



World Organisation
for Animal Health



Launch of the Regional Aquatic Animal Health Laboratory Network for Africa (RAAHLN-AF)

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Why a Regional Aquatic Animal Health Laboratory Network for Africa?

Africa's Perspective

by

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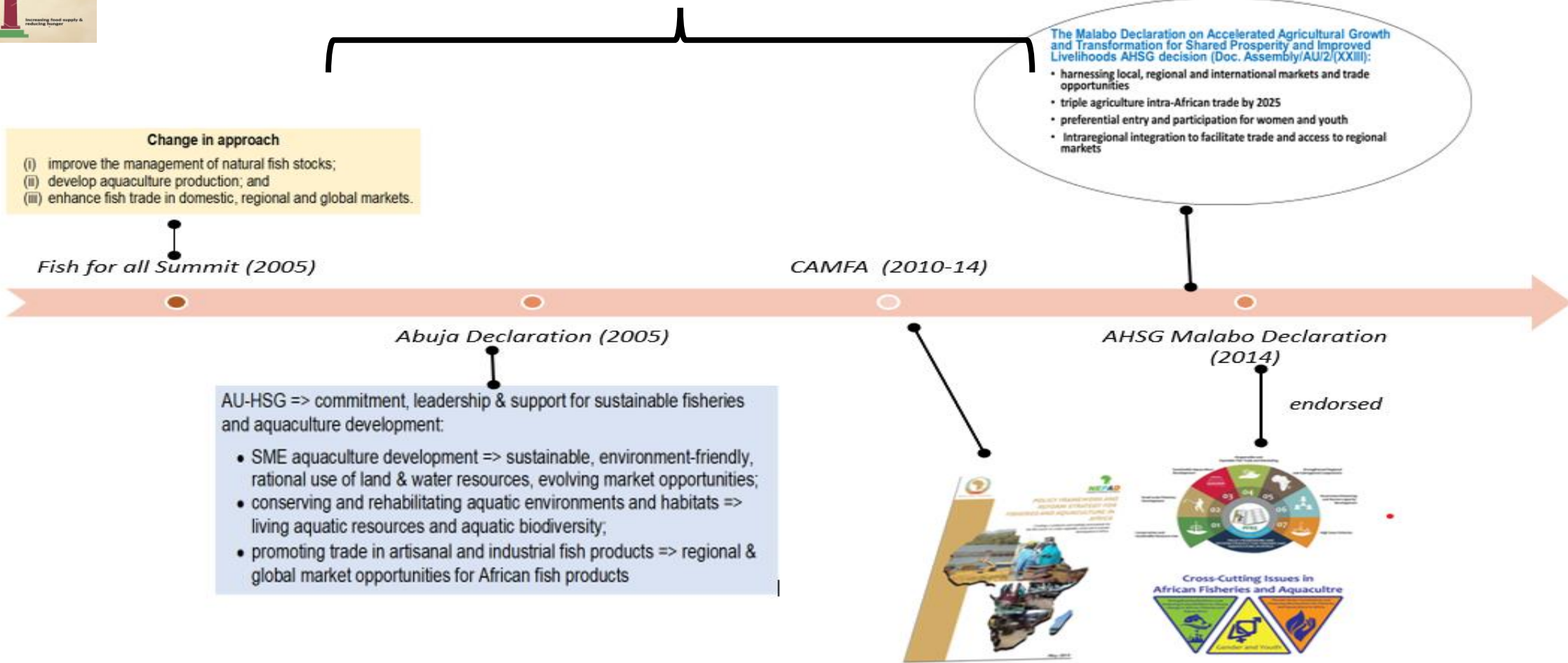
Outline of Presentation

1. Background
2. Lessons and recommendations from AU-IBAR's activities
3. The rationale for RAAHLN
4. Expectations for the RAAHLN/RAHLN
5. Way forward

BACKGROUND

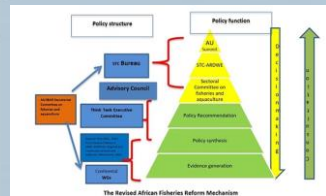
A shift in continental fisheries and aquaculture policy

