Capacitating One Health in Eastern and Southern Africa

Institutionalising and Operationalising One Health across Governance, Education and Research

2021–2026

COHESA
Capacitating One Health in Eastern and Southern Africa

Funded by

Implemented by

OACPS R&I

Overview: From Vision to Impact

The world is confronting **interconnected crises,** ranging from climate change and biodiversity loss to food and water insecurity and pollution, that pose growing threats to the health of people, animals, and the environment. Yet, evidence reveals that in most cases, **responses remain largely fragmented.** The One Health (OH) approach seeks to bridge this fragmentation by fostering collaboration among stakeholders and applying a systems perspective.

Started in 2021, the Capacitating One Health in Eastern and Southern Africa (**COHESA**) project built the capacity of One Health across 12 countries in Eastern and Southern Africa.

Key Project Objectives

- **Promote One Health Governance** through institutionalisation at country level, enhancing national and regional cross-sectoral collaboration between government entities with One Health mandates and One Health stakeholders across society.
- **Develop the One Health workforce** by equipping educational and research institutions to train the next generation in tackling One Health issues, from primary and secondary school through to tertiary education and in-service training.
- **Operationalize One Health,** building the capacity of government and non-governmental stakeholders to identify key problems for final beneficiaries and design and deliver One Health innovative solutions.

Approach: Building on and Collaborating with Other One Health Initiatives

Through stakeholder netmapping, the project unearthed invisible actors and connections within the One Health landscape, exposing critical relationships across ministries, disciplines and sectors. This was instrumental in breaking sectoral silos and provided the evidence base for strengthening One Health governance structures.

Furthermore, across the 12 countries (see facing map), COHESA collaborated with the African Union Inter-African Bureau for Animal Resources (**AU-IBAR**), the Africa Centres for Disease Control and Prevention (**Africa CDC**) and the four international organizations that jointly lead the Quadripartite One Health Alliance: the World Health Organization (**WHO**), the Food and Agriculture Organization of the United Nations (**FAO**), the United Nations Environment Programme (**UNEP**) and the World Organisation for Animal Health (**WOAH**). Together, these collaborations advanced national One Health strategies and governance frameworks, embedding One Health principles into institutional systems and strengthening regional coherence.

In nine countries COHESA supported the updating or development of One Health strategies where none previously existed. Four of these countries (Zambia, Zimbabwe, Namibia and Mozambique) now have active One Health strategies. In Ethiopia, Somalia, Botswana and Uganda, COHESA supported the review and updating of existing One Health strategies (Libreville Declaration for Botswana), while in Kenya, which already had a national One Health strategy, COHESA supported the development of sub-national One Health strategies.

In Rwanda and Tanzania, where up-to-date One Health strategies were already in place, COHESA supported their operationalization.

Project themes and key results across 12 countries

4 countries supported to establish new One Health governmental platforms

9 Countries developed new, or updated existing One Health strategic documents

Governance

Promoting national and regional One Health collaboration, and supporting implementation of One Health platforms within each country.

Education and research

Building the future One Health workforce in secondary and tertiary education institutes.

Training professionals and building the future One Health workforce through One Health secondary and tertiary education.

