

The background of the slide is a complex, repeating pattern. It consists of a grid of diamond shapes, each containing a silhouette of a different animal. The animals include various birds, mammals, and reptiles. In the center of the slide, there is a large, semi-transparent globe showing the continents and oceans. The text is overlaid on this central globe.

# **OIE INITIATIVES ON ADDRESSING AMR THROUGH FOOD FROM ANIMALS: A REGIONAL PERSPECTIVE**

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# PRESENTATION OUTLINE

- ANTIMICROBIAL RESISTANCE AND LIVESTOCK
- INTRODUCTION TO OIE
- OIE INITIATIVES FOR TACKLING AMR
- CHALLENGES IN ASIA PACIFIC REGION
- CONCLUSIONS

# ANTIMICROBIAL RESISTANCE AND LIVESTOCK

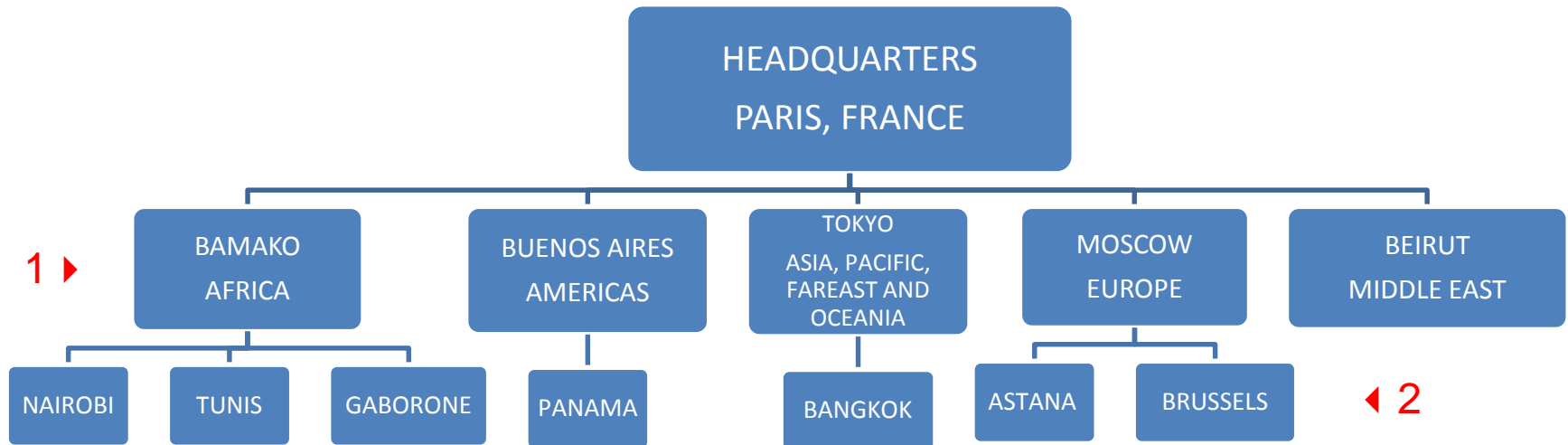
- SIR, ALEXANDER FLEMING WHO DISCOVERED PENICILLIN IN 1928 DURING ACCEPTANCE OF NOBEL PRIZE WARNED THE RISK OF MICROORGANISMS DEVELOPING RESISTANCE TO PENICILLIN IF NOT PROPERLY USED.
- DUE TO AMR INFECTIONS CURRENTLY ABOUT 700,000 PEOPLE DIE ANNUALLY AND IS ESTIMATED TO REACH TO 10 MILLION BY 2050 IF AMR ISSUES NOT ADDRESSED PROPERLY.
- GLOBAL CONSUMPTION OF ANTIMICROBIALS IN FOOD ANIMAL PRODUCTION WAS ESTIMATED AT 63,151 ( $\pm 1,560$ ) TONS IN 2010 AND IS PROJECTED TO RISE BY 67%, TO 105,596 ( $\pm 3,605$ ) TONS IN THE WORLD AND IN ASIA IT IS ESTIMATED TO BE 51,851 TONS, REPRESENTING 82% OF THE CURRENT GLOBAL ANTIMICROBIAL CONSUMPTION BY 2030.
- SINCE 1987 NO NEW CLASS OF ANTIBIOTICS HAVE BEEN BROUGHT INTO CLINICAL PRACTICE.

