



Better lives through livestock

One Health in action: Perspectives from 10 years in the field

Shauna Richards¹ and Anselme Shyaka²

¹Postdoctoral fellow, Animal and Human Health program, International Livestock Research Institute

²University of Global Health Equity, Rwanda

Virtual seminar at Acadia University, Wolfville Nova Scotia, Canada, 26 October 2023



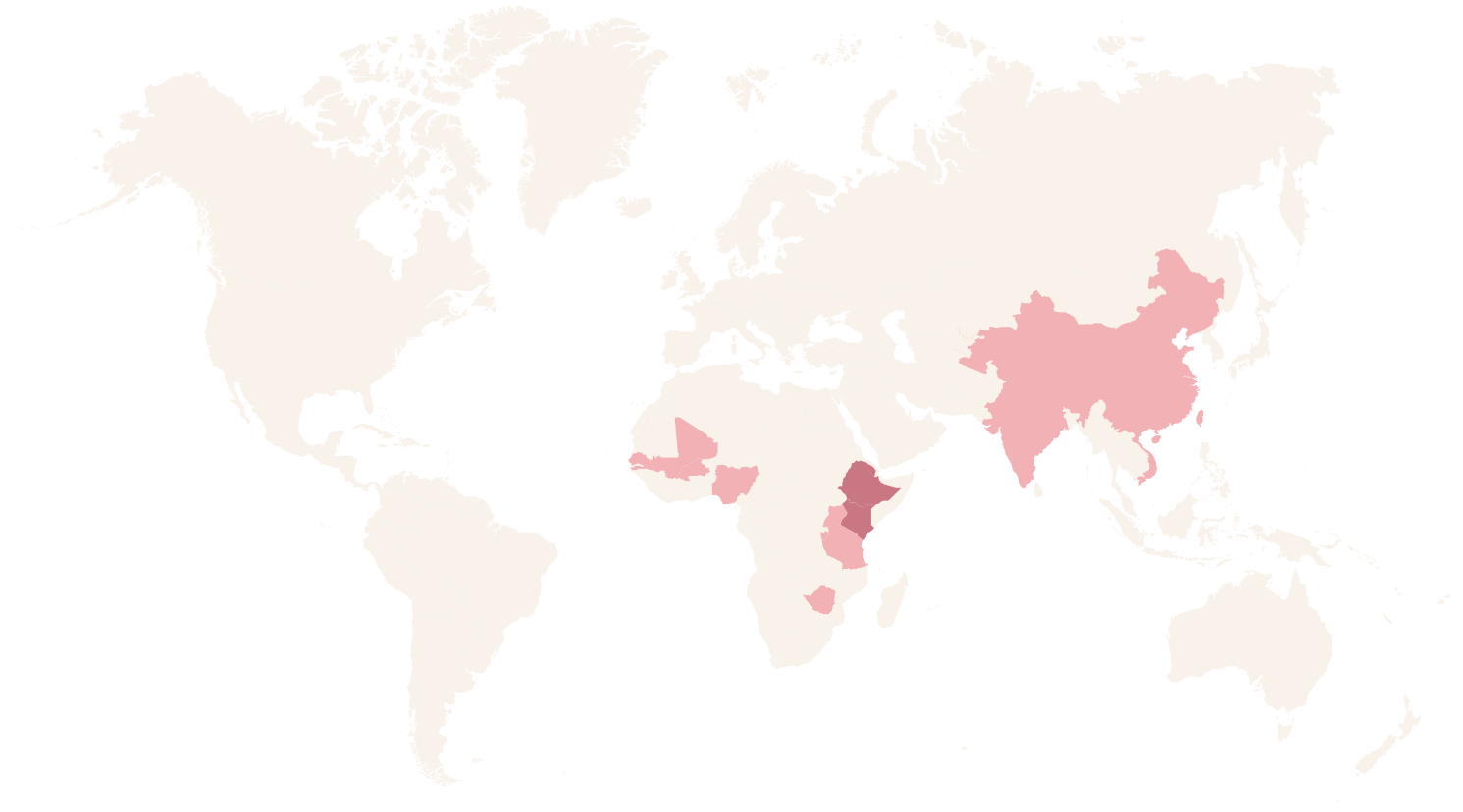
Overview

- Introductions
- Background
- Why (and why not) One Health works
- Examples: Multi-country project, Rwanda governance

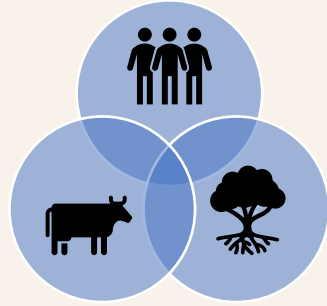
ILRI offices and staff worldwide

ILRI is co-hosted by both the governments of Ethiopia and Kenya, with offices in 8 other countries in Africa (Burkina Faso, Burundi, Mali, Nigeria, Senegal, Tanzania, Uganda and Zimbabwe); 4 countries in Asia (China, India, Nepal and Vietnam).

