

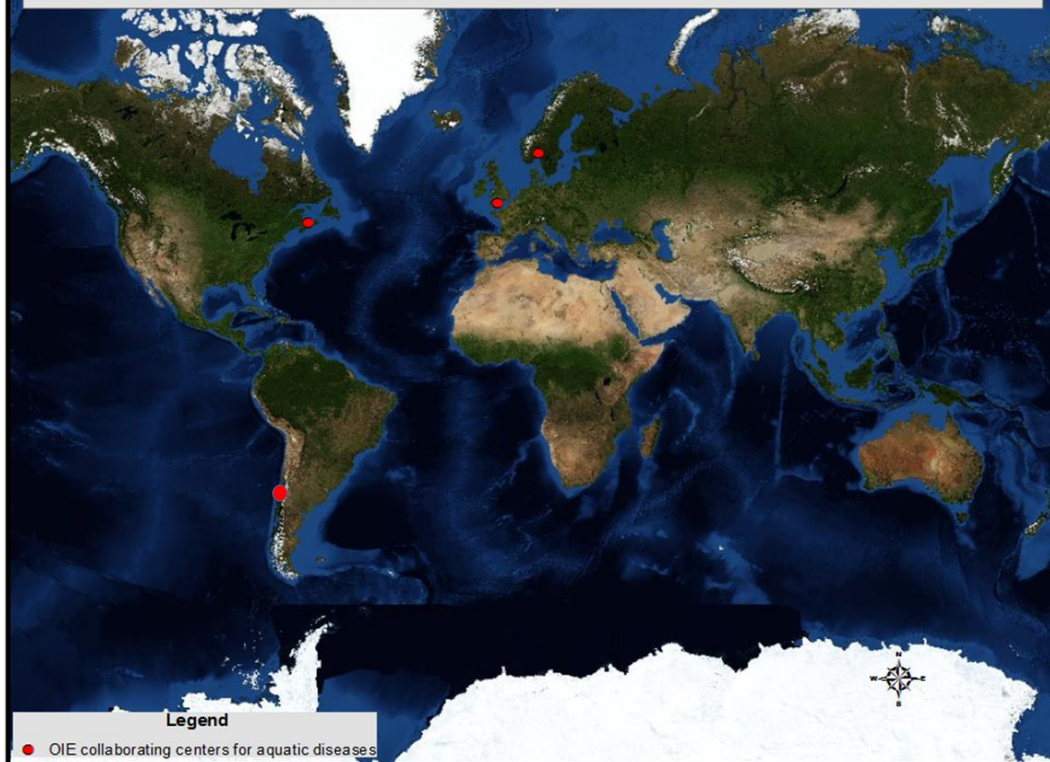
# Challenges and opportunity in the Fish networking: WOAH CCs activities



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## OIE COLLABORATING CENTERS FOR AQUATIC DISEASES



# Collaborating Centres

WOAH maintains a network of Collaborating Centres for the purposes of providing scientific expertise and support to the WOA and its Members, and for promoting international collaboration on animal health and welfare. Collaborating Centres are designated for a specific specialty within a focus area relating to the management of general questions on animal health issues. In its designated specialty, they must provide their expertise internationally (see WOA Terms of Reference and Internal Rules for Collaborating Centres).

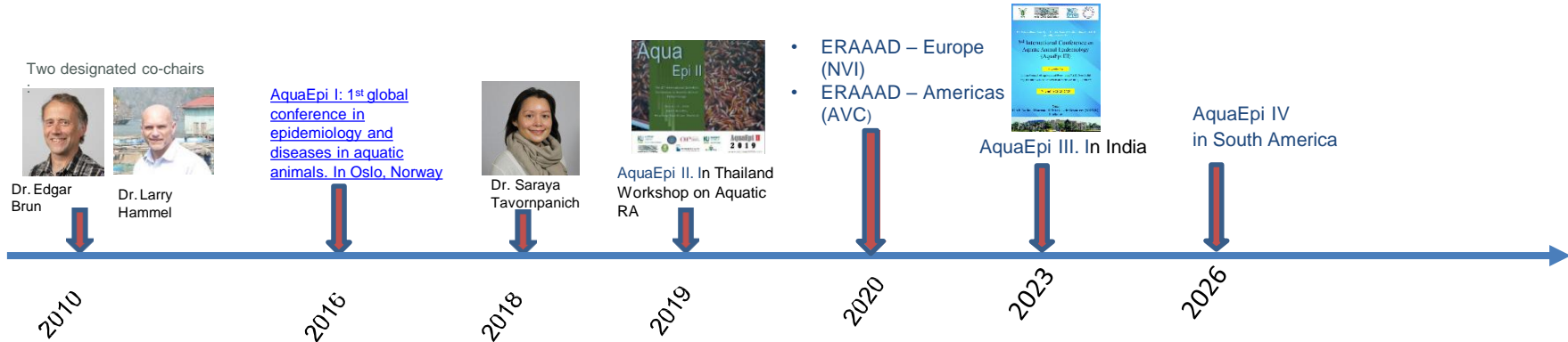
- *Emerging Aquatic Animal Diseases*
- *Epidemiology and Risk Assessment of Aquatic Animal Diseases: Americas*
- *Epidemiology and Risk Assessment of Aquatic Animal Diseases: Europe*
- *Antimicrobial Stewardship in Aquaculture*

