

AU-IBAR activities, projects & tools and expected outcome/impact (23 April, Tunis, Tunisia)

Dr Elynn Njeri - AU-IBAR

Round table on OH Surveillance and Control of
VBDs in North Africa



AU-IBAR brief overview

Who we are?

Specialized Technical Office of the 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 utilization 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.

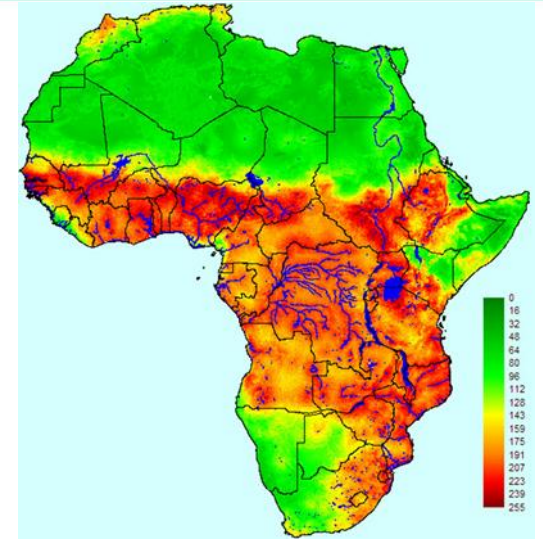


**Providing Leadership in the
Development of Animal Resources in Africa**



Vector borne Diseases: Emerging Risks

- Vector-borne diseases remain a **major constraint to livestock productivity, food systems, and public health**
- Many are **zoonotic**, with implications for human health (e.g., RVF)
- Third of the 90 currently listed diseases by WOAAH are vector borne diseases;
- Increasing concern in Africa:
 - Changing **vector distribution and disease dynamics**
 - Climate change is a **key contributing factor**: WOAAH 2024 report “Animal Health Situation Worldwide” provide evidence that climate change is a critical driver in the spread of VBDs
 - This Influences vector density, distribution, and transmission patterns



Key Challenges in VBD Surveillance and Control

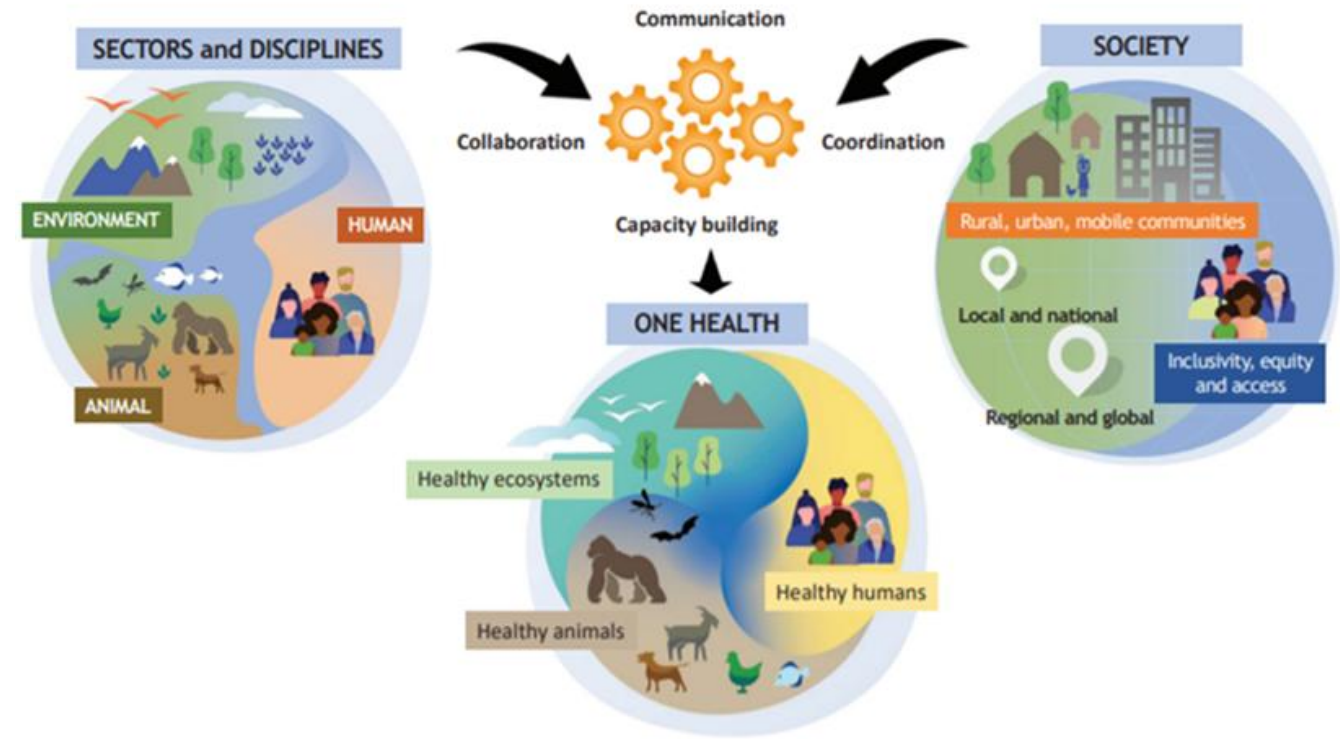
- Fragmented surveillance systems across sectors
- Limited integration of animal, human, and environmental data
- Weak early warning and response systems
- Insufficient laboratory and technical capacity
- Limited regional coordination for transboundary diseases

