

Working together to control FMD

TAFS Conference:

“Strengthening FMD control capacity and enhance resilience”

James Wabacha, AU-IBAR & Charles Bodjo

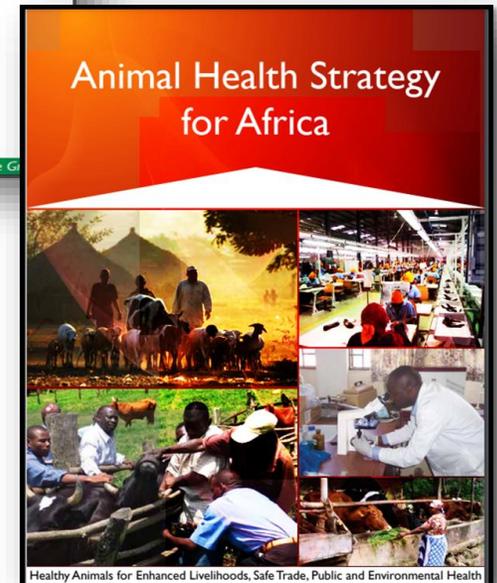
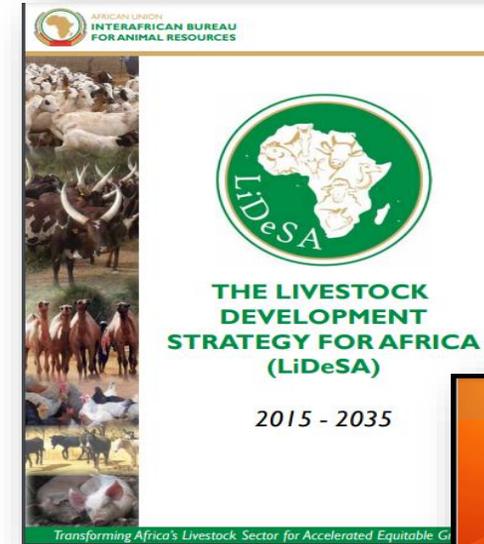
3rd and 4th of March 2026, Cape Town

Outline

- AU-IBAR Mandate and Way of Work
- Continental Strategic frameworks guiding livestock development
- Importance of Livestock and impact of livestock diseases in Africa
- Often cited Barriers to FMD Control in Africa
- The Barriers call for Integrated Approach for Foot and Mouth disease Control
- Engagement of Actors for an Integrated Foot and Mouth disease control programme
- Foot and Mouth disease and Red meat livestock value chains
- Role of AU-IBAR in Promoting FMD control Efforts
- Why Vaccine quality, diagnostics and surveillance are key for FMD Control: The role of AU-PANVAC
- Conclusions

AU-IBAR Mandate and Way of Work

- ❑ To support and coordinate the sustainable development and utilization of animal resources to enhance nutrition and food security and contribute to the well being and prosperity of the people in the MSs of the African Union
- ❑ AU-IBAR work is anchored in the Principles of Partnerships, Subsidiarity, Synergy, Complementarity and Mutual Respect



Continental Strategic frameworks guiding livestock Development: KAMPALA CAADP DECLARATION

