World Organisation for Animal Health
Founded in 1924

Towards a More Resilient Veterinary Workforce for Africa 2024

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Animal health is our health. It's everyone's health

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Comparative Assessment of Human and Animal Health Surveillance Systems in Cameroon:

Opportunities for a One Health Surveillance Platform

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- Introduction
- Objectives
- Methods
- Results/Discussions
- Conclusion

Introduction 1/2

- Surveillance is the continuous, systematic collection, analysis, and interpretation of health data for informed decision making
- Approximately 60% of human diseases are of zoonotic origin
- Cameroon's biodiversity and close interaction between humans and wildlife increase the risk of zoonotic disease transmission
- One Health concept emphasizes linkage of human, animal, and ecosystems health
- Zoonotic disease surveillance requires a One Health approach for rapid detection and control

Introduction 2/2

- Human and animal health surveillance systems operate independently
- Cameroon operates two parallel surveillance systems
  - ✓One for human health - managed by the Ministry of Public Health
  - ✓One for animal health – Managed by the Ministry of Livestock, Fisheries, and Animal Industries
- This leads to:
  - ✓Limited coordination and communication between sectors
  - ✓Delayed detection of zoonotic diseases, posing a significant public health risk
  - ✓Poor resource management due to overlapping activities

Objectives 1/1

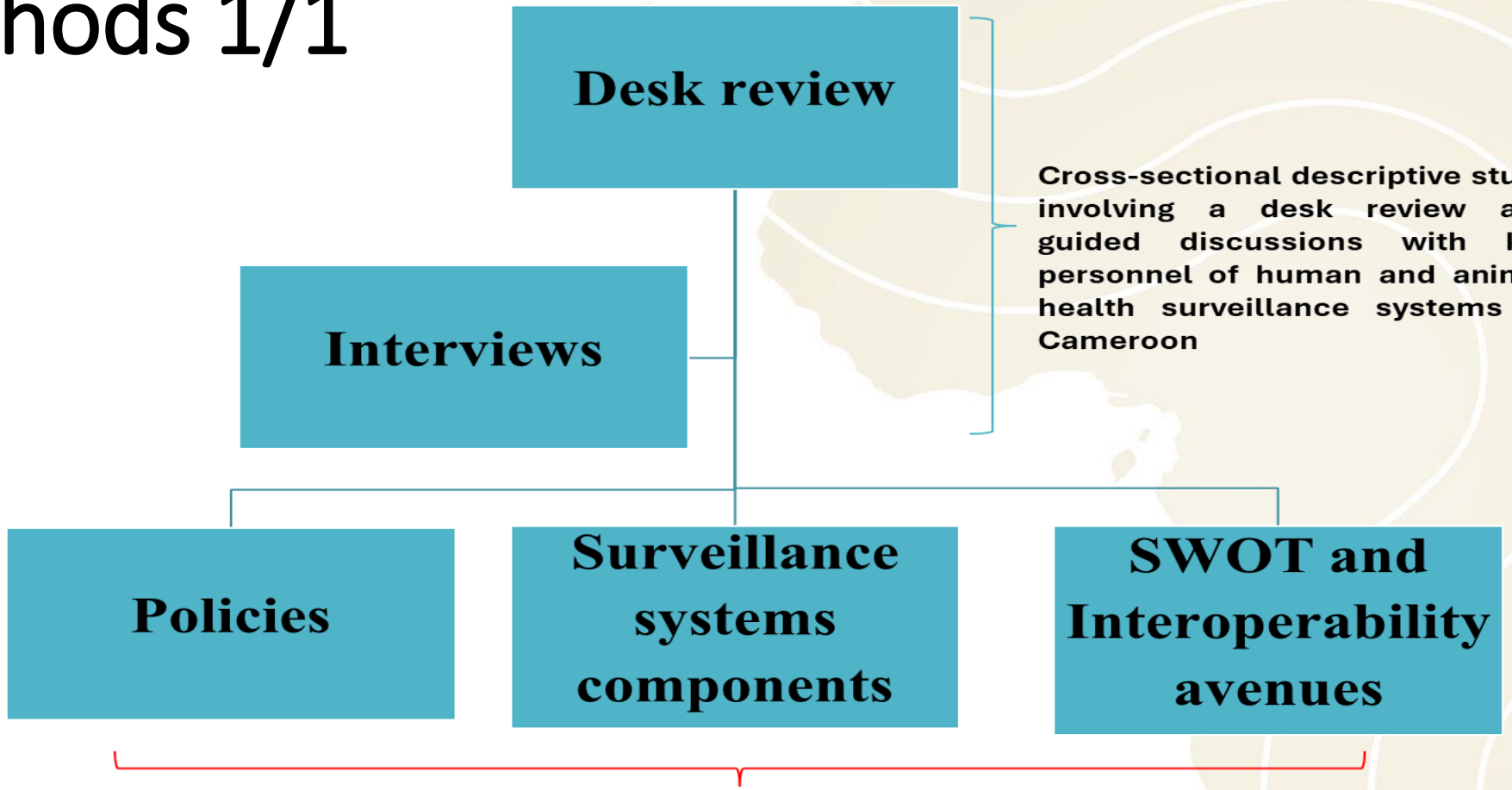
- **General**

Assess the human and animal health surveillance systems in Cameroon in a One Health perspective

- **Specific**

  - ✓ Analyze the existing policies governing human and animal health surveillance
  - ✓ Describe the existing human and animal health surveillance systems
  - ✓ Identify opportunities for integrating human and animal health surveillance systems