*Africa's first real experience
with mass devastating impacts
of TAADS*

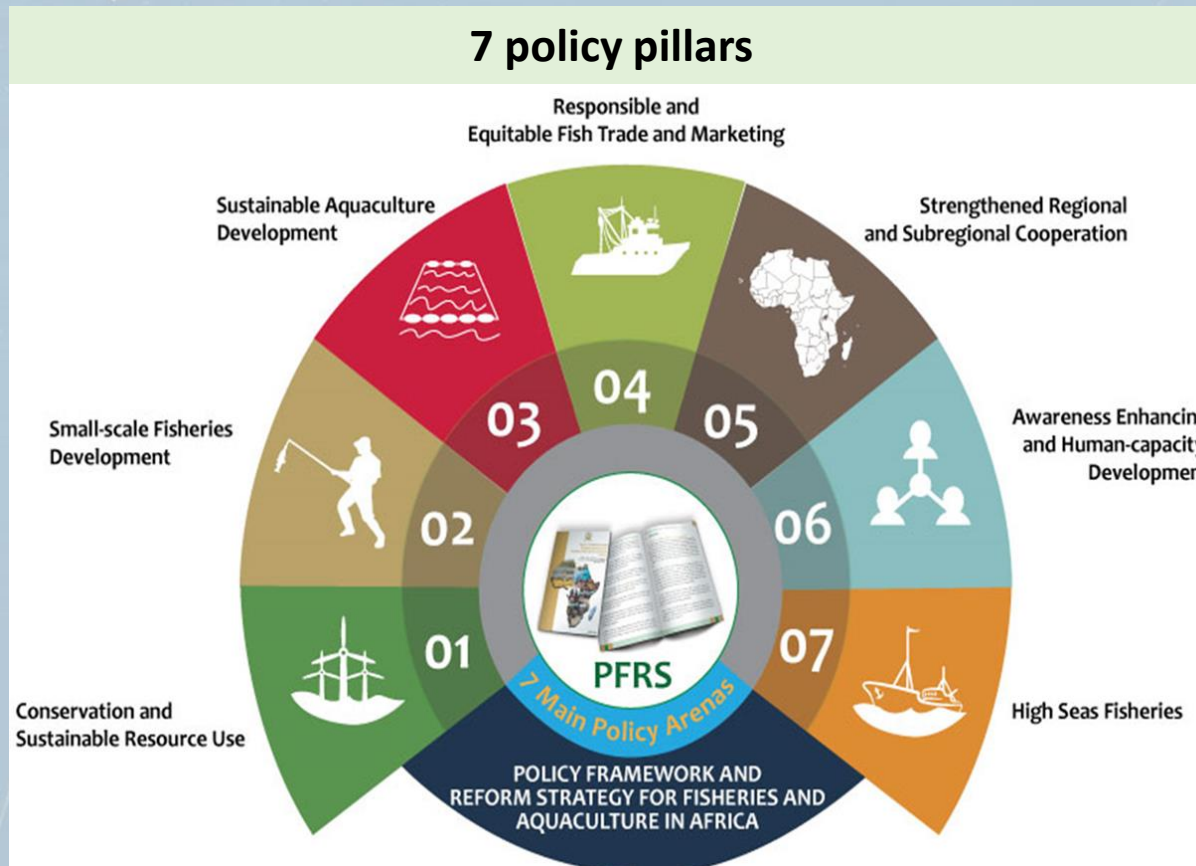


The Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa

=> coherent approach to guide the sector realize the full wealth-generating potential of African fisheries and aquaculture and ensures sustainable social, environmental and profitable outcomes for Africa and its peoples



AFRM



Implementation of the PFRS

Given its mandate for leadership in implementing continental policy for the sustainable utilization of Africa's animal resources, AU-IBAR in collaboration with AUDA-NEPAD (AU's development agency) obtained support from EU to implement:

1. The 1st Fisheries Governance Project (2014-2018)

to create a conducive environment for implementing the PFRS across Africa

2. The Fish Trade Project (2013-2018)

in collaboration with WorldFish to improve food and nutrition security through regional fish trade

3. The 2nd Fisheries Governance Project (2021 to-date)

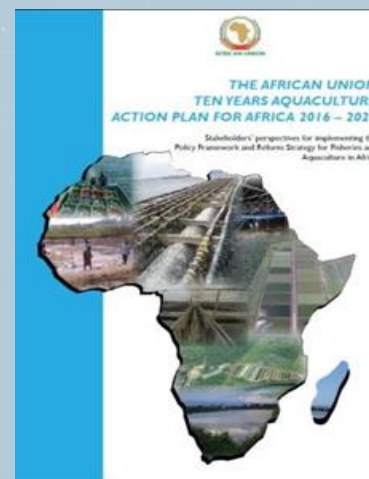
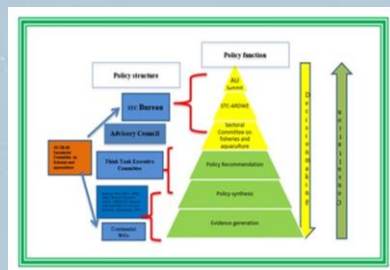
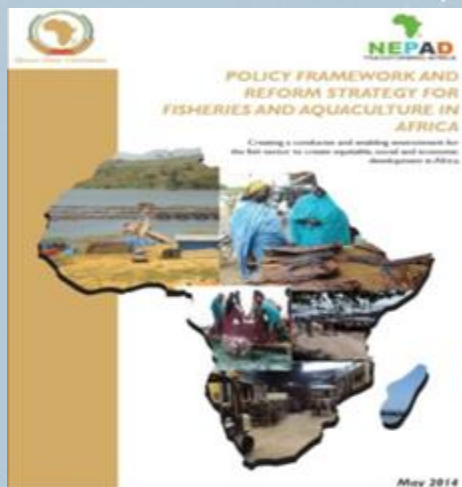
to strengthen the capacity of Africa's Regional Economic Communities and Member States implement the recommendations for FishGov 1, and also Fish Trade plus other continental decisions



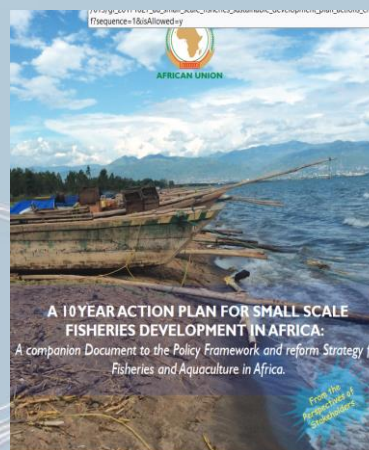
MAJOR LESSONS LEARNT AND RECOMMENDATIONS FOR AQUATIC ANIMAL HEALTH, WELFARE AND EQUITABLE REGIONAL FISH TRADE



1. Multi-stakeholder consultations/continental think tanks => Aquaculture Action Plan



Stakeholder views



Activity Area 5: Trans-Boundary Ecosystem Management for Aquaculture

AIM

- address *Policy Arenas 1, 5 and 8* of the PFRS.
- Sustainable management of aquatic natural resources for sustainable aquaculture
- Biodiversity control, ecosystem health and biosecurity bearing in mind the trans-boundary nature of Africa's aquatic ecosystems.
- Climate change resilience building
The quality of aquatic products produced depends a lot on the sustainable management of aquatic resources as a whole.

