



Introduction

- During the last meeting in Dhahran (June 5 & 6, 2023) the SC approved to develop a questionnaire/survey
- The three experts (Technical Committee) involved were
 - **Dr Saraya Tavoranpanich** WOAHC Collaborating Centre for Epidemiology and Risk Assessment– National Veterinary Institute Norway
 - **Dr. Edmund Peeler** (WOAH Collaborating Centre-Cefas-UK)
 - **Dr. Amedeo Manfrin** (WOAH Reference Laboratory for Viral Encephalopathy and Retinopathy-Italy)



● Introduction

- The first draft was ready at the end of 2023 and revised in June 2024
- **Dr. Faycal Meziani and his staff transformed the questionnaire into a very easy-to-use (despite 183 questions) online version that made data processing much easier for us.**
- The final version has been distributed online to AQMENET partners in June 2025 in agreement with some Dr. Faycal Meziani suggestions/additions.
- On last August 25 Rita Rizk sent to me the last updated version of the AQMENET survey answers.
- Last September we started to analyze the answers/results.....thanks to a IZSVe statistician who helped me.

Questionnaire structure

AQMENET-AQUATIC MIDDLE EAST NETWORK

Please answer the following questions as accurately as possible and then return to the technical expert (manfrin@izsvenezie.it) (the aim of this questionnaire is to have only a general overview of your country without any legal constraints –all information are confidential and restricted only to AQMENET members/experts. A summary of aggregated results will be generated but no country identifiers will be released.))

Contact information

Name		Surname	
Phone		Email	
Position			
Institution			

Address _____

Please describe the structure of the Competent Authority involved in Aquatic Animal Health control (you are welcome to attach a table or a flow chart of 1 page maximum)

AQMENET-AQUATIC MIDDLE EAST NETWORK

Governance and Competent Authority

What is the name of the Competent Authority for aquatic animal health and welfare in your country?

- Ministry of Agriculture
- Ministry of Fisheries
- Other (please specify): _____

Which department/agency is responsible for implementing regulations related to aquatic animal health and welfare?

○ _____

Who coordinates communication between the WOAHP Delegate, Focal Point for aquatic animals, and the Competent Authority?

○ _____

How frequently does the WOAHP Delegate and Focal Point communicate with the Competent Authority regarding aquatic animal health?

- Weekly
- Monthly
- Quarterly



Questionnaire structure

AQMENET-AQUATIC MIDDLE EAST NETWORK

Technical and Operational Aspects

- 1) Please indicate in which environments and which categories of aquatic animals are farmed (tick box):

	<u>Environment</u>		
	Freshwater	Brackish	Marine
Finfish	☐	☐	☐
Crustaceans	☐	☐	☐
Molluscs	☐	☐	☐
Amphibians	☐	☐	☐

- 1) Please provide updated data on Aquatic Animals – AAs (fish, mollusc and crustacean) production (top 3-5 farmed species by volume) and number of farms (if available); insert 'N/A' if information is not available)

AQMENET-AQUATIC MIDDLE EAST NETWORK

Aquatic Animal Health Laboratory Assessment

NATIONAL REFERENCE LABORATORY INFORMATION

Laboratory name			
Address			
Contact person		Role/qualification	
Phone		Email	

- 22) How many people are currently employed in the laboratory?



AQMENET - AQUATIC MIDDLE EAST NETWORK SURVEY

Please answer the following questions as accurately as possible and then return to the technical expert (amanfrin@izsvenezie.it) (the aim of this questionnaire is to have only a general overview of your country without any legal constraints—all information are confidential and restricted only to AQMENET members/experts and WOAHP internal use. A summary of aggregated results will be generated, but no country identifiers will be released.)

Quando invii questo modulo, non raccoglierà automaticamente i tuoi dettagli, come il nome e l'indirizzo di posta elettronica, a meno che non lo fornisca tu stesso.

Contact information

1. Name

Amedeo Manfrin Italy

AQMENET - AQUATIC MIDDLE EAST NETWORK SURVEY

Governance and Competent Authority

7. What is the name of the Competent Authority for aquatic animal health and welfare in your country?

☒ Ministry of Agriculture

☐ Ministry of Fisheries

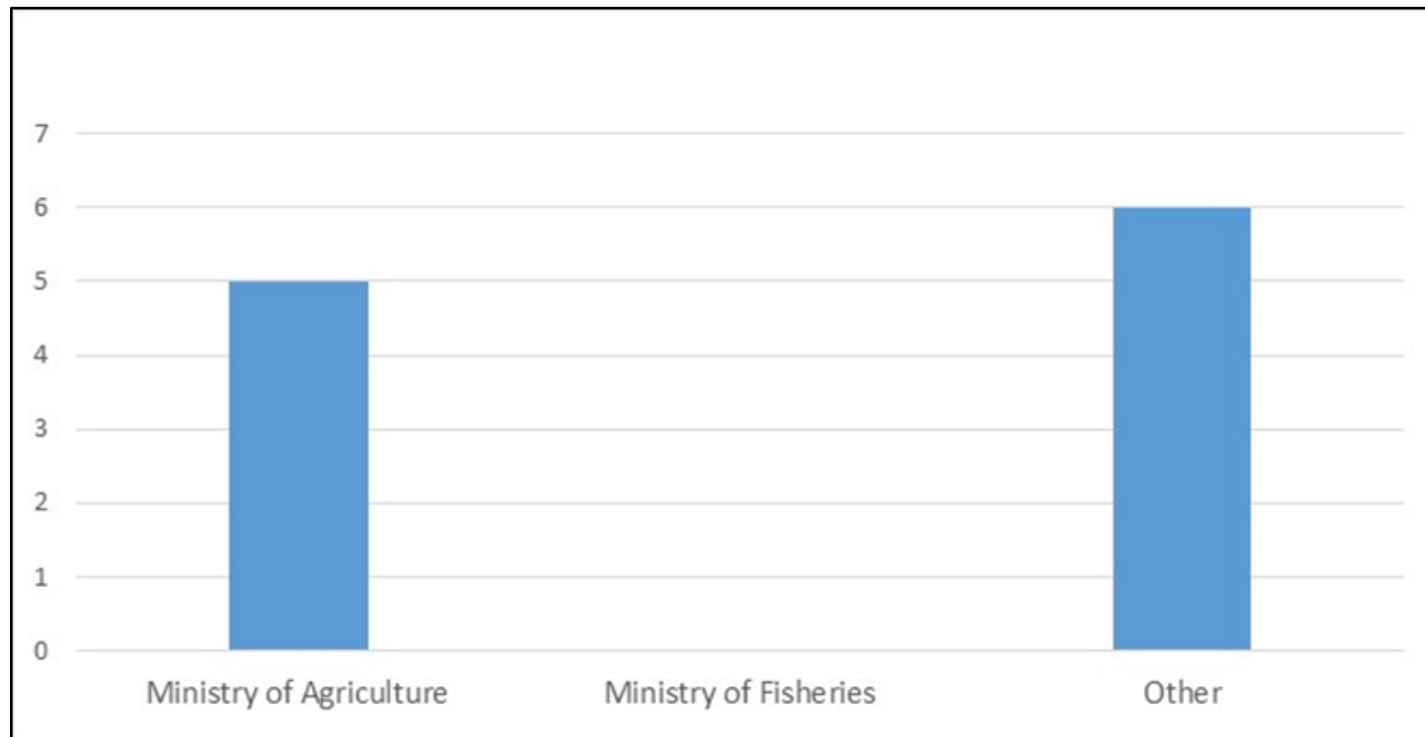
☐ Other (please specify): Ministry of health

☐ Altro

Results/answers

- 11 partners answered
- In some countries (Egypt and Djibouti) more than one contact point answered but we merged the information

Which is the name of the Competent Authority for aquatic animal health and welfare in your country?