Methods 1/1

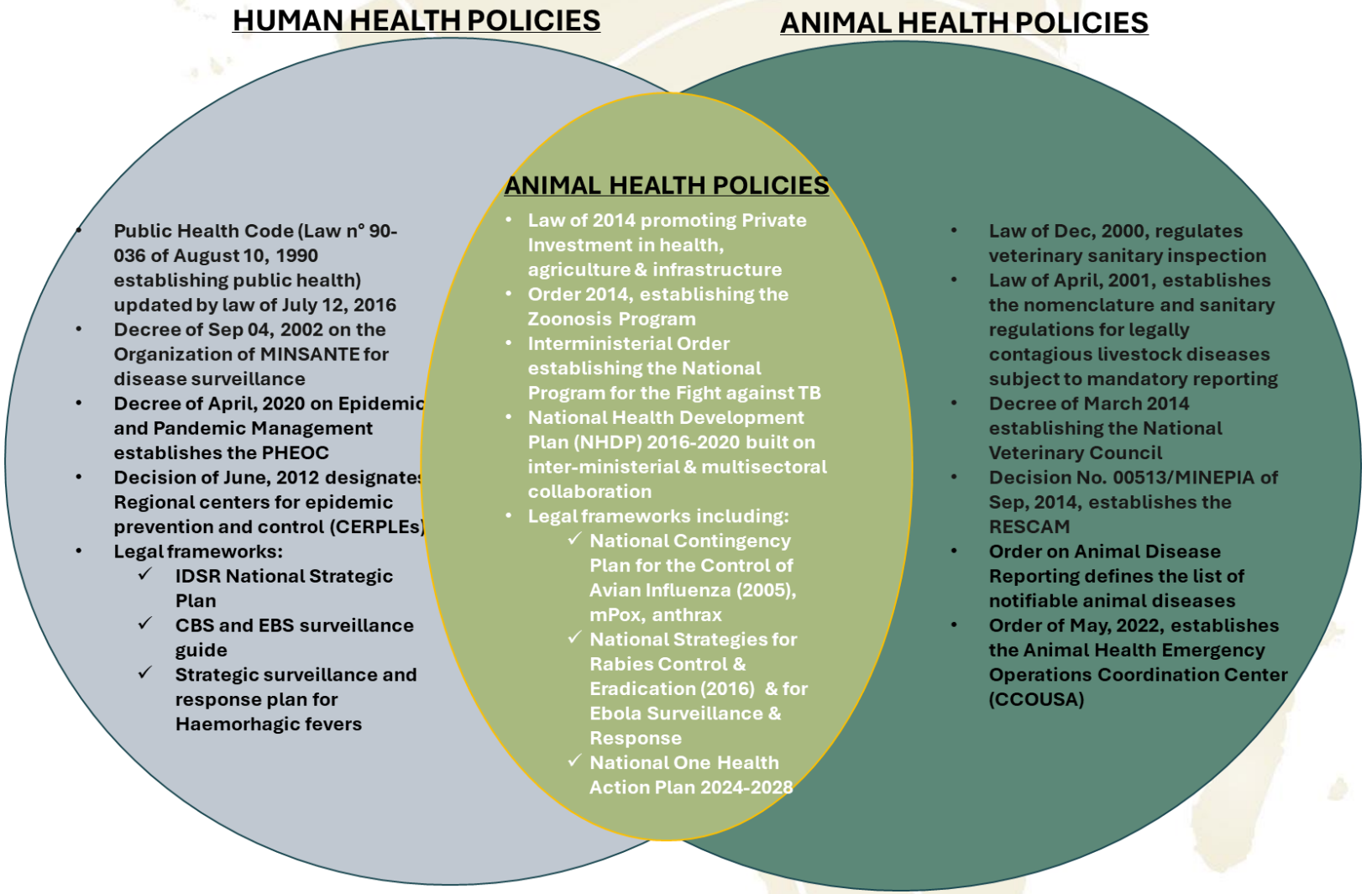


Cross-sectional descriptive study involving a desk review and guided discussions with key personnel of human and animal health surveillance systems in Cameroon

