment of the *Africa Association of Veterinary Education Establishments* (2A2E-V), that was launched on the 26 July 2018 in Cairo, Egypt, and thereafter endorsed by the AUC *Specialised Technical Committee* (STC) on *Agriculture, Rural Development, Water and Environment* (ARDWE) in 2020. The Association aims to enhance collaboration among all African veterinary education establishments and aims to harmonise veterinary curricula, research and community service. Some of the commendable achievements are the publication of the Guidelines on '*Re-Profiling of Veterinary Profession: Day 1 Competencies for Veterinarian in Africa*'. The Association also aims to improve and strengthen the quality and the performance of Veterinary Services in Africa based on WOAHP recommendations, inform harmonisation of veterinary curricula on the continent and promoting life-long professional development.

To encourage collaboration between public and private sectors, and to ensure sustainable models to expand access to animal health services, AU-IBAR in partnership with WOAHP jointly established and operationalised the '*Africa Forum for Public-Private Partnerships* (PPP) in the veterinary domain' (A3PF). The forum will serve as an integrated coordination and advocacy mechanism to support PPPs in Member States to deliver on continental mandates, and it will be officially launched this Thursday, 28 November 2024, as part of the Conference, inviting all delegates to join AU-IBAR and WOAHP to celebrate this unifying occasion.

Dr Salih concluded by highlighting the newly signed multi-partner agreement for the '*EU support to the eradication of peste des petits ruminants* (PPR) from Africa'. This is a three-year project to establish and strengthen the capacities and coordination of stakeholders for PPR eradication, as was previously successfully done with Rinderpest. Finally, she reiterated the commitment of AU-IBAR to serve the continent, with all stakeholders and partners, and looked forward to fruitful discussions and meaningful outcomes that will guide our collective journey towards a stronger, more resilient veterinary workforce in Africa.

Dr. Carolin Schumacher, CEO, Global Alliance for Livestock Veterinary Medicines (GALVmed)

Dr. Schumacher, on behalf of GALVmed, recognised all protocols and dignitaries in the Conference. She noted that there are a couple of challenges being faced in the field of veterinary work. Among the issues GALVmed has observed there is a low level of product innovation, product issues especially vaccine quality, purity, efficacy, safety and application, a regulatory system which remains still fairly weak, a disjointed supply chain, a performance of the veterinary sector that is wanting, the absence of a true system of regulating the use of products, leading to misuse, as well as the absence of post-treatment monitoring, among others.



All these -among others- make it difficult to operate in the sector.

Dr Schumacher also highlighted some of the positive changes observed so far, such as the number of Veterinary Services provided, which has fairly increased on the continent, the level of education is generally really good, and farmers have recognised the value of services being delivered by genuine veterinary professionals. However, there are still challenges: the connection between government and private veterinarians and paraprofessionals is still very weak. Linking up everyone in the sector is still not well done. Treatment only comes in when diseases have been identified and is working well in the poultry sector, unlike -unfortunately- in the ruminants' sector.

In her view, the present Continental Conference is very important and she expects that the participants will deliberate on how to make private sector involvement worthwhile and ensuring they serve all the regions, no matter how remote they are. She noted that the veterinary profession is one of the best sectors to work in.

Further, PPPs should be structured in such a manner that should benefit the larger workforce. She also noted that post-vaccination monitoring is absolutely critical even though is hardly happening today. Without treatment monitoring, no one can actually track and get to share the progress and lessons. Farmers are also central to the work that veterinarians and VPPs do. She expressed hopes that the Conference will allow the profession to reach every single farmer in Africa with services.

Ms. Grace Wasike, Director, Gender, Social and Economic Empowerment, Ministry of Gender, Culture, Arts and Heritage, Kenya



Ms. Grace Wasike (representing the Principal Secretary for Gender and Affirmative Action, Ms. Anne Wang'ombe, Ministry of Gender, Culture, Arts and Heritage, Republic of Kenya) started by recognising all dignitaries present, those represented in the Continental Conference and other participants. She noted that the Conference is an opportunity to pause, to reflect and to chart a way forward. The Conference theme, she noted, provides an invaluable opportunity to share and learn from each other. She noted the need to recognise the need for gender inclusivity in the sector. In the context of Veterinary Services, women and men play essential roles.

However, women face unique barriers, especially in the rural areas, to access services and training. There is a need to ensure gender considerations are integrated in all aspects of the profession. While there are many capable women, they often remain unrepresented and unappreciated. One must ensure that women have equal access to all opportunities in the profession. One must enshrine policies in the sector, as well as provide resources and opportunities for women. Last but not least is addressing barriers for entry level in the training for women as veterinarians and VPPs. Veterinary paraprofessionals can ensure that access is widened and reaches more people. Through gender-sensitive training, women can be encouraged to join veterinary and veterinary paraprofessional trainings. It is essential to foster a spirit of collaboration particularly in the private sector. By creating a supportive and inclusive environment all members of the workforce can contribute their knowledge.

She concluded by noting the importance of integrating both men and women in the workforce as this will lead to more sustainable animal health in Africa.

Dr. Christopher Wanga: Director of Policy, State Department for Livestock Development, Ministry of Agriculture and Livestock Development, Republic of Kenya



Dr. Christopher Wanga represented the Cabinet Secretary for Agriculture and Livestock Development, Kenya, H.E. Mr. Andrew Mwihia Karanja. He recognised all dignitaries and participants to this Continental Conference. During his own remarks, Dr. Wanga noted that he shares a lot of routes in the veterinary space especially in his past life where he served in the WOAHA technical committee for veterinary products, serving as the President of the *Kenya Veterinary Association (KVA)*, served the Commonwealth, and most recently was the Chair of the veterinary statutory body, the *Kenya Veterinary Board (KVB)*. He pointed the delegates to the fact that veterinarians

work in a very competitive space where nothing waits. The growth of veterinary practice and service to humanity is essential. He noted that in Kenya the notion of 'veterinary paraprofessional' is properly grounded in law. He invited WOAHA to look at the realities of veterinary regulations without prescribing to any Member what it should do. He also noted that there is another fairly

emotive issue that the Conference should look at - *Community Animal Health Workers* (CAHWs). For instance, in Kenya, as there is no shortage of professionals, there is a need to look into the lack of access to Veterinary Services instead. There is a need to look at the issues in the private practice that limit the deployment of trained CAHWs into the rural and *arid and semi-arid lands* (ASAL) areas. The delegates -in his view- need to properly digest the issues that make such properly trained personnel not deliver services in the rural areas. Finally, it would be nice for the political class to also note that vaccination is the main -but not the only- mode of control of viral diseases. One should ensure that it is science at play, and not politics, especially when talking animal vaccination. He concluded by expressing his joy to be part of this second Continental Conference and thanked WOAH for choosing to host this Conference in Kenya, after South Africa in 2015.

Speech by Cabinet Secretary (CS) for Agriculture and Livestock Development, Kenya, H.E. Mr. Andrew Muihia Karanja.

The CS in his speech read by Dr. Christopher Wanga recognised all dignitaries present and welcomed everyone to Nairobi, Kenya. He noted that he was delighted to join the delegates and to preside over this important Second Continental Meeting convened by the World Organisation for Animal Health to focus on creating a more resilient veterinary workforce 2024 and beyond. He recognised WOAH for choosing to host this event in Kenya after South Africa. The CS then invited all the international participants to sample the many interesting attractions in the country after the Conference. At the outset the CS wished to associate with the conference objectives that include: Highlighting the relevance and timeliness of investing in veterinary workforces in order to improve animal and human health, sharing challenges and good practices around veterinary workforce development and opportunities for regional harmonisation amongst countries and sub-regions in Africa; sharing new knowledge, tools and opportunities amongst Members, partners and donors; and exploring issues relevant for a work-ready and future-ready workforce.



The CS noted in his speech that the government of Kenya has ensured adequate numbers of skilled and motivated veterinary workforce are available to offer veterinary services by training over 100 veterinary surgeons and over 800 veterinary paraprofessionals annually who are adequately equipped and ready to work in any part of the country. The WOAH has built capacity of several veterinary professionals over time contributing to improvement of veterinary workforce. Key challenges faced by the veterinary professionals include the traditional veterinary training against a changing practice landscape including an economy that's not growing fast enough to uptake the required services. I call upon all stakeholders to support the development of Kenya's veterinary workforce planning and development through investment in the animal resources and institutional capacity development while supporting the redistribution of the available veterinary services to the *Arid and Semi-Arid Lands* (ASAL) where they are the most needed. The government fully supports the integrating of private animal health services providers in official veterinary work where registered veterinary surgeons and veterinary paraprofessionals under the law can offer public good services to the public on behalf of national or county governments.

He informed participants that agricultural transformation is critical to growing the economy, reducing the cost of food, alleviating poverty and therefore delivering 100% food and nutrition security, supporting industrialisation and promoting exports. Millions of citizens depend on agriculture for income and food security, and the country's economic growth therefore depends on enabling these people to achieve food security and contribute more fully to the economy. Animal health and production service providers are critical in food security and have sustained increased livestock production and productivity, food safety and security for income generation in terms of livestock products and by-products from the local and export markets, improved animal health care, disease control and improved animal husbandry leading to poverty alleviation and food security in the Nation.

The CS noted that the Ministry is committed to implementing the *Bottom-Up Economic Transformation Agenda* (BETA), Medium Term Plan IV of the Vision 2030 through the policy frameworks such as the Agricultural Policy, the *Agriculture Sector Transformation and Growth Strategy* (ASTGS), the Livestock Policy and the Veterinary Policy among others. Transforming the agriculture sector will provide the tools to combat price volatility, improving the environment for private investment, and developing more strategic approaches to lower the country's dependence on food imports. Food security requires a vibrant, commercial and modern agricultural sector that sustainably supports Kenya's economic development, national priorities, and commitments to the 'Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods' and the *Livestock Development Strategy for Africa* (LIDES). The policy measures are informed by the *Comprehensive Africa Agriculture Development Programme* (CAADP) and the United Nations *Sustainable Development Goals* (SDGs).

He remarked that for Kenya to realise the aspirations of a middle income country, there is need for structural transformation of the livestock sector to make it a major purveyor of food security, poverty reduction, economic growth and creation of employment. Sector transformation requires a clear road map that provides the national and county governments, development partners and private sector with a wide range of choices of evidence-based justified investment opportunities.

He invited all delegates to continue supporting the sector reform agenda within the animal resources sector, modernising veterinary laws and merging them into 3, i.e. the Animal Health Bill, the Veterinary Public Health Bill and the Animal Protection and Welfare Bill. Kenya also published a Livestock Bill to regulate commodity value chains. To inform targeted investments in the Livestock Sector value chains, Kenya is developing the Kenya Livestock Masterplan and rollout to maximise on the anticipated benefits to the sector, including support to mitigating climate change effects that have negatively impacted the livestock sector.

He then stated that the three key flagship programmes for this Government are represented in the leather and leather products value chain development aimed at boosting productivity along the leather value chain, but also the dairy value chain development targeting to double animal productivity and production of surplus milk for value addition and exports as well as supplying sufficient red meat for local and international markets.

Enabling interventions include control of livestock diseases, the improvement of meat processing facilities to enhance value of livestock for the pastoral communities, establishing honey processing plants, livestock genetic improvement and large-scale commercialisation of livestock feeds' production and conservation aimed at improving availability and affordability of livestock feeds and averting feed shortages during droughts.

Growth in the demand for animal source proteins has been driven by some of Africa's fastest growing economies in the past decade, increasing population and the emergence of an urban-centric middle class, spurring rapid growth in the consumption. Already the livestock sector generates 20% to 80% of the added value in several African countries and is the fastest growing sector in some African states. With this trend of more urbanised lifestyles, the share of livestock as a proportion of the Agricultural GDP in Africa will increase.

Animal resource categories in Kenya include livestock, wildlife, farmed wildlife, companion and aquatic animal species and bees. Addressing animal health, production and welfare, food safety and trade among other concerns in livestock, wildlife, aquatic and companion animals are important interventions. Animal health services are integral to the prevention, control and eradication of animal diseases that occasion huge economic losses and adversely impact livelihoods. Trade in animals and animal products require conformity to prescribed veterinary-related standards and application of sanitary measures that follow a *farm to fork* continuum. Provision of animal welfare is central to the physical and psychological wellbeing of animals, animal health and production and manifests in better performance, improved market access, safe and mutually beneficial companionship.

In conclusion, the CS in his speech appreciated the strong collaboration between WOAH and the Ministry, which hosts the Sub-Regional Representation for Eastern Africa that supports implementation of the national and regional development agendas. He invited WOAH to consider seriously supporting the rest of the continent to adopt Kenya's institutional governance of veterinary medicine and stewardship regulatory regime model as an effective *antimicrobial resistance* (AMR) mitigation measure.

He then declared the Conference officially opened.

Plenary overview session

Empowering Veterinary Workforce Development: Global and Regional Perspectives

Ms. Barbara Alessandrini, Head of Department, Capacity-building Department (WOAH)



The global perspective

[Barbara Alessandrini presented an evaluation which was conducted after the 2015 Conference held in Irene \(Pretoria\), South Africa.](#) This evaluation aimed to understand the various components and aspects of veterinarians and paraprofessionals in the African region. Topics covered by the evaluation included capacity-building versus training, global and regional perspectives of veterinarians and VPPs in Africa, regulatory frameworks and policy work, resource allocation, and the engagement of WOAH Members. A number of findings are shown in the tables below:

Table 1. PVSIS insights - Veterinary workforce since 2016

Workforce related parameters	Members who underwent a PVS Evaluation	
	Global	Africa
Majority of positions requiring veterinary or other professional skills at local levels are filled	49%	23%
Majority of positions requiring VPP skills are occupied by personnel holding appropriate qualifications, with a variable level of veterinary supervision	62%	64%
Members have veterinarians with knowledge, skills, and practices sufficient for all professional/technical activities of the VS	59%	61%
Members have veterinary paraprofessionals who have undergone training and qualifications of a fairly uniform standard that allows the development of some specific competencies (e.g. vaccination on farms, meat hygiene control, basic laboratory tests).	63%	65%
Members' VS accessing the Continuing Education that is reviewed and sometimes updated, but it is implemented only for some categories of veterinary professionals and paraprofessionals.	41%	26%

Table 2. Veterinary legislation missions, conducted since 2016

Veterinary legislation parameters	Members who underwent a PVS Evaluation	
	Global	Africa
Members have Veterinary legislation that covers most fields of the veterinary domain, including those fields under other Competent Authorities. The VS have the authority and capability to develop and update national veterinary legislation, including via consultation with stakeholders.	50%	37%
Members have the capability and authority to implement Veterinary legislation through a programme of communication and awareness raising and through formal, documented compliance and inspection activities.	30%	13%

In conclusion, she noted the following:

- The Africa region is strong in terms of engagement and re-engagement in the PVS Pathway and therefore demonstrates great efforts in transparency.
- These efforts now make it possible to measure performance and monitor progress and PVS can provide a wealth of new data and insights to discover.
- The methodologies and tools that WOAHA has developed in the last years now require action and sustainable engagement.

Barbara Alessandrini therefore encouraged the participants to:

- Take advantage of this Conference to learn more on what is available.
- Bring your expertise. Dare and be creative in parallel sessions.
- Think at what you want to take home, and work for this to happen.
- Benefit from peer-to-peer exchanges, good practices and expertise; and
- You have been chosen to come here: grab the opportunity !

Dr. Simon Kihu, Programme Officer, Sub-Regional Representation for Eastern Africa (WOAH)

Recommendations from the 2015 Continental Conference

[Dr. Simon Kihu presented the recommendations from the 2015 Continental Conference on the Role of VPPs in Africa](#) as summarised below:

a) Recommendations for WOAHA

- To continue to support the WOAHA Members involved in the WOAHA PVS Pathway for the implementation of the recommendations made through the WOAHA PVS missions.
- To continue to advocate that donors allocate funds for the continuation of the PVS Pathway in a long-term sustainable framework.
- To consider developing minimum day-one competencies for the various categories of paraprofessionals that exist, in scope and in level of qualification; and
- To consider developing minimum core training curricula for the various categories of paraprofessionals that exist, in scope and in level of qualification.



b) Recommendations to WOAHA

- To encourage the participation of representatives of national, regional and continental associations of veterinary paraprofessionals to participate in the fourth OIE Global Conference on Veterinary Education, to be held in Thailand in June 2016;
- To take appropriate steps in terms of monitoring progress made in the implementation of these recommendations;
- To reconvene as appropriate, regular regional fora on the role of Veterinarians and Veterinary Paraprofessionals in Africa where progress made will be assessed and further recommendations made towards the achievement of the goals of this initiative.

c) *Recommendations for Members*

- To address the shortcomings highlighted in PVS pathway mission reports, in particular the critical competencies related to human resources, particularly to veterinarians and veterinary paraprofessionals;
- To facilitate and, where possible, harmonise the legislative framework for the establishment and management of Veterinary Statutory Bodies...
- To support the veterinary paraprofessionals to establish independent national, regional and/or sector-wide associations, able and competent to represent the profession(s) in the Veterinary Statutory Body or Bodies;
- To consider their expectation that the National Veterinary Statutory Body will include veterinary paraprofessionals in their decision-making bodies...
- To consider their expectation that the National Veterinary Statutory Body will define conditions and admission criteria for continuing education and postgraduate education for veterinary paraprofessionals;
- To mobilise Veterinary Educational Establishments and Veterinary Associations to develop the required training opportunities for veterinary paraprofessionals;
- To take necessary steps for the enactment and enforcement of required legislation that will ensure the implementation of these recommendations.

Dr. Ashish Sutar, Programme Officer, Sub-Regional Representation for South-East Asia (WOAH)
Veterinary Workforce Development in Asia and the Pacific

[Dr. Ashish Sutar informed the participants that he was representing the perspectives from the Asia and the Pacific.](#) In the region, he noted, they have developed a guideline on how to implement a regional Veterinary Workforce approach. This approach involves the following:

- Organise an initial regional awareness raising event
- Conduct national veterinary workforce workshops
- Engage with *Veterinary Education Establishments* (VEE) and *Veterinary Statutory Bodies* (VSB)
- Always refer to WOAHS guidelines and tools
- And not to forget *Gender, Disability and Social Inclusion* (GEDSI)



Lessons Learnt from the journey Asia Pacific include the following:



Dr. Dmitry Morozov, Programme Officer, Sub-Regional Representation for Central Asia (WOAH)
Veterinary Workforce Development in Eastern Europe and Central Asia

[Dr. Morozov conveyed his gratitude to all the participants and pointed out that he was enjoying his stay in Kenya and looked forward to coming back. He shared among others:](#)

- Awareness activities in Eastern Europe and Central Asia;
- Key survey findings from various points;
- Veterinary Education in the Europe region (trends, twinning programme, gaps, accreditation);
- Veterinary Statutory Bodies in the Europe region;
- Success stories from Georgia; and
- Plans for the future.



He noted that in terms of the workforce structure, the picture is totally different from Asia and Africa.

Based on available [WAHIS](#) data of five Members of Central Asia and three from the Caucasus (2018-2019) there is a realisation that the pictures do not match. The ratio of veterinarians to VPPs in Eastern Europe and Central Asia is 87% : 13%. The region also notes that *Continuous Professional Development* (CPD) is essential for veterinarians to ensure they continue to provide the best care.

Some of the challenges the region faces include:

- Six percent (6%) of participating Members indicated a general shortage of personnel in the workforce;
- A high retirement rate indicated by 71% of Members with fewer new recruitments to replace the retired; and
- 71% indicated personnel leaving the workforce for other Members.

In conclusion,

- Many European Members have not yet undertaken the PVS evaluation, or their last assessment occurred over a decade ago;
- The workforce development team should intensify collaboration with national Delegates to advocate for the implementation of PVS and other critical national veterinary initiatives;
- Maximizing donor funding opportunities is essential; and
- Sharing success stories from Members that have successfully implemented PVS and other veterinary improvements can inspire and encourage similar efforts across the region.

The region has a number of plans for the future such as:

- The organisation of a similar Regional Conference on Veterinary and Paraprofessionaa Education;
- Enhanced coordination with other agencies; and
- Exploring Public-Private Partnerships (PPP) at national level.

THEMATIC SESSION 1 ■ WORKFORCE ASSESSMENT AND DEVELOPMENT

Workforce Assessment and Development

Workforce Assessment

Session leads: Dr. David Sherman (left), Senior Programme Coordinator, Capacity Building Department and Dr. Laibane Dieudonne Dahourou (right), Project Officer, P3V Project, Regional Representation for Africa (WOAH)



Session objectives

- Create awareness on the need and value of veterinary workforce assessments to ensure a strong and effective national Veterinary Services and reliable access to animal healthcare.
- Identify tools and approaches available for conducting workforce assessments.
- Participate in a simulated workforce assessment exercise.
- Participants will have a better understanding of the kinds of information and other resources required for conducting workforce assessments.



Session summary

This session included presentations on the need and value of workforce assessments, the tools available for workforce assessment in both the human health and veterinary sectors, and a participatory simulation exercise to identify gaps in a national veterinary workforce with an emphasis on defining the types of information needed to conduct a comprehensive and informative assessment. The results of the exercise were reviewed and the challenges of conducting veterinary workforce assessments examined at the end in a panel discussion.

Session presentations

Dr. David Sherman, Senior Programme Coordinator, Capacity Building Department (WOAH)
Rationale for, and development of, the WOA Veterinary Workforce Assessment Tool

Systematic, evidence-based workforce planning offers significant benefits, especially when coupled with investments in training institutions to meet future workforce demands. For example, in France, workforce dynamics are shifting as more women enter the workforce while a large number of men approach retirement, likely shift in dynamics, attitude of the workforce. Similarly, in 2015, Kentucky faced a significant shortage of large animal veterinarians. Through data visualisation, the state was able to calculate a viable and sustainable number of veterinarians required. Tools like the PVS pathway gap analysis—when data is available—help address workforce needs at a regulatory level (not last-mile delivery service distribution / capacities of the workforce). Moreover, the new WOA Veterinary Workforce Assessment Tool can further assist in planning and adjusting workforce strategies effectively to meet evolving needs.

Dr. James Asamani, WHO Health Workforce regional lead, World Health Organization (WHO) Regional Office for Africa (AFRO)

The WHO Health Labour Market Analysis Tool: the rationale for the Tool and the challenges it addresses

The *Universal Health Coverage* (UHC) in 2020 - 2021 highlighted the significant gap in Africa between disease burden and workforce availability, with a comparison to global metrics revealing that 920 million people in Africa and nearly half of the global population, lack access to good quality health services. Of this, 48% of the gap is due to competency issues, and 52% is attributed to a lack of healthcare utilisation. In Africa, 1 in 10 doctors and nurses migrate abroad, and in Europe, 30% of doctors and 20% of nurses are nearing retirement. Furthermore, 27% of the healthcare workforce is unemployed, indicating a critical need for a 43% increase in the healthcare budget to address these issues.

To address the imbalance between the current supply and demand of healthcare workers, especially in regions facing disease burdens, it's essential to focus on the distribution of the workforce. For instance, Zimbabwe has been losing nurses to the UK, but a policy change has successfully reduced migration rates by 55%. The Health Labour Analysis Support Tool, an Excel-based system with 10 modules, provides insights into the dynamics of the healthcare workforce, offering both descriptive and predictive labour market models. This tool helps map disease burden to the population, identifies essential service interventions, and calculates the share of the workload for practitioners. It includes validation from both technical and political sides and has been assessed in 22 African Members. In Zimbabwe, the evidence gathered through such tools led to policy actions, including a committed investment of USD 116 million out of the required USD 463 million to address workforce challenges.

Prof. Justin Kouamo, Lecturer, Assisted Reproductive Technologies, *École des sciences et de médecine vétérinaires*, University of Ngaoundere (Cameroon)

Analysis of the accessibility of veterinary care in Cameroon

[Veterinary Livestock Units and Tropical Livestock Units were utilised in this study](#). The non-availability of data was a significant constraint. To address this, the VLU attributed each animal to a coefficient that correlated with the Tropical Livestock Unit. Regarding the distribution of veterinarians across the regions (n=10), out of 59 departments, 24 had no veterinarians, particularly in coastal regions where security issues posed challenges. There are 29 veterinary clinics in the capital city, leading to a concentration of veterinarians in that area, and an unequal distribution overall. In the Western region, poultry and sheep farming areas have a higher number of veterinarians. The Southern region, however, has only 0.66 veterinarians per 100,000 people, compared to the standard of 1 vet per 100,000 people. Public sector veterinarians and VPPs were not included in this study, but future research will consider incorporating them to better assess the workforce dynamics.

Session panel discussion (questions and answers)

How can we reconcile this workforce assessment methodology with the existing capacity at country-level and the perceived needs, in terms of access to services, diagnostics ?

Dr. James Asamani, WHO-AFRO : As we ask ourselves what approach to take for workforce planning, we consider two main strategies: demand-based planning, which focuses on how many people are utilizing services, and the challenges that prevent others from accessing them—such as infrastructure and access to finance, and need-based planning, which considers the population, disease burden, infrastructure, financing, and the resources and supplies needed. For some countries with relatively sufficient resources, demand-driven planning is preferred, but in Africa, we have opted for a need-based planning approach to better address the specific needs of the population.

What has been the reaction from the Government on the workforce study in Cameroon?

Prof. Justin Kouamo, University of Ngaoundere (Cameroon) : The government has initiated a livestock development project, with FCFA 15 million (approximately USD 25,000) available for veterinarians.

Can you comment on the hypothesis that rural people are likely to return to the rural areas for employment or business, after completing their education.

Dr. James Asamani, WHO-AFRO : A curriculum assessment conducted at the University of Pretoria revealed that students from rural areas are less likely to return to their communities after graduation. This raises the question of how we can inspire individuals to work in their local communities. Zimbabwe offers a good example, with many veterinarians working globally in academia and professional roles. Conversely, a study in the US suggested that the majority of veterinarians tend to return to rural areas, highlighting that the decision largely depends on the specific context and circumstances of each Member or region. The rural pipeline approach advocates for establishing training schools in rural areas, where students can practice locally and be linked to job opportunities in the private sector. To support this, the private sector should make investments, while the government can offer tax incentives. This approach was tested in Niger, but security issues hindered its full implementation. Countries lose much more when their workforce migrates abroad than they gain from remittances sent back by those workers.

“Better to retain than to look for remittances”



Dr. James Asamani, WHO Health Workforce regional lead, World Health Organization (WHO) Regional Office for Africa (AFRO). Picture © L. lyadi (woah) 2024.

Session recommendations

- Gather data on workforce(s) and then analyse these data as a next step to inform policy recommendations which are realistic and feasible.
- Members who have perceived gaps in the veterinary workforce but are not conducting veterinary workforce assessments should establish working groups with appropriate stakeholder representation to develop a plan for conducting a veterinary workforce assessment with due consideration to mechanisms for collecting the necessary data, in view of meaningful assessments.
- WOA should provide support and resources to Members through the PVS Pathway to assist Members in organising and conducting veterinary workforce assessments that can lead to (better) workforce planning and development.

Workforce Assessment and Development

Workforce Development



Session lead: Dr. David Sherman, Senior Programme Coordinator, Capacity Building Department (WOAH)

Session objectives

- Create awareness on how workforce assessments are utilised to create workforce development plans and policies.
- Better understand the processes of workforce development through the presentation of examples of actual workforce development activities in the region both in the human health and veterinary sectors.
- Identify challenges and opportunities for implementation of workforce development plans and policies.

Session summary

This session followed on from the session on veterinary workforce assessments (see previous pages) and focuses on how those assessments can be used to determine policies and practices that will result in veterinary workforce development that addresses identified workforce gaps in ways that are consistent with the human, financial, educational and other resources constraints that exist within the Member. Examples were provided through presentations from several Members in the region (Kenya, Senegal, Republic of South Africa, the United Republic of Tanzania, Togo) and addressed workforce development in both the human health and veterinary sectors.

Session presentations

Dr. David Sherman, Senior Programme Coordinator, Capacity Building Department (WOAH)
Overview of Veterinary Workforce Development

Dr. Evelyn Chagina, WHO Country Office (Kenya), Dr. James Asamani, WHO Health Workforce regional lead, World Health Organization (WHO) Regional Office for Africa (AFRO) and Dr. Joel Gondi, Director of Health workforce development at the National Public Health Institute (NPHI), Ministry of Health (Kenya).

Workforce Development in the Human Health Sector and the Kenya Experience

Ms. Wamoja Ayubu Dickoalgwa, Principal administrative officer, Human resource department, Ministry of Livestock and Fisheries (Tanzania).

The Evolution of the Veterinary Council of Tanzania and its Contribution to National Workforce Planning [[download](#)]

Dr. Laibane Dieudonne Dahourou, Project Officer, P3V Project, Regional Representation for Africa (WOAH)

Experiences of the P3V Project on veterinary workforce development in Togo and Senegal.

Dr. Nandipha Toyota Ndudane, Chair of the WOA Ad-hoc Group (AHG) for CAHW guidelines, Chair of the South African Veterinary Council (SAVC) and Director (Principal) of the Tsolo Agriculture and Rural Development Institute (South Africa).

