



Food and Agriculture Organization
of the United Nations

Protecting people and animals from disease threats





Food and Agriculture
Organization of the
United Nations

FAO Regional Activities on Antimicrobials Resistance Containment

“6th Cycle regional training seminar for OIE focal
points for veterinary products (Africa)”

Addis Ababa, 9-11 July, 2019

Tenaw Anduaalem Tadege (FAO)



Outline

Background

FAO focus areas of support to countries

- Situation analyses and NAP development
- AMR Awareness raising
- AMR Surveillance and Evidences
- Good practices pilots: ET, KE, ZI, ZA, TA, GH, SU
- Governance

Way forward



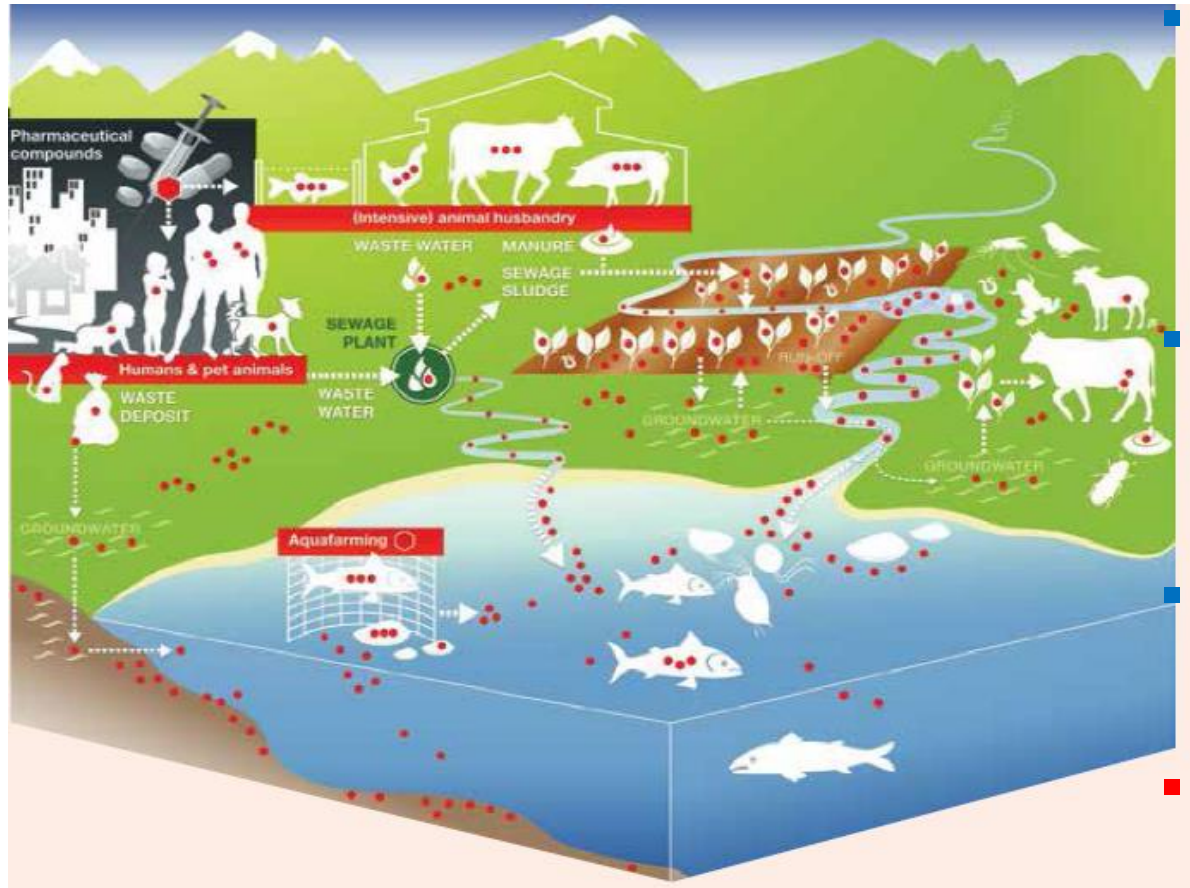
BACKGROUND



Global **Impacts** of AMR to Livestock and the Economy

- “... Livestock production in low-income countries would **decline by 11%** due to AMR by 2050 ...”¹
- Lower productivity & supply of livestock products & **increased prices** for major sources of protein, including milk, meat, eggs, and fish¹
- Additional number of **people living in poverty** will increase 8 to 24 million due to AMR¹
- AMR affecting **GDP**, 3.8% to 5.6% & may double by 2050¹
- “Without AMR Containment, the **SDGs for 2030** such as ending poverty, ending hunger, ensuring healthy lives, reducing inequality, and revitalizing global development partnerships-are less likely to be achieved ... And undermine hard-won achievements under MDGs”²
- **However**, investment of 1\$ on AMR containment will have 4-13 times return of the cost and Rate of Return of 31%¹

