



# Résistance aux antimicrobiens (RAM) en aquaculture

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# AU-IBAR Work plan on AMR in Aquaculture

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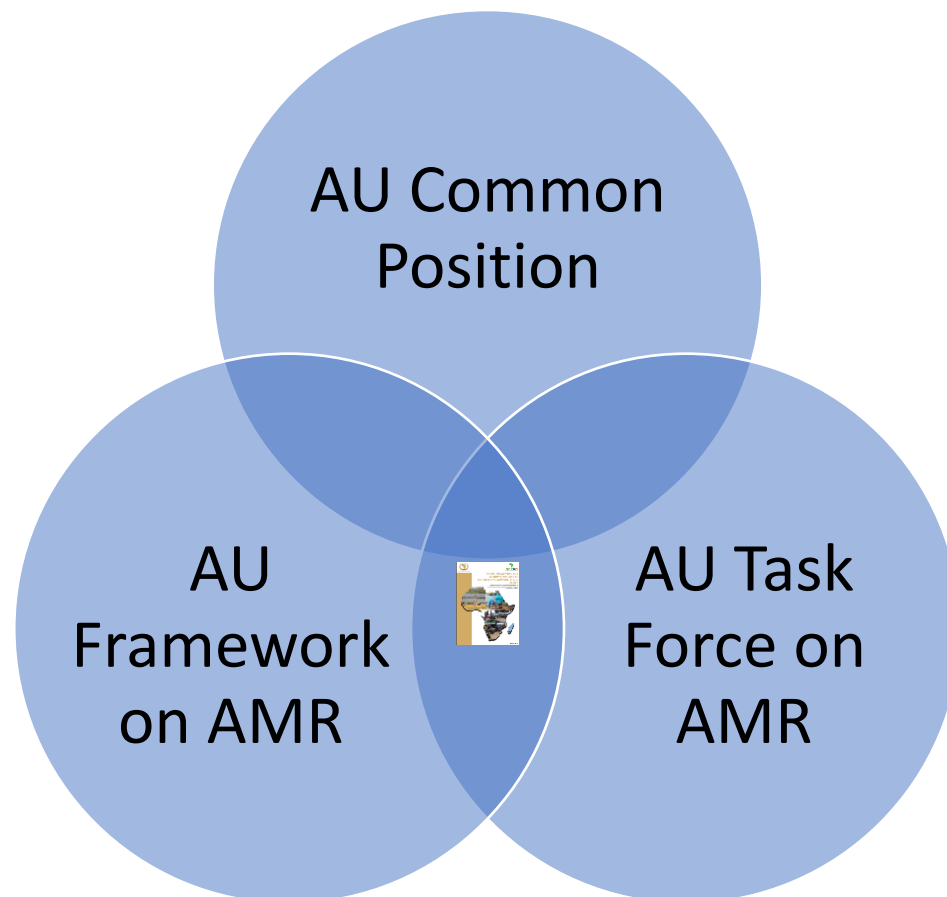


*The mandate of AU-IBAR is to provide leadership and coordinate the sustainable management and utilisation of Africa's animal resources for the benefit of the continent's citizens in line with continental policy.*

### **Hence, in control of AMR**

- WHO, FAO and OIE among others, the World Health Assembly adopted a global action plan for tackling AMR in 2015.
- A resolution on AMR was subsequently adopted by the 71st session of United Nations General Assembly (UNGA) in 2016.
- The Africa Union Heads of States further endorsed the **African Union Framework for antimicrobial resistance control and established the AU Task Force on Antimicrobial Resistance in 2018.**
- The *33rd Ordinary Session* of the African Union Assembly of Heads of States and Governments held in February, 2020 made a **Declaration on Africa's Position on AMR.**

Continently, the 'Africa's Position on AMR' follows a three pronged approach comprising:



## 1. Africa Common Position On AMR

- AMR is a global risk beyond the capacity of any organization or nation to manage or mitigate alone. AU advocates for an *interagency approach to AMR activities in Africa*.
- Recommends the application of the *“One Health approach”* to contain and minimize the threat of AMR in Africa.
- Encourages Member States to continue *prioritizing and investing in the implementation of their National Action Plans on AMR*
- Recommends that *Regional Economic Communities harmonize regulation of antimicrobial agents* used in humans, animals, and plants as well as protocols for recording and reporting AMR and antimicrobial use.
- Recommends the Commission to fully support and fund the *AU Task Force on AMR for monitoring, reviewing, coordinating, and developing policies related to AMR* with representation from all relevant sectors in a One Health approach.

## 2. AU Framework for Antimicrobial Resistance (AMR) Control

### Primary goals

#### Surveillance

Improve surveillance of Antimicrobial resistant organisms and Antimicrobial use

#### Delay Emergence

Better understand practices and barriers and propose solutions to promoting prudent antimicrobial use

#### Limit Transmission

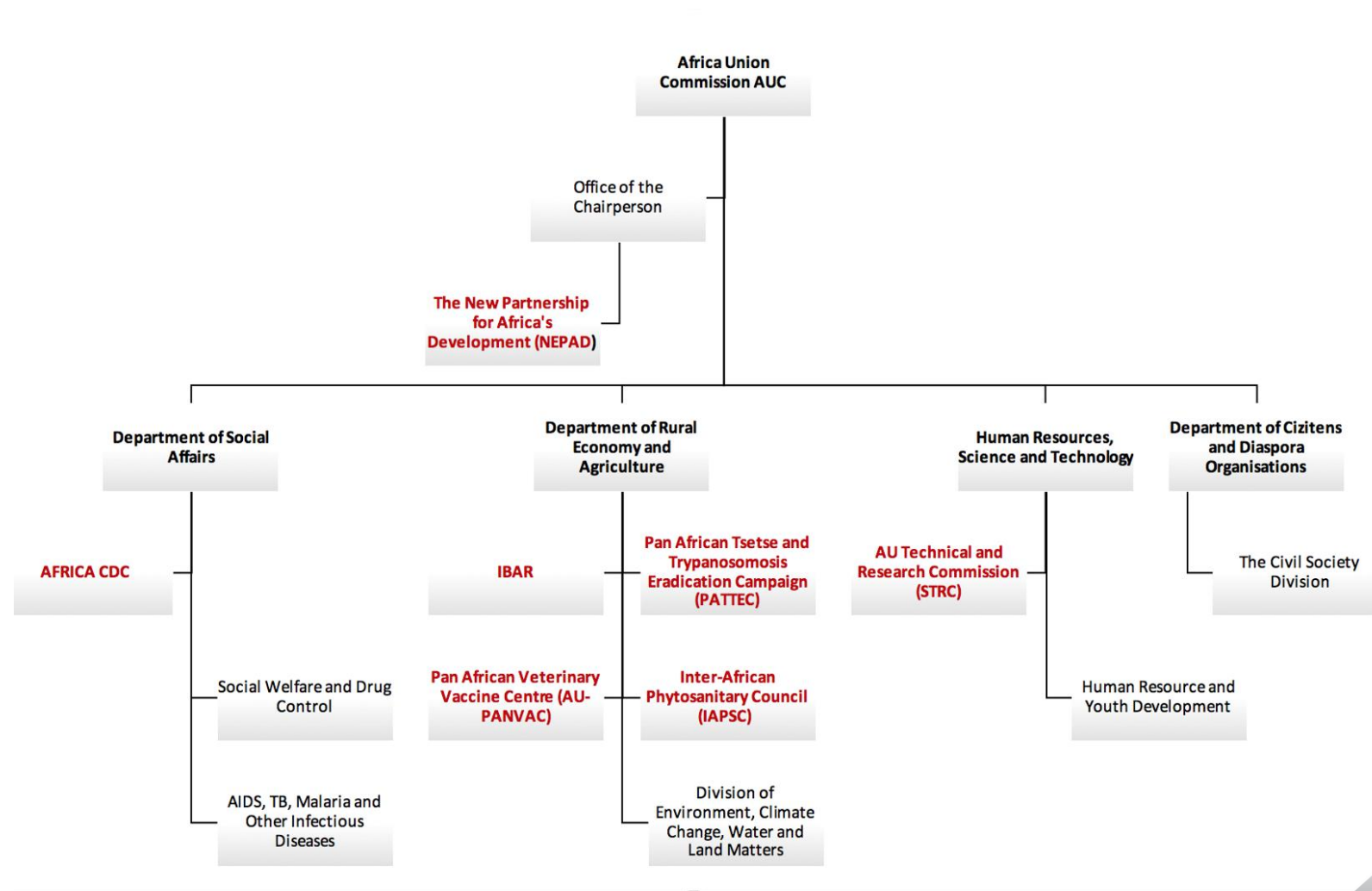
Advocate for policies and statutes that promote infection prevention and control, biosecurity and husbandry