***Navigating Veterinary Workforce Evolution in South Africa* [[download](#)]**

Session panel discussion (questions and answers)

The above presentations were followed by a panel discussion to discuss the challenges and solutions related to the successful implementation of workforce development plans:

Dr Komlan Daniel Batawui, Senior Ministerial Advisor, WOA Delegate of Togo.

Togo, along with Senegal, benefitted from a WOA Project (P3V), supported by the French Development Agency (*Agence Française de Développement*, AFD) to improve Veterinary Services through capacity building for VPPs. This led to a harmonised national curriculum for training institutions in Togo, and later with training institutions in Senegal. Togo also had the opportunity to conduct a demographic analysis to better understand the distribution of VPPs, in view of proper planning for the animal health sector in Togo. The Member developed a strategic plan for VPPs and implemented training of its VPPs on good veterinary practices and regulation of veterinary practice in-country, as well as good communication skills. Togo continues to maintain close communication with Senegal for the sharing of best practices.

Dr Moutar Seydi, representing the WOA Delegate of Senegal and P3V Project Contact Point.

P3V Project activities are similar to those implemented in Togo. Senegal developed supervision modalities and guidelines for VPPs. An important challenge remains the absence of a regulatory framework on the supervision of VPPs. The Project is supporting continued learning for VPPs.

Dr. Joel Gondi, Director of Health workforce development at the *National Public Health Institute* (NPHI), Ministry of Health (Kenya).

Commenting on the presentation by Dr Evelyne Chagina on ‘Workforce development in the human health sector and the Kenya experience’, Dr Gondi stated that it is important to clearly define the objectives of workforce *assessment* as one assessment cannot solve all the challenges of the workforce. The assessment is multisectoral (public and private sectors, consumers and service providers), therefore proper mapping of stakeholders is important. It is critical that one brings on board the real decision makers regarding possession and provision of reliable and accurate data right from the beginning. One should avoid relying on one data source only, but rather triangulate various data sources to ensure the reliability of information. Also, workforce assessment is a long process and thus stakeholder buy-in is critical. This can be achieved through effective stakeholder engagement. Definition of what roles are attributed to the different cadres is a challenge as sometimes there are overlaps between cadres. This requires clear definitions of scope of practice of different cadres. Many stakeholders are also interested in the granular analysis of workforce, for example at sub-national levels to increase utilisation of the data. This is particularly important in federal(ised) systems where decisions and budgets may be managed at sub-national level. Lastly, one should take into account extraordinary disruptions such as disease outbreaks or natural disasters during the analysis.

THEMATIC SESSION 2 ■ EDUCATION

Education

Digital transition in Africa: e-learning in the veterinary domain

Session lead: Mrs. Hana Abdelsattar, Senior Training Programme Manager, Capacity-Building Department (WOAH)

Session summary



This session on *Competencies for Digital Learning - Challenges and Opportunities to Transform Lifelong Learning in Africa*, aimed to enhance digital learning strategies for African Veterinary Services. Participants explored methods to build inclusive, collaborative learning communities, identify digital networks, and discuss solutions for accessibility barriers. Emphasis was placed on promoting engagement and lifelong learning through innovative digital tools and practices, with insights into using telehealth and competency-based e-Learning. The session concluded with a forward-looking discussion on the future of digital learning, aiming to sustain impactful education across the continent.

Session methodology

The session was implemented using Mentimeter™ questions, in-person presentations or by video, followed by a discussion session.

Session presentations

Dr. Jenny Maud, Veterinary Education and Online Training Specialist and Dr. Gerald Mucheru, Regional e-Learning platform (*Virtual learning centre, VLC*), Food and Agriculture Organisation of the United Nations (FAO)

Collaborative Learning: Developing Inclusive Online Communities, from Local to Global: FAO Virtual Learning Centres (VLC)

[The FAO team presented the FAO Virtual Learning Centre \(VLC\) concept](#), noting the various digital learning forums available to engage communities at local, regional and global levels on various topics (e.g. the *One Health Knowledge Nexus* is powered and governed by the Quadripartite in support of activities of the One Health Joint Plan of Action). Key to the success of the VLC concept : being user-friendly and inclusive.

Ms. Mary Katherine O'Brien, Researcher, Education and Outreach, *Center for Animal Health and Food Safety (CAHFS)*, College of Veterinary Medicine, University of Minnesota (US). *Digital Learning Insights from ProgRESSVet - Strengthening Competencies and Collaboration in Africa*

[Ms. O'Brien presented the Center for Animal Health and Food Safety \(CAHFS\)](#) which is at the core of the University of Minnesota's ProgRESSVet project, aimed at building the capacity of

Veterinary Services. The CAHFS is a WOA Collaborating Centre for Day-One Veterinary Competencies and Continuing Education. Ms. O'Brien highlighted the four P's to consider in e-Learning programmes. These are: the importance of embracing *Partnerships* - to ensure local context is accounted for and encourage eventual local leadership and direction; *Pragmatism* (to be flexible to use of dual delivery mechanisms, tools in order to make practical impact on national VS functioning). *Projects* and *Participation* beyond the programme.

Ms. Silvia d'Albenzio, Training Manager at Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise (IZSAM, Teramo, Italy)

Innovative Training Methodologies to Transform Lifelong Learning in Africa: Insights from WOA Collaborating Centres

The IZSAM is a WOA Collaborating Centre for Veterinary Training and Capacity Building. Three projects were presented: *Enhancing Research For Africa Network* (ERFAN) and EU Twinning project with France, Italy and Tunisia and the development of the Leadership eModules with WOA Collaborating Centres.

Dr. Alexis Kiers, Vice-President, Engagement and Operations, Africa, VETNOW (Kenya)

Building Capacity for Animal Health Service Providers through Remote Care in Kenya

[VetNOW, partnering with GALVmed and AVTA](#), is rolling-out digital apps in order to deploy veterinary services to animal health providers, to support quality veterinary supervision of VPPs, better diagnostic accuracy, and serve more clients.

Dr. Hadrien Jacquet, Director, Ecole Nationale des Services Vétérinaires (ENSV) France Vétérinaire International (FVI, France)

WOA Collaborating Centre for the Training of Official Veterinarians (Europe)

Dr. Jacquet, Director of the National School for (official) Veterinary Services in France, presented their e-Cerise e-Learning system and shared the constraints encountered in creating training modules.

Ms. Emma Alegi, Gender Specialist, Dr. Jenny Maud, Veterinary Education and Online Training Specialist and Dr. Gerald Mucheru, Regional e-Learning platform (Virtual Learning Centre, VLC), Food and Agriculture Organisation of the United Nations (FAO)

Can online learning bridge gender gaps to facilitate competency development?

[Insights provided included the fact that women seem less familiar with online learning](#), some required their husband's permission for training. Sometimes access to digital devices may pose a problem. At the same time, women are more exposed to zoonoses. Hence, new approaches are needed to narrow this gender gap. Key insights coming out of this presentation were gender differences in access to technology, familiarity with technology and the ability to attend to face to face training. Whilst challenging in some circumstances, online learning can also be a powerful tool and a pathway to empowerment of women.

Session highlights

Learner self-assessment and reflection emerged as a vital tool to measure success in acquiring digital competencies, as it encourages learners to assess their progress, identify gaps, and connect learning to practical application. This approach fosters accountability and ownership of the learning process, complementing objective measures like quizzes or real-world applications. Its impact can be measured by tracking engagement, correlating self-reported progress with assessment outcomes, and analysing reflections for themes and challenges, making it a valuable strategy for fostering personal growth and improving learning outcomes.

Session recommendations

- Adopt learner-centred designs: Ensure flexibility and pragmatism in e-Learning platforms by considering tools, language, platform accessibility, and learner support.
- Foster collaborative learning: Promote inclusion and motivation through well-prepared and managed collaborative learning approaches.
- Address barriers: Mitigate technological and language challenges to ensure equitable access.
- Enhance engagement: Prioritise strategies to maintain learner retention and active participation.
- Measure training outcomes: Employ diverse methods, such as digital assessments and real-world application of skills, to evaluate the success of training.
- Digitise animal health: Leverage digital tools to enhance Veterinary Services, professional collaboration, and preventive care.
- Strengthen regulatory frameworks: Develop oversight mechanisms for the use of digital tools (e.g. e-Learning, telehealth) by VSBs and VEEs.
- Promote gender inclusion: Utilise e-Learning and digital tools to bridge gender gaps in Veterinary Services.
- Explore emerging technologies: Investigate the potential of the [Metaverse](#) to enhance learning, simulate interactions, and address challenges in conflict zones.

Education

Recruitment, retention and incentives

**Session lead: Dr. David Sherman, Senior Programme Coordinator,
Capacity Building Department (WOAH)**

Session summary

This session aimed to achieve the following:

- Raising awareness about the challenges of recruiting and retaining students in veterinary and veterinary paraprofessional training programmes as well as the challenges of aligning admissions policies with national workforce needs;
- Sharing examples of efforts to address these challenges;
- Developing new ideas for addressing these challenges.



Ensuring the presence of an adequate, well trained veterinary workforce begins with attracting sufficient numbers of interested and capable people into training programmes, retaining them through the course of their training, developing the skills they will require in the workplace and exposing them to the range of employment opportunities potentially available to them once they graduate. These objectives are not without their challenges. Primary and secondary school students may be unaware or uninterested in animal health care or have an insufficient understanding of the varied opportunities available to them as veterinarians or veterinary paraprofessionals. Traditional teaching methods in veterinary and veterinary paraprofessional training institutions may not generate or sustain student interest over the duration of the curriculum. Educators and employers may not communicate sufficiently to identify the skills and knowledge that are required in a changing workplace and admissions policies may not reflect the overall needs of the national Veterinary Services to address gaps in the workforce. Though a series of presentations and a panel discussion, these topics were addressed. Examples on the current state of play and descriptions of innovative efforts to address the challenges were presented and opportunities provided to share and discuss together new ideas and innovations to address recruitment and retention issues.

Session Presentations

Dr. David Sherman, Senior Programme Coordinator, Capacity Building Department (WOAH) *Connecting Veterinary Education and Veterinary Workforce Development*

Ensuring the presence of an adequate, well trained veterinary workforce begins with:

- Attracting sufficient numbers of interested and capable people into training programmes;
- Retaining them throughout the course of their training programme;
- Developing the skills they will require in the workplace; and
- Exposing them to the range of employment opportunities potentially available to them once they graduate.

“Lecturers in veterinary schools need to light the fire. Give context to their lectures so that students understand why certain information/data is given for their future use. Governments need to develop strategies to retain veterinary graduates after graduation to ensure that they do not leave the country for greener pastures”.

Prof. Dietmar Holm, President, African Association of Veterinary Education Establishments (2A2E-V) and Dr. David Sherman, Senior Programme Coordinator, WOAH *Survey of African VEE Admissions Policies as they relate to Veterinary Workforce Development*

The main points raised in this presentation are:

- Regulation and organisation of African VEEs is lacking;
- African VEEs generally have unacceptable student attrition rates⁴;
- There exists some evidence of workforce needs-based admission by African VEEs exists, however admissions are mostly based on perceptions rather than evidence;
- The impact of centralised vs. decentralised VEE admission systems requires further investigation in Africa;
- Veterinary-specific accreditation of VEEs should be implemented across Africa, which must include standards for processes to ensure that workforce needs are met;
- VEEs in Africa should guard against improper admission of students, as this is associated with higher student attrition. Notably, political interference in the VEE admissions system should be eliminated;
- Systematic and reliable mechanisms need to be developed to regularly assess veterinary workforce needs in Africa and VEE admissions policies need to be aligned to better support efforts to address workforce needs.

“In Africa, many students enter veterinary schools with the hope of later changing to engineering/medicine schools. In the US and Europe this would be the other way around. Ideally, we do not want students who choose veterinary medicine as a second or third option”.

⁴ Attrition refers to a decrease in the number of students participating in course activities or a degree program. Attrition takes place when a student “drops” from the class role for a course or the student leaves a course of study.

“If there are VPPs working in a rural/remote area, one should put in place incentives to enable them upgrade to a veterinary degree”.

Dr. Fatou Ka, Director of the Centre National de Formation des Techniciens de l'Élevage et des Industries Animales (CNFTEIA) or National Training Centre for Livestock and Animal Industry Technicians, Saint-Louis, Senegal

Promoting the innovative recruitment of women into a VPP training programme in Senegal.

The main points raised in this presentation are:

- The Ministry of Vocational Training (*Ministère de la formation professionnelle*) in Sénégal should improve gender mainstreaming in recruitment;
- The Ministry of Agriculture and Livestock (*Ministère de l'Agriculture et de l'Elevage*) should promote the integration of women and people living with disabilities in the public service;
- Access to finance should be promoted for women, the youth and people living with disabilities, wishing to set up on their own.



Dr. Fatou Ka, Director of the Centre National de Formation des Techniciens de l'Élevage et des Industries Animales (CNFTEIA) or National Training Centre for Livestock and Animal Industry Technicians, Saint-Louis, Senegal. Picture © P. Bastiaensen (woah) 2024.

Dr. Ashish Sutar, Programme Officer, Sub-Regional Representation for South-East Asia (WOAH)
Working with regional networks of VEEs and VSBs in Asia for Veterinary Workforce Development.

The main points raised in this presentation are:

- Networking among VEEs and VSBs across countries can provide valuable opportunities for information and resource sharing towards harmonised curriculum and accreditation processes;
- Such networks can also provide a unified voice to advocate for policy changes and better funding for veterinary education and practice to build capacities;
- Enhanced communication between Veterinary Services, VEEs, VSBs and other stakeholders can facilitate the alignment of curriculum reforms with workforce needs;
- Collaboration can help align recruitment and admissions policies at VEEs to address workforce gaps identified by VSBs and other workforce assessment initiatives;
- Collaboration between VSBs and VEEs plays a significant role in increasing the mobility of vocational education graduates across borders due to the harmonisation of training and standards; and
- WOAHA can play a critical role in such endeavours.

Dr. Shimelis Dagnachew, University of Gondar, Ethiopia.

Engagement of Veterinary Medicine Students in Extra-curricular Activities and Impact on their Educational Performance at the University of Gondar, Ethiopia

The main points raised in this presentation are:

- The University of Gondar, Ethiopia and Ohio State University, USA implemented a WOAHA Veterinary Education Twinning Programme between 2015 and 2022;
- Despite the various constraints that hinder the quantity and quality of student activities (such as performance activities and community services), the impact on raising student motivation towards veterinary medicine and improvement of educational quality is positive;
- The student led extracurricular programmes like professional student clubs should be encouraged in universities.

Session panel discussion (questions and answers)

In light of the findings of the survey that Prof. Holm and Dr. Sherman presented, what do you think the African Association of Veterinary Education Establishments (2A2E-V) can do as an association to promote a more active engagement of African Veterinary Education Establishments (VEEs) in addressing specific veterinary workforce needs in their countries?

Prof. Dietmar Holm, President of 2A2E-V.: African VEEs cannot operate effectively without the VSBs. VEEs need to be accredited by external impartial bodies such as VSBs. There is need for support to get the VSBs in Africa improved and aligned in terms of standards. Day one competencies can be used as a benchmark for training institutions. Twinning programmes for institutions within Africa need to be encouraged. The expertise, the experience and the capacity exist.

What activities have been implemented by students of the (regional) Veterinary School of Dakar (Ecole Inter-états de Sciences et Médecine Vétérinaires, EISMV) to attract secondary school students in its veterinary training programme ?

Mr. Noé Tchiguir, Veterinary School of Dakar Student Association: The EISMV students organise activities to attract students not only from secondary schools but also from other university faculties. The students also organise activities such as sport games, cultural activities and visiting other towns, all in an effort to attract students into the veterinary training programme. Social media (WhatsApp, Instagram, Facebook etc) are also used to reach out to potential new students.

What is CNFTEIA's student recruitment process, and what strategies do you have for retaining female students?

Dr. Fatou Ka, Director of the CNFTEIA (St.Louis): The gender gap in the recruitment process of VPP is taken into consideration. The Centre has found strategies to ensure that female students are retained. These include ensuring that there is no disruption of training even if a female student is married, pregnant or breastfeeding. The number of students joining the programme from rural or remote areas has been increasing every year. The number of women students has also been increasing in the last four years. Entry exams are structured in such a way that there is no discrimination based on gender or whether the person is disabled.

What is EISMV's recruitment process as a regional training institution, and what initiatives are in place to align admissions policies with veterinary workforce needs for countries in the region?

Prof. Yalacé Kaboret, Dean of the EISMV (Dakar): Students are admitted from 14 member countries across Africa. A governing body has been established which provides guidelines to member countries regarding recruitment. These countries have to recruit students using the agreed guidelines which may be passing the secondary school exams or sitting for a selection exam. Other recruitment processes include online applications and enrolling straight into the second year for students with qualifications in animal health related fields such as medicine and the biological sciences.

What were some of the biggest challenges you faced while pursuing your goal of becoming a wildlife veterinarian and what efforts, with examples, have you made to inspire young individuals to explore veterinary medicine as a career?

Dr. Florence Kangethe, Wildlife Veterinarian, Ol'Pejeta Conservancy (Nanyuki): During her training as a veterinarian, in Kenya, the wildlife curriculum was very inadequate for students. Later, when she started as a veterinarian, there were only three female veterinarians, now there are 11. Efforts to inspire young individuals to explore veterinary medicine as a career have included mentorship programmes, interaction with primary school pupils to sensitise them on the work of veterinarians, interaction with secondary school students to encourage them to study STEM subjects (science, technology, engineering, and mathematics) and participation in the *Kenya Wildlife Services (KWS) internship programme* [4th year students' internship for two weeks].

Education

Veterinary and veterinary para-professional education

Session lead: Dr. Laibane Dieudonne Dahourou, Project Officer, P3V Project, WOA Regional Representation for Africa

Session summary

The objectives of this session were to:

- Share success stories of the WOA *Veterinary Education Establishments* (VEE) Twinning Programme and the WOA VPP curriculum assessment missions;
- Describe innovations or experiences that stimulate interest in the veterinary and veterinary paraprofessional sectors;
- Discuss the main challenges faced by training institutions and possible solutions (availability and retention of skilled trainers, access and retention of women in the academic pathway, practical training an internship in training, the way VPP curriculum pilot missions improved the training of VPPs in the beneficiary countries).



Session methodology

The session combined PowerPoint™ presentations, group activities, a poster session, and panel discussions. The presentations provided insights into WOA VPP curricula missions. Additionally, a group activity emphasised innovations or experiences that enhance engagement in the veterinary and veterinary paraprofessional fields. A dedicated poster session was held, and finally, a panel discussion addressed key challenges faced by training institutions on the availability and retention of skilled trainers, the access and retention of women in academic pathways, and the practical training and internship opportunities within the training framework.

Session panel discussion (questions and answers)

What are the economic and entrepreneurship components in the training programme? What about the animal welfare component, is it not too weak or even absent in training ?

Dr. Laibane Dieudonne Dahourou: Ideally the mission should see what is inside the legislation regarding animal welfare. The survey allows for a national consensus with all stakeholders. In Senegal and Togo, missions on legislation are ongoing. WOA guidelines are considered, but also the specific national needs.

Session recommendations

Measures focusing on women

- Mentorship programmes.
- Quota of women at entry, exemption of the tuition fees and flexibility in admission criteria.
- Setting up day-care in the establishments.
- Involvement of the family in the integration of women.
- Further capacity building of women post-training.
- Improvement of living conditions and infrastructure (for pregnant women, breastfeeding women).

Measures focusing on remote areas

- Use of new technologies (satellite internet, e-learning, digitalisation...).
- Credits to facilitate the integration of women.
- Using local radio stations for awareness and communication.

WOAH-supported Twinning programmes between VEEs bring many benefits in the context of skills transfers and the revision of training curricula, as well as promoting the sustainability of training arrangements in veterinary schools.

The retention of teachers / lecturers is a real challenge that VEEs face and for which they try to develop strategies, especially through incentives such as (monetary) allocations and the involvement of trainers in the design of local training projects.

The retention of young people within training programmes involves developing new modules that adequately address the problems of new occupations, tutoring of young people by teachers, setting up a framework for dialogue with the school(s).

THEMATIC SESSION 3 ■ SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS

Sustainable Services and Public-Private Partnerships

Business skills and sustainable deployment of private sector veterinarians, VPPs and CAHWs

Session lead: Dr. Laibané Dieudonné Dahourou, Project Officer, P3V Project, WOA Regional Representation for Africa

Session objectives

The objectives of this session were to:

- Share the situation regarding VPPs in Cameroon.
- Present the animal health ecosystem in Africa by describing stakeholders and their relationships.
- Discuss the benefits of public - private - partnerships in the integration of veterinarians, VPPs and CAHWs in the veterinary workforce in Africa.
- Discuss Member experiences and best practices regarding sustainable deployment of veterinarians, VPP and CAHWs in private and public sectors other projects.



Session summary

The session featured a combination of PowerPoint™ presentations, group activities, and panel discussions. The presentations focused on the professional integration of VPPs and the profitability of animal health services in West Africa. Additionally, participants engaged in a group activity analysing the animal health ecosystem, followed by a panel discussion highlighting success stories, Member experiences, and best practices for the sustainable deployment of veterinarians, VPP, and CAHWs in the private sector.

Session panel discussion

Dr. Nathalie Tinak, VPP Expert, Direction des Services Vétérinaires, *Ministère de l'Élevage et des Industries Animales (MINEPIA)*, Yaounde (Cameroon)

Survey on the professional integration of graduates from the National Zootechnical and Veterinary Training Centres of Maroua, Jakiri and Foumban (Cameroon) Cohorts 2010 to 2022

[A total of 7,200 VPPs were trained in Cameroon between 2010 and 2022.](#) A survey designed to gauge the socio-professional integration of VPPs showed that several challenges hinder their professional progress, including the lack of a socio-professional policy, limited access to land, an inability to start businesses, insufficient funding and training, and taxes, which all constitute barriers. Furthermore, and in general, there is limited effort in identifying financing opportunities for young people.

Based on the eight applicable decent work indicators (of the *International Labour Organisation*, ILO ⁵) shortcomings include very inadequate salaries, lack of social protection, the absence of a union or association for VPPs, unreasonable work schedules, and uncompensated extra hours. While non-discrimination is generally respected, some religious and cultural practices prevent women from working. In conclusion, all indicators of decent work should be integrated into socio-professional integration efforts.

Dr. Moses Arokoyo, President, Nigerian Veterinary Medical Association (Nigeria)

Dr Arokoyo explained that an assessment of training needs, conducted in Nigeria revealed a significant deficiency in business skills among VPPs. To address this, a blended approach was developed, incorporating a series of online training sessions over eight months, with a focus on practical applications and preventive measures such as vaccination and biosecurity. A mentorship programme, particularly for private operators, was established, offering guidance on the impact of quality drugs and increasing client linkage with Veterinary Services and government funding opportunities. However, social norms still prevent some women from participating as VPPs. To address this, the training programme is gender-sensitive, aiming to promote sustainable livestock health. Most VPPs lacked an entrepreneurial spirit, but after receiving training in entrepreneurship (including how to create a business plan), they were assigned as mentors. The training has successfully applied a gender-inclusive approach, as seen in Uganda and Nigeria. Thanks to the training, including business plan development, VPPs identified opportunities for financing.

Dr. Sandaogo Hamidou Ouandaogo, President, Association des Médecins Vétérinaires du Burkina Faso

According to Dr Ouandaogo, livestock production in Burkina Faso has faced a number of disease outbreaks, eventually prompting a two-year training programme for VPPs. VPPs in Burkina Faso can establish their own business in animal health under a mandatory supervision of a private veterinarian. Before the establishment of their company, they must obtain authorisation starting at the regional level and then proceed to the national level. The ethics of VPPs are evaluated through a morality survey, and they are officially recognised. The private VPP is established after a visit and an approval of his facility by the Directorate of Veterinary Services. Collaboration and supervision, through regular visit of the private veterinarian is also required. Additionally, each VPP is required to send regular reports to their supervisor.

⁵ These are : 1. employment opportunities 2. adequate earnings and productive work 3. decent working time 4. combining work, family and personal life 5. work that should be abolished 6. stability and security of work 7. equal opportunity and treatment in employment 8. safe work environment 9. social security 10. social dialogue, employers' and workers' representation

Dr. Miria Loquang, United Para-Veterinary Association of Uganda

Dr Miria Loquang is a VPP from Uganda, working in villages with a pastoralist (nomadic) population. In her view, many of the VPPs operating in this environment are unskilled and sell cheap (and often counterfeit) drugs to pastoralists at low cost. Hence, as a conscientious VPP, it is at times impossible to compete with these prices. Additionally, in Uganda, there are no government programmes that are specifically designed for private VPPs. The training she has benefited from has helped her treat animals more effectively, and she now discusses the animal(s) behaviour or symptoms with the farmers before making decisions regarding treatment.

“As a private VPP, I purchase my drugs from a registered pharmacist. There are various diseases affecting pastoralist animals, and I plan to establish a breeding farm for them. Private VPPs can assist with outreach efforts and help explain government schemes to pastoralists”.

Dr. Gcwalisile Bandliwe Tshona, Commercial Director, Sub-Saharan Africa Cluster, MSD Animal Health, Johannesburg, South Africa

Regarding the work of VPPs in the private sector in Sub-Saharan Africa, one often fails to reach the end users. In 2022, surveys and interviews revealed issues with the accessibility of quality veterinary products. Despite the ongoing disease conditions, people are unaware of the difference between genuine, high-quality products and counterfeit ones, leading to significant challenges in the business of veterinary product accessibility. To address this, the MSD Animal Health has established relationships with importers, providing access to information and training, including entrepreneurship courses. These programmes help VPPs develop entrepreneurial skills and improve their business acumen. Additionally, every two years, refresher training is provided to VPPs to help them establish stronger connections within their communities.

“The skills of VPPs should not be limited to treating animals; their entrepreneurial and business skills must also be developed”

Session panel discussion (questions and answers)

Among the issues that ensued during the general discussion, one can recall that:

- It is important to sensitise farmers about working with licensed veterinarians and certified VPPs to ensure better animal care. Collecting data on the location and registration of certified VPPs can help reduce the influence of quacks in veterinary practice. Additionally, improving access to animal health products and digital tools is crucial for enhancing Veterinary Services and promoting better animal health management;
- Regulatory measures are important : VPPs must also be regulated by the veterinary statutory bodies (VSBs) and must respect a medicinal code of conduct;
- Agroveter dealers (i.e. wholesalers or retailers of agricultural and veterinary inputs) also need to be regulated by statutory bodies to procure their drugs from legitimate producers

in order to avoid the smuggling and use of unregistered drugs, which may lead to antimicrobial resistance;

- Government-employed paraprofessionals and animal health workers should consistently engage with CPD providers to increase their knowledge on issues like biosecurity, the promotion of One Health and the fight against antimicrobial resistance; and
- Veterinary and VPPs associations need to work more closely with the veterinary profession. Public and private sector activities must be clarified to tackle informal competition.

Session recommendations

- **Capacity Building for VPPs in both Public and Private Sectors:** Focus on comprehensive capacity building and training programmes for VPPs in both public and private sectors, ensuring they receive ongoing training in veterinary practices, business/company management, entrepreneurial skills, and customer service to enhance their overall effectiveness.
- **Career Progression for VPPs in the Public Sector:** Establish clear career progression pathways for VPPs in the public sector, offering opportunities for professional growth, advancement, and their roles. This will help retain skilled VPPs and motivate them to excel in their work.
- **Collaboration with Veterinary Associations:** Foster stronger collaboration between VPPs and veterinary associations to promote shared knowledge, best practices, and ethical standards within the profession. This will help enhance the credibility of VPPs and provide a platform for continuous learning.
- **Improved Access to Quality Veterinary Products such as Drugs:** Improve and ensure that VPPs have reliable access to high-quality veterinary products by establishing reliable supply chains, ensuring that certified VPPs and practitioners can access the necessary medicines and equipment to provide effective care and prevent the use of counterfeit products. This will enhance the effectiveness of veterinary care and improve animal health outcomes.
- **VPPs should be regulated,** as is the case in many countries, to ensure consistent standards and practices. Additionally, *public-private partnerships* (PPP) can play a vital role in improving the delivery of Veterinary Services and fostering innovation in the industry.
- **To improve access to finance, credit should be provided** based on viable business models, allowing VPPs to secure funding tailored to their specific needs. This should be coupled with training that equips VPPs with the necessary skills to develop strong business plans and manage their finances effectively.

Specific recommendations regarding VPP training

- Set up a system which values (a valorises) prior learning;
- Train VPPs on company/business management; and
- Develop VPPs' entrepreneurial skills.

Sustainable Services and Public-Private Partnerships

Deployment of the veterinary workforce for disease control and eradication

Session lead: Dr. Simon Kihu, Programme Officer, Sub-Regional Representation for Eastern Africa (WOAH)

Session objectives

To explore the essential factors necessary for an effective and sustainable workforce deployment as well as the potential role of various professionals (CAHWs, VPPs and veterinarians) in achieving global control, elimination and/or eradication of prioritised *transboundary animal diseases* (TADs) and zoonotic diseases (FMD, PPR, Rabies, ASF, etc.) as well as combatting *antimicrobial resistance* (AMR).

