World Organisation for Animal Health

The Fleming Fund

Training of National Focal Points for Aquatic Animal Health (Cycle IV)

2 - 4 October 2023 Kigali, Rwanda

The Fleming Fund

World Organisation for Animal Health

Veterinærinstituttet
Norwegian Veterinary Institute

WOAH Collaborating Centre for Epidemiology and Risk Assessment of Aquatic Animals (Europe)

Reference Centre World Organisation for Animal Health
Founded as OIE

Biosecurity plans

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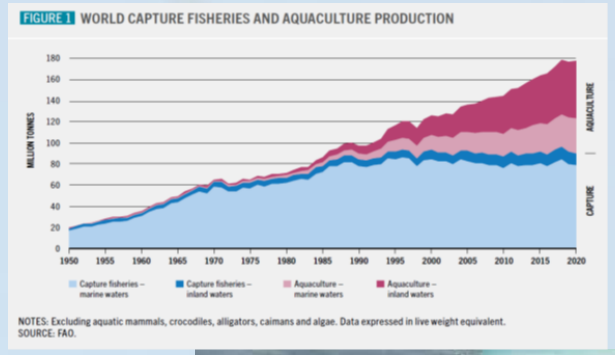
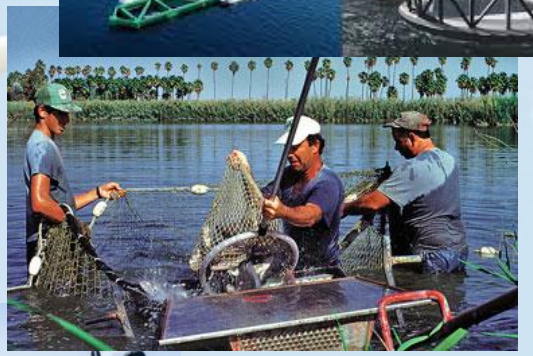
Aquaculture

- A variety of species cultured (~500)
- A variety of production systems in fresh and marine waters
  - 70% small scale
  - Increasingly intensified production
- “Blue food” of the most traded animal products in the world





.. towards a better understandig……

Disease outbreaks are the greatest threat to aquatic animal production globally (Monique Elloit, Dir Gen, WOAH)

….and

Controlling diseases are essential for an environmental, social and economically sustainable industry

