

#### AMU Data Collection and Report to the OIE Zambia

Presentation to

The OIE Sub-Regional Workshop on the Database on Antimicrobial Agents Intended for use in animals in Eastern and Southern Africa, 29-31 October 2019, Mombasa

> Dr Fusya Y. Goma Ministry of Fisheries and Livestock (MFL)

1



# **Presentation Outline**

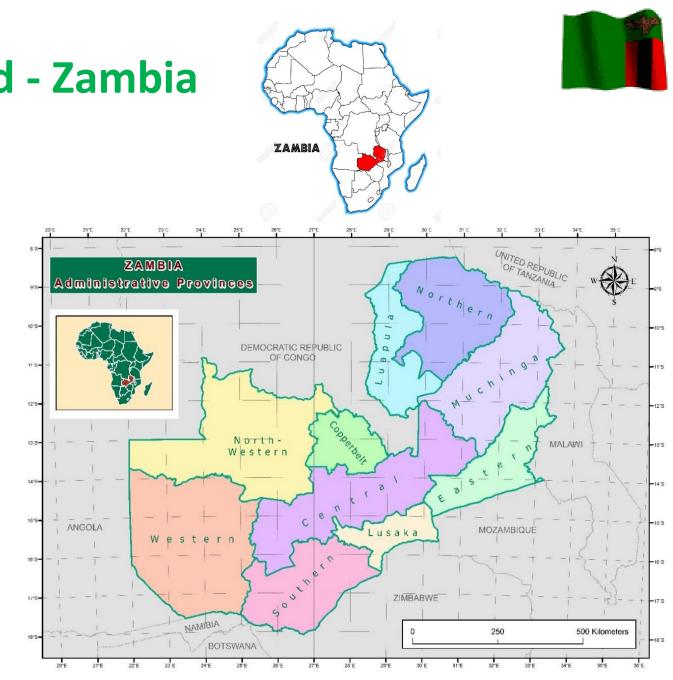
- Background
- Regulation of Veterinary Antimicrobial Agents
- AMU data collection
  - -Data Sources
  - Presentation of the AMU data
- Activities undertaken to Address AMR
- Conclusion

# **Background - Zambia**

- Land size: 754,600 sq. Kilometers
- Population: 17 million people
- Administratively: 10 provinces , 116 districts
- Economy: Mining- copper
- Capital City: Lusaka
- Land-linked: Surrounded by 8

   Countries: Tanzania, Malawi,
   Mozambique, Zimbabwe,

   Botswana, Namibia, Angola and
   The Democratic Republic of Congo



# Background...main features of agriculture and livestock sector



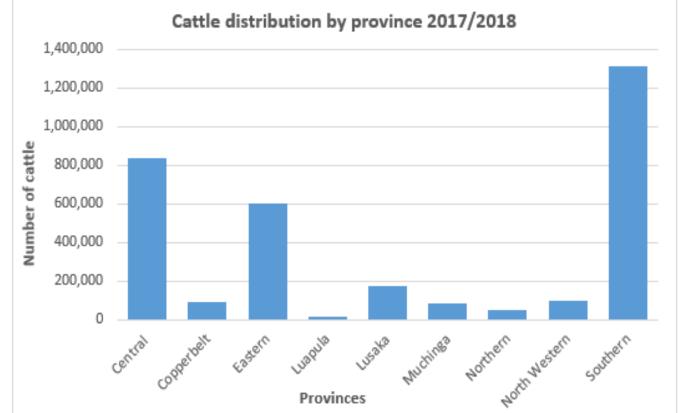
- The agricultural sector supports the livelihood of over 70% of the population
- The Agricultural sector contributes about 21% of GDP. Of this 21% the Livestock sector's accounts for approximately 42%
- Zambian Government is focusing on agriculture to be one of the key drivers of the economy. **Created a Ministry of Fisheries and Livestock** to put focus on the sector to foster development.
- The livestock production systems in the country are broadly classified into **traditional and commercial**.