Session summary

Transboundary animal diseases and zoonotic diseases are disruptive to the livelihood of livestock keepers, causing poor human health and severe loss in income and nutrition, thus enhancing rural poverty, malnutrition and economic stress. Control and eradication of these diseases require a well-trained, adequate, and properly deployed veterinary workforce. Unfortunately, this is not always the case in most countries due to inadequate deployment of the available veterinary workforce. The factors contributing to this inadequacy in workforce deployment were discussed in this session.



Session discussion

Break-out groups worked on questions related to barriers and solutions, especially answering two questions:

- Why are veterinary authorities not fully utilising CAHWs, VPPs and veterinarians in the private sector when conducting national veterinary disease control and eradication programmes?
- How can the potential roles of private veterinarians, VPPs and CAHWs in national control and eradication programmes against animal and zoonotic diseases be enhanced?

Barriers to the use of CAHWs, VPPs and veterinarians in the private sector in national disease control and eradication programmes:

- Perceived competition and power play between private and public veterinarians, and between veterinarians and VPPs;
- Limited resources and will by government to integrate private veterinarians/VPPs/CAHWs in disease control activities. Sometimes the engagement is not mutual or starts late instead at the planning phase to internalise national priorities;
- Unclear roles between private and public operators, and CAHWs;

- Lack of recognition of CAHWs in some countries (Kenya, Tanzania, Namibia, etc) and where they are recognised, supervision remains non-functional;
- Lack of enforcement of existing legal and policy framework making supervision of VPPs is difficult;
- Constraints in number of veterinarians to engage in supervision where willing, due to low number of government/public service veterinary workforce;
- Limitation in working environment, lack of diagnostic facilities, rapid test kits, equipment and poor remuneration of public sector employees;
- The cost-benefit analysis (perspective) for engagement in disease control initiatives as opposed to clinical practice seems unfavourable/not incentivizing.
- Fear of compliance with existing rules, policies/laws by private veterinarians/VPP and prefer to disassociate with public sector;
- Lack of clarity with data protection, as to where the data will be held and used is a barrier for disease information flow;
- Lack of PPP framework and no guide for implementation, specifying roles and models for engagement;
- Community agents considered not well trained and with no supportive legislation makes their engagement difficult. There are also no funds to support their training.

Solutions proposed by the working groups:

- Recognise CAHWs, define clear roles, etc.
- Trust building amongst the professionals through workshops, develop plans together
- PPP framework should be developed
- Education of VPP, CAHWs and the financing of their continuing education
- Structured collaboration with VPP on disease control planning
- Farmers and CAHWs work on telemedicine solutions for reporting along with educating on when and what to report on

Session recommendations

- There is need for legal recognition of CAHWs in countries where they are required;
- Adequate supervision should be availed upon deployment of veterinary workforce for disease control and eradication;
- Clarification of roles needs to be done upon deployment;
- Develop and strengthen PPP frameworks to support retention upon deployment;
- Improving training of VPPs, CAHWs (guidelines);
- Strategies for financing CAHWs/VPPs with contribution of livestock keepers should be established;
- Structure the collaboration with clear roles to ensure maximum impact and results from the collaborative efforts;
- Telehealth for reporting should be adopted for deployed staff;
- Experience sharing required by countries and partners to encourage good practice; and
- Funding remains an issue, but governments need to be convinced to invest in deployment of animal health services in disease control and eradication.

THEMATIC SESSION 4 ■ TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE

Technical Themes and Enabling Environment for Effective Veterinary Workforce

Emergency management

Session lead: Mr. Ian Peter Busuulwa, Project Officer, Sub-Regional Representation for Eastern Africa (WOAH)

Session summary

This session examined the roles of various professional categories in managing emergencies and disease outbreaks. It featured a case study from Malawi, and an interactive game ([ALERT](#)) designed to help participants understand the roles of these actors within a surveillance chain [[download the presentation](#)].



Session objectives

1. Understand the roles and responsibilities of veterinarians, VPPs and CAHWs in surveillance and emergency response.
2. Explore strategies for effective collaboration among professionals during outbreaks and emergencies.
3. Learn key lessons and best practices from a national case study on multi-professional emergency response.
4. Develop actionable recommendations to enhance collaboration and improve emergency management approaches.

Session presentation

Dr. Julius Chulu, WOA Delegate of Malawi, *Department of Animal Health and Livestock Development (DAHLD)*, Lilongwe (Malawi), also on behalf of *Action for Protection and Care of Animals (APCA)* and the *Malawi Veterinary Association (MVA)*. *Disaster Recovery and Resilience in the Wake of Cyclone Freddy - Malawi Experience.*

[Dr Julius Chulu presented Malawi's experience with response and recovery from Cyclone Freddy, which struck the country in March 2023.](#) The presentation highlighted the impact of the tropical cyclone on humans and livestock, affecting the livelihoods of over 1.1 million people and killing over 200,000 livestock. It also destroyed infrastructure and increased the risk of parasites and diseases among animals. Malawi's DAHLD collaborated with several national and international partners to mount the response and recovery efforts. These efforts included recruiting veterinary volunteers, donating essential medical supplies, administering anti-parasitics and vaccinations, and providing training on disaster preparedness, response, and management. Recommendations included continued fundraising to support free veterinary services for affected farmers and the inclusion of disaster preparedness and management in veterinary training programmes.



Dr Julius Chulu, WOA Delegate of Malawi, Department of Animal Health and Livestock Development (DAHLD), Lilongwe (Malawi), during his presentation, with on the table, copies of the serious board game “ALERT”.

Picture © P. Bastiaensen (woah) 2025.

“Relying on rumours is like fishing in the dark. The importance of disease surveillance for data collection should always be stressed”

Session discussion questions, following Malawi’s presentation

What was the role of other Departments in Malawi before the arrival of international organisations?

Dr. Julius Chulu: the presentation aimed to provide an overview of the veterinary activities only and is not to be considered an extensive summary of all the national efforts deployed.

Emergency management is a cross-cutting issue, therefore the involvement of other relevant ministries/national stakeholders should be envisaged.

Dr. Julius Chulu: indeed, all sectors are involved in disaster management. In such situations, however, the first priority is always rescuing people. Animal rescue was secondary and animals were treated in makeshift structures.

How is disaster management funded in Malawi, which Ministries ? Is there a contingency budget?

Dr. Julius Chulu: when it comes to animals, most funds come from donations from well-wishers; in addition, veterinarians and VPP volunteers helped to avert animal deaths.

Are there any lessons learnt or innovative solutions to be shared with other countries?

Dr. Julius Chulu: committees are being formed at community level to prepare for disasters in the future, initiatives have been taken to move/relocate animals and people to safe(r) places. These include locations with specific watering points and solar-powered high yielding boreholes. In addition, attention is drawn towards the production of early maturing fodder, the rehabilitation of dip tanks, mobile clinics, veterinary stations and other infrastructure, as well as training on the identification of animal diseases for reporting to veterinarians.

Session recommendations

- Preventive - stakeholders need to be equipped, skilled and resourced and all mechanisms and measures put in place in preparation of an emergency response. Laws and policies, sufficient staff. Community awareness on emergency management is key for the success of response interventions.
- Proactive - train and sensitise people on emergencies and including at local/community level.
- Responsive - reaction to emergency events requires collaboration and teamwork. There should be communication among actors including Government officials, veterinarians and technicians.
- Sustainability - learning from past experiences will be important in informing future responses. There's need for ensuring vigilance in emergency detection and response, to ensure that past issues will not re-occur.
- Engagement of research institutions, the youth, local governments is key in ensuring ownership for interventions both at political (event at community level) and technical levels.
- Lower cadre officers need to be trained on emergency preparedness. CAHWs and farmers should also be engaged. People from the community even when they cannot read or write, can be engaged through pictures.
- WOAHP to bring expertise to train more countries to facilitate this game by ensuring that the facilitation is standardised, to avoid that different messages are delivered by different facilitators, and that ad-hoc trainings are available to all interested member countries.
- There's need for multisectoral engagement to respond to emergencies at all levels for good information and not limit it only to veterinarians - too often health policies focus on animal health or veterinary services actors only - but engage *all* stakeholders at *all* levels in information sharing. Enlarge the action spectrum.

Technical Themes and Enabling Environment for Effective Veterinary Workforce

Gender inclusion in Veterinary Services and the role of veterinary and VPP associations

Session leads: Ms. Sonia Fevre (right), Programme Manager, Capacity building advisor, Capacity-Building Department (WOAH) and Dr. Holly Hufnagel (left), Veterinary Paraprofessional Project Coordinator (FAO).

Session objectives

- Explore key issues concerning women and men's inclusion in the veterinary workforce.
- Explore how to optimise access and inclusion of women in veterinary studies, internships and recruitment in Veterinary Services.
- Discuss how veterinary and veterinary paraprofessional associations can support women and men in building leadership skills and supporting each other; and
- Reflect on how gender relations influence the quality and outcome of veterinary services, and what matters for ensuring access to veterinary services for women livestock keepers.



Session methodology

The session included a discussion on improving access to animal health services for livestock keepers/farmers. Veterinary and veterinary paraprofessional associations were invited to share their experiences in mentoring, providing support networks and creating leadership opportunities. [A sociometry group exercise was also used to share experience about gender priorities in animal health services, by asking participants to embody different roles \(female/male veterinarians, female/male farmers\) and to step forward or backward depending on their perceived power in different situations.](#) After a debrief conversation, this was followed by short presentations on:

- Why gender matters in animal health (FAO);
- [Gender analysis in Veterinary Services in Senegal and Togo](#) (WOAH); the
- *Kenya Women's Veterinary Association* (KWVA); and the
- *Veterinary Council of Nigeria* (VCN).

The session ended with group work to identify causes and possible actions and to review recommendations on gender inclusion in the veterinary workforce.

Session discussion

The session began with an icebreaker exercise on gender inclusion. The session participants were diverse, including representatives of government veterinary services, members of veterinary associations, veterinary establishments, and FAO and WOAH staff.

The activity used a [sociometry](#) methodology to raise participants' awareness of the concept of gender and its importance in improving inclusion for better animal health. Key ideas on gender mainstreaming in the veterinary sector emerged from the discussions.

The discussion highlighted several gender disparities including:

- Women-farmers have very little power in their work environments.
- Men-farmers feel more dominant, but this depends on their education level, country, and farm size.
- Women-veterinarians do not have the same opportunities as men-veterinarians.
- Some men struggle to take on the perspective of women, while others feel vulnerable in roles, traditionally assigned to women.
- Unlike women-farmers who continue to handle household chores, women-veterinarians have delegated some of these tasks, allowing them to focus more on their professional roles.
- Across all groups, men hold most of the power and dominate in every category.

Session presentations

Ms. Emma Alegi, Gender Specialist, Dr Shehu Shamsudeen, Animal Health Business Specialist and Dr. Holly Hufnagel, Veterinary Paraprofessional Project Coordinator, Food and Agriculture Organisation of the United Nations (FAO)

Why does gender matter ?

A study conducted by ILRI in Uganda ([Dione M. et al. , 2016](#)) illustrates the division of labour in pig farming:

- Men's roles: focus on tasks like construction, marketing, inputs, and accessing veterinary services.
- Women's roles: involved in cleaning, waste collection, feeding, and watering the pigs.

Women's key role in animal health:

- Women, being close to the animals daily, are better positioned to detect the early signs of disease.
- This provides an opportunity for early disease detection but also increases their exposure to zoonotic risks since they care for animals and later cook for their families.

Misunderstanding of women's role in livestock farming:

- Women are often seen as helpers rather than direct stakeholders or full actors in the farming process.
- They communicate more easily with female VPPs, but women represent only 5% of VPPs.

Challenges faced by female VPPs:

- Their profession is often not considered suitable for women.

- They remain significantly underrepresented and face substantial barriers.
- FAO proposes a gender-sensitive animal health approach:
- Use the *"Target, Understand and Communicate"* framework to involve all actors and address the risks and opportunities for each family.
 - Tailor communication to the audience's role and tasks. For example, those feeding animals should be trained specifically for their responsibilities and messages and training should use the appropriate language and tools for each group.

Ms. Sonia Fevre, Programme Manager, Capacity building advisor, Capacity-Building Department (WOAH)

Gender studies conducted in Senegal and Togo.

- Several stereotypes were identified in the countries studied. Women are often discouraged from studying sciences and participating in technical training.
- Health-related issues specific to women, such as health risks at work related to pregnancy, are not addressed in VPP training content in either country.
- Gender is not sufficiently integrated into training programmes.
- Positive gender policies exist at the national level, but their implementation needs improvement.
- The safety and security of women students, and those working in the field, especially in remote areas where they meet with farmers, must be addressed more effectively.
- There is limited access to *continuing professional development* (CPD).

Dr Anima Sirma, Chairperson, Kenya Women's Veterinary Association (KWVA), Veterinary Public Health Section, Directorate of Veterinary Services, Kenya

The views of the Kenya Women's Veterinary Association

- The Association consists of 150 members, with 3,000 female veterinarians across Kenya. KWVA supports CPD and training for its members.
- Initially, women veterinarians were hesitant to take leadership roles. The Association now encourages women to participate in campaigns, pursue training, and engage in advocacy efforts. Members provide mentoring and seminars in schools and also amongst veterinary students (female and male).
- KWVA implemented a project in an arid region of Kenya (*Turkana*) where women and children are actively involved in rabies vaccination campaigns, and where they supplement their income through crafting necklaces and dog collars to help support their livelihoods and the rabies programme.
- KWVA also developed a work plan to guide its activities. This year, they launched the initiative *"One Girl, One Woman to Sponsor Schooling"* to promote education.
- Nonetheless, many women abandon training sessions due to conflicts between professional commitments and household responsibilities.

"We are encouraging women veterinarians to take leadership roles, but many still hesitate, as they feel the roles of caregiving and veterinary leadership are difficult to combine."

Dr. Aishatu Abubakar Baj, President of the *Veterinary Council of Nigeria (VCN)*, Assistant Inspector General of Police, Gender Advisor, Nigerian Police Force, Nigeria.

The views of the Veterinary Council of Nigeria

During the NVMA Annual Conference, held in October 2024, in Jos, Plateau State, Nigeria, a session organised by the VCN united 83 veterinarians from 22 (out of 36) States to address the challenges women face in their roles. From this session, the following findings and insights emerged :

- Women make up 40% of the veterinary workforce in Nigeria.
- Leadership roles remain difficult due to the challenge of balancing professional and household responsibilities.
- Women are often seen as less capable of handling physically demanding tasks, especially in wildlife and other specialised fields.
- Despite these *challenges*, women demonstrate resilience in their work.

The challenges that were identified are more specifically:

Professional challenges:

- Physically demanding tasks in veterinary practice.
- Discrimination in accessing training opportunities.
- Lack of mentorship.
- Poor work-life balance.

Socio-cultural challenges:

- Social expectations prioritise family over professional growth.
- Women are discouraged from entering male-dominated fields.
- Intimidation, harassment and gender-based violence in the workplace.
- Clients undervalue women's work and resist paying them equally.
- Women often lack the self-confidence to aim for higher roles.

Economic challenges:

- Balancing personal and professional finances.
- Safety concerns in certain regions (e.g., abductions discourage women from working in remote areas).

Personal challenges:

- Lack of mentorship and role models.
- Difficulty establishing mentor-mentee relationships.
- The need to maintain mental health and seek support from family and community.

“Advancing gender equity is not about fairness, but harnessing the full potential of our talent pool for improved animal health service delivery”

Session insights

Key insights from the presentations and from the sociometry exercise were:

- *Women as key observers in animal health and One Health:* women, due to their close involvement in tasks like feeding, watering, and cleaning of animals, are often the first to detect early signs of disease. This proximity provides them with unique observational skills that can serve as an opportunity for early disease detection.
- *Opportunities for precautionary animal health practices:* this insight underscores the potential for leveraging women's role in animal management to implement precautionary health measures and improve overall animal health surveillance.
- *Increased risk of zoonotic diseases:* however, at the same time, women's involvement in both animal care and household activities, including cooking, exposes them to a higher risk of zoonotic diseases. This dual role presents a significant health challenge that requires targeted interventions.

These insights led to identifying potential areas for further investigation:

- How can women's unique role in animal care be formally recognised and supported within veterinary and public health systems?
- What measures can be taken to reduce women's risk of contracting zoonotic diseases while empowering them in their roles as primary caregivers for animals?
- What training or resources are needed to enhance women's capacity for early disease detection while ensuring their safety?

Session recommendations

a. At the individual level

- Encourage mentorship and build strong mentor-mentee relationships.
- Foster networking opportunities within professional circles.
- Prioritise mental health with support systems from family, friends, and communities.
- Emphasise continuous learning and professional development.
- Pursue additional qualifications to excel in the field.
- Take responsibility for one's work and strive for excellence.
- Balance work with leisure and personal development.

b. At the institutional level

- Develop gender-sensitive policies.
- Provide targeted training and capacity building for all staff.
- Promote equal opportunities for everyone in the workplace.
- Gender-sensitive budgeting

c. At the policy-making level

- Advocate for zero-tolerance policies against violence and harassment toward women.
- Introduce gender-sensitive curricula to address these issues early.

- Celebrate women's achievements and conduct awareness campaigns to highlight their contributions to veterinary practice.
- Encourage trust in female veterinarians and VPPs through targeted campaigns.

d. Learning opportunities

- Promote remote learning to enable women to continue their education and professional development despite barriers.

e. Veterinary training and VPP

- Integrate mentoring into programme and policy development.
- Foster partnerships and promote advocacy efforts to support veterinary education.
- Involve stakeholders to ensure sustainable and effective implementation.

f. Access to Veterinary Services

- Promote the use of digital technologies for learning by raising awareness of digital tools and offering gender-sensitive training for veterinarians and VPPs.
- Conduct targeted campaigns in collaboration with extension services, NGOs and community radio platforms to raise awareness.
- Advocate for legislation requiring sex-disaggregated farmer registration and require AHSPS to document interactions with women farmers.

g. Career development

- Establish a supportive work environment through appropriate role models, mentoring programmes and monitoring and evaluation mechanisms.
- Develop policies and allocate resources to promote equal opportunities, technological advances, empowerment, equal pay and the achievement of personal goals.
- Promote cultural and paradigm shifts by involving all genders in policy reforms and ensuring that men understand and support women's concerns. Encourage women to lead reforms and mentor others.

h. Veterinary associations and VPP

- Promote a quota of women on veterinary and VPP governing bodies (bylaws and recommendations).
- Implement leadership and workplace safety training for members.
- Offer incentives for associations, such as firsts and co-management.

Technical Themes and Enabling Environment for Effective Veterinary Workforce

From policies to practice: a guide to veterinary legislation and regulation

Session lead: Ms. Kelsey Galantich, WOAHP Legislation Expert (VLSP) and FAO Legal Consultant, FAO Country Office Botswana.

Session objectives

The session objective was to raise awareness of veterinary legislation and the regulation of the veterinary workforce through VSBs and solutions for the regulation of veterinary practice. Participants were expected to understand:

- The links between veterinary legislation and regulation to other thematic topics, including workforce planning and planning for the future, education, PPPs, gender, veterinary drug use and AMR, animal welfare, and food safety;
- How legislation and regulation for the veterinary workforce underpin workforce planning and preparation of the veterinary professionals to meet present and future needs (including pandemic prevention, AMR, food safety, PPPs); and
- How regulation of the veterinary workforce through VSBs is crucial to ensuring effective delivery of Veterinary Services.



Session summary

The combined force of strong veterinary legislation and the efficient regulation of the veterinary professions is essential for building a veterinary workforce ready to meet any challenge. The legislation and regulation session provided participants with an overview of how Members can align their veterinary legislation with the latest international standards for the regulation of veterinary professionals. Building on the recommendations from the 2015 WOAHP [Conference on the Role of Veterinary Paraprofessionals in Africa](#) (Pretoria, South Africa), the group activity encouraged participants to think critically about issues they face due to inadequate veterinary legislation and regulation. Together, participants then conceptualised achievable solutions for equipping the national veterinary workforce with regulatory tools for effective delivery of Veterinary Services.

Session presentations

Ms. Kelsey Galantich, WOAHP Legislation Expert (VLSP) and FAO Legal Consultant, FAO Country Office Botswana.

Veterinary legislation and WOAHP Terrestrial Animal Health Code Chapter 3.4.
[\[download \]](#)

Mr. Benson Ameda, WOAHP VPP Expert and President of the *African Veterinary Technicians Association (AVTA)*, Kenya.

Regulation of the veterinary workforce with emphasis on the role and importance of VSBs [[download](#)]

Session highlights

- Recognition of Qualifications
 - Accredited institutions: graduates from accredited schools may need to register with the VSB for professional recognition.
 - Registration process:
 - For individuals with qualifications from non-recognised institutions or foreign countries, the VSB typically requires an assessment or registration examination to confirm their qualifications.
 - This ensures that all professionals meet the national standards for practice.
 - Scope of VSB regulations:
 - The VSB's primary mandate is professional registration and oversight; however, broader regulation of veterinary practices and roles often lies outside its scope and requires legislative backing.
- Inclusive regulation and council composition
 - Need for universal regulation: WOAHP advocates for the regulation of all veterinary professionals, including VPPs and veterinarians, to ensure accountability and quality service delivery. CAHWS should also be regulated according to the national context if they include them in the VPP category.
 - Council composition history:
 - Traditionally, VSB councils are closely tied to associations, prioritising the interests of veterinarians over broader societal or VPP needs.
 - Current frameworks often exclude or marginalise VPPs. To address this, it should be emphasised the need for inclusive councils where VPPs, veterinarians, farmers, and other stakeholders have equal status.
 - Rights and responsibilities:
 - In regulated bodies, rights and responsibilities must be distributed equitably, regardless of professional category.
 - Transformation committees (South Africa):
 - To address gaps in representation and inclusivity, transformation committees can be established to evaluate council structures and propose equitable changes.
- Expanding the *Scope of Practice* (SoP)
 - Define and draw clearly the line of practice for different roles.
 - Potential areas for expansion:
 - Direct and indirect veterinary activities.
 - Animal health and welfare.

- Public health, including animal product safety.
 - Medicines, AMR and training/extension services.
- One Health gaps:
 - The current One Health approach is deficient in practice. WOA should advocate for inclusive systems where all veterinary professionals, including VPPs, have the opportunity to contribute meaningfully and aspire to broader roles.
- Country-specific legislation
 - VPP regulation:
 - WOA does not dictate specific regulatory frameworks for VPPs but provides guidance to be adapted based on each country's needs and agreements.
 - CAHWs often fall under the VPP category, and Members must decide how to regulate their roles.
 - Cost considerations:
 - Veterinarians are often costlier due to their advanced qualifications and experience. The balance of cost-effectiveness and workforce-needs is a decision for individual Members.
- Members' examples and challenges
 - Nigeria:
 - Initially faced a battle to establish separate VSBs for veterinarians and VPPs. It eventually opted for a unified VSB to reduce costs and improve coordination, while ensuring equal opportunities for all professionals.
 - Nigeria currently promotes a complementary system where VPPs and veterinarians work collaboratively.
 - South Africa:
 - The VSB is not government-funded, preserving its independence. However, in almost all countries, legislation allows the line-minister to designate the VSB's Chair or President, which raises concerns about political influence.
 - It is recommended to remove government influence from VSB governance structures in order to maintain independence and impartiality.
- Inclusivity and diversity in regulation
 - Participation and representation:
 - Everyone regulated under the VSB should have the right to participate in council activities, including decision-making.
 - Regulatory councils should include diverse members, such as farmers, veterinarians, and VPPs, with equal status and equal pay for similar roles.
 - Fee structures:
 - Current fee structures often disadvantage VPPs or lower-paid professionals. Revising fees and payments can promote diversity and inclusivity in Council/Board operations.

Session insights (from the presentations and discussions)

- The size of the veterinary workforce does not typically support having several sustainable independent regulatory bodies (for veterinarians and for VPPs) as compared to human health where the regulatory councils benefit from economies of scale.
- The composition of a VSB should be based on the interests of the various concerned stakeholders who may sometimes be *non*-animal health professionals.
- Regulation should be based on the definition of *practice*. If the definition of *practice* entails both public and private sector professionals, then the regulations apply to both public and private.

Session recommendations

a. Governance and regulation

- Clear functions and terms of reference: Define precise roles and responsibilities for VSBs to improve their functionality and governance.
- Alignment of regulation: Ensure regulatory frameworks are consistent and harmonised across the veterinary continuum (veterinarians and VPPs).
- Autonomy and government influence:
 - VSBs should maintain autonomy, but the role of government must be clearly defined to avoid overreach while ensuring adequate support.
 - Explore alternative funding mechanisms to reduce government influence on VSBs.

b. Establishing and enhancing VSBs

- Members without VSBs should use WOAH guidelines to establish them.
- Develop best practice guidelines for VSB composition, functionality, and inclusivity, and maintain continuous dialogue to ensure opportunities for all registered professionals.
- Ensure VSBs are structured to include development, training, governance, and policy considerations, involving all stakeholders.

c. Integration of VPPs and veterinarians

- Promote integration of VPPs and veterinarians under a unified VSB to streamline operations and foster collaboration.
- Address challenges of resistance to change and harmonise curricula to align training standards for both professions.
- Establish equitable representation and voting rights for VPPs and veterinarians within VSBs.

d. Training and curriculum development

- Set minimum requirements for veterinary education and ensure higher education councils monitor and review curricula in collaboration with VSBs.
- Offer training on legal frameworks to veterinary practitioners.

- Provide continuous training (or CPD) for both VPPs and veterinarians to maintain competencies.

e. Digitalisation in Members with a VSB

- Develop a digital registration system to track licensed veterinarians and VPPs, ensuring compliance with regulations.

f. Addressing challenges in regulation and enforcement

- Corruption prevention: Establish and enforce robust laws to deter corruption within the veterinary governance.
- Strict enforcement: Ensure strict enforcement of laws and regulations to compel compliance.
- Mentorship and wellness programmes: Address staff victimisation and promote mentorship and wellness programmes to foster a healthy work environment.

g. Inclusion and equity

- Provide guidelines to address contextual factors such as age and gender gaps in VSB membership and governance.
- Ensure equitable distribution of VPPs and veterinarians within VSBs to promote diversity and inclusivity.

h. Harmonisation with international standards

- Align veterinary-related workforce categories with international standards, such as the [International Standard Classification of Occupations \(ISCO\)](#) 2008 standards.
- Review and revise relevant legislation, such as the WOA [Terrestrial Code Chapter 3.4. on Veterinary Legislation](#), to reflect current needs and practices.

i. Stakeholder collaboration

- Encourage *associations* of veterinarians and VPPs to collaborate, approach governments, and seek WOA support to strengthen governance and regulation.
- Establish *memoranda of understanding* (MoUs) between VSBs and higher education councils for regulatory consistency.

j. The One Health approach and expanded practices:

- Expand the regulatory focus to cover direct and indirect veterinary practices, including animal health, welfare, public health and AMR.

Technical Themes and Enabling Environment for Effective Veterinary Workforce

Engaging the veterinary workforce to apply One Health principles at national level

Session lead : Dr. Lillian Wambua, WOA Regional Programme Officer (One Health), Sub-Regional Representation for Eastern Africa.

Session summary

More than 60% of emerging infectious diseases originating from animals have occurred recently, including the *Severe acute respiratory syndrome* (SARS), M-pox, Ebola, Avian Influenza H₅N₁, pandemic influenza A (H₁N₁), Dengue virus and COVID-19. This trend has been due to the confluence of several drivers, including rapid population growth and urbanisation, land-use change, encroachment on wild habitats, and changing global and local weather patterns. As a result, humans and domestic animals are coming into closer contact with wild animals, increasing the chances for spillover of pathogens from wildlife to domestic animals and humans. Therefore, the role of veterinary professionals at all levels is paramount to prevent, detect, and respond to existing and potential zoonoses and other emerging health threats.



The One Health session therefore aimed at sensitizing conference participants on the importance of the One Health approach and multisectoral collaborations to address health challenges at the human, animal and ecosystem health interface. Conference participants were introduced to One Health principles, the global Joint plan of action and implementation guide for prevention, detection, and response to One Health threats. Participants were then sensitised on the framework of competencies for One Health, which are relevant to different professional levels. Highlights of successful health interventions at Member level, achieved from implementing the One Health approach in disease control were also presented. The session was interactive, providing a forum for discussions, and a final survey was used to collate specific needs and recommendations to strengthen the engagement of the veterinary workforce on applying the One Health Approach in the field.

Session Presentations

Keynote address : Dr Hung Nguyen-Viet, Leader (a.i.) of the Health Programme, International Livestock Research Institute (ILRI)

One Health operationalisation through workforce development

- Dr Nguyen highlighted the multisectoral nature (e.g., including economics, social sciences etc.) of the *One Health High-Level Expert Panel* (OHHLEP).
- The speaker reminded participants of available guidelines on the implementation of the Quadripartite One Health *Joint Plan of Action* (OH JPA).

