

WOAH's antimicrobial use monitoring in aquatic animals



Résistance aux antimicrobiens (RAM) en aquaculture

11 - 12 juillet 2024 Tunis, Tunisie

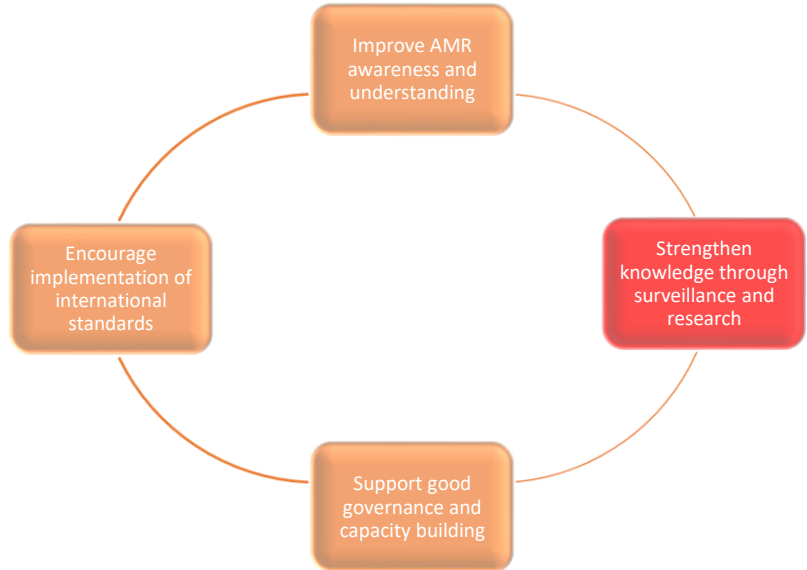


Dr Dante Mateo
Scientific Coordinator
AMR & VPD/ WOAH





The WOAH Strategy supports the objectives established in the Global Action Plan on AMR, developed by WHO with strong contribution from FAO and WOAH. It reflects the mandate of the WOAH, through four main objectives:



Use of Antimicrobials



Strengthen knowledge through surveillance and research

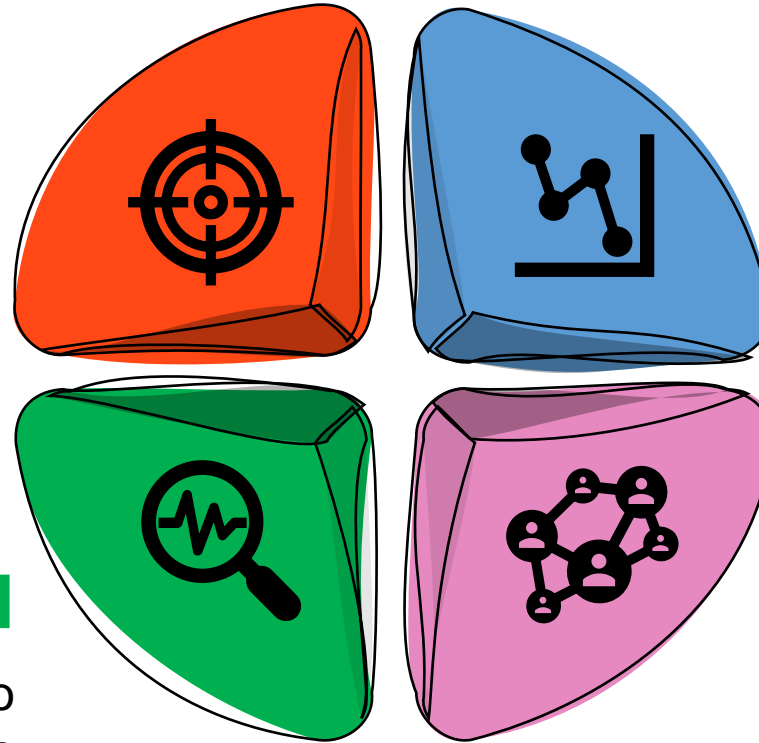
- Support Members in **developing and implementing monitoring and surveillance systems**
- Build and maintain a **database on the use of antimicrobial agents in food-producing and companion animals**, with associated analysis and annual reporting



Ch 6.9 & 6.3 Monitoring AMU: Objectives

INTERPRETATION

Helping in the interpretation of **AMR surveillance data** and assisting in responding to problems of antimicrobial resistance in a **precise and targeted way**



EVOLUTION

Giving an **indication of trends** in the use of antimicrobial agents in animals over time and **potential associations with AMR** in animals

EVALUATION

Assisting in **risk management** to **evaluate** the **effectiveness** of efforts and mitigation strategies.

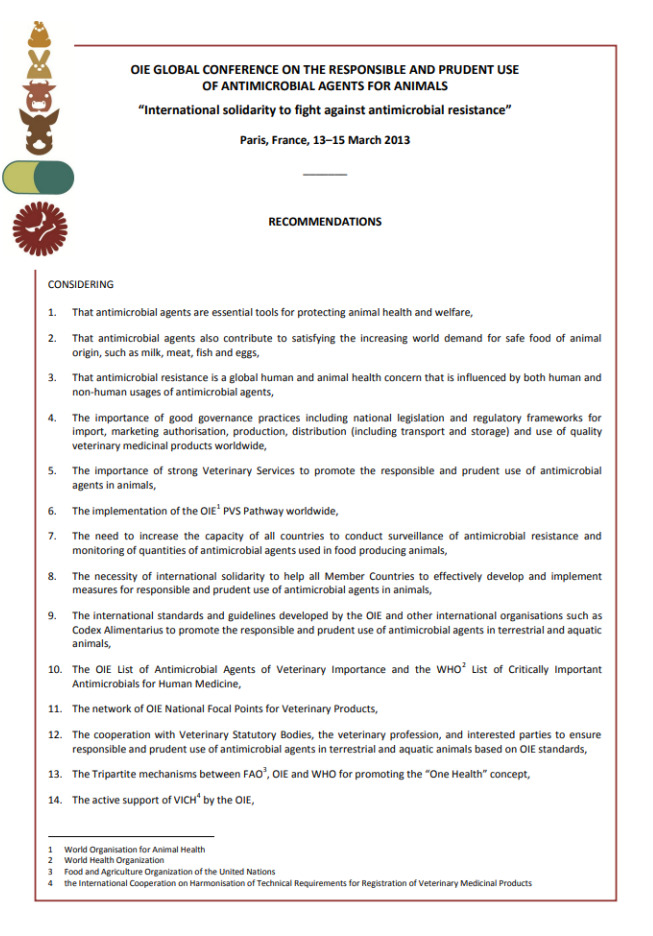
COMMUNICATION

Ensuring **transparency** and communicating on the **risks** (if data published)



WOAH data collection on the use of antimicrobial agents – Context

1st Global Conference on the Responsible and Prudent Use of Antimicrobial Agents for Animals (France, March 2013)



RECOMMENDATIONS TO WOAHA

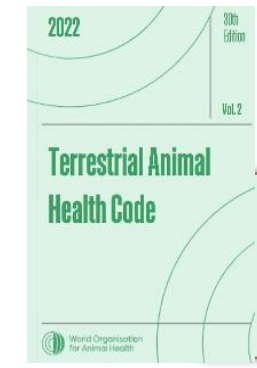
7. To collect harmonised quantitative data on the use of antimicrobial agents in animals with the view to establish a global database



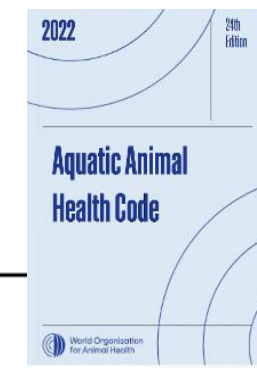
Creation of the OIE [WOAH] *ad hoc* Group to set up a global database on the use of antimicrobial agents in animals