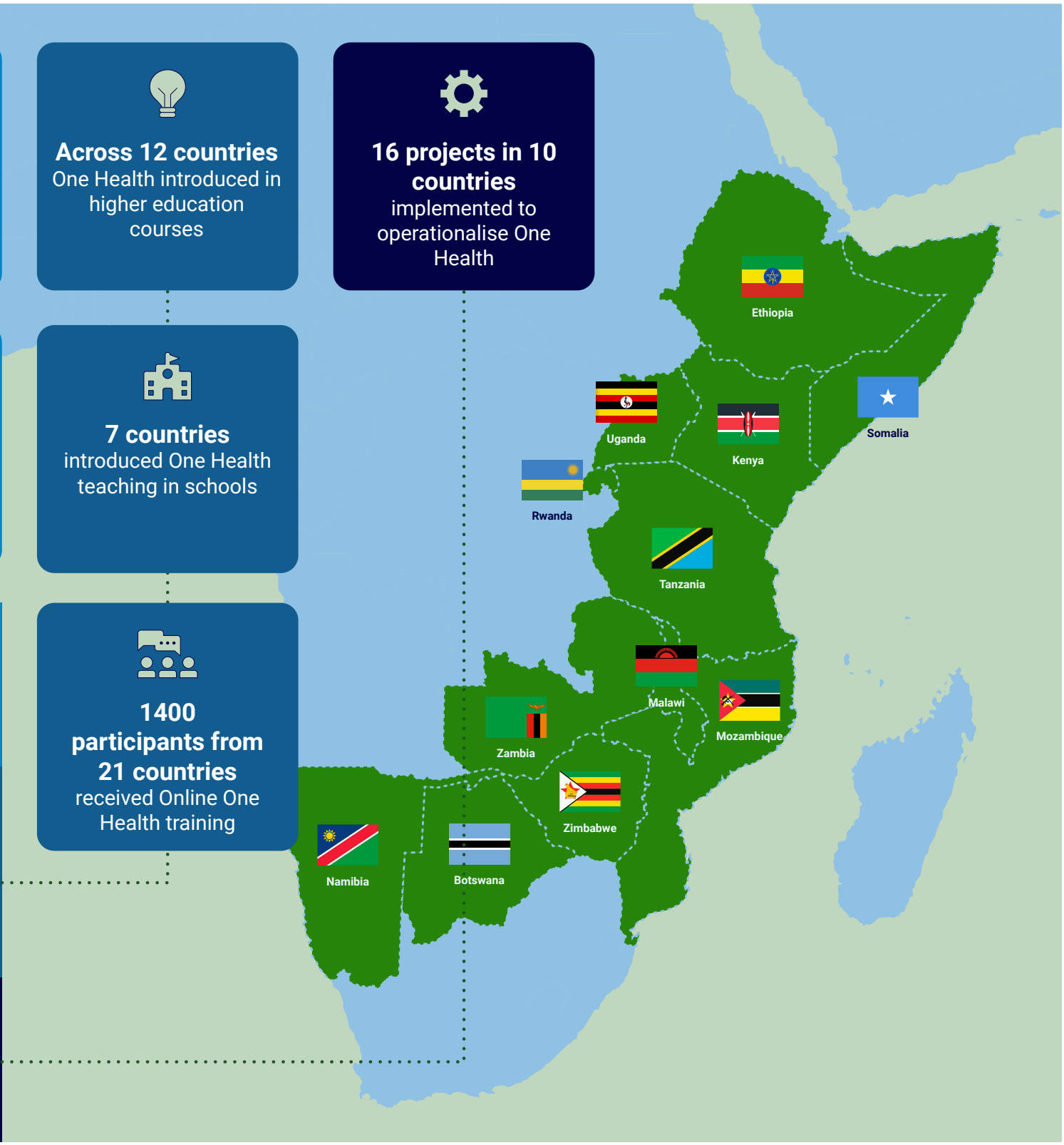
Delivery of One Health solutions

Local partners adopt, develop and implement One Health solutions. Strengthening research innovation in One Health.

Countries that developed capacity under COHESA shared it with neighbours: **Zambia** supported **Malawi**, **Namibia**, and **Eswatini** (not COHESA country) to develop their national One Health strategic plans.

In collaboration with the Inter-University Council for East Africa (**IUCEA**), COHESA supported the development of shared benchmarks for One Health master's programmes, providing a resource that higher education institutions across the East African Community can use to adopt, adapt, develop, or revise their One Health curricula.

This layered, collaborative model gives COHESA's work its reach and long-lasting impact. No initiative can institutionalise One Health alone, **but by strengthening what exists and brokering connections across it, COHESA has built a sub-regional network with the relationships, tools, and shared purpose to keep moving forward.**



Promoting National and Regional One Health Collaboration and Governance

Institutionalisation of One Health: The State of Play

The current global health challenges call for a coordinated, interconnected, and cohesive response from governments, businesses and citizens. While this kind of systems-wide, holistic analysis and action is at the core of the One Health approach, such responses are rarely straightforward. They require institutions to recognize the need to join forces and work effectively across sectors. Variation in One Health capacity and response across countries in Eastern and Southern Africa offers opportunities **for country-to-country and region-to-region learning and collaboration.**

To address these challenges of fragmented response and uneven capacity, COHESA supported the **national institutionalisation of One Health** across its project countries. University based teams engaged national stakeholders and crafted interventions tailored to each country's One Health status and needs. Sustainable One Health governance requires institutionalisation of One Health approaches within the structures and processes of government — an area where COHESA has made significant progress across all 12 countries. Four countries have developed national One Health strategies for the first time; a further five countries have updated or revised existing strategies or advanced implementation. Kenya has gone further, developing sub-national One Health strategies.

