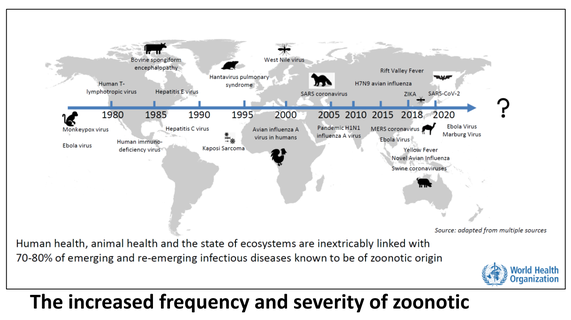
CGIAR initiative on One Health: Protecting human health through a One Health approach

Hung Nguyen-Viet[1], Vivian Hoffmann[2], Bernard Bett[1], Eric Fèvre[1,3], Arshnee Moodley[1], Javier Mateo-Sagasta[4], Chadag Mohan[5], Peter Daszak[6], Bassirou Bonfoh[7]

[1]International Livestock Research Institute, Nairobi, Kenya, [2]International Food Policy Research Institute, Washington, D.C., USA, [3]Institute of Infection, Veterinary & Ecological Sciences, University of Liverpool, United Kingdom, [4]International Water Management Institute, Colombo, Sri Lanka, [5] WorldFish, Penang, Malaysia, [6] EcoHealth Alliance, New York, USA, [7] CSRS, Abidjan, Côte d'Ivoire

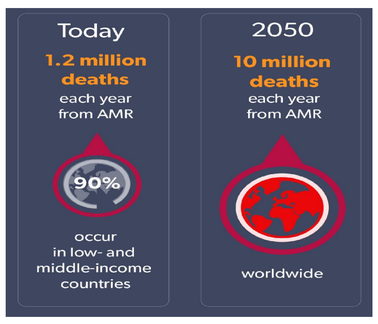
This initiative aims to show how a One Health approach – which recognizes the interconnections between people, animals, plants, and their shared environment – can help reduce antimicrobial resistance, improve food and water safety, and manage zoonotic diseases, leading to better human, animal, and environment health. It forms part of CGIAR's new research portfolio, delivering science and innovation to transform food, land, and water systems in a climate crisis.

THE CHALLENGES

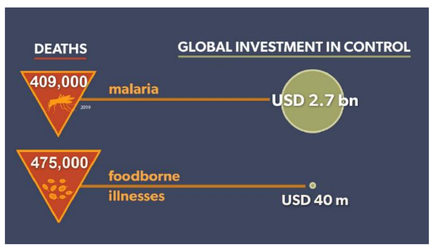


Human health, animal health and the state of ecosystems are inextricably linked with 70-80% of emerging and re-emerging infectious diseases known to be of zoonotic origin

The increased frequency and severity of zoonotic pandemic including COVID-19



Antimicrobial resistance (AMR)



Foodborne disease takes a toll comparable to that of tuberculosis, malaria and HIV/AIDS and costs US$110 billion a year.

Solving these challenges means overcoming institutional barriers to cross-sectoral collaboration and providing stronger evidence on the importance and cost-effectiveness of incorporating One Health principles into management of food systems.

OBJECTIVE

The objective is to protect human health by improving detection, prevention, and control of zoonoses, foodborne diseases and AMR in low- and middle-income countries by

- generating evidence on risks and public and private returns to action;
- evaluating impacts of technologies, tools and approaches on health risks and economic outcomes; and
- integrating innovations into policies and programs.

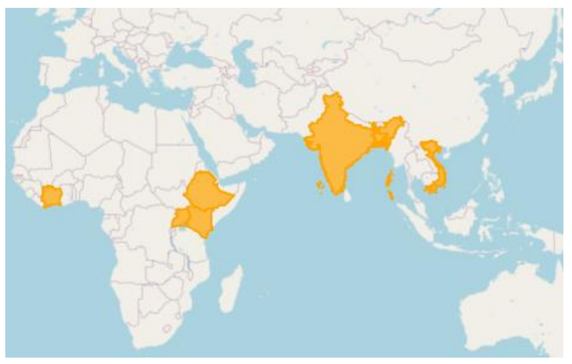
INITIATIVE COMPONENTS AND STRUCTURE

WORK PACKAGES AND PARTNERS BY COUNTRY

Country	Key Work Package	Partners in countries
Vietnam	**WP1, WP2, WP5*** WP3, WP4	Ministry of Agriculture and Rural Development, National Institute of Veterinary Research, Hanoi University of Public Health
Bangladesh	**WP3**	Food Safety Authority, Ministry of Livestock and Fisheries, Bangladesh Livestock Research Institute
India	**WP4** WP2	ICAR, Food Safety and Standards Authority of India; Office of the Commissioner of Food Safety – Odisha and Assam
Kenya	**WP1, WP3, WP5** WP2	National and country departments of veterinary services and public health
Ethiopia	**WP2, WP4, WP5**	One Health National Platform, Ministry of Agriculture (Livestock), Universities of Addis Ababa
Cote d'Ivoire	**WP1** WP2	One Health National Platform, Centre Suisse de Recherche en Cote d'Ivoire
Uganda	Leverage from other One Health projects in Uganda	Ministry of Agriculture, Animal Industry and Fisheries, Inter-University Council for East Africa (IUCEA)

*WP in **bold**: focus WP in the country, other: light activities in the country

WHERE WE WILL WORK AND PRIORITIZATION PROCESS



Research contexts

- Intensifying food systems
- Informal food systems
- Wildlife–livestock–human interface

Medium to high certainty impacts by 2030

CORE PARTNERS

Contact: Hung Nguyen-Viet (h.nguyen@cgiar.org)

#OneHealth_initiative