AMU Questionnaire based on WOAHA International Standards for AMR

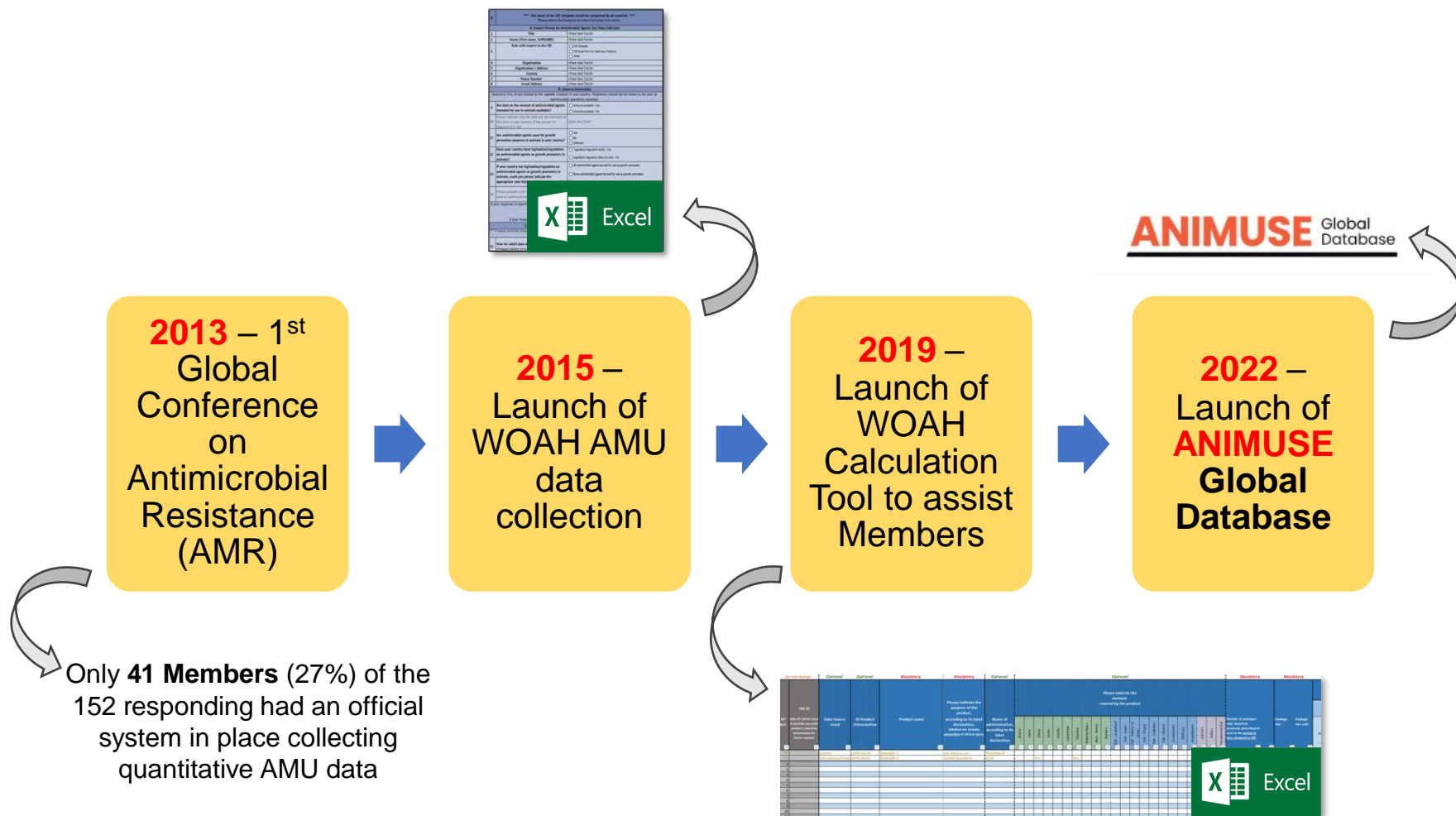


Ch.6.9. **Monitoring of the quantities and usage patterns** of antimicrobial agents used in food-producing animals



Ch.6.3. **Monitoring of the quantities and usage patterns** of antimicrobial agents used in aquatic animals







Welcome to your national portal

Data Collection Round

Follow the advancement of your AMU dossier here

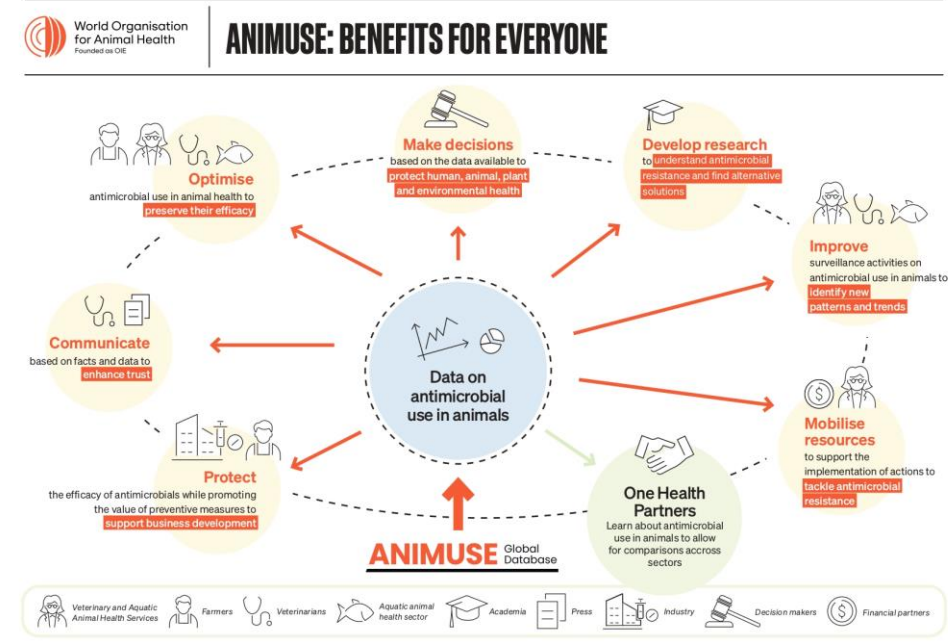
Continue

- Round opened
- In progress**
- Submitted
- Pending clarification
- Validated

Need help to calculate the antimicrobial quantities?

Enter your information by veterinary product in the

Calculation Module



Data dashboard

EXPORT

World Organisation

Country Participation

If the data are public, the last two columns will not appear in ANIMUSE public portal. They are shown here for you to check the

<https://amu.woah.org/amu-system-portal/home>

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ANIMUSE allows

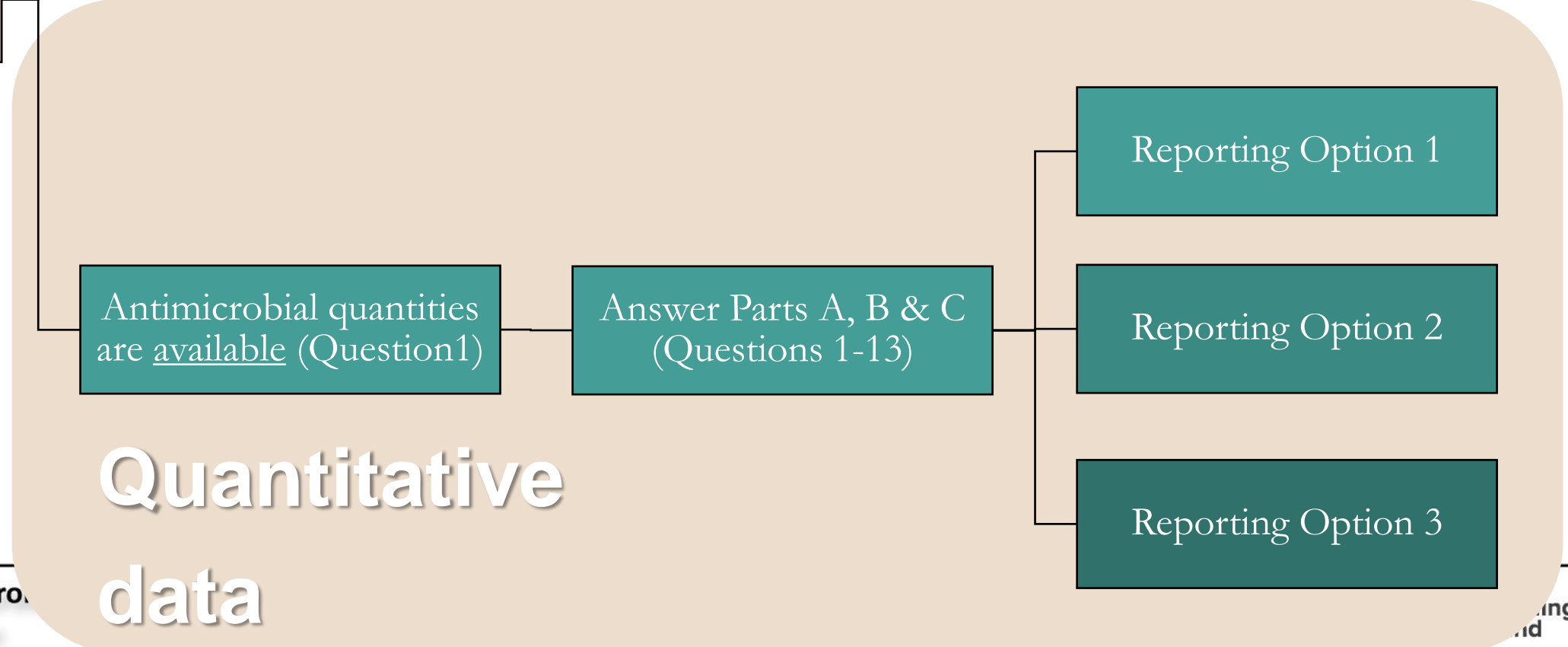
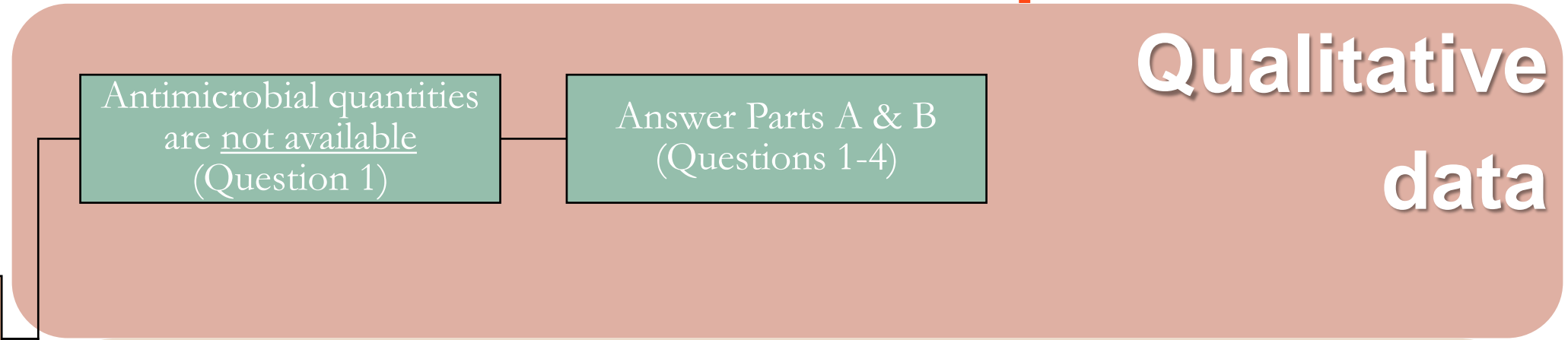
- To calculate antimicrobial quantities with the **Calculation module**
- Online access** to complete the antimicrobial use (AMU) **questionnaire** and upload data collected offline.
- Historical data** access and generate professional outputs for **data visualisation**