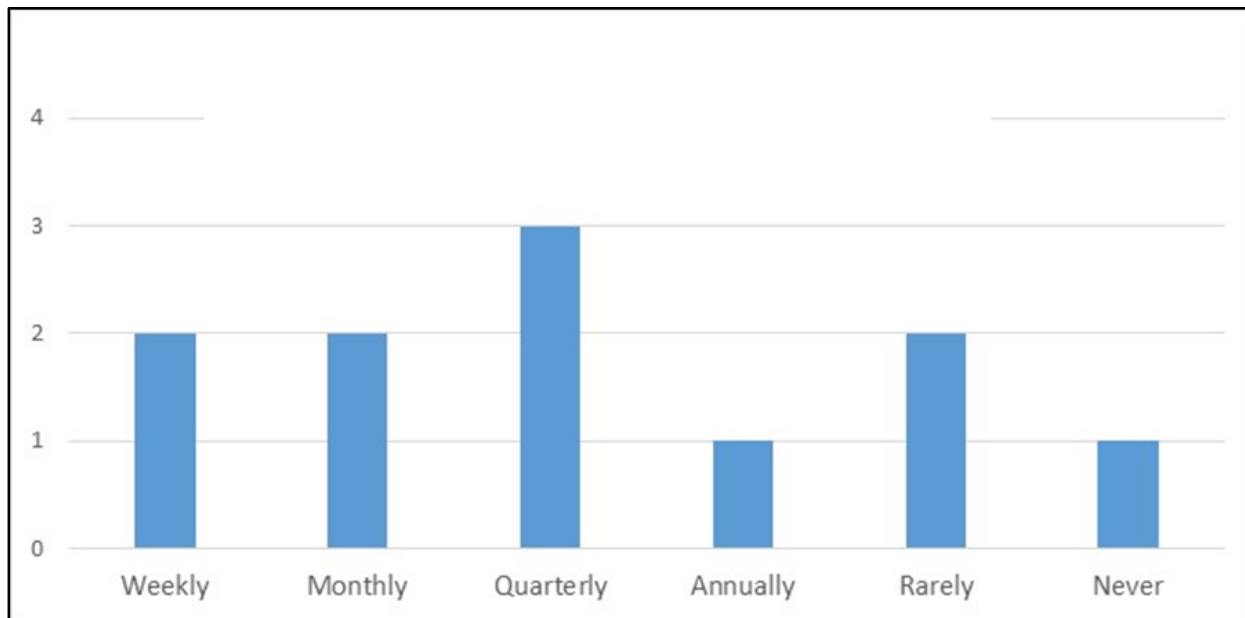


OTHER

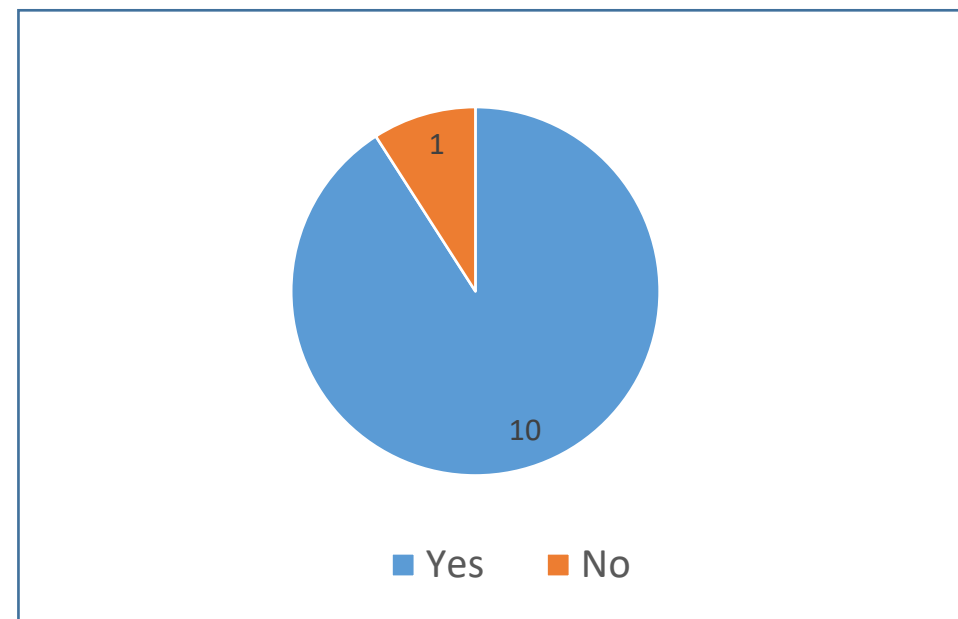
- Ministry of Environment, Water and Agriculture (MEWA);
- Ministry of Agriculture, Fisheries Wealth and Water Resources;
- Ministry of animal rescue;
- Ministry of climate change and environment;
- Supreme council for Environment; Ministry of Livestock, forestry and Range

Governance and Competent Authority

How frequently does the WOAH Delegate and Focal Point communicate with the Competent Authority regarding aquatic animal health?



Does your country have national legislation addressing aquatic animal health and welfare?