- ANTIMICROBIALS HAVE BEEN ADDED -- IN LOW DOSAGES-- TO ANIMAL FEED TO PROMOTE FASTER GROWTH IN MANY PARTS OF THE WORLD. THE MORE ANTIMICROBIALS ARE MISUSED, THE LESS EFFECTIVE THEY ARE AS MEDICINES IN BOTH VETERINARY AND HUMAN HEALTHCARE LEADING TO AMR TO EVOLVE.
- THIS POSES A THREAT NOT ONLY TO HUMAN HEALTH, BUT ALSO TO ANIMAL HEALTH, ANIMAL WELFARE, AND SUSTAINABLE LIVESTOCK PRODUCTION -- AND THIS HAS IMPLICATIONS FOR FOOD SECURITY AND PEOPLE'S LIVELIHOODS.
- **OIE ADVOCATES** MEMBER COUNTRIES FOR ENSURING THE RESPONSIBLE AND PRUDENT USE OF THESE INVALUABLE MEDICINES IN ANIMALS, IN ACCORDANCE WITH THE INTERGOVERNMENTAL STANDARDS OF THE OIE THAT WE WILL BE ABLE TO SAFEGUARD THEIR **EFFICACY**.

# OIE : AN INTERGOVERNMENTAL TECHNICAL AND SCIENCE BASED ORGANIZATION

**1924:** CREATION OF THE OFFICE INTERNATIONAL DES EPIZOOTIES (OIE)

**2003:** RENAMED AS WORLD ORGANIZATION FOR ANIMAL HEALTH (OIE)



1. OIE REGIONAL REPRESENTATIONS

2. OIE SUB-REGIONAL REPRESENTATIONS



# PRESENCE OF OIE

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**OIE: 180 Member Countries**



# MANDATES OF OIE

**"IMPROVE ANIMAL HEALTH AND ANIMAL WELFARE GLOBALLY"**  
**TO MEET THIS MANDATE IT HAS 6 MISSIONS**

- ENSURE TRANSPARENCY IN THE GLOBAL ANIMAL DISEASE SITUATION
- COLLECT , ANALYZE AND DISSEMINATE VETERINARY SCIENTIFIC INFORMATION
- ENCOURAGE INTERNATIONAL SOLIDARITY FOR THE CONTROL OF ANIMAL DISEASES
- SAFEGUARD WORLD TRADE BY PUBLISHING HEALTH STANDARDS FOR INTERNATIONAL TRADE IN ANIMALS AND ANIMAL PRODUCTS UNDER THE MANDATE OF WTO SPS AGREEMENT
- IMPROVE THE LEGAL FRAMEWORK AND RESOURCES OF NATIONAL VETERINARY SERVICES
- PROVIDE A BETTER GUARANTEE OF FOOD OF ANIMAL ORIGIN AND PROMOTE ANIMAL WELFARE THROUGH A SCIENCE-BASED APPROACH

# OIE INITIATIVES ON AMU AND AMR

- OIE RECOGNIZED THE NEED TO TACKLE THE AMR ISSUES IN 1990s AND ORGANIZED TWO INTERNATIONAL CONFERENCES RESPECTIVELY IN 1999 AND 2001 AND DEVELOPED 4 GUIDELINES ON SURVEILLANCE OF AMR, MONITORING THE QUANTITIES OF AMU IN ANIMAL HUSBANDRY, RESPONSIBLE AND PRUDENT USE OF ANTIMICROBIALS AND RISK ASSESSMENT FOR AMR FROM THE USE OF ANTIMICROBIALS IN ANIMALS WHICH WERE ADOPTED AND PUBLISHED IN TERRESTRIAL CODE.
- ORGANIZED **GLOBAL CONFERENCE** ON THE RESPONSIBLE AND PRUDENT USE OF ANTIMICROBIAL AGENTS FOR ANIMALS FROM 13-15 MARCH, 2013 IN PARIS FRANCE, WITH THE THEME OF **INTERNATIONAL SOLIDARITY TO FIGHT AGAINST ANTIMICROBIAL RESISTANCE**.  
*"WHICH MADE 12 RECOMMENDATIONS TO OIE AND 16 RECOMMENDATIONS TO MEMBER COUNTRIES AND EMPHASIZED TO STRENGTHEN **TRIPARTITE** ONE HEALTH APPROACH FOR RESPONSIBLE AND PRUDENT USE OF ANTIMICROBIALS IN HUMAN AND ANIMALS TO MINIMIZE THE DEVELOPMENT OF AMR AND USE ALL THE POSSIBLE TOOLS TO TACKLE THE PROBLEM OF AMR".*
- THE GLOBAL ACTION PLAN ON AMR ENDORSED BY WHO/FAO/OIE AND AGREED TO PUT AMR ISSUES ON PRIORITY AND TO ACT JOINTLY.