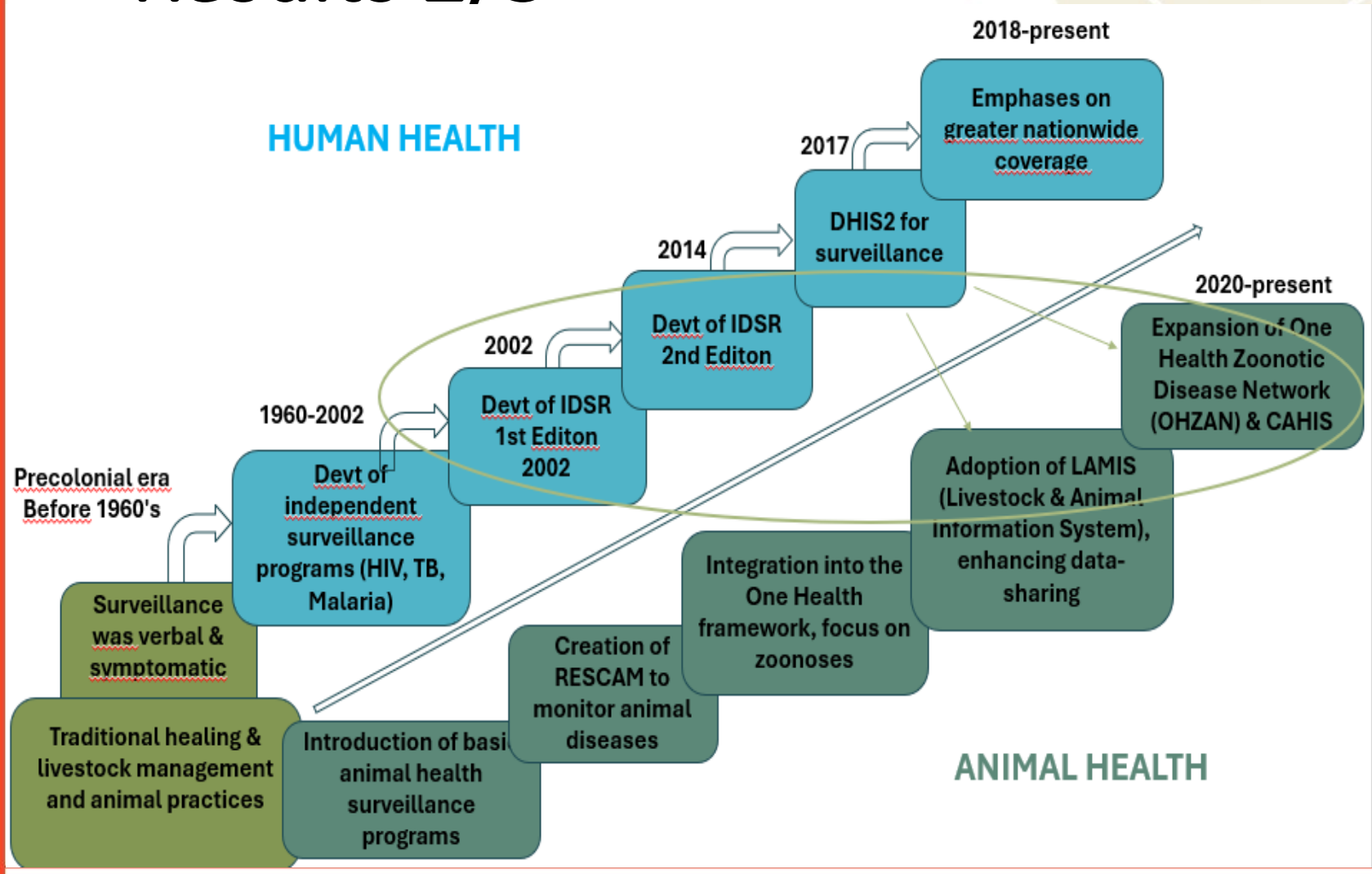
Data collection and analysis aligned with WHO guidelines. Focus on policies, surveillance structures, and system components (governance, data management, human resources, and community engagement)

