21st Conference of the OIE Regional Commission for Africa 16-20 February 2015 Rabat, Morocco



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Aquatic Animal Health Standards Commission Issues of interest to the Region

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Impact of infectious diseases

Recent developments of the aquatic standards



Aquaculture is increasingly important to global food security

Aquaculture is one of the fastest growing food producing sectors

The average consumption per capita has doubled since 1950

One fish out of two on the market comes from aquaculture

It provides a valuable source of high quality proteins and nutrients

36% is traded internationally (compared to 10% for meat)

It provides employment for about 23 million people

The growth of aquaculture is unprecedented in the history of animal production

Over 500 species in farming systems

Production in new geographical areas

New production technologies

Genetic improvement and domestication



Disease outbreaks continue to be a threat to growth and sustainability of the sector

In late 2006 an unusual ulcerative condition in wild fish was reported for the first time in Africa from the Chobe and upper Zambezi Rivers in Botswana and Namibia. Concern increased with subsistence fishermen reporting large numbers of ulcerated fish in their catches. In April 2007 the condition was confirmed as an outbreak of infection with *Aphanomyces invadans*, an OIE listed disease also known as epizootic ulcerative syndrome (EUS). The upper Zambezi floodplain at the confluence with the Chobe River spans the four countries of Botswana, Namibia, Zambia and Zimbabwe, making disease control a challenge. This ecosystem supports a high fish diversity of around 80 species, and is an important breeding and nursery ground. Since 2006 the disease has spread rapidly upstream along the upper Zambezi and its tributaries. By 2010 the disease was reported from the Okavango Delta in Botswana and in 2011 from the Western Cape Province of South Africa. *Aphanomyces invadans* has the potential to disrupt freshwater ecosystems elsewhere in Africa where high fish diversity forms the basis of subsistence fisheries and local economies, and is a direct threat to freshwater fish culture in the region. Most recently, it is believed that the disease has been recognised in the River Congo basin.

EUS leads to significant losses of income to the fisheries industry

Negative impact on the biodiversity of the river ecosystems

Social impact on communities dependent on fish

Potential public health risk from infected fish due to opportunistic Bacterial infections

Disease outbreaks continue to be a threat to growth and sustainability of the sector

White spot disease Saudi Arabia06 February 2011

White spot disease Mozambique 31 August 2011

White spot disease Madagascar

10 April 2012

Global performance at preventing spread of aquatic animal diseases has been poor

The characteristics of aquaculture have contributed to disease spread

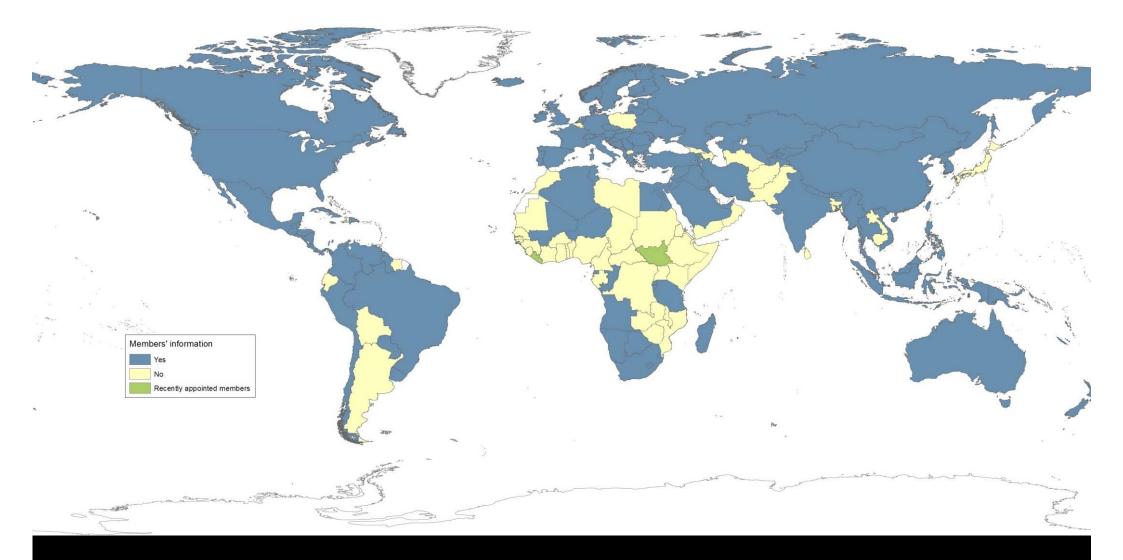
Aquatic animal health faces serious challenges