# CONTD.

- RESOLUTION NO. 26 OF 83rd GENERAL ASSEMBLY **ON COMBATING ANTIMICROBIAL RESISTANCE AND PRUDENT USE OF ANTIMICROBIAL AGENTS IN ANIMALS** ADOPTED BY WORLD ASSEMBLY OF DELEGATES ON 26th MAY, 2015 AND RECOMMENDED OIE:
  - ✓ **DEVELOP AND UPDATE STANDARDS** AND GUIDELINES RELATED TO AMR AND AMU INCLUDING LIST OF VET ANTIMICROBIALS.
  - ✓ **UPDATE DATABASE** ON THE USE OF ANTIMICROBIALS IN MEMBER COUNTRIES .
  - ✓ **IMPROVE VETERINARY LEGISLATION** AND EDUCATION IN ORDER TO IMPLEMENT OIE AND CODEX ALIMENTARIUS STANDARDS AND GUIDELINES.
  - ✓ **ENCOURAGE VSB** AND VET PROFESSION TO DEVELOP AND IMPLEMENT GOOD VETERINARY PRACTICE FOR PRUDENT USE OF ANTIMICROBIALS BY VETS AND PARAPROFESSIONALS UNDER DIRECT OVERSIGHT OF VETS.
  - ✓ **WHO GLOBAL ACTION PLAN** ON MICROBIAL RESISTANCE DEVELOPED WITH THE SUPPORT OF OIE SHOULD BE TAKEN AS A **GUIDING DOCUMENT AND NATIONAL ACTION PLAN** IN MEMBER COUNTRIES TO BE DEVELOPED IN THE SPIRIT OF ONE HEALTH.
  - ✓ **TRIPARTITE COLLABORATION** IN BUILDING CAPACITY OF OIE NATIONAL FOCAL POINTS FOR VETERINARY PRODUCTS THROUGH TRAINING AND SEMINARS IN NATIONAL AND REGIONAL LEVEL TO BE ORGANIZED FOR ENABLING THEM TO IMPLEMENT OIE AND CODEX ALIMENTARIUS INTERGOVERNMENTAL STANDARDS TO COMBAT AMR AS RECOMMENDED BY WHO GLOBAL ACTION PLAN FOR AMR.
  - ✓ **PROMOTION OF RESEARCH** FOR IMPROVED DIAGNOSTIC TOOLS FOR ANIMALS AND EXPLORING ALTERNATIVES TO ANTIMICROBIALS INCLUDING DEVELOPMENT OF VACCINES.