ILRI has approximately **600 permanent staff** (with a gender breakdown of 40% female and 60% male).



EXAMPLES of ONE HEALTH



COHESA
Capacitating One Health in Eastern and Southern Africa



COHESA

Capacitating One Health in Eastern and Southern Africa



COHESA Overall Objective

The project aims to **generate an inclusive Research & Innovation ecosystem**, facilitating rapid uptake, adaption and adoption of solutions to **One Health (OH) issues**, with the **OH concept embedded across society** in Eastern and Southern Africa (ESA), working for **healthy humans, animals and environments** using a **systems approach** to learning.



COHESA Consortium and Countries

Duration 48 Months –
December 2021 – 2025

Countries

EA Ethiopia, Kenya,
Rwanda, Somalia, *Tanzania*,
Uganda

SA Botswana, Namibia,
Malawi, **Mozambique**,
Zambia, **Zimbabwe**

Bold Deep Dive, *Standard Italics*, rest are focussed

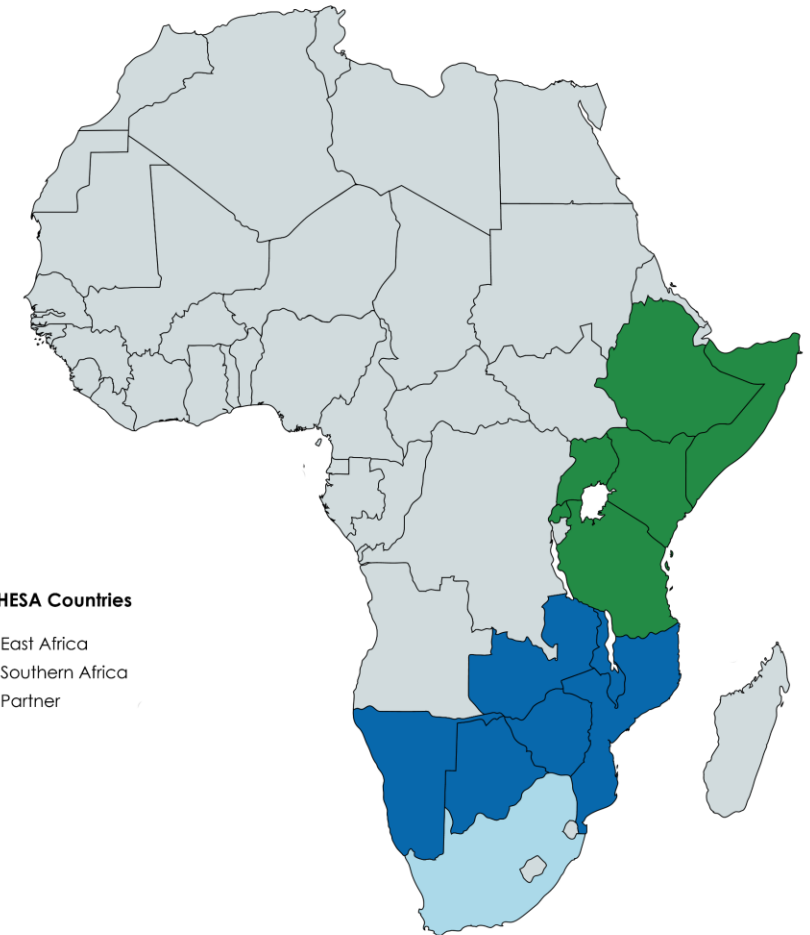
Consortium

ILRI – International Livestock
Research Institute

CIRAD – French Agricultural
Research Centre for
International Development

ISAAA AfriCentre –
International Service for the
Acquisition of Agri-biotech
Applications

University of Pretoria assist
as partner

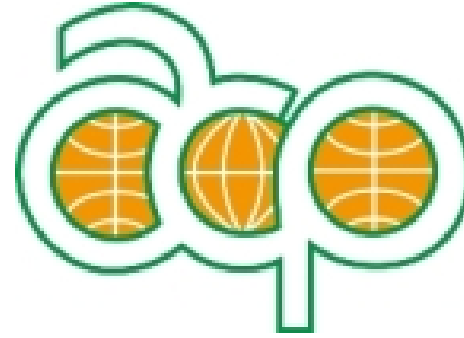


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Donor



OACPS R&I



Funded by the
European Union

This project is supported by the European Commission OACPS Research and Innovation Programme: ACP-EU initiative, co-founded through ILRI and CIRAD

Objectives

- Increased **relevance of OH research and policies** in Eastern and Southern Africa (ESA)
- Enhanced national and subregional **cross-sectoral collaboration** between government entities with OH mandates and OH stakeholders across society
- Educational and research institutes equipped to train the **next generation workforce** in tackling OH issues
- Increased **capacity** of government and non-governmental stakeholders to **identify and deliver OH solutions** to final beneficiaries



