



Food and Agriculture
Organization of the
United Nations

First Research Conference on Antimicrobial Resistance and Antimicrobial Use in Food Animals in Asia and the Pacific

6–8 February 2023 | Online

Concept Note

Rationale:

The emergence and spread of antimicrobial resistance (AMR) jeopardize the efficiency of antibiotics in curing humans and animals against bacterial infections that threaten their health. AMR is one of the most concerned with respect for the food animals-human connection. This is because the same classes of antibiotics are used in human and veterinary medicine and humans and livestock share commensal as well as pathogenic bacteria. This has been a key challenge in the food animal production industry.

The prevalence of AMR in bacterial pathogens varies across geographic regions but is highest in Asian countries where foodborne diseases caused by AMR bacterial pathogens are increasingly emerging as a public health challenge. Given that the use of antimicrobials drives the emergence of resistance, their extensive use in the livestock sector of antibiotics is scrutinized as an important contributor to the emergence and spread of AMR. In many Asian countries, large amounts of antimicrobials have been used in food animal production, mainly for the treatment of infection, disease prevention and growth promotion, providing favourable conditions for the selection, spread and maintenance of AMR bacteria. The problematic issue is compounded by the fact that antimicrobial use (AMU) in food animals is still not well regulated and existing regulations are poorly enforced. Despite decades of scientific research, it is still at large unknown about AMR and AMU in the food animal sector e.g., how much the livestock sector contributes to the overall AMR in humans, what the scope and scale of the contribution made by AMU in food animals to AMR in foodborne pathogens and further, to negative consequences for human health.

The First Research Conference on AMR/AMU in Food Animals in Asia and the Pacific (AMRU Asia-Pacific) will be a platform for bringing together scientists, industry, agriculture, policymakers, regulators, stakeholders, and other interested parties in the same virtual conference for **research on food animal production in Asia and the Pacific**.

The key objectives of AMRU-Asia Pacific 2023 are to highlight promising scientific research results and novel technologies in the area of AMR and AMU, assess approaches to translate basic advances in science to optimal policy development and implementation of action strategies and measure challenges to successful mitigation strategies for AMR in food animals in Asia and Pacific.

Research scope:

Research on AMR and AMU for food animal production in Asia and the Pacific is the main emphasis of AMRU Asia-Pacific 2023. Research is primarily conducted on food animals (i.e., livestock, aquaculture) and their products in Asia and the Pacific, of which the researchers' backgrounds are diverse.

Co-organized with:



The tentative scientific agenda includes emphases on the following topics in food animal production in Asia:

1. **Session 1:** AMR emergence and spread in food and agriculture in the Asia-Pacific Region: surveillance, molecular epidemiology and transmission dynamics
2. **Session 2:** AMU monitoring and alternatives to antimicrobials for AMU reduction in Food and Agriculture in Asia-Pacific Region
3. **Session 3:** Bridging innovations and AMR mitigation in Food and Agriculture

Activities:

The activities will include:

1. Keynote presentations
2. Select guest speakers
3. Electronic poster presentation by invited researchers
4. Research sharing by delegates through the **Research Sharing Forum**
5. Additional meeting (if any) at the end of each conference day

We aim for a high-quality scientific conference with a strong and attractive program on AMR and AMU in food animals in Asia. The scientific program will be built around selected topics given by high-quality keynote speakers and guest speakers who are currently being contacted. Electronic posters will be presented by invited researchers. Besides, AMRU-Asia Pacific 2023 participants will also have the opportunity to share their research on electronic research sharing platforms.

Expected participants:

AMRU-Asia Pacific 2023 will be a fully virtual event for all attendees from industry, academia, and government as well as other interested parties all over the world. It will engage not only scientists, (including microbiologists, epidemiologists, health specialists, ecologists, animal and food scientists, environmental scientists, and others), but also policymakers, regulators, and relevant stakeholders.

Registration and fee:

Participation at the event is free of charge, but registration is compulsory.

Conference proceedings:

All keynote and invited speakers including poster presenters will be asked to submit their abstracts which will be combined into a Conference Proceeding. The Conference Proceeding will be available electronically at the conference website at no additional charge. No paper-based conference proceedings will be produced for distribution.