



World Organisation
for Animal Health



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

5 – 7 December 2023 Pretoria, South Africa





Food and Agriculture
Organization of the
United Nations

FAO Aquatic Animal Health and Biosecurity Guidelines

Melba B. Reantaso

Team Leader, Food Safety, Nutrition and Health,
Fisheries and Aquaculture Division, FAO, Rome

Melba.Reantaso@fao.org



Outline

- FAO Instruments relevant to health management of aquatic organisms and aquaculture biosecurity
- Chronology of FAO technical support to Africa
- Networks and partnerships



- Art. 1 Nature and Scope of the Code
- Art. 2 Objectives of the Code
- Art. 3 Relationship with other International Instruments
- Art. 4 Implementation, Monitoring and Updating
- Art. 5 Special Requirements of Developing Countries
- Art. 6 General Principles
- Art. 7 Fisheries Management
- Art. 8 Fishing Operations
- Art. 9 Aquaculture Development
- Art. 10 Integration of Fisheries into Coastal Area Management
- Art. 11 Post-harvest Practices and Trade
- Art. 12 Fisheries Research

FAO Instruments

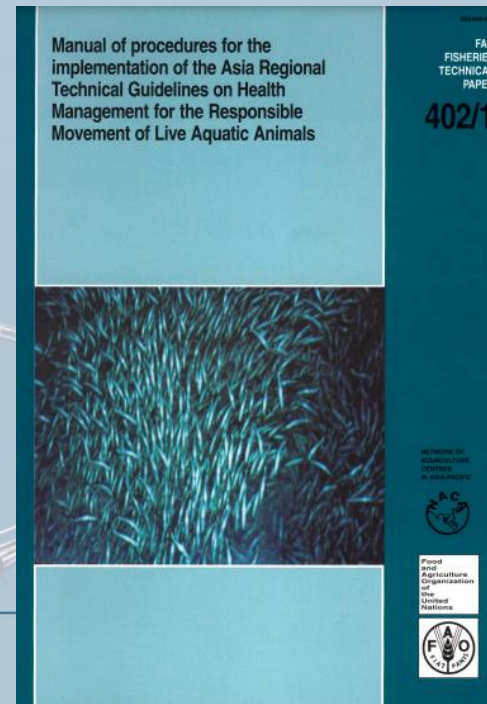
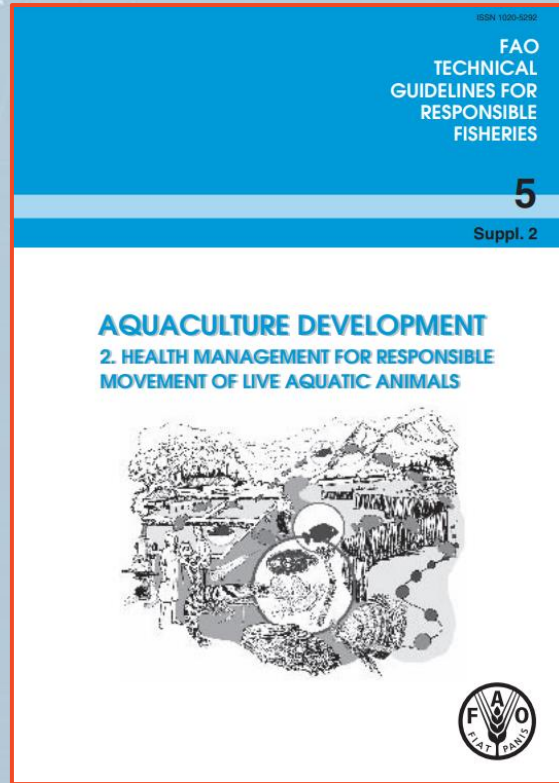
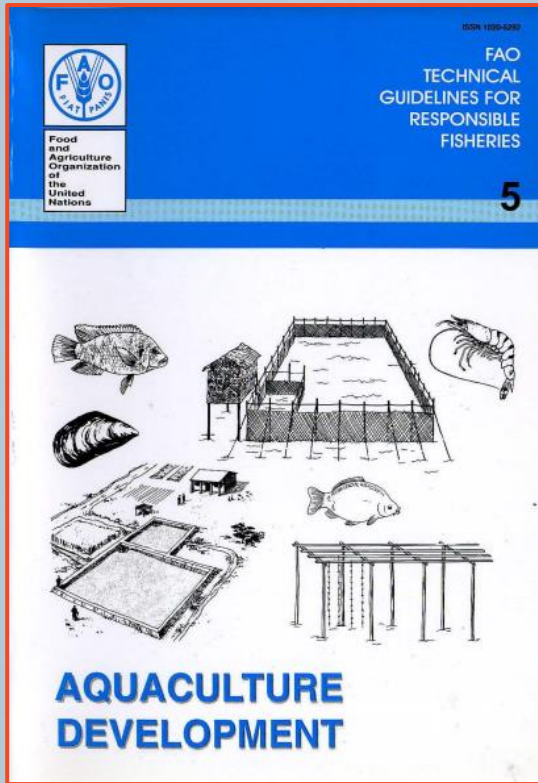
FAO Code of Conduct for Responsible Fisheries (CCRF) Technical Guidelines