KEY ACTIVITIES

- Environmental Management and climate change challenges
- Biodiversity control
- Aquatic Animal Disease Control and Surveillance
- systematic biosecurity control from farm continental level

2. FishGov 1

.....transboundary ecosystem management

To strengthen institutional capacity for biosecurity control => coherence and common approaches:

FISHGOV I

Following the AFRM

1. Establish the baseline

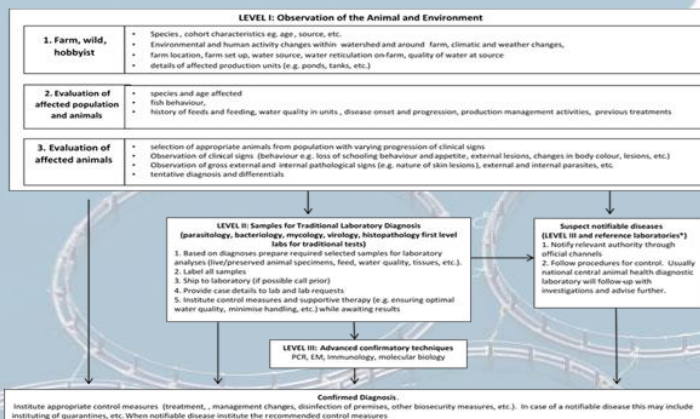
- Mapping of Aquatic Animal Diseases

2. Common Understanding

- Continental joint training and consultations in Aquatic Animal Disease Control for Veterinarians + Fisheries Officers (one of whom WOA National Aquatic Focal Point) and representative officers from RECs, RAHN, RAH laboratory and epidemiological networks.

3. Consensus in approach

- Developed draft ARIS - Aquatic Animal Health Data Collection Module
- Developed draft Regional Aquatic Animal Disease Control Frameworks
- Developed draft TORs Regional Aquatic Animal Health Networks to integrate as component of RAHN



Regional frameworks for the control of aquatic animal diseases in Africa drafted

1. Region specific framework to guide regional coherence and cooperation in the detection, control and epidemio-surveillance of aquatic animal diseases
2. Enhanced and effective biosecurity controls to protect Africa's aquatic animal production systems from threats attributable to diseases, pests and invasive species.
3. Safe aquatic animal products
4. Safe trade of aquatic animals and their products and improved access to markets
5. Improved sharing of phyto-sanitary information among stakeholders

