ActionLAB
Magazine

ONE HEALTH AND INNOVATION:

Advancing Research and Sustainability in ACP Countries

OACPS R&I

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ActionLAB

Magazine

ONE HEALTH :

Uniting human, animal, plant and environmental health

EDITORIAL

The climate and biodiversity crisis triggered by human activities across the world showcase the extent to which the **health of ecosystems** and **the planet as a whole are deeply interconnected** with the **health of people, animals** and **plants** that inhabit them. To start tackling these crises, an urgent shift in our approach to the management of the health of people, animals and plants and the sustainability of the environment is needed. The **'One Health (OH) approach' aims to address this interconnection** by uniting human, animal, plant and environmental health into a single framework that seeks to balance and optimise global wellbeing for all humans and non-humans, and our shared environments. In this magazine, we explore how the **Organisation of African, Caribbean and Pacific States (OACPS)** is leading the charge through its Research and Innovation (R&I) Programme, aligning health and food systems and ecosystem sustainability across its 79 member countries.

> "
> *'One Health (OH) approach' aims to address this interconnection by uniting human, animal, plant and environmental health into a single framework that seeks to balance and optimise global wellbeing for all humans and non-humans, and our shared environments*

Dr. Norbert Richard Ibrahim,
Assistant Secretary-General of the
Department of Political Affairs and Human
Development of the Organisation of African,
Caribbean and Pacific States (OACPS)

A central piece in this initiative is the project Capacitating OH in Eastern and Southern Africa (COHESA), an initiative, **co-financed by the OACPS R&I Programme**, focusing on institutionalising and operationalising the OH approach in twelve countries and promoting more cross-regional exchanges in Eastern and Southern Africa. The magazine also dives into the broader work done by OACPS on R&I that enables OH approaches more broadly. From zoonotic disease management to neglected and endemic diseases, antimicrobial resistance, food security and environmental restoration and sustainability, and taking leadership, the journey of building resilient systems-wide **health systems through collaboration** and innovation is more relevant than ever. **In this edition of our magazine, we delve into the broader implications of OH**, the role of R&I in advancing this approach, and success stories, which demonstrate the power of interdisciplinary and transdisciplinary collaboration.

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OACPS R&I

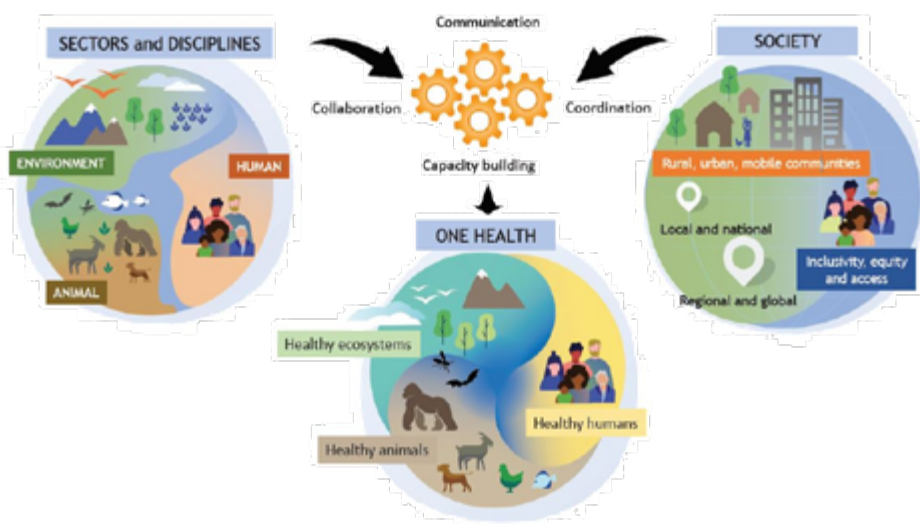Financed by the European Union

INTRODUCTION to
ONE HEALTH

What is One Health?

In today's interconnected world, health challenges are more complex than ever. The One Health (OH) approach is gaining global recognition as a solution. It acknowledges that the **health of people** is closely **linked** to the **health of animals, plants** and the **environment** and that, in the long run, neglecting one component would compromise the other two. By promoting collaboration across scientific and societal sectors, **OH aims to prevent, detect,** and **respond to health threats** that arise at the interface of humans, animals, plants and ecosystems.

At the forefront of defining and refining this approach is the OH High-Level Expert Panel (OHHLEP), the scientific and strategic advisory group to the **Quadripartite alliance**—comprising the World Health Organisation (WHO), Food and Agriculture Organisation (FAO), World Organisation for Animal Health (WOAH) and the United Nations Environment Programme (UNEP).

In 2022, OHHLEP provided a new definition of the OH approach:

> *OH is an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals and ecosystems. It recognises the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilises multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for healthy food, water, energy, and air, taking action on climate change, and contributing to sustainable development.*

Why Does One Health Matter?

