



# Research and Innovation to Combat Antimicrobial Resistance in the Philippines

*13<sup>th</sup> e-ASIA Call for Proposals*

Sub-theme/topic: Health - Antimicrobial Resistance

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# Global Burden of AMR

- **4,950,000 deaths**
  - associated with bacterial AMR in 2019
- **1 in 5** of these deaths
  - children under 5 years old
- LMICs are *disproportionately affected*
  - ~ higher mortality rates from infections with resistant organisms

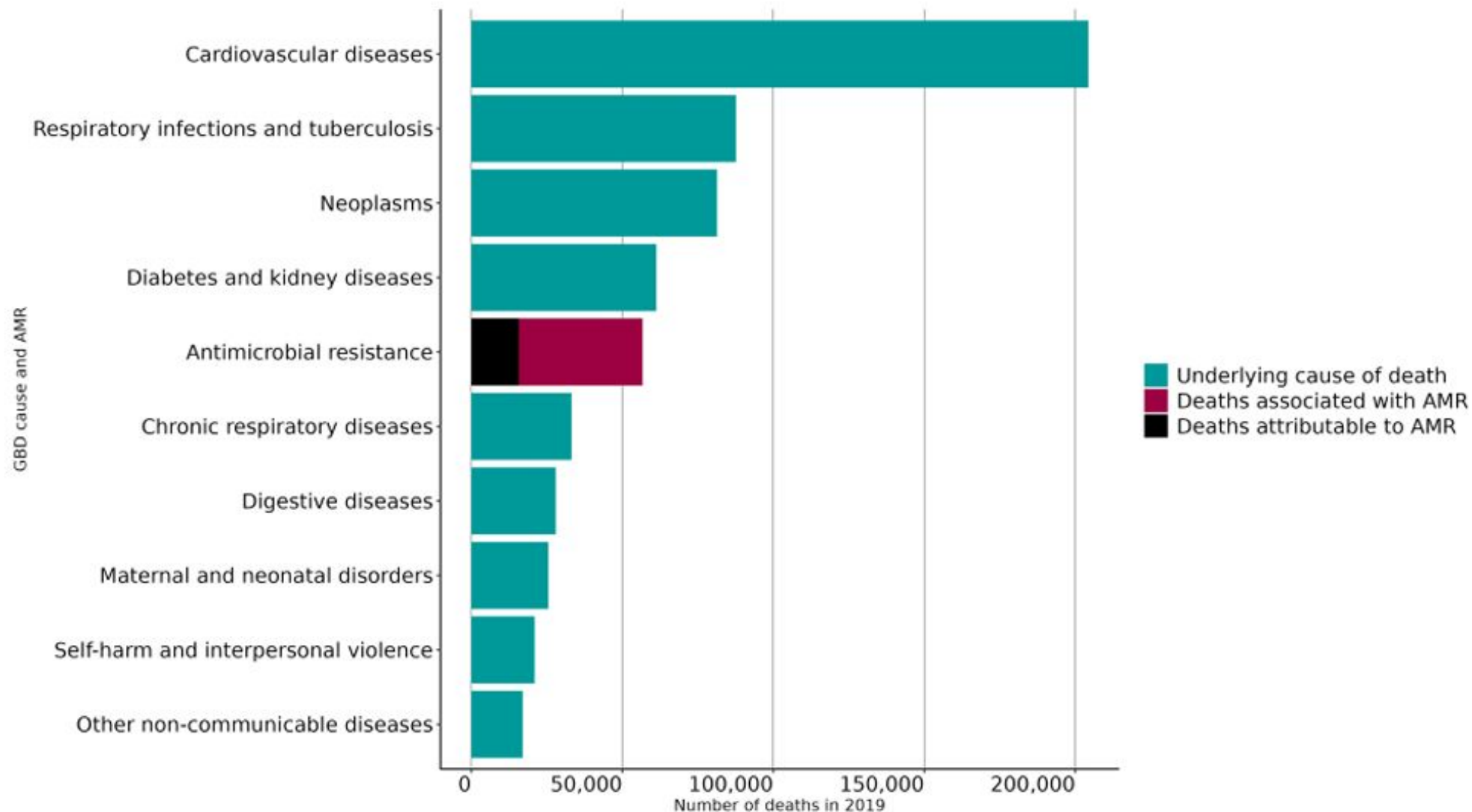


# Burden of AMR in PH

- Philippines has the **77th highest** age-standardized mortality rate per 100,000 population associated with AMR across 204 countries
- In 2019
  - **15,700** deaths attributable to AMR
  - **56,700** deaths associated with AMR