- adopted in October 1995 by over 170 FAO Member Governments during the 21st Session of the FAO Conference. The process took four years from its initiation during the 19th Session of the FAO Committee on Fisheries (COFI, March 1991)
- a voluntary instrument, the CCRF represents a globally recognized international framework covering the world's marine, coastal and inland fisheries including aquaculture
- based on major international agreements such as the United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Conference on Environment and Development (UNCED) and the Convention on Biological Diversity (CBD)

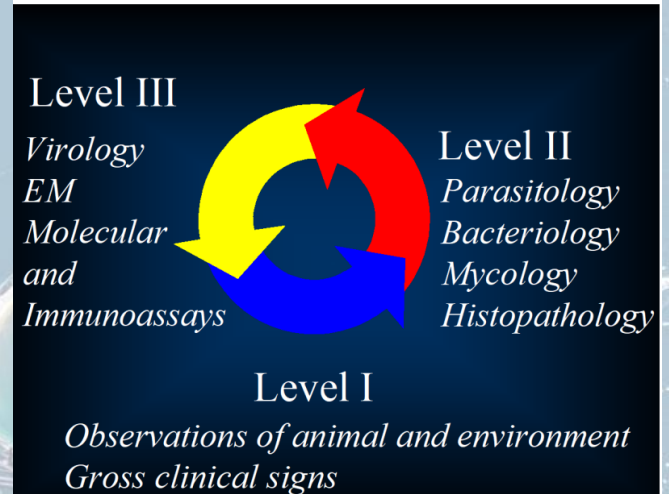


Food and Agriculture
Organization of the
United Nations

CCRF Article 9 Aquaculture Development



Three diagnostic levels



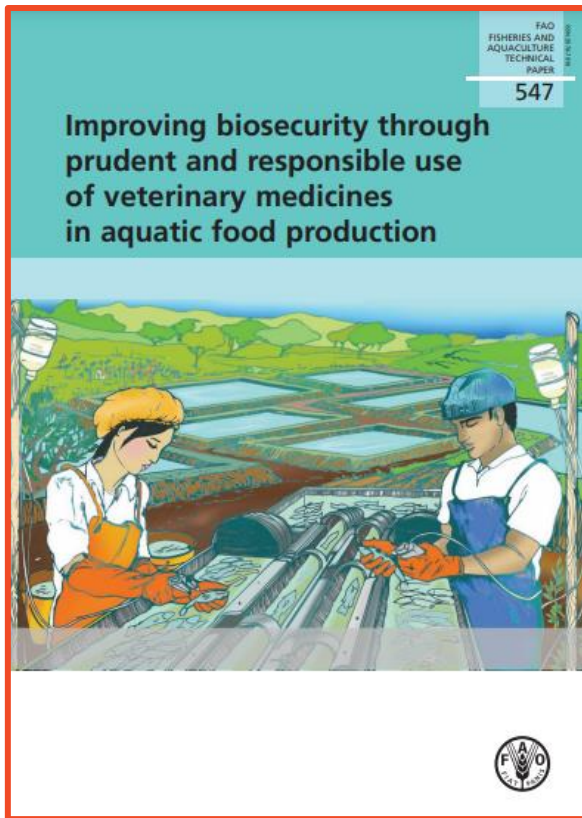
Launch of the Regional Aquatic
Animal Health Laboratory Network for Africa (RAAHLN-AF)

5 – 7 December 2023 Pretoria, South Africa



FAO Instruments

FAO Code of Conduct for Responsible Fisheries (CCRF) Technical Guidelines

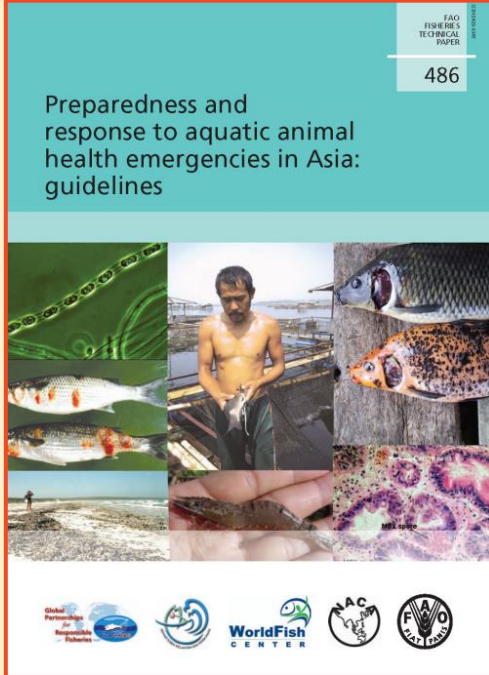


Recommendations

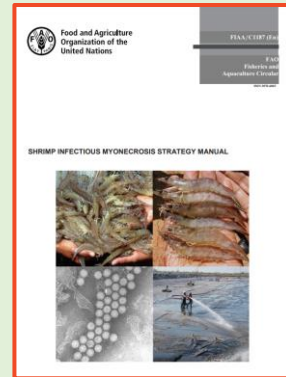
- to governments
- to the private sector, especially small-scale aquafarmers
- to aquatic animal health professionals and experts