The importance of OH is evident when we consider recent global crises. Diseases of animal origin like COVID-19 and Ebola have shown **how pathogens can leap between animals and humans** with devastating consequences for economies, communities, biodiversity, and the whole society. By fostering collaboration between sectors — such as veterinary, human and environmental sciences — **OH enables earlier detection, faster response, and more effective prevention** of such outbreaks**.**

But OH goes beyond emergencies, It plays a **key role in tackling antimicrobial resistance (AMR)**, which threatens the effectiveness of life-saving medicines. Through promoting responsible antibiotic use and improving agricultural practices, OH reduces the risks posed by AMR. It also strengthens food security by integrating sustainable farming methods that protect ecosystems and reduce human-animal conflict.

The relevance of OH is further reinforced through the One Health Joint Plan of Action (OH JPA), which translates its principles into practical strategies. The JPA's six Action Tracks provide a structured framework for addressing interconnected challenges like zoonotic diseases, AMR, and ecosystem health. Similarly, the European Union's OH Action Plan Against AMR highlights how coordinated efforts across human, animal, and environmental health sectors can address this growing global threat. **Where does OH deliver practical solutions? See a few examples in the table!**

Zoonotic Diseases

Diseases like Ebola, Rift Valley Fever, and COVID-19 originate in animals and can spill over to humans. OH strengthens surveillance systems to detect and prevent outbreaks early.
(Action Track 2)

Neglected and Endemic Diseases

Diseases like rabies and brucellosis continue to affect animals and humans. OH fosters collaboration across sectors to tackle these diseases more effectively.
(Action Track 2)

Food Security and Safety

Rising agricultural demands lead to deforestation and increased human-animal contact, raising disease risks. OH promotes sustainable agriculture and improves food safety standards.
(Action Track 4)

Antimicrobial Resistance (AMR)

Misuse of antibiotics in medicine and farming has fuelled AMR, making infections harder to treat. OH tackles AMR by promoting responsible antibiotic use, improved biosecurity, and alternative disease management across sectors.
(Action Track 5)

Climate Change, Environment and Sustainability

Environmental degradation and climate change drive disease emergence. OH promotes ecosystem conservation to mitigate these risks.
(Action Track 6)

One Health in Practice: Global and Local Initiatives

OH is not just a theoretical framework; it is a practical solution being implemented worldwide. While the COHESA initiative, which will be explored in detail in Chapter 3, is a prominent example of supporting OH principles, many other noteworthy initiatives have also emerged.

The FAO's OH Initiative addresses food safety, AMR and sustainable agriculture on a global scale. For example, FAO-supported programmes in East Africa have introduced community-driven solutions for controlling Rift Valley Fever.

Food and Agriculture Organization of the United Nations

Community engagement plays a crucial role in operationalising OH. In Kenya's Turkana County, for example, **participatory epidemiology** has been instrumental in empowering farmers to identify and report disease outbreaks, thereby enhancing early warning systems and disease control measures. By integrating community knowledge and a OH framework, the pilot study on expanding participatory epidemiology explored the complex interplay between human, livestock, and diseases of animal origin.

Namibia's Northern Communal Areas (NCA) are at the forefront of an innovative fight against rabies, demonstrating the power of a OH approach.

- **Innovative Vaccination Campaigns:** In 2023, targeted dog vaccination campaigns in five NCA regions leveraged innovative methods, including **High-Resolution Settlement Layer (HRSL)** data, to estimate vaccination coverage in remote areas. The campaign vaccinated 40,286 pets while providing

rabies education through materials distributed by the World Organisation for Animal Health (WOAH).

- **Impact of the OH Approach:** By combining veterinary services, public health initiatives, and community engagement, Namibia reduced human rabies deaths from 25 in 2015 to 7 in 2022. Supported by the WOAH, the Friedrich-Loeffler-Institut (FLI), and Federal Ministry for Economic Cooperation and Development (BMZ), Namibia is advancing toward eliminating rabies while inspiring global examples.

One Health in the Caribbean: A Regional Success Model
The Lasting Legacy of 'One Health, One Caribbean, One Love'
An article by Cadogan, P., Degia, C., Glasgow, M., Herbert-Hackshaw, K., King-Cenac, A., Mahase-Gibson, A., Parris-Aaron, M.

A Regional Model for Integrated Health and Sustainability
Implemented from 2014 to 2017, the "One Health, One Caribbean, One Love" project was the **first regional OH initiative**, promoting the interconnectedness of human, animal and environmental health. Funded by the EU through the ACP Science and Technology Programme II (ACP S&T II), it spanned **12 CARIFORUM countries**, fostering cross-sectoral collaboration and resource sharing.

Policy Leadership: Building a Foundation for OH

The project's key achievement was the CARICOM-endorsed Caribbean OH Policy, supported by a six-year strategic framework, which set a benchmark for multisectoral health governance and future regional initiatives.

Strengthening Capacity: Training and Technology Integration
The project built OH capacity by training **over 500 professionals** in disease management and enhancing **regional labs** with improved biosafety, testing and technology.

Leadership Development: Creating a Network for OH

The **OH Leadership Series** trained **29 senior and mid-level professionals** from diverse backgrounds across 12 countries. These connections evolved into the informal yet impactful Caribbean OH Alliance, a regional network dedicated to knowledge sharing, advocacy and resource mobilisation for OH.