- Noting demand for animal-source protein and increased livestock production in the global south, he highlighted the need to adopt the One Health lens to assess and mitigate health threats at the animal-human-environment interface.
- ILRI has several ongoing One Health projects, the ultimate aim of which is to develop impactful tools to share with governments.
- ILRI recognises that veterinarians are One Health champions and there is a challenge to extend the One Health mindset to the public human and environmental health sectors, whose One Health awareness is less developed.
- In conclusion Dr Nguyen highlighted a SWOT analysis conducted by ILRI: there are (still) a lot of issues in multisectoral collaboration at lower administrative levels and in terms of data exchanges between laboratories, amongst other issues.



Dr Hung Nguyen-Viet, Leader (a.i.) of the Health Programme,
 International Livestock Research Institute (ILRI). Picture © P. Bastiaensen (woah) 2024.

Dr Hana Abdelsattar, Senior Training Programme Manager, Capacity-Building Department (WOAH)
The One Health Field Epidemiology Competency Framework (COHFE): an opportunity for countries to invest in their workforce through a learner-centred programme.

- [Dr Hana Abdelsattar introduced the One Health Field Epidemiology Competency Framework \(COHFE\).](#) She noted that the COHFE framework provided a basis for strengthening curricula and training programmes for the Veterinary and Public Health workforce, on critical competencies relating to One Health.
- The COHFE framework is flexible and adaptable to existing Field Epidemiology and Laboratory Programme (FELTP). COHFE can be used to review such programmes to

include essential competencies for One Health at Frontline, Intermediate and Advanced levels of training.

- It was underpinned that the COHFE included several documents: The main COHFE framework, and four supplemental manuals (guidance documents) addressing different components for curriculum development.
- The next phase of project, starting in 2025, will aim to pilot the COHFE framework and supplemental manuals in 3 countries/regions with the support of the DTRA funding.

Examples of implementation of the One Health approach at country level were provided by presenters from Cameroon, Senegal and Tanzania.

Prof. Nicolas Djigoum Diouf, Assistant Professor in Animal Health, Université Gaston Berger, Saint-Louis (Senegal)

One Health approach during outbreaks of Avian Influenza in wild birds in Northern Senegal, in 2022 and 2023 [[download](#)]

Mr. Rajab Awami, Student Association, University of Dar es Salaam (Tanzania)

Tackling health challenges by using a youth-led One Health taskforce: Lessons from One Health Society, Tanzania [[download](#)]

Dr. Cleophas Kahtita Mbah, Field Epidemiologist, Management Sciences for Health, Yaoundé (Cameroon)

Comparative assessment of the human and animal health surveillance systems in Cameroon: opportunities for an integrated One Health surveillance platform [[download](#)]

Session panel discussion (questions and answers)

On the training conducted for the Directorate of Veterinary Services (DVS) in Kenya, what were the criteria to choose the participants?

Dr. Hung Nguyen-Viet, ILRI : The DVS training project is targeting Kenya only. However, the participants were encouraged to consider other training options.

Is there a possibility to plan DVS trainings in other countries, such as the Democratic Republic of Congo (given the need to address disparities in training between human and veterinary sectors)?

Dr. Hung Nguyen-Viet, ILRI : ILRI does not have many projects in the Democratic Republic of Congo (DRC). However, the *Capacitating One Health in Eastern and Southern Africa* (COHESA) Project is involving DRC as well and training workshops have been organised in the country in the past.

Which pilot countries have been selected for the second phase of COHFE?

Dr. Hana Abdelsattar, WOA : The final decision has not yet been taken, one Member per region is envisaged (Africa, Middle East, South-East Asia)

Will there be criteria to select participants (e.g., previous knowledge)?

Dr. Hana Abdelsattar, WOA : The COHFE serves to add to existing topics not previously covered under the current *Field Epidemiology Training Program(me)* (FETP) and how they could be added or a new OH COHFE programme could be developed.

Will the digital tools cover the three sectors?

Dr. Hana Abdelsattar, WOA : The various One Health Operational Tools aim to gather all available resources in a common database. Each Organisation of the Quadripartite will be in charge to gather the resources from its own sector and they will be all represented in the aforementioned database. There are three digital tools to assist Members in adapting the COHFE framework to suit their needs and priorities: the Competency-Builder Tool, the Curriculum-Builder Tool and a Budgeting Tool. The tools will empower Members to select and prioritise One Health competencies and related curricular guidance, ensuring alignment with national health agendas and strategic priorities

Over the years, several tools have been developed, leading to a certain internal competition. Are the WOA tools complementary with other existing tools? Has the inter-operability with other tools be foreseen?

Mrs. Hana Abdelsattar, WOA : As far as the digital tools are concerned, each Organisation will identify existing digital learning platforms and will group them in a common database. However, other tools will be available in the framework of COHFE only. The aim is to enable Members to adapt the COHFE framework to suit their specific needs and priorities.

What were the challenges faced in the outbreaks of Avian Influenza in wild birds in Northern Senegal, in terms of One Health approach implementation, and identified solutions:

Prof. Nicolas Djigoum Diouf, Senegal : Public health services are usually reluctant to collaborate with the other sectors. However, in St. Louis, the joint training and sensitisation of the local authorities and decision-makers led to a positive and successful experience. Moreover, it was helpful to share this success story with other regions.

What is the relationship between the One Health Society of Tanzania and national authorities in Tanzania, and participation in high-level events like the United Nations General Assembly (UNGA) ?

Mr. Rajab Awami (Tanzania) : Indeed, the One Health Society managed to attend the UNGA meeting because the Youth-led One Health taskforce was invited. They form an alliance to improve global health.

Session recommendations

- Veterinary professionals to actively seek to improve their knowledge and competencies in OH using available online resources and training programmes for their own professional growth in preparation for roles and responsibilities related to the broader OH areas of focus in the Quadripartite JPA based on their qualifications.
- National veterinary services, Veterinary statutory bodies, Veterinary Educational Establishments and Veterinary Associations to partner in developing, updating and conducting trainings programmes to improve the competencies of veterinary professionals in One Health, at all levels.
- The One Health approach is usually implemented at higher administrative and political levels only. Therefore, Members and International Organisations should foresee more activities at local/community level, promoting a bottoms-up approach and encouraging multisectoral collaboration between all relevant stakeholders (NGOs, civil society, youth groups etc.).
- Members should map existing relevant stakeholders in respective countries and plan capacity-building activities for them.
- Members should develop policies to facilitate the drafting/implementation of *national action plans* (NAPs).
- International Organisations should support Members to create/establish national One Health platforms or, should they already exist, to operationalise them, while mobilising financial support to ensure their sustainability.
- Members and International Organisations should plan multisectoral trainings, including all relevant sectors, as joint events (e.g. public health and animal health sectors).

SPECIAL EVENTS

Plenary Special Event (Panel Discussion)

WOAH ■ Youth Perspectives on Futures of the Veterinary Workforce in Africa



Sonia Fèvre

Special Event: Youth perspectives on futures of the workforce



Tianna Brand



Finn Strivens



Angel Mwangi



Donat Ngirarubanda



Jesca Nyasuna



Nancy Mugei

Session leads: Ms. Tianna Brand, Foresight Advisor (WOAH) and Ms. Sonia Fèvre, Programme Manager, Capacity building advisor, Capacity-Building Department (WOAH).

Panellists were:

- Finn Strivens - United Kingdom
- Angel Mwangi - Kenya
- Donat Ngirarubanda - Rwanda
- Jesca Nyasuna - Uganda
- Nancy Mugei - Kenya

Session summary

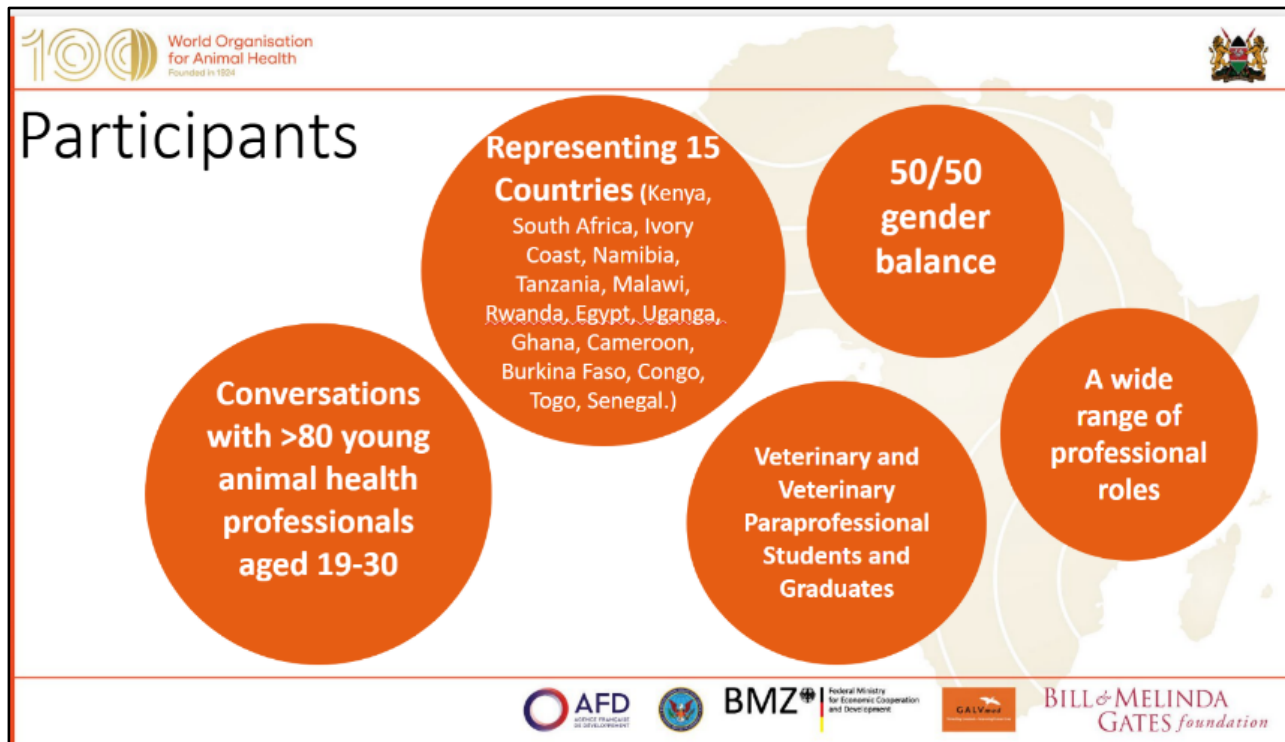
The session highlighted the need for planning the future with the youth at the centre, in order to make veterinary and paraprofessionals more adaptive and sustainable. This included:

- Creating a platform for the next generation where voices of the youth are put at the centre.
- Resilience and adaptability being the focus.
- Conducted with relevant and meaningful workforce planning.

The process of engaging the youth in the field is multifaceted and required the following activities:

- Interviews and scanning for signals of change.
- Two online and one in-person workshops with young people were held (**Annex 4**), and
- One youth prioritisation workshop was held to distil the priority issues.

The process was inclusive and had the following sets of participants:



[[download the full oversight presentation](#)]

The workshops used several methodologies and tools. Storytelling stood out as one of the best methodologies when involving and creating a sustainable and healthy world with a future thinking. The methodology is summed up in a diagram called the ***Futures Wheel***, which looked at the skills, workforce, regulation, workplaces, work tools, and work models among others.

Session recommendations

Some of the recommendations from the Futures Work with the Youth include:

- Strengthen professional development for veterinarians and veterinarian para-professionals.
- Consider having and entrenching a One Health approach in everything for a sustainable future.
- Ensure climate change effects are prioritised as this impacts the entire veterinary work with a possibility of evening changing the scope of Veterinary Services.

Workshop Session

WOAH ■ Youth Perspectives on Futures of the Veterinary Workforce in Africa

Session leads: Ms. Sonia Fevre, Programme Manager, Capacity building advisor, Capacity-Building Department (WOAH) and Mr. Finn Strivens, Creative Lead (Futurall).

Session Summary



This session explored the future of the veterinary workforce from the perspective of young people from the animal health sector. It considered what changes, opportunities or disruptions are present or emerging, inside, and outside of the veterinary domain, that are shaping the future of veterinary education and workforce development.



Questions considered included :

- What global, national, or local trends could affect the future of work in animal health and welfare?
- What new challenges or trends do animal health professionals, such as veterinarians and VPPs being trained now need to be prepared for?
- How should training programmes prepare new graduates in the veterinary domain to the future of their work?
- How does veterinary education align with current global changes which will affect the future of veterinary practice?

The session provided a space to explore stories and recommendations from African youth from the veterinary domain, from a consultation conducted by WOAH in October 2024. General recommendations will be framed related to inclusion of youth perspectives in workforce development, and the relevance of these for specific actors and institutions will be investigated.

Session Objectives

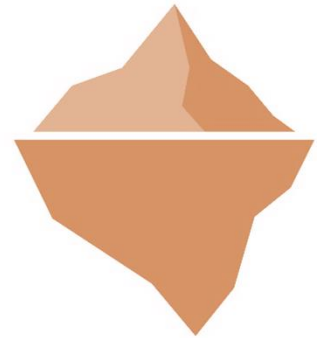
- Explore current and potential trends and expectations about education and training, jobs, employment and how animal health service delivery are organised.
- Provide recommendations on how actors in education and employment can be more responsive to the needs of the next generation in the evolving veterinary workforce.
- The session would also explore the interactions between human health and animal health and their interdependency on the environment.

Session Methodology

There was a panel discussion with three students explaining their experiences after having participated in the online workshop(s) earlier that year:

- Titilayo Ayodele - Nigeria
- Noé Tchiguiré - Senegal
- Sophia Waweru - Kenya

A PowerPoint™ was also used and focused on the methodology for developing the workshops and iceberg activity. The purpose of the workshop, held during the Conference was to get a hands-on experience of a foresight dialogue. Each of the three groups was given a character of a future veterinarian in 2040. Using the analogy of an iceberg, participants were asked to think about what structures would be in place in 2040 to support that character at a visible level (policies, infrastructure, organizations and resources), and also at an invisible level (mindsets, skills, competencies, beliefs). Each group came up with one recommendation on how veterinary workforce planning needs to adapt in order to respond to the needs of future generations of veterinarians.



Session Discussion

The session leads asked the three students about the main topic that they discussed during the earlier workshops. Responses included problems involving climate and how to include youth in decision-making, One Health, and how to establish and foster a worldwide community of students. Issues relating to gender and inclusion in the veterinary field. The third student, Mr. Noé Tchiguiré (Dakar), was asked how the association supports student's integration into the profession. The response was that an association called the Association of Dakar-based veterinary students or *Association des Etudiants Vétérinaires de Dakar* (AEVD) supports students by allowing them to participate in conferences organised by pharmaceutical companies. During these conferences they share experiences and expectations with the next generation of veterinarians and show them the way forward for collaboration in the future. He also mentioned that they organised internships for students to help students during the training at the university to be sure that all of them have a company where they can complete their internships. This group also has small organisations that concentrate on diverse topics, including leadership, environmental issues and other topics. This group organises experiences for students to shadow veterinarians in clinics.

When prompted to think about how jobs in the veterinary sector may differ in 30 years, one of the participants (Dr. Tobi-N'kaya, WOAH Delegate of the Republic of Congo) highlighted the fact that jobs will likely be different, and that national Veterinary Services should start preparing accordingly through harmonisation efforts across the continent. This includes reviews of legislation and exchanges between Members on goods and services within the veterinary sector.

“It is important to think of the African continent as a whole and to ensure exchanges between national Veterinary Services.”

Another participant had a differing view, highlighting that because the veterinary service delivery has not changed much in the past 30 years, it likely will be more of the same, static and slow, for the next 30 years. She pointed out that even today, in the field, older technologies are still being used (e.g. making phone calls rather than using apps or other technologies) and that for the most part veterinarians are not too innovative.

“Veterinary services are very static and have not changed much in 30 years.”



Ms. Titilayo Ayodele, Chair, IVSA Standing Committee on Animal Welfare, International Veterinary Student's Association (IVSA), Ilorin, Nigeria. Picture © P. Bastiaensen (woah) 2024.

Outcomes of the break-out session (iceberg, in three groups)

- Adopt a One Health approach to help meet the future role of veterinarians in the fight against future pandemics and diseases that are likely to emerge. This should be done by incorporating and including the One Health approach in training facilities to help students become knowledgeable in this area.
- Adopt digital technology to help with reporting, health monitoring and sharing of information in the veterinary sector. This will also help to meet the needs of farmers quickly, with mobile technology.
- Include digitalisation within the curriculum of veterinary professionals.
- Promote pairing (twinning) of local and international VEEs that offer veterinary qualifications and VPP qualifications, which will allow them to embrace cultural veterinary

story-telling and innovation. Youth should also be included in the design of their own curricula.

- To respond to the needs of livestock keepers, promote investment in new types of veterinary service delivery companies that can be scalable and respond to the needs of local communities.

There was a question on whether any themes should be removed from the veterinary curricula in order to make space for new additions. The response provided emphasised that more and more of veterinary education is occurring in an applied way, which will naturally lend itself to adaptation to whichever aspects of the job are most prevalent to the day-to-day work of the future within the education structure.

Other comments pertained to the fact that efforts are being made to adapt the approach of the curricula to competency-based veterinary service delivery. This will include competencies in leadership, collaborative networks, and interaction with current and developing technologies. This will help the profession to evolve with the “modern times”.

Further, it was argued, legislative frameworks should look into matters of artificial intelligence (including policies on AI and veterinary establishments and VSBs, as well as advocacy and grassroots involvement by veterinary associations and VSBs for the use of AI).

***“Human is human and artificial is artificial.
We must retain contact with veterinarians, as well as the AI”***

For the invisible aspects, below the sea surface, efforts should be made to build bridges between veterinary professionals, training, CPD, human resources and cultural and mindset changes in all these areas.

Session Highlights

- *Artificial intelligence* (AI) and future technology were discussed by every group. The need for future generations to adapt and work with this technology was highlighted as essential.
- Intergenerational exchanges were also emphasised as important for learning. Participants cautioned that it is important for youth to not only interact with other youth, but also other generations. This should occur ideally through coaching and mentorship, as well as hosting of spaces for more intergenerational exchanges. This could also include a digital platform for networking.
- One Health collaboration was also emphasised, particularly collaboration between sectors. This also requires collaboration between universities.
- Relationships with policymakers and their role in decision-making were also highlighted as critical.
- In the next five years, there will be work on freedom of movement to enable veterinary service delivery between Members in Africa.

*“Le terrain va vous apprendre des choses. Avec des erreurs on apprend.
Avec des erreurs on avance”*

[Field work will teach you the hard way.
With errors, one learns, with errors, one makes progress]

Session recommendations

- Human health and animal health should come together for a One Health approach towards learning.
- Policies should be put in place with input from veterinarians. In doing so, veterinarians should play a policy-making role and exchange regularly with other policymakers.
- *Artificial intelligence* (AI) should not be seen as a replacement for Veterinary Services, but instead as a tool to support and train veterinary professionals.
- Policymaking processes should promote and incorporate intergenerational dialogues, as well as make sure that future policies are fair to future generations.

Plenary Special Event

WOAH ■ Launch of the WOA *H* Community-based Animal Health Workers (CAHW) Guidelines

Session lead : Dr. Xyomara Chavez - Pacheco, Project Officer (CAHW), Capacity-Building Department (WOAH).

Session summary

Dr. Xyomara Chavez introduced the session providing the objectives of the session whose overall goal was to officially present the Competency and Curriculum Guidelines for *Community (based) Animal Health Workers* (CAHWs), hereafter referred to as the ‘Guidelines’. The objectives were to:



- Briefly explain the process that led to this output (creation of an *ad-hoc* group [AHG], with relevant expertise, methodology, etc) and the importance awarded by WOA *H* on the inclusion of CAHWs into the veterinary workforce.
- Present the structure of the Guidelines: introduction section and the curriculum itself (explain how it was developed, the items that comprise the curriculum, etc), and
- Briefly present the relevant supporting documents that will complement the WOA *H* Guidelines (the VSF-International Handbook, the Ohio State University’s Digital curriculum alignment tool or OSU D-CAT and a teaser of the Guide for Trainers of CAHWs)

This session was designed to provide an overview of the Competency and Curriculum Guidelines for *Community Animal Health Workers* (CAHWs), taking the audience through the steps from the conception of the project to the publication of the said Guidelines, while encouraging them to engage with the CAHWs team in the next session, where the practical aspects of the VSF-International Handbook and the OSU D-CAT would be discussed more in-depth, and where a practical activity would be carried out to better understand how to use the WOA *H* Guidelines.

There were four panellists taking part in this session:

- [Alice Matos](#) (The Ohio State University),
- Nandipha Toyota Ndudane (chairperson of the AHG on CAHWs, WVA representative),
- [Johan Oosthuizen](#) (CAHWs consultant),
- [Alexia Rondeau](#) (VSF-International).

In the curriculum, a *Community Animal Health Worker* (CAHW) has been defined by the WOA *H* CAHWs Ad Hoc Group in 2024, as quoted below:

A person selected from or by their own community and provided with short, initial or recurring vocational training to perform basic animal health and animal husbandry-related services, in line with national animal welfare standards. CAHWs operate on a fee-for-service basis or some other means, are accountable to a registered veterinarian, a registered veterinary paraprofessional or an appropriate official and are active in their community. CAHWs can also play an important role in a range of sanitary tasks such as disease reporting.

The roles and attributions of the CAHW include:

- CAHWs operate primarily where there are insufficient numbers of veterinarians and VPPs or where veterinarians and VPPs are unwilling or unable to go, both in peacetime and in periods of civil unrest.
- CAHWs provide last-mile service delivery for animal keepers in underserved areas and communities by providing services such as extension services, basic animal health care and preventive care.
- CAHWs support so-called ‘public good’⁶ functions such as disease surveillance and reporting, disease control and eradication, and emergency response.
- CAHWs can and do contribute to the various missions of the national Veterinary Services.



There are a number of reasons why the Guidelines were developed. The Guidelines serve two key objectives:

- a. To promote a consistent level of training for CAHWs through the delivery of core competencies.
- b. To create a basis for VSBs to establish criteria for the qualification and registration of CAHWs to better integrate them into the national Veterinary Services.

Workshop Session

The WOAHA CAHW Guidelines : how to use them ?

Session lead : Dr. Xyomara Chavez - Pacheco, Project Officer (CAHW), Capacity-Building Department (WOAH).



Session co-facilitators:

- [Alice Matos](#) (The Ohio State University),
- Nandipha Toyota Ndudane (chairperson of the AHG on CAHWs, WVA representative),
- [Johan Oosthuizen](#) (CAHWs consultant),
- [Alexia Rondeau](#) (VSF-International).

Session Summary

This session was designed to provide a comprehensive understanding of the pivotal role of *Community Animal Health Workers* (CAHWs) in improving animal health services in underserved regions. Participants explored the value of CAHWs as a complementary workforce to veterinarians

⁶ A public good is a commodity or service that every member of a society can use without reducing its availability to all others. Typically, a public good is provided by a government and funded through taxes. Examples of a public good include a town road, park, or school. (...) A public good may also be a basic need such as access to clean air and drinking water. Veterinary Services are regarded by WOAHA as a global public good.

and VPPs, based on global insights and the newly developed WOAH Competency and Curriculum Guidelines for CAHWs. This session also provided guidance on how to apply the WOAH Competency and Curricula Guidelines to design tailored CAHW curricula. Based on CAHWs' specific roles within communities, this hands-on session guided participants in tailoring training content to meet local needs, ensuring that CAHWs are well-prepared to address the unique challenges of their regions.

“I like that we are arguing because we will go back home with a lot of new ideas”

Session Objectives

- Ensure participants understand the significance of CAHWs in providing animal health services in underserved areas, as a complementary workforce to veterinarians and VPPs, through the presentation of a summary of CAHWs' roles and tasks worldwide, from WOAH Members survey.
- Ensure participants understand the development process and structure of the WOAH Competency and Curricula Guidelines for CAHWs.
- Equip participants with an understanding of how to use the WOAH Competency and Curricula Guidelines for CAHWs to develop their own CAHW training curriculum, based on CAHWs' possible roles at community level, through an interactive training (group activity).

“Africa is a continent and not a country, it's not a good idea to generalise”



Drs. Nandipha Toyota Ndudane (left) and Alice Matos (right), with Johan Oosthuizen in the background.
 Picture © P. Bastiaensen (woah) 2025.

Session highlights

During the session participants discussed and debated several matters as they relate to the Guidelines. Some of the key insights included:

- According to some participants, Africa risks ending up in a situation where CAHWs and VPPs are used to perform veterinary activities, with lower salary expectations, initiating a downward spiral of lower prices for lower quality service delivery.
- Most participants agreed on the importance of improving accessibility to training on core competencies to ensure that even at local/community level there is adequate awareness of key best-practices.
- It was noted that WOA ‘Guidelines’ (as opposed to WOA ‘standards’) are not mandatory; it is therefore up to the Members to decide what part and how much of the Guidelines they want to implement, according to their context and needs.
- Participants stressed the importance of defining and harmonising standards for VPPs and CAHWs and of recognising their roles by the VSBs. The creation of a new workforce can be both helpful or problematic.

“Africa likes shortcuts, loves confusion, does not like to spend money and hates building-up new regulations”

Recommendations

- WOA is to better clarify the differences between VPPs and CAHWs, detailing their role and responsibilities. The role(s) of CAHWs should be clarified, in particular through regulations to avoid conflict with other professions such as VPPs and veterinarians. Where relevant, the definition of VPPs should be standardised and refined by national governments.
- African Members should promote the harmonisation of VPPs and CAHWs training.
- One should avoid creating “silos” within the CAHW profession, as already exists for VPPs in certain Members.
- Where relevant and if possible, try to invest funds for individuals from within the community to become VPPs.

Plenary Special Event (Introduction)

GALVmed ■ The role of public-private partnerships in product development and creation of sustainable markets for veterinary products

Session lead : Dr. Carolin Schumacher, CEO, Global Alliance for Livestock Veterinary Medicines (GALVmed).

Session Objectives

The session highlighted how partnerships could be catalysts for innovation in order to increase the availability, access and adoption of animal health products to control livestock diseases. [Session lead Dr. Schumacher started the session by giving a quick overview of GALVmed and what it does and why they do what they do.](#) She reiterated that GALVmed is an international not-for-profit organisation dedicated to animal health product and business development. GALVmed works in partnership with several players including animal health industry players, donors, smallholder farmers, the private sector in general, governments, universities, and research institutions among others. Both WOA and FAO are institutional partners of GALVmed and are represented on GALVmed's Board of Trustees.



She noted that GALVmed does what it does for two major reasons:

- Transformational improvement in the wellbeing and economic progression of small-scale livestock producers.
- Improve access to veterinary products for small-scale livestock producers in Sub-Saharan Africa and the Indian subcontinent.

Public-private partnerships (PPPs) are essential for the work that GALVmed does because of the various roles that the various players in the value chain play. Some of the reasons include:

- GALVmed works in Africa and the continent is experiencing a high demand for livestock, animal health services and animal health products. This is because the continent is experiencing faster growth, livestock currently being the fastest growing, highest-value agricultural subsector globally.
- Limited access to animal health products constraints farmers' ability to manage animal health and welfare in Sub-Saharan Africa.
- Lack of access to effective and affordable veterinary care is a key constraint for many African farmers.
- Whilst there are limited effective PPPs in the veterinary domain, these are nonetheless needed for innovation and new product development, regulatory capacity building and sustainable and efficient disease control.

In addition, GALVmed believes that:

- The livestock production and animal health input value chains are highly complex, currently functionally disrupted, misaligned with farmer needs, subject to disease and climate shocks, and often commercially non-viable.
- Innovation, knowledge, veterinary care and animal health products do not reach farmers due to a lack of awareness and cooperation, government interference with market dynamics, weak distribution systems and public and private veterinary service infrastructures, an unpredictable regulatory environment and inefficient quality assurance systems.
- Building functioning, productive and sustainable livestock production systems and value chains is no longer a choice or a single stakeholder group's mandate, but a societal demand and responsibility of all livestock value chain players.
- Public and private stakeholders should collaborate and build PPPs to identify and gradually lift barriers that today constrain the livestock value chain and limit the progression of innovation and development of the livestock sector in Sub-Saharan Africa.

Workshop session

GALVmed ■ The role of public-private partnerships in product development and creation of sustainable markets for veterinary products



Session leads: Ms. Lois Muraguri (right), Senior Director, Enabling Environment and Partner Engagement and Ms. Edith Moroti (left), Associate Director, Outreach & Partnerships, GALVmed



Session facilitators: Dr. Karelle De Luca, Head of R&D and Mr Tom Osebe, Senior Manager, Commercial Development & Impact, GALVmed

Session objectives

The main objective was to highlight the importance of *public-private partnerships* (PPPs) and the role they could play in supporting sustainable veterinary product development and veterinary service provision in Africa.

Session sub-objectives included:

- Demonstrate how PPPs can be a useful approach for developing region-specific veterinary products that meet the unique needs of animal health challenges in Africa, leveraging the unique strengths of both sectors.

- Showcase examples where PPPs have helped address challenges in veterinary service provision and in developing sustainable markets that ensure accessibility of quality products by small-scale livestock farmers in Africa.

Session panel discussion (questions and answers to the facilitators)

Why are PPPs critical?