FAO Instruments

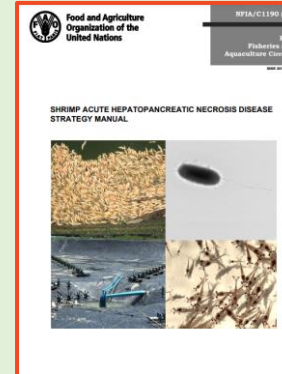
Emergency Preparedness and Response



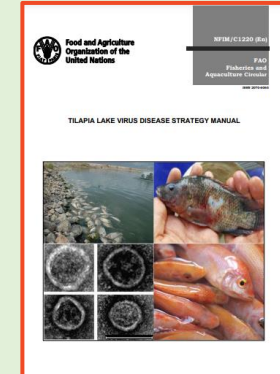
Disease Strategy Manuals as part of Contingency Plans



IMNV/
Shrimp



AHPND/
Shrimp



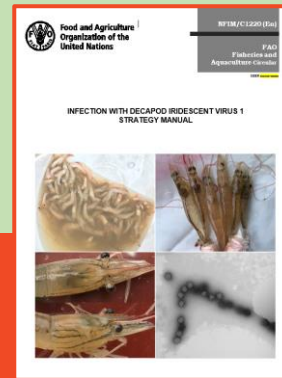
TiLV

In preparation



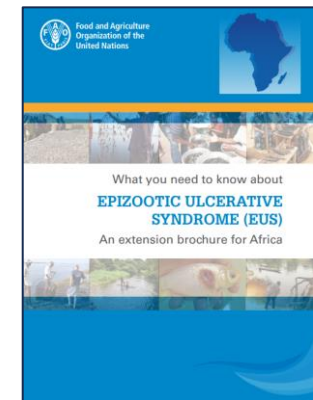
WSSV/
Shrimp

DIV1/
Shrimp



EUS
KHV

EUS Extension Brochure



FAO Instruments

FAO Action Plan on Antimicrobial Resistance 2021-2025

*Food and agriculture sectors,
dependent livelihoods and economies
are made resilient to the impacts of AMR*

*Strengthening governance
and allocating resources
to accelerate and sustain progress*

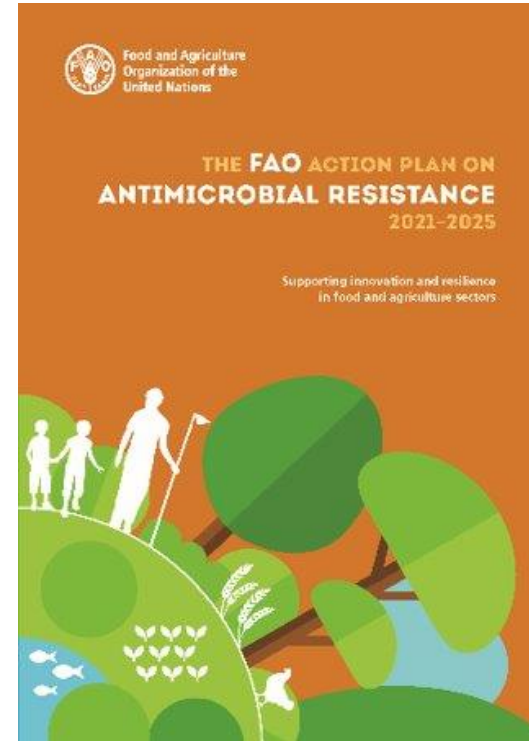
*Increasing stakeholder
awareness and engagement
to foster change*

*Promoting **responsible use**
to keep antimicrobials working*



*Strengthening **surveillance**
and **research** to support
evidence-based decisions*

*Enabling **good practices** to prevent
infections and control the spread
of resistant microbes*