AMR Requires all of us to work together: One Health Approach



Widespread **AMU & misuse** in **Humans, Animals, and Plants** are the main factors associated with AMR

AMs **residues** in food & **contamination** of the environment give rise to AMR;

Environmental soil and water bacteria **carry a pool of AMR genes**

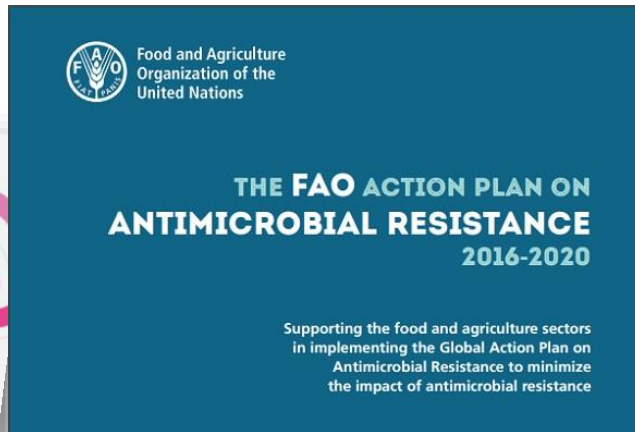
- **AMR genes transfer** between humans, animals and the environment

Addressing threats of AMR holistically and in multi-sectoral One Health approach is necessary

FAO Action Plan on AMR



2015



1. Improve **awareness** and advocacy on AMR, AMU and related threats
2. Develop capacity for **surveillance** and monitoring of AMR and AMU in food and agriculture
3. Promote **good practices** in food and agricultural systems and the **prudent use** of antimicrobials
4. Strengthen **governance** related to AMU and AMR

