

# Integrating the One Health Approach into Africa's Healthcare System



© Vic Josh

## Policy Brief

November 2024

### Key Messages

- ✓ One Health is a collaborative, multisectoral, and transdisciplinary approach used to attain optimal health outcomes for people, animals, plants, and their shared environment.
- ✓ The One Health approach is a solution to prevent and counter the emergence of zoonotic diseases and other shared public health threats, and has been tested and applied in various African countries.
- ✓ Better coordination and cooperation between human health agencies, veterinary services, and wildlife experts is required to implement national One Health programmes.
- ✓ By embracing the One Health approach, Africa can effectively and sustainably prevent and respond to epidemics, and improve its health and environmental outcomes.

### Context

Africa is prone to outbreaks of zoonotic diseases, which are infections that can be transmitted between animals and humans. Diseases such as Ebola, Rift Valley fever, Lassa fever, and novel pathogens with pandemic potential, highlight the need for a coordinated approach to disease surveillance, prevention, and control that involves human and animal health sectors. Additionally, environmental issues such as deforestation, climate change, and pollution have significant implications for human and animal health in Africa.

The One Health approach recognises the interconnectedness of environmental health with human and animal health, highlighting the need for sustainable practices that promote ecosystem health and resilience. One Health practitioners look at the intersections and overlaps between human health, animal health and environmental health, and One Health activities should

result in added value in terms of better health for people, animals, and the environment, as well as financial savings.

The One Health approach promotes a holistic and multidisciplinary response to evolving threats posed by zoonotic diseases. However, its implementation in Africa remains a challenge, and it has struggled to gain a firm institutional foothold, as sectors dealing with human and animal health continue to work in silos.

### Methodology

This policy brief examines how the One Health approach has been applied in different contexts in Africa. It is based on a review of the existing literature, which covered relevant scholarly papers, conference papers, books, reports, newspapers, and other sources. The authors examined the opportunities and challenges of One Health in the African context, to make policy recommendations to support its wider implementation. The brief also benefited from information gathered during meetings with experts on emerging technologies convened by the African Institute for Development Policy (AFIDEP) and the African Union Development Agency (AUDA-NEPAD) in August, September and October 2024. The meetings included the emerging health technologies expert meeting, biannual statutory meeting for the African Union High Level Panel on Emerging Technologies (APET) and a Regional Dialogue on Leveraging Emerging Technologies to Improve Healthcare Delivery Systems in Africa.

### Findings

Africa's complex health and development challenges require long-term commitment and a range of approaches encompassing more than one discipline, institution, or country. African ministers of health and environment demonstrated an early commitment to One Health when they signed the Libreville Declaration at the first Inter-Ministerial Conference on Health and Environment in 2008, and subsequently endorsed a 10-year Strategic Action Plan to scale up health and environment interventions in Africa from 2019 to 2029 at the third Inter-Ministerial Conference on Health and Environment in Gabon in 2018.

By taking advantage of shared leadership, resource allocation, and community values, African leaders are proactively demonstrating the principles of One Health, and thus becoming a model for this global vision. And by focusing on partnerships rather than donor-recipient relationships, they are fostering the development of shared priorities and are increasingly driving their own health agenda to fulfil their own needs.

During the Ebola outbreak in West Africa (2014–2016), countries like Guinea, Sierra Leone, and Liberia implemented One Health approaches to contain the spread of the virus. This included coordination between human

health agencies, veterinary services, and wildlife experts to understand the transmission dynamics, conduct surveillance, and engage communities in prevention and control efforts.

In East Africa, Rift Valley fever outbreaks have been managed using One Health strategies that involve collaboration between human health authorities, veterinary services, and environmental agencies. This approach includes early warning systems based on climate and environmental factors, vaccination campaigns for livestock, and public health education on reducing exposure to infected animals and their products.

In pastoralist communities of Somalia and Kenya, where livestock plays a crucial role in livelihoods and nutrition, One Health principles are applied to improve animal health, food safety, and human health outcomes. This consisted of vaccination campaigns against zoonotic diseases like brucellosis and tuberculosis, promoting hygiene practices during animal handling and food preparation, and integrating veterinary services with primary healthcare initiatives.

In Zambia and Tanzania, the One Health approach has been used to enhance malaria control efforts by addressing vector and environmental management through coordinated efforts between health departments, environmental agencies, and local communities to implement insecticide-treated bed nets, indoor residual spraying, and habitat modification to reduce mosquito breeding sites.

In regions where access to clean water and sanitation is limited, waterborne diseases such as cholera and typhoid pose significant health threats. One Health serves to combine efforts to improve water quality, sanitation infrastructure, and hygiene practices. For example, in communities along Lake Victoria in Kenya, Tanzania and Uganda, integrated approaches involving health education, environmental management, and improved water treatment have reduced the incidence of waterborne diseases.

Many rural communities across Africa benefit from integrated health services that apply One Health principles. For example, mobile health clinics provide healthcare services to both humans and livestock, addressing basic healthcare needs while also promoting animal health and disease prevention.

Cross-border disease surveillance and control are critical for preventing the spread of infectious diseases across national boundaries. In West Africa, countries like Ghana, Burkina Faso, and Côte d'Ivoire have established cross-border One Health committees and surveillance networks. These initiatives facilitate information sharing, joint response planning, and harmonised control measures for diseases such as avian influenza and tuberculosis, which affect both humans and animals.

