GLOBAL ANTIBIOTIC RESISTANCE PARTNERSHIP.
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RESIDUE MONITORING PLANS FOR LIVESTOCK PRODUCTS.
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Background

- Modern food production system should be designed and managed to ensure that exposure of food producing animals to Veterinary drugs does not pose a risk to human health.
- The importance of antimicrobial resistance was underlined by the Joint FAO/WHO/OIE Expert Meeting on Critically Important Antimicrobials that was held in Rome-Italy in 2007
Roles of stakeholders

- Business operator/commercial entities involved in the processing and marketing of food have the primary responsibility for ensuring food safety
- Competent Authority
  - Regulate the use of Veterinary drugs.
  - Verify that effective measure are in place within the veterinary drug distribution and food production system to provide effective protection of consumer.
Scope

- Be based on risk using realistic risk profiles
- Is prevention focused.
- Include regulatory measures proportionate to the relative human health risk
- Recognize that pre-harvest controls & practice are the primary means for ensuring safe food.
- Recognize that the primary role of audits and sampling programmes is to verify the implementation and effectiveness of the pre-harvest control practice.
Residue Monitoring Plans (RMP) - Kenya

• **Implementer:** Director of Veterinary Services

• **Commodities** - The ones in place now are for:
  - Milk
  - Honey
  - Meat (red and white) will be rolled out before the end of the year.

• The two Residue monitoring plans which will be subjected to international peer scrutiny were selected on their potential on global trade.

• Creation of Diseases Free Zones will favour maximum operationizing of the meats Residue Monitoring Plans (RMP).
Legal Framework

- Animal Disease Act (Cap 364)
- Pharmacy and Poisons Act (Cap 244)
- Food, Drug And Chemical Substances Act (Cap 254)
- Pests Control Products Act (Cap 346)
- Public Health Act (Cap 242)
- Standards Act (Cap 496)
- Fertilizer and Animal Foodstuffs Act (Cap 345)

These Acts have rules regulating use of drugs in foods/feeds
Infrastructures

• **Staff:**
  - Public 450 Vets spread from Headquarters to the Districts.
  - Para-Vets based up to location level.
  - Vets Private 1,500 spread all over the country
  - DVS has prohibited the use of Community Animal Health Workers
    The rationale is professional use of vet drugs amongst other issues

• **Laboratories**
  - Central Veterinary Investigations Laboratory
  - University of Nairobi
  - Bora Biotech Limited
  - Kari- Trypanosomiasis Research Centre
  - Kephis.
Production factors

• **Species:**
  : Honey Bee *Apis melifera* ssp

• Cattle

• **Honey:**
  ➢ Organics (Wild) production system.
  ➢ No risk from Antibiotics, through same cannot be said of pesticides. Production of honey is about 1,400 m tons

• **Milk:**
  ➢ Dairy herd of 3M cattle
  ➢ Kenya/produces 4.2 billion liters of milk/annually with 45% consumed at the farm level while the rest is processed.
Sampling

- Sampling is currently done by the DVS staff with assistance of the Depts. of Public Health & Toxicology of the University of Nairobi.
- The same procedure is entrenched in the residue monitoring plan for various livestock products.
Antimicrobials Of concern

- Chloramphenicol
- Nitrofurans
- Nitroimidazoles
- Antibacterial substances-
  tetracyclines, sulphonamides
- **Macrolides**
  - Tylosin
- **Aminoglycosides**
  - Streptomycin
- **Fluoroquinolones**
Results of Previous years for various products.

- **Meat**
- **2006 : Bora Biotech Ltd**
  - 40 Samples Chloramphenicol Nil:
  - 40 Samples Nitrofurans
- **2007: KARI:**
  - 59 Samples: Nitrofurans - negative
  - Goat, bovine, pig - liver. Muscle & Kidneys
  - Sulphonamides, tetracycline, penicillin chloramphenicols
- **2008/9: KARI**
  - Chloramphenicol - negative
  - Nitrofurans --negative
Challenges

- Inadequate food control systems
  - Well equipped laboratories
  - Inadequate human resource in number and skill.
- Very low funding that does not meet scientific sampling procedures.
- Public awareness at consumer and production levels.
Way forward

• Veterinary drugs should be regulated by the relevant competent authority in Animal Health.
• Veterinary Department should be adequately funded in order to operationize the various Residue Monitoring plans.
• Implement strategies to prevent the transmission of resistant bacteria, especially Salmonella, Campylobacter and E.coli
Thank You