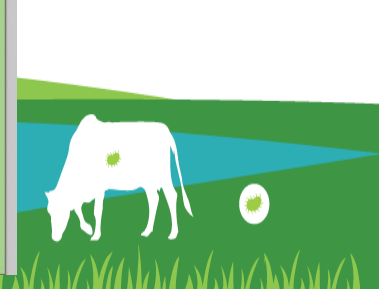
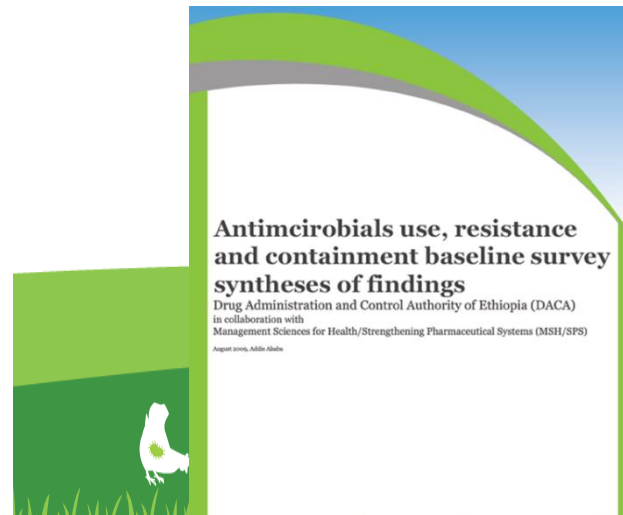
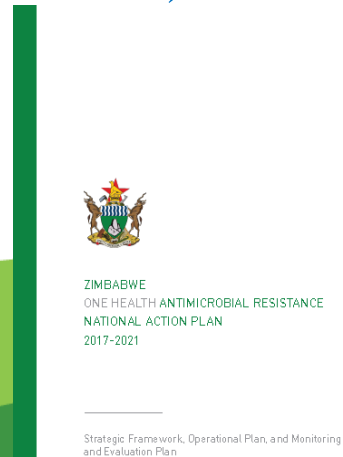
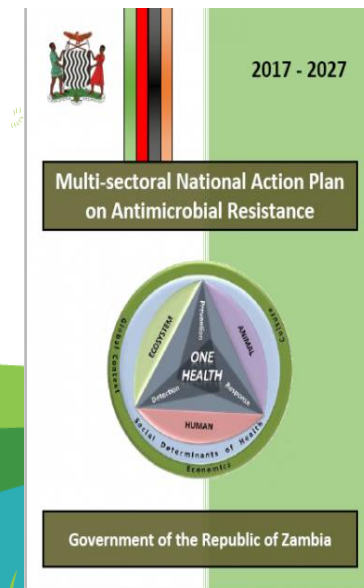
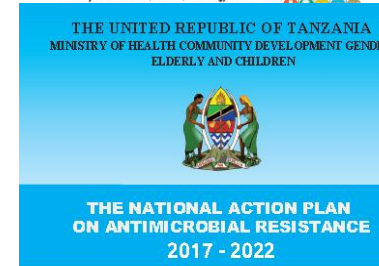
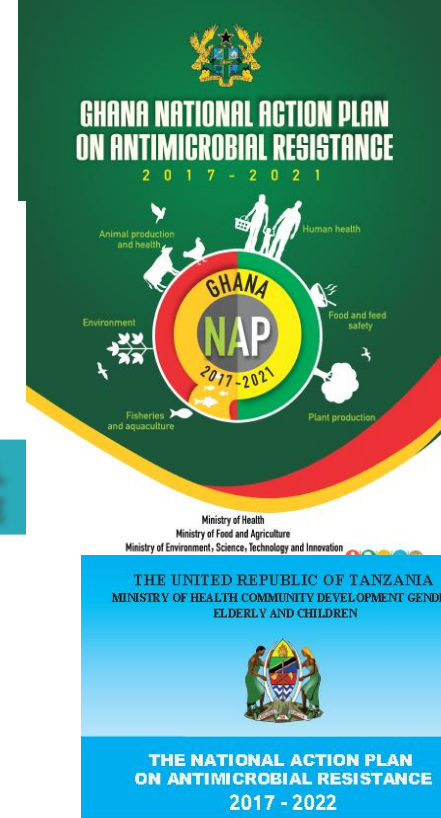
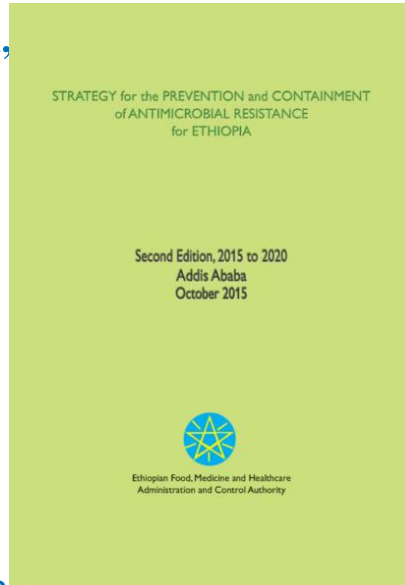


Situational analysis and NAPs



Countries Situational analysis and NAPs

- Situational analysis (ET, KE, Sudan, Tanzania, Zim, Zam, Ghana, Lesotho)
- Strategy for AMR Prevention and Containment, 2011, 2015, 2018 (ET)
- AMR policy (KE)
- AMR NAP (KE, Sudan, Tanzania, Zim, Zam, Ghana, Lesotho)



Ghana AMU and AMR Policy and NAP 2018-06-11



The president of Ghana, HE Akufo Addo, delivering his address at the launch of Ghana AMR policy and NAPn on AMR. Photo: Ministry of Health, Ghana.



Assessment workshops for francophone in West

Africa, 4-5 March 2018, Ouagadougou Burkina Faso

- ECOWAS/WAHO, UEMOA, CILSS, ALG, 10 francophone countries in West Africa
- 4 delegates/ country: ministries of health, animal health/livestock/fishery, agriculture and environment, OIE, WHO, ReAct Africa
- National TV coverage, news paper publications, radio interview in 3 languages
- Initiation of REC AMR task force
- Initiation of West African One health AMR platform

