

ICARS

International Centre for **Antimicrobial Resistance Solutions**

Edinburgh 2023 Symposium 22-24 May 2023



INTERNATIONAL
CENTRE FOR
**ANTIMICROBIAL
RESISTANCE**
SOLUTIONS

ICARS is...

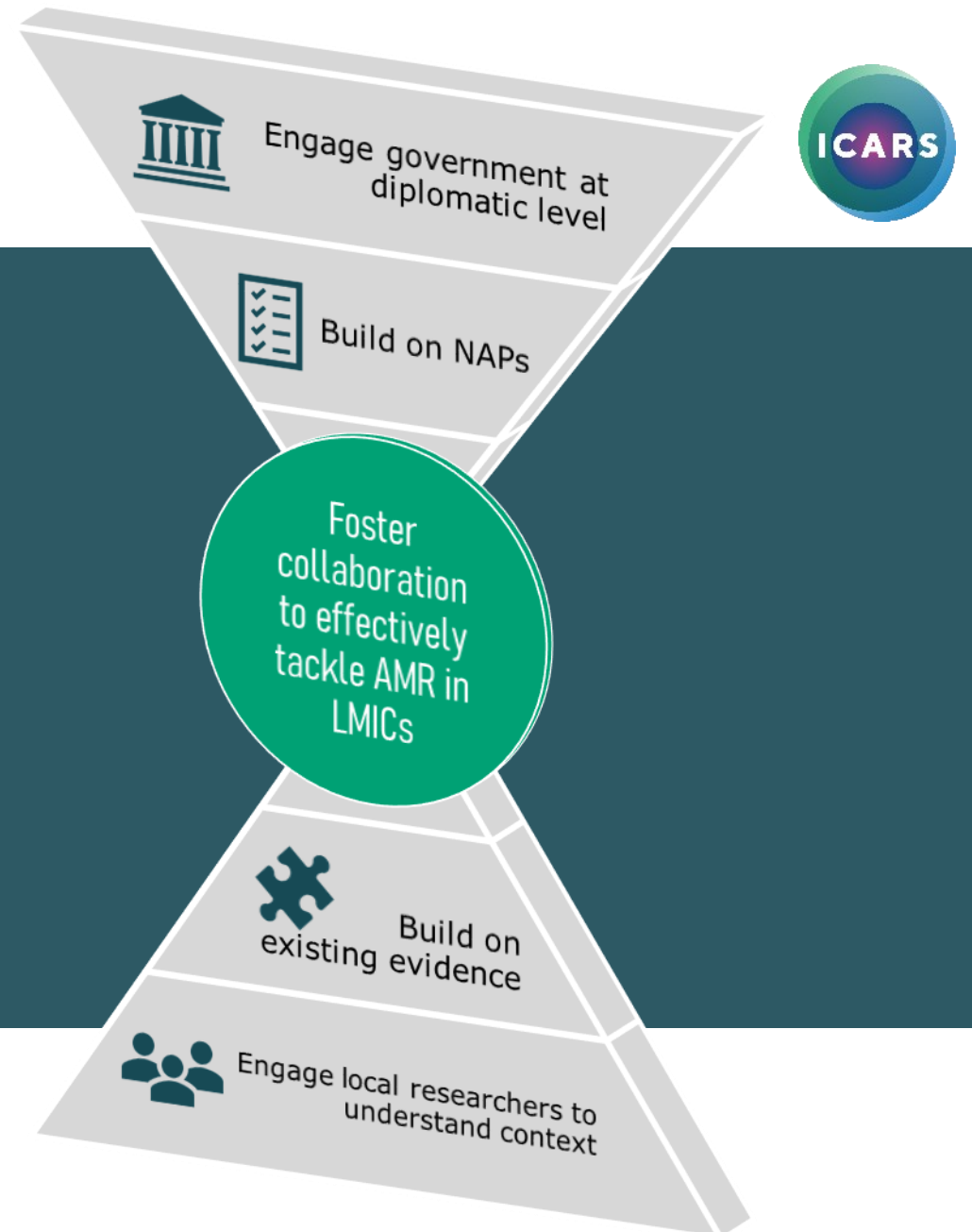
- An international organisation working in partnership with governments in LMICs to develop and test context-specific solutions for AMR.
- Providing **funding and expertise** across the One Health sector.
- Danish-initiated (2018), now an independent self-governed organisation (2021), attracting funding from member states as well as foundations.

Our mission is to partner with LMIC ministries and research institutions to **co-develop and test cost-effective, context-specific AMR solutions** with potential for **scale-up** across the **One Health** spectrum, building on National Action Plans, and informed by **intervention and implementation research**.



Our unique approach

- ✓ A mix between **top-down** and **bottom-up** engagement with LMICs
- ✓ Securing commitment from the **ministerial level**
- ✓ Projects are co-developed and executed by local universities /research institutions
- ✓ International and national partnerships with implementing partners (ReAct, ILRI, Fleming Fund, WHO, GAMRIF etc.) to **avoid duplication** and to **build on existing initiatives**



32

Projects

16

Countries

ICARS-funded
Co-developed between ICARS and LMIC ministries to tackle a specific AMR challenge and contribute to NAP implementation.