Efficacy and regulation are crucial for the production of veterinary products. There is a need for more collaboration between public and private sectors to enhance opportunities for developing innovative products. One should strengthen partnerships to build the capacity of national laboratories, particularly for vaccine production. Additionally, we require increased capacity and innovative approaches to vaccine development in private laboratories. Furthermore, it is essential to establish a continental programme for disease control and to harmonise the regulation of vaccines. We must also facilitate market access for vaccines produced in private laboratories. Innovation and cutting-edge research should be embraced by all collaborators through PPPs. The success of these partnerships will depend on the strength of the participants involved.

What are some of the successful PPP examples?

Thermostable products that have been commercialised, such as thermostable *Peste des petits ruminants* (PPR) vaccines (small ruminants) and thermostable Newcastle disease vaccines (poultry), have greatly improved the delivery to small-scale farmers. In Morocco, there are numerous initiatives aimed at fostering partnerships and collaboration with the African Unions' *Pan-African Veterinary Vaccine Centre* (AU-PANVAC), which is essential, alongside government partners and private vaccine producers. Additionally, more and more vaccines tested at AU-PANVAC are sourced from private laboratories. There is definitely still room for private manufacturers in Africa, but it is crucial to have clear, respected, and well-implemented continental legislation.

What are some of the barriers and/or challenges to vaccine usage?

Limited access to cold-chain facilities⁷ (ensuring the appropriate temperature for vaccine storage and transportation), lack of education/knowledge (there is insufficient understanding of disease prevention, particularly regarding specific diseases) and lack of sustainable vaccination programmes: there is a need for ongoing programmes that promote continuous vaccination (not reactive to outbreaks only) and awareness of disease prevention.

How can PPPs increase vaccine awareness and improve disease prevention?

Through national policies and legislation: Development of supportive policies at the national level.

Through a better understanding of the value chain: Enhancing the delivery of vaccines directly to farms through a comprehensive understanding of the supply chain.

⁷ A cold chain is a supply chain that uses refrigeration to maintain perishable goods, such as pharmaceuticals (drugs and vaccines). Cold-chain facilities include cold chambers, refrigerated trucks and lorries, fridges, (deep)freezers, cooling boxes, but also thermotolerant products, dry ice, liquid nitrogen etc...

Through appropriately trained personnel: Employing qualified professionals to administer vaccinations effectively.

Through regional approaches to disease control: Diseases like *East Coast Fever* (ECF), which impact 11 Members in the *East African Community* (EAC), result in significant economic losses, deterring company investments.

Through investments in technology: Utilising advanced technologies, such as drones, for vaccine distribution and logistics.

“PPPs are required for capacity building and technology transfer and to deliver quality vaccines in Africa”

Are farmers willing to pay for vaccines?

We need to win the trust of farmers, and this can be successful. Farmers are willing to pay. But... governments could provide subsidies to cushion the cost of certain vaccines, and governments should fully fund the vaccines for diseases that could be considered a public good. If payments from farmers are not forthcoming, then sustainability of the vaccinations cannot be assured. The farmer needs to understand the importance of good Veterinary Services from the farmers’ perspective.

Could geo-mapping (or geo-positioning) of veterinary service providers and animal owners help ensure the success of mass vaccination?

This approach is possible and could operate as a private business. However, while it may not be feasible for pastoralists, it could be effective for non-pastoralists (sedentary farmers).

Why are commercial poultry farmers more willing to pay for vaccinations as compared to cattle farmers?

There have been many campaigns aimed at convincing poultry farmers of the importance of vaccinations, the quality of available vaccines, and the sustainability of their ventures. Increasing disease awareness among farmers is crucial for the success of vaccination programmes.

“Collaboration between the public and private sectors is essential to bring innovative products to markets that can meet the needs for society”

Session recommendations

- WOA and AU-PANVAC should develop guidelines for auditing vaccine manufacturers to ensure the production of high-quality vaccines.
- The private sector should be viewed as a reliable partner, leveraging regional PPPs.
- There should be a push for the harmonisation of innovations and the establishment of an open continental market for both public and private vaccine producers, in order to encourage product competition.
- To build trust between the public and private sectors, opportunities for sharing experiences must be developed.

Plenary special event

AU-IBAR WOAH ■ The Africa PPP Forum in the Veterinary Domain (AF3P)

Session leads: Dr. Rahul Srivastava, Project Officer, Public-Private Partnership Project, Capacity-Building Department (WOAH) and Dr. Mary Mbole-Kariuki, Project Officer, One Health Data Alliance Africa (AU-IBAR).

Session summary



Session co-lead Dr. Mary Mbole welcomed everyone to the launch session of the Africa PPP Forum in the Veterinary Domain. She alluded to the fact that the launch is critical for the African continent and that it is one of the weakest links in strengthening the veterinary domain. Unity of the public and private sectors is critical in the successful existence of the veterinary domain on the continent.



Just like the three-legged African stool, PPPs must be stronger in each of their components :

“A chain is only as strong as the weakest link”.

Session co-lead Dr. Rahul Srivastava introduced the session structure highlighting that the session was to be conducted in two parts, a plenary session with 2 sets of panellists and a technical session.

Dr Karim Tounkara (WOAH Regional Representative for Africa) began by referring to what his nation of Mali believes in: *“When you invite somebody either you have something to give them or something to tell them”*. He then noted that he was not giving something but rather introducing the Africa Public Private Partnership Forum in the Veterinary Domain to an African audience. He noted that Africa is blessed with a vast livestock population. Indeed, as indicated by Dr. François Caya, the African livestock sector is projected to be worth USD 150 billion by 2050. Some of the critical statistics are shown on the next page.

Continental and regional initiatives

Two critical documents that have been developed in the region identify PPPs as essential in improving the livestock sector. These are the Livestock Investment Plan by the *African Development Bank* (AfDB) and the Livestock Policy in Africa Review by AU-IBAR. At the continental level, PPPs have been seen as very essential in shaping the future of Veterinary Services and the veterinary domain in general. It is essential that the Africa PPP Platform being launched takes cognizance of these contextual matters.

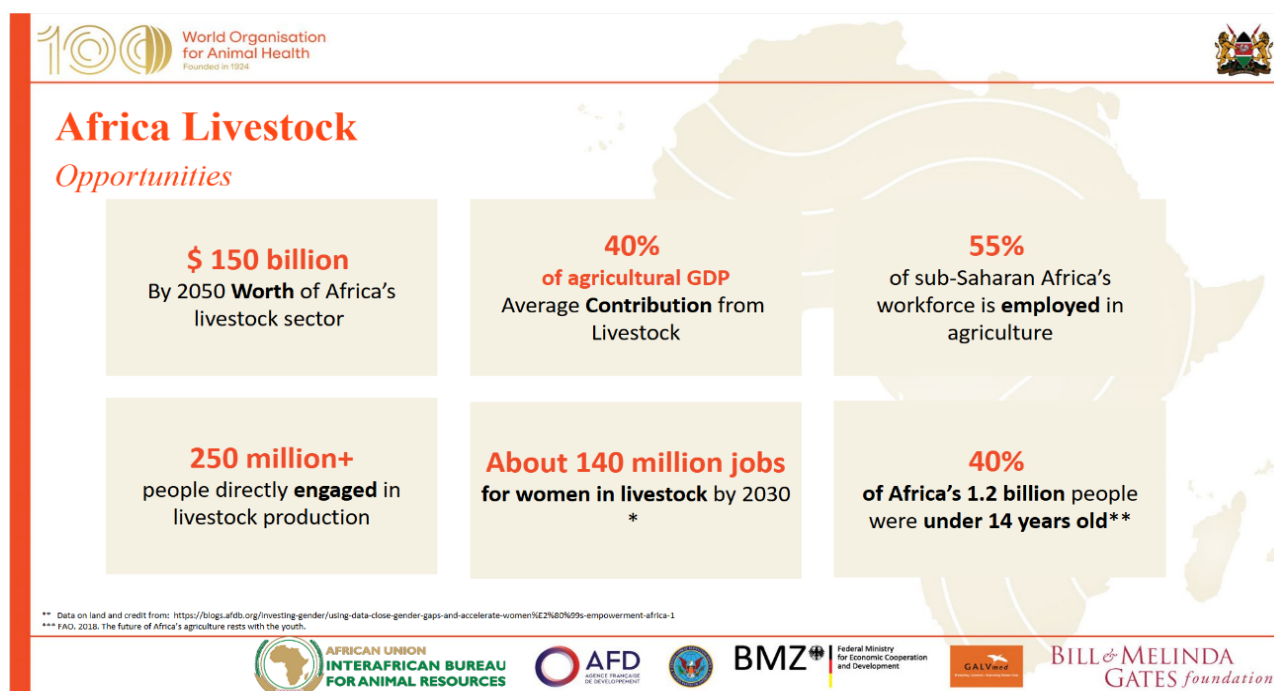


Figure 1 : Africa Livestock Sector Overview

He noted that there are 31 PPP cases from 15 African Members that have been recorded and reported in the WOAHP database : <https://www.oie-ppp-database.com/>. These hail from the following 15 Members : Ethiopia, Gambia, Ghana, Guinea, Kenya, Lesotho, Malawi, Mali, Morocco, Namibia, Nigeria, Tanzania, Tunisia, Uganda, and Zimbabwe.

Creating an enabling environment for PPPs in the Veterinary Domain in Africa

Forty-two (42) out of 54 African Members have enacted PPP legislation.

Since 2015, 28 Members in Africa adopted PPP legislation.

Government teams focusing on PPPs comprise independent institutions and units attached to Ministries of Finance, technical Ministries, or the Prime Minister's or President's office.

There is a need to view and understand ongoing PPPs in the Veterinary Domain in Africa to create synergies in efforts and improve efficiency in addressing the gaps in Veterinary Services.

The AF3P Forum co-creation process

The Forum has been created through a collaborative process. The first consultation processes included an orientation meeting on 4 April 2024, at the AU-IBAR offices in Nairobi, Kenya. This hybrid event saw robust participation from stakeholders across the continent. Representatives from AU-PANVAC, ECCAS, ECOWAS, FAO, IGAD, SADC, and various other organisations, including GALVmed, ILRI, STDF, WTO and the LVIF (IDRC), participated in discussions to align objectives, finalise governance structures, and explore sustainability avenues.

There was a second consultation process that included the Africa PPP Forum in the Veterinary Domain as presented at the annual meeting of the WOAHP Regional Commission for Africa, which met by videoconference on 21 May 2024. A total of 84 participants attended, including Delegates

from 29 Members of the Africa Regional Commission, five observers, and representatives from 16 international and regional organisations.

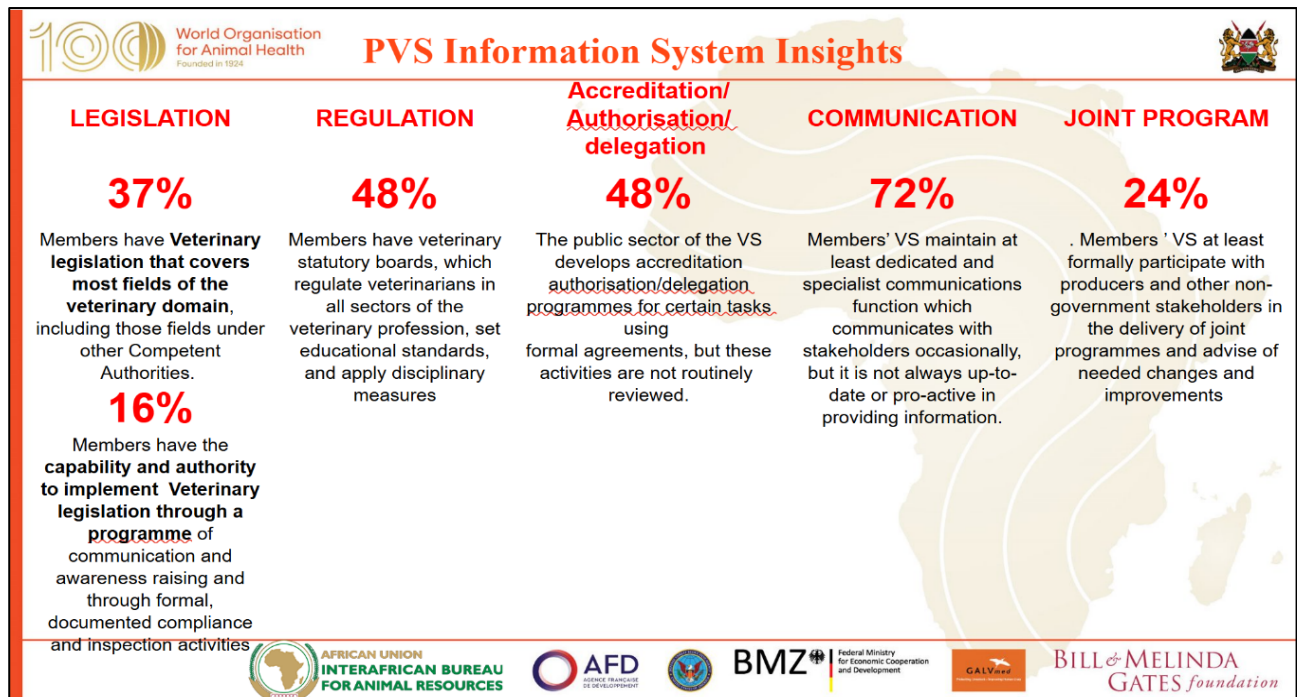


Figure 2 : PVS Information System Insights

[\[download the full presentation\]](#)

The Vision

Strengthen African animal health and welfare systems through a collaborative framework for Veterinary Services and their partners.

The nature of the Africa PPP Forum

- The Forum is not a decision-making body and will aim to reach a consensus on issues being discussed.
- There are no costs associated with membership.
- Members from the following organisations working in Africa are welcome to join:
 - Intergovernmental organisations (IGO)
 - *Regional Economic Communities* (REC)
 - *Non-governmental organisations* (NGO)
 - National governmental institutions;
 - Private sector entities organised through constituencies or international business associations, farmer/producer associations and trade association
 - Philanthropic foundations
 - Academic and research institutions



Dr. Mary Mbole-Kariuki, Project Officer, One Health Data Alliance Africa (AU-IBAR).

In the background : Dr. Rahul Srivastava, Public-Private Partnership Project, Capacity-Building Department (WOAH).

Picture © P. Bastiaensen (woah) 2024.

Expected outputs of the Africa PPP Forum include:

- Facilitating legal and regulatory frameworks and development of guidelines for improved governance and management of PPPs.
- Develop an 'Implementation Guide' with templates for MoUs, agreements, *Standard Operating Procedures* (SOPs), and best practices in PPP project development, implementation, and evaluation.
- Increased consultation and joint programmes among public and private stakeholders.
- Provide a digital forum for networking.
- Provide an advocacy platform for increased awareness among policymakers and end beneficiaries, including farmers.
- Producers and non-government stakeholders contribute resources and may lead the development and delivery of effective joint programmes with the Veterinary Services.
- Offer a *Monitoring, Evaluation and Learning* (MEL) platform for the dissemination of knowledge and information products, including best practices and lessons learned from existing PPPs.

Plenary special event

The African Union's key interventions to address emerging Public-Private Partnerships needs in the Veterinary Domain

Speaker : Prof. Dr. James Wabacha, Animal Health Expert, AU-IBAR

About AU-IBAR

IBAR is a specialised technical office of the *African Union Commission* (AUC) under the *Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment* (DARBE).

- **Vision:** An Africa in which animal resources contribute significantly to the reduction of poverty and hunger
- **Mission:** To provide leadership in the development of animal resources for Africa through supporting and empowering AU Member States and Regional Economic Communities.
- **Mandate:** To support and coordinate the utilisation of animals (livestock, fisheries and wildlife) as a resource for human wellbeing in the Member States of the African Union and to contribute to economic development.



Figure 3: AU IBAR Core Functions

AU IBAR's Core Functions

Core Areas for PPP interventions

- Disease surveillance, control and response
- Capacity development and building
- Infrastructure development (e.g. laboratories, abattoirs, etc)
- Research and development
- Animal welfare
- Veterinary legislation and regulations

AU-IBAR's initiatives with potential for high PPPs impacts across the veterinary domain

- Modernisation of policies and legislation.
- Development and modernisation of animal health infrastructure.
- Improved utilisation of private veterinarians for public work through accreditation schemes/programmes (i.e. the sanitary mandate).
- Strengthening and harmonisation of disease surveillance/detection systems.
- Strengthening of laboratory systems.
- building capabilities for enhancing compliance with sanitary standards (particularly key in the context of the *African Continental Free-Trade Area, AFCFTA*).
- Assuring the welfare of animals at farm level.
- Information management systems.
- Breeding programmes.

Way forward

- Strengthen functional multisectoral coordination mechanisms at national, regional and continental levels, leverage on building trust, accountability and transparency.
- Promote capacity building of Veterinary Services, other sectors and communities to better be able to develop and deploy risk management tools (actors are operating at different levels).
- Strengthen the enabling environment covering legislation and regulation.
- Encourage resource mobilisation for sustainability.

Plenary special event

Stakeholders' views on the Africa PPP Forum in the Veterinary Domain

Moderator : Dr. Bouna Diop, independent consultant and FAO/WOAH Expert

First panel :

- Dr. Wamalwa Kinyanjui, IGAD Centre for Pastoral Areas and Livestock Development (ICPALD) Nairobi.
- Dr. Columba Teru Vakuru, WOAHA Delegate and CVO, Federal Ministry of Agriculture and Food Security, Nigeria.
- Mr Francis Witola, Veterinary Paraprofessional Association of Zambia.



Dr. Wamalwa Kinyanjui, IGAD Centre for Pastoral Areas and Livestock Development (ICPALD)

Considering the increasing demand for livestock production and trade in the IGAD region, what opportunities do you see for PPPs intervention?

As IGAD, and in the eight Members⁸, there are quite a lot of opportunities for the Veterinary Services and the veterinary domain. First in line though are breeding or farming of livestock, processing, and overall husbandry practices. When one looks at breeding there is space for PPPs, where the private sector can offer a service and the Government can have a supervisory role. Both on the production side and on the side of animal health services, there are a lot of opportunities to grab. With structural adjustments that started in the 1980s, there are opportunities in husbandry, vaccination, and treatment, that can be handled through PPPs. Things have changed a lot in the way PPPs are looked at. As opposed to infrastructural issues, the private sector can even come in to conduct surveillance.

As a regional organisation mandated to help countries, in what ways do you think this Africa PPP Forum can help the region and also in particular your Members ?

At times incentives matter a lot. As opposed to looking at it as competition, we need to approach it from a complementary angle. In the livestock sector, most of the (export) quarantine stations are operated by the private sector. Those managed by government usually do not do very well. This is because the private sector offers better services. Therefore, governments should focus on supervision and provision of incentives like tax waivers or tax incentives. Governments have a number of ways to provide incentives. Regulation can be left for the public sector with service provision or delivery left to the private sector, in order for users to get the best value for money.

⁸ Djibouti, Ethiopia, Eritrea, Kenya, Somalia, South Sudan, Sudan and Uganda.

Dr. Columba Teru Vakuru, WOA Delegate, Federal Ministry of Agriculture and Food Security, Nigeria

What is the role that government agencies can play in making Veterinary Services work better?

First of all, any government's role in PPPs should be facilitative. Government or public workers should ensure they understand the 'body language' of the government of the day. The government is made up of politicians from different backgrounds with not much understanding of the various sectors. Policies are hinged on the objectives or agendas of the government. Secondly, the government workers should develop instruments that help deliver the government agenda in the veterinary sector. Veterinary Services, as it stands now, is one of the basic social services for any country. These services touch directly on the livelihoods of people: providing food, nutrition, gets the youth engaged, creates employment, and provides over 55% of employment to people in Sub-Saharan Africa. It goes beyond animal health and welfare and has transformed into social services. Therefore, there should be an easy linkage to government agendas. There is also a need to understand that whilst public sector resources are shrinking, at the same time populations are growing day by day. The policies therefore have to be need-based and consultative. Do not take anybody within the value chain for granted - educated or not. Everyone in the value chain level plays a critical role, involve them. Also have in mind that policies should be made legal to create the framework for the private sector work. It is a win-win for all. The private sector benefits, the public sector benefits and most importantly, the people at the communities are happy because they have a livelihood. Finally, always build-in time for reviews of the policies and strategies from time to time. If necessary, evaluate each other.

With regard to the ongoing initiatives in Nigeria, do you have one example to share on PPP implementation?

Dr Vakuru used to be the Coordinator of the Animal Health Project funded by the World Bank in Nigeria. The analysis, conducted during this Project, found that there were considerable workforce challenges in respect of private sector services providers, especially in rural areas. Despite a huge number of veterinarians in Nigeria, most are concentrated in the town centres. He sat down with the World Bank team and negotiated that the Project would be authorising the engagement of 100 veterinarians. Once this was achieved, the next hurdle was to design a inclusion criteria to ensure that those who would consider moving from the public sector to the private sector, would indeed be able to cross over. He did this intentionally to ensure that young veterinarians, recent graduates, could be enticed to join the Project and work with the farmers in the rural areas. The other way was to find a way to groom those already engaged in the public sector to start thinking "the private way". At the end of the Project, the young veterinarians transformed into employment providers which is good for the Nigerian economy. Previously they were mostly to job seekers and a burden to the Nigerian economy. Thereafter, as they expanded their private businesses they were able to absorb even more veterinarians, creating jobs.

Mr. Francis Witola, Veterinary Paraprofessional Association of Zambia

With the presence of a Veterinary Para-Professional Association in Zambia, how can PPPs help in enhancing the training of VPPs?

When you look at the paraprofessionals, you discover it is a long list of professionals including technicians, entomologists, biologists, nutritionists, research personnel, public health, meat inspectors etc. Therefore, if something tangible is to come out of this, the VPPs should be recognised, so that they can regulate themselves. Give them responsibilities to manage and self-regulate. We should accept that in every situation there could be change. We need refresher courses as part of the much-needed human resources development and capacity building. Technology is ever-changing and the workforce needs to adapt. Through PPPs, gaps in capacity can be filled. VPPs must also be involved in decision and policy making because they are on the ground. For example, in Zambia, you can find only one veterinary personnel in an entire district, the rest being VPPs. One realises quickly that it is not possible for this one veterinary surgeon to manage cases across the district.



From left to right : Dr. Bouna Diop, moderator, Mr. Francis Witola, Veterinary Paraprofessional Association of Zambia, and Dr. Columba Teru Vakuru, WOAH Delegate, Federal Ministry of Agriculture and Food Security, Nigeria. Partially visible is Dr. Wamalwa Kinyanjui, IGAD Centre for Pastoral Areas and Livestock Development (ICPALD). Picture © P. Bastiaensen (woah) 2025.

Second panel :

- Dr. Shannon Mesenhowski, Programme Officer Agriculture Development (Livestock), Gates Foundation, Seattle.
- Dr. Isabelle Dieuzy-Labaye, Board Chair, GALVmed, Edinburgh.
- Dr. Khalid Tadlaoui, President, MCI Sante Animale, Morocco [[download the presentation](#)]
- Prof. Andrew Peters, Owner and Director of Arpexas (Scotland) Ltd.

Dr. Shannon Mesenhowski, Programme Officer Agriculture Development, Gates Foundation.

How can international development partners help in PPP development

The most important thing for the international community to do is support partnerships and avoid creating distortions in the business environment. The Gates Foundation has a goal of working with both public and private sectors to ensure they serve the majority of the population.

How do you think that the Africa PPP Forum can help in resource mobilisation?

Congratulations for the creation of the Forum. This creates a platform for bringing all voices together and fronting joint resource mobilisation. The Forum is an innovative way to highlight individual challenges and be a match-maker by also highlighting successes and best practices

Dr. Isabelle Dieuzy-Labaye, Board Chair, GALVmed

What is GALVmed doing now in fostering PPPs for animal health in the innovative financing and partnership model.

GALVmed is about working on availability, access and adoption of good quality animal products for small scale producers. These small-scale producers are “clients” and should have the power to choose the most excellent products and make them accessible to customers who must be willing to pay. However, this is not yet happening in the animal health sector because they still do not have the power in their hands to choose what they really want or need. That is why we call them “beneficiaries”. The role of GALVmed and many others is to prime the pump of the value chain which is not functioning and make sure we incentivise the sections that are not working well with the hope that in the end, they become true “clients”. As an illustration of our involvement in PPPs, we work with industries in the private sector to produce products that are useful and support the needs of the end users. We push for making the right products for the right context. Here GALVmed incentivises those companies who are able to produce and register products to ensure they can make the products truly accessible to the end users. We try to turn the users from “beneficiaries” into “clients”. If there is a client at the end of the chain then there is profit-making which in turn can lead to accessing the best cold-chains and even technology like drones for delivering vaccines. The Africa PPP Forum looks to be the future of a better functioning value chain.



From left to right : Dr. Bouna Diop, moderator, Prof. Andrew Peters, Arpexas (Scotland) Ltd, Dr. Khalid Tadlaoui, President, MCI Sante Animale, Morocco and Dr. Isabelle Dieuzy-Labaye, Board Chair, GALVmed, Edinburgh. Not visible is Dr. Shannon Mesenhowski, Programme Officer Agriculture Development (Livestock), Gates Foundation, Seattle. Picture © P. Bastiaensen (woah) 2025.

Dr. Khalid Tadlaoui, President, MCI Sante Animale, Morocco

Can you share your views on opportunities for private investors and entrepreneurs. What are the opportunities for investors in Africa?

There are enormous opportunities in the development of products and solutions needed to improve the lives of many farmers. Private and public investments can be done through direct investment on equipment, or through the products. There should be legislation in place to support this. The other opportunity is investing in research to understand the challenges of the so-called last-mile-delivery. Without the public sector doing this type of research and sharing outcomes with the private sector, they won't be enticed to invest. If need be, PPPs can also invest in research. We have benefited from GALVmed sponsorship where we have been able to engage the public sector and universities on the continent to conduct research, which is essential for us to produce relevant and adequate vaccines. There are also opportunities to seize in capacity building and technology transfer. Focus should be on intellectual property rights, how to make the vaccines (capacity), and how to disseminate them (use of technology), and then improve the distribution value chain. PPPs are also critical in the logistics needed for Veterinary Services. Africa has vast land areas and the livestock distribution is wide and extensive. Therefore, the use of technology like drones to deliver vaccines can help overcome the long distances. The adoption and use of such technologies can only be made better via PPPs.

What can be the role of Africa PPP Forum to facilitate the interventions you are proposing to be done via PPPs?

We have numerous useful recommendations. First, legislation should be clear and applicable, and the Forum can push for this. Sensitisation, extension and awareness-raising are also essential for farmers to adapt and use the latest technology. The Africa PPP Forum can champion this via documenting and sharing of best practices. The Forum can also help to come up with a continental focus and agenda and guide vaccine production, access, and use. The Forum can be critical in resourcing to ensure there is money to drive all the PPP interventions. The Nagoya protocol⁹ also challenges and limits some operations; the Forum can relook at the Nagoya protocol and advocate for amendments where necessary.

Prof. Andrew Peters, Owner and Director of Arpexas (Scotland) Ltd

As an owner and director with extensive global experience, what do you think are essential elements for successful PPPs especially in Africa?

Prof. Peters congratulated WOA and AU-IBAR in championing the creation of Africa PPP. He referred to the chain with the broken link that had been mentioned earlier. The most important focus should be on the broken link. First, problems arising in PPPs are the same no matter from what angle you look at them. The other issues are also “body language” and trust. Most important is that for PPPs to succeed or fail, the “softer” issues should be highlighted and given all the attention they deserve. Neither part in the PPP can exist and succeed alone. Therefore, there is a need to collaborate and appreciate the roles of each other through trust.

Secondly, the private sector and public sector objectives are often different - private sector is focused on income and profits whereas the public sector is about systems and infrastructure. Therefore, for the private sector, they often look at the government as slow whereas the public sector sees the private sector as often being in a rush. Therefore, it is essential that both the Private and Public sector understand each other, trust each other, and most importantly be patient with each other.

⁹ The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity is a supplementary agreement to the CBD. It provides a framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources. The Nagoya Protocol on ABS was adopted on 29 October 2010 in Nagoya, Japan and entered into force on 12 October 2014. The Nagoya Protocol applies to genetic resources derived from plants, animals, or microorganisms; traditional knowledge associated with these genetic resources; and benefits that arise from their utilisation. More information : <https://www.cbd.int/abs/about>

Plenary special event

AU-IBAR WOAHA ■ Official Launch of the Africa PPP Forum in the Veterinary Domain (AF3P)

On behalf of AU-IBAR, Dr. Huyam Ahmed Mohammed Elamin Salih, Director and Head of the AU Mission to Kenya, started by recognising all protocols and noted that she was delighted to be present at the launch of this Forum. She then conveyed heartfelt greetings and appreciation from the Commissioner for Agriculture, Rural Development, Blue Economy and Sustainable Environment of the African Union Commission, H.E Ambassador Josefa Sacko, who firmly supports and shares this common vision of promoting African solidarity through the envisioned Africa Public-Private Partnerships Forum in the Veterinary Domain, a collaborative effort between WOAHA and AU-IBAR.