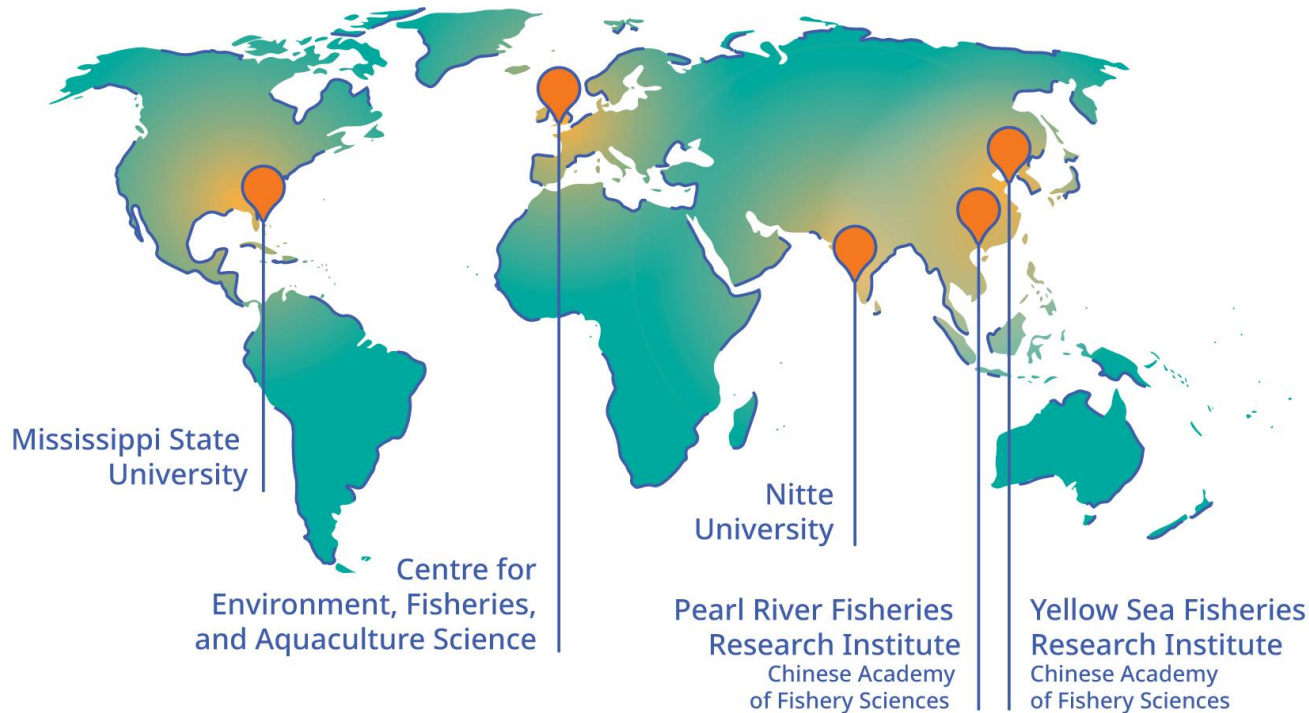


The FAO Action Plan on
Antimicrobial Resistance
2021–2025



FAO Instruments

FAO Reference Centres for AMR and Aquaculture Biosecurity



The FAO RCs would help guide and support
FAO Members in:



scientific,
technical and
policy advice



training and
collaborative
research



expertise on
laboratory
capacity



global
interpretation of
AMR data



confirmatory
testing of
resistant isolates
and serotypes

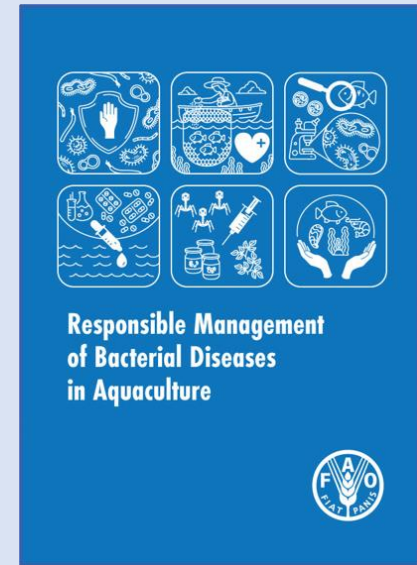
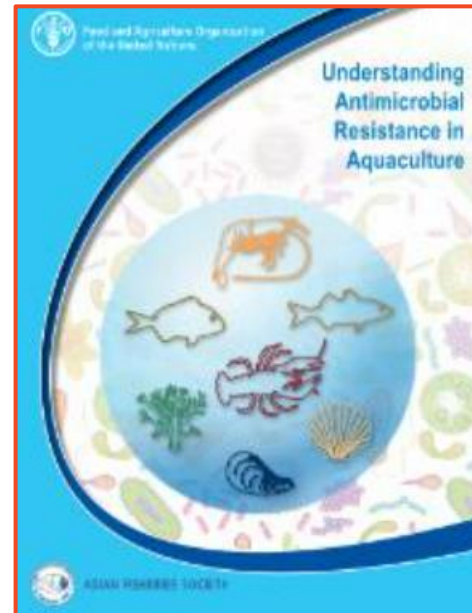


quality control of
antimicrobials
used in the food
and agriculture
sector



FAO Instruments

Best practice guidelines for the performance of antimicrobial susceptibility testing of bacteria isolated from aquatic animals as part of a monitoring or surveillance programme to provide guidance for clinical treatments of diseased animals.