ANIMUSE: Qualitative and quantitative



WOAH AMU
Questionnaire

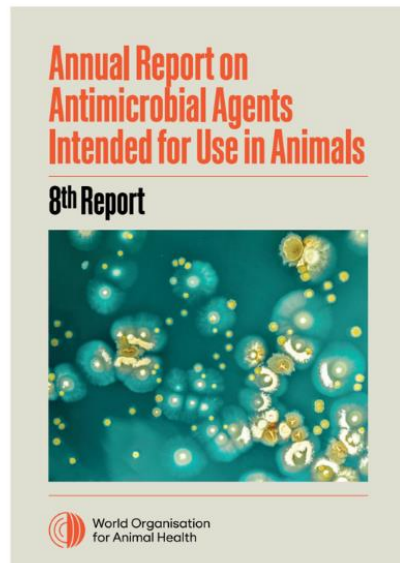




Results of the Eighth Round (**152** Countries)

2021 Analysis of Antimicrobial Quantities (**94** Countries)

Trends from 2019 to 2021 (**81** Countries)



Click the report to have access to the full comprehensive eighth annual report, presented in PDF format.

Please note that some charts in the PDF may differ from those in ANIMUSE, as the database continuously updates its charts in real time to present the most recent data.

Participation

Trends

Year Analysis

National Reports

Growth Promoters

Global Animal Biomass

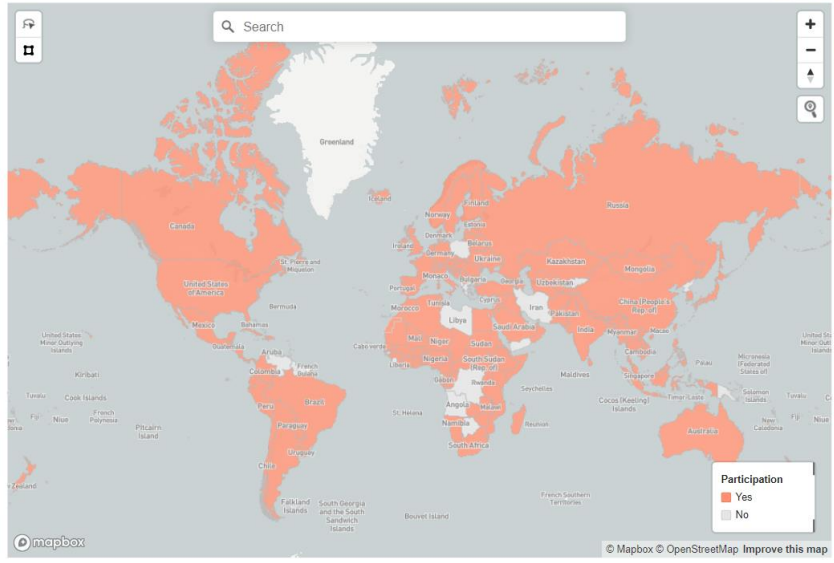


ANIMUSE Interactive Report – 8th Round:



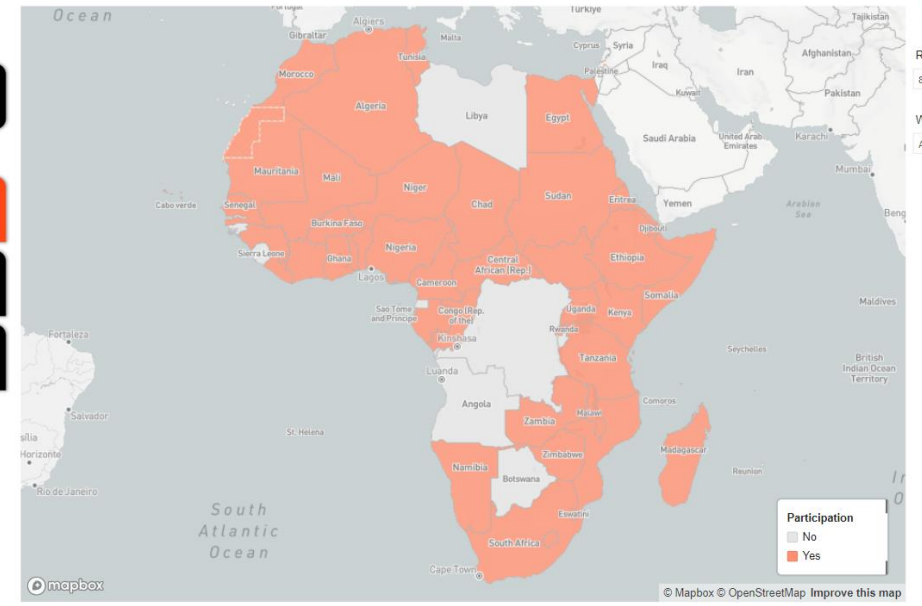
Global Participation

183
Total N° of Members



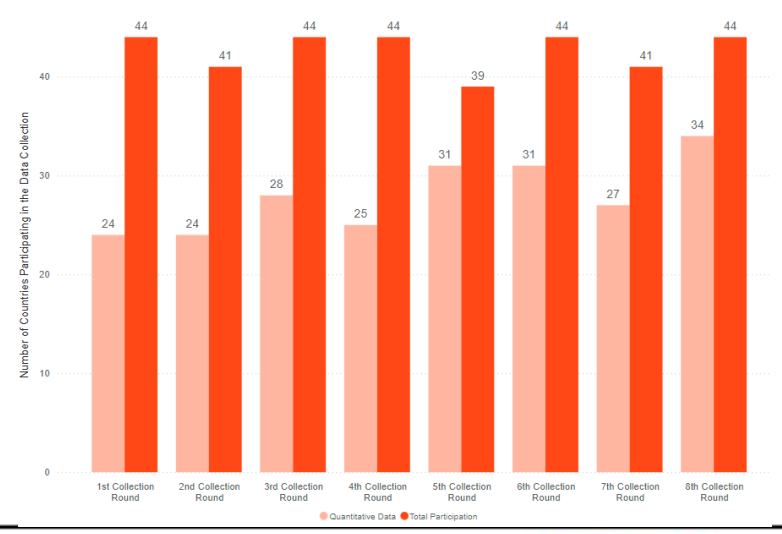
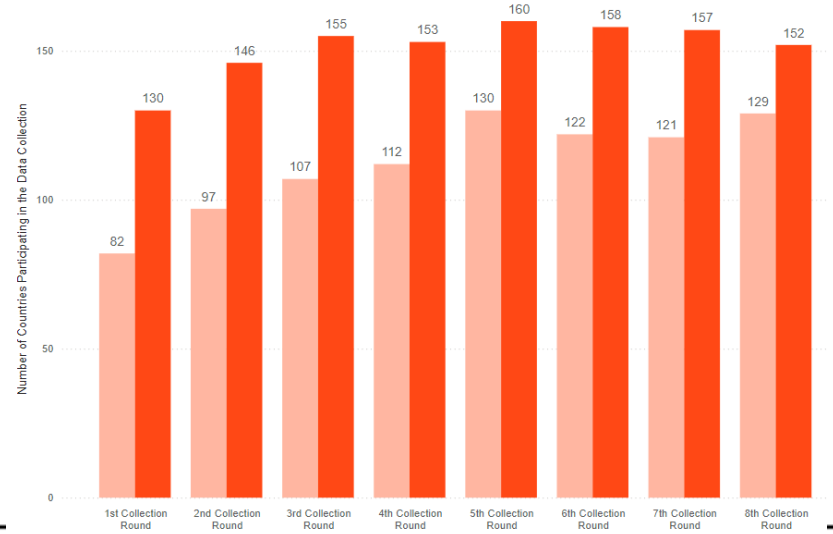
Global Participation