# Burden of AMR in PH

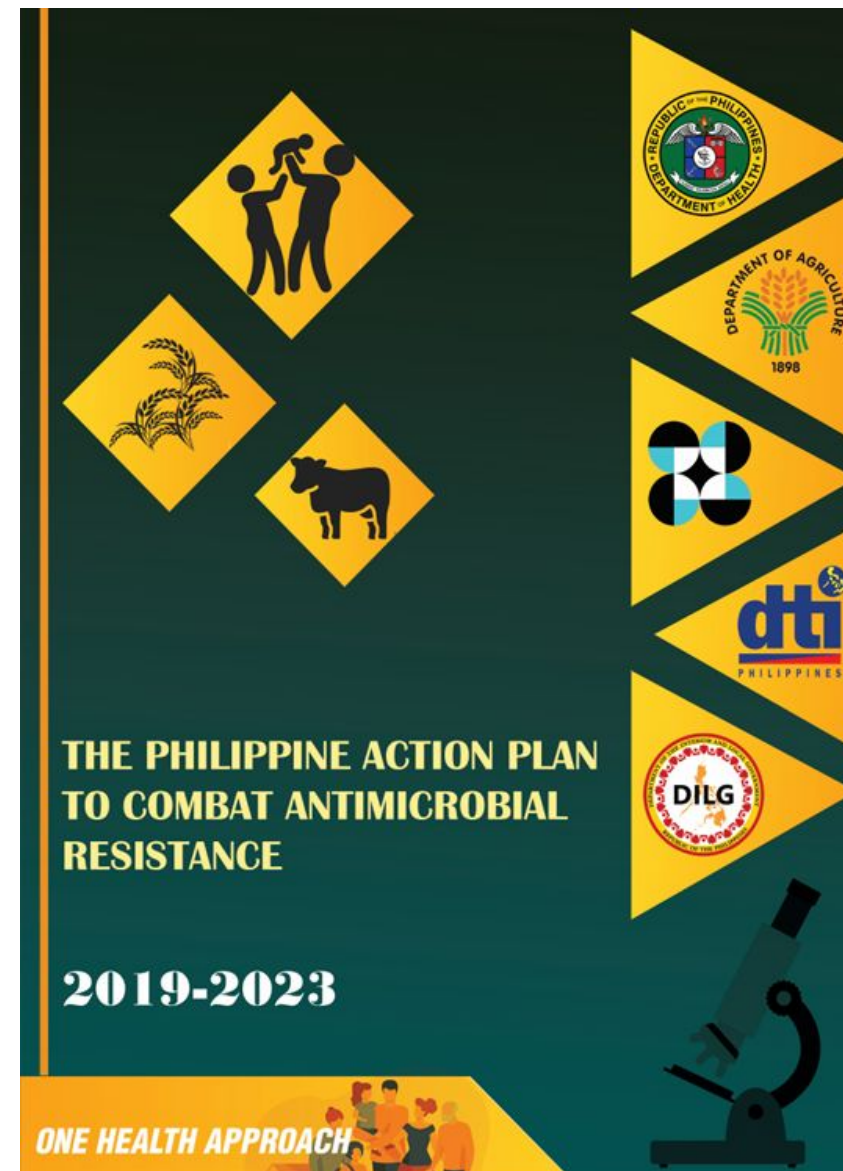


The length of each bar states the number of deaths by GBD cause and those associated with/attribution to AMR in 2019.