Work Packages

WP1 - Understanding OH capacity, knowledge and information sharing

- All countries

WP2 - Promoting national and regional OH collaboration and governance

- All countries

WP3 - Building the future OH workforce

- Deep Dive, limited in Standard and Focussed programme

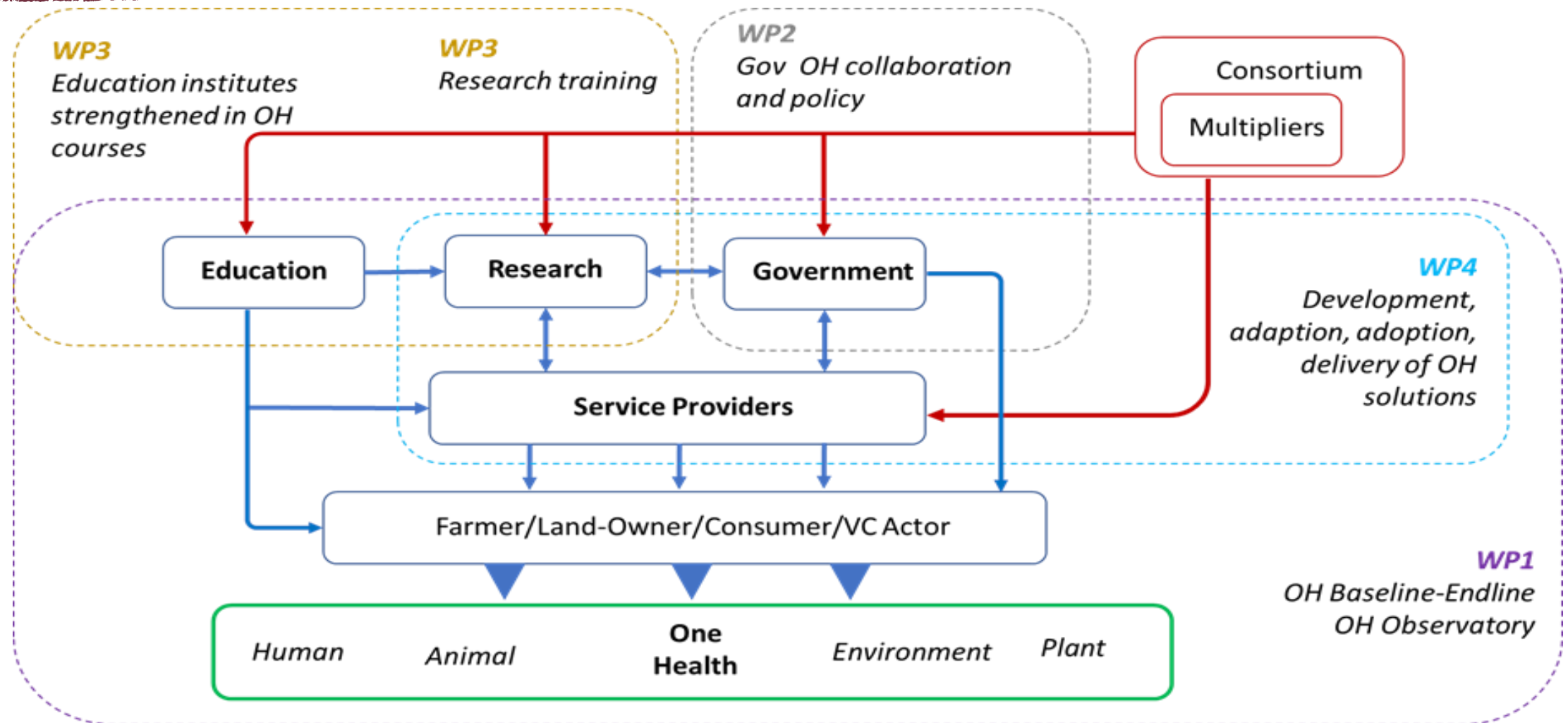
WP4 - Delivering OH solutions

Deep Dive, little in Standard and Focussed programme

WP5 – Project management

Consortium led by ILRI, CIRAD, ISAAA

Project Design – Led by Consortium & Delivered by Multipliers



Project Design – Led by Consortium & Delivered by Multipliers



Prof. Flora Pule-Meulenber

BOTSWANA



Prof. Mirgissa Kaba

ETHIOPIA



University of Nairobi

Dr. Salome Atieno Bukachi

KENYA



Dr. Jose Fafetine

MOZAMBIQUE



Prof. Simon Angombe

NAMIBIA



UNIVERSITY OF
Global Health
EQUITY

Prof. Anselme Shyaka

RWANDA



Prof. Gabriel Shirima

TANZANIA



Dr. Chiku Mtegha

MALAWI



MAKERERE UNIVERSITY

Prof. Clovice Kankya

UGANDA



Prof. Musso Munyeme

ZAMBIA



UNIVERSITY OF ZIMBABWE

Prof. Gift Matope

ZIMBABWE



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Dr. John Becker

SOUTH AFRICA
(partner)