Lack of efficient aquatic animal health programmes to ensure production of safe products in an environmentally sustainable way and to participate fully in international trade

Aquatic Animal Health Services (AAHS) may be part of the Veterinary Services (VS) or not. In either case, they often lack financial resources and infrastructure, including legislation, to implement aquatic animal health programs efficiently

Veterinarians and other aquatic animal health professionals play a key role in aquatic animal health programs but professionals with appropriate educational qualifications and experience in aquatic animal health are not readily available

Members having provided information on aquatic animals between 2005 and 2014



Concept of global public good

The benefits of control & eradication of infectious diseases are trans-national and trans-generational in scope

Countries depend on each other – the failure of one endangers the whole region, if not the world

Aquatic animal health systems are not a strictly commercial or agricultural good. They are fully eligible for investment of global and national public resources

OIE Initiatives to build capacity of Member Countries in Aquatic animal health

PVS Pathway, including PVS Evaluation, Gap Analysis, Veterinary Legislation Support Programme and PVS Follow-Up mission

Seminars for New Delegates and national Aquatic Animal Focal Points

Laboratory Twinning initiative

Guidelines on Veterinary Education

Veterinary education twinning projects

Global Conferences and other activities



The Aquatic Animal Health Standards Commission is responsible for the Aquatic Code and Aquatic Manual

Recent developments

'Criteria for listing species as susceptible to infection with a specific pathogen' (Ch 1.5. Aquatic Code) were adopted in May 2014

Important in the context of the aquaculture sector and the large number of existing and new aquaculture species

Work is underway by an ad hoc Group to develop revised lists of susceptible species, starting with crustacean diseases

Emerging diseases

Several changes made for reporting emerging diseases

Revised definition of "emerging disease" in the Glossary

Emerging diseases no longer listed in Chapter 1.3

Dedicated article for notification of emerging diseases in the Chapter 1.1. of the Aquatic Code

Member country responsibilities for reporting emerging diseases is now very clear

The Aquatic Code chapter on infectious salmon anaemia

First adopted the concept of pathogen differentiation

In recognition of the existence of highly pathogenic variants and the need to differentiate them from more benign variants.

Acute hepatopancreatic necrosis disease (AHPND)

Re-consideration of OIE listing

Development of a new Manual chapter

Infection with salmonid alphavirus

New OIE listed disease

New Aquatic Code and Manual chapters adopted

New Reference Laboratory designated

Responsible use of antimicrobials in aquaculture Significance

Antimicrobial resistance is an issue that spans human and animal health

Increasing expectation that aquaculture will contribute to management of AMR

Four guidance documents prepared in the suite on antimicrobial agents in aquatic animals

Principles for responsible and prudent use of antimicrobial agents

Monitoring quantities and usage patterns of antimicrobial agents

Antimicrobial resistance surveillance and monitoring programmes

Draft Ch 6.5. 'Risk analysis for antimicrobial resistance arising from the use of antimicrobial agents in aquatic animals'

Circulated for Members' comments

Aquatic Code Ch 4.3. 'General recommendations on disinfection'

To be revised to better address this topic

Work is underway by an ad hoc Group

Aquatic Code Ch 4.7 'Control of hazards in aquatic animal feed'

Revised draft circulated for Member comments (Sept. 2014 AAC report)

Aquatic Code Ch 1.2 'Criteria for listing diseases'



Other initiatives

Third OIE global conference on aquatic animal health January 2015, Vietnam

Sessions on theoretical and practical aspect of surveillance, use of zoning and compartmentalisation, and identifies challenges ahead, such as antimicrobial resistance

The conclusions of the conference emphasise the important contribution of the OIE standards to the development and sustainability of aquaculture

Guidance documents for developing surveillance systems

Practical guidance on the implementation of the OIE standards for surveillance

Viral haemorrhagic septicaemia

White spot disease

Infection with Bonamia ostreae

Available on-line from the OIE website



Take home message

Aquatic animals matter and aquatic animal health is a global public good

More efforts are needed in the region to address the challenges faced by the aquaculture sector

The AAHSC is committed to continue its efforts to improve the OIE aquatic standards

Thank you for your attention