Community-driven Projects: Bridging Policy and Practice

The project addressed food security, health and environmental issues through grassroots efforts. Initiatives included **anaemia reduction** in Dominica, **safer pesticide use** in Haiti, **pig farming** and watershed management in Jamaica, and **mosquito-borne disease** and **malnutrition prevention** in St. Lucia, showcasing OH's adaptability.

Partnerships for Sustainability: Regional and International Collaboration

Strategic partnerships with organisations such as the University of the West Indies (UWI), the Pan American Health Organization (PAHO) and the Food and Agriculture Organization (FAO) amplified the project's impact. By pooling expertise and resources, these collaborations ensured that the project achieved its ambitious objectives and laid the groundwork for sustained regional action.

ONGOING OH ACTIVITIES

The **'OH, One Caribbean, One Love'** project has served as a catalyst for numerous ongoing initiatives across the Caribbean. Examples include:

- **OH Education and Outreach:** Since 2018, Jamaica's annual OH conference, in partnership with **JVMA** and **CCFPJ**, drew over 2,400 participants in 2024. **JAPHI** has hosted two international OH conferences, and UWI began incorporating OH lectures in 2023.
- **Disaster Management:** The 2021 Soufriere volcano eruption in St. Vincent led the Caribbean Agriculture Network for Disaster Risk Reduction & Mitigation (CANDO)'s creation, integrating animal health into disaster plans and coordinating emergency responses.
- **AMR:** In 2024, OH practitioners played a pivotal role in establishing the Caribbean Sepsis and AMR Alliance under the Global Sepsis Alliance. This initiative emphasises the region's proactive stance on addressing AMR challenges.
- **Operationalising and Institutionalising OH:** Several CARIFORUM countries are embedding the OH framework into national systems, supported by international partners and the Caribbean OH network.

CONCLUSION

The **'One Health, One Caribbean, One Love'** project has strengthened Caribbean health systems through policy, training and regional co-operation. Its integrated approach addresses complex challenges and serves as a model for sustainable development regionally and globally More detailed outputs from the project are summarised in the "Caribbean Resilience and Prosperity through OH" Report.

Driving One Health Innovation in the Democratic Republic of Congo

Prof. Patrick Memvanga (Université de Kinshasa) emphasises the growing importance of OH in DRC. Drawing from his extensive work on **AMR and malaria research,** he underscores the **critical role of interdisciplinary collaboration** and innovation in tackling complex health challenges in the region. His interest in OH was inspired by the **rising rates of morbidity and mortality due to microbial diseases and the growing threat of AMR**.

"These issues represent major public health concerns in our region, particularly malaria and bacterial infections"

Key Innovations in OH Research

At the forefront of OH innovation, his team has **developed several groundbreaking solutions** in collaboration with local and international partners. Projects like CRITESS (Création d'un centre de Recherche et d'Innovation Technologique en Environnement et en Sciences de la Santé) and PI-RAM (Establishment of an Inter-University Innovation Hub for Implementing a Green Approach to Combat Antimicrobial Resistance in the DRC) have yielded promising results, including:

Metherfa Plus,
a treatment for malaria
Royal Dentifrice,
aimed at improving oral health
Kingo,
a treatment for typhoid fever
Nacaspiram,
targeting enterobacteria infections

CRITESS and **PI-RAM** are financed by the project PDTIE (Déploiement des technologies et innovations environnementales pour le développement durable et la réduction de la pauvreté) – through the OACPS R&I Programme – ACP Innovation Fund.

"These solutions address critical health needs while showcasing the power of interdisciplinary research"

Collaboration and Capacity Building

100 Innovations for Sustainable Development in the Congo Basin

There is a need for stronger interdisciplinary collaboration to address challenges like zoonotic diseases, AMR and food security.

"Improving cooperation among stakeholders and increasing joint initiatives are crucial steps forward"

"The Nagoya Protocol and our National Ethics Committee play an essential role in guaranteeing fairness and sustainability in our strategies," he says. *"This approach ensures the acceptability and durability of strategies by involving communities in problem identification, data collection, and analysis"*

Awareness and community engagement for integrated public health responses, supported by INOHA's education and capacity-building programmes promoting OH research and training are essential.

Ethics and equity are central to Prof. Memvanga's approach with the importance of respecting local knowledge systems and ensuring the inclusion of marginalised voices.
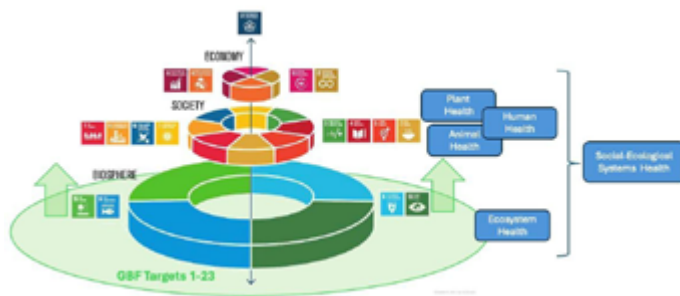
Ethics and Community Engagement

Looking Ahead:

When asked about the future of OH in the DRC, Prof. Memvanga underscores the importance of **strengthening the health systems that connect human, animal and environmental health.** He advocates for fostering partnerships among academic institutions, governments and external stakeholders, including donors. Finally, he calls on young researchers to embrace an interdisciplinary mindset.