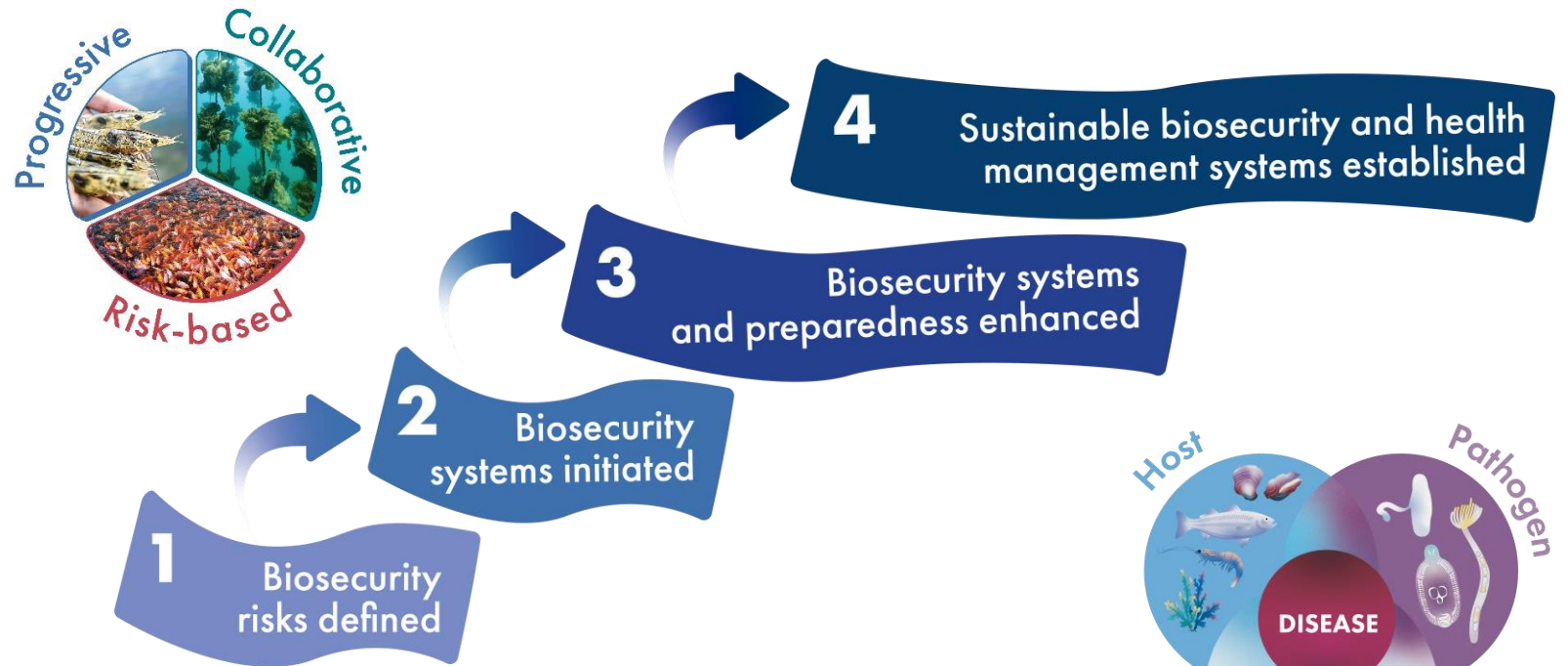
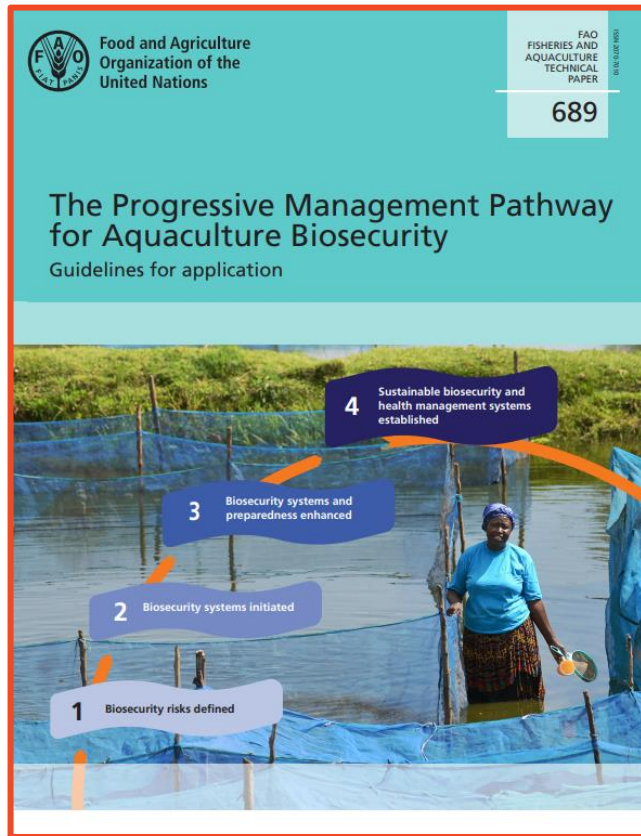
Six gram-negative bacterial groups:

Vibriosis, Aeromonosis, Edwardsiellosis, Pseudomonosis, Flavobacteriosis, infection with intracellular bacteria

Four gram-positive bacterial groups:

Mycobacteriosis, Streptococcosis, Renibacteriosis, infection with anaerobic bacteria

PMP/AMR | PMP/TAB | PMP/Bees | PMP/Forest Health



Progressive Management Pathway for Improving Aquaculture Biosecurity (PMP/AB)

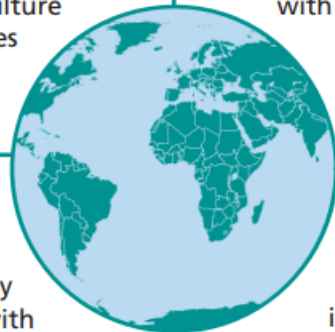


From Aquatic Animal Health Strategy (2007) to Aquatic Organism Health Strategy (2019, within the PMP/AB context) to be inclusive of aquatic plants that are important to several countries

Scenario 1: Countries with no national aquatic organism health nor aquaculture strategy in place, but an aquaculture sector exists or is in the early stages of development.

Scenario 2: Countries with a national aquatic organism health or aquaculture biosecurity strategy in place with some level of implementation.

Scenario 3: Countries with an advanced national aquatic organism health or aquaculture biosecurity strategy in place with full implementation.



Scenario 4: Countries whose aquatic organism health or aquaculture biosecurity strategy is dependent on the biosecurity situation in neighboring countries due to shared waterbodies, watersheds or coastlines and where a regional or sub-regional aquaculture biosecurity strategy is needed.



STAGES OF PMP/AB

- STAGE 1
- STAGE 2
- STAGE 3



12 PMP/AB toolkit

- 12.1 Guidance on conducting SWOT and gap analysis (Stage 1)
- 12.2 Guidance on developing a National or Regional Aquatic Organism Health Strategy (Stage 1)
- 12.3 Guidance on developing a National Aquatic Pathogen List (Stage 1)
- 12.4 Risk analysis
 - 12.4.1 Guidance on risk analysis along the value-chain (Stages 1–3)
 - 12.4.2 Guidance on Import Risk Analysis (Stage 3)
- 12.5 Guidance on passive and active surveillance (Stages 2 & 3)
- 12.6 Guidance on emergency preparedness and response systems (Stages 1–3)

13

13

15

15

16

16

17

18

19





Outline

- **FAO Instruments relevant to health management of aquatic organisms and aquaculture biosecurity**
- **Chronology of FAO technical support to Africa**
- **Networks and partnerships**



Report of the International
Emergency Disease Investigation Task Force
on a Serious Finfish Disease in Southern Africa
18–26 May 2007



FAO’s initial engagement on aquatic health management and biosecurity in Africa has gone a long way since 2006, when the Government of Botswana requested technical assistance to conduct an emergency investigation of a serious unknown disease in Southern Africa. For 17 years FAO has been providing support on two specific diseases, namely EUS and TiLV.

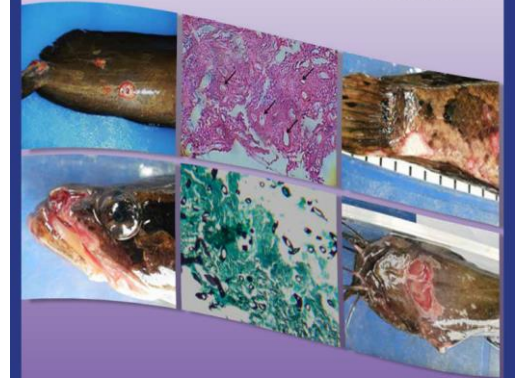
In 2015, another international disease investigation task force was convened by FAO to address EUS in the Democratic Republic of the Congo

In July 2020, as requested by the Government of Malawi, with support from FAO, an investigation was launched to investigate EUS and a TCP project was developed