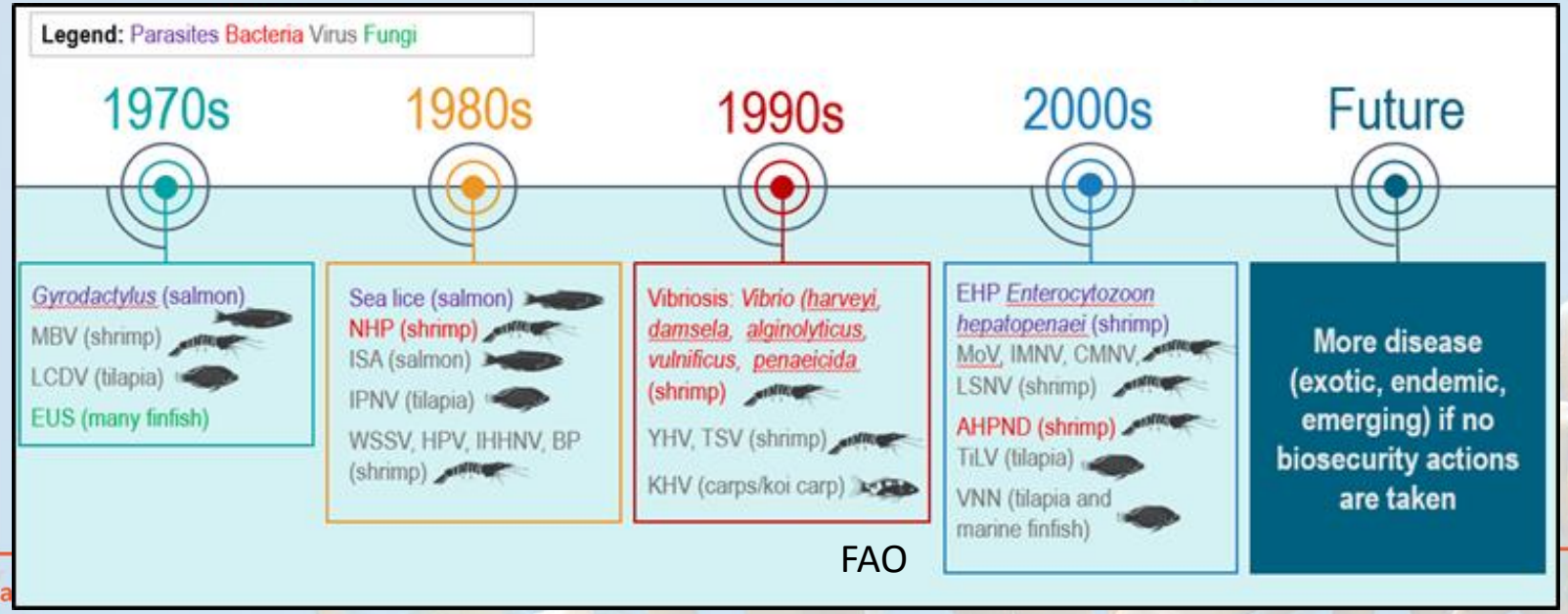
OIE Aquatic Animal Health Strategy

.. towards a better understanding..

- Can Veterinary Services continue to neglect aquaculture production, the fastest growing food production sector ?

  (Monique Éloit, Dir Gen, WOAH)

- OIE Aquatic Animal Health Strategy 2021–2025 launched



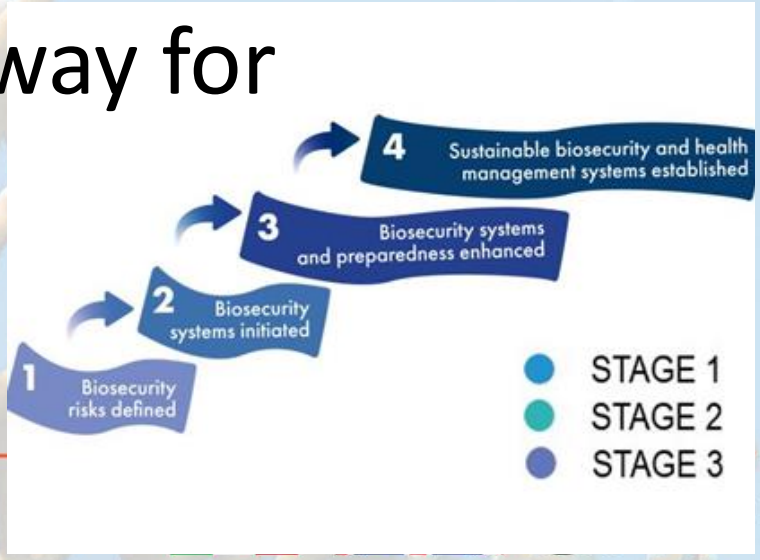
Tilapia Lake Virus

- First reported in Israel, 2014
- TiLV confirmed in *16* countries in the Middle-East, Asia, Africa and Latin-America by 2020
  - Likely that TiLV is in *more* countries
- Its threat to tilapia farming at the global level is significant - mortality rates up to 90%
- Reportable to WOAH in 2022

(WOAH,FAO)

Biosecurity in focus

- WOAH Aquatic Animal Health Code
  - Chapter 4.1 Biosecurity for aquaculture establishments
- EU/AHL regulation 2020/691
  - Rules for aquaculture establishments and transporters of aquatic animals
- FAO led Progressive Management Pathway for Aquaculture Biosecurity (PMP/AB)



BIOSECURITY PLAN

- a document that identifies potential pathways for the introduction of *pathogenic agents* into, or spread within, or release from, a *zone*, *compartment* or *aquaculture establishment* and describes the measures applied to mitigate the identified *risk*, in accordance with the recommendations in the *Aquatic Code* (AAHC,WOAH)