"Dedication, community service and continuous learning are key to making a meaningful impact in the OH domain," he advises. To global policymakers, he makes an urgent appeal: *"Increase scientific, educational and community-based initiatives supported by strong public policies and sustainable funding to address critical health challenges in vulnerable regions like Central Africa."*

ONE HEALTH and THE 2023 AGENDA:

Linking Public Health, Biodiversity, and Sustainable Development

One Health as a Driver for the 2030 Agenda

OH is not just a framework for managing health challenges — it is a pivotal tool for achieving global sustainability goals. By recognising the interconnectedness of human, animal and environmental health, OH aligns seamlessly with the **United Nations 2030 Agenda for Sustainable Development** and its Sustainable Development Goals (SDGs). At its core, OH embodies the principles of the SDGs, particularly SDG 3 (Good Health and Well-being) and SDG 15 (Life on Land). These goals emphasise the need to improve health outcomes, combat climate change, and protect ecosystems — all areas where OH has proven transformative. For example, by promoting biodiversity conservation and sustainable farming, OH reduces the risks of zoonotic diseases while supporting **food security (SDG 2)** and **responsible consumption (SDG 12)**. The preservation of ecosystems also mitigates the effects of climate change, enhancing resilience for both human and animal populations.

The global frameworks that guide these efforts, such as the **Kunming-Montreal Global Biodiversity Framework (GBF)** and the **OH JPA**, underscore the necessity of integrated approaches to address overlapping challenges at the human-animal-environment interface. The **GBF**, which calls for the conservation of 30% of land and sea by 2030, further underscores the need for integrated approaches like OH.

Aligning One Health, SDGs and the GBF in Africa

Africa's unique biodiversity and rapidly growing populations place it at the centre of the global efforts to link health, environmental conservation and sustainable development. The **GBF** underscores the urgency of protecting ecosystems, while the **SDGs** provide a roadmap to ensure human well-being, environmental resilience and economic equity. In this context, the **OH approach offers a practical way to integrate these global priorities**.

Through collaboration across sectors and communities, OH initiatives in Africa address challenges like disease of animal origins and deforestation, while fostering sustainable livelihoods. These efforts exemplify how the principles of the GBF and SDGs can be operationalised at the regional level, ensuring that biodiversity conservation and food security coexist.

The interconnectedness of public health, biodiversity, and sustainable development becomes evident in practical applications of OH. Initiatives like COHESA and community-led efforts not only address immediate challenges but also contribute to long-term sustainability goals. The following case studies from Southern Africa illustrate **how local actions informed by global priorities create sustainable and inclusive solutions:**

Namibia OH Landscape: Challenges, Opportunities and Collaborative Strategies

In Namibia, COHESA has been instrumental in fostering collaborative advocacy efforts. A notable achievement is the **OH Advocacy Strategy Workshop**, which united stakeholders from the Ministry of Health and Social Services, Africa CDC, and academia. The resulting **'Framework of OH Practices in Namibia Zoonotic Disease Prevention and Control 2024'** provides a roadmap for addressing diseases of animal origin and enhancing environmental resilience.

Alignment with SDGs:

- **SDG 10 (Reduced Inequalities):** Ensuring marginalised communities benefit from health initiatives.
- **SDG 15 (Life on Land):** Promoting biodiversity conservation as a pillar of health resilience.

Namibia's efforts underline the **value of cross-sectoral collaboration and advocacy** in institutionalising OH, ensuring alignment with both national and global frameworks.

Advancing OH Capacities in Mozambique

COHESA has been pivotal in developing and institutionalising the OH approach in Mozambique to address interconnected human, animal and environmental health challenges. Notable achievements include the creation of a **national OH strategic plan (2024–2029),** development of higher education modules, and training packages for OH professionals. In 2022, the **Stakeholder mapping** has identified influencers and opportunities for improving inter-sectoral collaboration. Future strategies involve formalising OH policies and broadening education at universities, aiming to empower multidisciplinary teams.

Alignment with SDGs:

- **SDG 3 (Good Health and Well-being):** Focusing on preventing diseases of animal origin and antimicrobial resistance through surveillance and training.
- **SDG 15 (Life on Land):** Promoting wildlife conservation and ecosystem health to prevent disease spill overs.
- **SDG 4 (Quality Education):** Enhancing OH education in universities and professional training programmes.

Mozambique's commitment to a collaborative OH framework to achieve sustainable health outcomes **addresses global health and environmental priorities.**

Advocacy and Future Steps

The **success of OH in addressing global challenges** like biodiversity loss and health inequities hinges on its full institutionalisation across sectors and regions. **Advocacy is the key to embedding OH principles** into national policies and strategies. Champions of OH must engage governments, organisations, and environmental health stakeholders — many of whom have only recently recognised the importance of this approach.

Local governments and international alliances play a critical role in supporting this transition. By aligning efforts with the 2030 Agenda and the Kunming-Montreal Global Biodiversity Framework, OH can continue to deliver on its promise of creating a healthier, more sustainable world.