# Agenda

- History of CC
- CC's collaboration activities
- Opportunities and Challenges

# WOAH Collaborating Centre for ERAAAD (Europe)

- Established in 2010, as a bi-national collaboration between the Norwegian Veterinary Institute (NVI) and the Atlantic Veterinary College (AVC) of the University of Prince Edward Island
- It operates as a global centre of research, expertise, standardization of techniques and distribution of knowledge in the specialized area of aquatic animal diseases, and **help building capacity for the WOAH member countries** through research collaborations, trainings, and participation in assessments of performance of veterinary services (PVS)



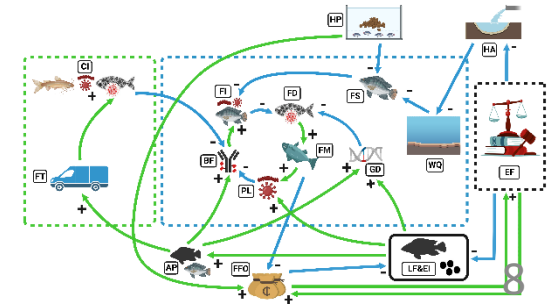
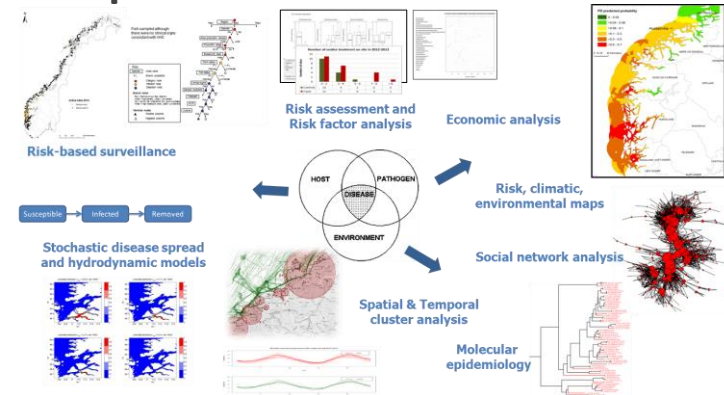
## CC's Five-year strategy plan

### Impacts and Key Objectives:

#### Reduce disease spread and sustain global aquaculture production

- Building epidemiological capacity at national and farm level
- Improve aquatic animal epidemiology competence → raise awareness of basic concepts on disease dynamics, biosecurity, health management and diagnostics
- Advance in developing digital technologies and tools for animal health monitoring, surveillance and disease management

### Expertise:



## Collaboration with other WOA reference centres

- Serves as an **external advisor** for the project “Aqua Strength” aiming to assist beneficiary countries on disease surveillance and emerging disease response in aquatic animal health management
- The project is financed by the Italian Ministry of health and supported by the WOA. The project is led by the Istituto Zooprofilattico Sperimentale delle Venezie (Italy), and involved 4 beneficiary institutes from Cambodia, Tunisia, Israel, Morocco



Open Access | Review

### A Scoping Review on GIS Technologies Applied to Farmed Fish Health Management

by Tiziano Dorotea <sup>1</sup>, Giorgia Riuzzi <sup>2,\*</sup>, Eleonora Franzago <sup>1</sup>, Paulette Posen <sup>3</sup>, Saraya Tavornpanich <sup>4</sup>, Alessio Di Lorenzo <sup>5</sup>, Laura Ferroni <sup>6</sup>, Walter Martelli <sup>7</sup>, Matteo Mazzucato <sup>1</sup>, Grazia Soccio <sup>1</sup>, Severino Segato <sup>2</sup> and Nicola Ferré <sup>1</sup>