A farm-level BP should include

- Site location and features
- Layout of the farm
- Production details

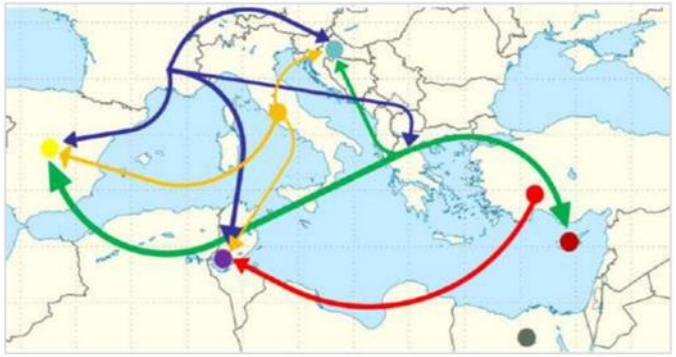
..... should include

- «Barriers» for personnel/guests in and out of the facility
- Separation of different departments in the facility ("epi-units")
- Routines for sharing equipment between facilities/departments
- Routines for dead fish collection and handling
- Routines for washing and disinfecting equipment
- Routine for incoming biological material (live animals, roe, etc..)
- Routines for verification of washing and disinfection by transporters (before loading or unloading)

- Who to turn to for help – reporting (internal-external)
- Transparency – biosecurity is a collective not a competitive action