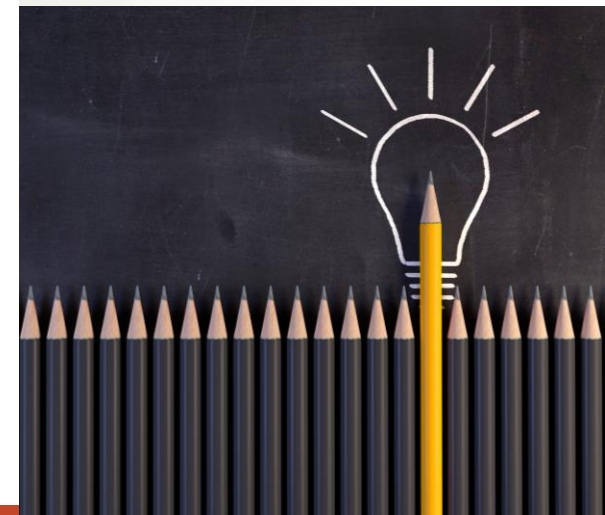
Dr. Yusuf Harad
SOMALIA

Work Package 1 – One Health Status

Baseline: To perform a baseline & endline assessments with key informants on One Health topics on the following:

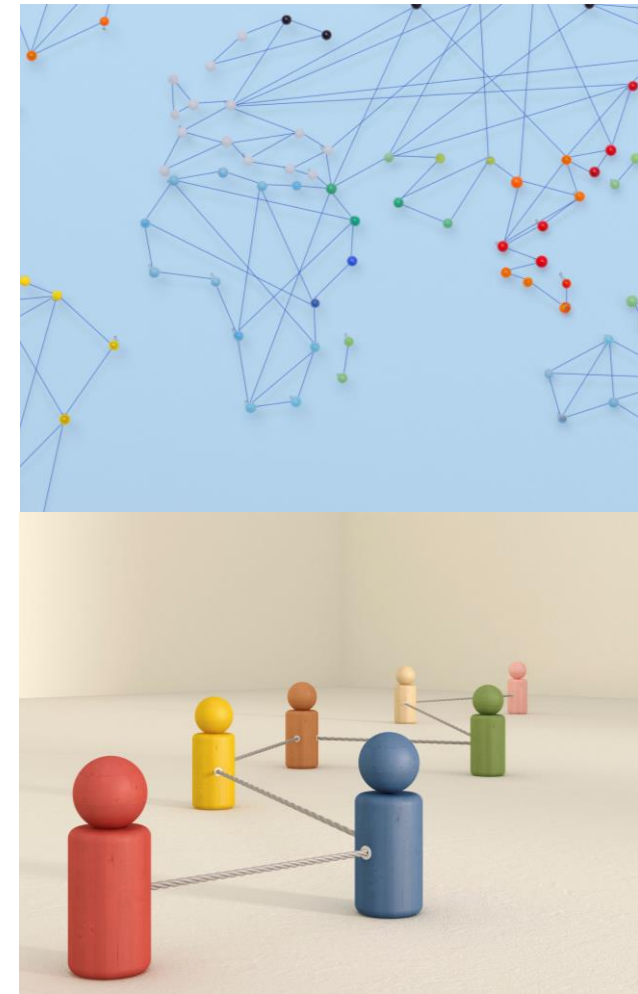
- 1. One Health national challenges, gaps, and capacities**
- 2. Understand current One Health Research and Innovation landscape to identify strengths and weaknesses**
- 3. Identify rapid approaches to identify key One Health issues**
- 4. Assess sectoral performance in One Health, capacity, and bottlenecks**
- 5. Avail baseline and endline data to evaluate performance and impact of COHESA project**

