

## CERTIFICATION OF AQUATIC PRODUCTS

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## Risk management

### Animal health

- Microbial agents posing risk to farmed and native fish stocks

### Human health

- Microbial agents and their toxins are of public health concern
- Residues are of public health concern



## Infectious disease

- Pathogenic organisms can be transmitted readily through water
- Some serious pathogens can be transmitted vertically through the gametes
- Asymptomatic carrier states exist for many fish pathogens



## Impact and consequences of fish translocations are reflected in the criteria for Aquatic Animal Disease listing

- Significant production losses nationally or multi-nationally
- Likely to negatively affect wild aquatic animals worth protecting for economic or ecological reasons
- Public health concern
- Infectious cause
- Potential for international spread via live animals, their products or fomites
- Countries or zones within countries may be declared free of the disease
- Repeatable and robust means of diagnosis exist

OIE Aquatic Animal Health Code-criteria for listing

## Infectious haematopoietic necrosis (IHN)

- Rhabdovirus
- Widely prevalent amongst free living salmonid fishes along the west coast of North America
- Introduced with devastating effect into major trout growing areas in Europe in 1987.



## Crayfish plague

- Oomycete or water mould – *Aphanomyces astaci*
- Native North American signal crayfish is resistant to crayfish plague
- Crayfish plague was introduced to Europe from 1870 – 1940 devastating European fresh water crayfish populations. From 1960's to 2000 active stocking of signal crayfish was the main route of spread of crayfish plague
- devastation of remaining indigenous European crayfish populations

## Withering disease of abalone

- Occurs naturally on the west coast of California and Mexico
- Spread to a wide geographic range with transportation of California red abalone
- Infection has spread to local species of wild and farmed abalone



## White spot disease of shrimp

- One of a number of serious viral diseases of shrimps or prawns
- Wide host range affecting almost any decapod crustacean in marine, brackish and fresh water.
- Many invertebrate vectors
- China, Japan, Korea, South-East Asia, India, Mediterranean, Middle –East and Americas



Internationally there is increasing pressure on aquaculture to meet rising demand for fish.

For fish farming to be viable aquaculture products must be able to access lucrative markets.

Export markets place stringent demands for disease status and food safety certification.



## Mariculture development is gaining potential in southern Africa – kob, shellfish, crayfish, prawns

- Regulatory support for mariculture development will need to provide internationally accepted assurances once production exceeds local consumption
- Particularly in the case of exports of high value animals such as shellfish



## To protect indigenous fish stocks and to sustain aquaculture development countries need:

- capacity to meet legislative requirements of importing countries
- capacity and infrastructure to prevent introduction of unwanted aquatic diseases
- diagnostic capacity in order to provide surveillance data on aquatic animal diseases



## Facilitation of international trade

- Uniform approach to health control in aquatic animals and their products
- Standardised methods of diagnosis
- Certification is a prerequisite for control and prevention of spread of aquatic animal diseases through international trade
- Inappropriate aquatic animal health requirements and/or inability to provide certification will create unjustified trade restrictions



## Further export guarantees

- Compliance with feed and food law
- Animal health and welfare
- Veterinary drug usage
- Residue testing



OIE and Codex Alimentarius Commission  
“Food safety throughout the food chain”

## Focus of international obligation

- Risk analysis
- Epidemiology
- Adoption of sanitary measures



EEC Directive 2006/88/EC

## International trade

- Export prescribed directives must be followed if regional aquaculture is to compete in international markets
- Legislation must cover fish and public health aspects
- Farm to fork food safety guarantees must be provided
- WTO SPS agreement provides framework for safe international trade in animals and animal products without unjustified trade restrictions.
- International animal health standards are set by OIE



## Requirements

- Trace ability of aquaculture products
- **Animal health certification**
- Risk based animal health surveillance
- Zoning
- Establishment of national reference laboratories
- Routine inspections and notification of disease
- Sharing of information on emerging diseases
- Development of contingency plans



EEC Directive 2006/88/EC

## Country of import

- Animal health and human health requirements must be clearly formulated
- For EU - Commission Regulation EC 1251/2008 including model animal health certificates
- Inspectors and Veterinary Services staff monitor imports and carry out a risk based programme of spot checks either at the port of entry or at the place of destination

## Country of export

- The official inspector in the country of export is responsible for ensuring that the consignment is able to satisfy all the requirements laid down in the animal health certificates of the importing country
- Health guarantees help guard against introduction of unwanted diseases