3. FishGov 1

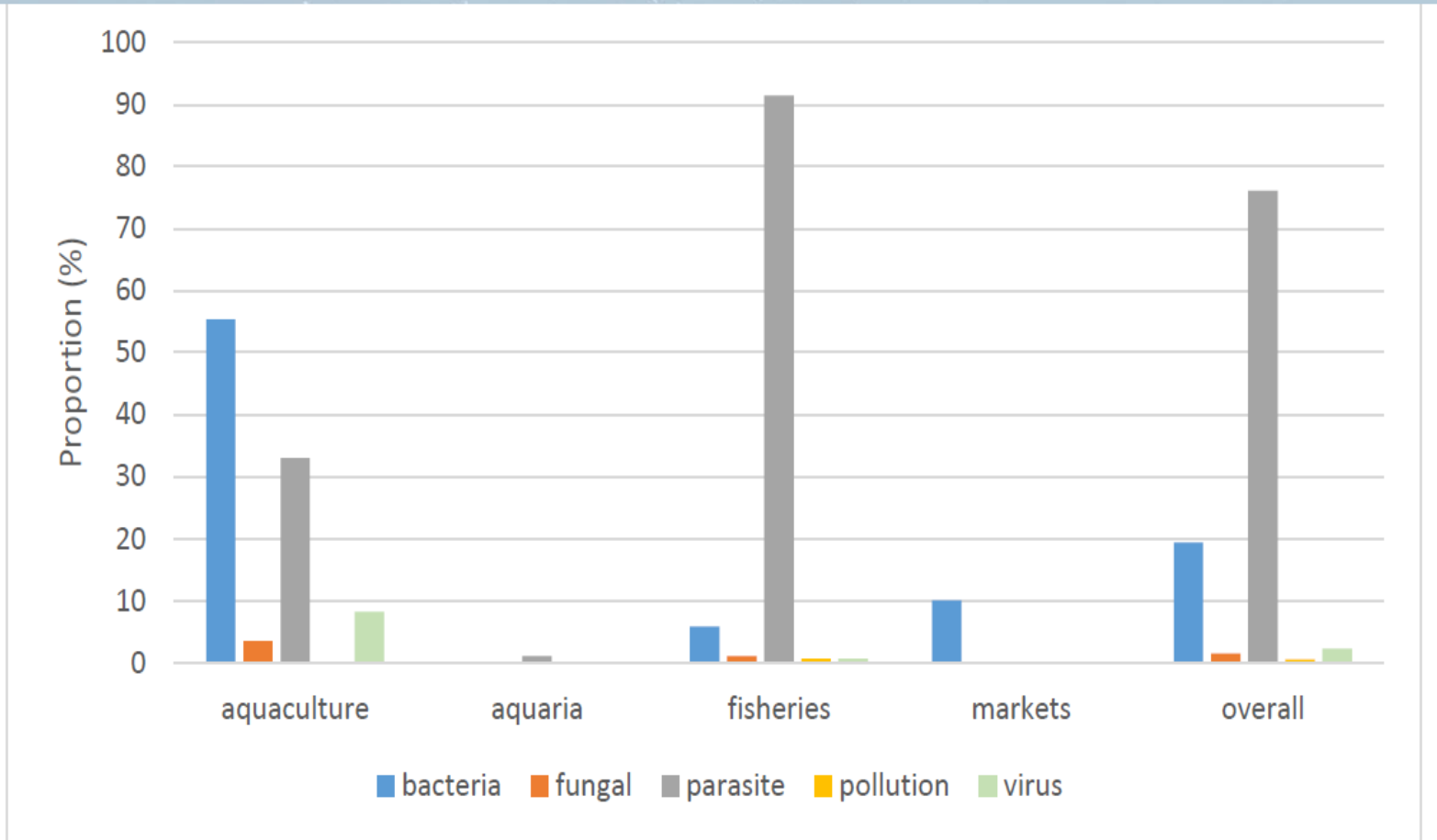


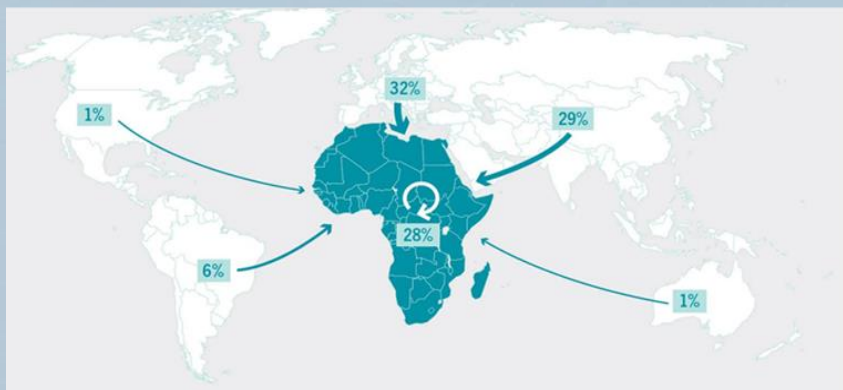
Figure 1. Pathogens identified on Aquatic Animals

Issues raised

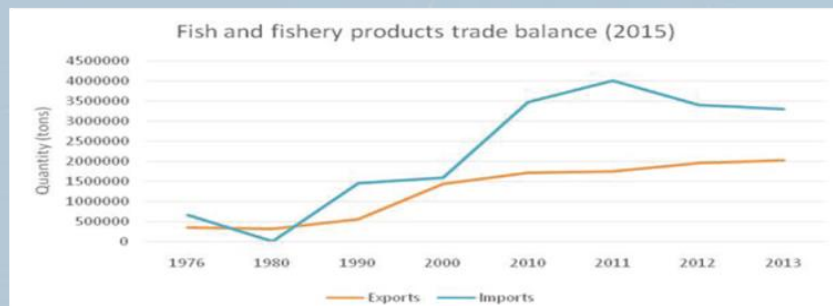
1. Quality and sharing of sanitary Information
2. Pathogen Lists
3. Capacity building (*human, institutional & infrastructure*)
4. Policies, governance and strategies
 - 3-teir laboratory network system linked to reference labs
 - Community-based approach => RAAHNs
 - Standards and traceability

4. Fish Trade

- While Africa exports high value fresh and marine fish products to international markets, it is net importer of cheaper food fish for its growing local markets.
- Imports still, do not meet actual demand

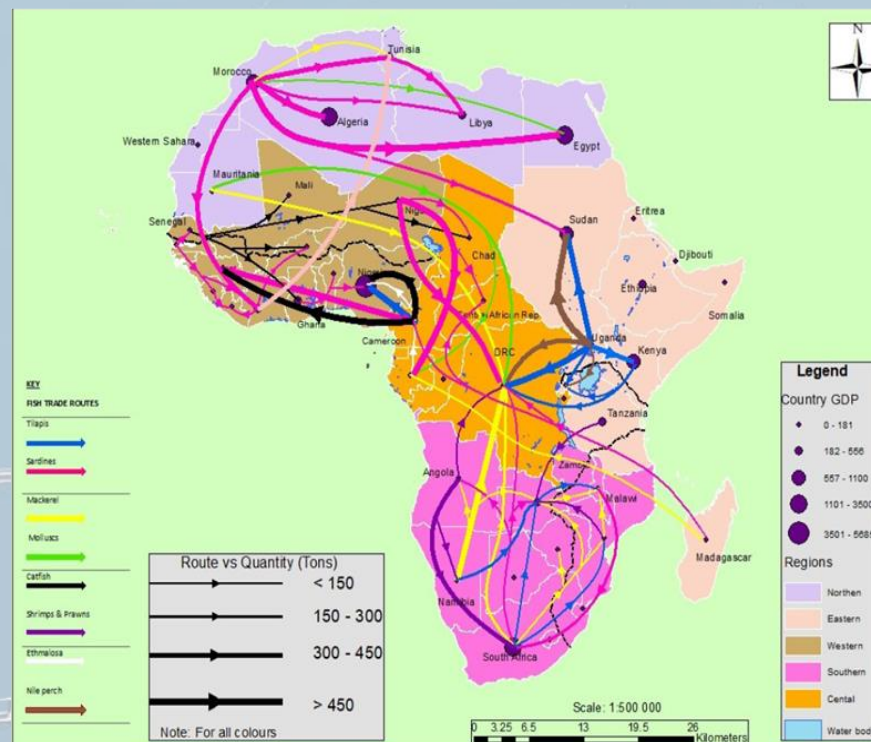


Africa: Trade Flows (blue arrows- international imports, white circular arrow – intra-regional fish trade). FAO, 2022. State of World Aquaculture and Fisheries.



