

The current state of AMR research activities including Alternative to antimicrobials (ATA) and collaboration opportunities in the Philippines

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Background on AMR research in the Philippines

- The Philippines has made significant strides in antimicrobial resistance (AMR) research through initiatives like the National AMR Surveillance Program (ARSP), which now integrates whole-genome sequencing to track resistant pathogens more effectively. Various institutions, including the Department of Health (DOH), Department of Agriculture (DA), and Department of Science and Technology (DOST), collaborate with academic and international partners to monitor and mitigate AMR.

ATA Research Focus

- Research on Alternative Therapeutic Approaches (ATA) in the Philippines, such as phage therapy and antimicrobial peptides, is in the early stages, with studies highlighting the potential of bacteriophages against *Salmonella enterica*. However, regulatory barriers, including complex approval processes involving multiple agencies (e.g., BAI, BFAR, FDA) and the lack of clear guidelines for ATA products, hinder development and implementation. Limited local manufacturing capacity and reliance on imported technologies further challenge the accessibility of these treatments.

Challenges related to AMR/ATA research

- Limited funding & infrastructure
- Complex regulatory framework
- Reliance on imports
- Low awareness & adoption
- Weak AMR surveillance

Solutions

- Increase investment & global collaboration
- Streamline approvals & unify policies
- Invest in local manufacturing
- Enhance education & training programs
- Expand monitoring & data sharing

Collaboration opportunities

Request support for **technology transfer and training** in **whole-genome sequencing** and bioinformatics to enhance AMR tracking. Establish joint R&D projects on **alternative livestock and aquaculture vaccines** to reduce antibiotic reliance.