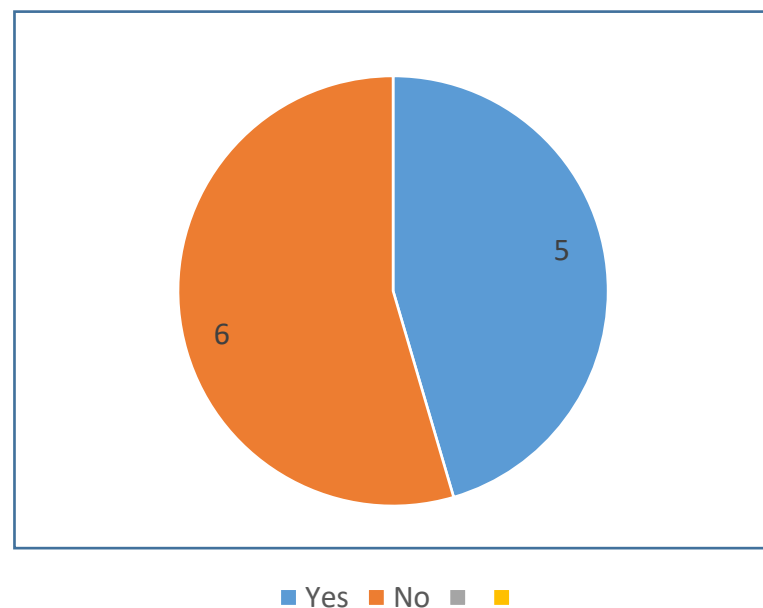


Governance and Competent Authority

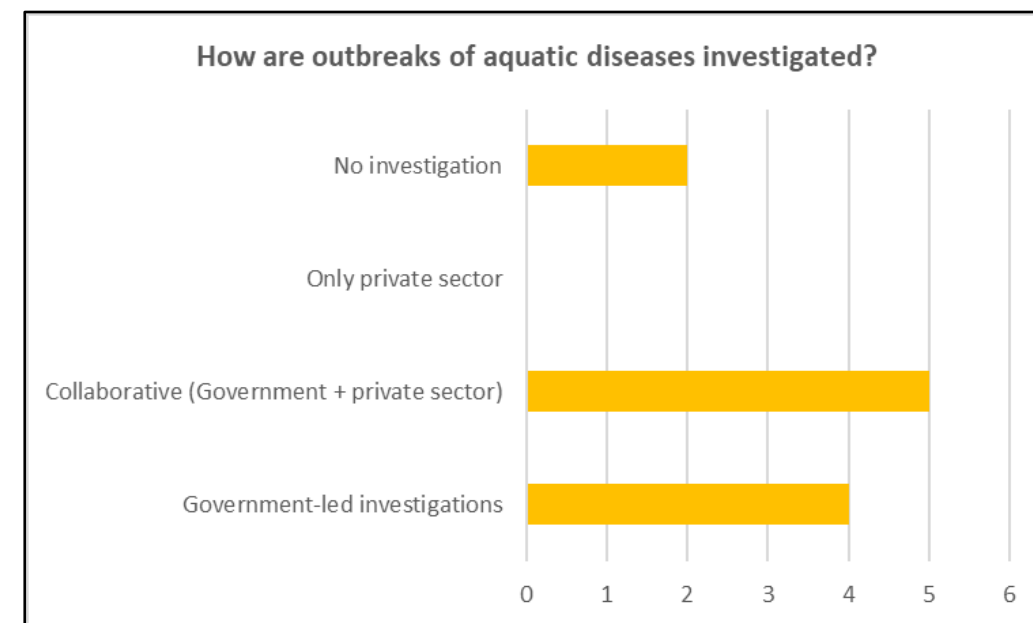
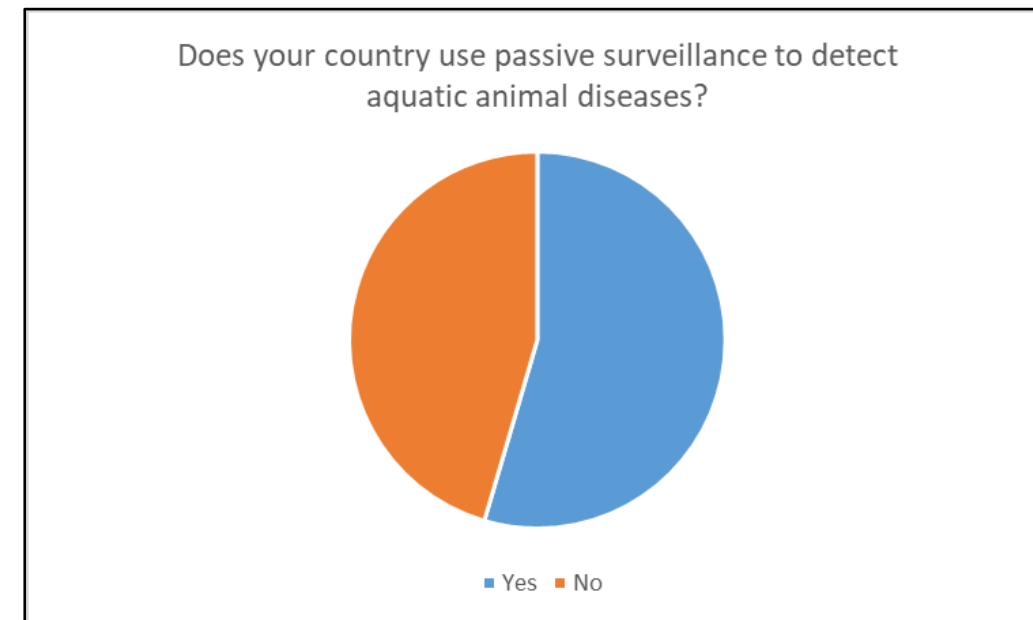
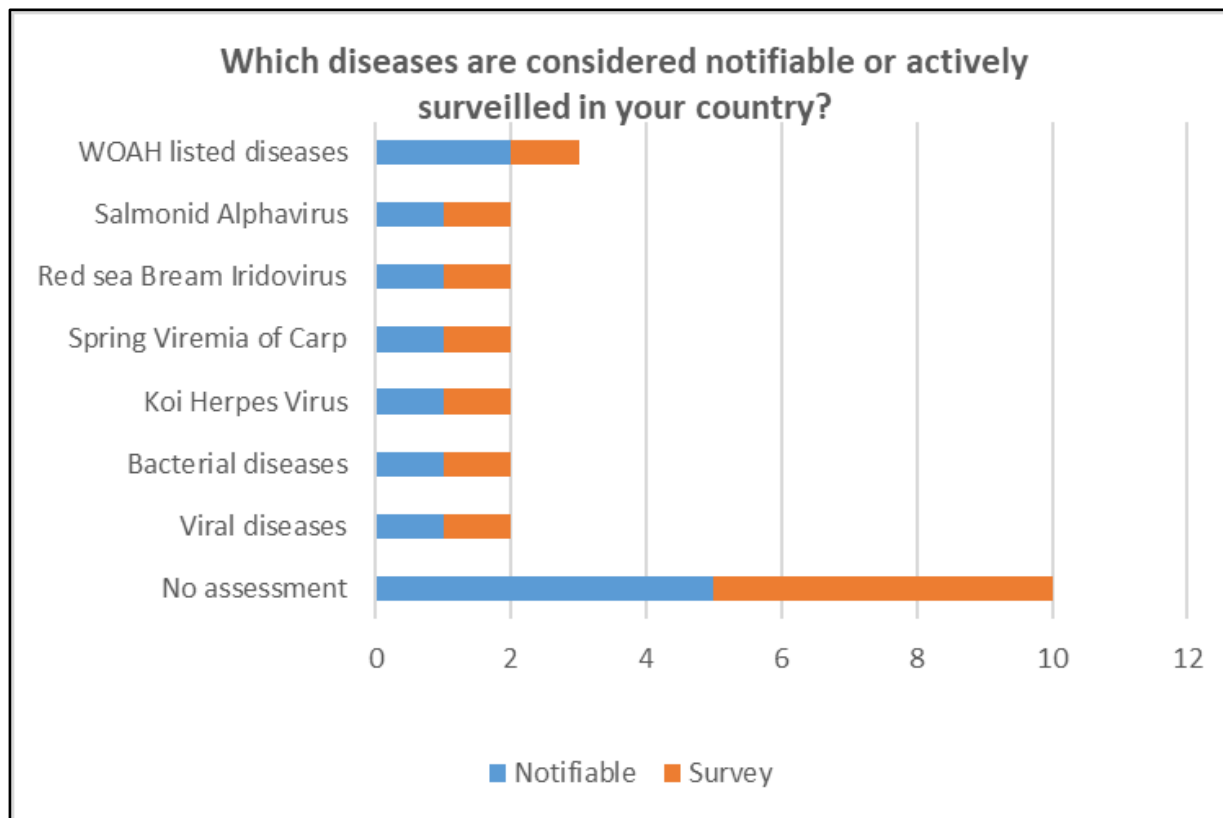
- Does your country follow international standards set by the WOA in regulating aquatic animal health?



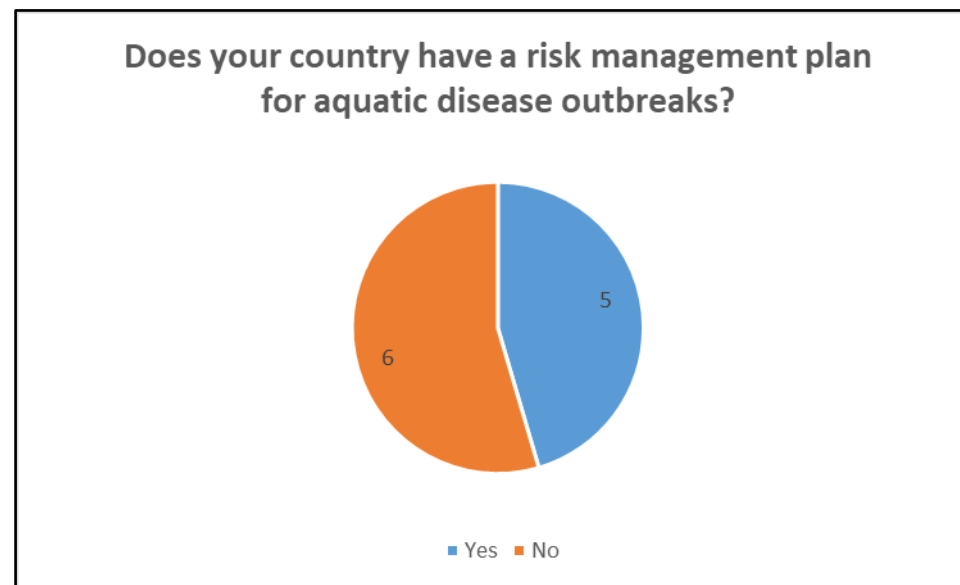
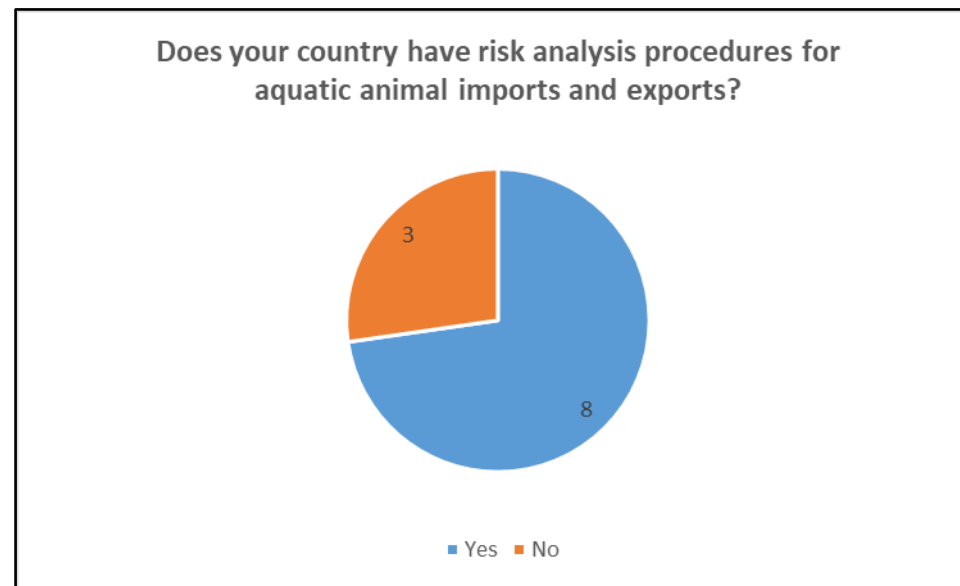
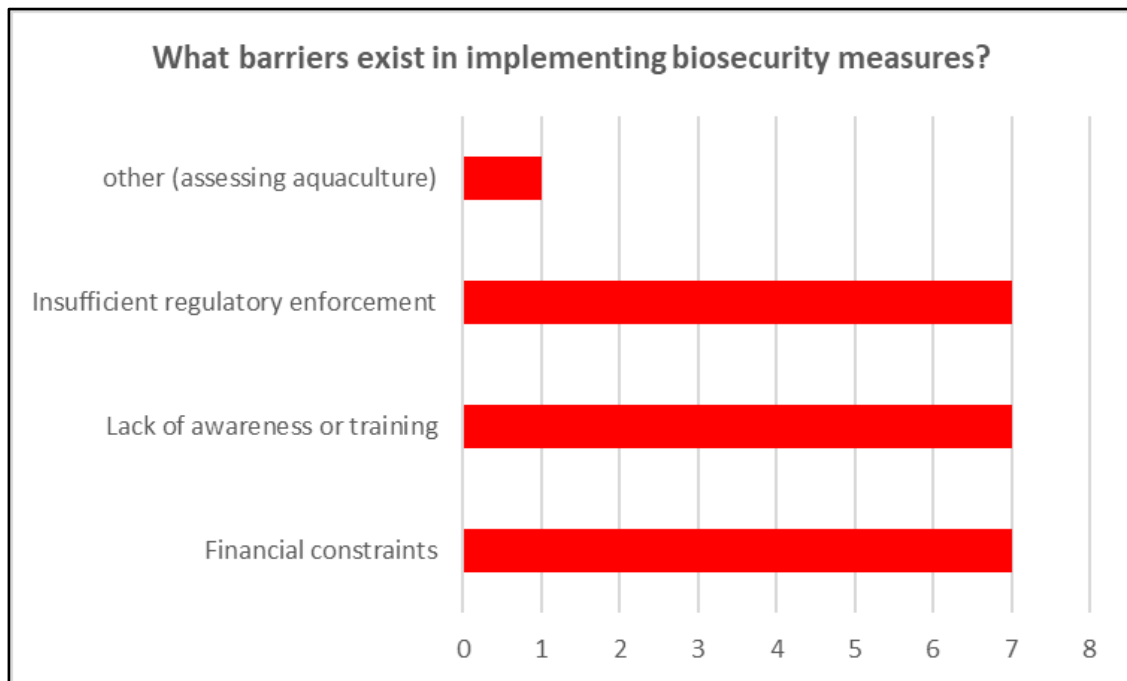
Is there any legislation addressing the control of emerging aquatic diseases?