Co-funded
Developed with funding partners and local research institutes to generate evidence and advance AMR mitigation nationally and globally.

One Health



Environment



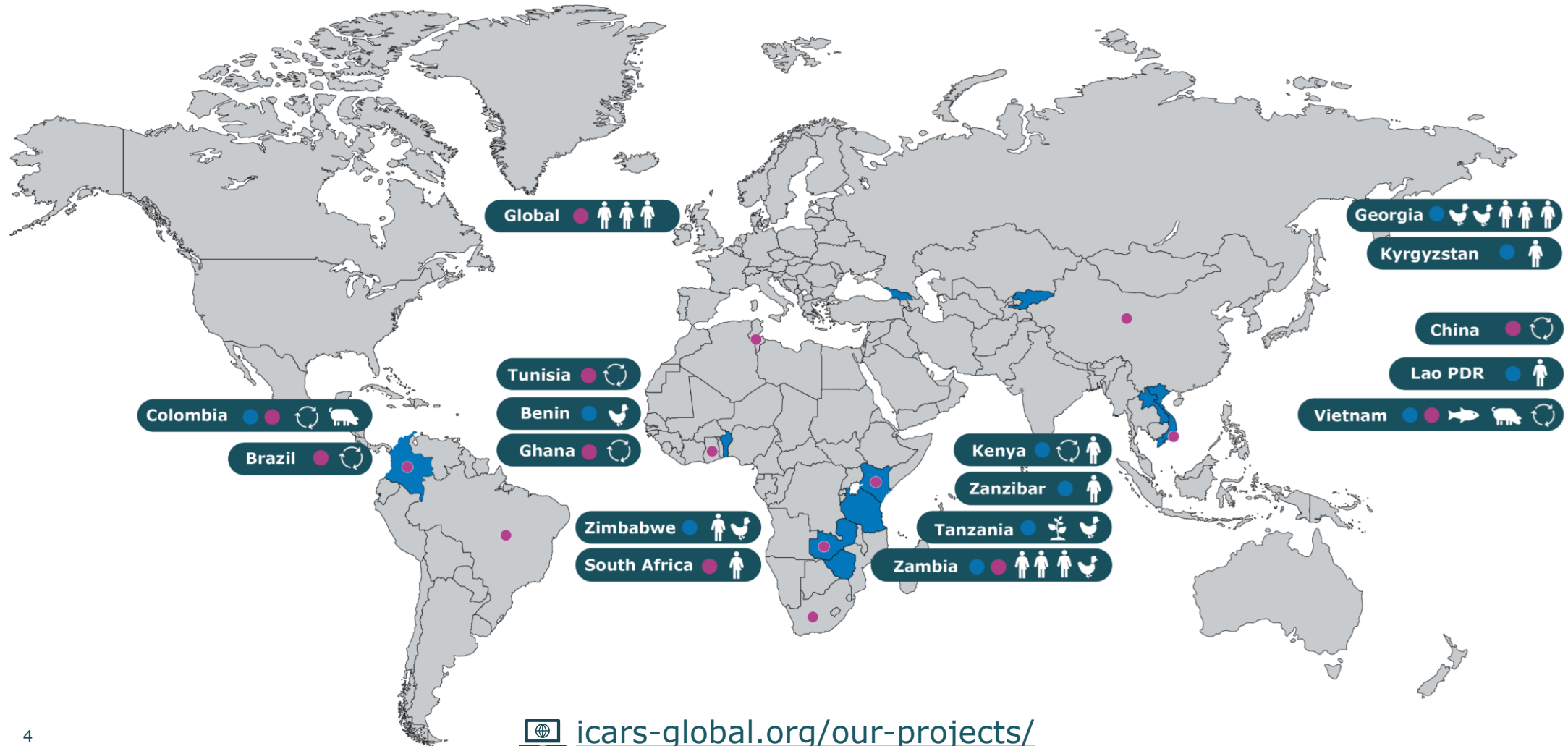
Animal



Human



Aquaculture



icars-global.org/our-projects/

ICARS' interconnected strategic pillars



Pillar 1: Develop and test context specific solutions for AMR mitigation



Pillar 2: Support the translation and uptake of existing evidence and innovation into policies, programmes and practice