Results 1/5

- Existence of firm legal backing for surveillance in both systems
- There is a functional One Health platform but the legal framework is pending signature



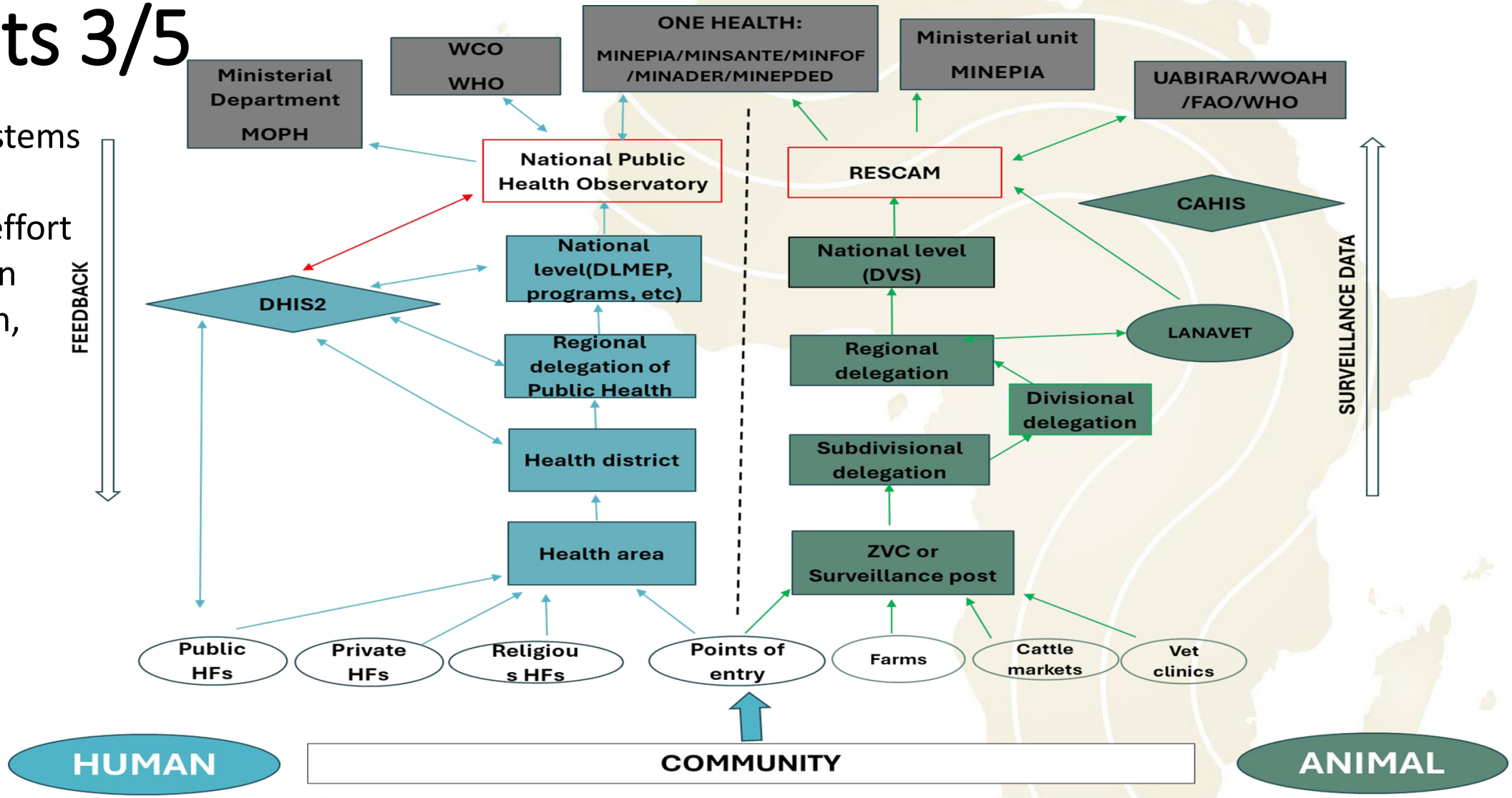