Governance and Competent Authority



Governance and Competent Authority



● Critical questions....multiple answers

What are the key requirements for importing aquatic animals into your country?

According to WOAH Code

Depending on the regulations of the Ministry of Trade and Ministry of Agriculture

Imported **seafood products** must comply with international sanitary standards, etc.

The live aquatic animals should have an issued health certificate

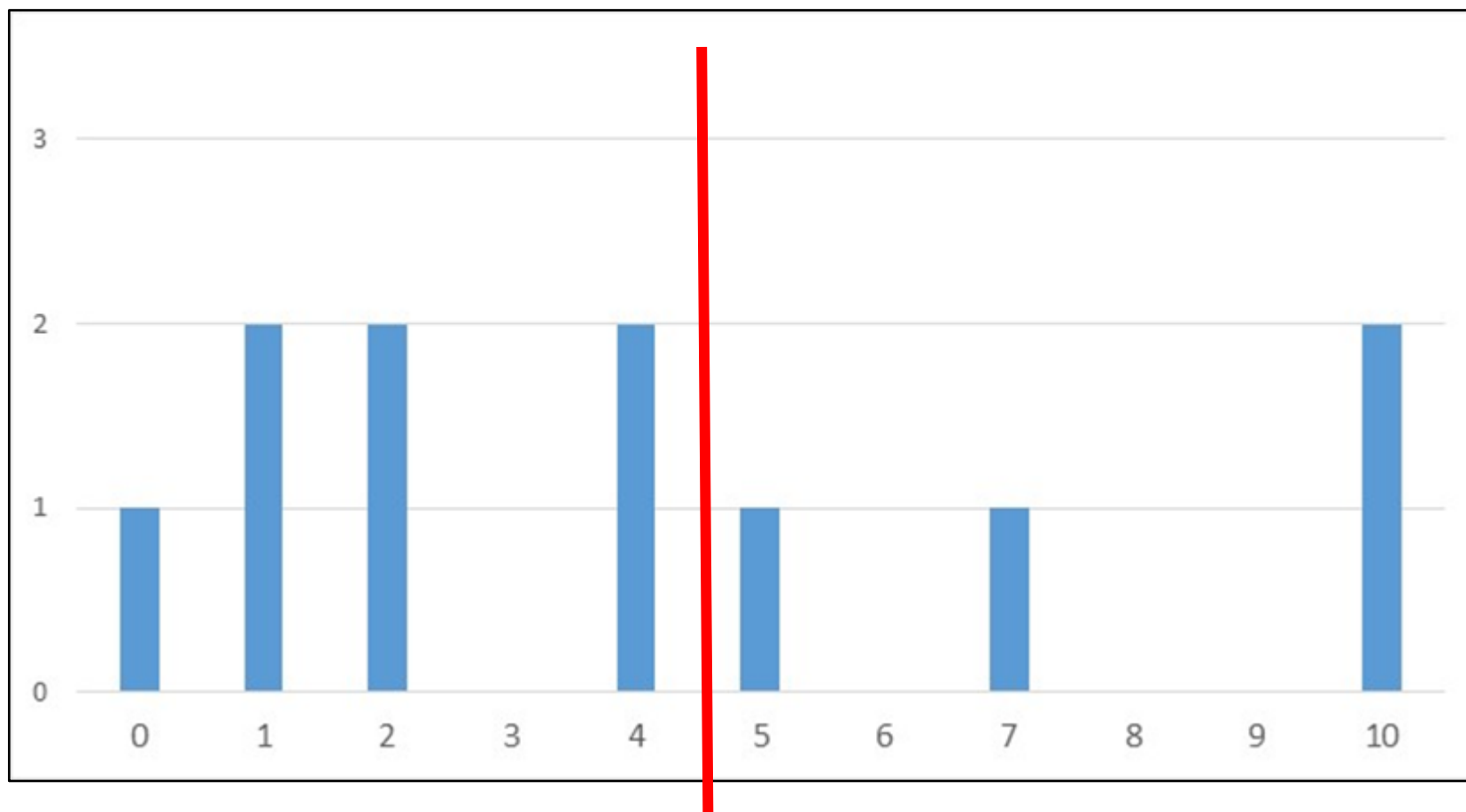
Only species approved by the Competent Authority are allowed to be imported.

You must obtain an import permit from the Fish Farm Directorate

Before Importing aquatic animals must be **from disease free country**

Only SPF (Specific Pathogen-Free) broodstock must be imported

● How is your country prepared for an aquatic animal health emergency?