Zimbabwe

A 2022/3 baseline assessment of Zimbabwe's One Health landscape and opportunities, supported by COHESA, revealed that One Health was being implemented with minimal cross-sectoral coordination. Although the approach was supported by a One Health Secretariat composed of officers from the three One Health ministries, implementation was mostly focused on antimicrobial resistance (**AMR**). The assessment also highlighted limited cross-sectoral collaboration, overlapping responsibilities among government ministries, departments, and agencies (**MDAs**), and inadequate funding for One Health initiatives.

In 2025, with COHESA's support, **Zimbabwe launched its National One Health Strategic Plan**, which aligns with the Global Quadripartite One Health Joint Plan of Action and the UN Sustainable Development Goals (**SDGs**) and Vision 2030, which emphasise sustainable development, food security, climate resilience, and inclusive growth.

Zambia

Through COHESA and other key initiatives, the University of Zambia (**UNZA**) and the Zambia Public Health Institute (**ZPHI**) joined forces to enable the country to play an effective role in initiatives requiring a coordinated One Health approach. These included the National Bridging Workshop (**NBW**) building on the International Health Regulations – Performance of Veterinary Services (**IHR-PVS**) process, and One Health Zoonotic Disease Prioritization (**OHZDP**) workshops run alongside Africa CDC. The successful launch of the **Zambian One Health Strategic Plan** (**OHSP**) on 14 February 2023 demonstrated significant improvements in multisectoral coordination. This was particularly evident in the effective response to the **anthrax and cholera outbreaks** later that year, and to **aflatoxin threats** affecting both animals and humans, where a multisectoral coordination mechanism enabled a timely response across human, animal, and environmental health sectors.

Namibia

With COHESA's technical and financial support, a multidisciplinary team from the University of Namibia (**UNAM**) played a central role in the launch of Namibia's National Tripartite One Health Strategy — a milestone in the country's commitment to an integrated health approach and a shift from fragmented sectoral responses to a unified One Health front. Launched on 19 June 2024, the strategy establishes a legal framework for coordinating One Health activities in Namibia. The collaborative process also led to the endorsement of the creation of the Namibia Public Health Institute.

Dalika plastic waste collection centre in Lupane, Zimbabwe. COHESA partners trained community members how to collect, sort and recycle waste into products that they sell to generate income. Photo credit- CIRAD/ Martha Katsi

Graduation of Dordabis One Health Champions under the SOHGARD project in Namibia (photo contributed by Rachel Freeman/UNAM)

The strategy was developed with key stakeholders and partners and is aligned with Namibia's Vision 2030, National Development plan 6, and the National Action Plan for Health Security. Its aim is to foster healthy ecosystems that mitigate health risks at the human, animal, plant, and environmental interface through a sustainable, whole-of-society One Health approach that starts at the community level. Successful implementation is expected to reduce disease burden, improved health coverage, ensure food safety and security, enhance conservation of ecosystems and wildlife biodiversity, and improve livelihoods — particularly for rural communities.

> **Zimbabwe values and appreciates the collaboration and support it has received from the many partners since the time the nation adopted the One Health Approach.**
>
> *— Dr. Agnes Mahomva, Public Health Advisor to the President and Cabinet, Zimbabwe*

> **Within the Namibian context, the need for the One Health approach is evidenced by the frequent reported outbreaks of zoonotic disease, coupled with the effects of climate change. The One Health approach is indeed crucial, as reports indicate that 75% of emerging pathogens that are known to cause epidemics affecting humans are of zoonotic origin, meaning they are transmitted from animals.**
>
> *— Dr. Kalumbi Shangula, Minister of Health and Social Services, Namibia*

Building the Future One Health Workforce

Embedding One Health in education

If the One Health approach is to permeate approaches and behaviours across society, a broad, demand-driven strategy for instilling it is essential. COHESA adopted this approach, providing on-demand support to develop One Health modules and **curriculum updates** tailored to primary and secondary school students; MScs, modules, and courses for tertiary students and university staff; pedagogy training for One Health trainers; bootcamps for early-career researchers; and in-service One Health training for practitioners across administrative levels.