These gaps limit effective Detection, response and Control of VBDs



Strengthening One Health Systems for VBD Control

- Interlinkages between Animal Health, Human Health, Plant Health, environment health and climate change calls for a OH approach
- That is enhanced **collaboration** and cooperation among the various sectors, Animal Health, human health, plant health, environmental health **including insect scientists**
- Partnerships needed to mobilize information, knowledge, technical capacities, resources and **research to shed light on evolving interactions between the environment, CC and the vectors** *(you will see later how at AU-IBAR we are integrating OH data and information)*



One Health High level Expert Panel (OHHLEP)



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Strengthening One Health Systems for VBD Control

- ❖ Need to strengthen **risk management systems and capacities** such as
 - surveillance systems and reporting
 - preparedness and response to reduce impacts of VBDs on food and nutrition security, health, livelihoods, economy and environment;
 - Enhance capacities to detect (human, laboratory capacities) and monitor the VBD threats
- ❖ **Partnerships** are needed to mobilize information, knowledge, technical capacities.
- ❖ **Resources** and research to shed light on evolving interactions between the environment, CC and the vectors;
- **Sharing and Integration of Data** and information on the threats (data remains in sector silos)-
- Enhance regional collaboration and coordination for key VBDs.



AU policy interventions

LiDeSA

Promotes **sustainable livestock systems** by integrating animal health into development planning, strengthening resilience and supporting control of diseases, including VBDs.

AHSA

Strengthens **surveillance, early warning, and veterinary systems**, providing the foundation for prevention and control of transboundary and vector-borne diseases.

AU-IBAR Strategic Plan (2024–2028)

Operationalizes **One Health approaches**, focusing on integrated surveillance, data systems, and coordinated responses to evolving risks, including VBDs.



AU-IBAR Strategic Interventions on VBDs

- **1. Surveillance and Reporting**
 - Strengthening animal health surveillance
 - Promoting integrated One Health reporting systems
- **2. Priority Disease Focus**
 - AAT as a key continental priority
 - Increasing relevance of **non-tsetse transmission in North Africa**
- **3. Data Integration (AU-DOHP)**
 - Integration of animal, human, and environmental data
 - Supporting real-time decision-making



Trypanosomiasis Control: Expanding Focus Beyond Tsetse

While tsetse control remains central,
Non-tsetse Transmitted
Trypanosomiasis is increasingly
significant – Particularly in NA

- **Key Insights (ISCTRC)**
- Mechanically transmitted trypanosomiasis has a **wider geographical reach**
- Driven by vectors such as **Tabanids, Stomoxys, and other biting flies**
- Requires **greater scientific, policy, and programmatic attention**
- **‘Harnessing One Health technologies & Innovations towards eliminating Trypanosomiasis in Africa’**.