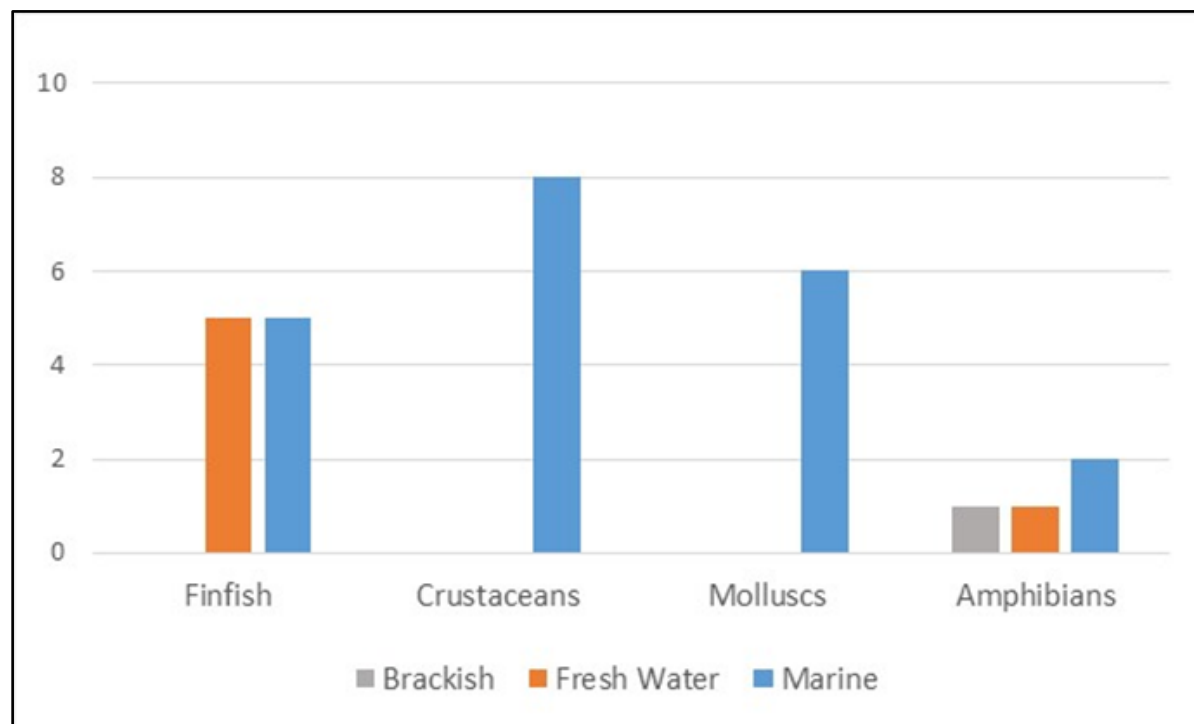


- 4 prepared
- 7 not or low prepared

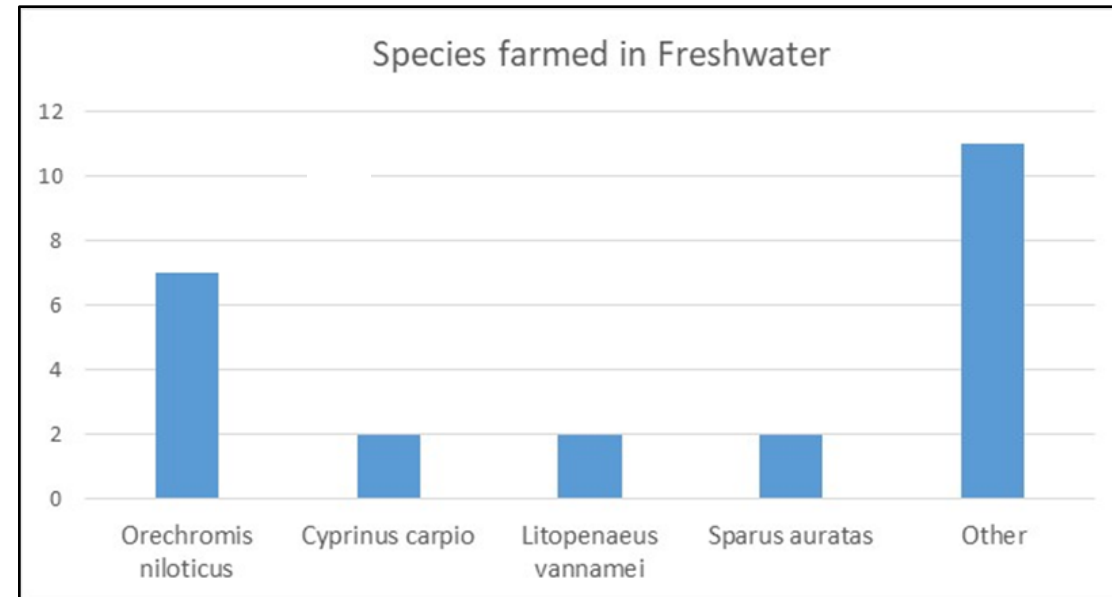
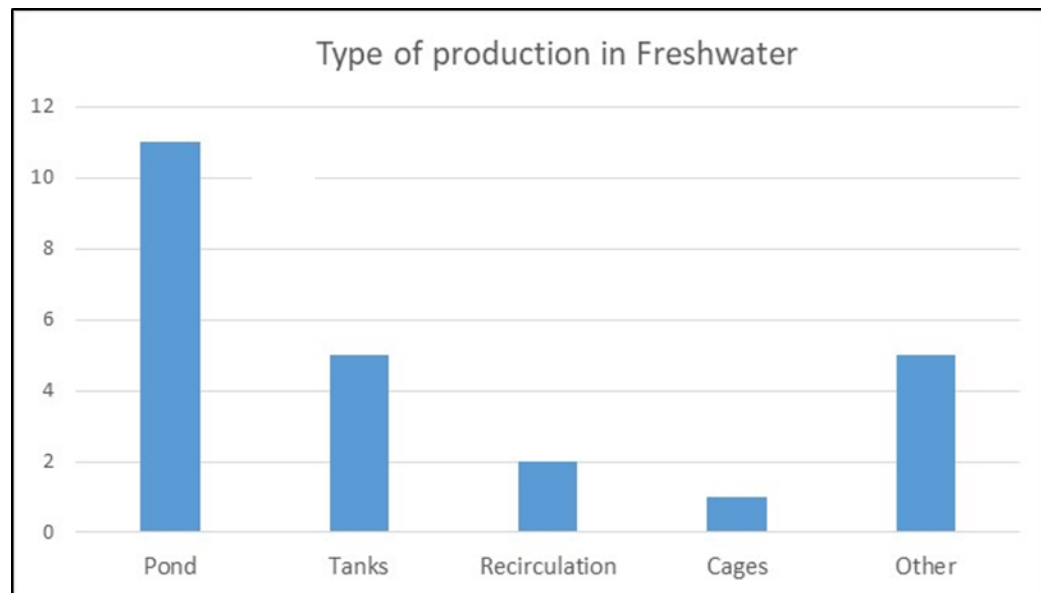
(Scale: 1 = Not Prepared, 10 = Very Prepared)

Technical and operational aspects

Please indicate in which environments aquatic animals are usually farmed

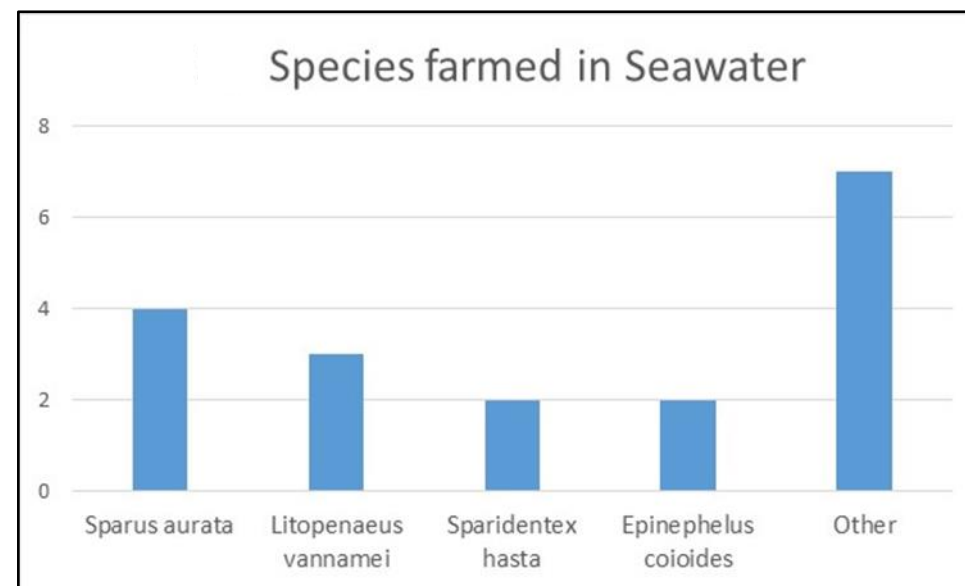
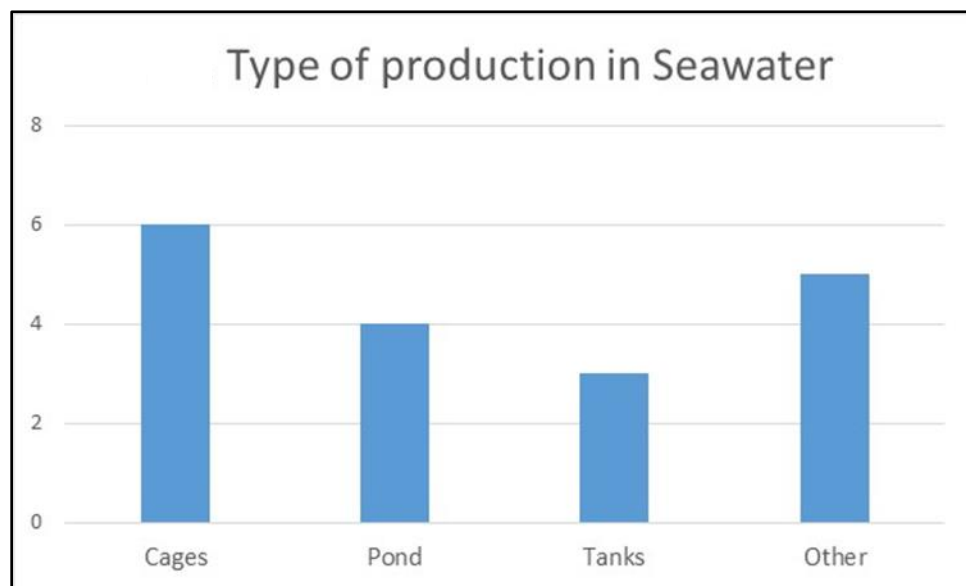