Online Observatory & Net-mapping

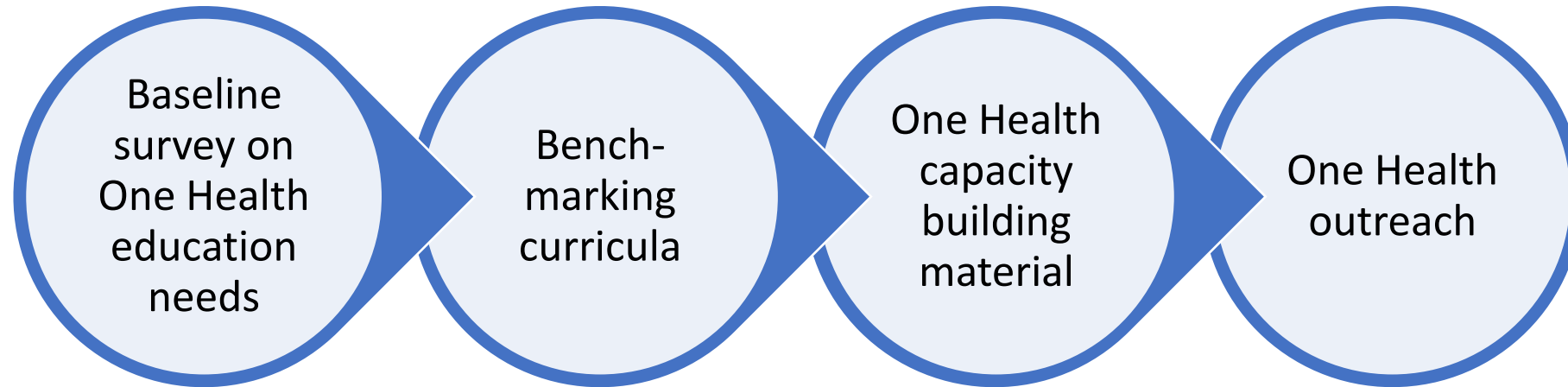


Work Package 2 – One Health Governance

- Promote National and regional OH collaboration and governance
- Training and learning support government entities on OH collaboration
- Strengthen the operation of existing or new OH platforms that involve cross government collaboration
- Training and learning support to government entities on addressing gaps and weaknesses in existing OH goals, strategies, action plans, and policies



Work Package 3 – Future OH Workforce



Work Package 4 – One Health Implementation

Capacitate Research Institutes to identify, develop, adapt, and deliver OH solutions for OH focal topics

- Develop and submit research proposal
- Review OH adaption and delivery mechanisms related to focal topic

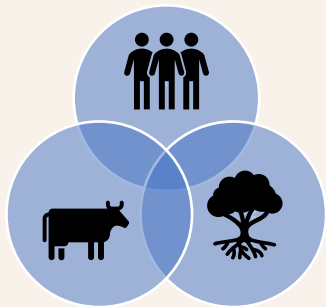




Summary

- One Health needed to face the major challenges of our time
- COHESA seeks to capacitate countries to face these challenges
- 12 countries in Eastern and Southern Africa - 4 years – 2022-25
- Consortium delivers project through in-country multipliers to national and local stakeholders
 - i.e. Government, Education, Research, Service providers
- Build on and collaborate with other One Health initiatives

EXAMPLES of ONE HEALTH



UNIVERSITY OF
Global Health
EQUITY

Prof. Anselme Shyaka



THE VICIOUS WORM



A *Taenia solium* cysticercosis/taeniosis advocacy information tool

[VIDEO](#) [START](#) [KINYARWANDA](#) [CREDITS](#)



OH Governance Rwanda



OH Policy
framework

OH structure

OH Governance in
Diseases
Management

Theme I: One Health Policy Framework

Rwanda

- **Small, landlocked, highly populated**
 - 26,338 Km² (~ 10,169 sq. mi)
 - 571 per Km² (1,480 people per mi²)
- **Various zoonotic diseases**
 - Rift Valley fever
 - Anthrax
 - Brucellosis
 - Bovine Tuberculosis
 - Cysticercosis
- **Hotspot of emerging Infectious Diseases**
 - Ebola, Marburg, Zika, Chikungunya, etc.



Timeline for the creation of Rwanda's OH Governance framework

1

2011: OH Steering Committee (RBC, RAB, RDB)

2

2014: OH Strategic Plan (2014 – 2018)

3

2021: OH Strategic Plan (2021 – 2026)

