

CGIAR Initiative on One Health

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The official objective of the CGIAR Initiative on One Health (2022-2024) was “to demonstrate how One Health principles and tools integrated into food systems [could] help reduce and contain zoonotic disease outbreaks, improve food and water safety and reduce anti-microbial resistance, benefiting human, animal and environmental health” in low- and middle-income country settings.

The research initiative was operationalized through five thematic work packages (Figure 1). Each work package was designed to generate contextually relevant evidence and solutions, develop capacities for their use, and engage in policy and practice change. The initiative focused on testing and evaluating One Health innovations on disease surveillance, food safety and antimicrobial resistance intervention in seven countries: Vietnam, India, Bangladesh, Ethiopia, Kenya, Uganda and Côte d'Ivoire (Figure 2). Key results of the initiative include:

- Development of integrated surveillance at the wildlife-livestock-human interface, including genomic surveillance of pathogens to track viral evolution and predict outbreaks. Climate-responsive disease risk mapping support tools were created to target surveillance and resource allocation and enhance prevention efforts in vulnerable regions with scarce resources.
- Evaluation of innovations to improve slaughterhouse hygiene (Kenya) and food safety

in pork markets (Vietnam) and in red meat shops (Ethiopia). Impact evaluation results showed positive changes in behaviours and attitudes, but more work is needed to reduce bacterial contamination.

- Crucial insights into drivers of antimicrobial misuse in livestock and aquaculture, along with recommendations based on this evidence.
- Better understanding of the spatial and temporal distribution of waterborne zoonotic pathogens and antimicrobial resistance in selected watersheds in Ethiopia and India to inform planning for pollution control and health risk mitigation. Business models for resource recovery from livestock waste in these countries were analysed and co-developed to prevent water pollution from livestock waste.
- Cooperation with local authorities to operationalize the One Health concept on the ground. One Health research sites were established and supported in Vietnam and Kenya, which serve as One Health practice sites that bring together actors from diverse disciplines and communities to work on topics prioritized by communities.

Significant progress was achieved in knowledge discovery, as evidenced by the publication of 105 peer-reviewed articles to date and other knowledge outputs, outcomes and impacts being reported.

References

CGIAR Initiative on One Health: <https://www.cgiar.org/initiative/one-health/>

CGIAR Initiative on One Health outputs: <https://hdl.handle.net/10568/114641>

Lam S., Hoffmann V., Bett B., Fèvre E.M., Moodley A. et al. 2024. Navigating One Health in research-for-development: Reflections on the design and implementation of the CGIAR Initiative on One Health. *One Health*, 8,100710. <https://doi.org/10.1016/j.onehlt.2024.100710>

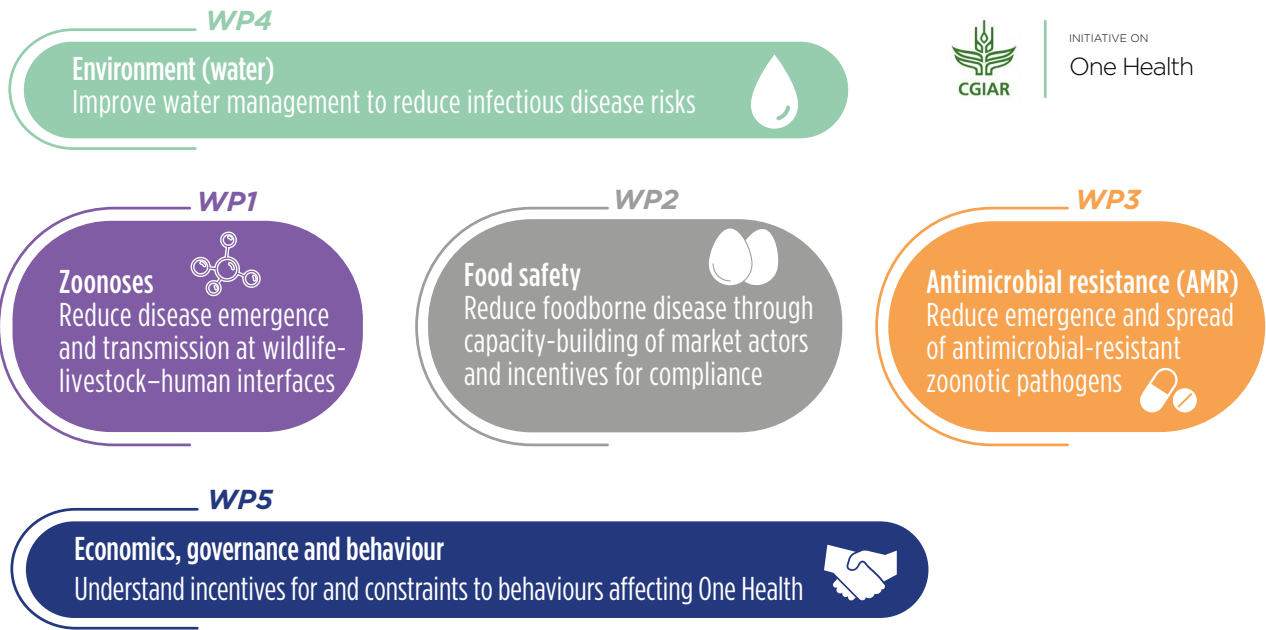


Figure 1. CGIAR One Health initiative project framework broken down by work package (WP), including core components and activities.