Priority Actions

- Strengthen understanding of **transmission dynamics and vector distribution**
- Develop **control tools for mechanical vectors**
- Improve **diagnostics and surveillance systems**
- Address **drug misuse and emerging resistance** through stronger regulation and oversight
- Integrate NTTAT into **livestock health and production systems**
- Align policy, research, and control efforts to include **both tsetse and non-tsetse AAT**



Data Integration for One Health Surveillance (AU-DOHP)

- **Context**
- Effective VBD control is constrained by **fragmented data across animal, human, and environmental sectors**
- Limited interoperability reduces **timely decision-making and coordinated response**
- **AU-IBAR Approach**
- Development and endorsement of:
 - **Continental Digital One Health Information Policy**
 - **One Health Information Architecture**
- Operationalization of the **AU Digital One Health Platform (AU-DOHP)**

What AU-DOHP Enables

- Integration of **multi-sectoral data (animal–human–environment)**
 - Improved **data sharing, harmonization, and accessibility**
 - Strengthened **real-time analysis and early warning systems**
- Integrated data systems are essential for coordinated, evidence-based surveillance and control of vector-borne diseases.*



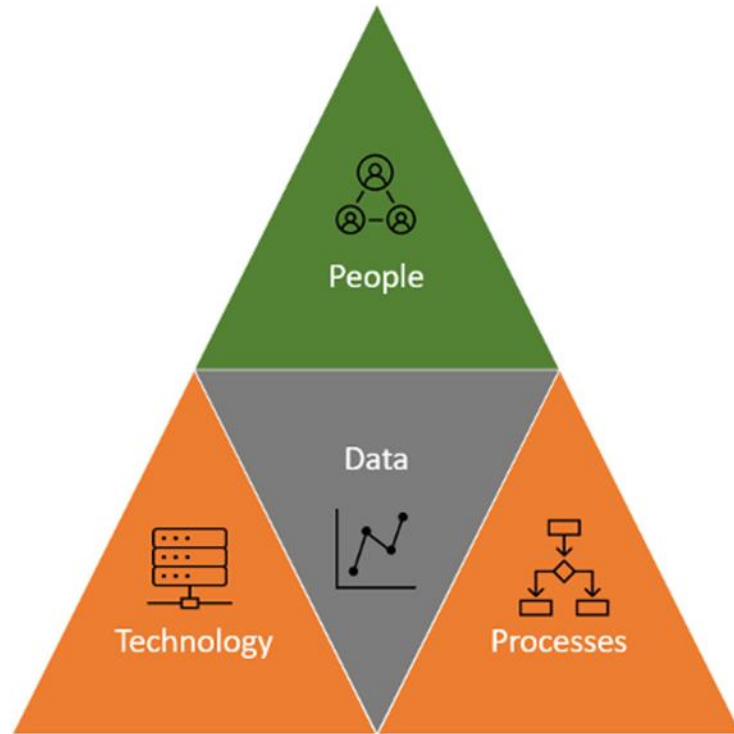
Data Integration for One Health Surveillance (AU-DOHP)

One Health Initiatives: Integration of animal, human health and environmental/climate change data

- Development and endorsement of:
 - Continental Digital One Health Information Policy
 - One Health Information Architecture
- Building and Enhancing of Digital One Health capacities and competencies at continental, regional and National levels
- Operationalizing a continental One Health digital platform for improved data sharing, integration and harmonization



Data Integration for One Health Surveillance (AU-DOHP)