54
Total N° of Members



- Home
- Participation
- Type of Data
- Barriers

- Home
- Participation
- Type of Data
- Barriers



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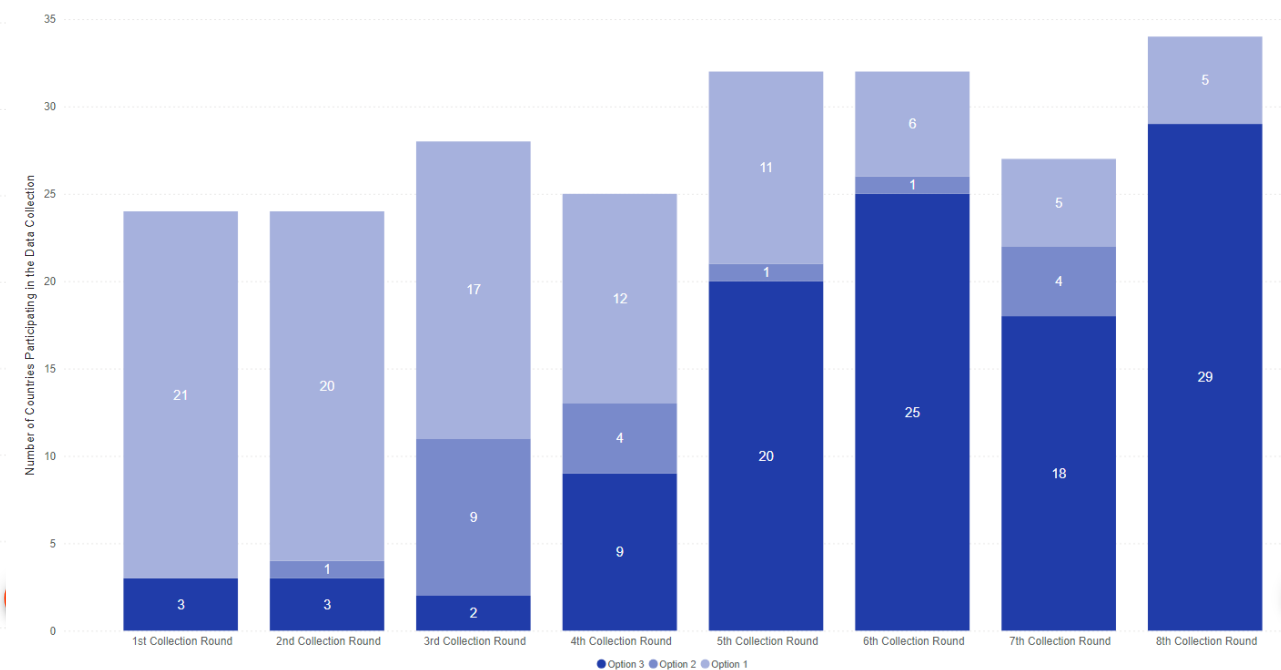
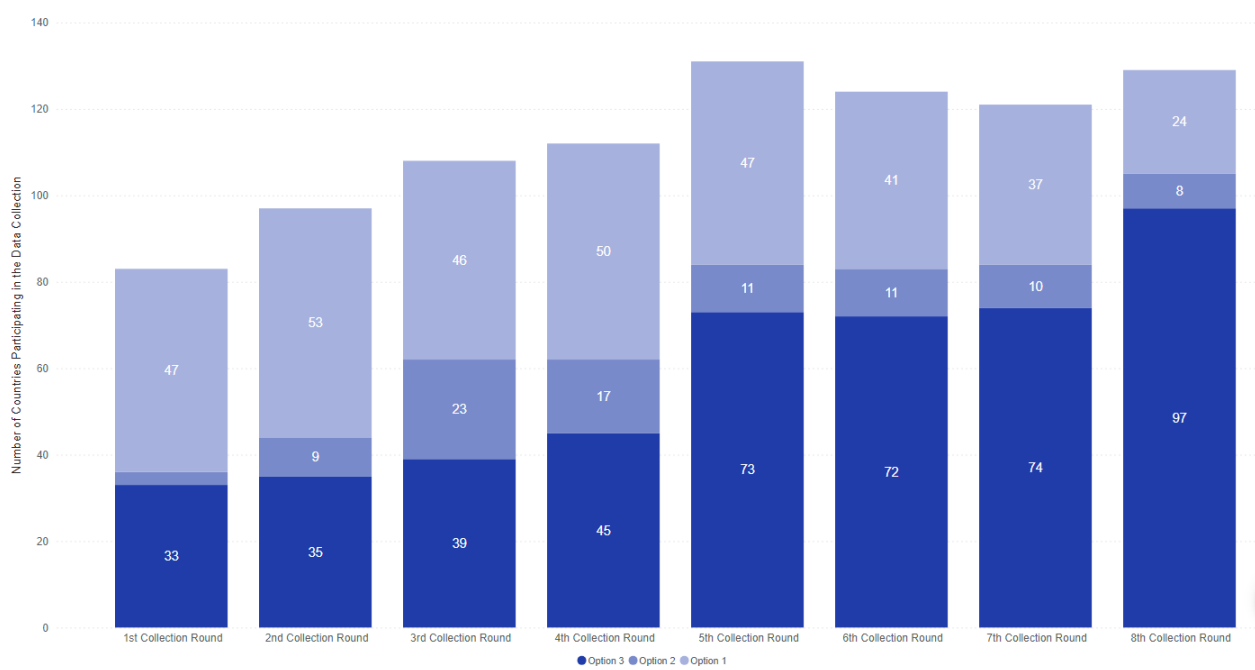




Reporting Options

Global

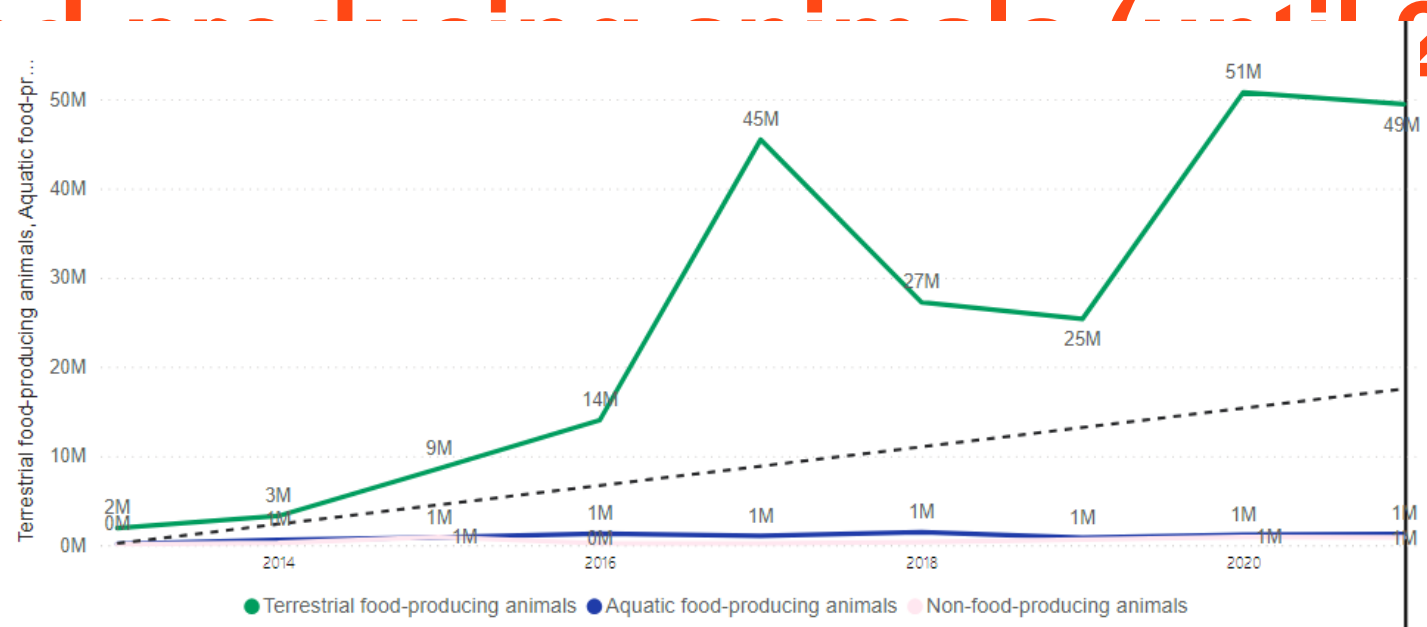
Africa



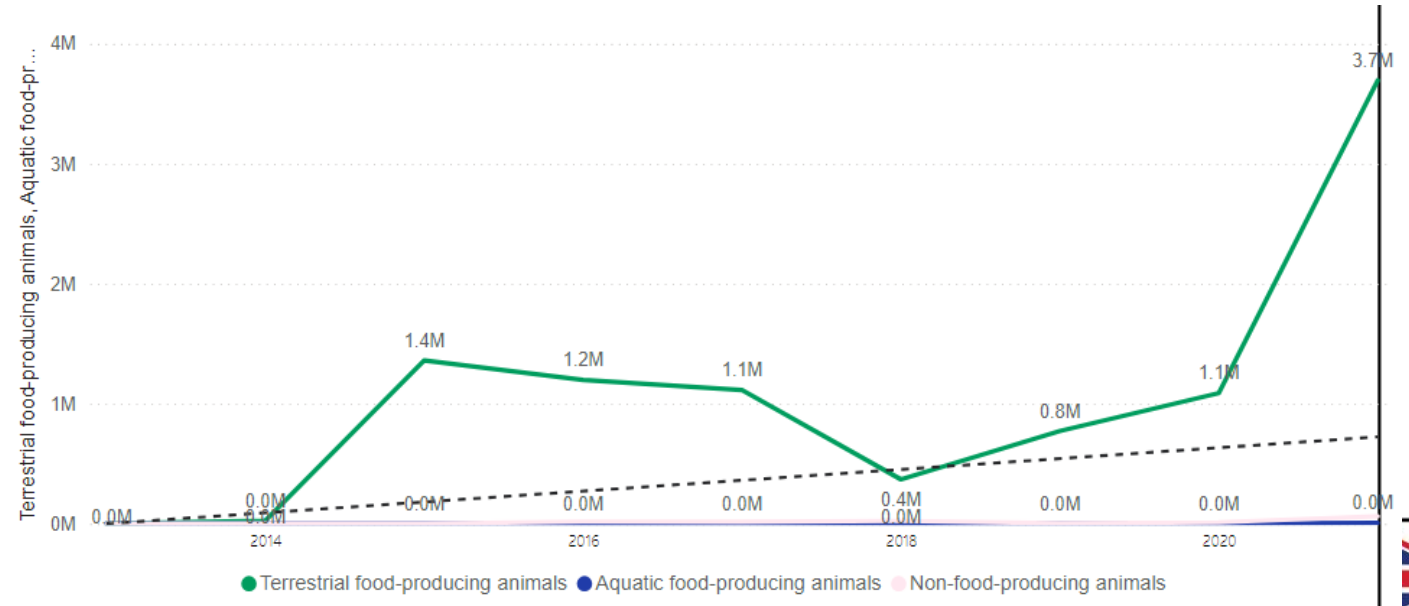
Quantities of AMU in terrestrial and aquatic