# **Background ....continued**

#### Animal Populations 2017/2018

- Cattle: 3,714,667
- Goats and sheep : 3,753,958
- Pigs: 1,082,765
- Broiler/Layer chickens: approx. 50,000,000
- Local chickens: 15,313,780
- **Dogs:** 968,372
- Rabbits: 550,790





# **Regulation of VMP**

Ministry of Fisheries and Livestock : Department of Veterinary Services
The Animal Health Act No. 27 of 2010 provides for:
The production, distribution and use of veterinary drugs (including import and exports),
biological, vitamins, minerals and pesticides

•Ministry of Health: Zambia Medicines Regulatory Authority (ZAMRA) The Medicines And Allied Substances Act No. 3 of 2013- provides for the : Regulation of pharmacies and agro-veterinary shops Regulation of the manufacture, distribution and supply of medicines and allied substances (including imports and exports)

•Ministry of Fisheries and Livestock : The Veterinary and Para-veterinary Professionals Act No.45 of 2010 regulates the conduct of veterinary professionals through the Veterinary Association of Zambia and Veterinary Council of Zambia. The council has been mandated to prescribe the qualifications of suitably qualified personnel to manage the Agro-veterinary shops

### **Regulation of VMPs**

- There are no manufacturing firms for VMP in the country and all VMPs used in country are imported.
- Department of Veterinary Services (DVS) issues import permits for importation of VMPs for with marketing authorization.
- DVS staff at the ports of entry undertake the inspection of consignments of VMP.
- Porous borders pose a challenge in regulating imports of VMPs.

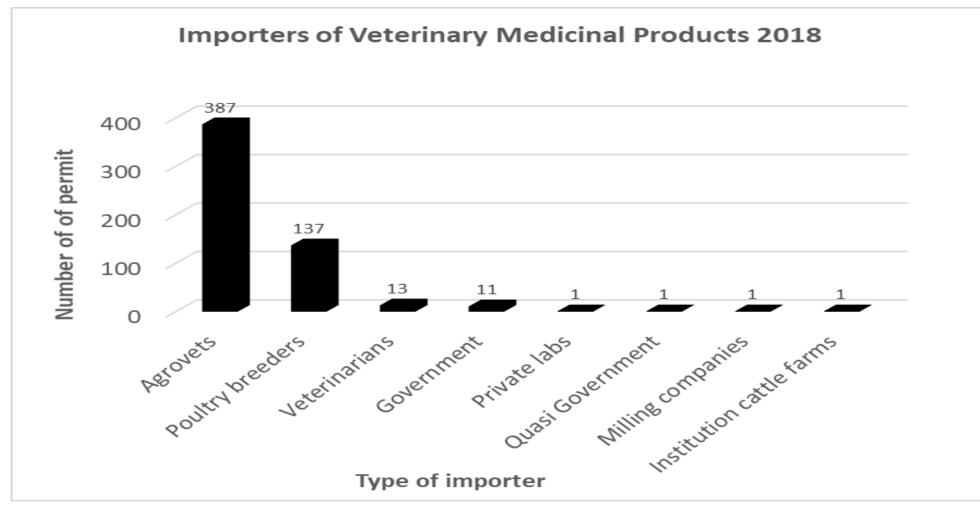
### **AMU data collection**

AMU data collection for submission to the OIE started in 2015. So far it has been undertaken for 2015 to 2018.

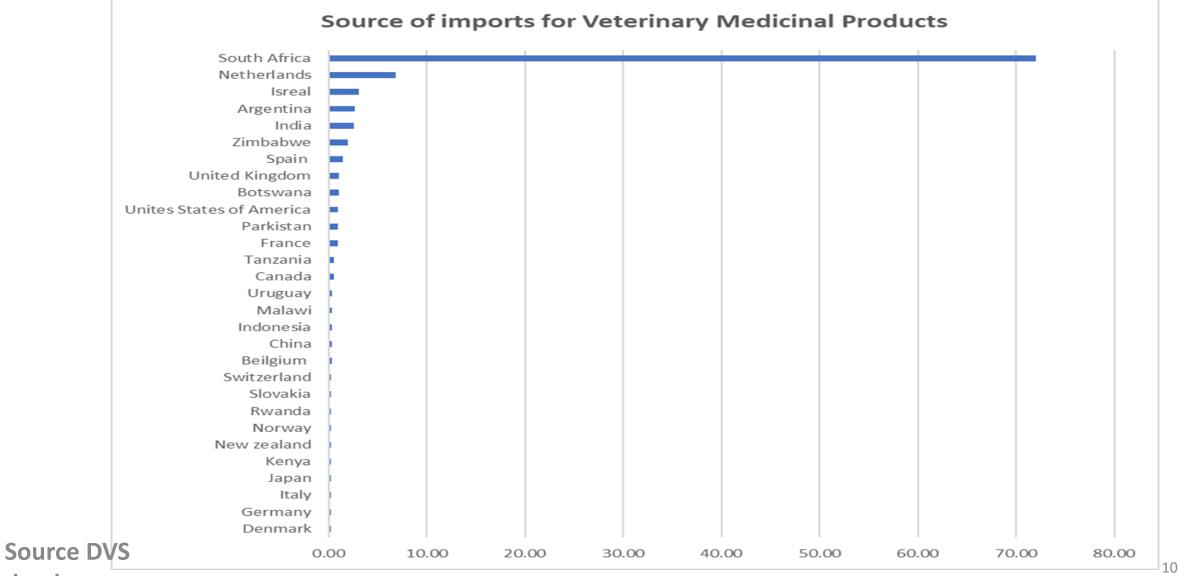
#### **Data Sources**

- Zambia Revenue Authority Import and Export data (could not be used because it can not differentiate between human and veterinary medicines)
- Medicines Regulatory Authority (ZMRA)- data not in a form what could be submitted to the OIE
- Major Importers of VMP (data collected for 2015 & 2016)
- Imports and Exports data from DVS for issuance of permits (2017, 2018)