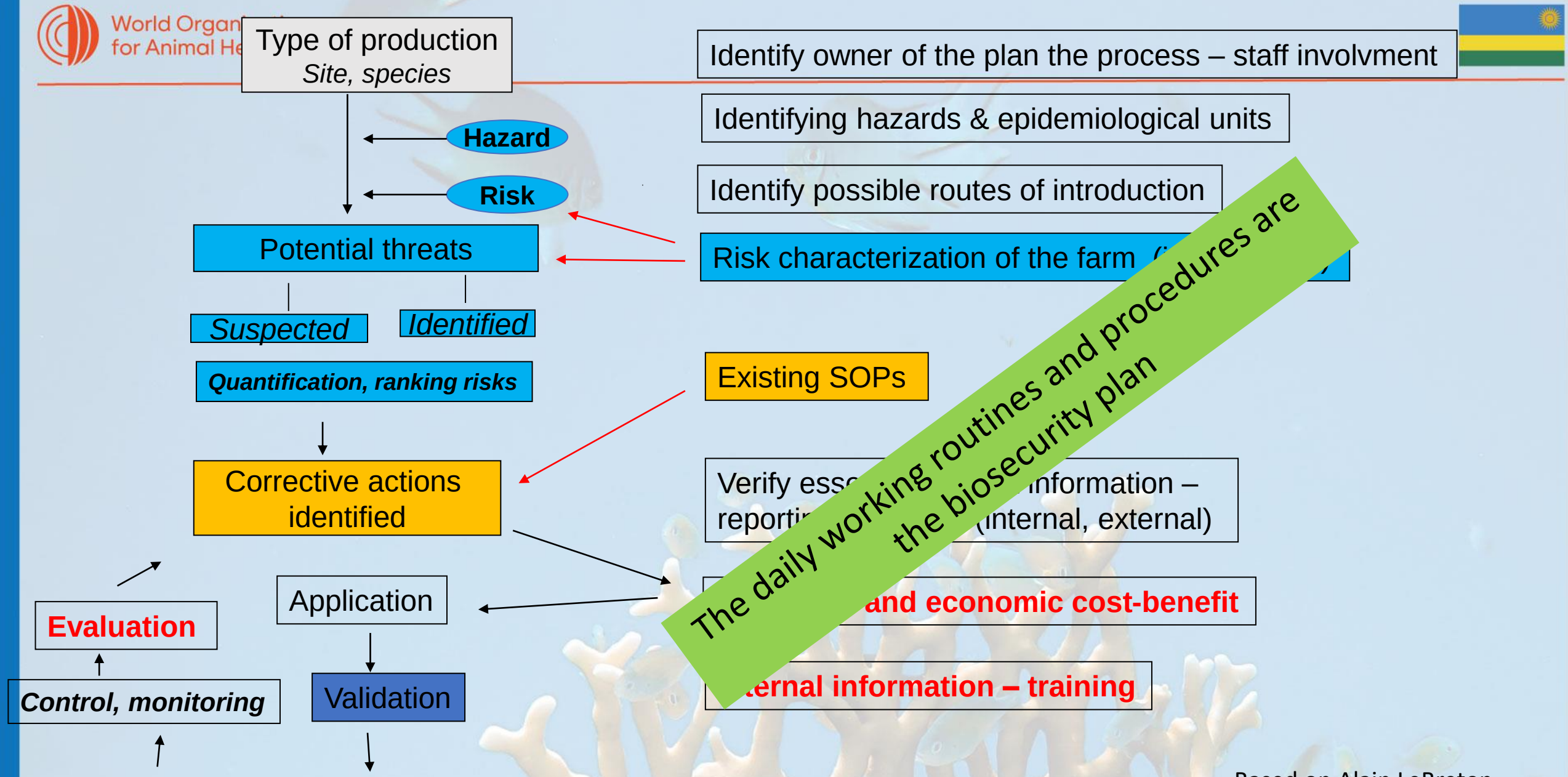
..... be based on risk assessment

- Health status in the area
- Distance to other facilities, waterways, slaughterhouses, etc.
- Water source and water treatment
- Outlet water
- Health status of fish taken into the facility
- Movement of live fish
- Vaccination
- Traffic to and from the facility
- Health monitoring



From the EU project MedAID

. Movements of seabass and seabream fingerlings between countries of the companies surveyed



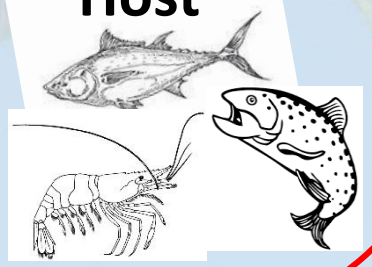
Based on Alain LeBreton

The Fleming Fund

The epidemiological triad

Knowledge, facilities, routines, technology, resources to secure production based on **welfare**

Host



Surveillance, control, early detection, treatment, transparency

WOAH delegates FP,extention officers

Environment

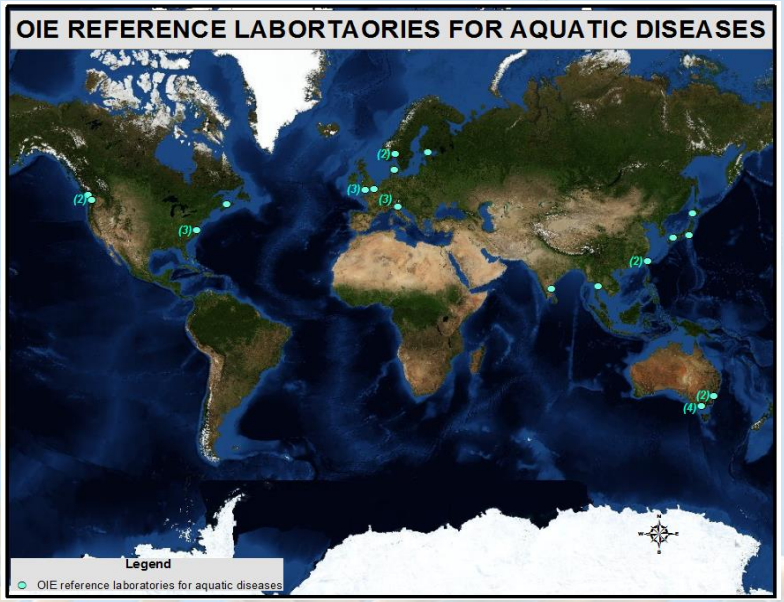
Agent (pathogens)