Fish and fish products trade in Africa. FAO FishStat 2017.

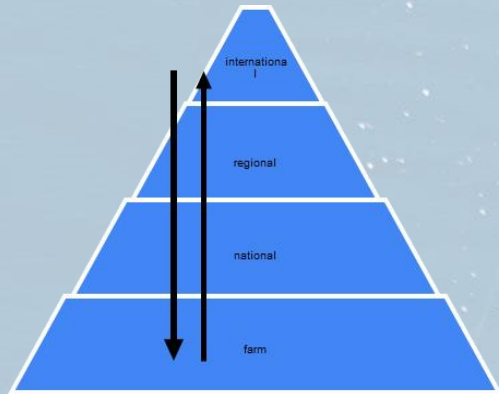
- Fish is Africa's second most traded commodity after sugar
- About 40% of the fish consumed on the continent, crosses a border
- Distribution of aquatic animal food products inland and intra-regionally is done overland by smallholders and informally.
- Aquaculture inputs (feed and seed) and products are increasingly traded regionally; some imported internationally



Africa's SSF major source of fish for + 200 million African, especially inland

70% of informal fish trade and processing (including cross-border done by women)

4. Findings and recommendations from mapping studies & consultations under FishGov 1



@ implementation AU principle of regional subsidiarity anchored in RECs



Continental level policy direction and strategic approaches

Reg/int Protect industry, rules and mechanisms of trade

- Competence levels of governments to implement legislation, surveillance and testing
- Compliance to WOA Aquatic Code

National Sanitary status, surveillance

- Establish sanitary status and compartments
- Develop and implement national biosecurity protocols (trade, production).
- response to disease outbreaks

Producer Implementation => BMPs

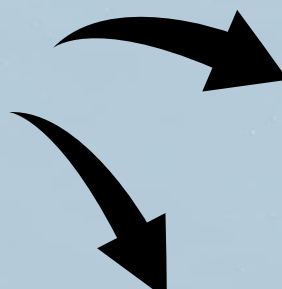
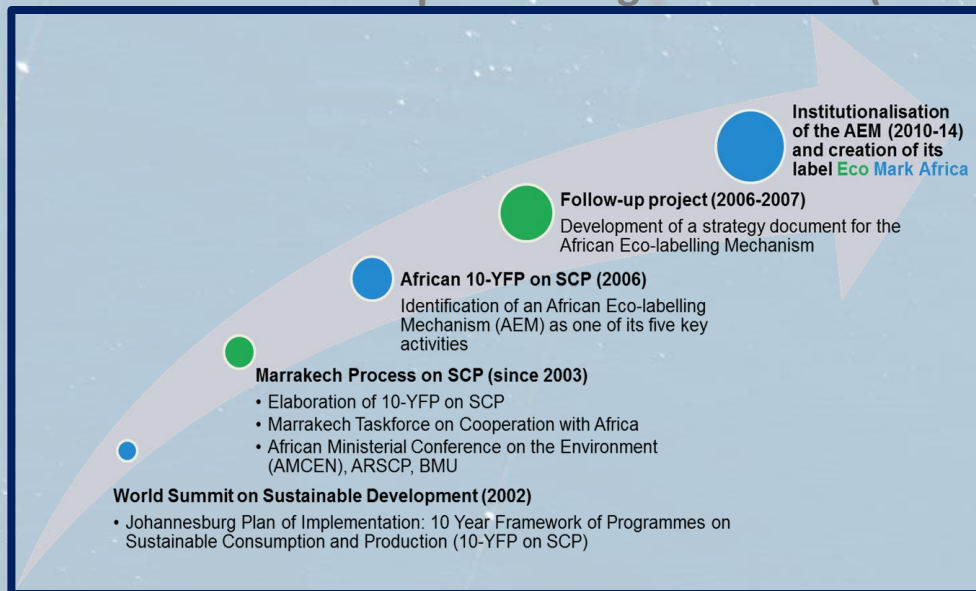
- Develop and implement appropriate SOPs/BMPs



Map showing geographical regions of Africa: North Africa (green), West Africa (yellow), Central Africa (pink), Eastern Africa (blue) and Southern Africa (brown)

5. Africa Standard Organization (ARSO)

Coherence among stakeholders to meet standards for free equitable regional trade (ARSO)



Africa's Sustainability Standard => '*Eco Mark Africa*'

Principles	Agriculture	Fisheries	Forestry	Tourism
Legal Compliance	✓	✓	✓	✓
S & E Management System	✓	✓	✓	✓
Good Social Practices	✓	✓	✓	✓
Conservation of Biodiversity	✓		✓	✓
Stock Management		✓		
Soil Management	✓	✓	✓	
Water Management	✓	✓		✓
Energy Efficiency	✓	✓	✓	
Air and GHG Management	✓	✓	✓	✓
Pesticide Management	✓	✓	✓	
Waste Management	✓	✓	✓	✓
Good Business Practices	✓	✓	✓	✓

WTO's WOH Standards are Africa's default standard for the production and trade animals and their products

FISHGOV 1 drafted ARSO standards for achieving aquatic animal health, biosecurity control, aquaculture environmental sustainability