4

2021: OH Policy adopted



Republic of Rwanda
Ministry of Health

ONE HEALTH POLICY

March 2021



REPUBLIC OF RWANDA



ONE HEALTH STRATEGIC PLAN 2021-2026

June 2021



Republic of Rwanda
Ministry of Health
www.moh.gov.rw

NEGLECTED TROPICAL
DISEASES STRATEGIC PLAN
2019-2024

rbc Rwanda
Biomedical
Centre
Healthy People, Wealthy Nation

May, 2019

REPUBLIC OF RWANDA

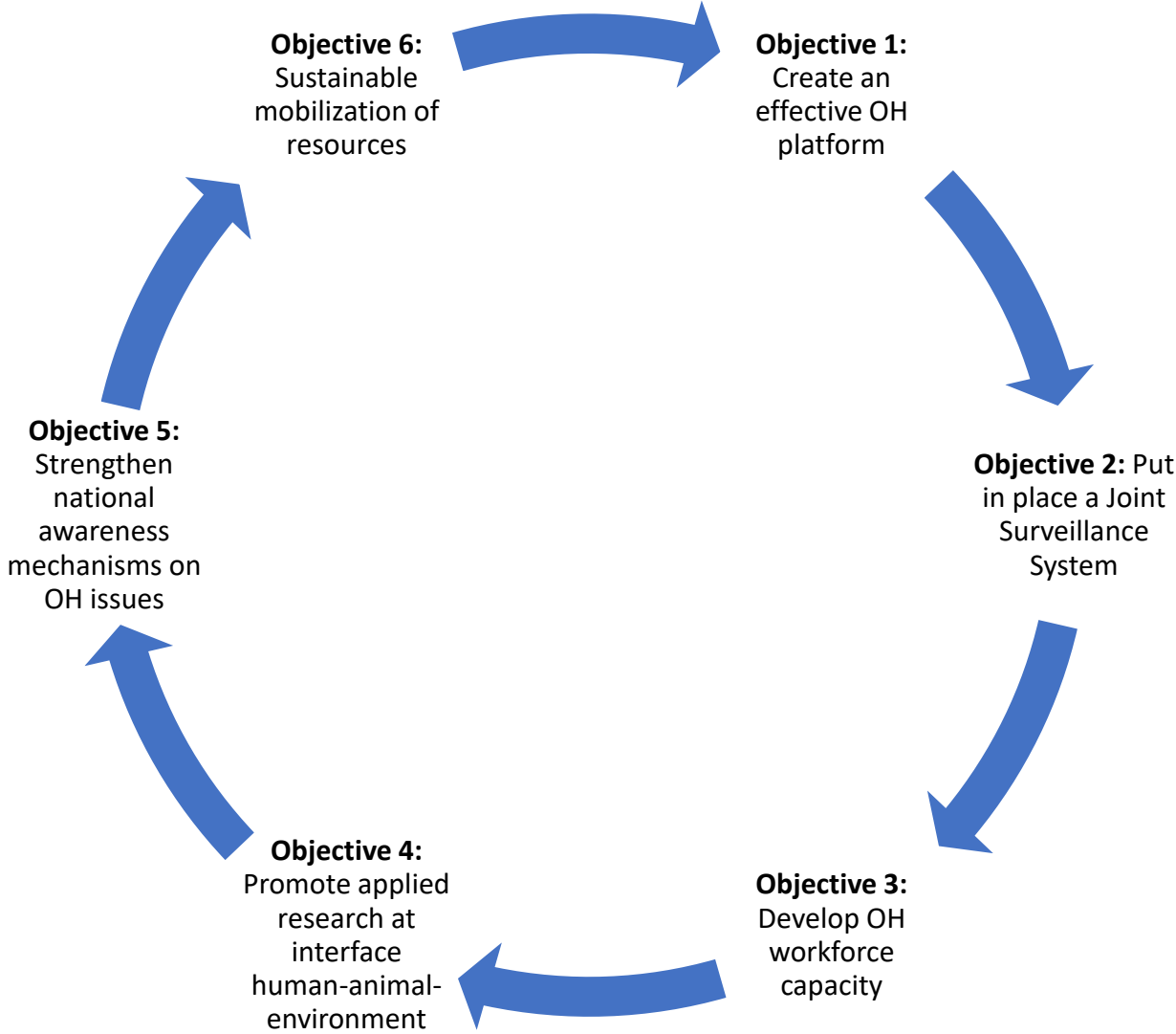


NATIONAL ACTION PLAN ON ANTI-
MICROBIAL RESISTANCE
2020-2024

June 2021

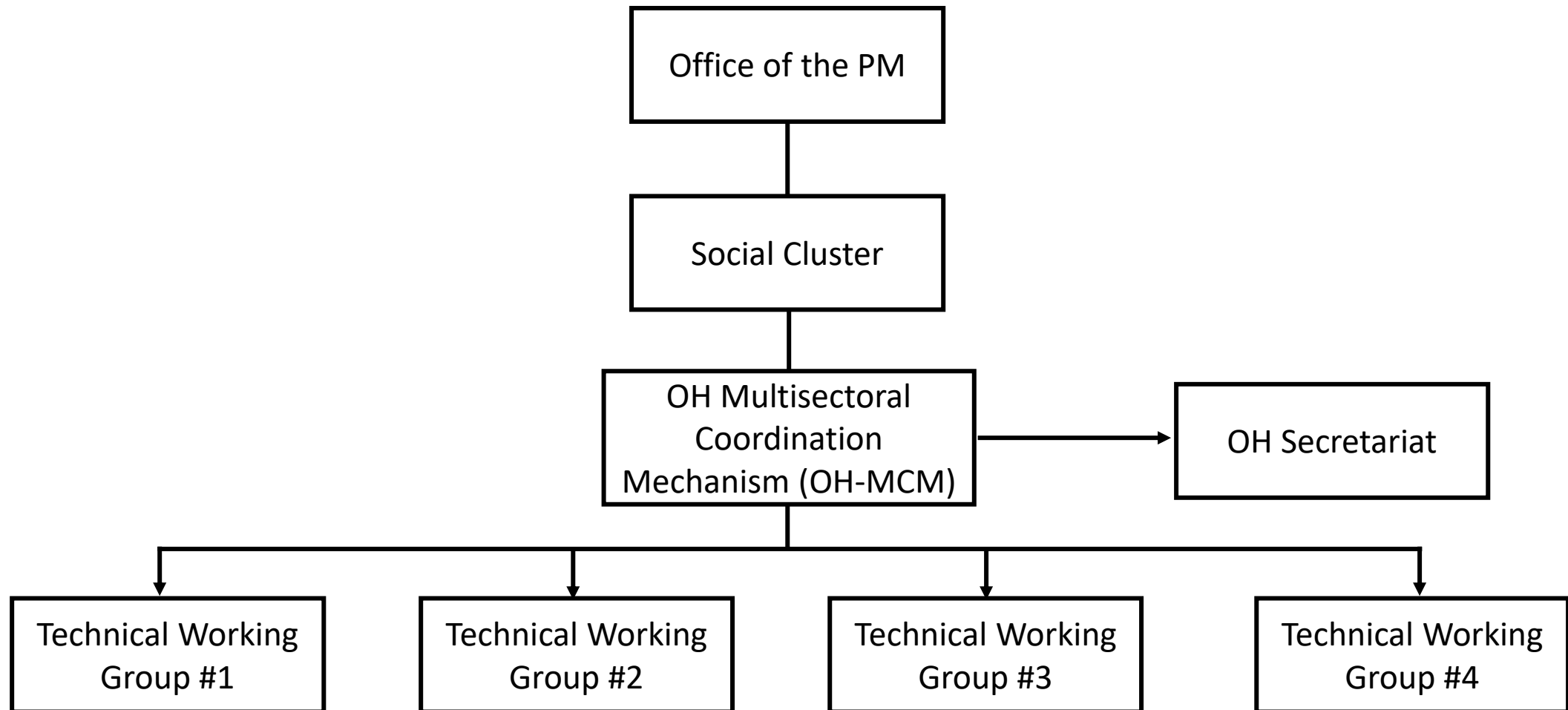


Rwanda's OH Policy & Strategic Plan (2021 – 2026)



Theme II: Rwanda's One Health Structure

Theme II: Rwanda's OH structure



Social cluster: MoH, Min. of Agric., MoE, Min. Educ., Min. of Emerg. Mangmnt