SPOTLIGHT ON COHESA

Empowering One Health in Eastern and Southern Africa

The [Capacitating OH in Eastern and Southern Africa (COHESA)](#) project is setting a new standard for human and animal health, and environmental collaboration across Africa. The programme is co-funded by the [OACPS R&I Programme](#), implemented by the **OACPS** with the financial support of the EU. Launched in 2021, COHESA operates in **12 countries**, buildIng the capacity of governments and communities to manage the intertwined health of people, animals, and the environment. COHESA is implemented by a consortium comprising the International Livestock Research Institute ([ILRI](#)), the French Agricultural Research Centre for International Development ([CIRAD](#)), and the International Service for the Acquisition of Agri-biotech Applications ([ISAAA](#)) AfriCenter.

COHESA seeks to address health threats at the intersection of human, animal, plant, and environmental health by adopting an integrated OH approach. The programme operates in **Botswana, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Rwanda, Somalia, Tanzania, Uganda, Zambia, and Zimbabwe**.

COHESA supports the **development of national OH strategic plans**, creates educational **curricula for future professionals, and builds an online observatory** to coordinate activities. For example, [COHESA aided Zambia in drafting its OH National Strategic Plan](#) and established workshops to train local actors in ecosystem-linked health resilience. By fostering collaboration among governments, academia, and communities, COHESA operationalises OH principles to address complex regional health challenges.

Driving a Health Revolution

COHESA's work will lead to an inclusive R&I ecosystem that facilitates uptake, adaptation and adoption of solutions to issues that can be addressed by a OH approach. By partnering with governments, universities, and local communities, **COHESA embeds OH principles across national policies.** In [Mozambique](), [Namibia]() and [Zambia](), the project has spearheaded **OH Strategic Plans and Frameworks,** with strategies developed or updated in another seven countries, helping institutionalise the OH approach at national level and promoting cross-sectoral collaboration.

Building the Future OH Workforce

A key focus of COHESA is training the next generation of OH professionals. The project has supported the development of **MSc** and **PhD programmes** in **Zimbabwe, Rwanda, Tanzania, Zambia** and **Ethiopia** to train specialists in areas like disease surveillance and sustainable agriculture. These programmes, along with **in-service training co-delivered to 449 participants across Eastern and Southern Africa with FAO**. COHESA supported development of **Benchmarks for Masters in OH**, for use in the East African Community (EAC). Recently, under COHESA, **Ethiopia ran a summer school**, to integrate OH approaches into education and research.

Cross-Border Collaboration

COHESA's impact stretches across borders. Across the 12 countries, government and academic stakeholders have created a OH network that promotes between-country collaboration. Countries can share their experience and materials, for example Zambia and Kenya shared their national documents (e.g. National OH Strategic Plans), helping other countries in the development of their own strategies, such as Mozambique and Namibia. Similarly, experts from Zambia went to Malawi to share their knowledge and support Malawi in developing its OH strategy. **Countries also partnered to develop multi-country proposals for submission to funding agencies.**

Leandre Ishema M.D, MSc, OH Specialist at Rwanda Biomedical center

COHESA has played a pivotal role in Rwanda by fostering interdisciplinary collaboration and building capacity through initiatives like net-mapping, which strengthens stakeholder networks across public health, veterinary and environmental sectors. Additionally, COHESA's focus on science communication and media engagement has amplified public awareness of OH issues, while training programmes for students at demonstration sites prepare the next generation of scientists to tackle complex health challenges. [...] Partnerships with universities enable training programmes for students and professionals, while community-level initiatives like awareness-raising campaigns and media cafés empower local populations to strengthen health resilience and address shared health concerns [...]. COHESA's initiatives address diseases of animal origin, climate resilience and food security by strengthening outbreak surveillance, promoting sustainable farming practices and introducing climate-resilient crops. These practical interventions empower communities to mitigate risks, improve health and enhance livelihoods in an integrated manner. [...] Integrating OH principles into national policies faces challenges, such as siloed sectoral approaches and limited resources. However, successes include establishing multi-sectoral platforms and incorporating OH into disease surveillance and zoonotic control strategies. In Rwanda, advocacy and capacity building have increased recognition of OH's potential to tackle complex health challenges.

COHESA is not just about policy; it's about empowering African OH professionals and experts. As COHESA evolves, its focus remains clear: **Society-wide institutionalisation of OH across Eastern and Southern Africa**, laying the groundwork for a future where the inextricable links between the health of people, animals and the environment are managed as One.

Success Stories

COHESA's work is producing tangible results. The **Stakeholder Netmapping exercise**, originally launched in four countries, quickly expanded to all 12 target countries on demand.

This tool helps identify key players in OH, allowing governments to address gaps in governance and streamline their health responses.

In 2023, **Zambia** suffered multiple Anthrax outbreaks at the wildlife/livestock/human interface and a severe drought. As well as linking to expert laboratory support from the University of Pretoria with COHESA's support for OH institutionalisation and operationalisation, Zambia can now better fight these recurrent health threats.

In **Namibia**, COHESA facilitated the drafting of the country's first **OH Framework**, formalised in 2024. This landmark agreement between ministries marks a major step toward institutionalising OH across sectors, ensuring a coordinated response to health and environmental risks.