- Lessons from PFRS actions above also referenced and articulated into the:
 - (i) **Africa's Animal Health Strategy** => *affirmative action for emerging sectors like fisheries & aquaculture, private-sector, AH value-chain development, etc.*
 - (i) **Africa Animal Welfare Strategy** => *fisheries & aquaculture, aquatic biodiversity*
 - (i) **Africa Blue Economy Strategy** => *fisheries & aquaculture, aquatic biodiversity*

Assured long-term commitment

RATIONALE FOR A RAAHLN IN AFRICA

Not only about finding and controlling pathogens, but:

- **Business imperative => access to markets**
- **Development imperative**
- **Sustainability of aquatic resources and climate change resilience**
- **Trade => fish nutrition and food security, jobs, incomes**
- **Equity & rights**
- **Gender and youth empowerment**
- **New opportunities in the Blue Economy**
- **Social cohesion**

=> Improve access to affordable and quality laboratory services, sanitary data and information

Fisheries Governance Project (FishGov 2)

Enhancing Sustainable Fisheries Management and
Aquaculture Development in Africa:
A programme for accelerated reform of the sector

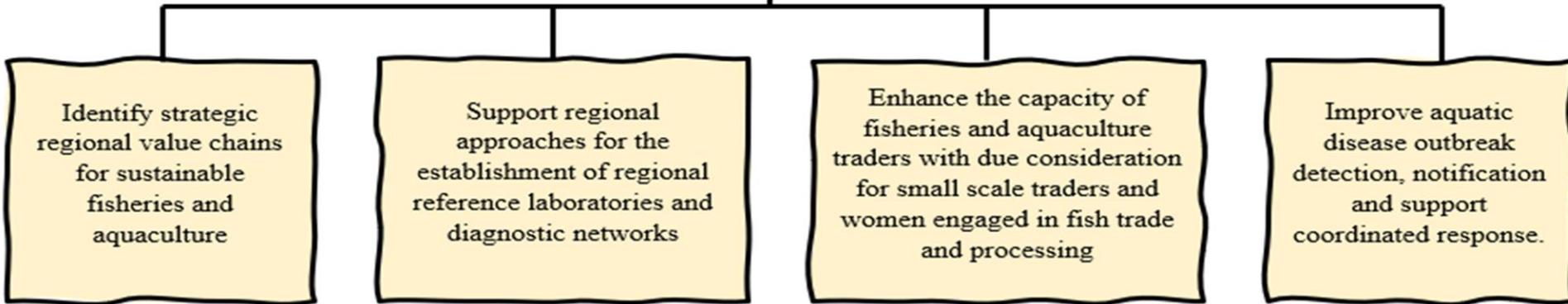


Specific Objective 2

Fisheries and aquaculture policies in Africa are coherent with the PFRS and coordinated at continental, regional and national levels in order to maintain healthy and resilient marine, coastal and freshwater ecosystems in the context of climate change