Technical and operational aspects



Other species (7): *Acipenser sp*; *Barbus sharpeyi*; *Clarias gariepinus*; *Ctenopharyngodon idella*; *Epinephelus coioides*; *Hypophthalmichthys molitrix*; *Lates calcarifer*; *Parapeneus longirostris*; *Sparidentex hasta*; *Omaniti abalone*

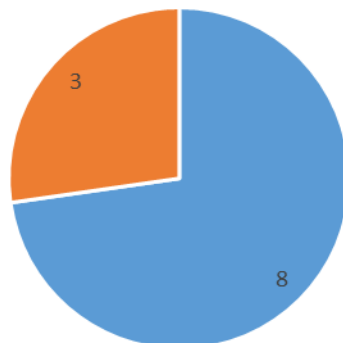
● Technical and operational aspects



Other species(): ***Crassostrea gigas***; *Dicentrarchus labrax*; *Epinephelus spp.*; ***Haliotis mariae***; *Lates calcarifer*; *Mugil sp.*; ***Oreochromis niloticus??***

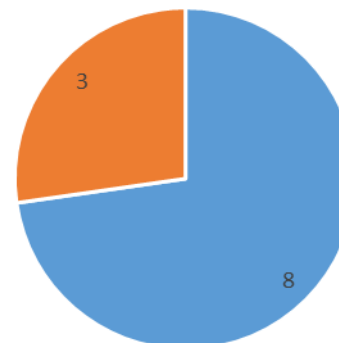
● Technical and operational aspects

Is there a national register of AAs farms?



■ Yes ■ No

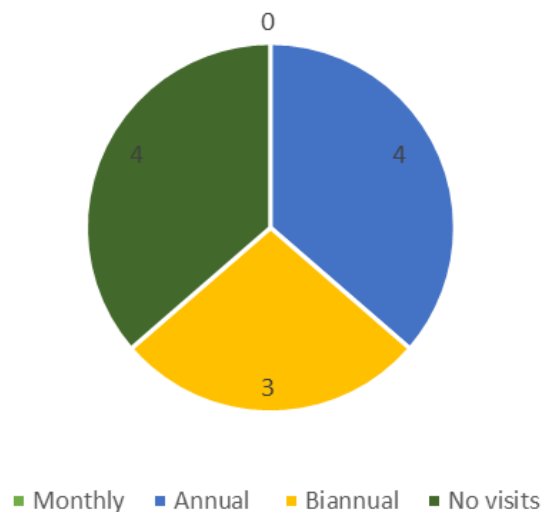
Do farms have a compulsory registration number?



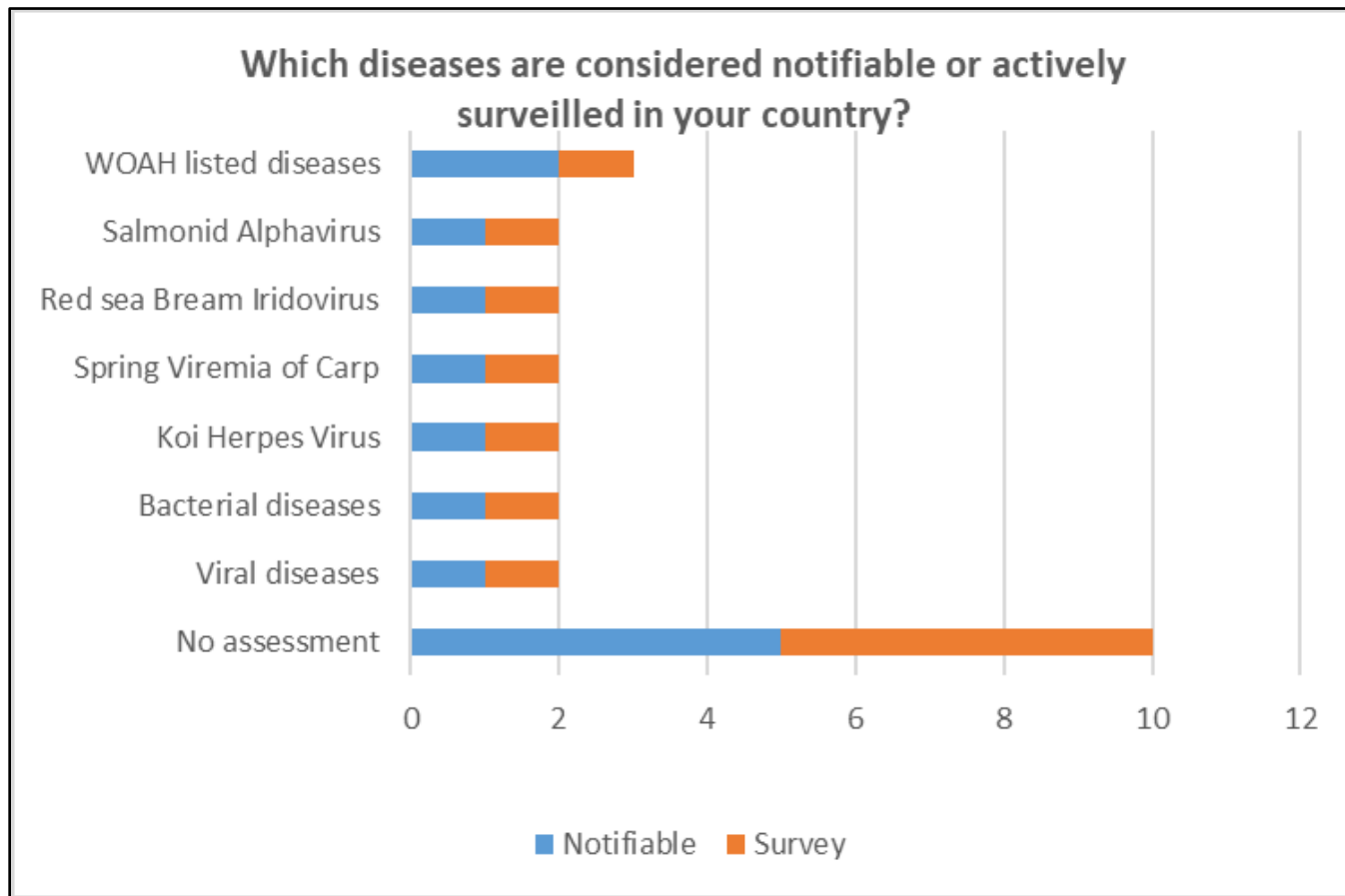
■ Yes ■ No

● Technical and operational aspects

How frequently farms are receiving aquatic animal health - AAH routine official visits?