Some activities to build the One Health workforce:

- Female Leadership and One Health

Inequalities in One Health representation remain a concern. At the ISAAA Africa Biennial Biosciences Communication Symposium 2025, COHESA supported women leaders in One Health to participate in high-level discussions, including a session dedicated to the **decolonisation of One Health in Africa**, with position papers to follow.

- One Health MSc and PhD Programmes

Using the benchmarks developed in collaboration with IUCEA, Zimbabwe, Tanzania, Zambia, Namibia and Ethiopia have since revised national curricula to integrate One Health into master's and PhD programmes. The benchmarks serve as a reference framework for curriculum developers rather than prescriptive standards.

- Uganda and Somalia school programme

COHESA mentored and commissioned 1,500 students (ages 12–18) and 100 teachers as One Health ambassadors and mentors in Bunyangabu District, western Uganda. Through school One Health clubs, they promoted human, animal, and environmental health by establishing gardens and small animal farms, and engaging communities through visual arts, music, dance, and drama.

Somalia developed a bilingual One Health Facilitator Guide, trained 130 educators from 20 schools, and reached over 9,000 students (ages 8-18) with One Health knowledge. COHESA also trained 55 public health students to extend outreach to 300 households and 700 pastoralist students, while supporting the integration of One Health into the national curriculum in collaboration with the Ministries of Education and Health.

- Mentorship on One Health

Since 2024, the COHESA multiplier in Ethiopia has convened a consortium of eight universities to expand One Health in higher education by training and mentoring academic staff to integrate One Health into existing curricula, reaching more than 80 courses.

Working with the Quadripartite, COHESA trained stakeholders across all 12 project countries on the Workforce Development Operational Tool, which helps identify workforce capacity gaps and links One Health professionals to relevant training opportunities. COHESA also partnered with academic institutions to integrate these tools and training resources into educational programmes, strengthening One Health workforce development.

One Health in Action

One Health is critical to addressing real-world challenges. Across 12 countries, multidisciplinary teams of researchers and practitioners received mentoring and support to design and implement 14 projects that tackled country-prioritized challenges. These projects addressed issues ranging from waste management to community-led responses to zoonotic diseases.

APC-RVF

Rift Valley Fever Awareness, Prevention, and Control

Outbreaks of Rift Valley Fever (RVF), a viral zoonosis transmitted by mosquitoes, have recurred almost annually, intensifying since 2018, and 2024. Despite this, community awareness remains limited and locally tailored educational materials are lacking. To address these gaps, the project is developing a tiered digital educational app for audiences ranging from community members to policymakers, alongside a comic book on RVF prevention and control. Thirty-five health professionals will also be capacitated as trainers of trainers to ensure sustained knowledge dissemination.

IYRP

One Health Approach for rangelands management: Fore-runner activities to International Year of Rangelands and Pastoralism

Assessing Indigenous Knowledge System (IKS) on ecosystem function in relation to One Health, land management and grazing practices

Multisectoral mechanisms for reducing open defecation in communal grazing areas to contain beef measles for improved livelihoods, human, animal and rangeland health, Dikgonnye extension area, Botswana

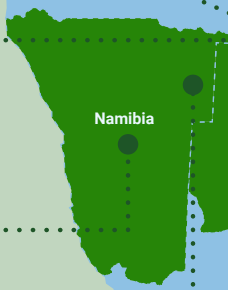
SWIM-LSU

Lupane Waste Management Project

The Lupane project addresses the persistent challenge of solid waste management through a comprehensive and sustainable One Health-informed waste management model that recognises the interconnectedness of human, animal, and environmental health. Three key technologies sit at its core: a plastic waste recovery centre for collection and segregation, a thermal chamber for pyrolysis of plastic waste, and a biogas digester powered by organic waste from a community slaughter pole. These are complemented by community training to foster local ownership. The initiative promotes interdisciplinary collaboration, is business-oriented and offers a replicable model for communities across Zimbabwe and beyond.

