

**FAO TCP/INT/3501: Strengthening biosecurity governance and capacities for dealing with the serious shrimp infectious myonecrosis virus (IMNV) disease**

**FAO/MAPA/ABCC**

**“Final Interregional Workshop of FAO TCP/INT/3501: IMNV”**

**2-5 November 2017**

**Qingdao, China (Intercontinental Hotel)**

**FAO Aquatic Animal Health Capacity and Performance  
Self-Assessment Survey Questionnaires**

**Dr Melba B. Reantaso (FAO)**

**Melba.Reantaso@fao.org**

## Summary Tables for the Countries Participating in Project TCP/INT/3501: Strengthening biosecurity governance for dealing with the serious shrimp Infectious Mynechrosis Virus (IMNV)

- ▶ presents, in the form of summary tables and annexes, the results of the FAO self-assessment questionnaire on aquatic animal health capacity and performance for the six countries that participated in the interregional project FAO/INT/3501. The contributing countries represent three regions of the world: Latin America and the Caribbean (LAC) (Brazil, Ecuador, Mexico), EastAsia (People's Republic of China) and Southeast Asia (Indonesia, Thailand).

# Purpose

- ▶ an on-going activity of FAO
- ▶ collect and analyze information on national aquatic animal health capability for developing countries on a global basis.
- ▶ obtains information on national capacity and the agencies mandated to implement aquatic animal health programmes, as well as collecting information essential to support the development of the aquaculture sector through healthy aquatic production and seeking opinions on the components and activities that might be included in regional aquatic biosecurity strategies.
- ▶ Because this survey involves only a few countries from each of the three regions, no regional analyses are possible at this time.

# Purpose

- ▶ This preliminary information will be retained by FAO until such time as the results of other similar surveys have been obtained for the various regions, allowing the preparation of regional summaries and analyses that will help guide regional and national strategic planning for improving aquatic animal health and biosecurity and assuring adequate and rational support services to achieve sustainable aquaculture development.
- ▶ This brings the total number of countries that have completed the self-assessment survey to 65, the previously completed surveys involving the following regions: West Balkans (5 countries), South African Development Community (SADC) (14), Central Asia (5), Pacific Islands and Territories (PICTs) (18), Middle East (8), South Asia (2), Southeast Asia (2) and Latin America and the Caribbean (7)

## Purpose

- ▶ Support the pipeline: Global Aquaculture Biosecurity Management Framework using Progressive Management Pathway (PMP) used for livestock diseases: risk-based and progressive
- ▶ Tripartite consultation (government, producers, academe/research/service providers (Washington DC March 2018))
- ▶ Basis for further support from FAO

# Structure of questionnaires

<b>1. international trade in live aquatic animals and national border controls</b>	<b>7 emergency preparedness and contingency planning</b>	<b>13. infrastructure</b>
2. control of domestic movement of live aquatic animals and other domestic activities that may spread pathogens	8. extension services	14. linkages and cooperation
3. policy and planning	9. compliance & enforcement	15. funding support
4. legislation	10. research	16. current challenges
5. disease surveillance/monitoring	11. training	17. constraints
6. disease diagnostics	12. expertise	18. additional information

# Persons completing the survey

Country	Officers
Brasil	Eduardo de Azevedo Pedrosa Cunha Aquatic Animal Coordinator Ministry of Agriculture, Livestock and Supply
China	Yan Liang/Xuan Dog/Jie Huang Yellow Sea Fisheries Research Institute Chinese Academy of Fishery Science
Ecuador	Narciso Flavio Pin Quimiz National Fisheries Institute
Indonesia	Ms Mukti Sri Hastutui Directorate General of Aquaculture Ministry of Marine Affairs and Fisheries
Mexico	Mauricio Flores Villasuso Health Aquaculture and Fisheries Director
Thailand	Ms Jaree Polchana/ Ms Jumroensri Thawonsuwan Aquatic Animal Health Research and Development Division Department of Fisheries

# Examples of missing info

The background of the slide features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the slide, creating a modern, layered effect.