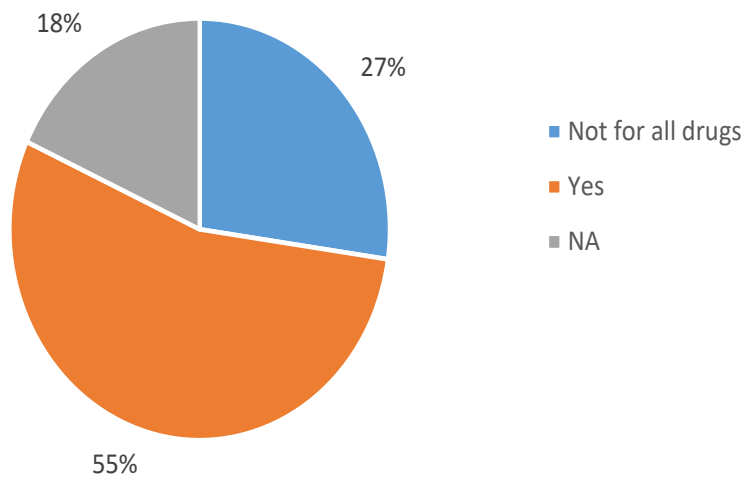


● Main diseases in your country

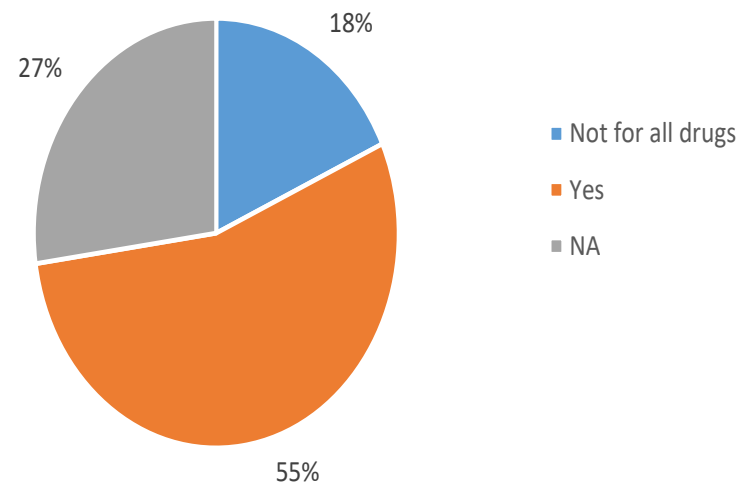


Therapy and vaccination

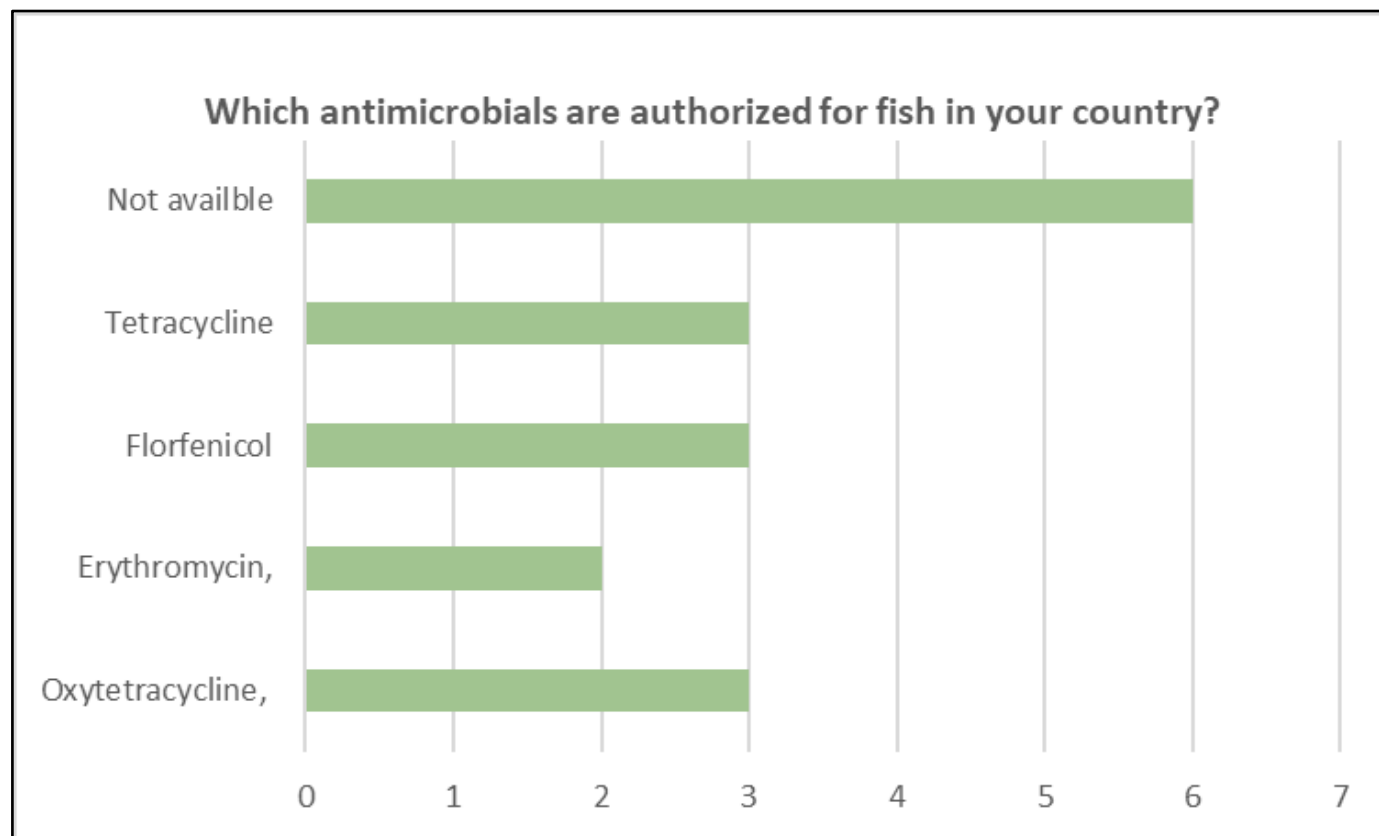
Is a veterinarian prescription required before the administration of antibiotics?



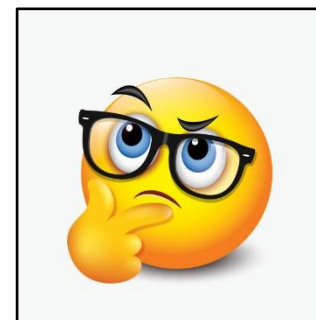
Is a loading and unloading register required by regulations?