# AMR Response in PH

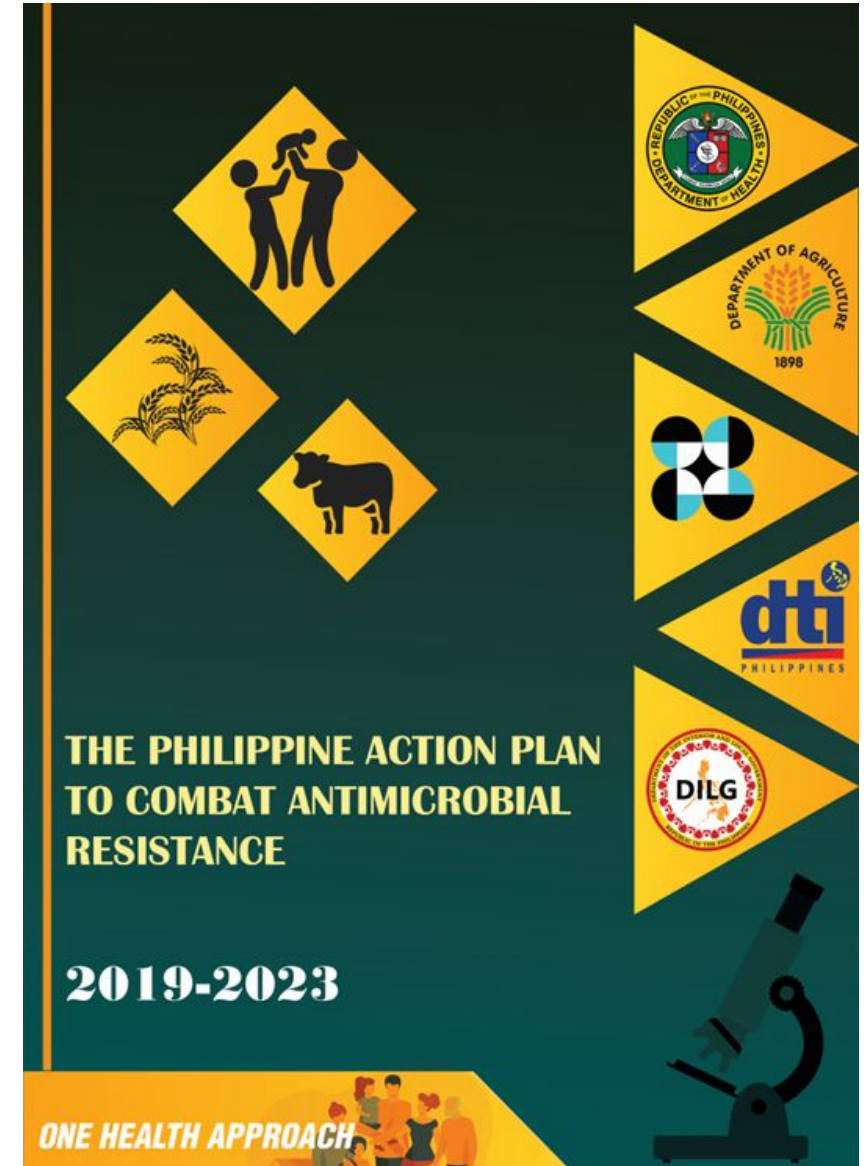
- Inter-agency Committee on Antimicrobial Resistance (ICAMR)
  - National Government Agencies
  - Academe
  - Private Sector





# AMR Response in PH

- **Inter-agency Committee on Antimicrobial Resistance (ICAMR)**
  - National Action Plan
  - Awareness & understanding of AMR
  - Rational use of antimicrobials
  - Strengthen surveillance and monitoring of AMR
  - Research & innovation for AMR
  - International cooperation and partnerships







## AMR National Action Plan Governance

### SUMMARY OF MULTISECTOR INDICATORS IN 2022

- Country has formalized multisector coordination mechanism on AMR ✓
- Country has developed NAP AMR ✓
- Country is implementing NAP AMR ✓
- Country in the process of revising the NAP AMR or developing a new one ✗
- Country has a monitoring and evaluation plan for the NAP AMR ✗
- Country has government supported nationwide AMR awareness campaigns ✓
- Country has established or starting the implementation of an Integrated Surveillance System for AMR ✓