## Animal Health Regulation – finding the right balance

- Inadequate controls will lead to the spread of pathogens resulting in major losses and compromise the animal health status of the country
- Over regulation leads to unnecessary restrictions on free trade



EEC Directive 2006/88/EC

## Competent Authority

- The importing country must recognize the competent authority of the exporting country
- The competent authority must provide guarantees with respect to:

Animal Health  
Human Health



## International movement of salmonid fish is tightly regulated based on OIE listed diseases

- Adherence to strict import regulations and disease surveillance testing has in the case of RSA kept feared salmonid diseases out of the country
- Effective diagnostic and regulatory capacity has enabled RSA to export certified disease free salmonid ova to lucrative northern hemisphere markets



## Attestations by certifying authority

- That premises for production or processing are approved and under control of the competent authority
- That import requirements have been met, e.g. fish have been eviscerated, head and gills removed, internal and external surfaces washed
- That fish were subjected to an inspection system under supervision of the competent authority
- That the product is free from lesions associated with infectious disease

AQIS 99/1438

## Certificate

Must bear:

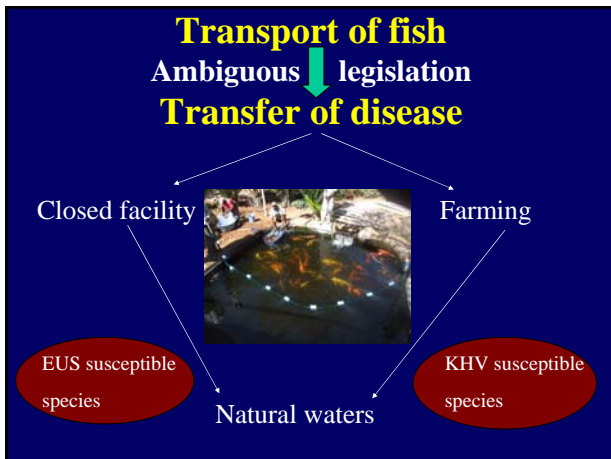
- name, address and approval number of the establishment
- name and address of the consignor and consignee
- signature of person authorized by the competent authority
- impression of the official stamp on each page

AQIS 99/1438

## Inspection of ornamental fish

- Fish should be free from visible lesions associated with infectious disease
- Certification must comply with importing country's requirements EC1251/2008
- Permits must be appropriate
- Packaging must comply with animal welfare requirements and international air transport guidelines





- All fish included in the consignment must :**
- be inspected by the competent authority within 24 hours of issuing the certificate and must have shown no clinical signs of disease
  - not be intended for destruction or eradication purposes.
  - originate from a source where no species susceptible to the listed diseases occur, or originate from a source where these diseases are notifiable
  - originate from a source where there has been no known disease outbreak causing significant impact on stock during the 6 months prior to dispatch
- Commission Decisions 2006/656/EC

- Delimitation of disease free or Approved Zones**
- Climate and geographic barriers
  - Individual farms
  - Specific areas
  - Provinces
  - Country
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- Virus free status**
- The international norm for a virus free status in an animal population is that no virus is detectable in at least 2 percent of the population at the 95 % confidence level with six monthly testing over a two year period
  - Applicable to certification of freedom from specified salmonid and cyprinid viruses

- Prerequisites for a disease free status**
- Closed population of fish
  - Closed water supply
  - Any newly introduced fish must originate from a source with the identical or a higher standard of disease free certification
  - Disease free status based on EU directives and on principles laid down by the International Aquatic Animal Health Code (OIE) for other aquatic diseases

- Co-operation with neighbouring countries**
- Build contacts with neighbouring countries
  - Encourage monitoring
  - Share information
  - Share regional control strategies
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## Diagnostic capacity

- Virology Section of the OVI - testing for VHS, IHN, IPN and SVC
- Bacteriology Section of the OVI - testing for BKD
- Regional laboratories capable of doing general fish bacteriology

### Private laboratories:

- MDS - testing for KHV by PCR
- Golden Vetpath Idexx - fish bacteriology
- Aquatic animal consulting and histopathology service – Dr KDA Huchzermeyer
- Amanzi Biosecurity - Dr. A. Mouton – molluscs and marine fish

Pro-active regulatory bodies, with the capacity to implement sensible regulations based on OIE guidelines and with the capacity to certify aquatic products will do much to further sustainable development of aquaculture and associated economic growth in Africa

**“It is unlikely that EUS will ever be eradicated from the upper Zambezi. EUS will remain a threat to other sensitive aquatic systems throughout Africa”**

THANK YOU