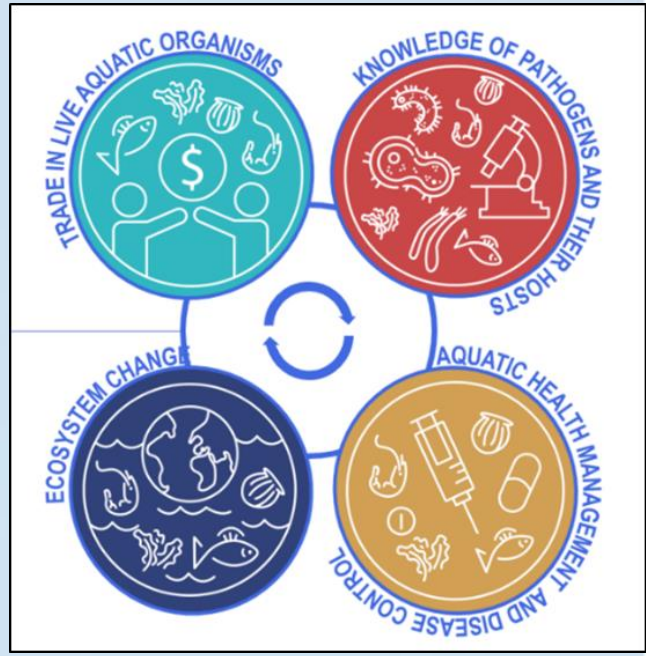
Quizlet.com

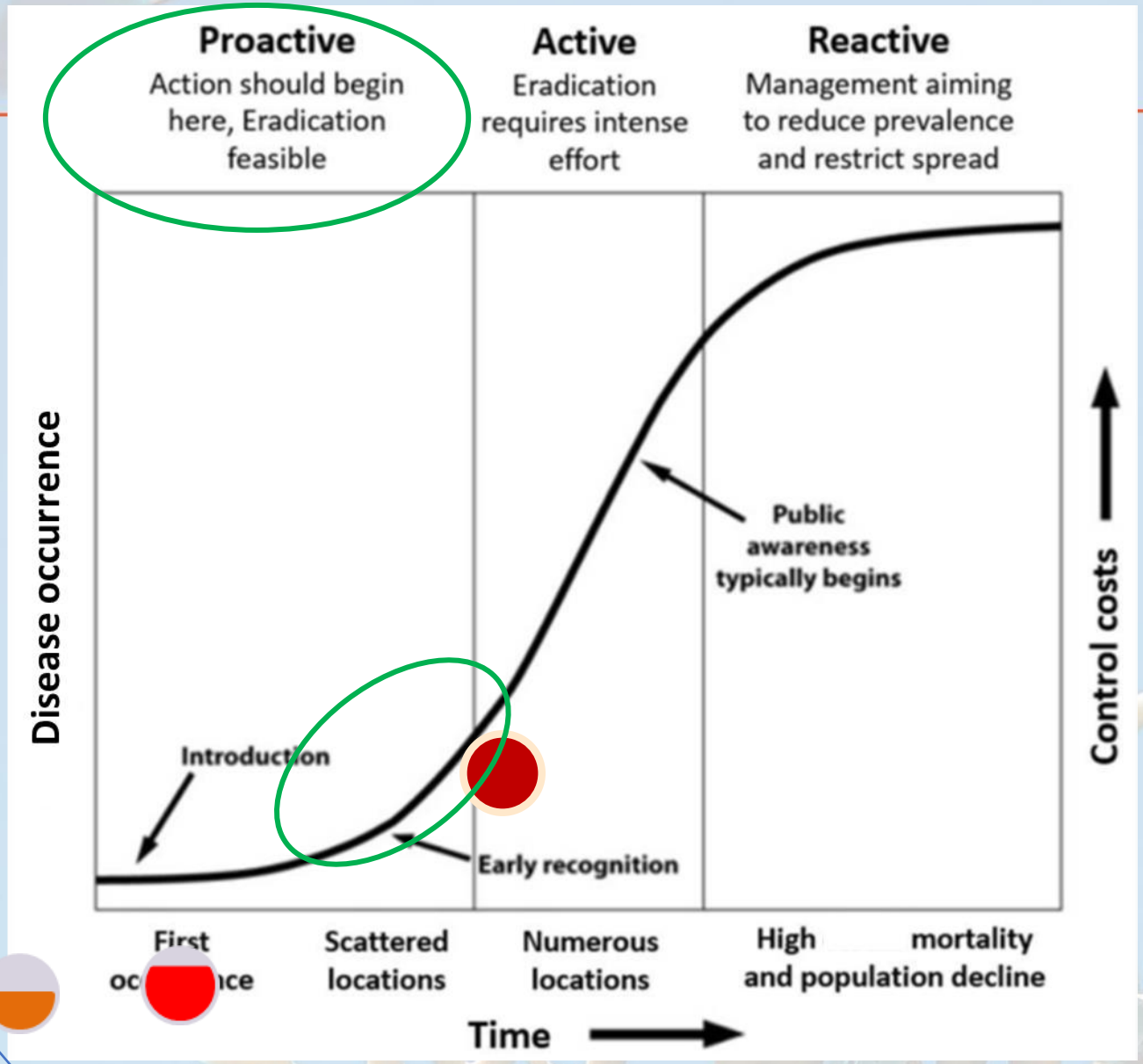
Biosecurity farm plans are integrated in daily routines