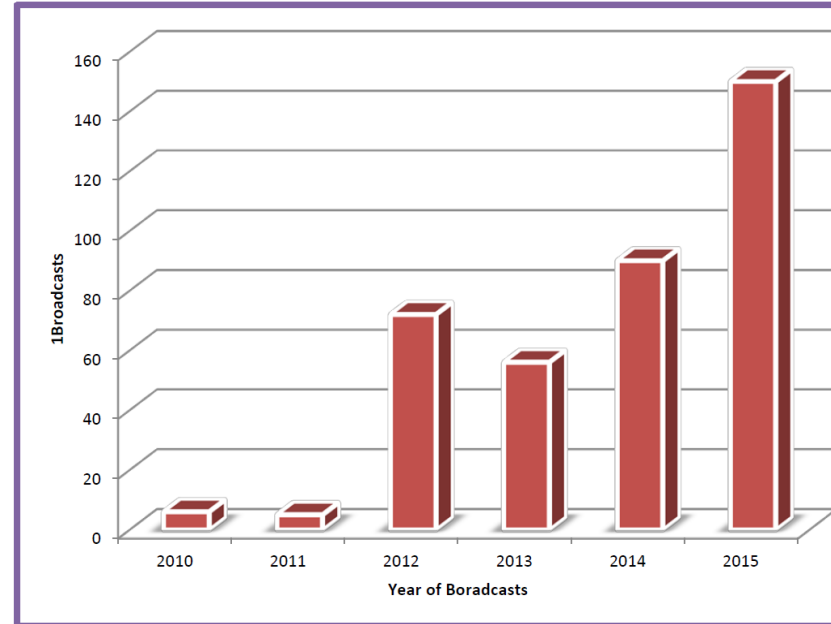


AMR Awareness Raising



Ethiopia AMR Containment Awareness Raising

- One-to-one treatment adherence counseling
- Face-to-face group education at waiting areas
- Social and behavioral change communications
- Mass media campaigns
- Mass walk programs
- Mass media (electronic & Print): more than 600 broadcasts in more than 10 languages



Awareness alone does not lead to behaviour change

Kenya and Ethiopia WAAW 2018

- Kenya video: <https://www.youtube.com/watch?v=zepLLI0XSxA&t=142s>



Joint activity of AMR stakeholders led by government & CSOs play key role, examples of INRUD and APUA

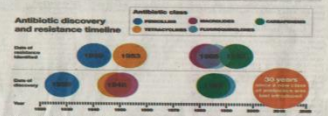
Tanzania AMR Awareness campaign

Antimicrobial resistance and the Tanzanian population: The way forward

By Government Information Bureau

ANTIMICROBIAL RESISTANCE (AMR), the ability of some microorganisms to resist the effects of drugs used to cure infections, is a global public health concern. It is a major cause of death and disability, and is expected to become one of the leading causes of death in the world by 2050. In Tanzania, AMR is a growing public health problem, with an estimated 1.2 million people dying each year from AMR-related infections.

AMR is caused by the overuse and misuse of antimicrobials, including antibiotics, antivirals, antifungals, and antiparasitics. This leads to the development of resistant strains of microorganisms, which can then spread to other people. AMR is a global public health threat, and it is essential that we take action to prevent and control it. This includes using antimicrobials responsibly, improving infection prevention and control measures, and investing in research and development of new antimicrobials.



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Zimbabwe AMR Awareness Raising

- [Zimbabwe: https://www.youtube.com/watch?v=m4SFzL3Hgtw](https://www.youtube.com/watch?v=m4SFzL3Hgtw)