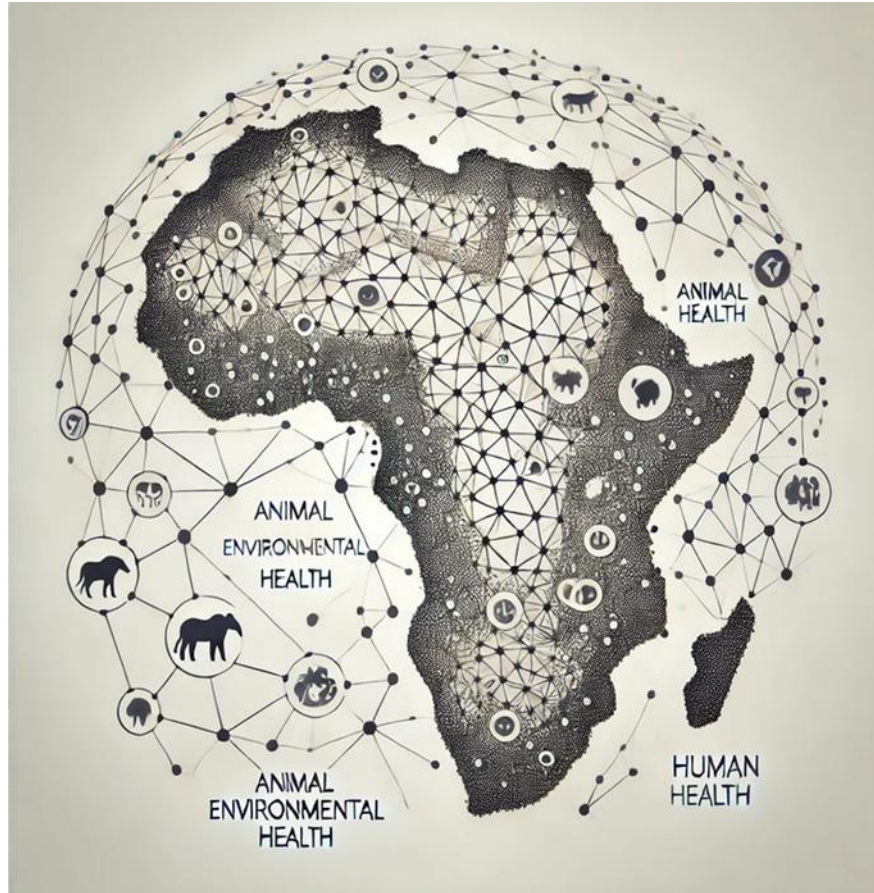


Why AU-DOHP is needed ?

- -To **integrate** and harmonize diverse data sources for comprehensive insights.
- -To **enhance collaboration** between continental One health actors.
- -To ensure **data security** and compliance through standardized protocols.
- -To improve **decision-making** with timely and accurate data access.
- -To support scalable and **sustainable data management** solutions for future needs.



Data Intergration for OH Surveillance



The principle for the **AU-DOHP** is data mesh. A decentralized data architecture that organizes data by a specific domain to provide more ownership to the producers of a given data set.

The four key principles of data mesh are :

- Domain-oriented decentralized data ownership and architecture.
- Data as a product.
- Self-serve data infrastructure as a platform.
- Federated computational governance.