#### Mitigate Harm

Produce evidence-based guidelines for clinicians, veterinarians and farmers to treat susceptible and resistant infections in animals and humans. Promote access to essential medicines

### 3. African Union Task Force on AMR

- Coordinates AMR control within the AUC
- Contributes to creation of an environment that facilitates the work of Member States, UN Agencies, development partners, research and academia, industry and other organizations.
- The Task force works with Member States to prioritize continent-wide efforts to increase political commitment, mobilize resources, and promote policies that improve AMR control.





## AU-IBAR's actions and workplan





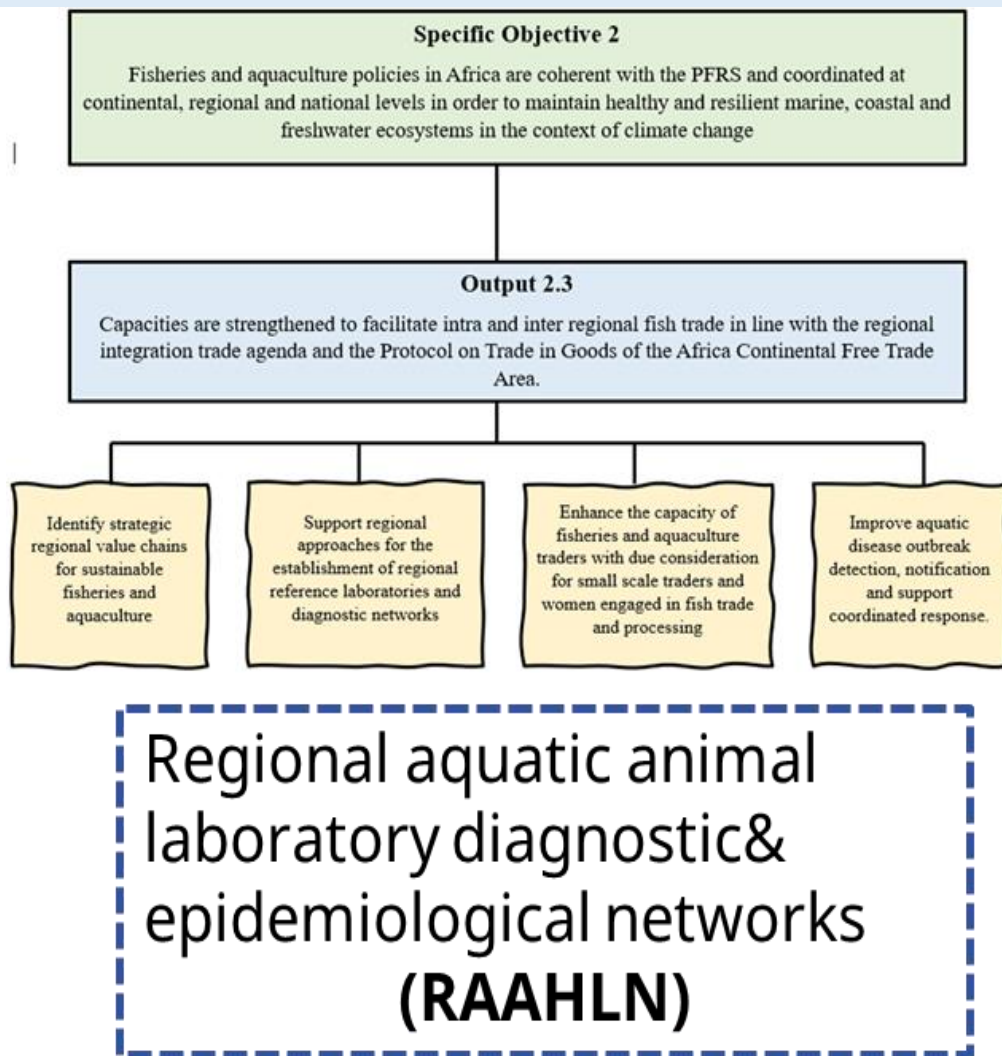


## AU-IBAR's actions:

1. Establishing regional aquatic animal health laboratory diagnostic networks in collaboration with WOAHA
2. On-going CES-AMR project
3. Develop a continental aquatic animal health strategy
4. Eventually a consolidated quadripartite continental One Health Strategy & reporting system



# 1. regional aquatic animal health laboratory diagnostic network(s)



1. Promote and strengthen the establishment of collaborative partnerships and networking between national, regional and international aquatic animal health laboratories and public and private-sector fisheries and aquaculture institutions to support pathogen detection, identification, and delivery of aquatic animal health services in Africa;
2. Improve the capacity for, and access to, quality aquatic animal health laboratory services and information in Africa
3. Establish a continental aquatic animal health laboratory information system and capacity building (training) programmes.