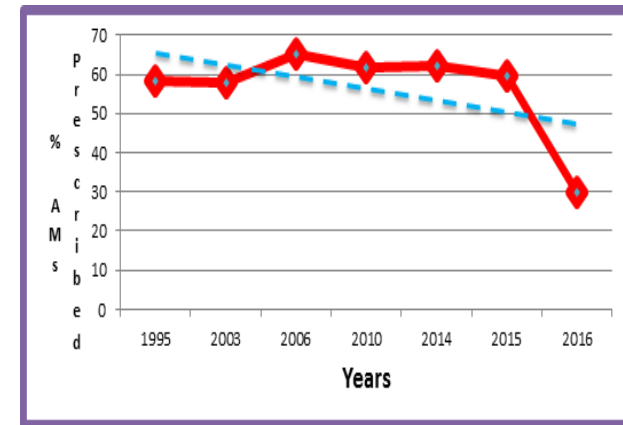


AMU and AMR Surveillance and ATLASS



AMR & AMU Surveillance and Evidence

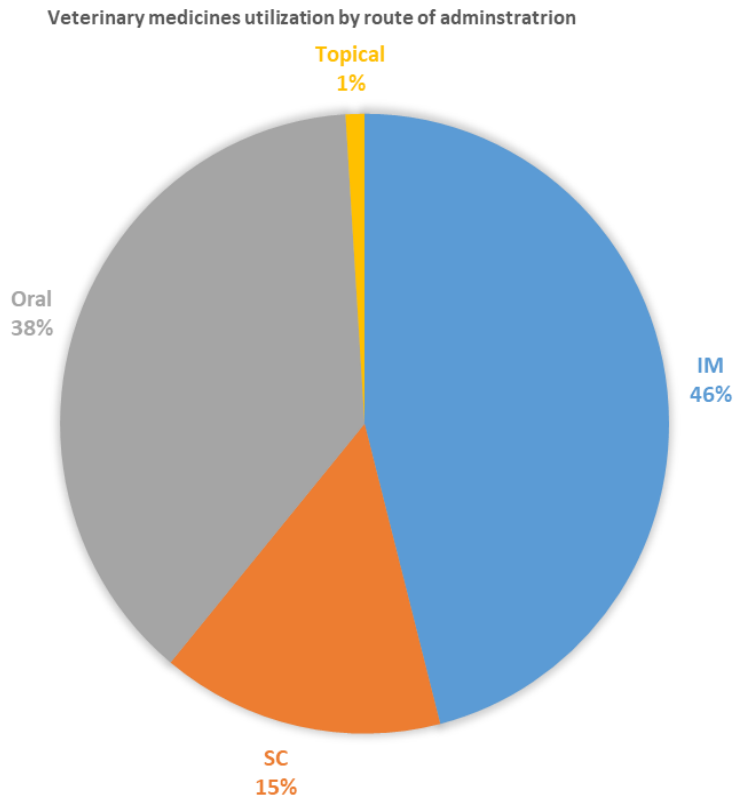
1. Antimicrobials Resistance **Baseline** assessment: AMU and AMR, 2008, 2018 (ET)
2. **ATLASS** Assessment and **AMR** surveillance system in *Ethiopia, Kenya, Sudan, Tanzania, Zambia, Zimbabwe, Ghana*
3. Integrated Antimicrobial Resistance and Residue **Surveillance Plan** 2016, 2019-ET
4. AMR surveillance Plan for the Agric-sector- *KE*,
5. Draft regional surveillance framework
6. Regional **AMR-OH lab trainings** – KEMRI
(TZ, Zam, Zim, KE, ET, SU, UH, GH)
7. National trainings



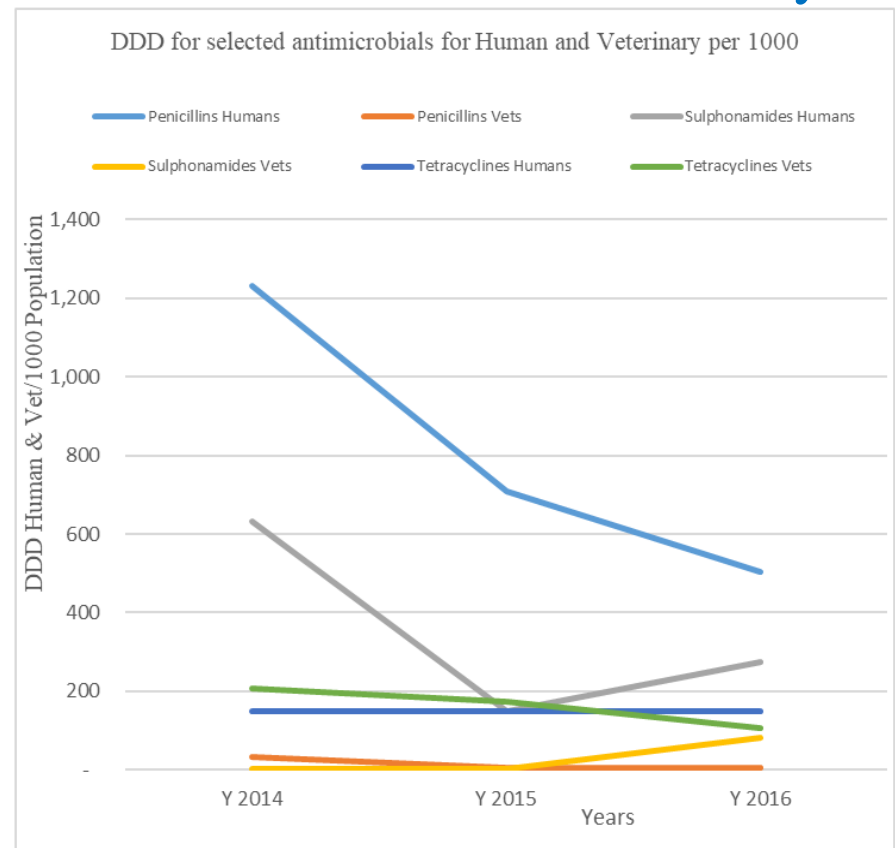
Ethiopia AMU over years examples

VCIA, VHIA, VIA, VUOA and AWaRe

Vet AMU by route of Admin



AMU DDD per 1000 population for humans and veterinary



Good Practices



Output 4: Good practices in the food and agriculture sector on AMU and AMR containment implemented