EPECOH

Evaluating Community Opinions: Health and Ecosystem Impacts of Wildlife Culling in Namibia

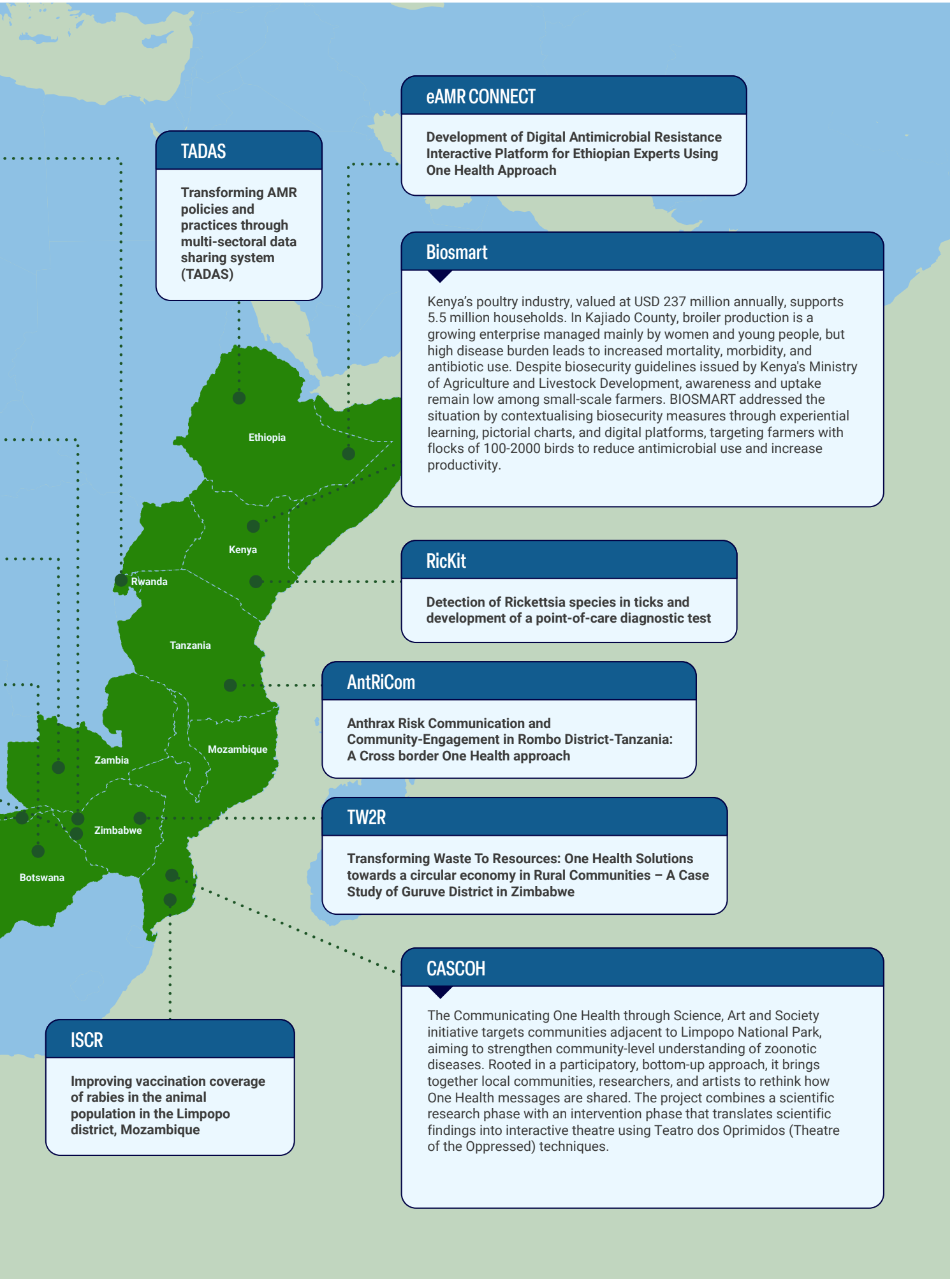


SOHGARD

Through Sustainable One Health Gardening in Dordabis (SOHGARD), vulnerable and indigenous minority populations groups were empowered with knowledge and skills in One Health, food production gardening skills and mushroom cultivation. This boosted food security, environmental health awareness, and knowledge of food safety practices.