## 2. CES-AMR project

- **Goal of the CES-AMR Project**

To enhance AMR governance with focus on regional approaches that strengthen capacities to undertake surveillance of AMR microorganisms

- **Project objectives**

- To establish and operationalize the Africa AMR Surveillance Network
- To build capacities of Member States to undertake surveillance and monitoring of AMR in the animal health sector



## 2. CES-AMR project

- **However, only 3 of countries** expressed need/shared information on aquaculture value chains and these not necessarily the continent's largest producers
- **Bearing in mind** that aquaculture producers and fisheries independently through FishGov activities have raised concern on AMU/AMR and are able to attribute consequences to their enterprises and the industry e.g. some have been denied access to markets because they cannot certify the status of AMU exposure
- AU-IBAR also collaborated with WOAHA survey on antimicrobials used in aquaculture  
*⇒ low level of awareness on the status and relevance of controlling AMU/AMR in the fisheries/aquaculture and aquatic ecosystems*
- Within the framework of the AHSAs => affirmative action for emerging animal sub-sectors like as aquaculture therefore CES-AMR project will still consider aquaculture AMR

## 2. CES-AMR project

### Key achievements of the CES-AMR project

- Resistance is commonly reported against Tetracyclines, Penicillins, Quinolones, Acaricides, Trypanocides, Streptomycins and Sulphonamides.
- *E. coli*, *Salmonella* spp., *Campylobacter* spp., *Enterococcus* spp. and *Staphylococcus aureus* are key pathogens exhibiting resistance.
- Livestock value-chains most affected include, Beef, Poultry and Dairy.