Results 2/5



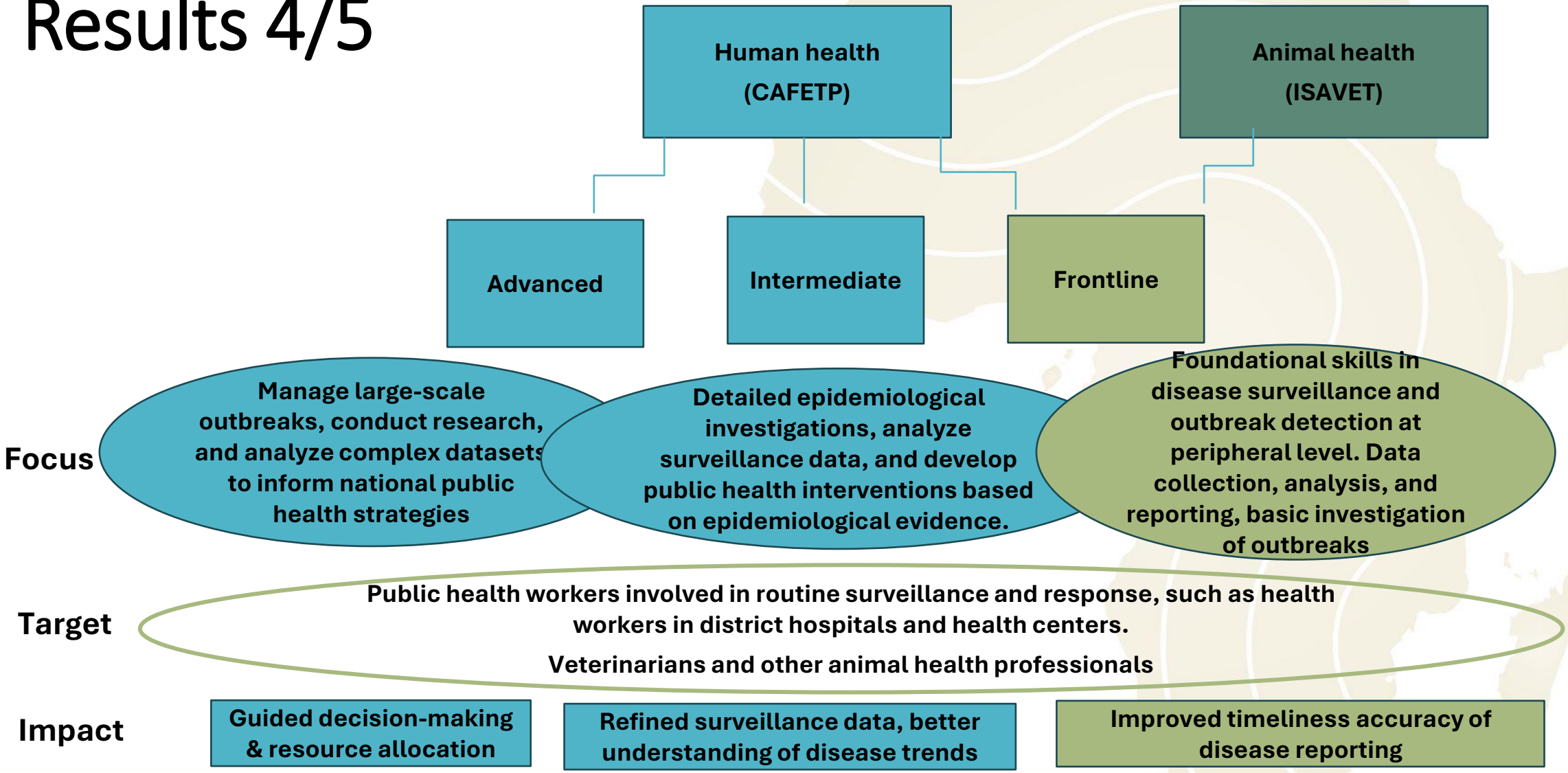
- Human surveillance system is more advanced (≥7 years) than animal surveillance system (animal production is prioritized compared to animal disease surveillance)