INSIGHTS FROM THE STAKEHOLDERS
The Call for One Health

Across Eastern and Southern Africa, the **OH** approach is making waves. We spoke with health professionals, academics, and community leaders who are seeing its impact firsthand, thanks to projects like **COHESA**

Health Professionals on the Frontlines

In **Namibia, Iyalo Mwaningange**, from the Ministry of Health, shares how OH has been institutionalised, particularly in zoonotic disease surveillance. *"Integrating veterinary and public health services has improved our ability to respond to outbreaks like Rift Valley Fever. OH has given us the framework to act faster and more effectively."*

Agnes Mahomva, Public Health Advisor in **Zimbabwe**, highlights the challenges and opportunities. *"While the OH approach has been widely accepted, the coordination between sectors can be complex. But with COHESA's support, we've seen great improvements in disease control and collaboration."*

Academics Weigh In

Anselme Shyaka from the **University of Global Health Equity** in Rwanda is leading research on health-environment linkages. *"OH provides the scientific basis to understand how ecosystem disruptions impact human health. COHESA's efforts are bringing this understanding into practical, actionable strategies in our region."*

At the **University of Zimbabwe, Prisca Mugabe** adds, *"Our students are now learning to view health holistically. The OH modules we've integrated, with COHESA's support, are preparing a new generation of professionals to tackle health challenges from all angles."*

Communities See the Benefits

At the community level, COHESA's impact is being felt first-hand. In **Zimbabwe**, a **waste management project** has not only improved public health outcomes by reducing disease transmission but also created jobs and improved the local environment. *"It's been a win-win for the community,"* says a local leader involved in the project.

In **Uganda**, a **school programme** introducing OH concepts has transformed how young people think about their environment and health. *"By educating children, we're building the foundation for long-term change,"* says a school representative.

Expert Insights: An Interview with Mirgissa Kaba
Associate Professor, School of Public Health, Addis Ababa University

As an expert in public health with a focus on cultural epidemiology, Mirgissa Kaba brings a wealth of knowledge in interdisciplinary research and education within the OH framework.

Q: What inspired your interest in the OH framework, and what's your main focus? *A: I started in sociology before transitioning to public health with a focus on cultural epidemiology [...]. This interdisciplinary foundation allows me to approach global health challenges, such as emerging infections, through diverse lenses, inspiring my work as a researcher and policy advisor [...].*

Q: How can interdisciplinary collaboration be improved to tackle health challenges in your region? *A: The **Horn of Africa faces intertwined challenges**, exacerbated by climate change impacts such as floods, heatwaves, droughts and earthquakes, which heighten the risk of emerging infections [...]. Addressing these issues demands **coordinated efforts** across policy, research and academia, involving stakeholders at all levels [...].*

Q: Can you share successful OH training initiatives led by your institution? *A: As a [COHESA project partner,](#) Addis Ababa University has integrated OH principles into education and research [...]. A key initiative was a **[Netmapping exercise](#) that united stakeholders and identified entry points** for advancing OH. These efforts embedded OH into 86 courses across public health, environmental science, and veterinary medicine [...]. The university plans to train high school teachers to integrate OH and collaborate with he Ethiopian Public Health Institute (EPHI), further extending OH principles to eight other universities [...].*

Q: How does community-based participatory research play into your approach to these challenges? *A: Research that adopts OH approaches and principles is expected to amplify and **prioritise the community's role throughout the research process**. [...] involving communities in defining research questions, generating evidence, analysing and interpreting findings, and ultimately fostering community ownership of the research outcomes. **Strengthening this engagement is critical** to ensuring that research addresses community needs effectively while also supporting long-term solutions [...]*

Q: What mechanisms effectively foster inter-sectoral collaboration among stakeholders? *A: **Netmapping has been instrumental** in fostering collaboration and breaking silos [...]. COHESA's facilitation created shared platforms, complemented by a Delphi process to prioritise OH issues [...]. Four proposals were selected to consolidate AMR data, with results accessible online by mid-2025 for policy development [...].*

Q: How can research institutions and governments collaborate better to institutionalise and operationalise OH? *A: One of the most important elements in this is **establishing a strong governance structure to guide OH collaboration among stakeholders**. [...] While the foundations have been laid in academic and research institutions to integrate OH into education and research, **stronger governance at the national level** will ensure more robust mechanisms to track and hold these institutions accountable. Strengthening national OH governance is, therefore, vital to achieving successful and sustainable OH programmes.*

Q: What advice do you have for young researchers aiming to impact the OH domain? *A: My advice to young researchers is to embrace **interdisciplinary approaches**, recognising that **no problem can be solved in isolation**. Value contributions from other disciplines and non-academic actors, and step beyond your comfort zone to achieve more effective, comprehensive solutions [...].*

Q: What is your call to action for global policymakers regarding OH in ACP regions? *A: This requires revising existing curricula and research methodologies. Research and academic institutions must take proactive steps to update their curricula and modify their research. Donors play a critical role in providing the financial support needed [...].*

TRAINING THE FUTURE
ONE HEALTH WORKFORCE

To establish **OH** as a sustainable and effective approach, **education and training must permeate all societal levels**—from primary education to professional development. While the COHESA project has been instrumental in this transformation, numerous other initiatives across Africa are also contributing significantly to building a robust OH workforce.

