Topics in Global Food Animal Systems: Antimicrobial Resistance

Project Title	Topics in Global Food Animal Systems: Antimicrobial Resistance
Project Summary	Support the Food Animal Systems Team in the Bureau for Resilience and Food Security (RFS) at USAID by performing a literature review and landscape analysis on the linkages between food animal production systems and antimicrobial resistance using a One Health approach.
Country	United States

Project Description

The newly formed bureau for Resilience and Food Security (RFS) houses four technical centers including the Center for Agriculture, Center for Water, Center for Nutrition, and the Center for Resilience. Livestock is a cross-cutting topic for the bureau as livestock can contribute to agricultural production, nutritious diets, and resilient populations. The Livestock Team within RFS is comprised of livestock experts representing various equities in the bureau including agriculture, nutrition, and resilience. This close-knit team collaborates often to provide technical assistance to Missions, assist with livestock program design, and elevate the importance of livestock within the bureau. This team is seeking an intern with an interest in livestock and international development to perform a literature review and landscape analysis on the use of antimicrobials in livestock production in developing countries and what role this might play in contributing to antimicrobial resistance (AMR).

The use of antimicrobials in livestock in developing countries is very different than the US as strict regulations like FDA's Veterinary Feed Directive may not be present. Producers may be able to access and administer antimicrobials without diagnostics or recommendations from an animal health worker. The aim of this project is to perform a literature review and generate a report on the state of antimicrobial use and antimicrobial resistance in developing countries. This can include, but is not limited to, regulations on antimicrobial acquisition and administration, residue limits or levels in meat products, residue testing or levels in the water supply, incidence and prevalence of AMR pathogens in livestock and humans, or other related AMR measures for which scientific literature is available. The second part of this project is a landscape analysis to determine what, if any, programs already exist to address the topic of AMR in developing countries. This will be accomplished through reviewing work of both USAID, our implementing partners, or other donors to determine what work is already ongoing. The intern will also reach out to and engage with our offices located in the field (or USAID Missions) to determine if they have any ongoing programming related to AMR. The final deliverable for this internship will be a written report consolidating the findings of the literature review and landscape analysis. If the intern has a desire, they can deliver a virtual presentation to the bureau synthesizing their findings.

Outside of the project, the intern will have the opportunity to attend weekly Livestock Team meetings and will gain an understanding of our role in providing technical assistance to Missions by attending meetings we have with our partners in the field. The intern will also gain a broader understanding of the role of USAID and our

bureau in promoting and supporting the global effort to achieve food security in the most vulnerable populations.

Required Skills or Interests

Skill(s)
Analytical writing
Graphic design
Research

Additional Information

To see some of the work of our partners including the Livestock Systems Innovation Lab, please see this website: https://livestocklab.ifas.ufl.edu

The Livestock team at RFS is a close knit and diverse group within RFS. The intern will receive mentorship from all team members and gain an understanding of the collaborate nature of USAID. An intern with an interest or background in any of the following areas is ideal: livestock production, animal health, antimicrobial resistance, or One Health.

Language Requirements

None