Biosecurity Plan - National Level

- Regulation, enforcement, funding, legislation
- “Authority”-competence/capacity
  - Disease list
  - Transparent reporting
  - Preparedness
  - Diagnostics
- Collaboration
  - Between farmers, regions
  - Across disciplines and authorities
  - Across borders (rivers, coast line)
- Emergency capability
  - How to handle huge numbers of dead fish





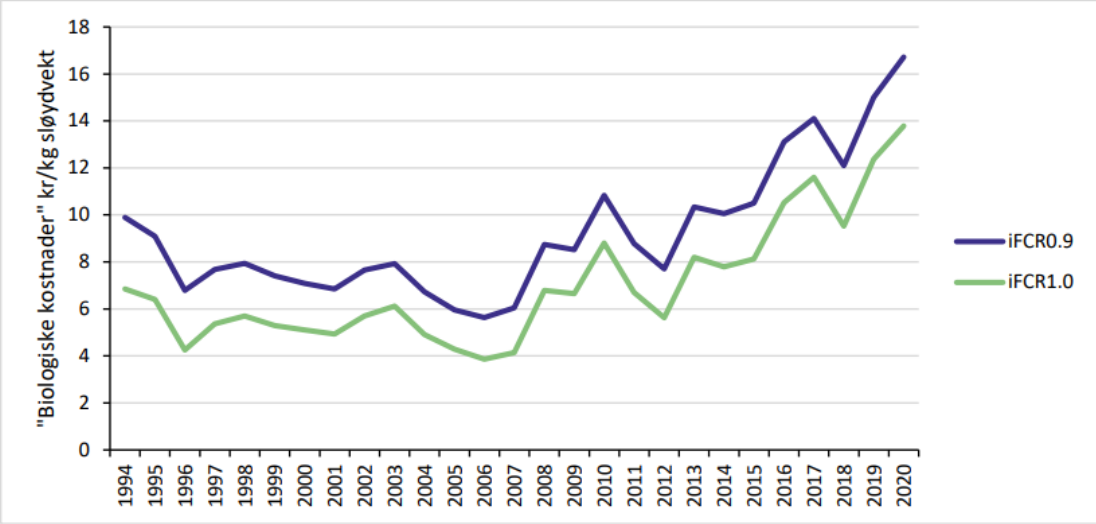


Animal health economics

RA, awareness

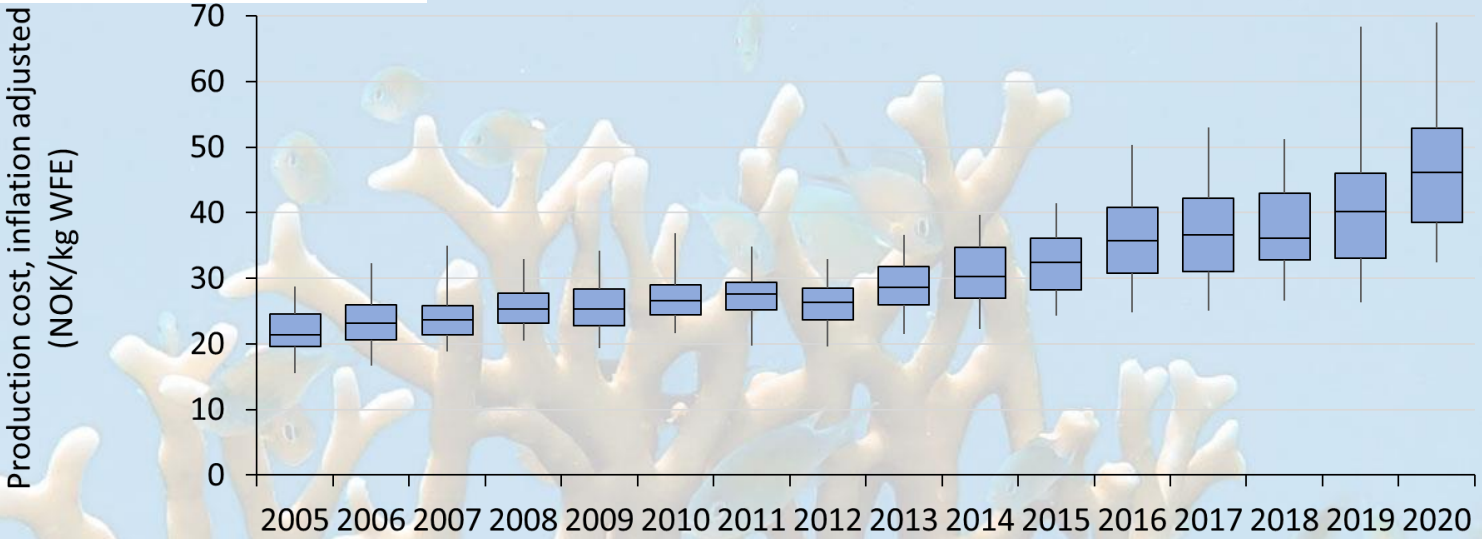
Biosecurity and surveillance

"Biological" costs in fixed 2020 kroner per kilogram of «gutted weight».
Calculated from ideal feed factors of 0.9 (iFCR0.9) and 1.0 (iFCR1.0).
Own calculations based on the Directorate of Fisheries' profitability survey.
(B.Misund 2022)



A dramatic rise in the «global burden of diseases» - in the biological cost of diseases - for the salmon farming industry

The cost of animal diseases is a cost to the society



B. Misund,2022

Responsible Seafood ADVOCATE

Health & Welfare

Opinion: Does the WTO need a new International Reference Point to control the spread of animal diseases via trade?

8 May 2023

By Victoria Alday-Sanz, DVM, Ph.D. , Daniel F. Fegan and Timothy W. Flegel, Ph.D.

Would a new "Codex Animalia Commission" allow the World Organization for Animal Health to focus on wider non-trade issues?

.. suggesting a new IRP "…..to safe trade in animals and their products,
allowing WOAH to focus on wider, non-trade, issues such as global improvement of general animal health and welfare and other issues relevant to its members

WOAH – biosecurity – trade

- countries are reluctant (or even avoid) reporting their health status to WOAH for new and newly emerging diseases
- risk of trade restrictions being imposed by trading partners, even for exported, dead aquaculture products
- countries seek confidential advice from international experts or organisations but choose not to inform WOAH
- global industry is placed at risk
- **WOAH faces loss of credibility in its inability to prevent disease spread due to lack of reliable information.**

Economy

Environment

Societal

Aquatic animal health and welfare

Thank you for your attention