Global (2014-2021)

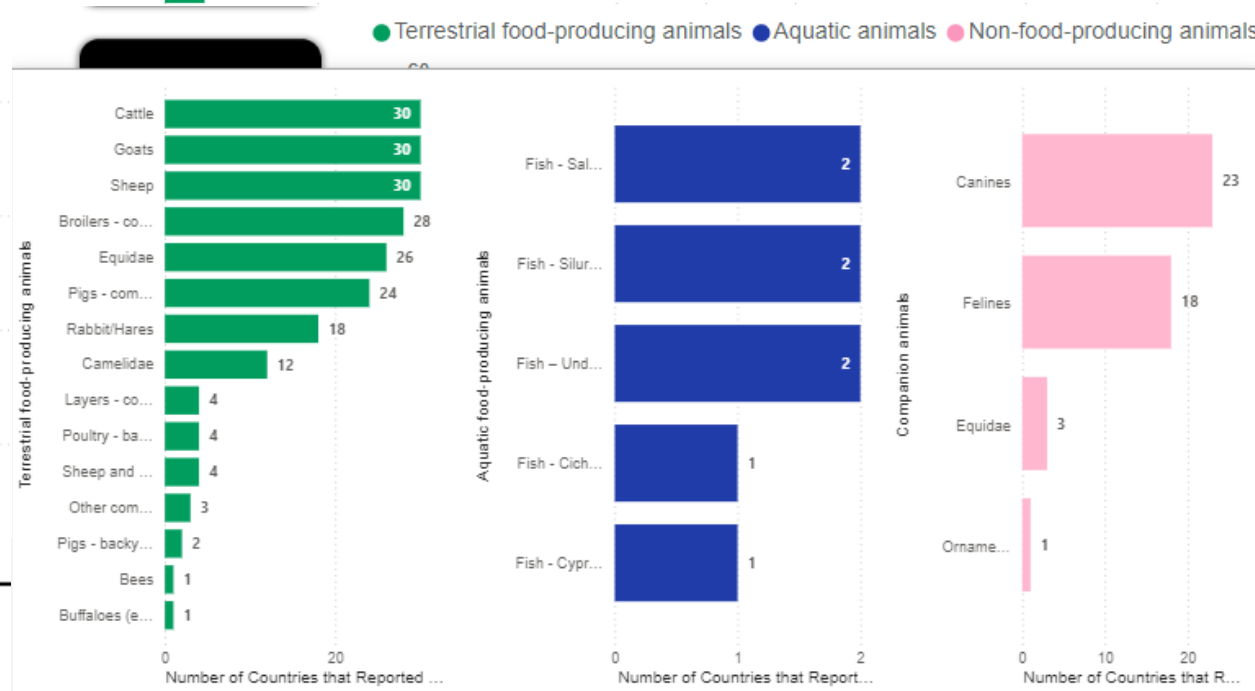
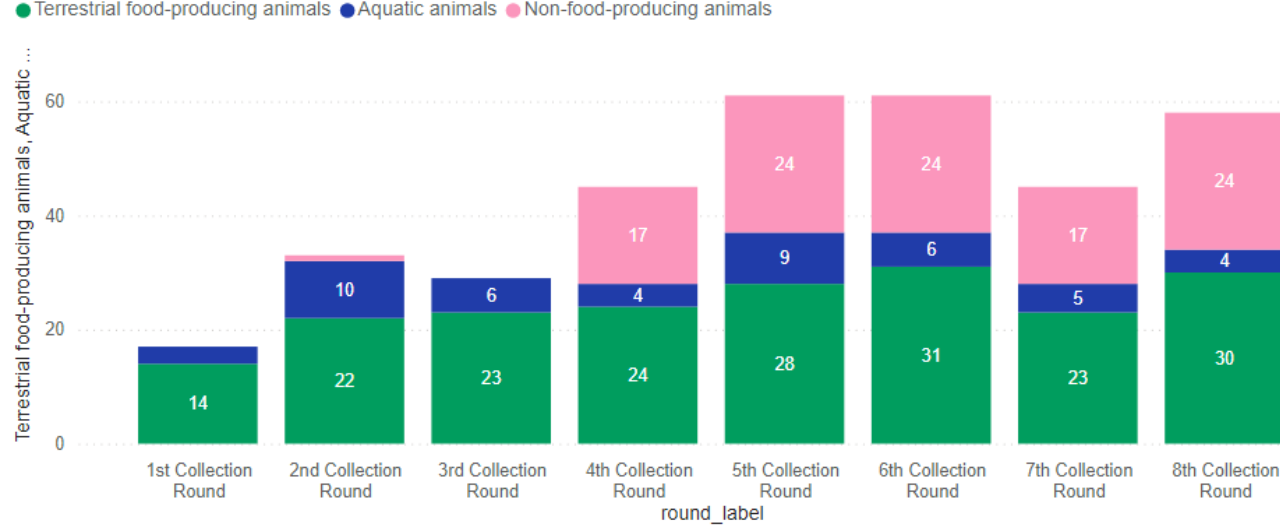
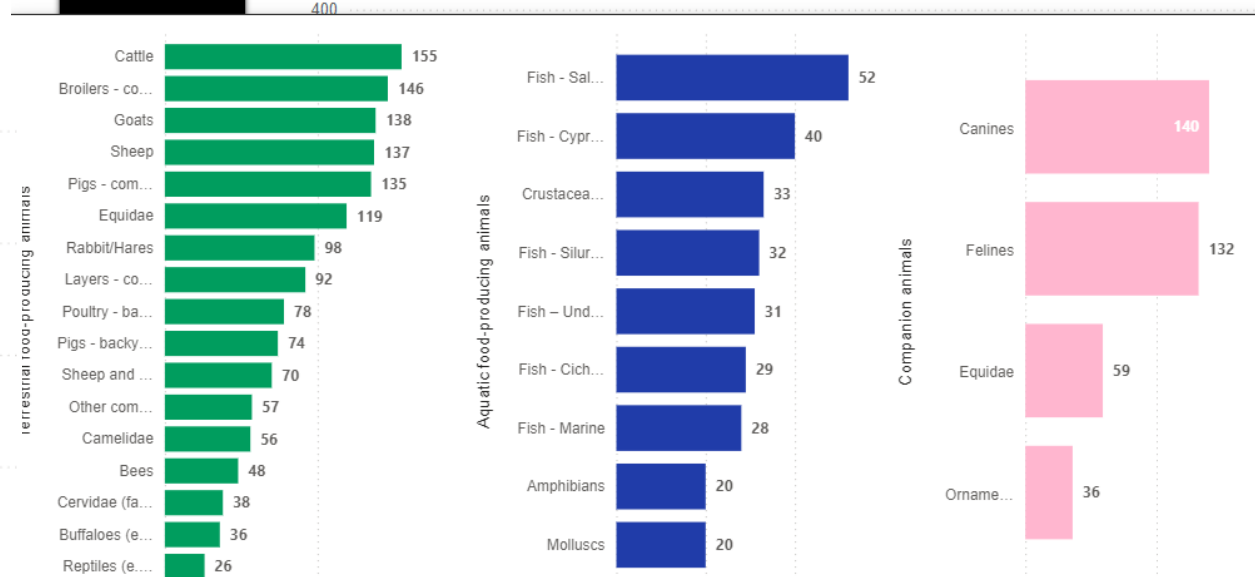
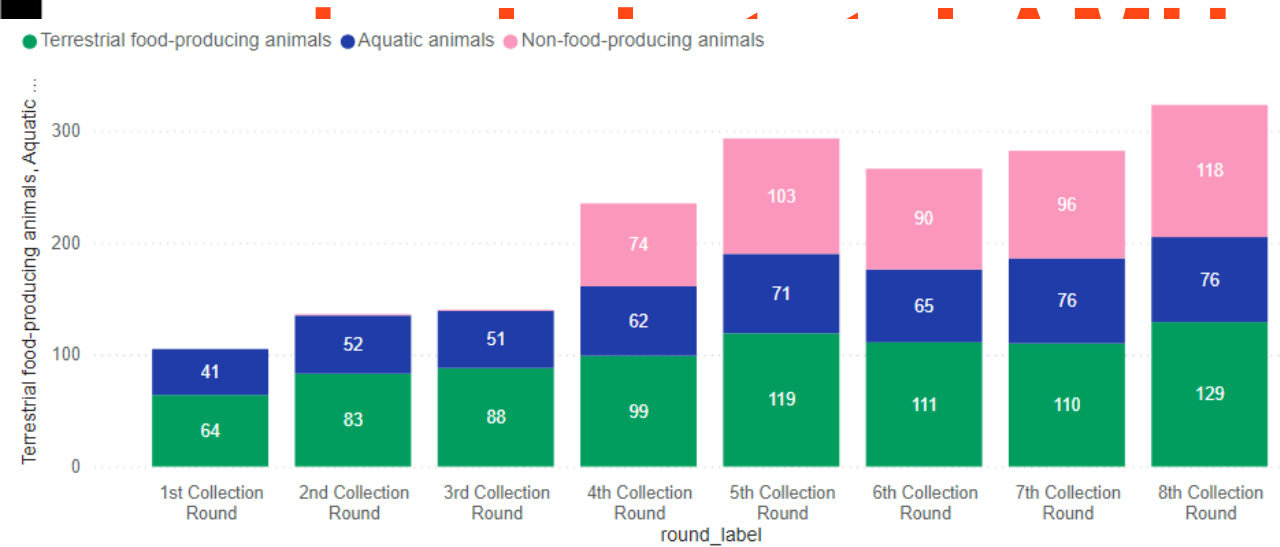