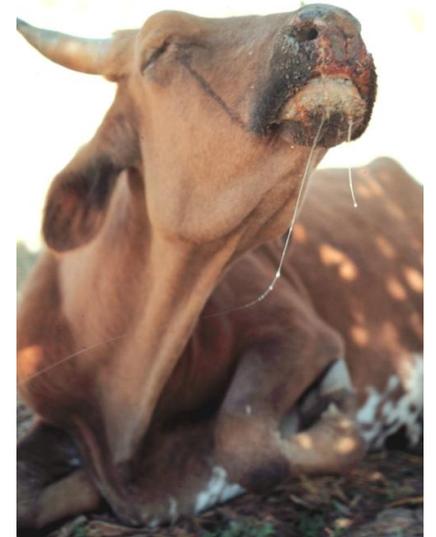


- ❑ Enhance sanitary and phytosanitary standards (SPS) and implement One Health protocols to safeguard food safety and protect human, animal, plant and environmental health.
- ❑ Invest in disease surveillance and reporting, **STRENGTHEN VETERINARY LABORATORIES, INCREASE VACCINE PRODUCTION**, prioritize eradication of peste des petits ruminants (PPR) by 2030, and improve cooperation on transboundary animal diseases.
- ❑ Ensure Food and Nutrition Security
 - Invest in disease surveillance and reporting, strengthen veterinary laboratories, increase vaccine production, prioritize eradication of peste des petits ruminants (PPR) by 2030, and improve cooperation on transboundary animal diseases.

- Prioritize research and development of improved fodder crop varieties and promote alternative feed sources to enhance livestock nutrition and reduce dependency on traditional feeds.

Importance of Livestock and impact of livestock diseases in Africa

- Africa holds nearly one-third of the global livestock herd.
- Over one-third of the continent's population—approximately 470 million people—depend directly on livestock,
- Livestock contributes an average of 24.9% to AGDP
- The animal disease burden in Africa is responsible for annual losses of over US\$4 billion in Sub-Saharan Africa alone, equivalent to 25% of the total value of livestock production in the continent (AU- IBAR, 2010).
- FMD is reported in all the regions of Africa with huge economic losses
- Impacts on food security, livelihoods and limits the trade of livestock and their products within and from the region
- FMD increases the climate and ecological footprint of livestock
- An integrated approach for Sustainable Livestock value chain development and sustainable FMD control is needed



Often cited Barriers to FMD Control in Africa

- ✓ Vaccinations that are not evidence based- surveillance and diagnostic systems weak
- ✓ Compliance with farm/regional biosecurity measures
- ✓ Fragmented regional vaccination efforts-coverage
- ✓ Fragmented regulatory regimes across countries in a region; regional standards?
- ✓ Availability of quality vaccines when needed
- ✓ High costs/Affordability and accessibility of quality vaccines
- ✓ Lack of incentives to vaccinate
- ✓ Weak Regional collaboration and coordination
- ✓ Cross border movements and trade

The Barriers call for Integrated Approach for Foot and Mouth disease Control

- ✓ There is need for partnerships with a wide range of actors to address the challenges and seize the opportunities presented by FMD (*technical and financial resources, regulations, experiences, field realities, advocacy, etc*)



Engagement of Actors for an Integrated Foot and Mouth disease control programme

Key stakeholders and partners

Academia and Research Institutions:
Generate evidence

Civil Society Organizations:
Amplify advocacy, uptake of good practices

Development partners:
Investments based on VC priorities

Private sector: Offer contextualized experiences and practical solutions for VC development and FMD control and are involved e.g in vaccine supply, governance, compliance, investment, and market access

Public Sector

Primary beneficiaries

Smallholder producers:
Production, disease control- exclusion

Large scale producers & youth: Production, disease control- exclusion; Industry standards

Women & youth:
Critical role in Livestock production; inclusion

Institutional Partners

AU-IBAR:
Harmonisation & Coordination

AU-PANVAC:
Diagnostic and Vaccine quality control

RECs: Coordinate cross-border disease control, policy harmonization

Technical partners:
WOAH: Standards
FAO
GF-TADs

GALVmed: Reliable FMD supply,

Networks and reference Laboratories

Epi & Laboratory Networks:
Diagnostics, early detection, Matching

Vaccine Laboratories: Supply of quality and efficacious Vaccines

Reference Laboratories:
Reference for diagnosis, surveillance, and vaccine development

Foot and Mouth disease and Red meat livestock value chains

Regions

Intergovernmental Authority on Development (IGAD)



Southern African Development Community (SADC)



Foot and Mouth disease and Red meat livestock value chains

The Common Market for Eastern and Southern Africa (COMESA)