Standardising One Health Education

Beyond COHESA, the **OH Workforce – Next Generation (OHW-NG)** project, supported by USAID, has partnered with the **Africa OH University Network (AFROHUN)** to establish competency-based OH education across multiple countries. These programmes focus on experiential learning, equipping students to address challenges like antimicrobial resistance (AMR) and food security. Training professionals across Africa and Southeast Asia involves **empowering the next generation of health leaders with the interdisciplinary expertise needed** to tackle complex challenges at the intersection of human, animal and environmental health. These professionals bridge the gap between policy and practice, ensuring that OH principles are not only implemented today but also sustained for the future.

> *Introducing new OH concepts can be challenging, but integrating these principles into existing courses, as done in Ethiopia under COHESA, has made adoption more seamless. This approach allows institutions, students, and professionals to embrace OH without creating entirely new programmes."*

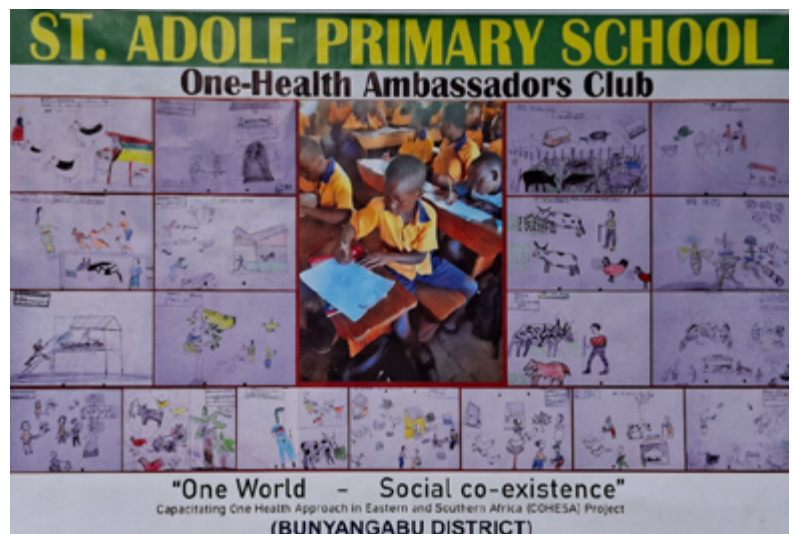**Yordanos Tadesse,**
Lecturer at Addis Ababa University, Ethiopia

> "*Standardising OH education* across ACP countries is difficult due to **diverse regional priorities,** varying institutional capacities, and cultural differences. *Overcoming these challenges requires* **collaboration, investment, and adaptable frameworks that integrate global OH principles with local needs**."

Anselme Shyaka,
Assistant Professor at OH Faculty, University of Global Health Equity, Rwanda

In-Service Training: Empowering Professionals

COHESA's efforts extend beyond classrooms. In-service professionals in **Mozambique** and **Zimbabwe** have benefitted from specialised training modules designed for both academics and field workers. These programmes focus on zoonotic disease prevention, ecosystem health, and public health strategies, equipping professionals to apply OH principles in their daily work. In **Uganda, primary school pupils are involved in OH projects** through music, dance and drama, OH gardens and farms as a way of promoting awareness and among the pupils and the community.

> "*Education is critical to embedding OH across disciplines like medicine, veterinary sciences, and environmental studies. Beyond university programmes,* **we must begin preparing primary and secondary students to appreciate the interconnectedness of humans, animals, and the environment, building a future workforce ready to address complex challenges.** *[...] The interdisciplinary nature of OH curricula has been well-received by students and professionals alike. Veterinary and public health students value its practical utility, while environmental studies students sometimes feel their perspectives are underrepresented [...]. Standardising OH education across ACP countries is complex due to diverse regional priorities, [...] adaptable frameworks are needed to align global OH principles with local needs, supported by investment and collaboration.*"

Flora Pule-Meulenberg,
Associate Professor, Department of Crop and Soil Sciences, Botswana University of Agriculture and Natural Resources (BUAN)

Food and Agriculture Organization
of the United Nations

FAO Virtual Learning Centers

Female leadership and One Health
online course

FAO organised a series of training courses to strengthen **OH capacities in Eastern and Southern Africa**, with support from **COHESA** and its partners, including ILRI and CIRAD. These initiatives aimed to build technical knowledge, leadership skills, and promote gender equity in health systems.

One notable training was the **'Concepts of OH Online Course for Southern Africa,'** developed by FAO's Subregional Office for Southern Africa and delivered through the FAO Virtual Learning Centre for Southern Africa. This course focused on OH principles, establishing multi sectoral coordination mechanisms, and developing national OH strategic plans. It engaged 173 field-level professionals from 12 SADC member states across animal health, public health, and ecosystem health disciplines.

Another impactful training was the **FAO Female Leadership and OH Online Course**, which empowered frontline human and animal health service providers with essential leadership and communication skills. This **programme integrates gender-responsive approaches to OH, emphasising the critical role of women in advancing health strategies at the human-animal-environment interface**. By combining technical knowledge with leadership development, it contributes to building a more inclusive and resilient health workforce. This initiative highlights the **importance of gender equity in creating sustainable health systems** that benefit both people and the environment.