Africa





Number of countries including aquatic



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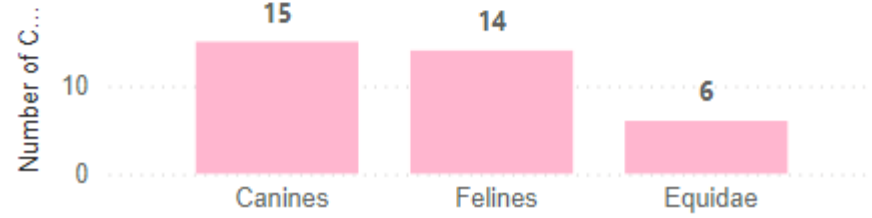
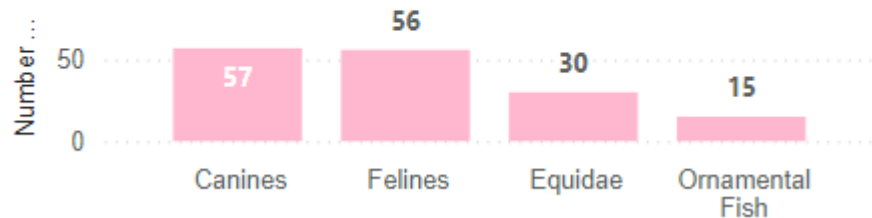
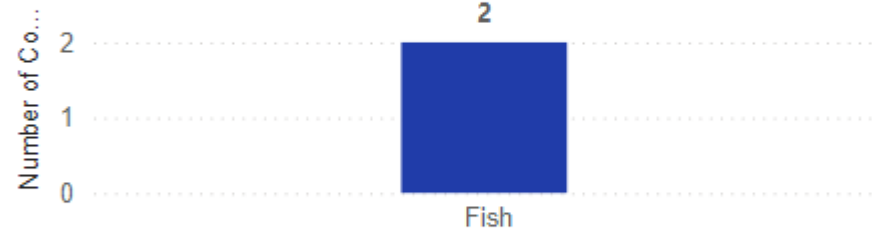
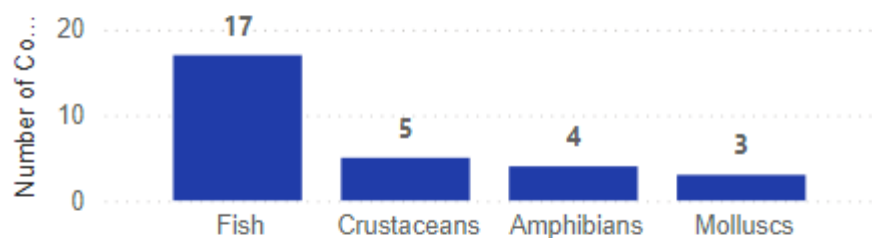
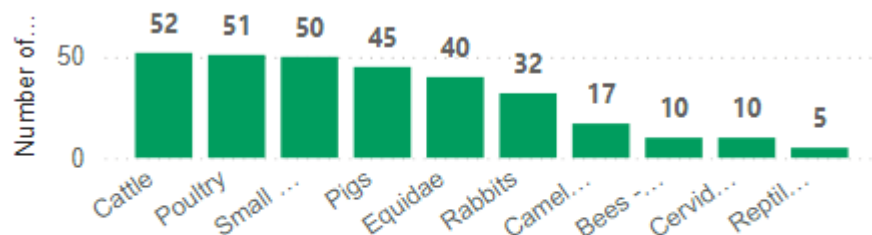
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Number of countries reporting AMU quantities for aquatic animals (2021)



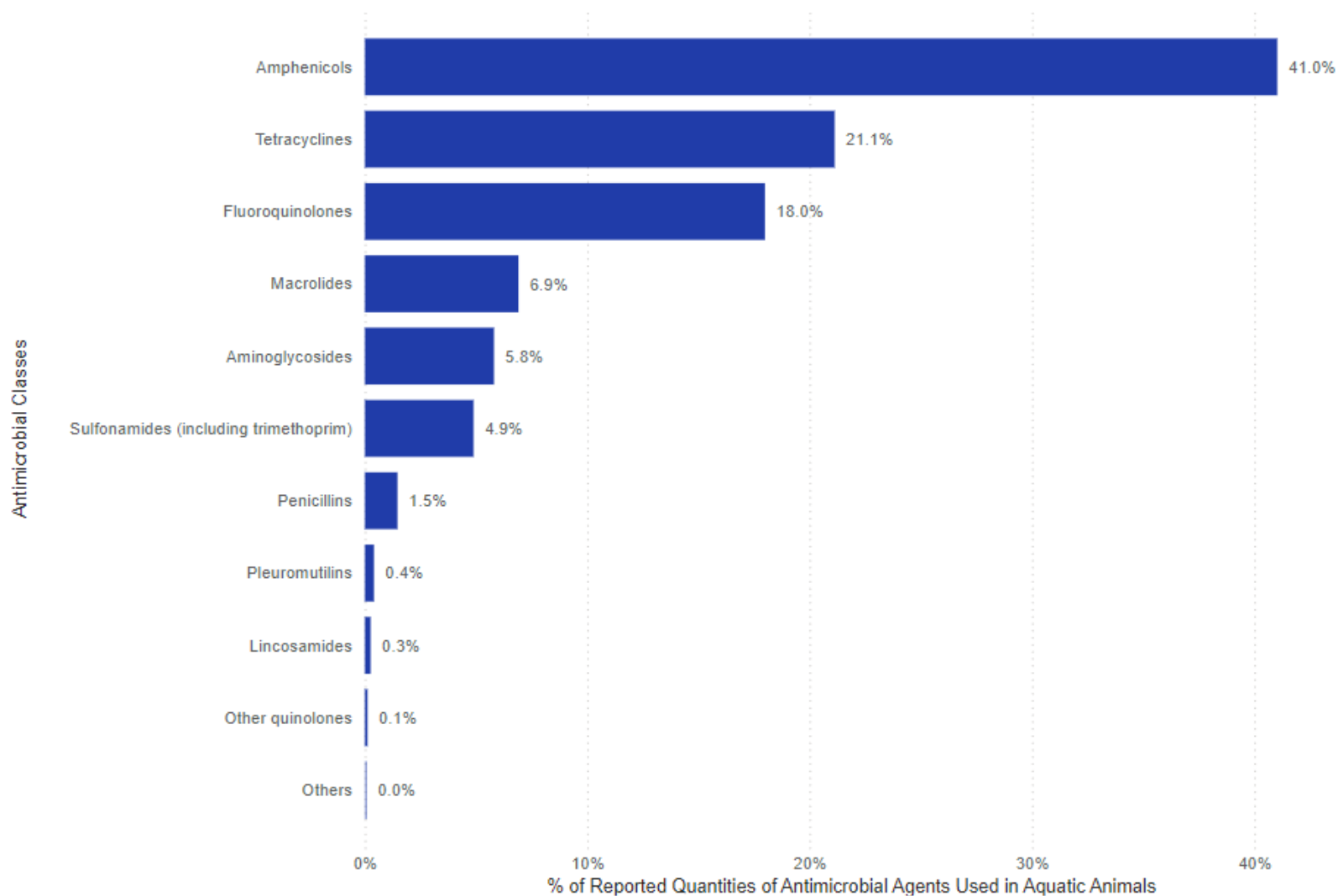
Global

Africa





Proportion of antimicrobial classes reported for use in aquatic food- mbers



Antimicrobial Quantities (numerator) and WOAAH Animal Biomass (denominator)

Antimicrobial use is expressed in mg/kg of animal biomass. It is determined by adjusting the quantity of antimicrobial agents reported (mg) by the live domestic animal biomass (kg) each year. This indicator can be compared between regions and over time.

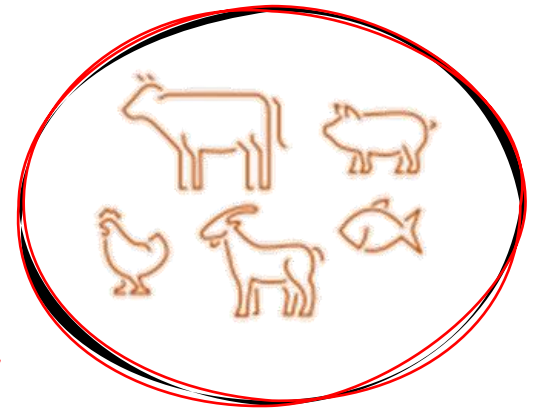
Antimicrobial agents (**mg**)

=

Animal biomass (**kg**)