Priority Value Chains

Red meat & leather



These value chains build on the LiDeSA-aligned Live2Africa Project of 2017 – 2022 : its successes, learnings and consultative value chain prioritization

Role of AU-IBAR in Promoting FMD control Efforts for the Red meat Value chains

- Advocacy and support for Integrated Regional Livestock Value Chain development
- Coordination and Harmonisation: Alignment of efforts with PCP-FMD and GF-TADs
- Support regional and Epidemiology and Laboratory networks
- Support information sharing through ARIS3
- Capacity Building
- Promote innovation by partners on FMD- e.g Eastern Africa protocol for FMD by GALVmed

African
Union



**AU-PANVAC
Laboratories**



Why Vaccine quality, diagnostics and surveillance are key for FMD Control: The role of AU-PANVAC

Dr Charles BODJO, Director AU-PANVAC



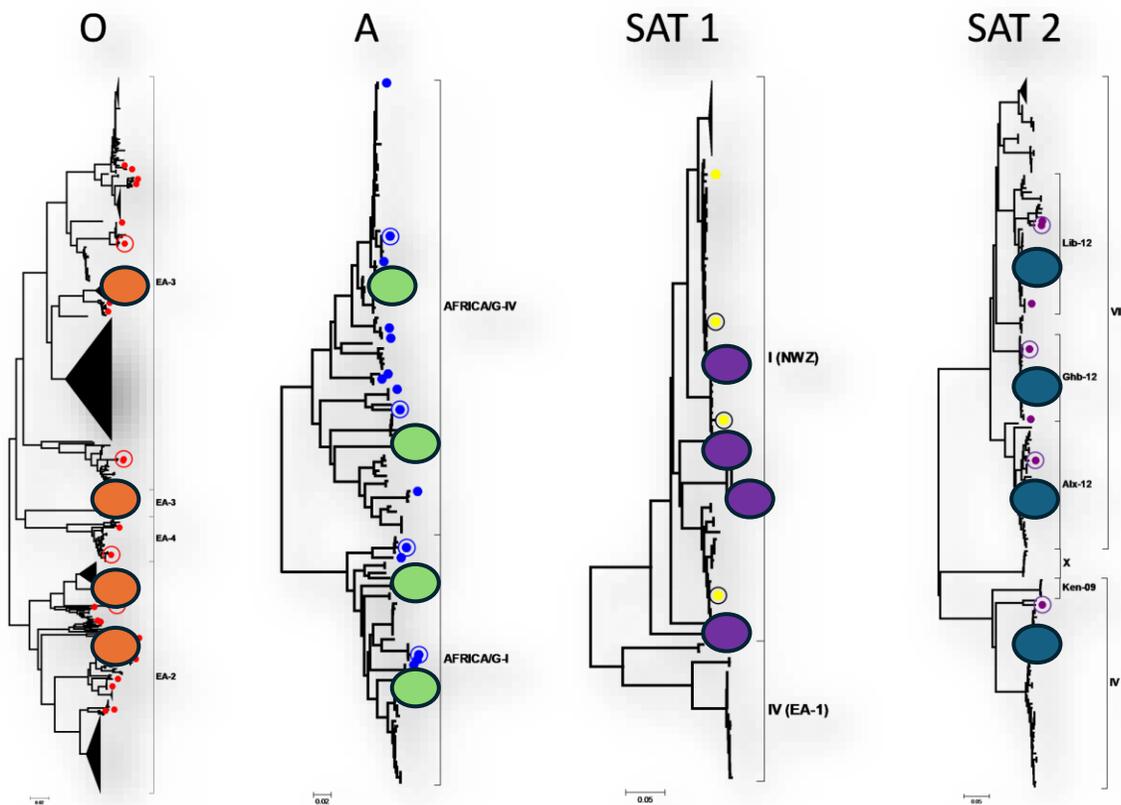
AU-PANVAC's Mission & Mandates

 **MISSION:** “To promote the use of **GOOD QUALITY VACCINES** and **DIAGNOSTIC REAGENTS** for the control, eradication and surveillance of animal diseases in Africa.”