# CONTD.

- RESOLUTION NO. 36 OF 84th GENERAL ASSEMBLY ON **COMBATING ANTIMICROBIAL RESISTANCE THROUGH A ONE HEALTH APPROACH**: ADOPTED BY WORLD ASSEMBLY OF DELEGATES ON 26th MAY, 2016 AND RECOMMENDED OIE:
  - ✓ **PROMOTE INTER SECTORAL COOPERATION**, COORDINATION AND INTERACTION AT REGIONAL AND NATIONAL LEVEL AND IMPLEMENT OIE STRATEGY ON ANTIMICROBIALS THROUGH TRIPARTITE ONE HEALTH APPROACH.
  - ✓ **ADVOCATE POLICY MAKERS** FOR PRESERVING THE EFFICACY OF ANTIMICROBIAL AGENTS.
  - ✓ **PROMOTE THE RESPONSIBLE AND PRUDENT USE OF ANTIMICROBIALS** AS WELL AS APPROACHES TO DECREASE THEIR USE, SUCH AS THE ADOPTION OF BEST PRACTICES FOR SANITATION, OIE TERRESTRIAL AND AQUATIC CODE PROVISIONS FOR BIOSECURITY TO PREVENT DISEASE, AND GOOD HUSBANDRY PRACTICES INCLUDING VACCINATION PROGRAMMES.
  - ✓ **PROVIDE GUIDANCE ON ALTERNATIVES TO THE USE OF ANTIMICROBIALS** AND ON HOW TO CARRY OUT RISK ANALYSES TO DEMONSTRATE APPROPRIATE MANAGEMENT TO REDUCE THE DEVELOPMENT OF RESISTANCE AND THE PROTECTION OF BOTH ANIMAL AND HUMAN HEALTH.
  - ✓ OIE MEMBER COUNTRIES **FULFILL THEIR COMMITMENT UNDER THE GLOBAL ACTION PLAN** TO IMPLEMENT POLICIES ON THE USE OF ANTIMICROBIALS IN TERRESTRIAL AND AQUATIC ANIMALS, RESPECTING OIE INTERGOVERNMENTAL STANDARDS AND GUIDELINES ON THE USE OF CRITICALLY IMPORTANT ANTIMICROBIAL AGENTS, AND THE PHASING OUT OF THE USE OF ANTIBIOTICS FOR GROWTH PROMOTION IN THE ABSENCE OF RISK ANALYSIS.
  - ✓ THE OIE SEEK **SUPPORT TO ENABLE MEMBER COUNTRIES TO IMPLEMENT THE OIE STRATEGY** AND THEIR NATIONAL ACTION PLANS.

# CONTD.

- DEVELOPMENT OF STANDARDS AND GUIDELINES FOR HARMONIZATION
  - TERRESTRIAL ANIMAL HEALTH CODE
  - AQUATIC ANIMAL HEALTH CODE
  - MANUALS OF DIAGNOSTIC TESTS AND VACCINES FOR TERRESTRIAL ANIMALS.
  - OIE LISTS OF ANTIMICROBIALS OF VETERINARY IMPORTANCE
- TRAINING AND EDUCATION FOR VETERINARY HEALTH PROFESSIONALS.
  - OIE RECOMMENDATIONS ON COMPETENCIES OF GRADUATING VETS (DAY-1 ) TO ASSURE HIGH QUALITY NATIONAL VET SERVICE.
  - OIE GUIDELINES FOR VETERINARY CORE CURRICULUM.
  - STANDARDS FOR VETERINARY STATUTORY BODIES FOR GOOD VETERINARY GOVERNANCE.

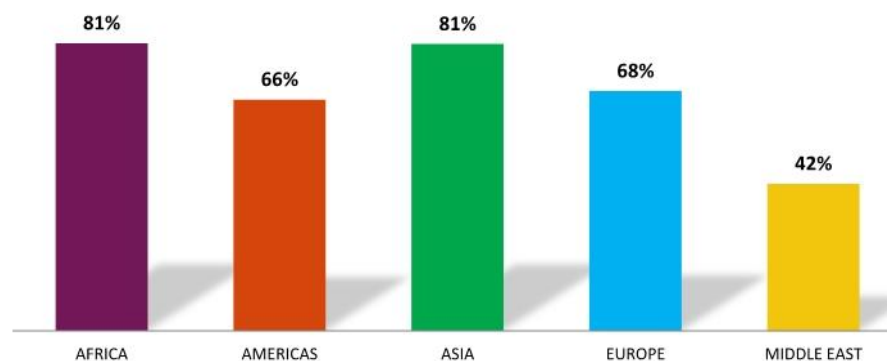
- DATA ON AMU IN MEMBER COUNTRIES INCLUDING LEGAL FRAMEWORK FOR THE IMPORT, MANUFACTURING AND DISTRIBUTION OF VETERINARY MEDICAL PRODUCTS COLLECTED.
  - WHICH CONTRIBUTES IN GLOBAL ACTION PLAN TO ESTABLISH BASELINE INFORMATION ON THE USE OF ANTIMICROBIAL USE IN ANIMALS.
  - HELP MEMBER COUNTRIES TO ANALYZE AND CONTROL THE SOURCE OF VETERINARY MEDICINAL PRODUCTS.
  - OBTAIN MORE RELIABLE INFORMATION ON IMPORTS.
  - TRACE THE DISTRIBUTION OF THE PRODUCTS AND EVALUATE THE QUALITY OF PRODUCTS IN CIRCULATION.
  - HELPS TO MEASURE THE TREND OF THE USE OF THE PRODUCTS