Results 3/5

- Two parallel systems leading to the duplication of effort and resources in terms of human, financial and infrastructural resources



Results 4/5


Human health (CAFETP)
Animal health (ISAVET)
Advanced
Intermediate
Frontline
Focus
Manage large-scale outbreaks, conduct research, and analyze complex datasets to inform national public health strategies
Detailed epidemiological investigations, analyze surveillance data, and develop public health interventions based on epidemiological evidence.
Foundational skills in disease surveillance and outbreak detection at peripheral level. Data collection, analysis, and reporting, basic investigation of outbreaks
Target
Public health workers involved in routine surveillance and response, such as health workers in district hospitals and health centers.
Veterinarians and other animal health professionals
Impact
Guided decision-making & resource allocation
Refined surveillance data, better understanding of disease trends
Improved timeliness accuracy of disease reporting

Results 5/5

Strengths	Weaknesses	Opportunities	Threats
HUMAN HEALTH			
• Firm policies and legal frameworks on disease surveillance • Strong data management and reporting system (DHIS2) • Well-resourced and supported by external partners • Effective case detection and response for epidemic-prone diseases (e.g., cholera, yellow fever).	• Limited cross-sectoral collaboration with animal health • Reliance on traditional surveillance methods in some regions • Limited geographical coverage	• Potential to integrate with animal health surveillance for a more comprehensive system • Use of mobile health applications and GIS for real-time monitoring. • Existence of funding partners	• Emergence of zoonotic diseases that require a multi-sector response
ANIMAL HEALTH			
• Strong community-based reporting through RESCAM and Zootechnical Veterinary Centers • Engagement with local communities for early signal detection	• Lack of a functional digital infrastructure (no comprehensive electronic reporting system) • Limited number of trained personnel on the field for surveillance and response • Peripheral levels are under-equipped • Animal laboratory network is under-represented at the peripheral level • Underfunding	• Potential to leverage technology (e.g., mobile apps, dashboards) for faster reporting • Collaboration with the human health system to improve zoonotic disease surveillance • Presence of some funding partners (FAO, USAID, RACE)	• Resource constraints make it difficult to respond to outbreaks efficiently • Zoonotic disease outbreaks (e.g., Avian Influenza) that affect both human and animal populations • Open borders making surveillance vein in the face of epidemics in neighboring countries

Recommendations 1/1

- Invest in digital infrastructure and cross capacity-building across both sectors
- Establish platforms for regular data exchange between human and animal health sectors at all levels
- Develop an integrated surveillance dashboard that includes data from both sectors (e.g., using GIS and mobile health technologies)
- Invest in training programs that bring together human and animal health professionals, ensuring knowledge sharing and collaboration in surveillance

Conclusion 1/1

- By Integrating surveillance systems, operationalizing the One Health legal framework, and investing in digital tools and cross-training, Cameroon can improve timely detection and response to public health threats, especially zoonoses

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Organisation mondiale de la santé animale
Organización Mundial de Sanidad Animal

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