# Description of Competent Authorities for various aspects of aquatic animal health responsibilities

- ▶ Brasil: more detailed description of mandate
- ▶ Ecuador: more detailed description of mandate
- ▶ Indonesia: missing information
- ▶ Mexico: more detailed description of mandate
- ▶ Thailand: more detailed description of mandate

## **Table 6C. Summary of status of national pathogen list for participating countries (Survey Questionnaire Parts 6.9– 6.10)**

- ▶ Only Ecuador does not have a National Pathogen List

## **SECTION 7. EMERGENCY PREPAREDNESS/CONTINGENCY PLANNING**

**Table 7. Current status of emergency preparedness/contingency planning for outbreaks of aquatic animal disease in participating countries (Survey Questionnaire parts 7.1–7.3)**

- ▶ Ecuador: None ????
- ▶ Indonesia: None ???

# Section 12

Table 12. Summary of estimated number of individuals with tertiary qualifications in fields related to AAH in participating countries (only individuals actively employed in a capacity with direct relevance to the field of expertise are listed) (Survey Questionnaire Section 12).

Question=	Field of Expertise in AAH	Doctorate	Masters degree	Veterinary degree	Bachelors degree	Other (specify)
COUNTRY						
Brazil <sup>1</sup>	Parasitology (experimental)	x				
	Parasitology ((taxonomy/systematics)	x				
	Virology	x				
	Bacteriology	x				
	Mycology	x				
	Epidemiology	x				
	Histopathology	x				
	Toxicology/water quality	x				
	Molecular diagnostics	x				
	Electron microscopy	x				
	Aquatic biosecurity	x				
	Aquatic veterinary medicine	x				
	Fish medicine/pharmacology	x				
	Aquatic animal health information systems		x			
	Other (specify)	x				

<b>P.R. China</b>	Parasitology (experimental)	10	20		50	
	Parasitology (taxonomy/systematics)	5	10			
	Virology	20	50			
	Bacteriology	20	50			
	Mycology	1	2			
	Epidemiology	5	10			
	Histopathology	1	5			
	Toxicology/water quality	5	20			
	Molecular diagnostics (e.g. PCR, ELISA)	20	50			
	Electron microscopy	5	10			
	Aquatic biosecurity (e.g. risk analysis)	1	2			
	Aquatic veterinary medicine	5	10			
	Fish medicine/Pharmacology	5	10			
	Aquatic animal health information systems					
	Other (specify):					

**Table 16B. Summary of the major constraints to implementing an effective aquatic animal health programme, in order of importance, as identified by the respondents (Survey Questionnaire Part 16.2)**

- ▶ Indonesia/Thailand: missing information

## **SECTION 17 ADDITIONAL INFORMATION**

**Table 17A. Any additional information about your country's capacities or capabilities with respect to managing aquatic biosecurity that is not mentioned in the responses to the above questions: (Survey Questionnaire Part 17.1)**

- ▶ Only China responded

# NR No Record entries

- ▶ Brasil
- ▶ Ecuador
- ▶ Indonesia
- ▶ Mexico

# Biosecurity: Risks

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graph TD; A[Biosecurity: Risks] --> B[Legal dimension]; A --> C[Emergency dimension];
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## Legal dimension

- Competent Authority
- National Strategy on AAH
  - National Pathogen List
  - Health Certification
  - Border controls and quarantine
  - Inspection of premises
- Farm registration (aquaculture plan/strategy)
- Compensation
- Etc.

## Emergency dimension

- Disease outbreaks/mass mortalities
- Emergency response
- Rapid diagnostics (known disease)
- Surveillance (to determine the status: confirmed, negative, point source, spreading, risk factors, etc.) – basis for reporting to OIE (if an OIE listed disease)
- Containment: vaccines (if appropriate and available) and other treatment possibilities; border controls

Competent Authority (aquatics), National Strategy on AAH, etc.

Healthy production, access to market, resilience, transparent trading partner

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**Robust biosecurity**

+++

\$\$\$

Prevention

Mitigation

Eradication

-

\$\$\$

**Weak biosecurity**

+ -

\$\$\$

Production losses, livelihood, income, market, industry collapse, containment, treatment, etc.

# Still missing/inaccurate info

- ▶ Find time to go over the survey returns
- ▶ Complete this week