# AMU IN ANIMALS IN DIFFERENT REGIONS



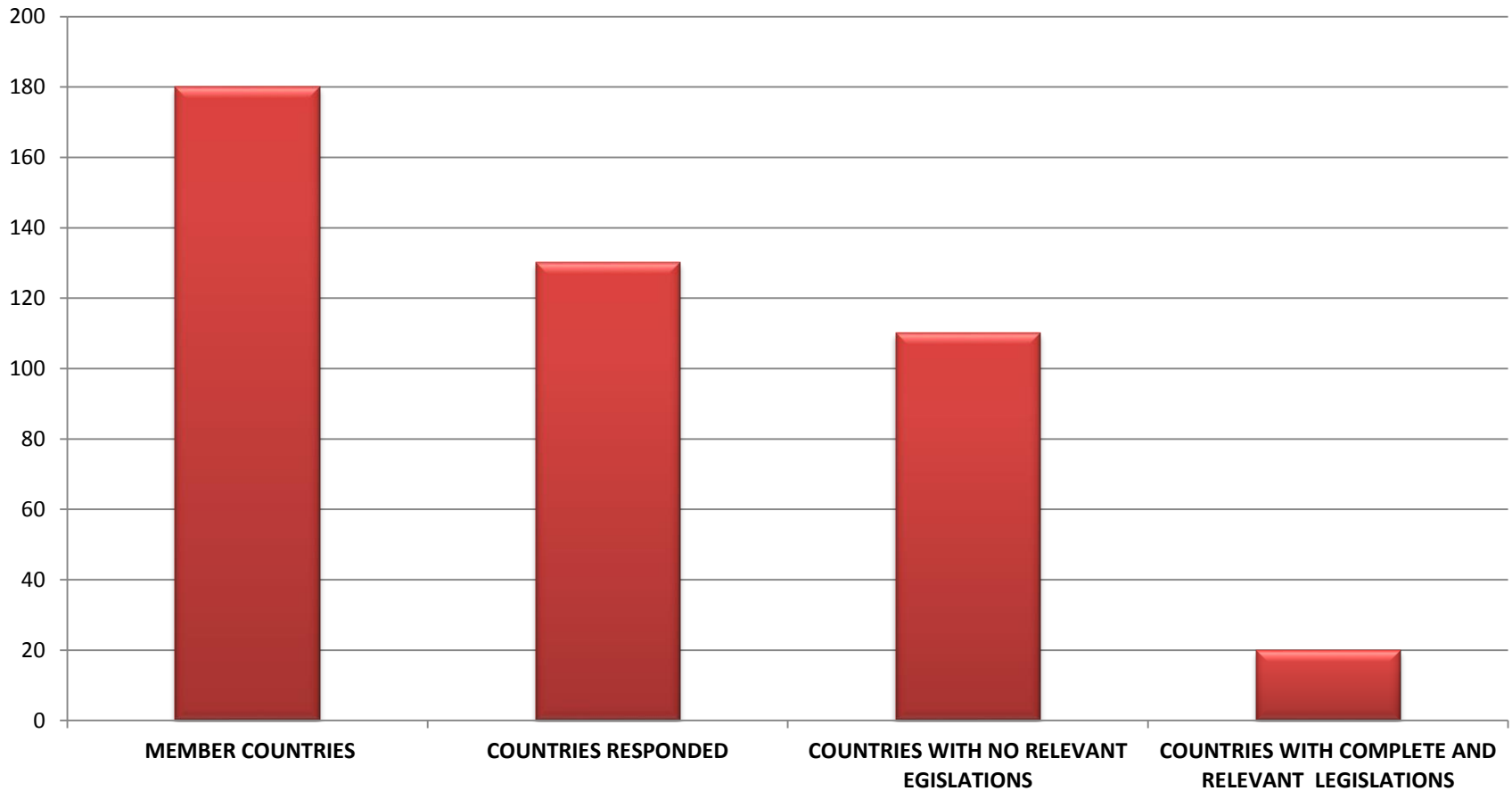
## ANTIMICROBIAL USAGE DATA COLLECTION IN ANIMALS

AMU Data Collection



n = 130

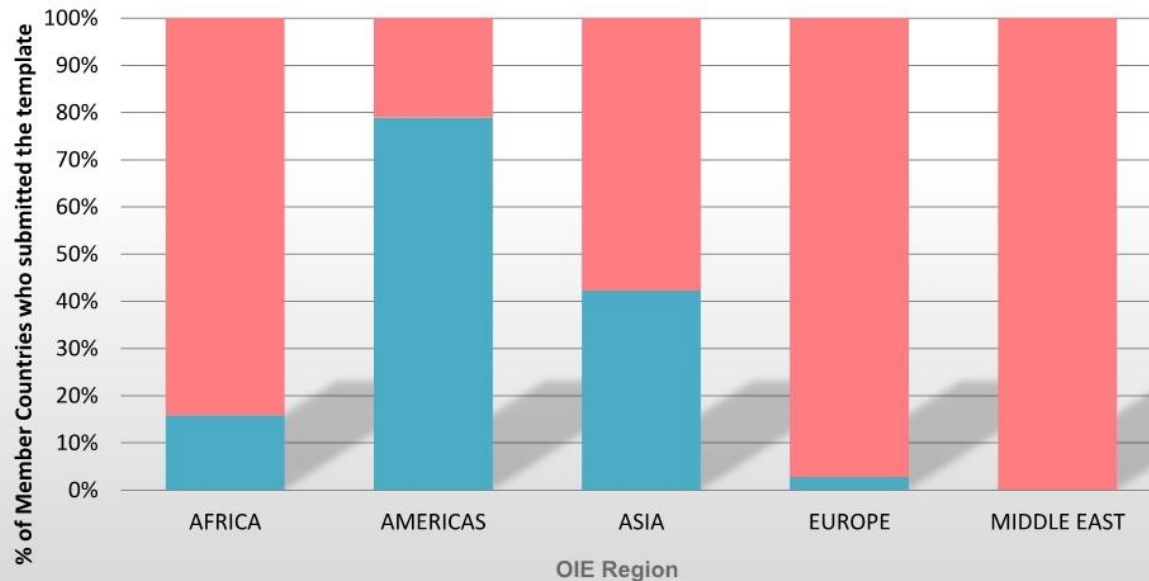
# STATUS OF LEGAL FRAMEWORK IN MEMBER COUNTRIES FOR COMPLETE REGULATION OF IMPORT, MANUFACTURING AND DISTRIBUTION OF VET MEDICAL PRODUCTS INCLUDING ANTIMICROBIALS





# AUTHORIZATION ON THE USE OF ANTIMICROBIALS AS A GROWTH PROMOTER IN DIFFERENT REGIONS.

## Proportion of OIE Regions authorising antimicrobial growth promoters in animals ( 2015 )



N = 130

■ Antimicrobial growth promoters authorised

■ Antimicrobial growth promoters not authorised

- SURVEILLANCE FOR ANTIMICROBIAL RESISTANCE
  - DESPITE OF ITS HUGE IMPORTANCE VERY LITTLE INFORMATION AVAILABLE ON AMR IN ANIMALS.
  - OIE HAS DEVELOPED STANDARDS AND GUIDELINES FOR HARMONIZATION IN TERRESTRIAL AND AQUATIC ANIMAL HEALTH CODE FOR NATIONAL SURVEILLANCE AND MONITORING OF AMR.
- AVAILABILITY OF QUALITY MICROBIAL.
  - MEMBER COUNTRIES NATIONAL POLICY MUST COMPLY WITH OIE STANDARDS REGARDING THE DESIGN, MANUFACTURING, REGISTRATION, IMPORT, DISTRIBUTION, WHOLESALING, STORAGE, RETAILING AND FINAL USE OF VET MEDICAL PRODUCTS.
  - WORKING ON ALTERNATIVES TO ANTIMICROBIALS.
  - ENCOURAGES FOR RESEARCH ON ALTERNATIVES TO ANTIMICROBIALS.