She noted that *Public-Private Partnerships* (PPPs) in the livestock sector have remained wanting. The weak collaborations, mistrust and silo-mentality has continued to plague the entire value chain resulting in dysfunctional agri-food systems. In particular, weak PPP systems in the veterinary domain have resulted in inefficient animal health delivery systems and thus significant economic and socio-economic losses have been experienced by livestock value chain actors, including the farming communities.

Leveraging on various continental frameworks formulated by AU-IBAR, Dr. Salih emphasised the *Animal Health Strategy for Africa* (AHSa) that highlights effective, efficient and sustainable animal health delivery systems revolve around stakeholder engagements, PPPs and multisector planning and implementation. Aligned to this vision, AU-IBAR has established robust pan-African coordination mechanisms and learning platforms within the veterinary domain namely; the *Continental Animal Health Platform of Public and Private Actors* (CAHP-Africa) which provides leadership in the implementation of animal health actions; the *African Association of Veterinary Education Establishments* (2A2E-V) which spearheads reforms in veterinary education across the continent, as well as the *African Association of Veterinary Statutory Bodies* (2AVSB) which coordinates reforms in veterinary regulation, amongst others. These platforms play a key role in catalysing and fostering strong PPPs and therefore continued effort is necessary to ensure their sustainability.

In the spirit of promoting PPPs in Africa, she noted that AU-IBAR and WOAHA have made commendable contributions towards propagating PPPs as evidenced by numerous strategic frameworks and capacity building tools. These include the “WOAHA PPP Handbook : [Guidelines for Public-Private Partnerships in the veterinary domain](#)”, the WOAHA PPP Database with 100+ PPP cases and the WOAHA “Introductory Course on PPPs in the Veterinary Domain”, as well as AU-IBAR’s “Guide for Developing and Implementing Public-Private Partnership models for Sustainable Fisheries and Aquaculture Development in Africa”, “Enhancing Public-Private Sector Partnerships

(PPP) in Fisheries and Aquaculture”, and “Mechanisms for strengthening *Public Private Producer Partnerships* (PPPPs) in the *Southern Africa Development Community* (SADC) in the red meat and live animals value chain”, amongst others. Dr. Salih added that in light of this shared vision, AU-IBAR and WOAAH have partnered to spearhead the establishment of the *Africa Public-Private Partnerships Forum in the Veterinary Domain* (AF3P), a ground-breaking initiative. This innovative forum represents a collaborative effort to revolutionise services in the veterinary domain across the continent. The continental platform is envisioned to foster multisectoral dialogues, sharing of innovative solutions, and promotion of sustainable best practices and lessons learnt. In addition, the platform will support awareness creation and advocacy for the establishment of robust PPP mechanisms at national and (sub)regional levels. It will further support the identification of gaps, guide on suitable reforms which can promote mutual accountability across stakeholders. Strong multi-stakeholder and multi-sectoral engagements are foreseen that will catalyse integration, inclusivity and equality. Key to the livestock transformation agenda, the PPP forum will catalyse the achievement of the *Livestock Development Strategy for Africa’s* (LiDeSA’s) public and private partnerships interventions.

Dr. Salih said that it was indeed a momentous occasion, the imminent launch of the first ever African Public-Private Partnership Forum in the Veterinary Domain. It is a symbol of unity and will break any borders and red-tape bureaucracy. The forum will build bridges and break down walls to ensure the transformation of the veterinary domain and its multiple stakeholders. She then made a humble appeal to all stakeholders, including development partners, to offer their invaluable support towards the operationalisation of this noble initiative. Through the unification of all partners, the transformation of services in the veterinary domain will be unstoppable.

She concluded by referring to the spirit of Ubuntu “*I am what I am because of who we all are*’, She then urged all stakeholders to heed the clarion call and promote unification for the prosperity and posterity of the African people.

On behalf of WOAAH, Dr. François Caya, Deputy Director General thanked all panellists who made it to give their views and suggestions on how the yet to be launched Forum can change the veterinary domain. Dr. Caya said that it was with immense pride and optimism that he stood to mark this launch of the Africa Public-Private Partnership Forum in the Veterinary Domain. This initiative reflects a shared commitment to the growth, sustainability, and transformation of Africa’s livestock sector.



Indeed, livestock is more than a cornerstone of the African economy: it is a lifeline for 250 million people across the continent. By 2050, this sector is projected to grow to a staggering USD 150 billion, driven by population growth, rising incomes, and changing diets. The *African Continental Free Trade Area* (AfCFTA) offers unparalleled opportunities to integrate this vital sector into regional and global trade. However, the path forward is littered with obstacles.

The prevalence of transboundary animal diseases, emerging zoonotic threats and the limited productive capacity of livestock are hurdles that demand our urgent attention. The loss of 18% of livestock in low-resource areas is more than a statistic. It represents shattered livelihoods,

dislocated families, and diminished resilience for millions of smallholders and pastoralists. These issues are compounded by under-resourced Veterinary Services, inadequate regulatory frameworks, and a lack of formal collaboration between public and private stakeholders.

He added that if the delegates gathered today, it is not to dwell on challenges but to seize opportunities. The PPPs are a powerful tool to bridge the gaps in Veterinary Services and ensure the implementation of international standards in animal health and welfare. By leveraging the complementary strengths of the public and private sectors, we can create sustainable solutions. WOAHA has long championed the potential of PPPs in advancing animal health, animal welfare and veterinary public health outcomes. With tools that include PPP guidelines, workshops and e-learning courses, WOAHA has supported its Members in building partnership capacities. The African Union's *Interafrican Bureau for Animal Resources* (AU-IBAR) has also made remarkable strides in fostering PPPs, from developing self-assessment scorecards for PPP readiness to promoting innovations.

The Africa PPP Forum in the Veterinary Domain is the culmination of these collective efforts. It is a platform for dialogue, innovation and collaboration, bringing together public authorities, private entities, and development partners to address the gaps in veterinary services. This forum aims to strengthen veterinary legislation, enhance disease control, and promote investment and innovation across the livestock sector.

He noted that the formation of the Forum was a collaborative process that began with a strong foundation, i.e. with a hybrid consultation meeting held in 2024 in Nairobi, convening over 40 stakeholders from International Organisations, Regional Economic Communities, and the private sector. Their collective insights shaped the vision for the Forum. This was further refined through discussions at the WOAHA Regional Commission for Africa and presented at WOAHA's 2024 General Session last May (2024). Today, that vision becomes a reality. The Africa PPP Forum in the Veterinary Domain is an important step toward sustainable and inclusive growth in livestock. It prepares Africa's livestock to meet the demands of the AfCFTA, while ensuring that no farmer, no herder, and no community is left behind.

In conclusion, Dr. Caya stressed that as the Africa PPP Forum is launched there is an essential need to reaffirm commitments to collaboration, innovation and action. Together, we can transform challenges into opportunities, weaknesses into strengths, and potential into reality. The Forum should be the catalyst for a future where Africa's livestock sector thrives, its Veterinary Services excel, and its people prosper.

Workshop session

In-depth discussion on the Africa PPP Forum in the Veterinary Domain (AU-IBAR, WOAH)

Session lead: Dr. Rahul Srivastava, Project Officer, Public-Private Partnership Project, Capacity-Building Department (WOAH)

Session objectives



[This session was dedicated to an in-depth discussion of the operational aspects of the Africa PPP Forum, with a strong emphasis on co-creation.](#) It aimed to identify critical areas that the Forum should prioritise and explore practical ways to address these areas through robust organisational mechanisms, including thematic working groups and establishing a secretariat. Participants actively shared their insights and perspectives, ensuring their views are integral to the Forum's development. Furthermore, the session emphasised the importance of sustainability for long-term impact. This initiative promises to foster meaningful collaboration and progress across the continent, driven by the collective input of its members.

“Without acts, regulations and guiding principles, no one knows where to start”

Session summary

Table 3. Key points emerging from the group discussion

Breakout group discussion	Main points
Knowledge management and advocacy	<ul style="list-style-type: none"> • Better PPP initiatives benefiting all stakeholders. • Facilitate discussion between the public and private sectors. • Create a body (help desk) with resources accessible to all sectors.
Networking, engagement and mutual accountability	<ul style="list-style-type: none"> • Share practical case studies of successful PPPs, templates, & tools. • Governance: clearly define the membership inclusion criteria, steering committee of diverse background, dedicated coordinator (driving the life of the Forum). • Focus on resource mobilisation (policy advocacy, build trust).
Governance and management	<ul style="list-style-type: none"> • Provide guidelines for harmonisation of PPP legal framework. • Create synergies between actors to avoid conflict and competition between sectors. • PPP Forum should have a website or other easy-to-access platform to distribute advice and ideas.
Monitoring, Evaluation and Learning (MEL)	<ul style="list-style-type: none"> • Identification of best practices and key challenges. • Purpose-driven stakeholder interaction and expansion of the network. • Influence policies and practices. • Stimulate more successful PPPs.

Session highlights:

- Operational aspects of African PPP Forum were extensively discussed.
- The establishment of a governing bodies management document by the PPP Forum could help to establish rules and regulations (including for ToRs of different actors and funding). Ideally, within this document, all participants should be at same level to enable collaboration (with different roles and responsibilities).
- There is a pressing need to generate awareness within the private sector of the mandate of Veterinary Services to ensure that they can support these same Veterinary Services in animal disease control. This will also help to best define the role of the private sector in animal disease control schemes and help avoid conflicts.
- It is recommended that Members review their legislation and PPP legal framework to help facilitate implementation of PPP initiatives and good governance (also professional working codes).
- There is a need to create a PPP policy for any government to implement to enable pooling of resources (it is noted that sometimes the private sector doesn't have the capacity to implement some of the activities when given the mandate by a government).
- Having regular and effective communication and consultation between actors.

Responses from a Mentimeter™ poll indicated that:

- Priority areas for PPPs are animal disease prevention and control (33%), as well as workforce development (11%).
- Focus areas are mostly networking, engagement and mutual accountability, governance management. Surprisingly low priority for resource mobilisation which is the key gap in the region.
- Improved collaboration between stakeholders is needed.

“Everything starts with governance. Good governance is the key to success”

Session recommendations

- Following the official launch of the African PPP Forum in the Veterinary Domain, the next task is to operationalise the Forum (ToR, membership, thematic working groups etc) and to generate awareness at both regional and national levels.
- Develop a comprehensive stakeholder engagement strategy. This should include templates and guidelines on engagement between partners, advocacy and creating an enabling environment.
- Develop a dedicated database, website and/or helpdesk for the Forum, which encompasses training modules, learning resources guidelines, experience sharing etc.

PARTICIPANT-LED ROUND TABLE DISCUSSIONS ■ REGIONAL DISCUSSIONS

Regional Discussions

North Africa



Session lead: Dr. Francesco Valentini, Programme Officer, Sub-Regional Representation for North Africa (WOAH)

Session summary

This session focused on addressing key issues, and proposed solutions related to the veterinary workforce at a regional level. It was conducted as a participatory discussion. The outcomes of these discussions yielded a few recommendations aimed at tackling the identified challenges and enhancing the veterinary workforce in North Africa. The session was attended by participants from Algeria, Egypt, Libya, Morocco, Sudan and Tunisia.

Session objectives

To discuss the state of play of veterinary paraprofessionals in the North Africa region (activities, tasks and training availability) through specific questions:

If you have VPPs in your region, what are the different categories that exist? Which activities do they perform? And are there VPP training courses available?

Algeria: VPPs, most often referred to as “technicians” are allowed to work but must work under a veterinarian's supervision. These “technicians” may specialise in different domains, e.g. animal health, food hygiene, slaughterhouse inspection, and are classified based on the duration of their training, either as “basic” or “superior”. These professionals can work in both the public and private sectors.

Egypt: VPPs are not officially allowed to work due to the high number of veterinarians in the country (3,000 graduates this year alone). However, assistants can be “empirically” trained by veterinarians to perform specific tasks in clinical and husbandry practices.

Libya: There are two categories of VPPs, distinguished by their training and roles:

- *Assistant for the private sector:* six-month training. These assistants work under the supervision of a veterinarian but can obtain different certifications based on their skills.
- *VPP:* three years of field training, including vaccination and surveillance campaigns. A very limited number of these VPPs work in quarantine centres. They are employed for specific tasks and cannot work as private consultants for farmers.

Morocco: VPPs exist and do work, but in accordance with local regulations, they must work under the supervision of veterinarians. In addition, specialised institutions train VPPs in areas such as veterinary diagnostics or food hygiene in slaughterhouses. These VPPs can be either private or public. However, today's veterinary statutory bodies do not yet include VPPs in their approach. VPPs are intentionally referred to as “farm technologists” and not “veterinary paraprofessionals or veterinary technologists”, in order to maintain a clear

difference between the roles/tasks.

Sudan: There are three categories of VPPs, classified based on their training and the responsibilities they can undertake:

- *First category of VPPs : Assistants.* These represent a six-months' training. Their role is solely to assist.
- *Second category of VPPs, with two subcategories : Animal health and laboratory; Animal production.* These represent three-year training. This includes animal health, laboratory practices, and clinical procedures, which must be carried out under a veterinarian's supervision. Husbandry practices are equivalent to those performed by veterinarians, but animal production tasks can be performed independently, without supervision. Training courses for this category no longer exist, so when those holding this qualification retire, this category will disappear.
- *Third category of VPP : Technologists.* These represent a four-year training. They are authorised to perform the same tasks as veterinarians. The only difference is that they are trained one year less and usually receive a lower salary. A “technologist” cannot become a veterinarian by adding one year of study; they are two different courses.

“In the Sudan, a technologist (who studied for 4 years) cannot become a veterinarian (who has 5 years training)”

Has your country implemented changes in the VPP situation/roles since the 2015 Pretoria Conference?

Libya: There are more veterinarians than VPPs, which limits their presence in the field.

Sudan: Two categories of VPPs are progressively disappearing. It is expected that soon, only VPP “technologists” and veterinarians will remain in practice.

Session highlights

- It is very challenging for certain Members of this region to consider having an increased number of VPPs due to the fact that many Members have an important number of veterinarians graduating every year, and that some of them, due to the lack of opportunities, end up performing VPP tasks. In addition, Algeria and Morocco are very reluctant to formally recognise the role of VPPs and are interested in continuing to qualify them as technicians only.
- In Algeria, the current WOAHP VPP Guidelines have been useful to draft a proper VPP curriculum.

Session recommendations

- Teamwork is key to working together among veterinarians, VPPs and even CAHWs.
- Standardise the training, status, and certification of VPPs across the North African region.
- Increase quality education across the *veterinary education establishments* (VEE)
- Think of stricter “filters” when selecting and recruiting students for veterinary schools.

Regional Discussions

West and Central Africa

Session lead: Dr. Laibané Dieudonné Dahourou, Project Officer, P3V Project, Regional Representation for Africa (WOAH)

Session summary

As for the previous session, this session too focused on addressing key issues, and proposed solutions related to the veterinary workforce at a regional level. It was conducted as a participatory discussion. The outcomes of these discussions yielded a few recommendations aimed at tackling the identified challenges and enhancing the veterinary workforce in West and Central Africa.

The session was attended by participants from Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo (Rep.), Congo (Dem. Rep.), Côte D'ivoire, Gabon, Gambia, Ghana, Guinea, Liberia, Mali, Mauritania, Nigeria, Senegal, São Tomé & Príncipe and Togo.



Session highlights

An interactive Mentimeter™ poll session with questions to participants was used to get answers from the participants on the five questions below.

Session discussions (Mentimeter™ poll)

What are VPPs in your countries called, according to legislation/regulations ?

Different categories of VPP are found in different countries, including animal health technicians, veterinary technical agents, veterinary technologists, veterinary supervisors, veterinary nurses, assistant veterinary nurses, etc. In French, some of these categories are difficult to translate and are best served in the original language : “*agents techniques d'élevage*”, “*ingénieurs des travaux d'élevage*”, “*agents techniques d'élevage et de santé animale*”, “*techniciens supérieurs d'élevage et de santé animale*”, etc.

What are the activities of VPPs in your country ?

Activities of VPPs in the region include vaccinations, veterinary healthcare, disease surveillance, farmer sensitisation, animal necropsy, laboratory analyses, sale of veterinary medicines, meat inspection. All these activities are to be executed under the supervision of a veterinarian. One of the recurring questions was whether VPPs are authorised to vaccinate. For instance, VPPs in Ghana vaccinate without supervision because they have been trained to the required level. In Nigeria, VPPs are not allowed to do animal necropsy or laboratory analyses.

Are private training institutions allowed to train VPPs in your country ?

Ten Members answered ‘yes’, while seven Members answered ‘no’ to this question. But some of them mentioned that private institutions train VPPs even though they are not allowed to do so and therefore their certificates are not recognised at national level.

Are VPPs authorised to set up their own private veterinary medicine company or business in your country ?

Nine Members answered ‘yes’, while seven answered ‘no’. When the answer was ‘yes’, it means that the VPP can own a private company but can create it only if he signs a supervision agreement with a veterinarian.

What has been done since the 2015 Pretoria Conference to enhance the integration and roles of VPPs in the veterinary workforce in your country ?

VPPs in Ghana are now being trained and integrated into the national Veterinary Services. Also, VPPs are recognised as professionals, and the VPP curriculum has been improved. Burkina Faso is working on legislation to include activities authorised for VPPs.

Regional Discussions

Eastern Africa

Session lead : Dr. Simon Kihu, Programme Officer, Sub-Regional Representation for Eastern Africa (WOAH)

Session summary

As for the previous session, this session too focused on addressing key issues, and proposed solutions related to the veterinary workforce at a regional level. It was conducted as a participatory discussion. The outcomes of these discussions yielded a few recommendations aimed at tackling the identified challenges and enhancing the veterinary workforce in Eastern Africa. The session was attended by participants from Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Tanzania and Uganda.



Session highlights

Participants deliberated on a number of key issues following themes relevant in the region. Some of the insights include:

- **Gender and youth** - On this theme participants agreed that the youth are the future of the veterinary profession, given an increasingly aging workforce. The youth environment is characterised by the use of digital technologies, therefore training them and equipping

them with necessary digital skills to stay up to date is a must. The youth should be involved in research programmes of Government and other public sector organisations so that they can give feedback that helps in the development of policies.

- **Training, digital literacy & harmonisation of CPD in Eastern Africa** - The group provided a review of *Continuous Professional Development* (CPD) programmes, using Kenya and Uganda's experiences. These can be conducted as in-person sessions or using online formats. The CPD requirements differ for the various Members and are differentiated for veterinarians and VPPs. The group noted there was no clear pathway for specialisation.
- **Veterinary Statutory Bodies and regulation** - The group noted that VSBs are not established in all Members and that where they exist, some do not function properly, partly due to funds. Some Members are trying to establish VSBs, inspired by others. Participants noted the importance of policy and legal frameworks that should be put in place to recognise VPPs and clarify/define roles of the three cadres, i.e. veterinarians, VPPs and CAHWs. In addition, an autonomous body should be designated to develop standards for VPPs and CAHWs, this could be an autonomous body under the VSB. Concerns on how farmers could locate and identify genuine professionals and skilled personnel, led to the discussion on the sensitisation of farmers, aspects of identification of different professional cadres and their linkages to farmers.



Dr Alemayehu Anbessie Mekonnen, Senior advisor, State Ministry for Livestock & Fisheries Resources Development, Federal Ministry of Agriculture (Ethiopia). Picture © P. Bastiaensen (woah) 2024.

- **Resources and incentives for workforce development and its sustainability** - The group defined possible sources of various resources (financial, human, infrastructure, machinery, equipment) and discussed two major issues:
 - *How to provide incentives*: Providing incentives requires favourable policies that attract actors in the sector, e.g. subsidised university fees or funded internships to contribute towards the development of human resources and encourage high school students to join the veterinary workforce.
 - *Resource Mobilisation*: One must effectively and efficiently mobilise funds from government, private sector, educational institutions or others to support veterinary service delivery. The participants recommended a “Workforce development fund” to support a rapid response in case of need, mobilised within a short period of time.

Session recommendations

- *Political*: Foster policies that attract actors in the sector including private sector, youth, women.
- *Financing*: Imagine financing options to encourage the growth of a skilled workforce, e.g. through loans, or the proposed “Workforce development fund”.
- *Resource mobilisation*: Develop an effective and efficient resource mobilisation plan, with incentives and operations to motivate retention. Resources must be made available to address both short and long-term perspectives.

Regional Discussions

Southern Africa



Session lead : Dr. Caesar Lubaba, Programme Officer, Sub-Regional Representation for Southern Africa (WOAH)

Session summary

As for the previous session, this session too focused on addressing key issues, and proposed solutions related to the veterinary workforce at a regional level. It was conducted as a participatory discussion. The outcomes of these discussions yielded a few recommendations aimed at tackling the identified challenges and enhancing the veterinary workforce in Southern Africa. The session was attended by participants from Eswatini, Lesotho, Malawi, Namibia, South Africa and Zambia.

Four pertinent topics were proposed by the participants:

1. (in)Adequate resourcing of the Veterinary Services (human capital and funding).
2. Veterinary education and training.
3. Technology and innovation, including diagnostic innovations.
4. Mainstreaming of the One Health approach into national programmes.

Session discussion

On the question of inadequate resourcing of Veterinary Services, the following issues were raised:

- Low staffing levels and inadequate equipment of personnel.
- Poor incentives to work in remote, rural communities.
- In general, poor utilisation of veterinarians and VPPs.
- Poor regional collaboration to share veterinarians across countries of Southern Africa.
- Limited scope for specialisation of veterinarians and VPPs.
- There is need for continuous education on climate change, AMR, aquatic animal health,...

On veterinary education and training of VPPs and veterinarians the following ideas came out:

- There is need for harmonisation of veterinary education, training across Southern Africa.
- VSBs and veterinary associations need capacitation, strengthening and better collaboration.
- There is need to identify Members that can provide certain specialisations for the region.

On the subject of technology and innovation, including diagnostic innovations, the following ideas and discussion points emerged:

- How often do the countries embrace the technology innovations and is this known ?
- The cost of adoption of technology and (sometimes even) translation is often prohibitive.
- There is a clear shortage of ICT skills within the sector.
- Many Members (or regions within countries) suffer from poor network coverage.
- There is a lack of policies that can govern technology adoption and usage.
- Data security and cybercrime are an issue.
- Technology development is resource demanding.

On the topic of mainstreaming of the One Health approach, the main issue was the lack of sub-national capacity/committees to mainstream One Health down to district (or similar administrative) levels.

Session Highlights

The participants discussed the possibility of adopting a regional mechanism to share veterinary capacities between Members. For instance, veterinarians and VPPs from South Africa could be shared with Lesotho, which suffers acute workforce shortages.

Session recommendations

- Implementing resource mapping and adopting a sharing framework across Southern Africa.
- Mainstreaming of critical competencies into the veterinary training curriculum, including ICT, One Health dimensions, etc.
- Harmonisation of veterinary training curricula and veterinary legislation across Southern Africa.
- Specialisation on specific topics unique to across Southern Africa, e.g. equine diseases.
- Establishment of sub-national committees to mainstream One Health down to district level.

**PARTICIPANT-LED ROUND TABLE
DISCUSSIONS ■ DIFFERENT CATEGORIES
AND CADRES OF VETERINARY
PARAPROFESSIONALS**

Different Categories and Cadres of Veterinary Paraprofessionals

Surveillance and field activities

Session lead: Dr. Laibane Dieudonné Dahourou, Project Officer, P3V Project, Regional Representation for Africa (WOAH)

Session summary

This session aimed to share experiences among Members concerning the primary activities of VPPs, related to surveillance and other field operations in the Africa region. Key challenges and solutions regarding the execution of these activities by VPPs were examined. Additionally, the session emphasised the significance of *continuing professional development* (CPD) activities in effectively implementing surveillance and other field activities. The discussions culminated in a few recommendations to address the identified issues faced by various Members.



Session discussions (questions and answers)

What tasks are implemented by VPPs in diseases surveillance?

- Data collection and sharing: observing and recording clinical signs in animals and gathering information from farmers
- Reporting: preparing and submitting regular reports and alerts for suspected diseases.
- Communication: raising awareness among farmers about good health management practices. Disseminating information about vaccination programmes or other interventions.
- Outbreak investigation: assisting in investigating animal disease outbreaks. Supporting the identification of risk factors.
- Implementation of responses: applying preventive measures (vaccination, deworming, disinfection) and assisting in outbreak management under supervision.
- Farm monitoring: regularly monitoring livestock to quickly detect anomalies. Assisting farmers in maintaining optimal animal health.
- Surveillance: monitoring priority diseases as outlined in animal health plans.
- Sampling: collecting biological samples (blood, faeces, tissue). Handling and transporting samples according to standards.

Community Animal Health Workers (CAHWs) are integrated into the local surveillance system and supervised by state-designated veterinarians. They play a key role in disease detection and surveillance, promptly informing veterinarians when a disease is suspected (Madagascar).

When in the field, VPPs perform various tasks that extend well beyond disease surveillance. What are such tasks ?

- Vaccination against diseases, treatment of diseases.
- Performing artificial insemination to improve breeding programmes.
- Monitoring reproductive health and recording breeding outcomes, castrations.
- Deworming: administering anti-parasitic drugs to control internal and external parasites.
- Animal nutrition and husbandry advice.
- Detailed record keeping of animal health, vaccination schedules, and treatments.
- Report writing.
- Documenting farm productivity data and health indicators.
- Educating farmers on animal welfare and productivity improvement.
- Training and capacity building of farmers in basic animal health practices.
- Promoting awareness about zoonotic diseases and biosecurity measures.
- Support in times of emergency response.
- Meat inspection.
- Inspection and certification.

What constraints or inadequacies have you observed in the execution of VPPs' tasks related to epidemiological surveillance ?

- Limited ICT knowledge.
- Insufficient quantities of consumables.
- Inadequate access to essential materials (e.g. sampling kits, testing supplies, vaccines).
- Low educational levels.
- Difficulties understanding complex epidemiological concepts or procedures.
- Poor communication skills and the inability to adapt communication styles to the level of understanding of livestock farmers.
- Ineffective transmission of critical health messages or recommendations.
- False alerts, i.e. raising unnecessary alarms due to misinterpretation or lack of knowledge about disease symptoms.
- Surveillance and reporting challenges. Incomplete or inaccurate reporting of field data.
- Limited resources to cover large areas effectively.

What actions are implemented to improve VPPs' field tasks, especially in the context of epidemiological surveillance ?

- Practical courses and refresher training, skills updates and capacity building in general.
- Enforcing supportive laws and regulations.
- Providing supervision, mentorship support and veterinary assistance.
- Providing adequate resources, supplying tools, equipment.
- Mobility, ensuring accessibility and transportation for fieldwork.
- Promoting awareness and educating communities.
- Improving recognition of clinical signs and guiding antibiotic use, teaching VPPs to recognise signs appropriately to avoid reporting errors.
- Providing basic epidemiology training.

Are the CAHWs in your country assigned to epidemiological surveillance tasks ? If so, what are their roles in epidemiological surveillance ?

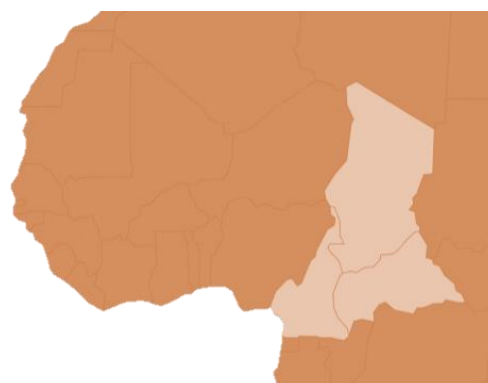
- Data collection and reporting.
- Reporting of suspected diseases, disease alerts.
- Collecting samples.
- Farmer and community engagement, communication with farmers.
- Extension services, awareness raising, sensitisation.
- Information sharing and follow-up visits.
- Disease monitoring and management.
- Record keeping and general administrative support.
- Assisting animal health technicians and veterinarians.

The epidemiological surveillance system is being reorganised, transitioning from a PACE model to a community-based model with relay agents. Due to staffing shortages, there is collaboration with the Ministry of Health to enhance the system's effectiveness (Gabon).

Table 4. Commonalities and differences in the involvement of CAHWs in epidemiological surveillance across Members

Commonalities in the involvement of CAHWs in epidemiological surveillance across Members	Differences in the involvement of CAHWs in epidemiological surveillance across Members
<p>Where they operate, CAHWs are supervised by veterinary professionals (veterinarians or VPPs), and their reports are verified and validated by these authorities.</p> <p>CAHWs help prevent the spread of diseases, especially zoonoses, through reporting and awareness raising.</p> <p>Some countries equip CAHWs with tools like (smart) phones and GPS to enable real-time disease reporting.</p>	<p>In some Members, CAHWs play a role in disease surveillance by reporting suspected cases to VPP, veterinarians or veterinary officers. Other Members, like Namibia, do not use CAHWs due to their level of training, considered too low. All diseases <i>must</i> be reported to veterinarians or technicians.</p> <p>Training levels for CAHWs vary, with some countries providing basic training (e.g. Cameroon) and others offering on-the-job training only (e.g. Central African Republic).</p>

In a joint effort, Cameroon, the Central African Republic and Chad aim to recruit, train, and support Community Animal Health Workers (CAHWs) in managing livestock movements at both national and cross-border levels.