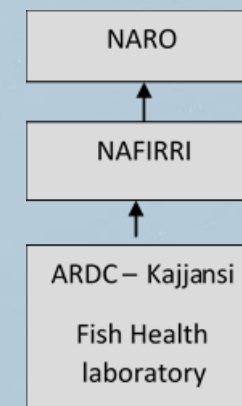
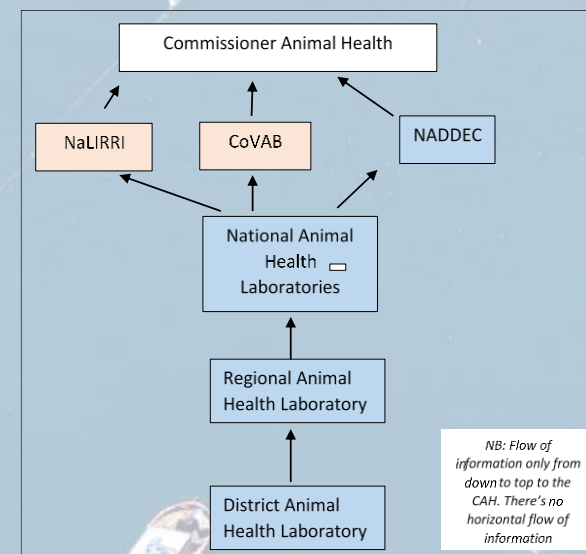
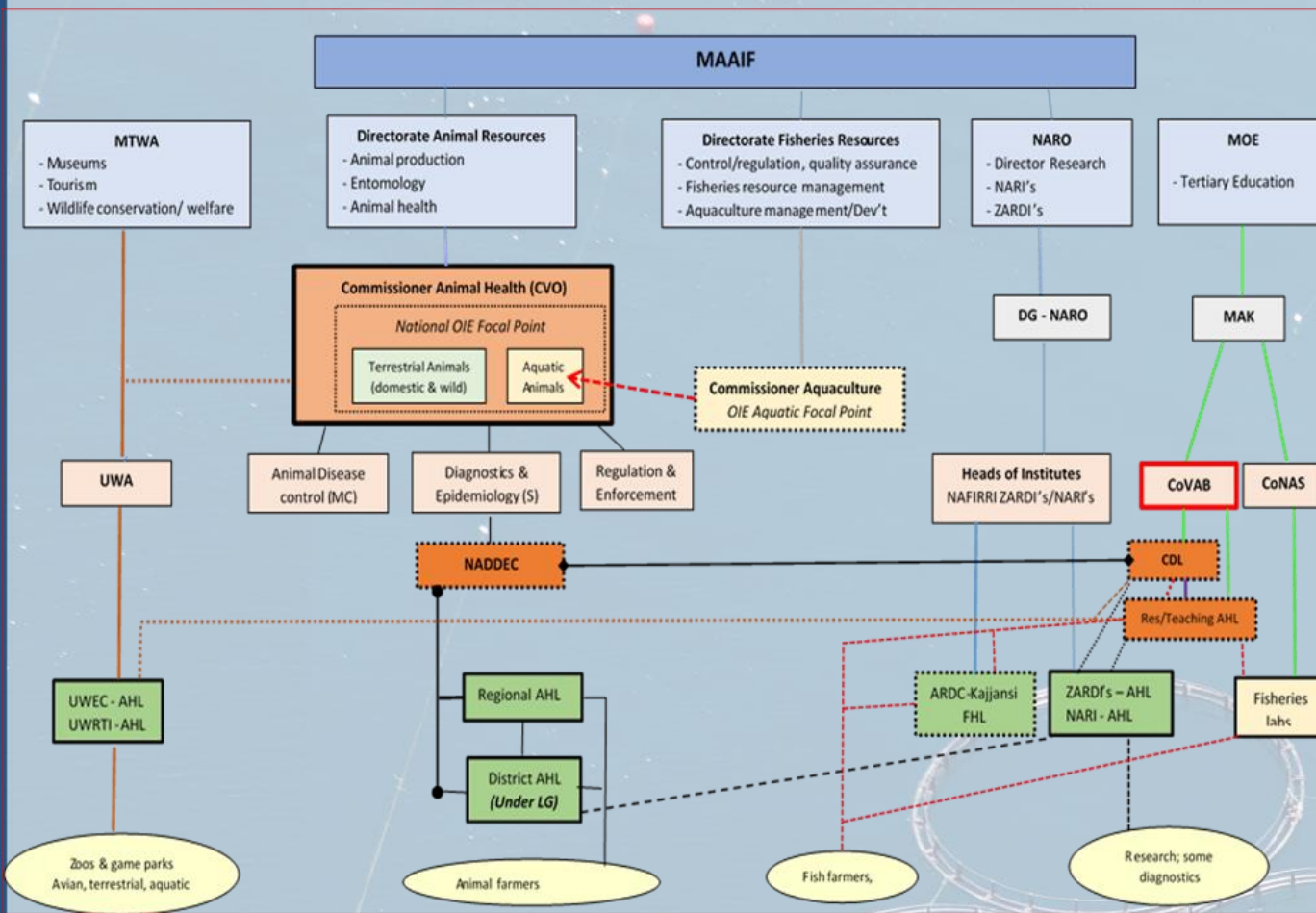
Output 2.3

Capacities are strengthened to facilitate intra and inter regional fish trade in line with the regional integration trade agenda and the Protocol on Trade in Goods of the Africa Continental Free Trade Area.



EXPECTATIONS FROM THE RAAHLN

1. Leverage onto existing national & regional AH laboratory services to improve early detection and sharing of accurate sanitary data and information: Integrate/leverage onto existing national AH laboratory services



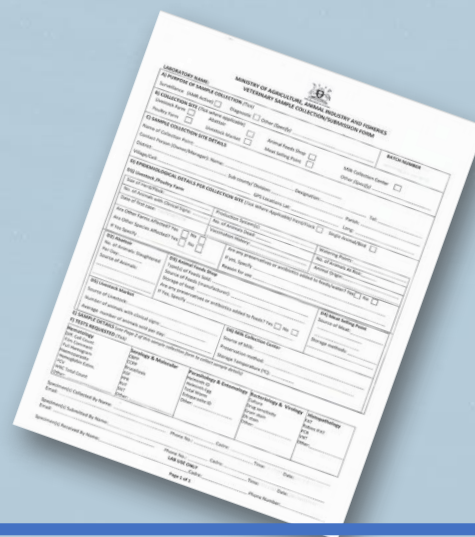
Institutions outside national veterinary laboratory services & individuals Professional Veterinary Code (i.e. CVO) have no legal obligation to report to the CVO, thus National Aquatic Focal Points. They are likewise not obliged to give feedback of results to farmers unless they have been contracted directly by them as opposed to national AH laboratory services

Status of Aquatic Animal Disease Diagnosis and Reporting in Comparison to Animal Disease Reporting (MAAIF, Uganda, 2021)

1. Leverage onto existing national & regional AH laboratory services to improve early detection and sharing of accurate AA sanitary data and information:

Opportunities and positive impacts

- Existing infrastructure and trained personnel already working at field level with existing referral systems covering also registered private practitioners & their facilities
- Existing lab information and reporting systems – several also handle fish diseases but not required by national regulation to relay this information to Centre
- Cost-benefits + capacity for uptake and continuity



By simply adding a query on AA to all national AH lab reporting forms plus reporting of field vet => within a year, Africa will have data & literally, at no extra cost