Surveillance and Reporting

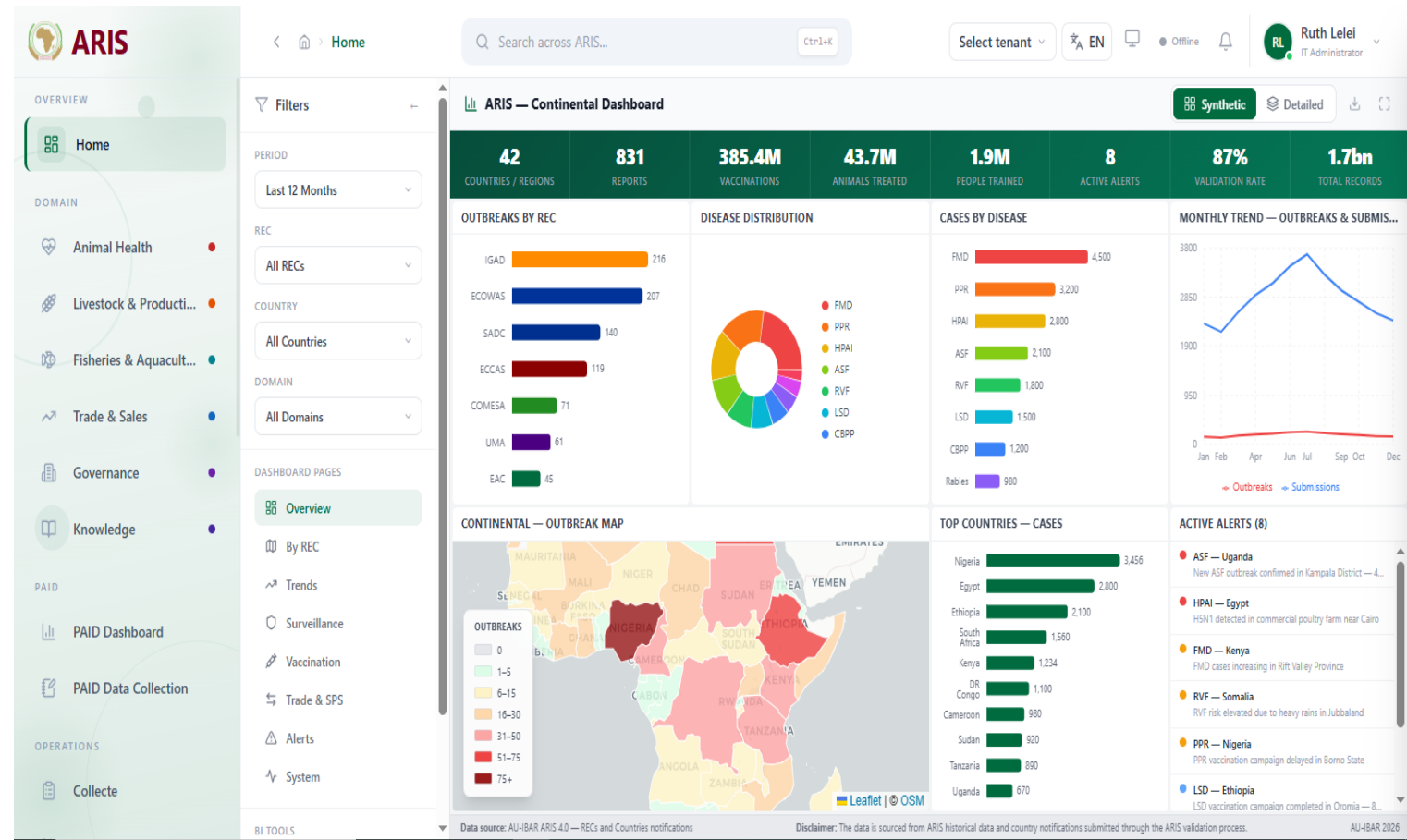
AU-IBAR TOOLS AND SYSTEMS

Strengthening animal health surveillance through:

- ARIS (African Animal Resources Information System)

ARIS supports:

- Standardized data collection and reporting
- Improved visibility of animal health events
- Linkages to regional and continental reporting systems



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Strengthening Capacity and Systems

- **Strengthening Capacity and Systems**
- Supporting AU Member States to:
 - Enhance **veterinary service capacity**
 - Strengthen **laboratory infrastructure and diagnostics**
 - Build **human and technical capacity for surveillance and response**
- Through broader **animal health and One Health initiatives**, including:
 - Capacity building programmes
 - Support to surveillance networks
 - Strengthening early warning systems



Conclusions

- **Better understanding** of the evolving interactions between the environment and the climate-sensitive vector borne diseases is needed;
- Need to strengthen **risk management systems** such as surveillance system and adapt them accordingly as climate change situations evolve;
- **Capacity building** of veterinary services, other sectors and community to better able develop and deploy risk management tools for climate-sensitive VBDs;
- African Countries to **enhance investments** for priority continental VBDs to safeguard both human and animal health;
- **Interlinkages** between Animal Health, Human Health, Plant Health, environment health and climate change calls for a **OH approach**;
- Need for **enhanced collaboration and cooperation** among the various sectors, Animal Health, human health, plant health, environmental health including insect scientists;
- **Partnerships are needed to mobilize information, knowledge, technical capacities, resources and research** to shed light on evolving interactions between the environment, CC and the vectors;
- **Sharing of data and information** from the different sectors and disciplines.



Thank you

Merci

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Obrigado

Gracias

Asante



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