Map. Location of Cameroon, Central African Republic and Chad (in pink).

Session highlights

- In many African Members, there is a lack of systematic disease reporting and the data submitted to WOAH are not consistently and accurately processed. This hampers the effectiveness of early warning systems.
- Moreover, the national surveillance systems rarely include aquatic animals. The curriculum of African veterinary and VPP training institutes should include skills on aquatic diseases surveillance.
- To enable an effective surveillance system, it is essential to benefit from farmers and CAHWs who can promptly report any suspected diseases.
- Indeed, in many Members, CAHWs are involved in the surveillance of animal diseases and their activities include event notification, (other) farmers' sensibilisation, etc.

CAHWs, formerly known as "gomiers", assist transhumant - nomadic herders (pastoralists) by providing essential information and supporting field veterinarians in vaccination campaigns and meat inspections (Central African Republic).

Session recommendations

- Update and improve training programmes for veterinarians and VPPs to specifically address aquatic animal diseases, include aquatic animal diseases surveillance in national diseases surveillance networks.
- Develop incentives to motivate CAHWs to participate actively in the surveillance efforts.
- Train CAHWs on preventive measures, aimed at avoiding the spread of diseases as soon as they are detected.
- Encourage WOAH Members to systematically report diseases on the organisation's dedicated platform ([WAHIS](#)).

*CAHWs are trained and equipped with phones to report diseases.
They are connected to the VPP, who in turn links them to district veterinarians (Somalia).*

Different Categories and Cadres of Veterinary Paraprofessionals

Challenges and opportunities in the use of antimicrobials in the field

Session lead: Jane Lwoyero, Programme Officer, Sub-Regional Representation for Eastern Africa (WOAH)

Session summary

The purpose of this session was to get participants to deliberate on the challenges faced while using antimicrobials in the field and - through a participatory process - provide solutions and recommendations for the identified challenges, including, but not limited to:

- Issues of non-compliance to treatment guidelines.
- Limited farmer and community awareness on AMR.
- Indiscriminate use of antimicrobials without clinical or laboratory confirmation.
- Easy access to antimicrobials without veterinary prescription.
- Counterfeit antimicrobials and informal markets.



In addition, participants raised the issue of how to advocate for better resource allocation to Veterinary Services, in order to support AMR activities at national level, as well as how to decentralise laboratory infrastructure and services for bacterial isolates and *antimicrobial susceptibility tests* (AST) in countries? Proposed solutions include the development of AMR-NAPs which adequately cover all issues of concern and cater for resource allocation in the costed NAP.

“How can we advocate for people to improve the behaviour and attitude of various stakeholders such as veterinarians, VPPs, communities? Do we need the engagement of anthropologists and social scientists?”

Session highlights

- **The use of antimicrobials without diagnostics** - This causes increased cost of the treatment, leads to AMR and an increased disease burden. What can be done is provide better access to laboratories, develop and disseminate rapid (penside) tests and tools and increase the general awareness of AMR.
- **Poor regulation** - This also increases the risk of AMR. What can be done is that regulatory bodies start enforcing or show more efforts in enforcing legislation to control the access to antimicrobials, as well as increase farmer knowledge and awareness on AMR.
- **Ability of farmers to access antimicrobials without prescriptions** - Numerous drug outlets across the continent allow farmers to buy antimicrobials over the counter, in a cheap and easy manner, farmers assuming that if it worked last time it will work next time, and that the one antimicrobial or antibiotic chosen can cure all infections. What can be done is to start registering or continue registering these veterinary-inputs' outlets and determine what qualifications or capacity they hold to recommend the use of antimicrobials.

- **Farmers cannot correctly weigh their animals** because they lack the equipment, services to calibrate the scales or knowledge to convert weight measurements into dosage. This affects the determination of antimicrobial quantities used for treatment. What can be done is to train VPPs on these matters, in addition to training on how to address dosage mistakes and - in general - encourage the responsible use of antimicrobials.
- **Poor storage conditions for antimicrobials** - This leads to loss of efficacy, safety, and ultimately mistrust by farmers in conventional medicines. What can be done is to train VPPs - but also veterinarians - on storage conditions, adapt safety tests¹⁰ to the realities of the environment in which these drugs are used, provide cold-chain facilities alternative sources of power for cold-chain maintenance.

“We should focus on behavioural change in people. Also, we shouldn’t be blaming any one sector for the AMR problem, instead all should take responsibility”

Session recommendations

- Continue to “*Educate, Advocate and Act*”¹¹ on AMR, i.e. educate relevant professionals (through VEEs and VSBs/CPD) for increased awareness-raising amongst all stakeholders on the proper stewardship of antimicrobials to limit the development of AMR, educate relevant professionals (through VEEs and VSBs/CPD) on bacterial isolation and AST, and - in general - advocate for, and intensify, AMR awareness campaigns at all levels.
- VSBs to establish and implement legislative frameworks to curb the scourge of counterfeit drugs, as well as the indiscriminate sale and access of antimicrobials.
- WOA to facilitate the dissemination and implementation of WOA guidelines, ToRs for training, tools and e-learning resources on AMR and One Health, for prudent use of antimicrobials by Members.

“AMR should be viewed through a One Health lens”

- WOA to facilitate multisectoral collaborations with other organisations and stakeholders on the regulations for antimicrobial use in animals, humans and the environment and support countries to implement the One Health approach when dealing with AMR interventions. A transdisciplinary approach should be chosen to involve anthropologists and social scientists to promote behaviour change on use of antimicrobials amongst all stakeholders.
- There is a need to step up preventive measures against diseases, so that there is less need to use antimicrobials when diseases appear and encourage the *essential* use of antimicrobials only. Preventive measures should include vaccination, *infection prevention and control* (IPC)¹² and improved biosecurity.

¹⁰ Safety tests are typically conducted by increasing the recommended dosage levels to much higher levels to detect toxic effects or adverse effects of the drug when overdosing.

¹¹ The theme of the 2024 *World Antimicrobial Awareness Week* (WAAW) : Educate, Advocate, Act

¹² Infection prevention and control (IPC) is a practical, evidence-based approach preventing patients and health workers from being harmed by avoidable infections. Effective IPC requires constant action at all levels of the health system, including policymakers, facility managers, health workers and those who access health services. Source : WHO.

Different Categories and Cadres of Veterinary Paraprofessionals

Animal welfare services

Session leads: Dr. Francesco Valentini, Programme Officer, Sub-Regional Representation for North Africa (WOAH) and Dr. Mactar Seck, Programme Manager, The Brooke West Africa (representing the *International Coalition for Animal Welfare, ICfAW*).

Session summary

The general objective of the session was to assess the role that VPPs are currently playing (day-to-day in-the-field activities) promoting animal welfare in Africa, discuss major gaps and needs and future perspectives, considering WOA's Guidelines on VPPs' Day-1 competencies and curriculum. The discussions culminated in a few recommendations to address the identified issues faced by various countries.



Session highlights

- Algeria has recently opened a central office, specifically dedicated to animal welfare.
- In Senegal, animal welfare laws only apply to equids¹³ due to their higher commercial value.
- The recommendation to explore and exploit socio-cultural dynamics for the promotion of animal welfare should be further developed and considered. Participants gave the example of the Sudanese people's love for livestock, and how the use of excerpts from the Quran helped to spread messages about animal welfare and respect for animals. The example of India was also cited, i.e. the "sacred cows".
- Dr. Myriam Carpentier, of the WOA's CBD, announced that the WOA has opened a call for tenders for the development of e-learning training courses on animal welfare, which should be available in 18 to 24 months' time.
- In conclusion of the session, the role that WOA Focal Points¹⁴ for animal welfare can play as a link between the veterinary sector and VPPs for the promotion of animal welfare was discussed. Two WOA national Focal Points for animal welfare were present in the room. It was generally agreed that they could act as a bridge and should facilitate the transfer of knowledge and experiences, e.g. through participation in meetings and training events.

¹³ Equids are horses, donkeys and mules.

¹⁴ WOA Focal Points are national subject matter experts who have been officially appointed by the WOA Delegate to cover certain technical areas in respect of WOA's work (wildlife, food safety, aquatic animal health etc...). One of these areas is animal welfare. More information : [Animal Welfare Focal Points - WOA - Africa](#)

Session group discussions (questions and answers)

What roles do VPPs play in promoting animal welfare in Africa?

- Most VPPs are inspectors/technicians, responsible for the application of national legislation, on all animal welfare issues (farming, transport, slaughter, etc.) under the supervision of a veterinarian.
- VPPs advice and enforce the five freedoms of animal welfare with stakeholders.
- VPPs provide advice on humane slaughter according to animal welfare standards.
- In some countries VPPs activities are limited to equids only and focus almost exclusively on awareness-raising. Other activities are carried out in the field, but only within the framework of special projects.



Session co-lead, Dr. Mactar Seck, Programme Manager, The Brooke West Africa (representing the International Coalition for Animal Welfare, ICAFW). Picture © P. Bastiaensen (woah) 2024.

What are the major gaps and needs ?

- Existing training activities need updating (e.g. Senegal launched the first *ad-hoc* module on animal welfare in 2024) and continuous education strengthened.
- Regulations and standards on animal welfare are not or partially implemented.
- Existing legislation needs to be strengthened or broadened (e.g. in the case of Senegal extension to other animal species besides equids), based on WOAH guidelines.

- Enforceability of regulations need to be ensured through the drafting of service notes or circulars.
- This includes ways to apply penalties and sanctions in cases of non-compliance.
- The capabilities of VPPs to communicate on animal welfare with farmers and other stakeholders are generally poor.
- There is a general lack of awareness of specific animal welfare guidelines (e.g., transportation, slaughter and dehorning).
- Raising awareness at community level is a pressing need.
- There is an observed lack of access to appropriate equipment and resources to ensure animal welfare.
- The engagement of civil society federations and associations (NGOs) needs to be strengthened.

Session recommendations

- Animal welfare needs to be integrated in the curriculum for VPP training programmes (universities and training institutes), as recommended under “*Animal Handling and Animal Welfare*” of the applicable [Curricula Guidelines for Veterinary Paraprofessionals](#) (2019).
- Training activities (*ad-hoc* courses) on animal welfare and the application of international standards need to be developed for those involved in the sector (e.g. transporters).
- The awareness of policy makers needs improving, with the aim of ensuring that legislative frameworks are updated/adapted.
- A business case needs to be developed on the benefits of animal welfare targeting VPPs and farmers.
- Investments in communication are needed, and so are mass awareness campaigns targeting communities and the wider public.
- Socio-cultural dynamics should be understood, explored and harnessed. Where appropriate, religious arguments can be used to promote animal welfare.
- Animal welfare regulations need to be updated or developed to ensure implementation of international standards.
- Access to basic/appropriate equipment to ensure proper implementation of animal welfare practices is needed.
- Establishing federations should be encouraged to promote the collaboration between the different actors involved, and provide a single “window” at national level.

Different Categories and Cadres of Veterinary Paraprofessionals

Meat inspection and laboratory services

Session leads : Mr. Ian Peter Busuulwa, Project Officer and Dr. Simon Kihu, Programme Officer, Sub-Regional Representation for Eastern Africa (WOAH)



Session summary

This session shared experiences among Members concerning the primary activities of VPPs related to meat inspection and laboratory services in the Africa region. Key challenges and solutions regarding the execution of these activities by VPPs were examined. The discussions



culminated in a few recommendations to address the challenges faced by various countries.

Session discussions (questions and answers)

Who is involved in the veterinary workforce for meat hygiene and laboratory benchwork ?

- In **Ghana** there are staff technologists, VPPs, including animal health officers who received a 3-year certificate or diploma in public health.
- In **Lesotho** there are still many gaps, there are no institutions that offer animal health or veterinary medicine degree. Many people go to South Africa for training. Some animal health *courses* do exist. Legislation is far behind (outdated) and needs reviewing.
- In **Kenya** there is public health and animal health training, including at certificate or diploma levels. Kenya's Meat Training Institute in Athi River offers specialised training in food safety and hygiene.

Session recommendations

- The One Health approach can be used to fill gaps in staff shortages whereby staff working in medical laboratories and in public health can be used for veterinary laboratory work and meat inspection respectively.
- There is a need to establish specialised training on meat hygiene, and the development of laboratory technology courses in those countries where such are not included in the VPP curriculum. The gap between veterinary and medical laboratory technicians should be bridged through on-the-job training to be able to have full competencies of working in a veterinary laboratory.
- The training of VPPs is an opportunity to raise awareness on possible further training in specialisation in meat hygiene and laboratory technology.
- Members need to set aside resources for the (advanced) training of VPPs as meat hygiene inspectors and laboratory technologists, as per the “*Veterinary Public Health Track*” and the “*Laboratory Diagnosis Track*” of the applicable [Curricula Guidelines for Veterinary Paraprofessionals](#) (2019).

Plenary Session on Conference Recommendations

Plenary Session on Conference Recommendations

Conference high level recommendations

Ms. Barbara Alessandrini, Head of Department, Capacity-Building Department (WOAH)



How were the recommendations generated ?

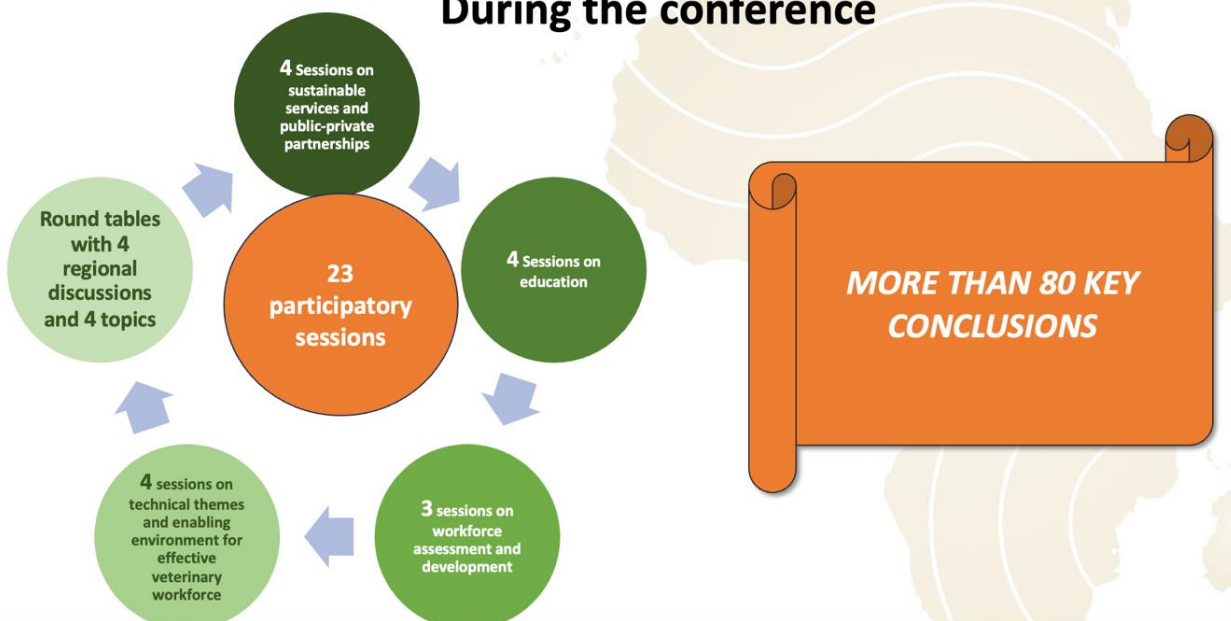
Session presenter **Barbara Alessandrini** informed participants that the process of coming up with recommendations was a two-step process. The first step was consultations that were done during preparations for the Conference. The second step involved picking up issues, collecting views, and suggesting recommendations throughout the three days of the Conference that emanated from the various Conference sessions.

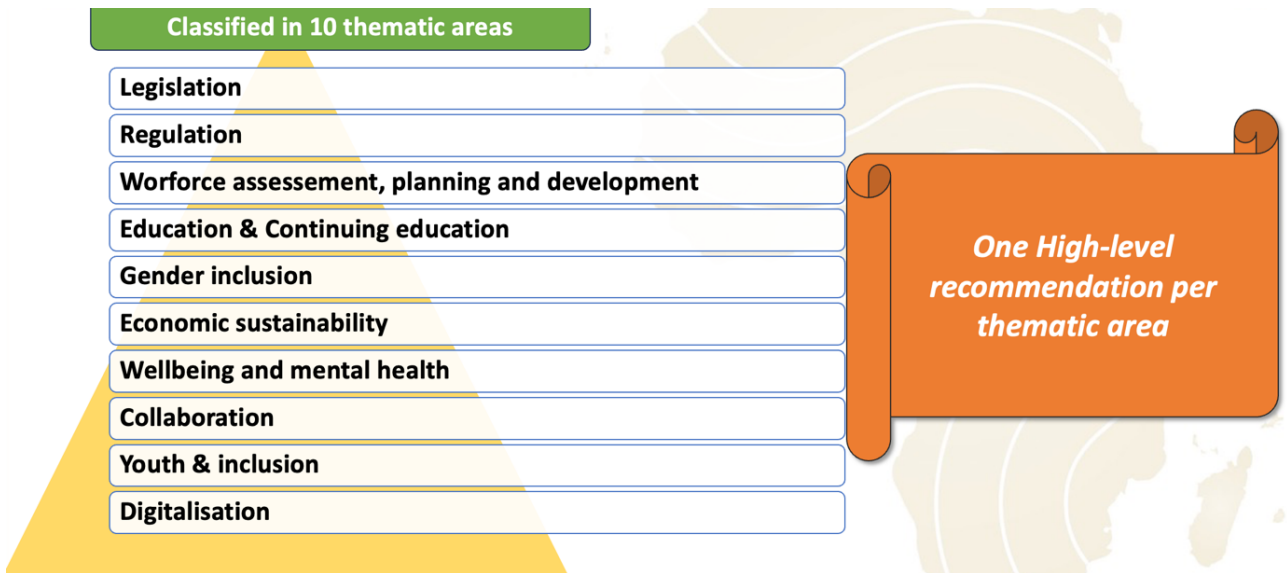
She then ushered in a panel of selected participants to read out and provide context to the proposed, consolidated recommendations from the Conference.

Pre-conference
consultations for
Intelligence
Gathering

- **PVS reports**
- **Workshops** at national and regional level
- **Regular discussions and exchanges** with WOAH delegates, focal points, VSB, associations and other stakeholders.

During the conference





The recommendation panel was selected from amongst the participants and worked with the facilitation and organising team to refine the recommendations. The panel members as reflected below also participated in the presentation of the recommendations (next pages).



Dr. Relebohile Lepheana
Director and
WOAH Delegate
Ministry of
Agriculture,
Food Security
and Nutrition
Lesotho



Dr. Aishatu Abubakar Baj
President

Veterinary
Council of
Nigeria



Prof. Dr. Yalacé Kaboret
Dean

*Ecole Inter-Etats
de Sciences et
Médecine Vété-
rinaires (EISMV)*
Senegal



Dr. Sandaogo Ham. Ouandaogo
Président

*Association des
Médecins
Vétérinaires du*
Burkina Faso



Ms. Barbara Alessandrini
Head of
Department
Capacity-
Building
Department
(WOAH)
France

High level considerations and recommendations to Members

Considering

1. The recommendations of the 2015 OIE Regional Conference on the role of veterinary para-professionals (Pretoria, South Africa);
2. The 2016 OIE International Conference on Veterinary Education (Bangkok, Thailand);
3. The development and publication of WOA (OIE) :
 - a) Recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality (2012)
 - b) Guidelines on Veterinary Education Core Curriculum (2013)
 - c) Competency Guidelines for Veterinary Paraprofessionals (2018)
 - d) Curricula Guidelines for Veterinary Paraprofessionals (2019)
 - e) Competency and Curricula Guidelines for *Community-based Animal Health Workers* (CAHWs) (September 2024);
4. The data generated and availed through the *Performance of Veterinary Services* (PVS) Pathway and *Information System* (PVSIS);
5. The *World Veterinary Association* (WVA) Position Statement on Veterinary Para-Professionals (2024);
6. The AU-IBAR / WOA Africa PPP Forum in the veterinary domain (April 2024);
7. The work implemented by numerous programmes and projects, supported by FAO, WHO, UNEP, VSF International, and other partners;

Participants recommend

WOAH Members to -

Legislation

3. Ensure that national legislation provides a robust framework to govern all categories of personnel involved in animal health services, including veterinarians, *veterinary paraprofessionals* (VPPs), *community-based animal health workers* (CAHWs), and addresses their education, qualifications, prerogatives and regulation.

Workforce assessment, planning and development

4. Conduct regular veterinary workforce assessments ensuring all relevant stakeholders are involved in the process, using gender-disaggregated data collection, monitoring, exploiting data from the PVS Pathway Information System and including continuing education to ensure appropriate workforce planning and development.

Regulation

- 3.a. Ensure the establishment or strengthening of an independent *Veterinary Statutory Body* (VSB) that regulates all categories of personnel, includes their representation on the VSB Board, and ensures that ethical standards and accountability underlie veterinary practice, and that a Continuing Education framework is in place.
- 3.b. Encourage Veterinary Statutory Bodies across Africa to foster collaboration, harmonisation of standards, and shared resources in the regulation of veterinary practice and recognition of all categories of personnel.

Education

4. Develop competency-based frameworks for veterinary and veterinary paraprofessional education and continuing education, aligned with national requirements, WOAH competency and curricula guidelines and competency-based Training Frameworks, with attention to lifelong learning and transferable skills for women and men, aspiring towards continental quality assurance and regional harmonisation.

Economic sustainability of Veterinary Services

5. Foster economic sustainability of veterinary service delivery, including through leveraging *public - private partnerships* (PPP), creating the enabling environment, providing economic incentives, advocating for investments in adequate staffing, and fostering business and advocacy skills in the private sector.

Gender inclusion

- 6.a. Promote gender equality and gender mainstreaming of the veterinary professions by ensuring equal access to education, continuing education, employment, and decision-making within the workforce, adopting gender-disaggregated data collection, analysis, and reporting and ensure service delivery tailored to meet the needs of both women and men livestock keepers.
- 6.b. Advocate for policies addressing gender-based violence, harassment, and discrimination to ensure that everyone in the workforce feels safe.

Wellbeing and mental health

7. Promote the psychosocial resilience of the veterinary workforce by ensuring comprehensive workforce planning, targeted training, adequate staffing, and improved working conditions as well as fostering a supportive infrastructure, an inclusive decision-making environment and integrating mental health support mechanisms.

Collaboration

- 8.a. Enable collaboration between veterinarians, *veterinary paraprofessionals* (VPPs), *community-based animal health workers* (CAHWs), their associations, and other professionals in the veterinary domain, actively including the public and private sectors.
- 8.b. Promote understanding of Veterinary Services scope and impact beyond the veterinary domain, including in One Health approaches.

Inclusion and youth

9. Identify and incorporate youth perspectives in workforce planning and decision-making and ensure affordable access to veterinary education and continuing education, fair compensation and inclusivity in veterinary careers.

Digitalisation

10. Integrate, as appropriate, inclusive digital technologies, across competency-based education frameworks and veterinary service delivery systems, to enhance professional collaboration, strengthen preventive care, regulation and surveillance capabilities, and improve service efficiency.

The World Organisation for Animal Health (WOAH) to -

5. Continue to support WOAH Members for the implementation of these recommendations, through the capacity building programmes PVS Pathway and Training System, including the Platform for the Training of Veterinary Services;
6. Develop indicators for monitoring, evaluation and learning of the Performance of Veterinary Services through the PVS Information System;
7. Continue to make available and encourage Members to access veterinary workforce assessment and development opportunities offered by the PVS Pathway and Training System, acknowledging language and technological barriers;
2. Mobilise resources for WOAH capacity building programmes and their innovation with resource partners;
3. Advocate for sustainable financing and public-private partnerships in Veterinary Services;
4. Continue updating and developing methodologies and tools for competency-based education and continuing education, including competency and curricula guidelines for veterinarians, VPPs and CAHWs, and continuing education frameworks;
5. Advocate for visibility and inclusivity of Veterinary Services, including for gender inclusive recruitment and retention in the veterinary workforce, for veterinary services that meet the needs of women and men livestock keepers, and for workforce development that responds to the needs of next generation animal health professionals;
6. Encourage gender-disaggregated quantitative and qualitative data collection, analysis and reporting on veterinary workforce by Members;
7. Monitor and evaluate Members' progress in the implementation of these recommendations, including through the use of data from the PVS Pathway Information System;

The Africa PPP Forum in the Veterinary Domain to -

WOAH and AU-IBAR, as co-organisers of the Africa PPP Forum, to -

1. Develop a five-year roadmap for operationalising the forum to enhance animal health and welfare through a comprehensive stakeholder engagement strategy involving government agencies, veterinary authorities, animal health companies, industry associations, and livestock farmers;
2. Facilitate open dialogue and encourage active participation to better identify and address the specific needs and challenges within the veterinary sector across African regions;
3. Enhance trust and transparency and promote the co-creation of solutions that align with international standards, ultimately contributing to a more resilient and thriving livestock sector in Africa;

Members of the Africa PPP Forum in the Veterinary Domain, to -

4. Engage in the Forum's thematic working groups for targeted discussions and actionable outcomes, ensuring that diverse perspectives are considered in developing solutions and sharing feedback to continuously improve and adapt strategies based on participant insights and changing circumstances to make this forum relevant and sustainable;

WOAH Collaborating Centres to -

1. Continue to support the Organisation and its Members in the assessment of education and continuing education needs, development of quality standards for education and continuing education, and delivery of training services, in line with their mandate and through the WOAH Platform for the Training of the Veterinary Services.

Comments from the plenary on the draft recommendations

- **Dr. Madi Savadogo** (representing the WOA Delegate, *Ministère de l'Agriculture, des Ressources Animales et Halieutiques, Burkina Faso*). On the topic of digitalisation, Dr Savadogo shared an experience from Burkina Faso, pertaining to the vaccination against diseases. Something that did not come out clearly from the draft recommendations is the capacity of digitalisation to be used by farmers and the veterinarians. The use of digital platforms makes it better and safer for farmers to know vaccination fees when making payments.
- **Dr. Tobi-Nkaya** (WOAH Delegate, *Ministère de l'Agriculture, de l'Elevage et de la Pêche, Republic of Congo*). Dr Tobi-Nkaya pointed out that some of these proposed recommendations, when taken to the public, will be difficult to implement. There should be a process of merging them in order to make them more attractive to the profession by including innovative ideas and new technologies that address the needs of everyone: youth, men and women, move towards encouraging investment and entrepreneurship and making it more attractive to the rural thinking.
- **Ms. Irene Gichingiri** (Kenya Women Veterinary Paraprofessional Association, Kenya). In respect of the recommendation on gender inclusion there is, according to Ms. Gichingiri, a need to advocate for policies that make the sector more inclusive and enticing for the younger people. Younger women can often not be retained because of social issues such as marriage, childbirth etc. Can there be flexible working hours to encourage women and young people to be retained ?
- **Mr. Aimable Twagirayezu** (Pan-African Farmers Organisation, Rwanda). On the topic of farmers' willingness to pay for vaccines, there is no way of understanding this in detail unless farmers are engaged in the discussions. Livestock farmers in Africa own a well-structured model through which they can be engaged. In Africa, there are more than 73 farmer organisations. There are five regional farmer blocks across Africa. All these help in understanding how farmers are engaged, provided they are included in these conversations.
- **Dr. Annette Namboowa** (Ministry of Agriculture, Animal Industry and Fisheries, Uganda). On the topics of *Inclusion and Youth*, as well as of *Education*, Dr Namboowa argued that there is a need to advocate that training institutions conduct curriculum review and include entrepreneurship skills in the curriculum. This will enable young graduates to acquire hands-on skills while at training. This can make them love the profession much more.

The final recommendations, as endorsed by WOA, can be downloaded here :

<https://rr-africa.woah.org/app/uploads/2024/11/WOAH-Final-recommendations-vet.-workforce-2024.pdf>

The detailed recommendations can be downloaded here :

<https://rr-africa.woah.org/app/uploads/2025/04/WOAH-Refined-DETAILED-Recommendations-14.01.2025.pdf>

The detailed recommendations can be browsed here

[Africa Continental Conference on Veterinary Workforce Development : Detailed recommendations](#)

Official closing

Conference Official Closing Statements

Deputy Director General, WOA, Dr. François Caya



Dr. François Caya appreciated the sacrifice made by delegates to be at the Conference. He then conveyed his regards to the donors and development partners who put in resources to make sure that the Conference happened. He noted that the Conference was historical and yielded varied comments from across the continent calling for very innovative and ground-breaking ideas. The full range of the veterinary workforce was also covered through this Conference.

He also alluded to the progress at the level of WOA and its partners. He applauded the dynamism and enthusiasm within the stakeholders across the African continent. Involvement of the young generation was remarkable and as WOA there should be a very intentional way to include the young generation in each and every activity. WOA will launch a member driven initiative for the establishment of a regional governance committee and hopes that the membership will include a slot for young people.

He concluded by appreciating the WOA staff who have been involved at each and every stage. This has been a collaborative effort for all the WOA representatives. This is the one-WOA approach that is needed.