## Collaboration with other WOAH reference centres

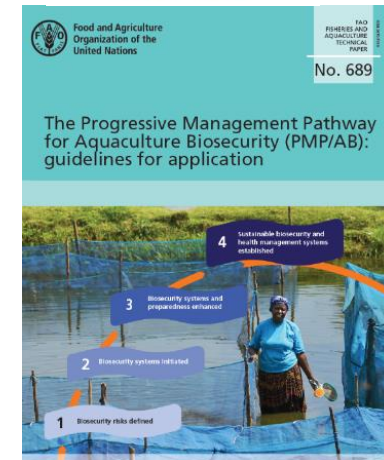
- Member of Technical Committee for AQMENET (Aquaculture Middle East Network). Member countries of AQMENET include the countries bordering the Red Sea and the Gulf: **Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, Somalia, Sudan, United Arab Emirates, and Yemen.**
- Short-term action plans focus on building countries capacity on **Biosecurity and Surveillance, Emergency preparedness, Diagnostics** and Developing system for **AMU**



# Collaboration with inter-governmental organizations

- Technical working group for development and implementation of Progressive Management Pathway for Aquaculture Biosecurity (PMP/AB). Leading to guidelines (e.g. Step-wise guideline for farm-level biosecurity action plans), e-learning modules, workshops, publications, etc.

- Fish-Vet-Dialogue  
1<sup>st</sup> was in June 2021, Virtual  
<http://infofish.org/Fish-VetDialogue/>  
2<sup>nd</sup> will be in 18-19 June, 2024 in Rome,  
Italy





## Trainings and field studies conducted in various countries



3-day workshop on AVC RA for 5  
African countries near Lake volta  
(March 2024)



EHP diagnostic methods, prevalence and risk  
factor study in shrimp farms in Indonesia



# Collaboration with inter-governmental organizations

## Technical Advisory Group (TAG) on Aquatic Animal Health and Biosecurity General Fisheries Commission for the Mediterranean (GFCM)

[www.fao.org/gfcm](http://www.fao.org/gfcm)

- Launch a Survey containing questions about Production statistics, Disease surveillance, Data collection and reporting, Disease situation, Biosecurity, Treatments, Future priorities and Needs
- Aquaculture focal points of member countries



Membership

The General Fisheries Commission for the Mediterranean is composed of **23 contracting parties**:

19 Mediterranean states - 3 Black Sea states - European Union

Albania 10 Apr 1991	Algeria 11 Dec 1967	Bulgaria 03 Nov 1969
Croatia 22 May 1995	Cyprus 10 Jun 1965	Egypt 19 Feb 1951
European Union 25 Jun 1998	France 08 Jul 1952	Greece 07 Apr 1952
Israel 20 Feb 1952	Italy 29 May 1951	Lebanon 14 Nov 1960
Libya 13 May 1963	Malta 29 Apr 1965	Monaco 14 May 1954
Montenegro 31 Jan 2008	Morocco 17 Sep 1956	Romania 19 Feb 1971
Slovenia 25 May 2000	Spain 19 Oct 1953	Syria 12 Dec 1975
Tunisia 22 Jun 1954	Türkiye 06 Apr 1954	

The GFCM also includes **6 cooperating non-contracting parties**:

Bosnia and Herzegovina (2016) - Georgia (2015) - Jordan (2018) - Republic of Moldova (2017) - Saudi Arabia (2021) - Ukraine (2015)

### General Fisheries Commission for the Mediterranean - GFCM

Home About Activities Decisions Information management Meetings Reports Publications News Contact

Area of application  
Membership  
Structure  
Partners  
Basic texts  
GFCM 2030 Strategy

#### The GFCM in brief

The General Fisheries Commission for the Mediterranean (GFCM) is a regional fisheries management organization (RFMO) established in 1949 under the provisions of Article XIV of the Constitution of the Food and Agriculture Organization of the United Nations (FAO). In 1952, the Agreement for the establishment of the General Fisheries Commission for the Mediterranean (GFCM Agreement) officially came into force.

#### Objectives

Federate efforts of countries towards:

- the **conservation and sustainable use of living marine resources** at all levels (biological, social, economic and environmental)
- the **sustainable development of aquaculture**

## Collaboration with inter-governmental organizations

- Co-opted member Network of Aquaculture Centre in Asia-Pacific (NACA) Advisory Group since 2019. The group meets yearly to provide advice to NACA members (18 countries) in the Asia-Pacific region on aquatic animal health management.
  - (a) evaluate disease trends and emerging threats
  - (b) identify developments with global aquatic animal disease issues and standards
  - (c) review and evaluate the Quarterly Aquatic Animal Disease reporting programme and assess the list of diseases of regional concern
  - (d) provide guidance and leadership on regional strategies to improving management
  - (e) monitor and evaluate progress on Technical Guidelines implementation
  - (f) facilitate coordination and communication of progress on regional programmes
  - (g) advise in identification and designation of regional resources, as Experts (RRE), Laboratories (RRL)
  - (h) identify issues of relevance that require depth review and propose actions needed.