OH-MCM: DG RBC, RAB, RDB and VC - UR

In reality...

- **MoH and RBC: Coordinates all activities**
- **Broken Linkages with other line Ministries and stakeholders**
 - Rabies: Ministry of Agriculture and Animal Resources/RAB
 - AMR: Ministry of Agriculture and Animal Resources/RAB
 - No clear linkage with MoE/REMA
 - Broken linkages with Development Partners and Academia
- **Insufficient Involvement of Other line Ministries**
 - Don't feel empowered
 - Feel underestimated
 - RBC feels left alone with all the activities

Theme II: OH Governance in Diseases Management

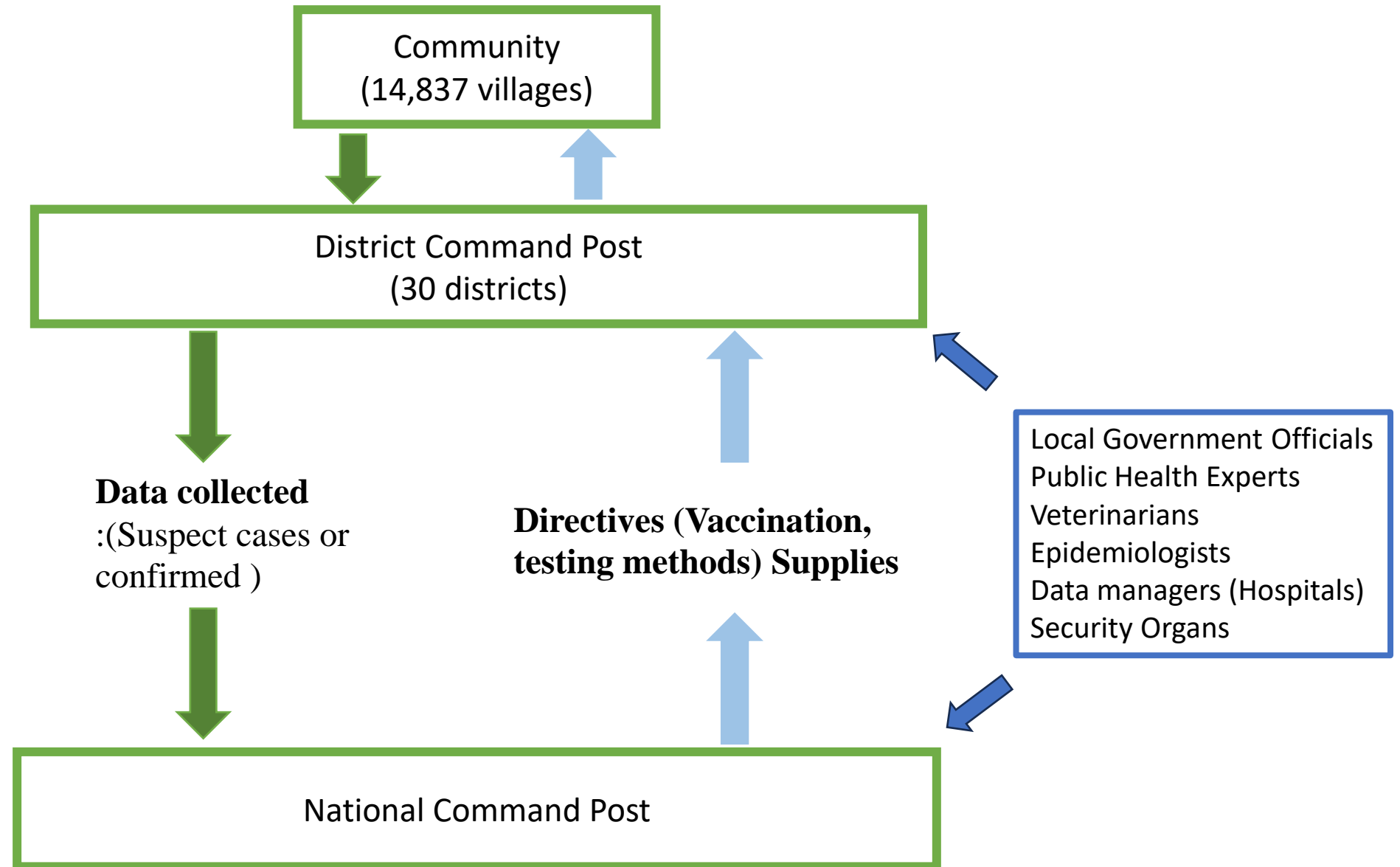
Theme III: OH Governance in Diseases Management

