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.

**AMR hub**

- **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

- **Capacity development**
  - 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.
  - Outputs:
    - Guidance for scaling of interventions
    - Training, mentorship and exchange programs
    - Training materials

- **AM use and value chains**
  - We research behaviour around antimicrobial use, 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 use behaviour

- **Transmission dynamics**
  - 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

- **Interventions and incentives**
  - Based on One Health approaches, we design, test and evaluate interventions and incentives that lead to behavioural change and reduce agriculture-associated AMR.
  - Outputs:
    - Typologies of interventions
    - Decision support tools to identify best-bet interventions
    - Gender sensitive interventions to manage drivers of AM use
    - Cost and benefits of interventions from a One Health perspective

- **Enabling policy**
  - 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.
  - Outputs:
    - Synthesized evidence for policy makers
    - Advocacy materials
    - Integrated policy approaches towards One Health solutions

**Benefits**

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

- A growing, well-managed CGIAR AMR research portfolio facilitating collaboration between CGIAR centers and CGIAR research programs
- Improved access for national science partners to international AMR research community

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