- Benefits have been registered in African Union Member States that have invested in building the capacity of their veterinary services for aquaculture. For example:
 - (i) Tunisia and Egypt have made it a requirement for every fish farm to have a supervising veterinarian. This has greatly improved biosecurity control and farm productivity due to:
 - Rapid detection and accurate diagnosis of diseases,
 - Improved and accurate health record keeping and disease reporting, including of zoonotic diseases. These comprise an essential component of veterinary practice that are technical in essence and beyond the capacity of farmers for certain key aspects.
 - Increased efficacy of treatments and other health management measures and reduction in recurrences as control measures are prescribed following recommended veterinary diagnostic procedures whereby the investigative process is typically holistic and elucidates underlying factors, administration and implementation of farm health management done under veterinary supervision.
 - Judicious use and proper disposal of antimicrobials which has resulted into reduced antimicrobial use.
 - Veterinary inspection for the safety of aquatic feeds and aquaculture produce and products.
 - There's traceability and farm biosecurity and biosafety measures can be certified in line with global best practices by a veterinarian which facilitates access to markets. This consequently cascades up the value chain permitting safe movement of fish, aquaculture products and environmental biosecurity.
 - The Tunisian aquaculture sector is largely export-oriented. As a result of these measures, Tunisian aquaculture products have access to international markets
 - Facilitated epidemiological surveillance and consequently the implementation of fish movement controls, establishment quarantines and zonation

2. Improved case definition, differentials, cost-effective case management, biosecurity control and priority pathogen lists

AAH as an emerging issue

- Commercial aquaculture novel, rapidly growing
- Growing pollution
- More adverse climatic events
- Fish diseases in aquatic animals often a encounter for most farmers, fishermen + practitioners
- Most AA disease references based on foreign information and experiences => expression of conditions, prognosis, etc. need to factor local conditions (*e.g. which strain + its infectivity?*)

Everyone is learning and experiences need to be accurately documented for:

Step 6: Diagnostic Testing - Standardised Field and laboratory Protocols

Examples of facilities and tools existing that could be co-opted, adapted, collaborations established for cost-effectiveness, to quick-start, etc.



Farmers, border-pasts, markets, extension offices

Farm level diagnosis

LEVEL I - FEILD

- Awareness
- Pictorial charts – famers books
- Manuals
- Field kits – water quality
- Record templates

Passive syndromic surveillance
Early detection and reporting



Extension workers



Laboratories



District Vet Lab



Regional Vet Lab



Standardised Lab Forms

Reference Labs
(level III)

NADDEC - Level III
Epidemiology & link OIE/FAO ref labs

Adapted from MAAIF, Uganda, 2021.

3. Standards and access to markets

Quality assurance and traceability based on objectively verifiable standards with field guidelines and indicators to support practitioners adopt :

- Setting and implementing local, national, regional and global market and SPS standards
- Environmental standards (residues, environmental AMR, biodiversity impacts)
- SPS measures
- Inputs and services (feed, seed, veterinary inputs, products, etc)
- Animal welfare (food, ornamental & AA)
- Animal health
- Cost-effective

Informal qualitative standards dominate

Strengthening value chains – biosecurity, biosafety => quality assurance and traceability, safety of products => access to markets



Practical training, exposure, engaged in policy dialogue, and development of regional and national standards for their commodities

- ⇒ Establish conformity and enable SME enter mainstream + emerging markets
- ⇒ Cost-benefit analysis for investment and impact assessments
- ⇒ Rights of access and equity

4. Sustainability and resilience of the sector: biosecurity and biosafety



- One health and one welfare
- Aquatic biodiversity
- Compliance to aquatic code (e.g zonation, AMR)
- Codex Alimentarius
- Monitoring disease status and ecosystem health
- Impacts assessments (events, climate change, etc)
- Early warning systems
- Regional cooperation and integration (regional value chains, equitable benefit sharing, gender equity, more employment for youth, women, disadvantaged communities including young professionals, comparative advantage)
- Better evidence-based policies, governance and investments
- Data + evidence => promote self-compliance and voluntary SoP (attribute impacts and value)
- Sustainable food systems and businesses

Principally by leveraging onto knowledge and expertise of WOAHA and other global and regional reference centers,

the purpose of the RAALN is to **'rapidly'** build capacity and improve coordination for developing, adopting, adapting and implementing coherent regional approaches for transboundary aquatic ecosystem management and SPS measures to achieve the objectives of the PFRS and AU Agenda 2063

WAY FORWARD & ANTICIPATED OUTCOMES

In line with the PFRS and other continental decisions by AHSB => transboundary aquatic ecosystem management, regional approaches that foster regional integration and trade, gender equity, empowerment of women, youth and disadvantaged communities, One Health, climate change resilience:

1. **Identify & establish multi-sectoral and multi-stakeholder participatory approaches and partnerships that build onto existing strengths and opportunities to harness 'low-hanging fruits' and foster equity while addressing challenges and minimizing threats (*i.e. sustainable, reliable and accessible OH & CC AAH laboratory systems + LIMS that are fit for purpose*)**
2. **Identify options and strategies that will systematically and effectively cascade down to strengthen REC's, MS and public and private sector practitioners especially for knowledge and skills, quality control and economies of scale (*i.e. enhance affordability, accessibility, availability, innovation utility and credibility*)**
3. **Improved evidence generation, knowledge and information sharing and evidence-based decision-making across all-levels of the sector (*public, private and communities; policies, governance, codes and standards of practice*)**
4. **Improved R&D => appropriate and cost-effective field diagnostics, biosecurity & biosafety measures, trade and other related standards and development actions by public and private sector to *improve viability, sustainability, resilience, access to markets* and new opportunities for Africa AA and Blue sectors and businesses (*goods, services and products including of locally generated knowledge and information, diagnostics products, vaccines, etc*)**
5. **Support the development of regional reference laboratories and RAAHNS within Africa tailored to our regional attributes and needs to foster the sectors growth, sustainable development and climate-change resilience, Blue Economy, aquatic biodiversity conservation, environmental sustainability and, aquatic ecosystem health.**

*So where and how do we start achieving these & ultimately the SDG's
(not forgetting SDG 14) is the overall purpose of this launch?*

Thank you