

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

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Background on AMR research in Sri Lanka

- Limited research conducted to prevent AMR in Sri Lanka
- AMR Surveillances were Conducted in a One Health Approach: Human, Animal, Plant, Food & Feed Sectors
- Contribution of Environmental sector is yet to be developed
- The Government & Academic sectors are the key stakeholders on AMR research

ATA Research Focus

- Bacillus and Lactobacillus sp. isolated and identified from backyard poultry is being used as probiotics in feed
- Phytobiotics (Plant extracts) individually & as a combination, tested to improve broiler growth & meat quality, HDP and egg quality in layers, HDP, hatching egg% and hatchability in parent stocks (broiler/layer)
- **Products were compared with antibiotics and identified to give better performance comparative to Flavomycin and equivalent to Zinc Bacitracin at 0.05% level inclusion**
- Funding was a barrier to develop ATA-based AMR prevention in Sri Lanka. At present it is being implemented through a PPP, introduced by WOAHP

Challenges related to AMR/ATA research

- Challenge 1: Imported feed ingredients for animal production contained AMR bacteria
- Challenge 2: Rapid spread of African Swine Fever in Sri Lanka prevented ATA research in piglets

Solutions

- Solution 1: Test imported feed randomly for ABST
- Solution 2: Initiate the research once a pig population is established

Collaboration opportunities

A collaborative research proposal was submitted to: National Institute of Health & Care Research, UK (*Global Health Research – Researcher-led Band 3*)