### SECTORS INVOLVED IN AMR MULTISECTOR COORDINATION

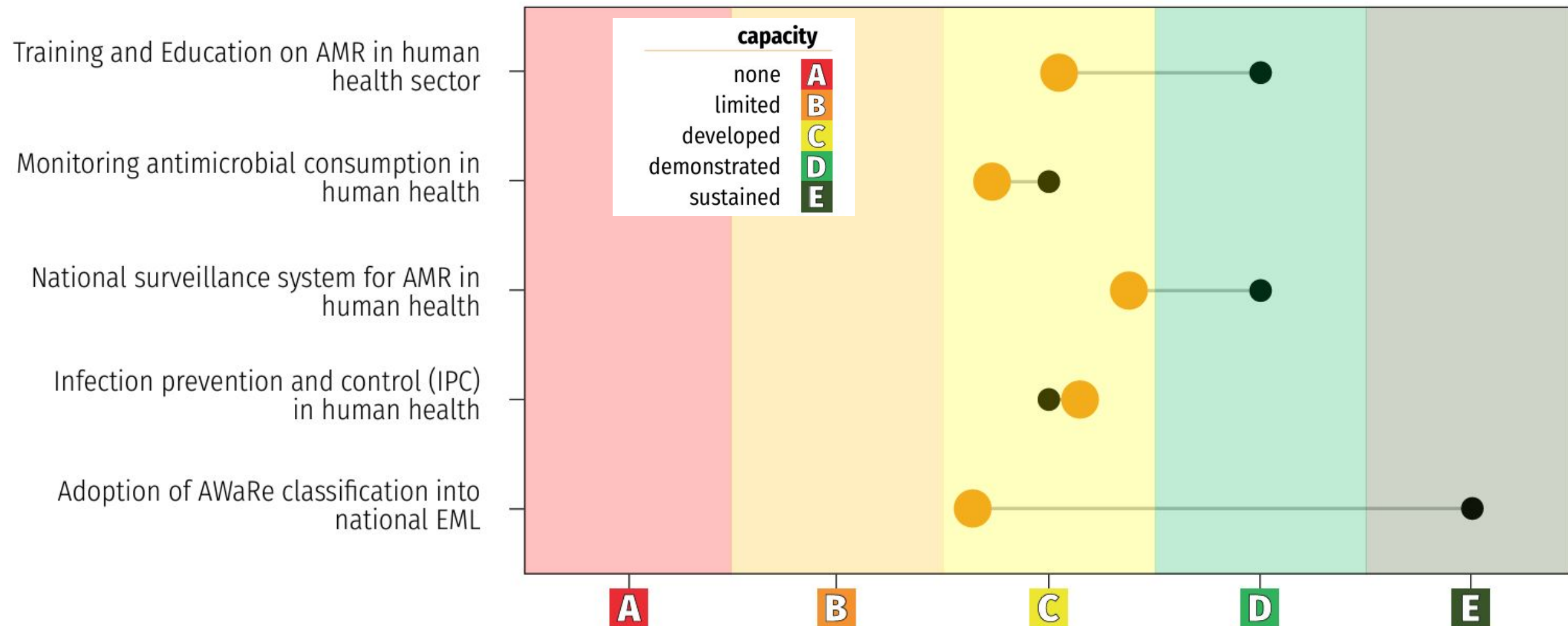
- Human Health ✓
- Terrestrial Animal Health ✓
- Aquatic Animal Health ✓
- Plant Health ✗
- Food Production ✓
- Food Safety ✓
- Environment ✓