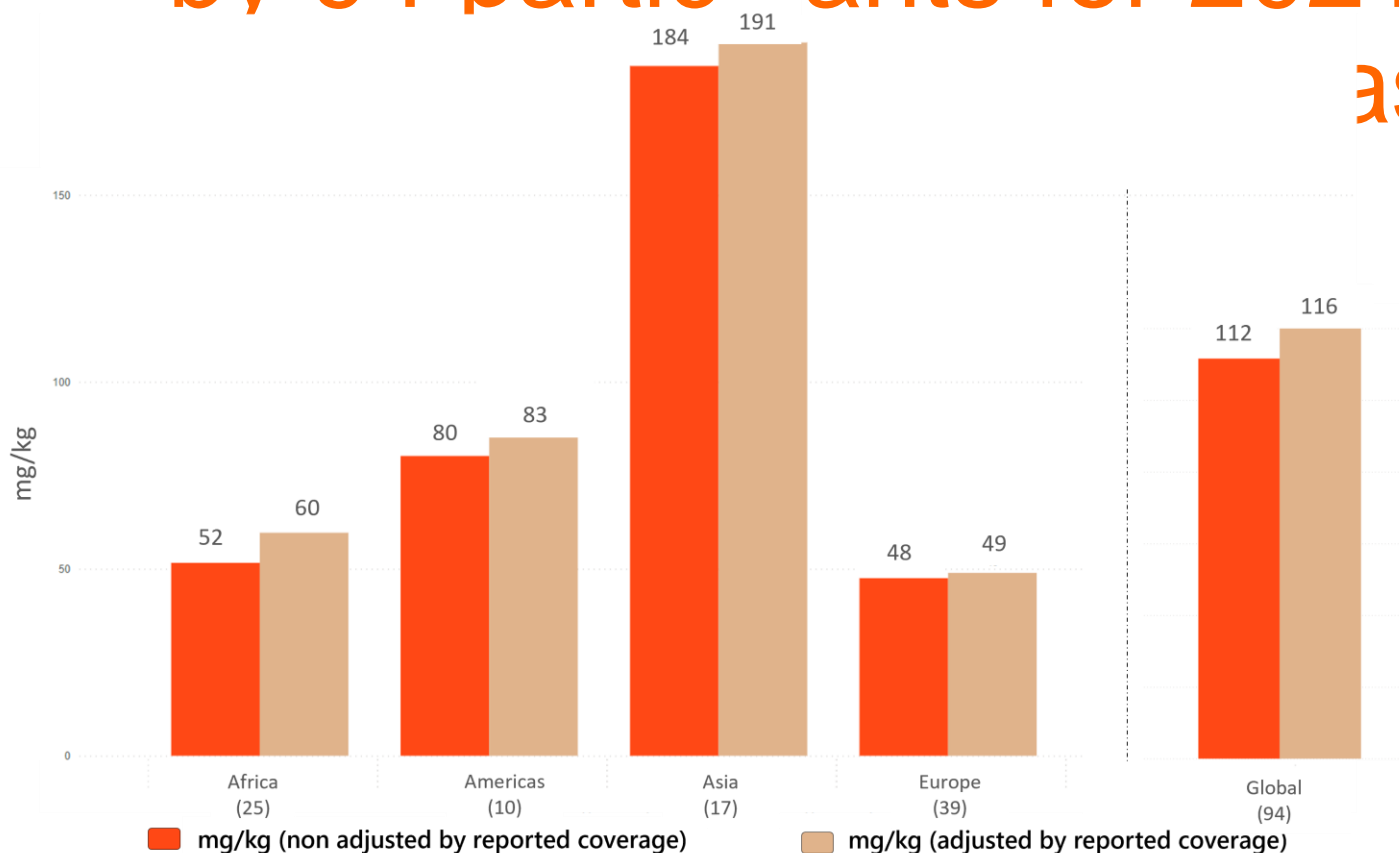
As **reported** by the country to the OIE data collection for the target year



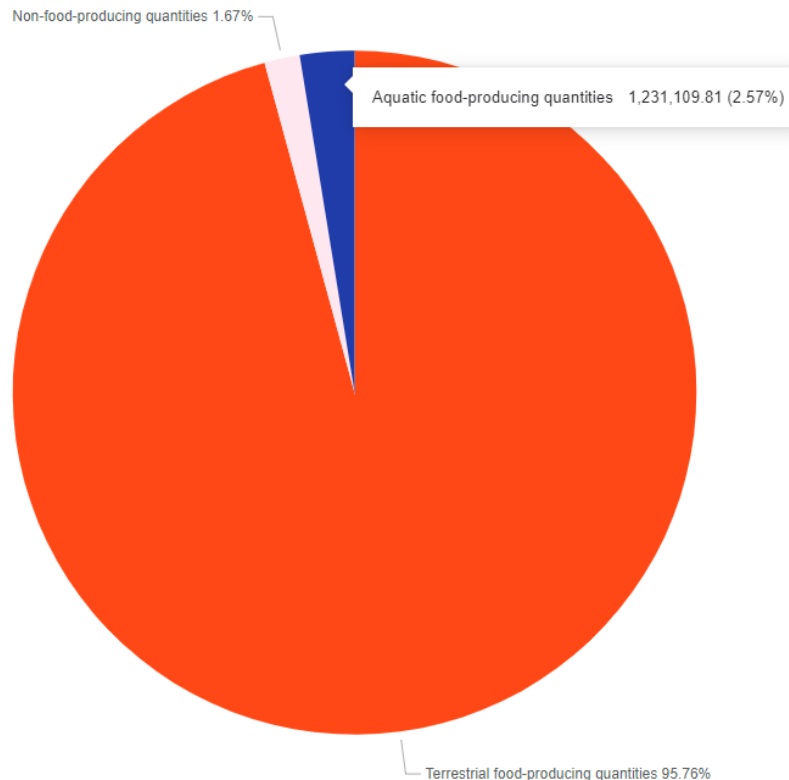
Total weight of food-producing animals in the target year

Calculated Animal Biomass of a country for the target year

Global and regional quantities of antimicrobial agents intended for use in animals based on data reported by 94 participants for 2021, adjusted mg/kg



Proportion of AMU in terrestrial and aquatic food-producing animals (2021)



Animal group	Number of participants	Mean (mg/kg)*	Median (mg/kg)*	Standard deviation (mg/kg)*	Minimum (mg/kg)*	Maximum (mg/kg)*
Terrestrial food-producing animals	17	169.86 (203.05)	29.44 (34.39)	320.84 (422.40)	0.92 (1.26)	1,140.45 (1,733.06)
Aquatic food-producing animals	17	104.64 (112.88)	23.66 (23.70)	264.19 (293.25)	0.73 (0.73)	1,265.67 (1,267.17)

*Adjusted estimated data coverage in brackets.



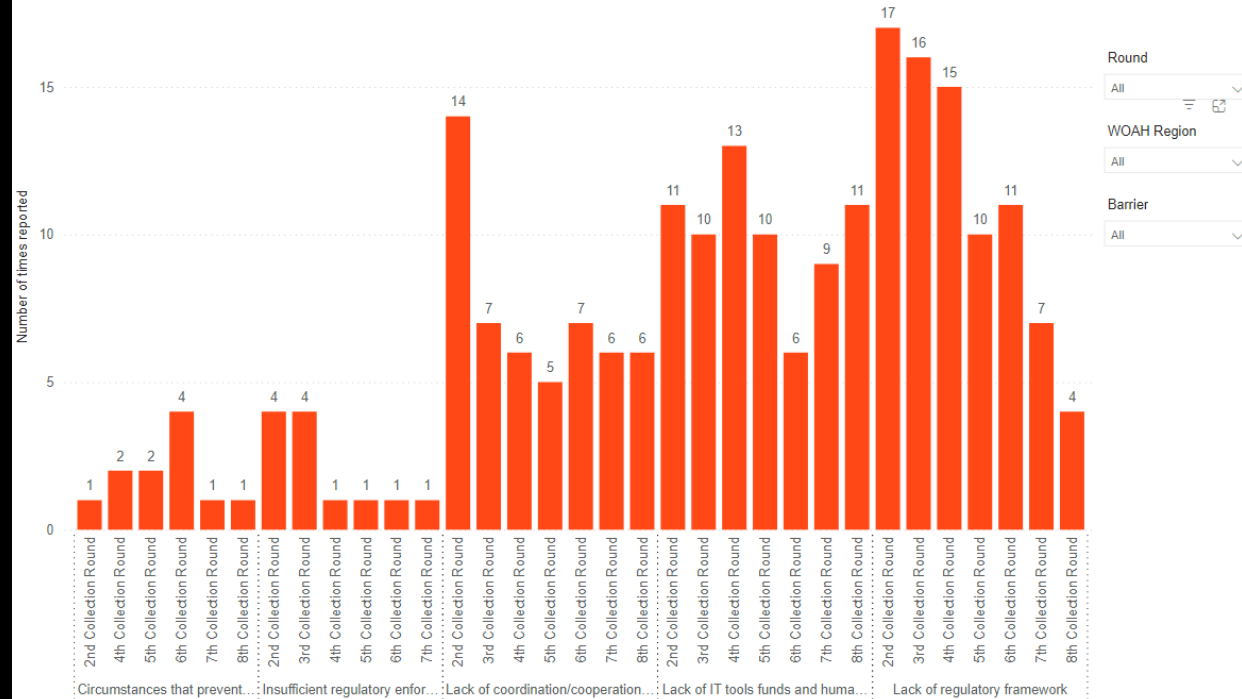
ANIMUSE Interactive Report: Participation (all rounds) – Barriers