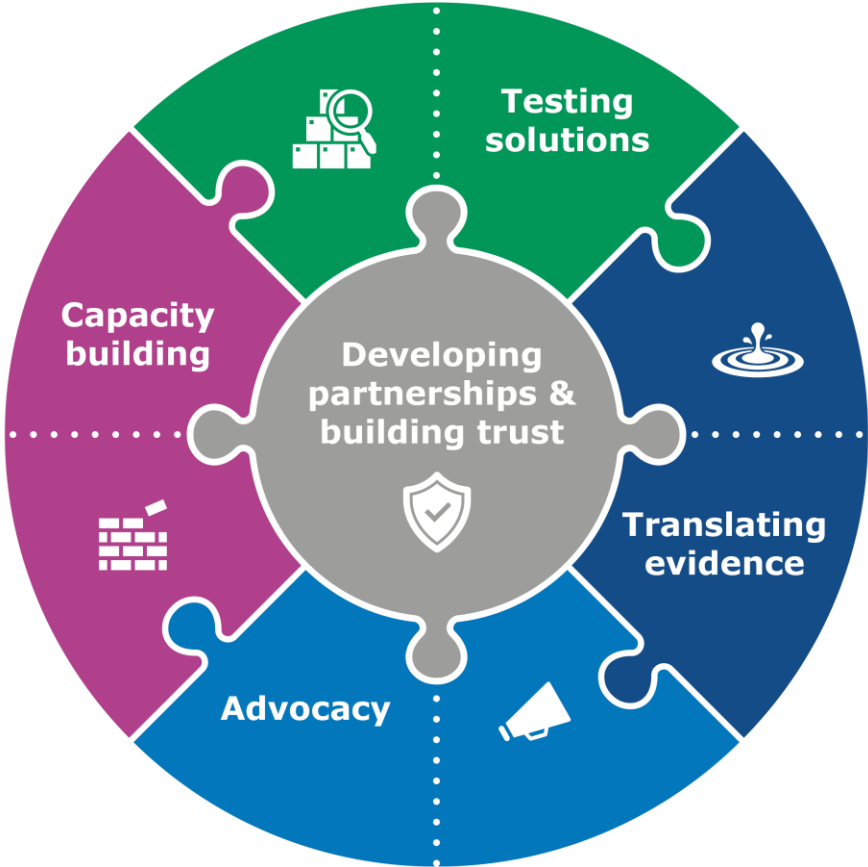
Pillar 3: Advocate for context-specific, country-owned AMR mitigation solutions



Pillar 4: Support targeted capacity and capability building



Cross cutting pillar: A trustworthy partner and platform for delivering context-specific and country-owned AMR solutions



Combating antimicrobial resistance and antimicrobial residues in the Zambian Poultry sector (CAAZAP)

Problem

- Increasing demand for poultry meat
- Little antibiotic regulations and non-prudent use at farms

Project

- **Farmer Field School model** (Farmers and veterinary assistants)
- **Guideline development** (Veterinarians)

Outcome examples

- Improved knowledge, attitudes and practices
- Decreased antimicrobial residues and AMU

Approach for scale-up

- Feasibility and sustainability assessment
- Communication of results to decision makers



Reduce antimicrobial use in aquaculture in Viet Nam

Problem

- High value of seafood and aquaculture export (USD 8.9 billion in 2021)
- Bacterial diseases have a high impact and lead to routine AMU
 - Pangasius: Bacillary Necrosis of Pangasius (BNP) and Motile Aeromonas Septicaemia (MAS)
 - Tilapia: *S. agalactiae*

Project

- Pangasius: assess feasibility and cost-effectiveness, of a commercially available vaccine
- Tilapia: test how in-pond race ways systems can reduce diseases and AMU

Economic, behavioural and natural barriers preventing uptake of vaccines / in-pond race ways systems & strategize on overcoming them will be studied



Manure treatment in Tanzania

Problem

- Poultry manure is a desirable fertiliser used in food production
- Risks of transmission of pathogens, residues & genes across the food chain

Project

Develop and test treatment solutions of manure, leading to safer fertiliser and food products

Partners

Tanzanian Ministry of Livestock and Fisheries, Sokoine University of Agriculture (SUA), Zanzibar Livestock Research Institute (ZALIRI), Ministry of Agriculture, Irrigation, Natural Resources and Livestock, Zanzibar

Expected output

- Identify the best treatment solution in the Tanzanian context
- Create employment opportunities for small businesses for manure composting and fertiliser sales
- Inform and lead to revision of national policies with recommendations regarding the safe use of poultry manure in short cycle horticultural crops



Strengthening gender equality and social inclusion in AMR research

Problem

There is limited investigation on the interplay between gender and AMR, and even less on best-practices for incorporating a gender lens in AMR research.

Project

Develop and embed guidance and resources for integrating a gender lens into AMR research.

Partners

Funding: Danish Ministry of Foreign Affairs, IDRC
Implementing: Human Sciences Research Council, Jive Media and Mahidol University
Oversight: FAO/WHO TDR

Expected output

1. A rapid review on gender and social characteristics in human and animal health in LMICs.
2. Clear and practical guidance for strengthening an intersectional gender lens within AMR research to influence policies, programmes, and practices.





Invitation to partner

We wish to partner with countries and organisations that are committed to mitigating AMR through the development of interventions that inform action and advance NAP implementation.

LMIC Governments

Co-development of AMR mitigation projects through a funded partnership with ICARS

Funding Partners

Governments or foundations that wish to join ICARS and support our efforts

Mission Partners

Governments that support the vision and mission of ICARS and commit to promote AMR at national and regional level

Implementing Partners

Organisations with aligned goals that complement our efforts

Thank you!



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