Conference Official Closing Statements

President of the 2A2E-V, Prof. Dr. Dietmar Holm

Prof. Dr. Dietmar Holm, President of the *Africa Association of Veterinary Education Establishments (2A2E-V)* thanked everyone for a very nicely held Conference. He recognised and appreciated the story of one bullet that was referenced on day 1. From the 2A2E-V they recommend the development of evaluation tools that can be similar to or part of the previous pathways. There has also been a realisation of the impact of student enrolment. Workforce assessment tool should be involved in student enrolment. Lastly, they experienced the power of Twinning. There was a Twinning project between Iowa State University and Rwanda University and the impact has been felt far and beyond the two institutions.



Conference Official Closing Statements

Representative of the *World Veterinary Association (WVA)*, Dr. Nandipha Toyota Ndudane



Dr. Nandipha Toyota Ndudane, representative of the *World Veterinary Association (WVA)*, noted that her three days were impressive. She thanked WOAH Africa and WOAH Headquarters for a well-organised three-day Conference. The whole veterinary community was present at this Conference and was part of the conversation and the dialogue. She reiterated the issue of veterinary workforce which remains a challenge on the continent and leads to Africa's inability to manage and control some diseases. The issue of gender and youth voices should be re-emphasised and these voices should be fully engaged in planning

and implementation, including in the policy formulation processes. She also stressed that there is a need for an integrated veterinary sector where each and everyone has a role to play.

Conference Official Closing Statements

President of the *African Veterinary Technicians Association (AVTA)*, Mr. Benson Ameda



Dr. Benson Ameda appreciated the efforts of everyone who was behind the organisation of the Conference. He said that in some sectors there is a consideration of VPPs to be agriculturalists and are put under policies of *agriculture* while in some countries they are considered under *health*. There are also countries that believe that veterinarians play a critical role in *national security*. Therefore, veterinarians are poorly understood from context to context. There is also a cadre of VPPs who are supporting the work of Veterinary Services. Africa is lucky to have very assertive veterinary para-professionals associations supporting the sector. Whilst there has been

good progress since the 2015 Pretoria Conference, we did not do well in all areas and we must and can do better. AVTA remains committed to promote PPPs under the assumption that Members will embrace the recommendations, work on regulations, and work on legislation. The success of the PPPs will rely squarely on laws that will be enacted and regulations put in place to protect the same. Youth and gender, he noted, is coming to the Conference on a greater magnitude for the first time. AVTA will do all they can to ensure that youth and women are involved at each and every level with an inclusive lens. He also reiterated that AVTA will continue to advocate for an enabling environment. Advocacy will still continue to ensure that legislation consider VPPs, including in decision making. Last but not least, AVTA has noted that there is still a weak link between VPPs and veterinarians. AVTA, he stated, will develop platforms across the continent to ensure they bring VPPs and veterinarians together to create good linkages before even talking about legislation. AVTA has partnered with VetNow and GALVmed to digitise vaccination (data) on the continent. All these efforts will be done in the interest of the clients.

Conference Official Closing Statements

Director of Veterinary Services of Kenya, as represented by Dr. Abraham Sangula, Deputy Director

Dr. Abraham Sangula, representing the Director of Veterinary Services of Kenya, Dr. Allan Azegele, started his remarks by observing all protocols. He said that he was convinced that the delegates had a good time and stay in Kenya and in Nairobi. He confirmed that Kenya embraces all the recommendations that have been made around the 10 thematic areas. He appreciated the efforts that WOAH is deploying to make sure that all veterinarians and veterinary paraprofessionals are appropriately recognised and given the space they deserve to do their jobs. He appreciated all stakeholders for taking time to come and share and learn with each other. He insisted that Kenya will take the recommendations very seriously and will champion their implementation. He then called upon all partners to support and ensure veterinarians are in the right spaces where they are required to provide services. As a country, he added, the President of the Republic of Kenya recently made a promise that the country will go ahead and vaccinate the whole national (large and small ruminant) herd and this calls for support from all stakeholders and partners including the private sector. He further mentioned that Kenya was in the process of reviewing many veterinary laws and policies because most of them were adopted in the 1960s. The review is needed to ensure that the country is able to meet the needs and changes brought about by globalisation and the availability of digital tools. These new laws should also be able to guarantee the safety of what Kenya is exporting and sharing with the world.



In conclusion he hoped that the Conference provided an opportunity to share challenges and learn from each other. He wished all participants a safe travel back home and declared the Conference officially closed.

Annexes

Annex 1


Agenda

TUESDAY 26 NOVEMBER 2024		
07:30 - 08:30	Registration of participants	
PLENARY SESSION 1	OPENING CEREMONY	Mt Kilimanjaro
08:30 - 10:00	<p>Welcoming addresses</p> <ul style="list-style-type: none"> - President of the WOA Regional Commission for Africa - Regional Representative of the WOA Regional Representation for Africa (RR/AF) - Deputy Director General of the World Organisation for Animal Health - Director of the African Union <i>Interafrican Bureau for Animal Resources</i> (AU-IBAR) - Chief Executive Officer of the <i>Global Alliance for Livestock Veterinary Medicines</i> (GALVmed) - Principal Secretary for Gender and Affirmative Action, Ministry of Gender, Culture, Arts and Heritage, Kenya - Cabinet Secretary for Agriculture and Livestock Development, Kenya 	<p>Honoré N’Lemba Mabela Karim Tounkara</p> <p>François Caya</p> <p>Huyam Salih</p> <p>Carolyn Schumacher</p> <p>Grace Wasike, on behalf of Anne Wang’ombe</p> <p>Christopher Wanga, on behalf of Andrew M. Karanja</p>
10:00 - 10:40	Coffee and tea break, group photograph	Terrace
10:40 - 11:00	Conference overview	Facilitators
	GLOBAL AND REGIONAL PERSPECTIVES	Mt Kilimanjaro
11:00 - 12:00	Recommendations from the 2015 inaugural regional conference (Pretoria), global perspectives, and the <i>Performance of Veterinary Services Information System</i> (PVSIS) across regions	Barbara Alessandrini, Simon Kihu Ashish Sutar, Dmitry Morozov
12:00 - 12:30	Special event: Youth perspectives on futures of the workforce	Tianna Brand Sonia Fèvre
12:30 - 14:00	Lunch and gallery walk	

THEMATIC SESSION 1	EDUCATION Mt Kenya 1	WORKFORCE ASSESSMENT AND DEVELOPMENT Mt Kilimanjaro	SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS Mt Kenya 2	TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE Mt Kenya 3
14:00 - 16:00 Leads:	Digital transition in Africa: e-learning in the veterinary domain <i>Hana Abdelsattar</i>	Special event: Youth perspectives on futures of the workforce <i>Tianna Brand, Sonia Fevre, Finn Strivens, Nancy Muigei</i>	Business skills and sustainable deployment of private sector veterinarians, VPPs and CAHWs <i>Laibane D. Dahourou</i>	Emergency management <i>Ian Peter Busuulwa</i>
16:00 - 16:30	Coffee and tea break			Terrace
THEMATIC SESSION 2	Participatory round table discussions REGIONAL DISCUSSIONS			
	Mt Kenya 1	Mt Kenya 2	Mt Kenya 3	Kifaru
16:30 - 17:30 Leads:	West, Central Africa <i>Laibane D. Dahourou</i>	Eastern Africa <i>Simon Kihu</i>	Southern Africa <i>Caesar Lubaba</i>	North Africa <i>Francesco Valentini</i>



WEDNESDAY 27 NOVEMBER 2024 (DAY 2)		
PLENARY SESSION 3	OPENING SESSION	Mt Kilimanjaro
08:30 - 09:00	Highlights of day one and what to look forward to today	Facilitators
09:00 - 09:30	Special event: Launch of the WOA Community-based Animal Health Workers (CAHW) Guidelines	Xyomara Chavez
09:30 - 10:00	Special event: Introduction to the GALVmed workshop  Protecting Livestock – Improving Human Lives	Carolin Schumacher Lois Muraguri Edith Moroti Karelle De Luca
10:00 - 10:30	Coffee and tea break	Terrace

THEMATIC SESSION 3	EDUCATION Mt Kenya 1	WORKFORCE ASSESSMENT AND DEVELOPMENT Mt Kenya 2	SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS Mt Kilimanjaro	TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE Mt Kenya 3
10:30 - 13:00	Special event: Launch of the WOA H Community-based Animal Health Workers (CAHW) Guidelines: how to use them?	Workforce assessment	 Workshop The role of public-private partnerships in product development and creation of sustainable markets for veterinary products	What does gender inclusion mean for Veterinary Services, and how can veterinary and VPP associations play a role? <i>Sonia Fèvre, Holly Hufnagel (FAO)</i>
Leads:	<i>Xyomara Chavez</i>	<i>David Sherman</i>		
13:00 - 14:00	Lunch			
THEMATIC SESSION 3 (cont'd)	EDUCATION Mt Kilimanjaro	SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS Mt Kenya 2	TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE Mt Kenya 3	
14:00 - 16:00	Recruitment, retention and incentives	Deployment of the veterinary workforce for disease control and eradication	From policies to practice: a guide to veterinary legislation and regulation	
Leads:	<i>David Sherman</i>	<i>Simon Kihu</i>	<i>Kelsey Galantich</i>	
16:00 - 16:30	Coffee and tea break			Terrace
THEMATIC SESSION 4	Participatory round table discussions DIFFERENT CATEGORIES AND CADRES OF VETERINARY PARAPROFESSIONALS			
	Mt Kilimanjaro	Mt Kenya 1	Mt Kenya 2	Mt Kenya 3
16:30 - 17:30	Surveillance and field activities	Challenges and opportunities in the use of antimicrobials in the field	Animal welfare services	Meat inspection and laboratory services
Leads:	<i>L. D. Dahourou</i>	<i>Jane Lwoyero</i>	<i>Francesco Valentini, Mactar Seck (ICFAW)</i>	<i>Ian P. Busuulwa, Simon Kihu</i>
	DAY CLOSING			



THURSDAY 28 NOVEMBER 2024 (DAY 3)				
PLENARY SESSION 5	OPENING SESSION			Mt Kilimanjaro
08:30 - 09:10	Highlights of day two and what to look forward to today			Facilitators
09:10 - 10:30	Special event: Launch of the Africa PPP Forum in the Veterinary Domain			Rahul Srivastava Mary Mbole (AU-IBAR)
10:30 - 11:00	Coffee and tea break			Terrace
THEMATIC SESSION 5	EDUCATION	WORKFORCE ASSESSMENT AND DEVELOPMENT	SUSTAINABLE SERVICES AND PUBLIC-PRIVATE PARTNERSHIPS	TECHNICAL THEMES AND ENABLING ENVIRONMENT FOR EFFECTIVE VETERINARY WORKFORCE
	Mt Kenya 1	Mt Kenya 2	Mt Kilimanjaro	Mt Kenya 3
11:00 - 13:30	Veterinary and veterinary paraprofessional education	Workforce development	Special event: Launch of the Africa PPP Forum in the Veterinary Domain (AU-IBAR, WOA)	One Health in practice: engaging the Veterinary workforce to apply One Health principles at national level
Leads:	<i>L. D. Dahourou</i>	<i>David Sherman</i>	<i>Rahul Srivastava</i>	<i>Lillian Wambua</i>
13:30 - 15:00	Lunch and gallery walk			
PLENARY SESSION 6	CLOSING			Mt Kilimanjaro
15:00 - 16:00	Closing panel - Presentation of the Conference recommendations - Delegate of Lesotho - President, Veterinary Council of Nigeria - Director General, Inter-State School of Veterinary Sciences and Medicine (EISMV) - President, Association of Veterinarians of Burkina Faso - Head, Capacity Building Department, WOA			Facilitators Relebohile Lepheana Aishatu Abubakar Bajju Yalacé Kaboret Sandaogo Hamidou Ouandaogo Barbara Alessandrini
16:00 - 17:00	Closing statements - President of the <i>Africa Association of Veterinary Education Establishments</i> (AAVEE-V) - Representative of the <i>World Veterinary Association</i> (WVA) - Representative of the <i>African Veterinary Technicians Association</i> (AVTA) - WOA Delegate and Director of Veterinary Services (DVS), Kenya			Dietmar Holm Nandipha Toyota Ndudane Benson Ameda Abraham Sangula, Deputy-Director, on behalf of Allan Azegele
17:00 - 17:30	Coffee and tea break, departures			Terrace

Annex 2

Abstracts (accepted, by theme) from the [Book of Abstracts](#)

Downloads : <https://rr-africa.woah.org/app/uploads/2023/02/BOOK-OF-ABSTRACTS-32-pages.pdf>

Thematic session: Education

Session title: Innovations or experiences that stimulate interest in the veterinary and veterinary paraprofessional sectors

LA FORMATION PAR SIMULATION DANS L'EDUCATION VETERINAIRE : CAS DE L'ECOLE INTER-ETATS DES SCIENCES ET MEDECINE VETERINAIRES (EISMV) DE DAKAR

Author/s: Yalacé Y. Kaboret ; Mireille Kadja, Dieudonné Kabkia

ISVEE18, 8-12 NOVEMBER 2027, CAPE TOWN (SOUTH AFRICA): TOWARDS AN AFRICAN EXPERIENCE THAT STIMULATE INTEREST IN THE VETERINARY AND VETERINARY PARAPROFESSIONAL SECTORS Author/s: Nduvuyo Magadla, Anita Michel, Geoffrey Fosgate, Mohamed Sirdar, Peter Thompson

REGIONAL NETWORKS OF VEES AND VSBS IN ASIA - TOWARDS BETTER EDUCATIONAL OUTCOMES

Author/s: Maho Urabe, Ashish Sutar, Pasang Tshering

ENGAGEMENT OF VETERINARY MEDICINE STUDENTS IN EXTRACURRICULAR ACTIVITIES AND IMPACT ON THEIR ACADEMIC ACHIEVEMENT: THE EXPERIENCE OF VETERINARY STUDENT CLUBS AT THE UNIVERSITY OF GONDAR, ETHIOPIA Author/s: Shimelis Dagnachew, Rehmet Kemal, Andinet Yirga, Tsegaw Fentie, Alice Matos, Amanda Berrian, Armando Hoet

Thematic session: Workforce assessment and development

Session title: Member updates on veterinary workforce development and VPP integration

TANZANIA ANIMAL HEALTH WORKFORCE DEVELOPMENT OPPORTUNITIES AND CHALLENGES Author/s: Daniel Mdetete, Benezeth Malinda, Makungu Selemani and Samwel Mngumi

COMMENT PROFESSIONNALISER LES PARAPROFESSIONNELS VÉTÉRINAIRES EN AFRIQUE DE L'OUEST

Author/s: Laibané Dieudonné Dahourou

BUILDING RESILIENT AND SUSTAINABLE ANIMAL HEALTH WORKFORCE THROUGH FIELD EPIDEMIOLOGY TRAINING IN UGANDA (2019 - 2024) Author/s: Annet Namboowa, Chrisostom Ayebazibwe and Merab Acham

Session title: Case studies of veterinary workforce assessments in the past 5 years

A CASE STUDY ON VETERINARY WORK-BASED ASSESSMENT AND MENTORSHIP IN EAST AFRICA Author/s: Samantha Opere, James Kithuka, Paul Mnangat, Vincent Oloo

ASSESSMENT OF BUILDING FRONT-LINE ANIMAL HEALTH WORKFORCE CAPACITIES IN KENYA Author/s: Evans Mulinge, Mr. Evans Tenge, Khadija Chepkorir, Rinah Wangila, Sam Okuthe, Stephen Gikonyo

Session title: Youth perspectives on futures of the workforce

YOUTH PERSPECTIVES ON FUTURES OF THE VETERINARY WORKFORCE IN AFRICA Author/s: Sonia Fèvre, Simon Kihu, Nancy Mugei, Desmond Rono, Finn Strivens, Tianna Brand

Thematic session: Creating a sustainable working environment

Session title: Best practices for VPP professional integration in-country

ENHANCING PRIMARY ANIMAL HEALTHCARE SERVICE DELIVERY: COLLABORATIVE ROLES OF ANIMAL HEALTH TECHNICIANS (AHTS) AND VETERINARIANS IN SOUTH AFRICA Author/s: Johan Oosthuizen

DEVELOPMENT PROCESS OF THE NATIONAL STRATEGIC PLAN FOR THE IMPLEMENTATION OF SUPPORT TO PRIVATE VETERINARY PRACTICE IN NIGERIA Author/s: Yakubu Yanet Ago

ENQUETE D'INSERTION PROFESSIONNELLE DES DIPLOMES ISSUS DES CENTRES NATIONAUX DE FORMATION ZOOTECHNIQUE ET VETERINAIRE DE MAROUA, JAKIRI ET FOUMBAN : PROMOTIONS 2010 A 2022 Author/s: Gaelle Nathalie Tinak Satok

Session title: Case studies and experiences related to PPP Interventions to improve terrestrial and aquatic animal health and welfare

PRIVATE SECTOR COLLABORATION FOR VETERINARY WORKFORCE DEVELOPMENT IN VACCINE PRODUCTION AND QUALITY CONTROL IN AFRICA: EXAMPLES OF PRIVATE PUBLIC PARTNERSHIP INITIATIVES Author/s: Khalid Omari Tadlaoui, Lamy Raf

Session title: Country experiences and best practices regarding sustainable deployment of vets, VPP and CAHWs in private and public sectors

WORKING TOWARDS SUSTAINABLE DEPLOYMENT OF CAHWs: RECOMMENDATIONS FOR VETERINARY STATUTORY BODIES, VETERINARY SERVICES, AND DEVELOPMENT PARTNERS Author/s: Alexia Rondeau

PRIVATE VETERINARIANS AND CAHWs WORKING TOGETHER THROUGH THE PRIVATE PROXIMITY VETERINARY SERVICE: THE CASE OF NIGER Author/s: Alexia Rondeau

Session title: Opportunities and challenges in implementing of PPPs in the veterinary domain

A CRITICAL EXAMINATION OF OPPORTUNITIES, CHALLENGES, AND SUSTAINABLE MODELS Author/s: David Magina Owino, Martin Barasa, Maurice Kiboye, Sylvester Wakhu

Session title: Case studies, examples or research on mentorship, career pathways and leadership for women in Veterinary Services

GENDER EQUALITY IN THE VETERINARY PROFESSION IN KENYA Author/s: Anima Sirma, Marilyn Karani, Getrude Shepelo, Mary O'Brien, Sol Perez

Downloads : <https://rr-africa.woah.org/app/uploads/2023/02/BOOK-OF-ABSTRACTS-32-pages.pdf>

Technical themes and enabling environment for effective veterinary workforce

Session title: Case studies demonstrating multisectoral collaboration at national/sub-national/cross-border levels across the topics: the evolution, spread, and prevention of amr and improved use of antimicrobials in animals; priority emerging, re-emerging and endemic zoonoses with regards to surveillance investigation and response; novel methods and used to assure safety of food of animal origin ; impact of climate change and other environmental factors on vector borne diseases

A REVIEW OF HUMAN DOG-BITE INJURIES IN KITUI SOUTH SUBCOUNTY, KENYA (2017-2021) Author/s: Peris Kung'u

LES MICROMAMMIFERES ANTHROPOPHILES : SOURCE POTENTIELLE DE PARASITES ZOONOTIQUES DANS LA COMMUNE D'ABOBO, ABIDJAN, COTE D'IVOIRE Author/s: Gaoussou Coulibaly

ONE HEALTH APPROACH DURING OUTBREAKS OF AVIAN INFLUENZA IN WILD BIRDS IN NORTHERN SENEGAL, 2022 AND 2023 Author/s: Nicolas Djigoum Diouf, Coumba Faye, Evariste Bassene, Youssou Ndiaye, Ahmadou Tidiane Niang

RENFORCER LA COLLABORATION INTERSECTORIELLE DANS LA SURVEILLANCE DES MALADIES ZOONOTIQUES : PLACE DES ECOLES DE FORMATION DES PPV DANS LA DIFFUSION DU « JEU SERIEUX ALERTE » Author/s: Wendmisida Victor Yacinthe Guigma, Sophie Muset, Dieudonné Laibané Dahourou

Session title: Experience sharing on how various professional categories are used in surveillance or emergency management.

COMPARATIVE ASSESSMENT OF THE HUMAN AND ANIMAL HEALTH SURVEILLANCE SYSTEMS IN CAMEROON: OPPORTUNITIES FOR AN INTEGRATED ONE HEALTH SURVEILLANCE PLATFORM Author/s: Cleophas Kahtita Mbah

Session title: Gender in the veterinary domain

GENDER-RESPONSIVE APPROACHES FOR TRAINING VETERINARY PARAPROFESSIONALS IN NIGERIA, SOUTH AFRICA, AND UGANDA Author/s: Emma Alegi, Anthony Mugisha, Gani Enahoro, Grace Nakityo, Holly Hufnagel, Jacoray Lesiba Khunou, Jenny Maud, Johan Oosthuizen, Nafinatu Hyelni Abdullahi, Neil Sargison, Nokulunga Xaba, Rob Kelly, Rosie Herrington, Shehu Shamsudeen, Sylvia Baluka, Zimbini Mdlulwa

LE NOMBRE DE FEMMES DANS LE SECTEUR VETERINAIRE AUGMENTE, MAIS EST-CE QUE L'INCLUSION EST AUSSI SIMPLE QUE ÇA ? SOUS-TITRE : ANALYSE « GENRE » SUR L'ACCÈS À LA FORMATION ET L'INSERTION PROFESSIONNELLE DES FEMMES DANS LE SECTEUR VÉTÉRINAIRE AU SÉNÉGAL ET AU TOGO. Author/s: Anne-Françoise Thierry, Sonia Fèvre, Laibané Dieudonné Dahourou, Bachir Souley Kouato

AUTONOMISATION DES FEMMES ET JEUNES ENTREPRENEURS IMPLIQUÉS DANS LA PRODUCTION ANIMALE ET HALIEUTIQUE (Kinshasa, RDC) Author/s: Solange Ndudi, Denise Ntema, Eulalie Kashwantale, Tatiana Banze, Antoinette Lukalu.

Downloads : <https://rr-africa.woah.org/app/uploads/2023/02/BOOK-OF-ABSTRACTS-32-pages.pdf>

Annex 3

Posters (in alphabetical order, by first author)

1. Alegi et al. (Nigeria, Uganda, South Africa)
2. Coulibaly et al. (Cote d'Ivoire)
3. Dahourou et al. (West Africa)
4. Diouf et al. (Senegal)
5. Fèvre et al. (youth perspectives)
6. Guigma W. Yacinthe (ALERT[E] serious game)
7. Kaboret Y. (EISMV)
8. Kemal et al. (Ethiopia)
9. Magadla N. (ISVEE-18)
10. Mbah et al. (Cameroon)
11. Mdetele et al. (Tanzania)
12. Mulinge et al. (Kenya)
13. Namboowa A.P. (Uganda)
14. Njoki Kung'u P. (Kenya)
15. Ntema et al. (Congo-Kinshasa)
16. Opere et al. (East Africa)
17. Owino et al. (Horn of Africa)
18. Rondeau A. & Vias G. (Niger)
19. Rondeau A. (CAHW)
20. Sirma A. (Kenya)
21. Thierry et al. (Senegal & Togo)
22. Tinak et al. (Cameroon)
23. Urabe et al. (Asia)
24. Vakuru C.T. & Ago Y.Y. (Nigeria)



<https://rr-africa.woah.org/en/news/downloads-posters/>

Annex 4

Youth Perspectives on Futures of the Veterinary Workforce in Africa : Workshop reports



Website blog : [Empowering youth to shape the future of Veterinary Services. - WOA - Africa](#)

Executive summary : <https://rr-africa.woah.org/app/uploads/2025/02/Youth-futures-Execsummary-WOAH.pdf>

Full report : <https://rr-africa.woah.org/app/uploads/2025/02/Youth-futures-report2025-WOAH.pdf>

Annex 5

Relevant agreed definitions of terms (from the Glossary of the 2024 WOA Terrestrial Animal Health Code and from the 2019 WOA Curricula Guidelines for Veterinary Paraprofessionals)

Animal handler means a person with a knowledge of the behaviour and needs of [animals](#) who, with appropriate experience and a professional and positive response to an [animal](#)'s needs, can achieve effective management and good [welfare](#). Competence should be gained through formal training or practical experience.

Animal product means any part of an [animal](#), or a raw or manufactured product containing any material derived from [animals](#), excluding [germinal products](#), [biological products](#) and [pathological material](#).

Animal welfare means the physical and mental state of an [animal](#) in relation to the conditions in which it lives and dies.

Antimicrobial agent means a naturally occurring, semi-synthetic or synthetic substance that exhibits antimicrobial activity (kill or inhibit the growth of micro-organisms) at concentrations attainable *in vivo*. Anthelmintics and substances classed as disinfectants or antiseptics are excluded from this definition.

Competent Authority means a Governmental Authority of a Member Country having the responsibility in the whole or part of the territory for the implementation of certain standards of the [Terrestrial Code](#).

Eradication means the elimination of a pathogenic agent from a country or [zone](#).

Killing means any procedure that causes the death of an [animal](#).

Laboratory means a properly equipped institution staffed by technically competent personnel under the control of a specialist in veterinary diagnostic methods, who is responsible for the validity of the results. The [Veterinary Authority](#) approves and monitors such laboratories with regard to the diagnostic tests required for [international trade](#).

Notifiable disease means a disease listed by the [Veterinary Authority](#), and that, as soon as detected or suspected, should be brought to the attention of this [Authority](#), in accordance with national regulations.

Sanitary measure means a measure, such as those described in various chapters of the [Terrestrial Code](#), designed to protect animal or human health or life within the whole territory or a [zone](#) of a Member Country from [risks](#) arising from the entry, establishment or spread of a [hazard](#).

Slaughter means the [killing](#) of an [animal](#) primarily intended for human consumption.

Surveillance means the systematic ongoing collection, collation, and analysis of information related to animal health and the timely dissemination of information so that action can be taken.

Terrestrial Code means the WOAH *Terrestrial Animal Health Code*.

Vaccination means the administration of a vaccine, in accordance with the manufacturer's instructions and the [Terrestrial Manual](#), when relevant, with the intention of inducing immunity in an [animal](#) or group of [animals](#) against one or more pathogenic agents.

Veterinarian means a person with appropriate education, registered or licensed by the relevant [veterinary statutory body](#) of a country to practice veterinary medicine/science in that country.

Veterinary Authority means the Governmental Authority of a Member Country having the primary responsibility in the whole territory for coordinating the implementation of the standards of the [Terrestrial Code](#).

Veterinary legislation means laws, regulations and all associated legal instruments that pertain to the veterinary domain.

Veterinary paraprofessional means a person who, for the purposes of the [Terrestrial Code](#), is authorised by the [veterinary statutory body](#) to carry out certain designated tasks (dependent upon the category of [veterinary paraprofessional](#)) in a territory, and delegated to them under the responsibility and direction of a [veterinarian](#). The tasks for each category of [veterinary paraprofessional](#) should be defined by the [veterinary statutory body](#) depending on qualifications and training, and in accordance with need.

Veterinary Services means the combination of governmental and non-governmental individuals and organisations that perform activities to implement the standards of the [Terrestrial Code](#).

Veterinary statutory body means an autonomous regulatory body for [veterinarians](#) and [veterinary paraprofessionals](#).

Selected definitions from the 2019 Curricula Guidelines for Veterinary Paraprofessionals

Animal Health means the state, in animals, of being free from illness or injury.

Competency means knowledge (e.g. cognitive abilities), skills (e.g. ability to perform specific tasks), attitudes (e.g. affective abilities, feelings and emotions), and aptitude (e.g. natural ability, talent, or capacity for learning).

Course means a series of lessons designed to communicate knowledge, skills, attitudes, and aptitude about a particular subject.

Course description means a synopsis of the contents of a Course.

Course objective(s) means a list of the key concepts and/or skills which are to be imparted to students who take the Course.

Curriculum means the Units and Courses comprising a course of study associated with a particular programme at a training or educational institution.

Curriculum alignment matrix means a tabulated comparison of the Learning Outcomes stated in the (OIE) Curricula Guidelines against the Learning Outcomes stated for existing VPP curricula at different training and educational institutions in order to assess the degree of alignment or concordance.

Laboratory diagnosis means a diagnosis made by a chemical, microscopic, microbiologic, immunologic or pathologic study of secretions, discharges, blood, or tissue.

Learning Outcome means what a student will know and be able to do by the end of a course or programme.

Programme means the combination of Courses and other components of training that leads to a qualification in a specific field of study.

Track means the principle job-related focus for a veterinary paraprofessional, be it animal health, veterinary public health, or laboratory diagnosis.

Unit means a self-contained part of an educational Course. Veterinarian⁵ means a person with appropriate education, registered or licensed by the relevant Veterinary Statutory Body of a country to practice veterinary medicine/science in that country.

Veterinary domain means all the activities that are directly or indirectly related to animals, their products and byproducts, which help to protect, maintain and improve the health and welfare of humans, including by means of the protection of animal health and welfare, and food safety.

Veterinary Public Health means the sum of all contributions to the complete physical, mental and social well-being of humans through an understanding and application of veterinary medical science.



World Organisation
for Animal Health



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