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Current study: Post doctoral study;  
Veterinary Microbiology - molecular genetics/ FAO, ILRI - MAAIF  

The National Animal Disease Diagnostic and Epidemiology Centre (NADDEC)  
It is the Government institution responsible for national Diagnostic and Epidemio-surveillance programs. The laboratory is the recognized Central Veterinary Laboratory for Uganda. The activities undertaken include; disease outbreak investigation, disease surveillance and response, laboratory diagnostic testing and acts as a national referral facility, including testing for international trade, research and collaborative work to prevent and control diseases, in Uganda, especially those that are epizootic and / or of a trans-boundary nature.

Objectives:  
• To identify, isolate and profile the harmful zoonotic microbes (including GIT commensals) and their possible resistance / susceptibility to antibiotics at current dose ranges prescribed for terrestrial animals in Uganda along the beef, pork and poultry value chains.  
• To describe the genetic relationships / phylogenetics of the isolates.

Methods:  
• Obtain isolates randomly from healthy animals, abattoir surfaces and carcasses  
• Tests on meat will include Total Viable Count (TVC), Coliform counts, detection of coagulase positive Staph. aureus, E. coli O157, Salmonella spp, Clostridium perfringens, Enterobacteriaceae, lactic acid bacteria, faecal streptococci, Salmonella spp., Bacillus anthracis, and neurotoxic clostridia; followed by bacterial culture and isolation  
• Antimicrobial susceptibility tests and classification of bacterial isolates for AMR to antibiotics.  
• Genotyping and characterization of AMR organisms.  

Expected outputs from the project:  
• Microbiological risk factors along key meat value chains in Uganda will be documented.  
• Initiation of a National Antimicrobial Resistance Surveillance and Monitoring Program.  
• An established National Database on antimicrobial susceptibility / resistance.  

Impact of the outputs on agriculture in Africa:  
• Therapeutically effective Veterinary Antimicrobial Drugs  
• Improved livestock production.  
• Availability of safe meat with regional and international market value.  
• A healthy manpower / human population.

Microbial Risk Factors and Indications of Antimicrobial Resistance in Select Meat Value Chains in Uganda

What types of molecular biology equipment do you have at your labs?  
• Conventional PCR Thermal Cyclers  
• Real Time PCR machines  
• Gel electrophoresis apparatus  
• Gel documentation system  
• PCR workstation  
• Weigh scales  
• Micropipettes  
• Centrifuges