# Collaboration in Fish for Development program

## Fish for Development Program in Colombia:

- A survey of IPNV infection in farmed trout production in Lake Chocha, Colombia
- Development and Validation of Biosecurity evaluation tool
- Stakeholder perspective assessment
- Trainings and workshops



# Collaboration with WordFish



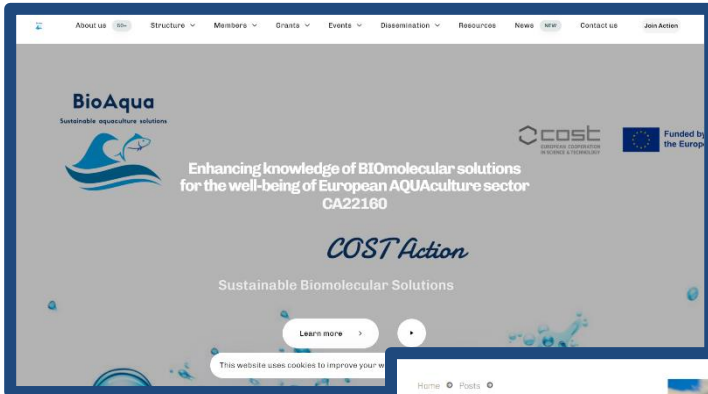
Training on the **principles of epidemiology in aquaculture, outbreak investigation**, supported by practical lessons

A baseline study **to map fish disease occurrence in tilapia farms on Lake Volta**. The study was designed to get a clearer picture of the disease situation and to serve as guide to improving Fish Health Management in Ghana



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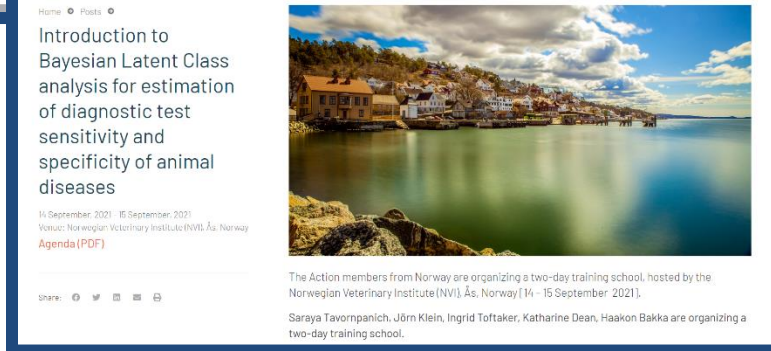
# Collaboration with EU networks: Cost Action



<https://bioaqua-cost.eu/>



<https://harmony-net.eu/>



BETTER - COST ACTION CA20103

## Biosecurity Enhanced Through Training Evaluation and Raising Awareness

The **BETTER** COST Action will evaluate how biosecurity is currently used and will use participative approaches to understand motivators and barriers for biosecurity implementation.

<https://better-biosecurity.eu/>

# Opportunities

## **Knowledge Exchange:** Sharing ideas and expertise with different groups

- Enhance competence and capacity in fish health management
- Improve systems for fish health management at industry and governmental level.
- Improve competence and procedures in aquatic animal health diagnostics.
- Improve NVI experience, knowledge and learning base on health challenges in tropical aquaculture (focus on fresh water finfish - tilapia etc.).

**Networking and Outreach:** Being part of collaborative networks to facilitate new ideas and opportunities

**Impact and Influence:** By teaming up with others, we can help implement changes to improve aquatic animal health, being a louder voice when it comes to advocating for policies



# Challenges

**Resource Allocation:** limited time and resources

**Communication and Coordination:** dealing with collaborators from different time zones and languages.

**Political and Socioeconomic Factors:** the biggest hurdles impact the implementation and success of collaborative projects.

**Policy Harmonization:** Aligning regulatory frameworks and policies across different regions and organizations

**Data Sharing and Standardization:** Ensuring consistent and reliable data sharing among diverse regional networks and organizations

**Capacity Building:** making sure everyone has the right skills and tools

**Technological Glitches:**

# *International Aquaculture Team*