Global

Barriers to Providing Quantities

80

Participants Reporting Barriers

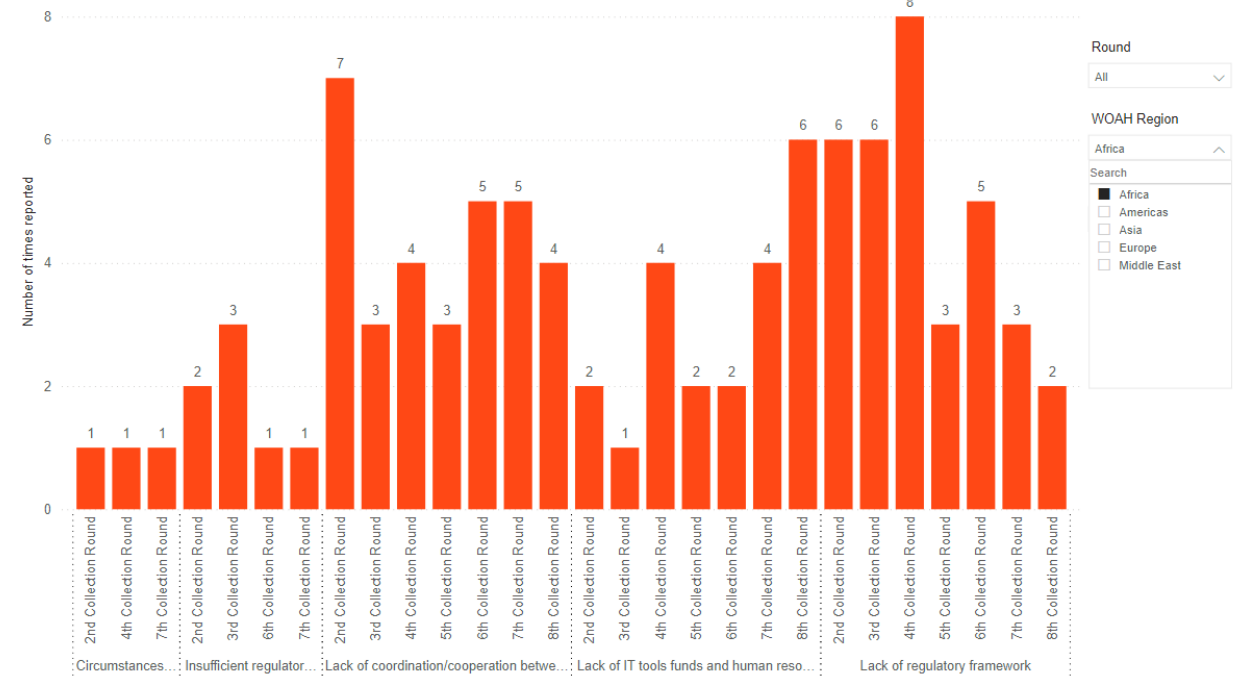


Africa

Barriers to Providing Quantities

27

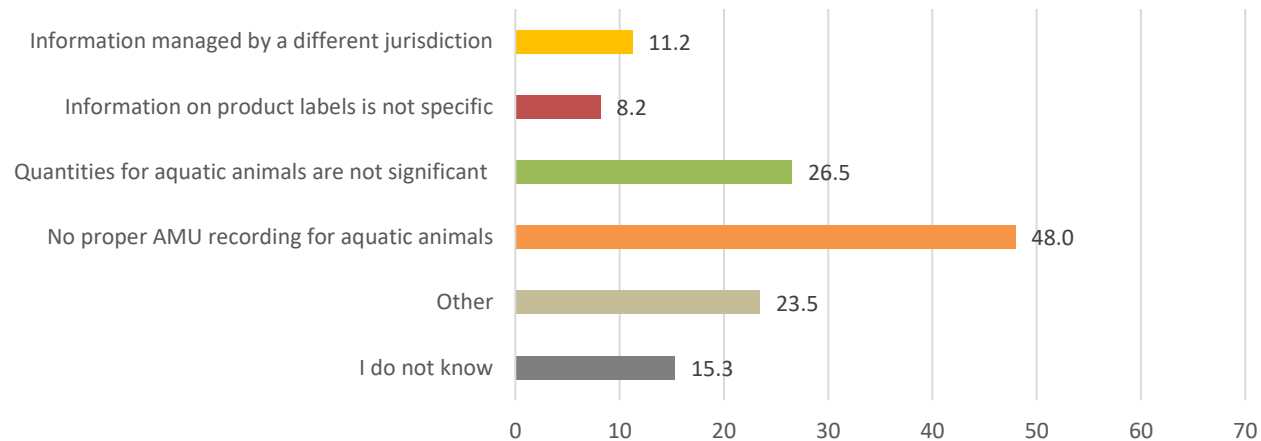
Participants Reporting Barriers



Barriers for reporting AMU – Survey on AMU/AMR in Aquaculture 2022

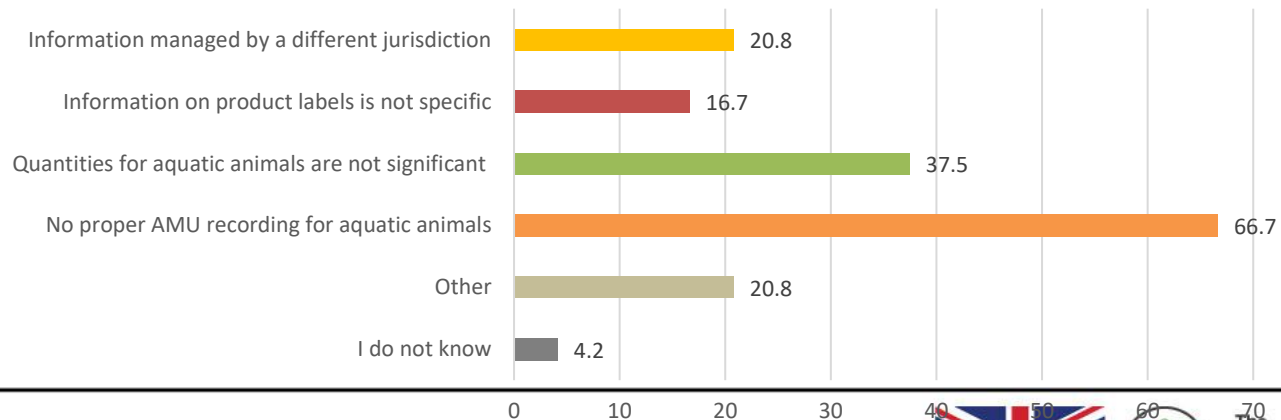


Main difficulties to report AMU quantities in aquatic animals - Global

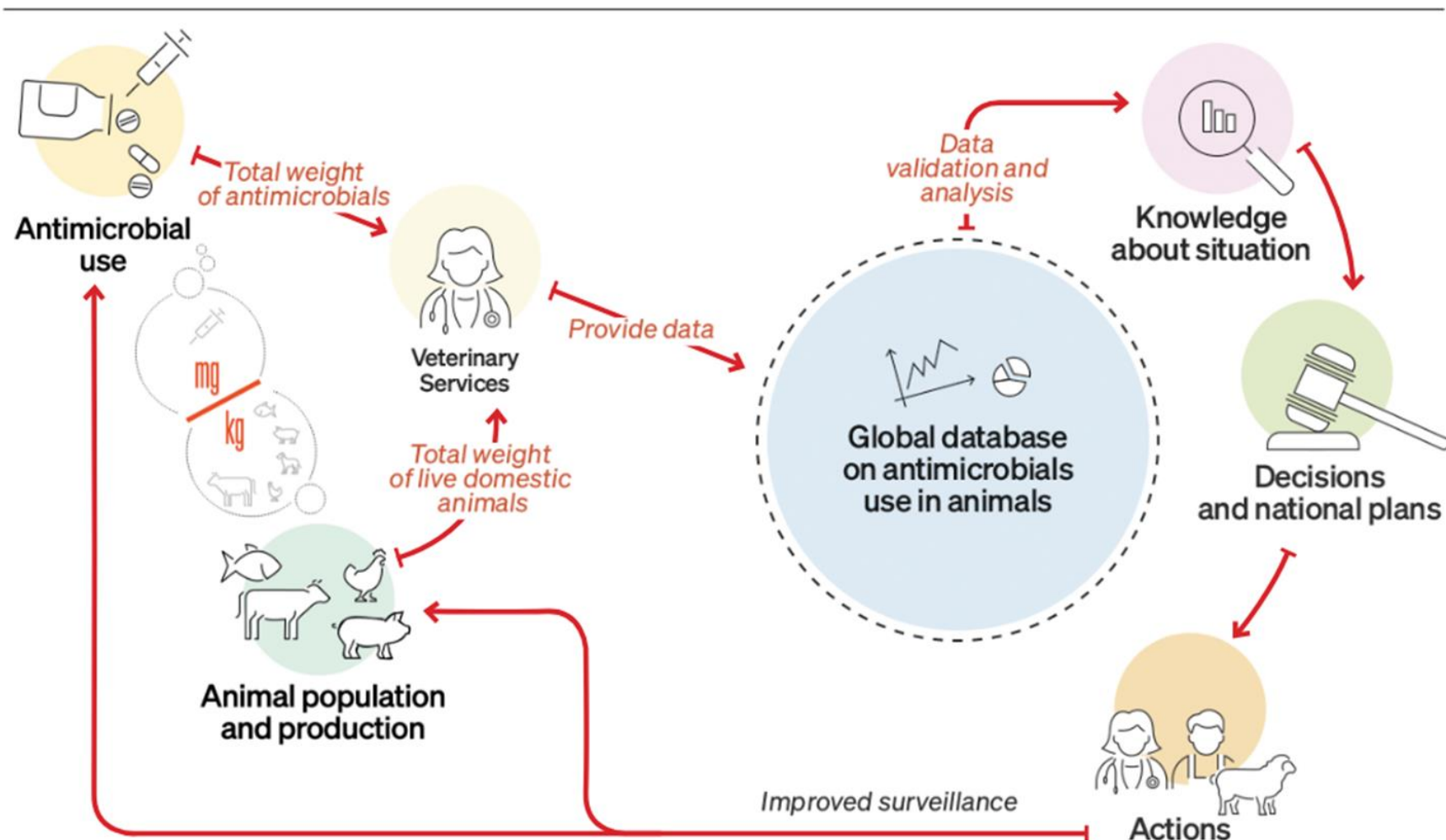


Region	FP-AA	FP-VP	Total FP	Total countries
Africa	25	17	42	31
Americas	22	14	36	24
Asia	15	7	22	19
Europe	30	15	45	33
Middle East	8	4	12	10
			157	117

Main difficulties to report AMU quantities in aquatic animals - Africa



ANTIMICROBIAL USE: FROM DATA TO ACTION





Thank you

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