*[...] Through education, we can train a **skilled workforce capable of managing interconnected challenges [...]**. OH is inherently interdisciplinary, requiring collaborative and coordinated efforts to respond effectively to health emergencies. Training must reflect this by **preparing professionals from diverse disciplines** to work together, **ensuring a collective response to outbreaks**. [...] We've been actively involved in initiatives like the **EAC Short Course on Pandemic Preparedness**, which was developed to equip responders, including health officials and even the military, with the skills to manage infectious diseases. Additionally, we've developed the **Master of OH benchmarks**, which aim to **harmonise curricula across universities in the region**. [...] In-service training of professionals is vital. A response to emergencies requires system thinking—an understanding of the broader context and collaboration among various stakeholders, from policymakers to field responders. [...]"*

Prof. Michael Mawa,
Inter-University Council of East Africa (IUCEA)

NEXT STEP

Future of One Health in ACP Countries

Building a OH global network

Looking ahead, the focus for OH in ACP countries is clear: **strengthen, scale and sustain**. The [8th World OH Congress in Cape Town](#), held from 20 to 23 September 2024 in Cape Town, South Africa, served as **a pivotal platform for advancing this agenda**. The Congress featured abstract-driven sessions encompassing diverse topics such as zoonoses, pandemic preparedness, food security, climate change and antimicrobial resistance. This inclusive approach facilitated the exchange of innovative ideas and research findings, fostering collaboration among scientists, policymakers and practitioners. A significant sideline meeting convened **COHESA** and **[PreZoDe](#)** partners, government officials and health experts to chart a roadmap for the future. The vision? **A robust OH regional network that promotes the institutionalisation and tests on the ground the operationalisation of OH, engaging the full spectrum of stakeholders.**

Key priorities of this OH global network

Collaboration and sharing

Cross-border collaboration and learning, experience sharing, avoiding duplication. Political strength to influence policies and advocate for OH across society.

Capacity building

Ensure OH is integrated in regional and national education systems from primary to tertiary education. Strengthen and scale out OH in-service training.

Operationalise OH

Address emerging and re-emerging health issues. Maximise the efforts in prevention, co-design OH interventions with local communities and implement them.

In Summary

The **OH approach** is coming of age across the **ACP region** and can provide the systemic approach necessary to tackle the multiple on-going crises of climate change, biodiversity loss, disease threats including pandemic threat and the need for sustainable development. By addressing the interconnected challenges of human, animal, and environmental health, initiatives like **COHESA** are laying the groundwork for a healthier, more resilient future.

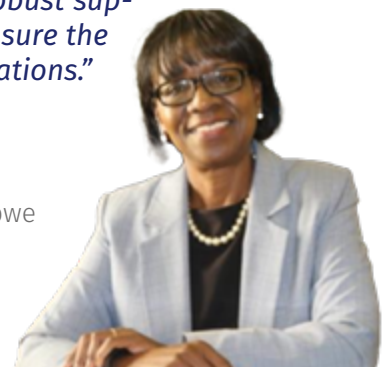The success stories highlighted in this magazine show how local communities, governments, and international partners can work together to create solutions that are innovative, inclusive, and sustainable. However, the journey doesn't stop here. Continued investment in research, governance, and collaboration is essential to safeguarding global health and ensuring that the OH principles become an integral part of national and regional strategies.

As we look to the future, the message is clear: only by working together across sectors, borders, and communities can we hope to build resilient health systems that are prepared to tackle the challenges of tomorrow.

"*OH is a transformative approach that unites the health of people, animals, and ecosystems.* *It has enabled ACP countries to move away from traditional siloed approaches, fostering* **multi-sectoral collaboration that optimises health outcomes** *for sustainable development and security. […] While current research in OH rightly focuses on emerging zoonotic diseases and antimicrobial resistance, we must also prioritise strengthening OH institutions and systems. Future research should delve into policy and operational frameworks, exploring innovative ways to enhance collaboration and coordination among stakeholders. […]* **It is essential that OH initiatives are not treated as stand-alone projects but are elevated to national priority programmes.** *This can be achieved by establishing high-level coordination mechanisms and government-led strategies, including National OH Action Plans developed with input from all stakeholders, such as the private sector and communities. Evidence-based approaches must underpin these efforts to ensure their long-term effectiveness. […]* **OH is integral to global security,** *encompassing the full spectrum of disease control—from* **prevention and detection to response and management.** *No nation can achieve this alone. The global community must provide robust support for OH initiatives to ensure the health and security of all nations.*"

Dr A Mahomva,
Public Health Advisor to the
President and Cabinet, Zimbabwe

Discover more

about the OACPS Research & Innovation programme

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We encourage you to visit our website (https://oacps-ri.eu/en/) to explore other editions of the magazine and to learn more about how the programme is advancing not only OH but also broader **initiatives in R&I across the ACP regions**.

Through the **ACP Innovation Fund (ACP IF)** and the **Policy Support Facility (PSF)**, the programme works at both national and regional levels to foster impactful collaboration and drive sustainable innovation.

If you would like more information or wish to get in touch, please contact us at: **info@oacps-ri.eu**

We look forward to engaging with you!