Despite the One Health approach enabling some African countries in addressing zoonotic disease outbreaks and other health challenges, many countries still lack formal and funded One Health programmes. Institutionalising and operationalising One Health can be challenging, including breaking down established professional and programmatic silos that currently exist within government and non-governmental agencies and institutions. There is also a significant gap in political commitment, diagnostic capacity for zoonotic diseases, surveillance mechanisms, multisectoral response systems, skilled workforce, domestic financing, and legal frameworks to strengthen coordination, collaboration, and communication among One Health stakeholders in Africa.



**Many rural communities across Africa benefit from integrated health services that apply One Health principles.**

### Policy Recommendations

The policy and practice changes needed to address zoonotic diseases require strong political commitment, financial investments and institutionalised national One Health programmes. To successfully implement the approach, AU member states should consider:

1. Developing and implementing national One Health policies and strategies that integrate human health, animal health, and environmental health considerations.
2. Establishing mechanisms for multisectoral collaboration and coordination among health, agriculture, environment, wildlife, and other relevant sectors.
3. Investing in training programmes and capacity building initiatives that equip healthcare professionals, veterinarians, environmental scientists, and policymakers with interdisciplinary skills in One Health.
4. Integrating One Health principles into educational curricula at universities and training institutions.
5. Implementing community engagement strategies to raise awareness about One Health concepts and principles. This involves fostering partnerships with local communities, traditional leaders, and civil society organisations to promote behaviour change and sustainable health practices.
6. Providing financial incentives, grants, and funding mechanisms to support One Health initiatives at national, regional, and local levels.
7. Harmonising regulatory frameworks across health, agriculture, environment, and other relevant sectors to facilitate integrated approaches to disease control, food safety, and environmental management.

### Conclusion

Collaboration between human, animal, and environmental health sectors is essential to effectively tackle complex health challenges in Africa. Embracing the One Health approach will enable African countries to better address these interconnected health challenges and promote sustainable development, resilience, and health security for their populations. However, the One Health approach has not yet been fully adopted and many researchers, physicians and veterinarians are unaware of this new holistic vision. Given the devastating impact of recent zoonotic disease outbreaks, strengthening the One Health approach across African Union (AU) member states will improve the continent's ability and capacity to efficiently prevent, detect, and respond to emerging and re-emerging zoonotic diseases. The AU can leverage the lessons learned from the regional approach in fighting the COVID-19 pandemic in Africa, and support One Health institutionalisation through its technical and regional bodies across member states.

### Bibliography

Ademe, S. K., & Glaziou, P. (2023). Integrating One Health Approaches Into National Health Policies in Africa. *Global Health Action*, 16(1).

Akudjedu, J. M., & Nkrumah, F. (2021). One Health in Africa: An Integrated Approach to Combat Zoonotic Diseases. *African Journal of Health Sciences*, 38(3), 229–243.

Da Silva, F. J., & Azevedo, J. (2024). One Health and Climate Change: Impacts on Public Health in Africa. *Journal of Environmental Management*, 325, 116418.

Eze, E. A., & Okonkwo, C. (2023). Strengthening Veterinary Surveillance Systems: A One Health Approach in the African Context. *Tropical Animal Health and Production*, 55(2).

Lutumba, P., & Mbuyi, M. (2022). Zoonotic diseases and One Health: Contributions to Public Health in Africa. *International Journal of Infectious Diseases*, 123, 123–130.

Makoni, M. (2023). Adopting One Health Approaches to Enhance Disease Surveillance in Africa. *The Lancet Planetary Health*, 7(2).

Mbonye, A. K., & Rukundo, A. (2024). Engaging Communities in One Health Initiatives: Lessons from Uganda. *Journal of Community Health*, 49(2), 205–213.

Mwanga, J. R., & Kilonzo, B. S. (2022). Integrating Human, Animal, and Environmental Health: One Health Perspectives in Africa. *Environmental Science & Policy*, 133, 12-19

Salami, H. A., & Phillips, W. A. (2023). Community Engagement in One Health: A Strategy for Combating Zoonotic Diseases in Africa. *Journal of Community Health*, 48(2).

Wanyonyi, S. S., & Muchemi, J. (2024). Evaluating the Effectiveness of One Health Policy Frameworks in African Nations. *Journal of Social Medicine*, 15(1), 75–85.

### For More Information, Contact:

#### Africa Institute for Development Policy (AFIDEP)

Malawi Office: 3rd Floor, Public Service Pension Fund Building,  
P.O. Box 31024, Lilongwe 3

Kenya Office: 6th Floor (Block A), Westcom Point Building,  
Mahiga Mairu Avenue, Off Waiyaki Way, Westlands

P.O. Box 14688-00800, Nairobi, Kenya | [info@afidep.org](mailto:info@afidep.org)  
[www.afidep.org](http://www.afidep.org)

#### African Union Development Agency (AUDA-NEPAD)

230 15th Road, Midrand,  
Johannesburg, South Africa

[info@nepad.org](mailto:info@nepad.org)  
[www.nepad.org](http://www.nepad.org)



**HealthTech**  
Promoting dialogue and action  
on health technologies in Africa

[www.healthtechafrica.org](http://www.healthtechafrica.org)