#### **Types of organizations involved in VPM importation**

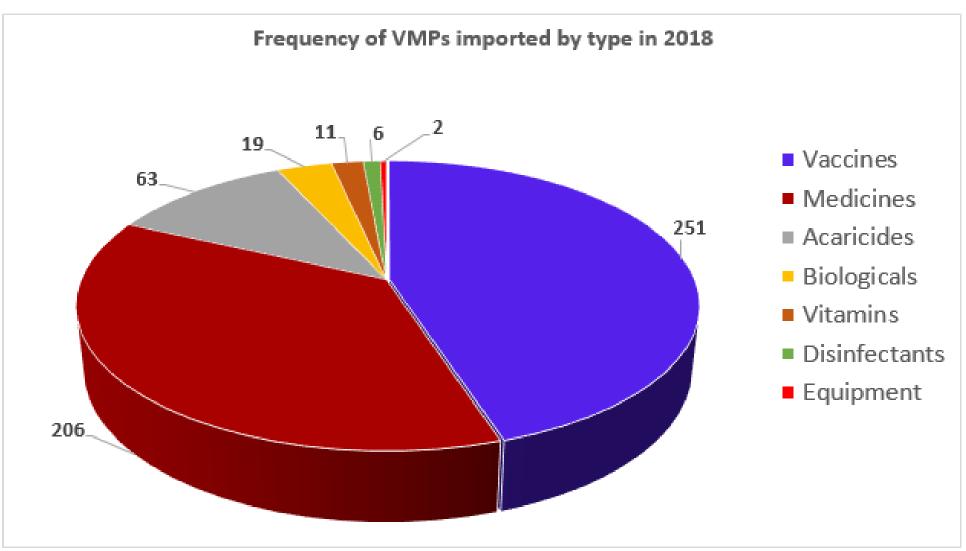


#### **Countries where VMPs are sourced**



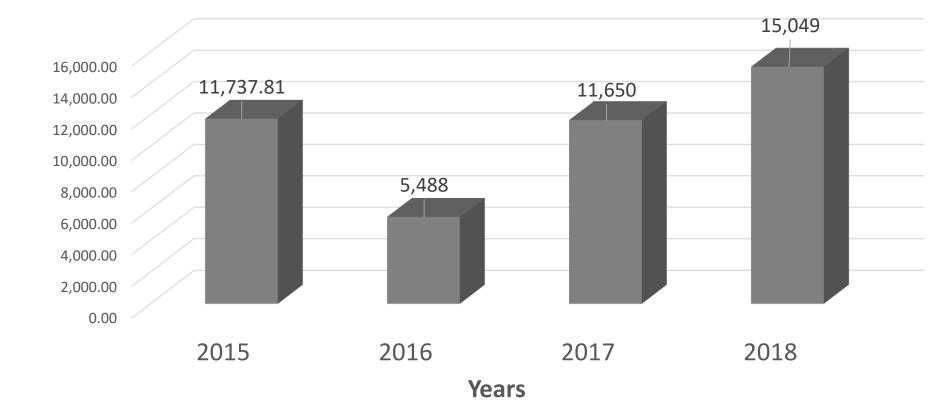
database

#### Frequency of importation of VMP

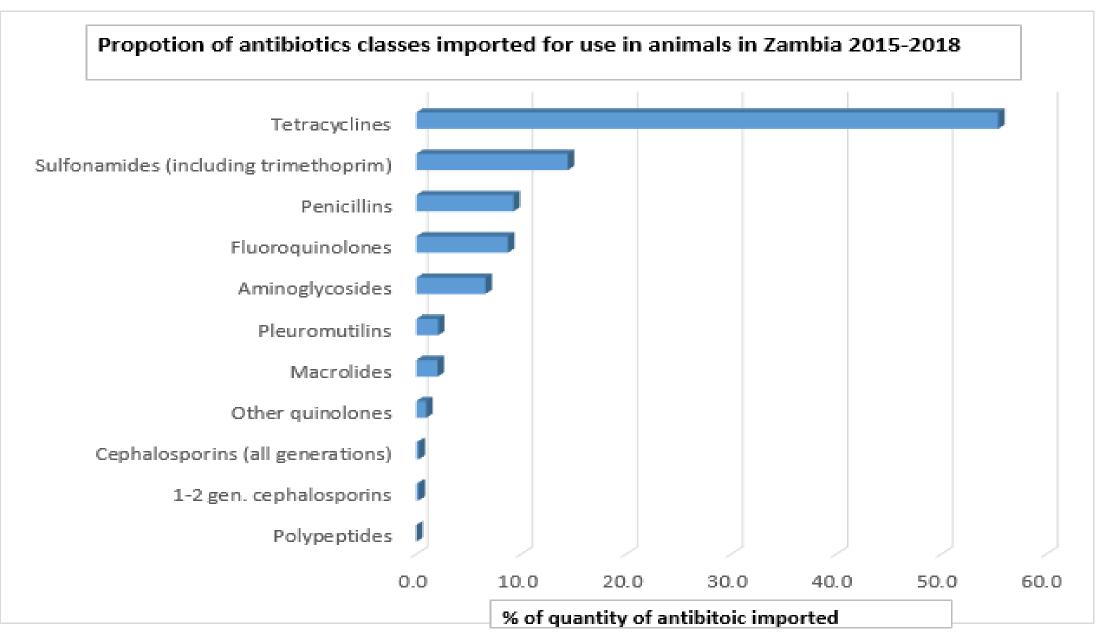


• Quantities of antibiotics imported for animal use

Total quantities of veterinary antibiotics imported 2015 - 2018



#### Presentation of the AMU data... picture of antibiotic classes



#### AMR in animals in Zambia

 Antimicrobial resistance (AMR) in Zambia has been detected in microbes from animals through the works of :Chishimba K et al 2016 ; Mainda G et al 2015; Mubita, C et al 2008; Ngoma M et al 1993 among other studies

• AMR has mostly been cited for Tetracycline's, Penicillin's, Sulphonamides and Microlides in cattle and poultry. This is consistent with the pattern of the most used antibitocs.

# AMU data usage

- The data has been shared with the National Antimicrobial Resistance Coordinating Committee
- Utilized in the formulation of the National Surveillance strategy on AMR
- Shared the information with Academia, private veterinarians and feed industry stakeholders during recent workshop to discuss the phasing out of antibiotics for non-therapeutic use.

# Summary of Activities carried to address AMR

- Formed the AMR Coordinating Committee with appointment of Focal Point Persons from various sectors (2016)
- Conducted Situation Analysis on AMR (2016)
- Development of the multisectorial AMR National Action Plan (2017)
- Orientation of Policy makers and senior Government officials on AMR (2017)
- OIE data collection for antibiotic use (2015, 2016, 2017, 2018)
- Drafted AMR surveillance strategy (2018)

#### Government of the Republic of Zambia



#### COUNTRY SITUATION ANALYSIS FOR ANTIMICROBIAL RESISTANCE.









Government of the Republic of Zambia