- A total of **1339 confirmed cases** of RVF between 31 March 2022 and 31 December 2022
 - 1285 (96%) were reported in cattle
 - 34 (3%) in goats and 20 (1%) in sheep
- A total of **516 deaths** (38.5%)
- Up to **1254 abortions** in animals (all species combined)
- No official counts for human's cases

OH Governance in Diseases Management

- **Robust One Health response to reduce the disease impact**
 - Enhanced surveillance was in place (humans and animal cases)
 - PCR testing for animal samples supported by hospitals
 - Control measures at farm and abattoir level:
 - All herds were sprayed using a pyrethroid insecticide (Permapy Plus © 5L), by veterinarians, para-veterinarians and community health workers (CHW)
 - In total 105 080 animals were sprayed up to 13 May 2022
 - Intensive vaccination was widely conducted
 - The use of Zipline drones facilitated delivery respecting the cold chain.
 - 1.3 million cattle had been vaccinated (87% of the target population), 1.4 million goats (93%) and 0.3 million sheep (75%)

OH Governance in Diseases Management



Conclusion

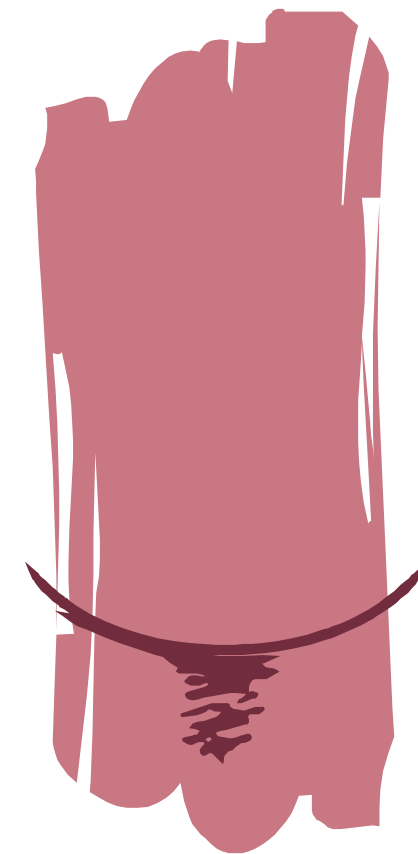
- 1) Rwanda has adopted OH approach to handle complex challenges

- 2) OH Governance in Rwanda is well defined
 - Policy documents establishing a working framework
 - OH structure not yet fully operational
 - Need to strengthen collaboration between key stakeholders
 - Need to have OH education that graduate a workforce aware of OH approach

- 3) OH approach has been successfully tested in various zoonotic outbreaks
 - Need to keep the momentum in period without outbreaks




Questions?





ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE



The International Livestock Research Institute (ILRI) is a non-profit institution helping people in low- and middle-income countries to improve their lives, livelihoods and lands through the animals that remain the backbone of small-scale agriculture and enterprise across the developing world. ILRI belongs to CGIAR, a global research-for-development partnership working for a food-secure future. ILRI's funders, through the [CGIAR Trust Fund](#), and its many partners make ILRI's work possible and its mission a reality. Australian animal scientist and Nobel Laureate Peter Doherty serves as ILRI's patron. You are free to use and share this material under the Creative Commons Attribution 4.0 International Licence .

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