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#### Current trends on antimicrobial use and emergence of resistance in the animal health sector in Africa: A review covering the period 2013-2023

**Joseph W Magona, John Oppong-Otoo, Hiver Boussini, Nelly Isyagi, Cheick AK Sidibé, James K Wabacha and Salih Huyam**

##### Abstract

Increasing prevalence of antimicrobial resistance in the animal health sector in Africa is an issue of great importance to African countries. To understand current trends in antimicrobial resistance and antimicrobial use in the animal health sector in Africa, a review of the latest update was conducted. The review spanned the period 2013 to 2023, covering antimicrobial resistance and associated factors; common practices of antimicrobial use or misuse; antimicrobial testing approaches; measures for



### 3. Develop a continental aquatic animal health strategy

**AU-IBAR has been tasked by the African Union Commission (AUC) to undertake the following by 2025/26 in collaboration with AU-PANVAC:**

1. A continental epidemiological assessment of the current status of transboundary aquatic animal diseases and aquatic antimicrobial resistance in Africa
2. A continental review of Africa's water and aquatic environmental management guidelines to promote climate-smart sustainable fisheries and aquaculture development, aquatic biodiversity conservation and the maintenance of aquatic ecosystem health
3. Develop a continental aquatic animal health & biosecurity control strategy for Africa



### 3. Develop a continental aquatic animal health strategy

**To strengthen capacity and coordination for aquatic animal health, biosecurity control and safe-trade in compliance to global and continental best practices and norms to:**

- *Address growing threats to the sector & aquatic biodiversity from diseases, pests, invasive species, pollution, environmental degradation and climate change*
- *Curb spread of transboundary aquatic animal diseases (TAAD)*
- *Control the spread of aquatic antimicrobial resistance (AMR) through aquatic food chains and environments*
- *Strengthen access to markets and safe equitable regional fish trade towards AfCFTA*
- *Strengthen resilience and sustainability of the fisheries & aquaculture sectors and Blue Economy*
- *Strengthen coordination & regional cooperation for multi-sectoral & multi-stakeholder coherence in transboundary aquatic biosecurity and biosafety control*
- *Develop an all-inclusive 'One Africa Voice'*

## Adopting PFRS guidelines anchored on regional integration + regional ecosystem value-chain risk-based approach

|   | Production systems | Post-harvest | Distribution and marketing | Consumer (human health) | Environment (including indirect impact) |
|---|--------------------|--------------|----------------------------|-------------------------|---|
| <b>A] SYSTEM LEVEL</b>  |                    |              |                            |                         |   |
| Ecosystem stressors   |                    |              |                            |                         |   |
| Entry points  |                    |              |                            |                         |   |
| hotspots  |                    |              |                            |                         |   |
| drivers   |                    |              |                            |                         |   |
| Transmission pathways   |                    |              |                            |                         |   |
| <b>B] ANIMAL LEVEL</b>  |                    |              |                            |                         |   |
| Animal welfare (5 freedoms domestic & wild)   |                    |              |                            |                         |   |
| Predisposing factors  |                    |              |                            |                         |   |
| Factors influencing susceptibility & establishment  |                    |              |                            |                         |   |
| Preventive & control measures (appropriate alternative production & health management measures) |                    |              |                            |                         |   |
| <b>C] ONE HEALTH IMPACTS</b>  |                    |              |                            |                         |   |
| Public health (inclusive food-safety, AMR, zoonoses)  |                    |              |                            |                         |   |
| Environmental health  |                    |              |                            |                         |   |
| <b>D] EQUITABLE SOCIO-ECONOMIC DEVELOPMENT</b>  |                    |              |                            |                         |   |
| Food & nutrition security   |                    |              |                            |                         |   |
| Access to markets & safe-regional trade   |                    |              |                            |                         |   |
| Jobs, wealth creation, incomes, national & regional development                                 |                    |              |                            |                         |   |

RAAHN's, RAHLN, Regional public & private sector practitioner networks, supported by NEMA's, RFB, RWB, Regional AMR networks, regional & global aquatic biodiversity conservation networks, OH partners, regional & global trading partners (food & non-food) coordinated by RECs will play long-term key roles



# Thank You



**AU-IBAR: Providing leadership in the development of animal resources for Africa**