- Revised Ethiopia veterinary **medicines list**
- Drafted unfit for use veterinary medicines **safe disposal** guideline
- **KAP of animal owners/farmers** on AMU, AMs residue and good dairy farm practices
- Disseminations and **interventions: mastitis prevention and prudent AMU: dissemination, audit and feedback, field experiences sharing, BCC guides**

S. aureus resistance to:

- ❑ Penicillin decline *by 20%* from 63%, 53%, to 43% in the first to second to third round measurements, respectively.
- ❑ Streptomycin declined *by 30%* from 94%, 89% to 64% in the first to second to third round measurements, respectively.



Promote good practices in food and agricultural systems

- Harmonized behaviour change interventions
 - Dairy – ET & Sudan
 - Agrovets , vets – Sudan
 - Poultry- KE, Ghana, Zim, Zam
 - Pastoralism - Tanzania
- KAP studies
 - Design of interventions based on gaps identified
 - Implementation of interventions – mixed approach Farmer Field Schools and others



Governance



Governance

- OH Legislations Review Relevant for Antimicrobial Use, Antimicrobial Resistance and Containment (ET, KE, TZ, Sudan)
- Regional VMP Regulation harmonization Guidelines (SADC) to regulatory systems in Southern African countries
- Mapping of the drug supply chain (KE)
- Updated the Ethiopian Veterinary Medicines-ET
- Safe disposal guideline for unfit for use veterinary medicines and animal feed (ET)
- Drafting a generic veterinary pharmaceuticals management and use training manual (ET)
- Updating the Ethiopian veterinary standard treatment guidelines for veterinary clinics (ET)



Strengthen governance: Legislation workshop for francophone West Africa, 6-7 March 2019, Burkina Faso

- Supporting the development of One Health **National Action Plans (NAP)**
- Supporting **AMR and AMU regulatory framework assessment**
- **Legislation workshop** in West Africa for francophone countries, 6-7 March 2019

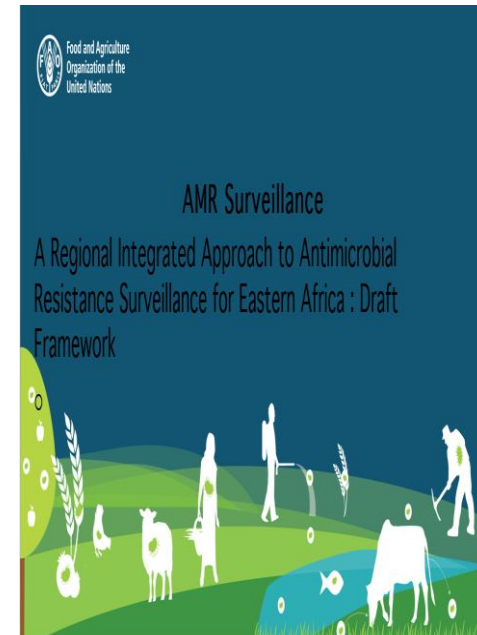
Progressive Management Pathway tool

- First pilot exercise: Ghana in March 2019, multi-sectoral panel
- Contribution of WHO, OIE and UNEP in the development of the tool



Regional strategies/activities

- Southern Africa Development Community (**SADC**) member states have gathered to come up with an **AMR Strategy**, to be collectively implemented by the 15 countries. The SADC AMR Strategy is premised on **One Health** approach so as to realize synergies and opportunities within the human, animal, crop and environmental health sectors.
- Draft AMR **surveillance strategy** –EA
- Regional **AMR network** –EA
- AMR-OH institutionalization analysis- KE



Way forward

- Assist AMU and AMR containment **situation analyses**
- Assist countries to draft their OH AMR containment **strategies**
- **ATLASS** AMR surveillance & lab capacity assessment
- Capacitate for integrated AMR & AMU & Residues **surveillance** and post-marketing surveillance
- Support countries to **integrate AMR containment in plans**
- One Health **legislation review**
- Promoting **good practices and prudent use** in countries on AMR
- AMU tool **standardization**: aggregate and granular
- **Sharing experiences** among the countries



Thank you

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