COHSAN

Under Capacitating One Health among the Southern African Natives (COHSAN) initiative, community members co-created culturally sensitive and appropriate One Health content by documenting Indigenous Knowledge Systems, ensuring culturally grounded approaches to health, environment, and livelihoods.



eAMR CONNECT

Development of Digital Antimicrobial Resistance Interactive Platform for Ethiopian Experts Using One Health Approach

TADAS

Transforming AMR policies and practices through multi-sectoral data sharing system (TADAS)

Biosmart

Kenya's poultry industry, valued at USD 237 million annually, supports 5.5 million households. In Kajiado County, broiler production is a growing enterprise managed mainly by women and young people, but high disease burden leads to increased mortality, morbidity, and antibiotic use. Despite biosecurity guidelines issued by Kenya's Ministry of Agriculture and Livestock Development, awareness and uptake remain low among small-scale farmers. BIOSMART addressed the situation by contextualising biosecurity measures through experiential learning, pictorial charts, and digital platforms, targeting farmers with flocks of 100-2000 birds to reduce antimicrobial use and increase productivity.

RicKit

Detection of Rickettsia species in ticks and development of a point-of-care diagnostic test

AntRiCom

Anthrax Risk Communication and Community-Engagement in Rombo District-Tanzania: A Cross border One Health approach

TW2R

Transforming Waste To Resources: One Health Solutions towards a circular economy in Rural Communities – A Case Study of Guruve District in Zimbabwe

CASCOH

The Communicating One Health through Science, Art and Society initiative targets communities adjacent to Limpopo National Park, aiming to strengthen community-level understanding of zoonotic diseases. Rooted in a participatory, bottom-up approach, it brings together local communities, researchers, and artists to rethink how One Health messages are shared. The project combines a scientific research phase with an intervention phase that translates scientific findings into interactive theatre using Teatro dos Oprimidos (Theatre of the Oppressed) techniques.

ISCR

Improving vaccination coverage of rabies in the animal population in the Limpopo district, Mozambique

Perspectives

COHESA as a legacy for One Health in Eastern and Southern Africa

Over five years and in 12 countries, from parliamentary chambers, public health institute networks, and university lecture halls to rural schools and community gardens, COHESA has strengthened the institutionalisation and operationalisation of One Health. Where One Health approaches take hold, **responses to complex health threats tend to become faster, better coordinated, and more grounded in local reality.**

Yet, the boundaries that make One Health complex are not simply sectoral. The sub-regional COHESA model that emerged have demonstrated the added-value of collaboration beyond national borders, bringing together the communities, institutions, and governments who live with these challenges to develop responses. The multi-country collaboration seen in COHESA's shared benchmarks, regional convenings, and country-to-country capacity transfers suggests how sustained regional cooperation might work in practice.

Co-designing the future of the COHESA network

In 2024, COHESA partners and collaborators launched a co-design process to establish a sustainable **COHESAplus** network that will continue advancing One Health across Africa beyond the life of the project.

COHESAplus

Vision

An African-led, community owned, resilient and integrated One Health ecosystem that improves the wellbeing of the planet inclusive of people, animals and the environment.

Mission

To convene and strengthen African One Health stakeholders by co-creating, generating and translating evidence into coordinated policy, investment and implementation thereby enabling cross sectoral and community action for impact at scale.

Strategic impact

- Stronger and more inclusive One Health governance at regional level.
- Enhanced international and transboundary collaboration
- Increased One Health capacity across diverse actors
- Greater public awareness and stronger political commitment to One Health.
- Improved generation, access and use of One Health evidence and knowledge to inform policy and practice.
- More locally co-designed and owned One Health interventions

A society-wide One Health

The model established through COHESA is strategic, replicable and practical, and a growing workforce is advancing the One Health approach across the sub-region.

Sustaining and expanding these gains will require long-term investment, strengthened ownership, and continued commitment from governments, development partners and regional institutions, and cross-sectoral collaboration, that the One Health approach by its very nature, requires.

A pastoralist leads her goat for grazing (photo credit: ILRI\Zerihun Sewunet)

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