-  **MANDATED to act as CONTINENTAL REFERENCE CENTRE for:**
- **Independent quality control and certification of veterinary vaccines** produced in or imported into Africa.
 - **Produce, maintain, and distribute biological reference materials** to support disease surveillance and diagnosis.
 - **Provide training and technical assistance** to laboratories and national vaccine production facilities to build capacity for quality assurance.
 - **Auditing and certification of vaccine manufacturing facilities** *in collaboration with National Regulatory Authorities in Africa.*
 - Maintaining **Africa Free from Rinderpest**



Reference Panels for Quality Control of FMD



Selection of a Reference Panel of 16 FMD Viruses with the Support of **Pirbright INSTITUTE** covering the genetic diversity circulating in **Eastern African countries (O, A, SAT1 & SAT2)** used for VNT for FMD Vaccine Validation for the Region



Publications on East African FMD Virus Panel

Publication 1 : 2021

Rev. Sci. Tech. Off. Int. Epiz., 40 (1)

| | |
|---|-----|
| A.B. Ludi, V. Mioulet, L. Bakkali Kassimi, D.J. Lefebvre, K. De Clercq, E. Chitsungo, N. Nwankpa, W. Vosloo, D.J. Paton & D.P. King | |
| Selection and use of reference panels: a case study highlighting current gaps in the materials available for foot and mouth disease | 239 |
| <i>Sélection et utilisation des panels de référence : à partir de l'exemple de la fièvre aphteuse, étude soulignant les lacunes actuelles en la matière (résumé).....</i> | 247 |
| <i>Selección y uso de paneles de referencia: estudio de las carencias de los paneles disponibles actualmente a partir del ejemplo de la fiebre aftosa (resumen).....</i> | 248 |

<https://doi.org/10.20506/rst.40.1.3221>

Publication 2: 2025

npj | vaccines

Article

Published in partnership with the Sealy Institute for Vaccine Sciences



<https://doi.org/10.1038/s41541-025-01128-7>

An antigen panel to assess the regional relevance of foot and mouth disease vaccines

Check for updates

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<https://doi.org/10.1038/s41541-025-01128-7>



Future Direction

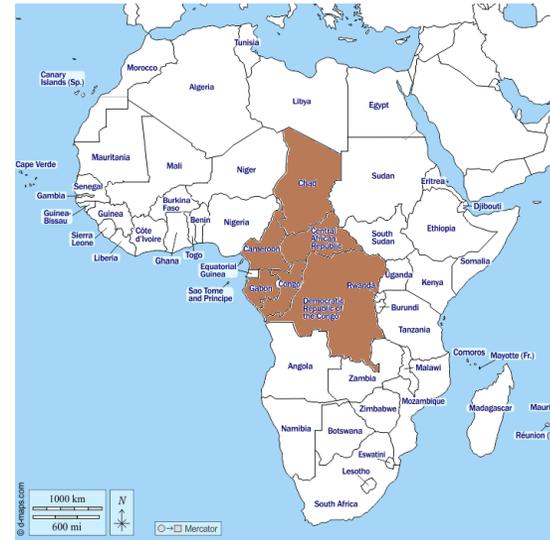
- Developing similar approach of FMD virus panel for:



Northern



Western



Central



Southern

- Exploration of guinea pigs as an alternative model for vaccine testing
- With the current situation in the SADC region, AU-PANVAC would support the QC of FMD Vaccines using local isolated FMDV in collaboration with the Reference Labs: **Pirbright Institute, ARC-OVI or BVI.**

Conclusions

- Working Together and integrating FMD control and prevention into Integrated Regional Livestock Red meat value chains (IRLVC) across RECs are key imperatives
- Seize opportunity presented by IRLVCS and AfCFTA to:
 - ✓ To unlock markets,
 - ✓ protect livelihoods, and
 - ✓ secure resilient livestock economies.