# GOOD GOVERNANCE AND CAPACITY BUILDING OF OIE FOCAL POINTS.



## GOOD GOVERNANCE AND CAPACITY

BUILDING OF OIE FOCAL POINTS

## OIE PVS Pathway

Good Governance & Capacity



# COLLABORATING CENTERS FOR VETERINARY MEDICAL PRODUCTS

- (ANMV-Anses)-Fougeres, FRANCE
- CENTER FOR VET MEDICINE,FDA(CVM-FDA),  
ROCKVILLE, USA
- CENTER FOR VETERINARY BIOLOGICS, Ames,  
USA
- NATIONAL VETERINARY LABORATORY, TOKYO  
JAPAN

# AWARENESS AND COMMUNICATIONS

DIFFERENT COMMUNICATION TOOLS FOR AWARENESS AND COMMUNICATION IN THE FORM OF HANDBOOK, POSTERS, PAMPHLETS, AND IN ELECTRONIC FORMS ARE DEVELOPED.

EG:

POSTERS: [Poster-1.pdf](#) , [Poster-2.pdf](#), [Poster-3.pdf](#)

VIDEOS :[AMR and Better use of Antibiotics.mp4](#), = UTF-8 b QW50aWJpb3RpYyBSZXNpc3RhbmNlLiBQb2xpY3k= = UTF-8 b IE1ha2Vycywg2hhdCBjYW4geW91ICBkb9ifLm1wNA== .mp4, = UTF-8 b QW50aWJpb3RpYyBSZXNpc3RhbmNlLiBGYXJtZXJzIGFuZCA= = UTF-8 b YW5pbWFsIG93bmVycywg2hhdCAgY2FuHlvdSBkbx8ubXA0 =.mp4

# FUTURE ACTIVITIES OF OIE ON AMR

- AMR LABORATORY TRAINING NATIONAL VETERINARY ASSAY LABORATORY TOKYO FROM 14-18 NOVEMBER 2016.
- 2nd INTERNATIONAL SYMPOSIUM ON ALTERNATIVES TO ANTIBIOTICS CHALLENGES AND SOLUTIONS IN ANIMAL PRODUCTION FROM 13-15 DECEMBER, 2016.
- REGIONAL CAPACITY BUILDING TRAINING ON AMR IN GIMCHEON KOREA FROM FEBRUARY 8-12, 2017



# CHALLENGES IN OUR REGION

- INADEQUATE LEGISLATIVE FRAMEWORK FOR PRUDENT USE OF ANTIMICROBIALS IN FOOD ANIMALS.
- ANTIMICROBIALS ARE FREELY AVAILABLE IN THE MARKET IN MANY COUNTRIES.
- GROWTH PROMOTERS WITH ANTIBIOTICS ARE STILL IN PRODUCTION AND ARE IN USE.
- PRESCRIPTION OF ANTIMICROBIALS WITHOUT CONFIRM LAB BASED DIAGNOSIS IS MUCH PRACTICED IN HEALTH SERVICE DELIVERY.
- IN ADEQUATE DATA BASE ON THE AVAILABILITY, USE AND QUALITY ANTIMICROBIALS.
- POOR SURVEILLANCE AND MONITORING OF AMR IN LIVESTOCK.
- ONE HEALTH APPROACH FOR JOINT ACTION IS STILL NOT ESTABLISHED.
- QUALIFIED MANPOWER FOR LIVESTOCK SERVICE DELIVERY IS NOT ADEQUATE.
- RESOURCE ALLOCATION FOR DEVELOPMENT AND EFFECTIVE IMPLEMENTATION OF NATIONAL ACTION PLAN FOR COMBATING AMR .