# Summary of Activities carried to address AMR

- Development of awareness materials for various stakeholders (February, 2017)
- Sensitization of Agro-veterinary shops on AMR (September, 2017)
- Media orientation workshop (2017)
- World Antibiotic Awareness Week (2017 & 2018)- -
  - -Walk to raise awareness
  - -Poultry Farmers sensitization workshop
  - -Sending of Bulk SMS to farmers
  - -National radio program



# Summary of Activities carried to address AMR

- FAO-ATLASS Assessment of Veterinary Laboratories for AMR surveillance (2017).
- Training of laboratory personnel in bacterial isolation and Antibiotic Suspect ability Testing (2018)
- Knowledge, Attitudes and Practices (KAP) Study in the Broiler Value Chain in 2 Provinces of Zambia. Currently formulating interventions to address the key issues identified in the KAP study. (2018)
- Held a workshop in collaboration with the Center for Science and Environment of India toobtain stakeholder views oncoming up with a road map to phasing out antibiotics use for non therapeutic purposes (2019)
- In the process of finalizing the Fleming Fund Mott MacDonald Project to support AMR surveillance in the Human and Animal Health Sectors (2019)

# **Conclusion- AMU data submission to the OIE**

- Current data is presumptive as it is obtained from import applications and some permits are not utilized, while some importers may bring in less quantity than applied for.
- Limited human and financial support for AMU data collection. This is a major challenge in the submission of data the OIE.
- There is need to develop a designated AMU data management system in the required OIE reporting format. This would greatly ease the collection of the VMP data.

# **Thank You for your attention!**