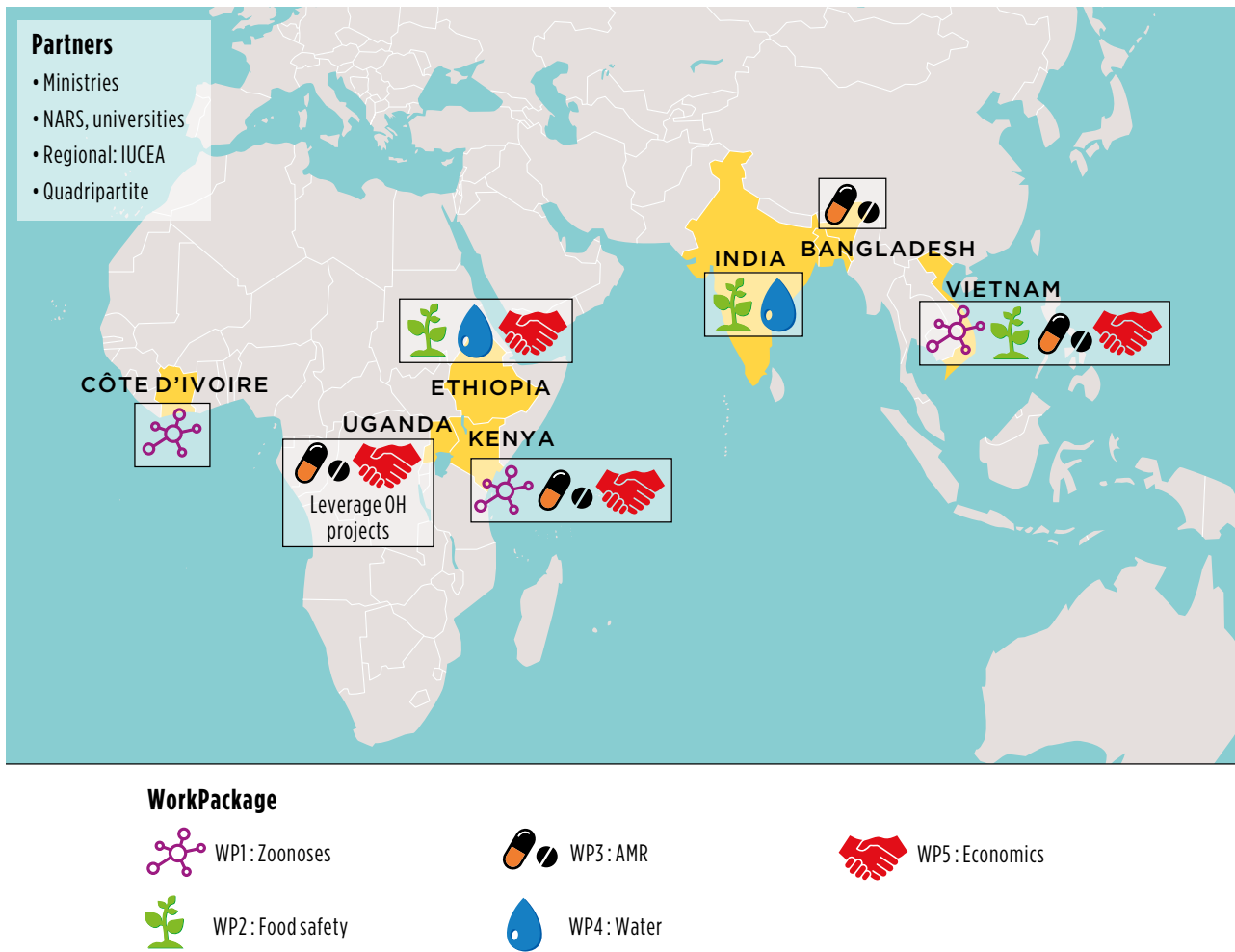


Figure 2. CGIAR One Health initiative study sites and topics.

NARS: National Agricultural Research Systems; IUCEA: Inter-University Council for East Africa; Quadripartite: FAO, WHO, WOA and UNEP.