# CONCLUSION

- ANTIMICROBIALS ARE ESSENTIAL FOR ENSURING HUMAN, ANIMAL AND PLANT HEALTH, WELFARE, FOOD AND NUTRITION SECURITY. **BANNING OF ANTIMICROBIALS IN LIVESTOCK WOULD NOT SOLVE THE PROBLEM.** JUDICIAL USE OF ANTIBIOTICS SHOULD BE PROMOTED.
- ALL THE RELEVANT SECTORS SHOULD HAVE SHARED RESPONSIBILITIES AND ADOPT ONE HEALTH APPROACH TO PREVENT AND MINIMIZE AMR.
- RISK OF DIFFERENT ANTIMICROBIALS ON ANIMALS SHOULD BE ASSESSED AND NON PRIORITY ANTIMICROBIALS SHOULD BE BANNED.
- AMR SHOULD BE NATIONAL PRIORITY AND REGULATORY FRAMEWORK IN EVERY COUNTRY IS MUST FOR ITS PRUDENT USE.

- NATIONAL PLAN OF ACTION IN LINE WITH GLOBAL ACTION PLAN FOR AMR WITH TANGIBLE TARGET SHOULD BE DEVELOPED ENDORSED BY THE GOVERNMENT AND IMPLEMENTED IN EVERY COUNTRY.
- OIE GUIDELINES SHOULD BE ADOPTED FOR THE PRODUCTION, IMPORT, DISTRIBUTION AND USE OF ANTIMICROBIALS.
- AWARENESS ON PRUDENT USE OF ANTIMICROBIALS AND AMR SHOULD BE RAISED AT ALL LEVELS.
- PRIORITY IN RESEARCH FOR THE ALTERNATIVES OF NON ANTIBIOTIC DRUGS SHOULD BE GIVEN.
- GOOD PRACTICES AND USE OF VACCINES FOR DISEASE CONTROL SHOULD BE PROMOTED IN AGRICULTURE PRODUCTION.

**ON 21 SEPT. 2016 GLOBAL LEADERS AT UN HQ COMMITTED TO ACT ON AMR FOR TAKING BROAD, COORDINATED APPROACH TO ADDRESS THE ROOT CAUSE OF AMR ACROSS MULTIPLE SECTORS ESPECIALLY HUMAN HEALTH, ANIMAL HEALTH AND AGRICULTURE AND CALLED ON WHO, FAO AND OIE IN COLLABORATION WITH DEVELOPMENT BANKS AND OTHER RELEVANT STAKEHOLDERS TO COORDINATE THIS PLANNING ACTION AND REPORT BACK TO UN GENERAL ASSEMBLY IN SEPTEMBER 2018.**

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Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

## **Tripartite united against AMR**



**HIGH-LEVEL MEETING ON  
ANTIMICROBIAL RESISTANCE**



21 SEPTEMBER 2016, UN HEADQUARTERS, NEW YORK





**WORLD ORGANISATION  
FOR ANIMAL HEALTH**



OIE AS ONE OF THE PARTNER IN ADDRESSING THIS GLOBAL ISSUE, IS HELPING MEMBER COUNTRIES THROUGH PVS PATHWAY FOR IMPROVING THE VETERINARY SERVICE AND ENCOURAGING MEMBER COUNTRIES TO FOLLOW AND HARMONIZE THE NATIONAL STANDARDS AND GUIDELINES AS PER BOTH TERRESTRIAL AND AQUATIC ANIMAL HEALTH CODE FOR TRANSPARENT AND SAFE TRADE OF LIVESTOCK AND LIVESTOCK PRODUCTS INCLUDING PRUDENT USE OF ANTIMICROBIALS.



# FINALLY, I ACKNOWLEDGE

**DR. ELISABETH ERLACHER-VINDEL, HEAD OF THE  
SCIENCE AND NEW TECHNOLOGIES DEPARTMENT OIE  
HQ,PARIS AND MARY JOY GORDONCILLO, SCIENCE AND ONE  
HEALTH COORDINATOR OIE SRR BANGKOK.**