## Comparison of global average versus country's responses

Distance visualization between a country's response and global averages

Global ●  
Country ●





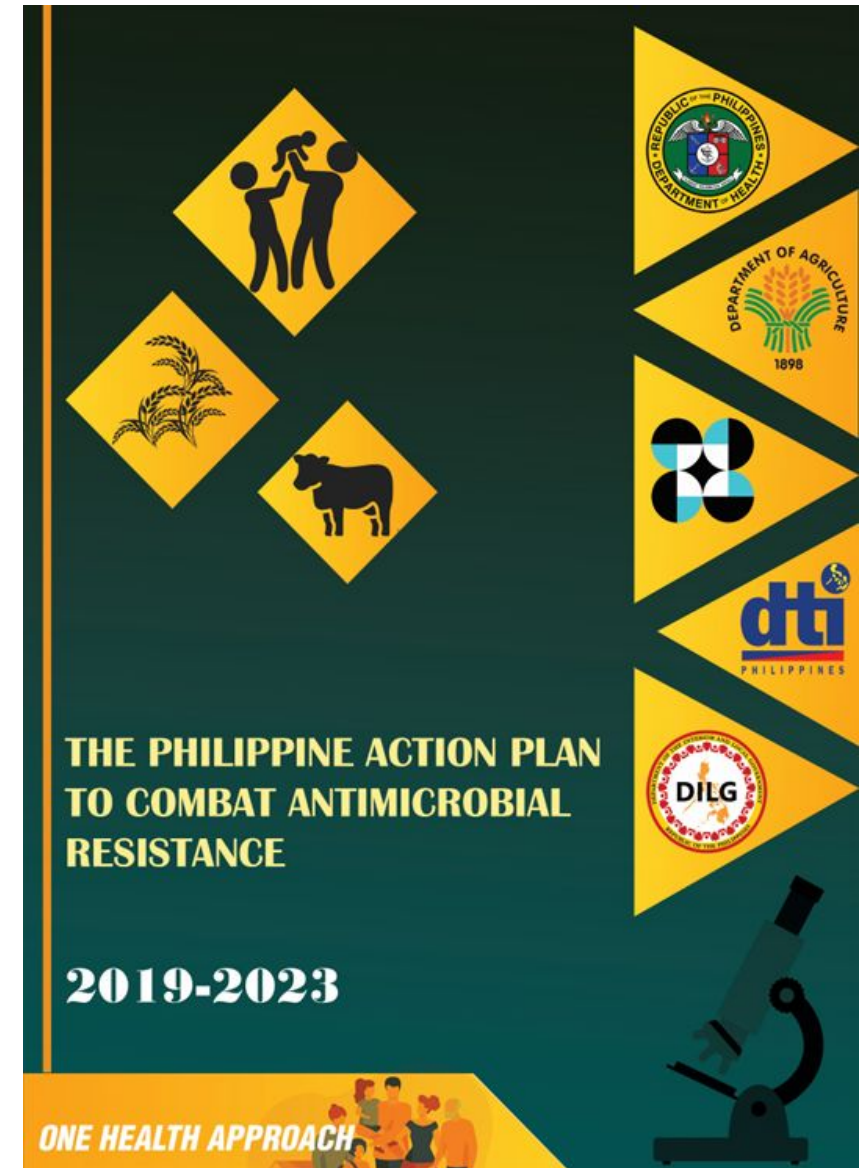


# AMR Response in PH

- **ICAMR**

- 1 of the 7 key strategies:

- *Promote innovation and research on AMR*





# DOST-PCHRD prioritizes AMR

<b>TOPICS OF INTEREST</b>	<b>OUTPUTS</b>
<ol style="list-style-type: none"><li>1. Community knowledge, perceptions, practices, and/or behavior (prescription practices, marketing) correlated with AMR</li><li>2. Studies of alternative therapeutics against antimicrobial-resistant pathogens</li><li>3. Innovative AMR detection technologies</li></ol>	<ol style="list-style-type: none"><li>1. Evidence-based strategies for combating AMR</li><li>2. Genetic, molecular and physiologic AMR studies and innovation for antimicrobials.</li></ol>



# DOST-PCHRD prioritizes AMR

## How?

- Providing support for research and innovation
- Identifying research gaps and facilitating development of proposals involving different sectors, especially health
- Promoting coordination and strengthening **partnerships across sectors**
- Increasing engagement and awareness of AMR



# One Health Approach





# No sector can do it alone...

- Transdisciplinary approach to combat AMR
- Increase collaboration between disciplines and stakeholders, including non-academic communities
- Generate research questions to address key areas of unmet need
- Awareness is everyone's responsibility
- Strengthen health system response and beyond
- Build resilience in the social-ecological system