Currently, a suspected EUS incursion in Mozambique is being investigated

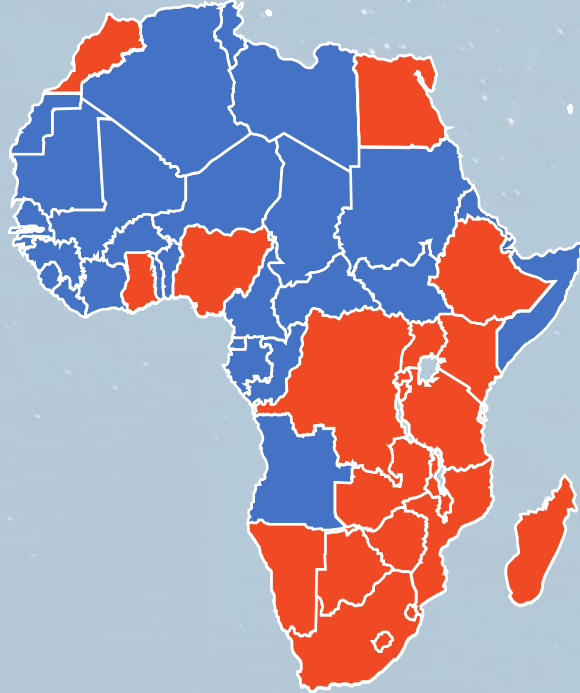


Report of the International Emergency
Fish Disease Investigation Mission on a Suspected
Outbreak of Epizootic Ulcerative Syndrome (EUS)
in the Democratic Republic of the Congo
13–19 March 2015





FAO Projects: recipient countries



Technical assistance provided by FAO to Member Countries based on country requests (demand-driven)

National/Regional Trust Fund Projects

Regional: African Solidarity Trust Fund

Diagnostics, surveillance, risk analysis

- **EUS:** Angola, Botswana, Madagascar, Mozambique, Namibia, South Africa, Zambia and Zimbabwe
- **TiLV:** Angola, Ghana, Nigeria, Kenya, Uganda

National: African Development Bank

NAOHS, diagnostics, surveillance

Zambia

Sub-regional: EU/LVFO

Sub-RAOHS and NAOHS, diagnostics, surveillance, risk analysis, emergency preparedness

Burundi, Kenya, Rwanda, Tanzania, Uganda

Sub-regional: World Bank

Sub-regional strategy for shrimp diseases

Madagascar, Mozambique, Tanzania

National/ Regional TCPs

NAOHS, diagnostics, surveillance, risk analysis

Regional:

- **EUS:** Botswana, Ghana, Kenya, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe

National:

Egypt, Ethiopia, Ghana, Malawi, Namibia

Others

- Two weeks training of UNZA to AAHRI/DoF (Thailand) on EUS
- SADC South Africa



Chronology of FAO technical support to Africa



7-11 November 2007
Lusaka, Zambia
FAO TCP/RAF/31111
Emergency assistance
To combat EUS in the
Chobe-Zambezi River

22-24 April 2008
Lilongwe, Malawi
FAO Workshop on the
Development of Aquatic
Biosecurity Framework
for Southern Africa

9-15 February 2009
Lusaka, Zambia
Training/Workshop on
surveillance, aquatic
animal health and
risk analysis

14-21 July 2014
Grahamstown, South Africa
Aquatic animal health training course for SADC
Veterinarians: A Collaboration between DAAF,
FAO, WOH and Rhodes University



Chronology of FAO technical support to Africa



2-11 November 2014
Durban, South Africa
Improving Aquatic Animal
Health Management and
Strengthening Biosecurity
Governance in Africa

24-28 August 2015
Lusaka, Zambia
FAO Training/Workshop on Epizootic
ulcerative syndrome (EUS): biology,
pathology, diagnostics and design
of an active surveillance program

27-29 October 2016
Workshop on the development
of national strategies on
aquatic animal health

29 November – 3 December 2016
Livingstone, Zambia
Fourth Regional Project Technical
Committee



Chronology of FAO technical support to Africa



4-7 October 2017
Kasane, Botswana
**Final EUS Surveillance
Data Analysis Workshop**

15-18 November 2022
Akosombo, Ghana
**Enhancing capacity/risk
reduction of emerging
Tilapia Lake Virus (TiLV) to
African Tilapia Aquaculture**

20-22 February 2023
Kisumu, Kenya
**FAO TRUEFISH Project Regional
Workshop Component 3: Health
Management and Aquaculture
Biosecurity**

18-26 April 2023
Kisumu, Kenya
**UTF /ZAM/077/ZAM:
Technical Assistance to the
Zambia Aquaculture
Enterprise Development
(ZAEDP)**

24-27 July 2023
Swakopmund, Namibia
**Development of National
Aquatic Health and Biosecurity
Strategy for Namibia**

