

# Antimicrobial Resistance Hub

A global research and development partnership to reduce agriculture-associated antimicrobial resistance



The CGIAR Antimicrobial Resistance Hub applies a One Health approach to contribute to mitigating the effects of antimicrobial resistance (AMR) globally, and to support the efforts of low- and middle-income countries (LMIC's) in controlling agriculture-associated AMR risks through promoting and facilitating transdisciplinary partnerships.

## We research behaviour around antimicrobial used, the distribution networks of antimicrobials, and the role of formal and informal markets in perpetuating cycles of inequity

#### Outputs:

- Metrics for AM use in different systems
- Better understanding of systems influencing AM

AM use and

value chains

AMR hub

CGIAR

The AMR hub generates evidence on links between agriculture and public health outcomes and develops solutions that are locally relevant and applicable. Research on how to best implement and scale workable solutions is embedded in capacity development activities and supported through advocacy for enabling These ambitions need effective policies. partnerships across disciplines, which are at the heart of the AMR hub.

use behaviour

Capacity development as a key enabler on the pathway to impact. We capitalize on a network of AMR experts to support capacity building on researching AMR issues and to facilitate access to international AMR research for professionals and institutions in LMICs. An important area of research is how solutions can be brought to scale.

### Capacity

Outputs

- Guidance for scaling of interventions
- Training, mentorship and exchange programs
- Training materials

For more information

### development

Convene partners Provide technical facilities to foster collaborations Facilities for capacity development Online information platform Coordinate communication on agriculture-associated AMR

Data storage and biobank

To better understand AMR risks for people, we study the biology, ecology, and epidemiology of resistant microbes at the animal, human and environment interface.

#### Outputs

• adequate study designs for genotyping research evidence on the extent of resistant bacteria and antimicrobial residues found in livestock, fish, humans, the environment, water and food transmission and genetic mechanisms of resistance in agriculture and the implications for human and animal health



We translate evidence into convincing arguments to engage policymakers and other stakeholders in the AMR discussion. Accepted and feasible policies are key for sustainable solutions that achieve impact.

# Enabling policy

#### Outputs

- Synthesized evidence for policy makers
- Advocacy materials
- Integrated policy approaches towards One Health solutions

Interventions and incentives

Based on One Health approaches, we design, test and evaluate interventions and incentives that lead to behavioural change and reduce agricultureassociated AMR.

#### Outputs

- Typologies of interventions
- Decision support tools to identify best-bet interventions Gender sensitive interventions to mange drivers of AM use

Transmission

dynamics

Cost and benefits of interventions from a One Health perspective

# Benefits

- New significant transdisciplinary partnerships around AMR
- Urgently needed evidence on ways to mitigate agri-food

• A growing, well-managed CGIAR AMR research portfolio facilitating collaboration between CGIAR centers and CGIAR research programs

### Supported by



system associated AMR risks

- Strengthened advocacy and communication on agri-food system associated AMR
- Compelling evidence and support for donors on critical AMR research gaps in LMICs

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 Improved access for national science partners to international AMR research community

Managing partners

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