



People make systems work: Why workforce matters for One Health

Strong systems depend on people – and One Health fails when the workforce is fragmented, under-recognized or poorly aligned across sectors

One Health in context

For those working in global health, One Health workforce challenges are not simply about training numbers, they are about **how different professional groups are prepared, incentivized and supported to work together** across human, animal, plant and environmental health domains.

Many countries face a similar constraint: while capable staff exist in different sectors, **there is a lack of capability in regard to working at the interfaces between sectors**. Training pathways are siloed, competencies are inconsistent and frontline workers often lack the mandate or confidence to engage beyond their sector. One Health provides a framework for **aligning competencies, roles and institutional expectations**, thereby strengthening prevention, surveillance and response in practice.

For example, joint field epidemiology training across human and animal health sectors – including collaborative outbreak investigation exercises and shared field placements – **can strengthen practical co-ordination at the interfaces where risks emerge**. Beyond technical skills, effective One Health workforce development requires investment in ‘soft skills’, such as communication, collaboration, negotiation and systems thinking, which enable professionals to work effectively across institutional and disciplinary boundaries.

Why it matters

- Workforce gaps are often **co-ordination gaps in disguise**.
- Frontline workers are the first to see emerging risks – but they are rarely trained or authorized to act across sectors.
- Siloed training undermines health security, antimicrobial resistance (AMR) control, food safety and outbreak preparedness. Interprofessional and intersectoral learning are increasingly recognized as core components of effective One Health workforce development.
- Workforce alignment is a **prerequisite for system resilience**, not a downstream add-on.

Practical examples

- **‘Building the future One Health workforce in Eastern and Southern Africa: Gaps and Opportunities’**. This article analyses workforce development across multiple countries, highlighting fragmented training pathways, inconsistent competencies and limited cross-sector exposure. It shows that while One Health is increasingly recognized in policy, workforce development has lagged behind, particularly in translating high-level strategies into practical skills. The article underscores the need for harmonized competencies, joint training approaches, clearer career pathways and better visibility of One Health -related roles within professional education and workforce planning.
- **‘Enhancing the Capacity of Frontline Workers Across One Health Domains’ (Kenya)**. This case study focuses on strengthening the capabilities of frontline workers operating at the human–animal–environment interface. It illustrates how targeted capacity building can improve risk recognition and co-ordination in practice, while also revealing structural constraints, such as staff turnover, uneven incentives and limited career pathways. The case study demonstrates that training alone is insufficient unless it is part of a wider workforce support package, including clear roles, supervision, incentives, mentoring and opportunities for progression.
- **‘Towards institutionalization of One Health in Eastern and Southern Africa’**. While the institutionalization of One Health is often framed around governance, this case study also highlights its workforce implications. It shows that sustained One Health implementation depends on embedding One Health competencies within existing professional cadres, including both pre-service education and competency-based in-service or continuing

professional development systems, rather than relying on ad hoc projects or short-term training. Workforce sustainability emerges as a binding constraint when co-ordination platforms lack dedicated, skilled personnel.

Common challenges in practice

- **Siloed professional training** across human, animal and environmental sectors.
- **Lack of recognized One Health career pathways**, particularly at sub-national level.
- **High staff turnover**, undermining continuity and institutional memory.
- **Training without a mandate** – skills are gained but are not used in practice.
- **Dependence on project-based capacity building**, with limited sustainability.
- **Uneven incentives**, discouraging cross-sector collaboration.
- **Limited cross-sector exposure in professional training pathways**.

Factors that make these approaches work

- **Competency alignment across sectors.** Defining shared and complementary competencies matters more than creating new job titles.
- **Institutional recognition.** One Health roles may need to be formally recognized through official review and updating of existing structures, job descriptions and performance frameworks.
- **Linking training to real-world functions.** Capacity building is most effective when it is tied to routine tasks, not abstract concepts.
- **Retention and continuity.** Workforce strategies must address turnover, incentives and career progression.
- **Long-term investment.** Building a One Health workforce is a systems reform challenge, not a short-term technical exercise.
- **Joint field epidemiology and cross-sector simulation training.** Learning together through in-service training, field epidemiology programmes or simulated outbreak settings builds trust, clarifies roles and strengthens operational readiness; where feasible, earlier exposure through pre-service education can help normalize cross-sector practice.
- **Soft skills development.** Communication, collaboration and systems leadership are as critical as technical expertise for effective One Health implementation.

Possible entry points for those working in global health

- **Understanding the existing workforce landscape.** Mapping which actors deliver relevant functions across human, animal, agricultural and environmental sectors – and how these roles connect in practice – may help identify overlaps, gaps or co-ordination challenges.
- **Encouraging cross-sector learning opportunities.** Joint training, field epidemiology programmes or simulation exercises can provide opportunities for professionals from different sectors to build shared experience and understanding.
- **Linking training to operational roles.** Capacity-building initiatives may be more effective when connected to routine functions, such as surveillance, outbreak response or community engagement.
- **Supporting integration of One Health competencies into curricula and professional development.** Where relevant, there may be opportunities to influence how cross-sector competencies – including collaboration, communication and systems thinking – are incorporated into undergraduate curricula, pre-service education and continuing professional development.
- **Recognizing frontline interface roles.** Community health workers, veterinary officers and environmental staff often encounter related risks in practice, highlighting the value of basic awareness and communication across sectors.

Want to know more?

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Key resources:

- 'One Health Explainer' – <https://www.cabi.org/cabi-publications/one-health-explainer/>
- 'Building the future One Health workforce in Eastern and Southern Africa: Gaps and Opportunities' – <https://www.cabidigitallibrary.org/doi/10.1079/cabonehealth.2025.0014> (Multi-country empirical research study / workforce assessment)
- 'Enhancing the Capacity of Frontline Workers Across One Health Domains' (Kenya) – https://virtual-learning-center.fao.org/pluginfile.php/182541/mod_page/content/22/COVER%20and%20TOC%20KENYA-combined_1.pdf (Proposed intervention / capacity-strengthening component within a national investment initiative). Available via the FAO One Health Virtual Learning Centre (requires joining the Community of Practice for access).
- 'Towards institutionalization of One Health in Eastern and Southern Africa' – <https://doi.org/10.1079/onehealthcases.2024.0007> (Multi-country programme case study / learning case)

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