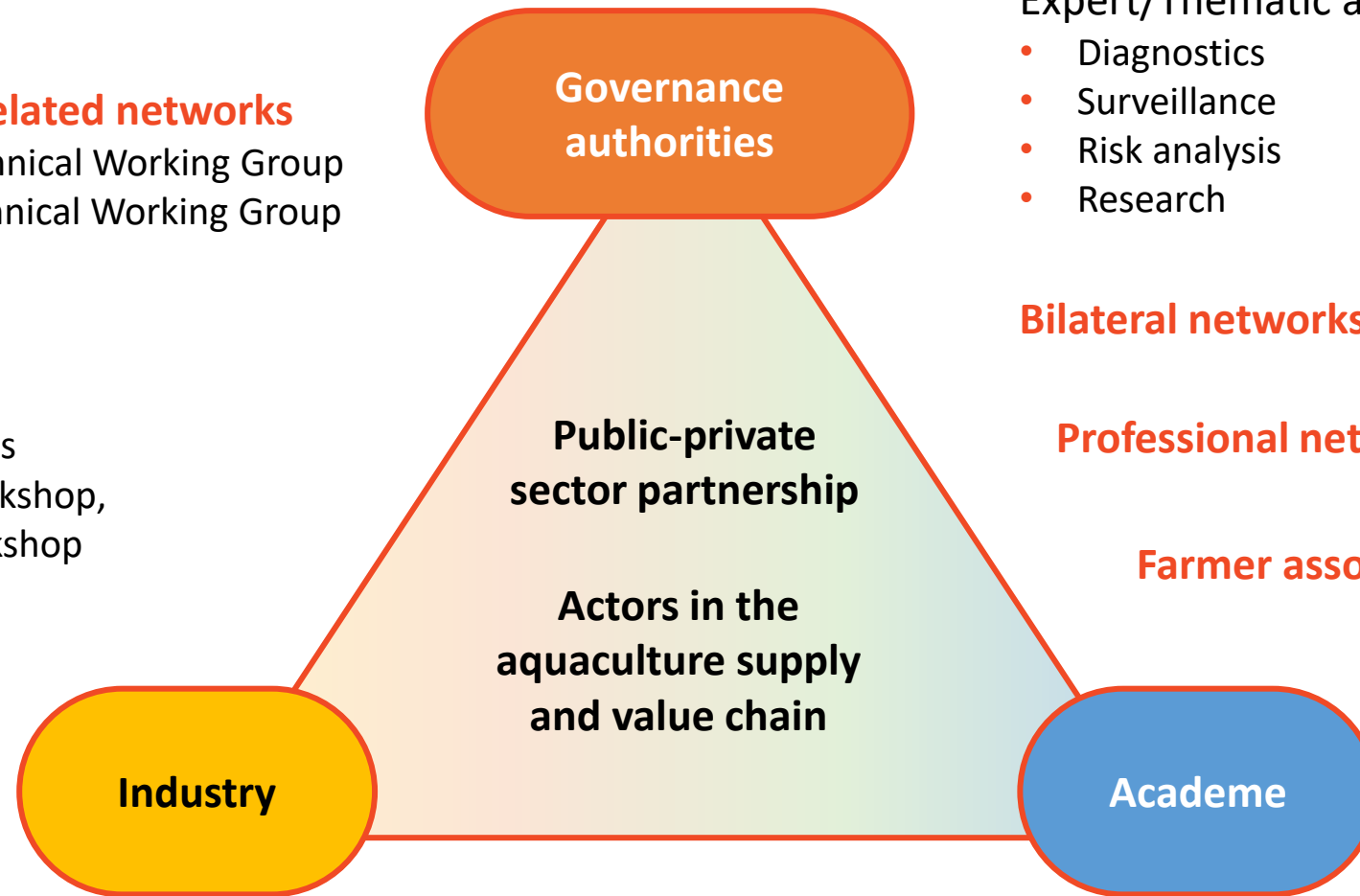
Types of informal and formal networks

Programme/Project-related networks

- Regional PMP/AB Technical Working Group
- National PMP/AB Technical Working Group
- Advisory Board

Events networks

- Webinars, Conferences
- Project Inception Workshop, Project Terminal Workshop
- Training Courses



FAO Reference Centres for AMR and AB Expert/Thematic area networks

- Diagnostics
- Surveillance
- Risk analysis
- Research

Bilateral networks

Professional networks

Farmer associations



FAO Expert Network in Africa



J. Richard
Arthur
CANADA



Brett
Mackinnon
CANADA



Kathy Tang-
Nelson
UNITED STATES
OF AMERICA



Fernando
Mardones
CHILE



Mike
Phillips
UNITED
KINGDOM



Kishio
Hatai
JAPAN



Somkiat
Kanchanakhan
THAILAND



Beibei Jia
CHINA



Ramesh
Perera
AUSTRALIA



Flavio
Corsin
ITALY



Rohanna
Subasinghe
FAO/SRI LANKA



Win
Surachetpong
THAILAND



David
Huchzermeyer
SOUTH AFRICA



Lind
Curtis
AUSTRALIA



Marc Le
Groumellec
FRANCE



Melba
Reantaso
FAO/
PHILIPPINES



Ha Thanh
Dong
VIET NAM



Bernard
Hang'ombe
ZAMBIA



Mark Crane
AUSTRALIA



Nihad Fejzic
BOSNIA AND
HERZEGOVINA



Mohamed
Shariff
Mohamed
Din
MALAYSIA



Chadag
Mohan
INDIA



Mwansa
Somge
ZAMBIA



Food and Agriculture
Organization of the
United Nations

Thank you for your kind attention!

Melba B. Reantaso

Team Leader, Food Safety, Nutrition and Health,
Fisheries and Aquaculture Division, FAO, Rome

Melba.Reantaso@fao.org