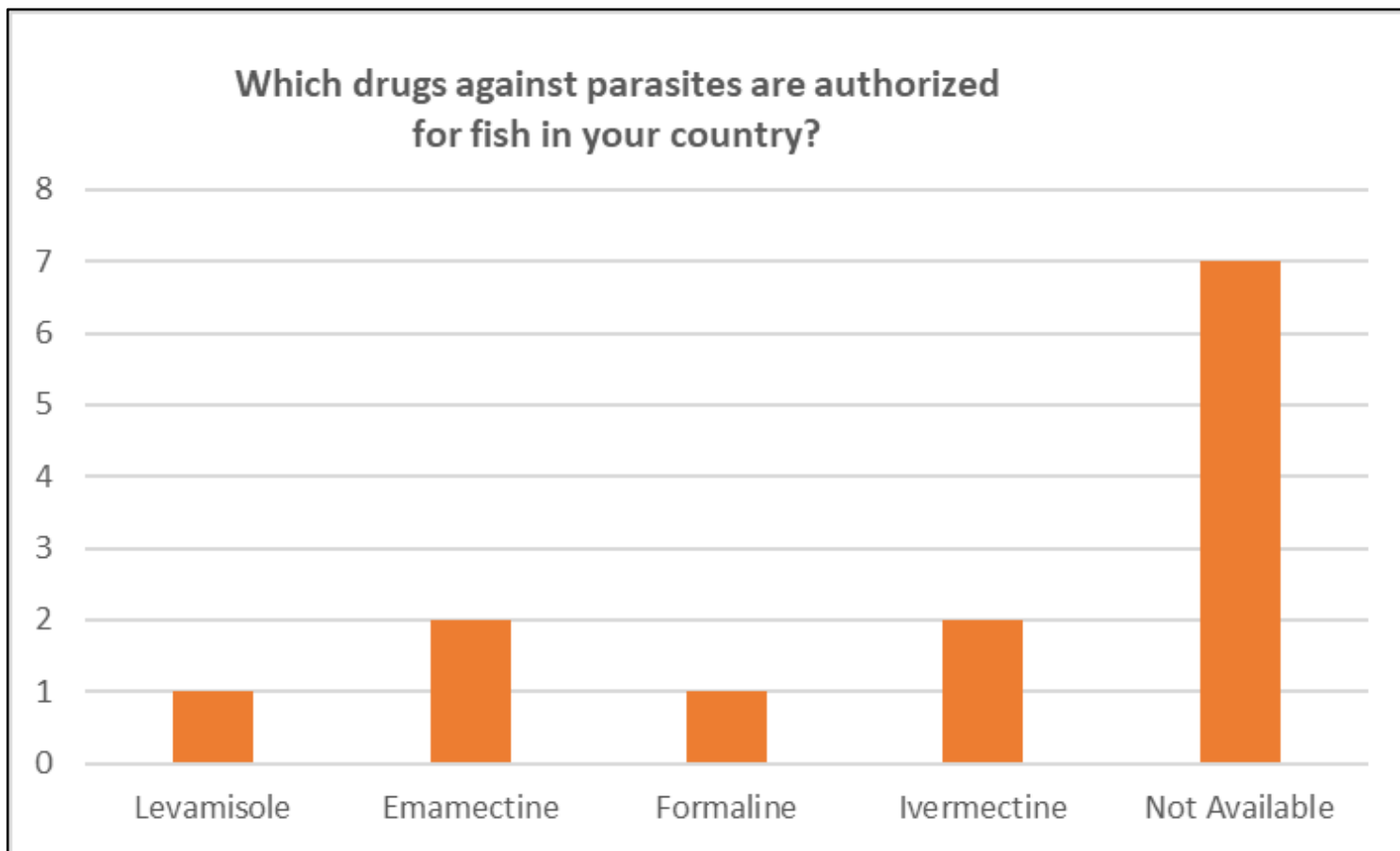
● The use of antimicrobials in aquatic animals



One country listed about 40 molecules including Marbofloxacin and Ciprofloxacin which are Critically Important Antimicrobials - CIA



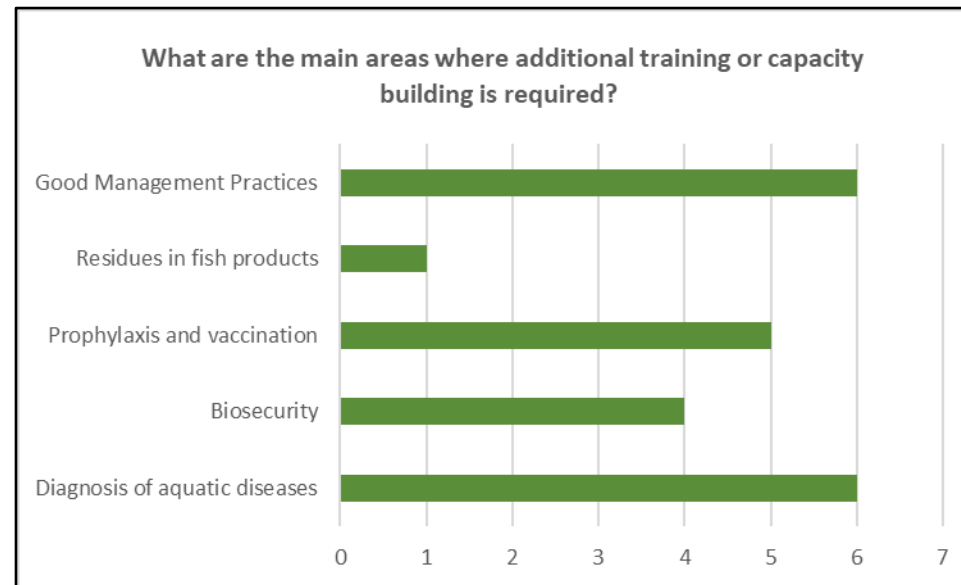
● The use of chemicals against parasites



The use of chemicals and drugs in aquaculture

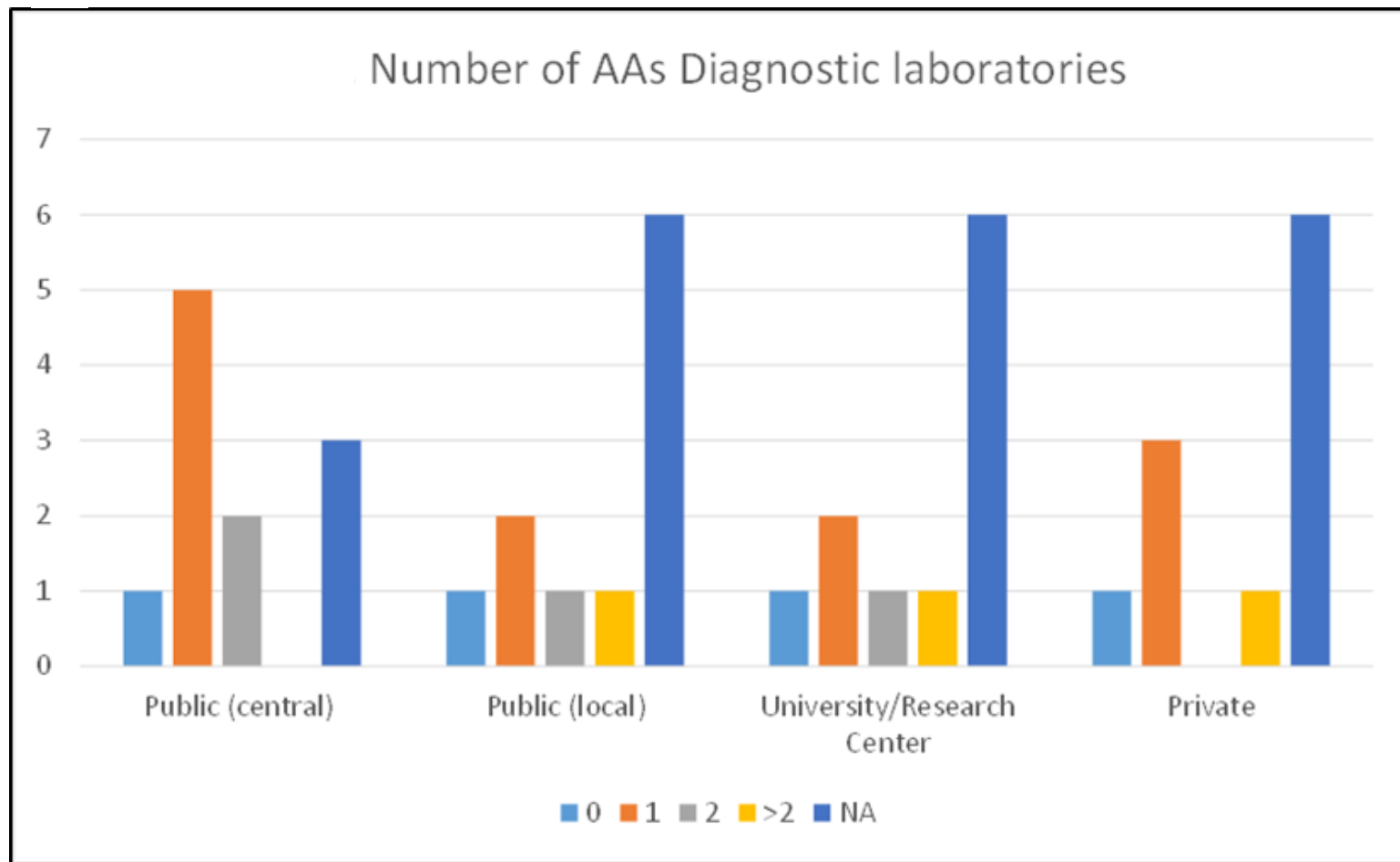
	No	Yes	NA	%Yes
Are disinfectants authorized to be used to treat ill animals?	4	4	3	36,4%
Is there a National Surveillance Residues Plan for aquatic animal products in force in your country?	4	4	3	36,4%
Which vaccines are used? Commercial?	5	1	5	9,1%
Which vaccines are used? Autogenous?	5	1	5	9,1%

● Lack of specific training on aquatic Animal Health

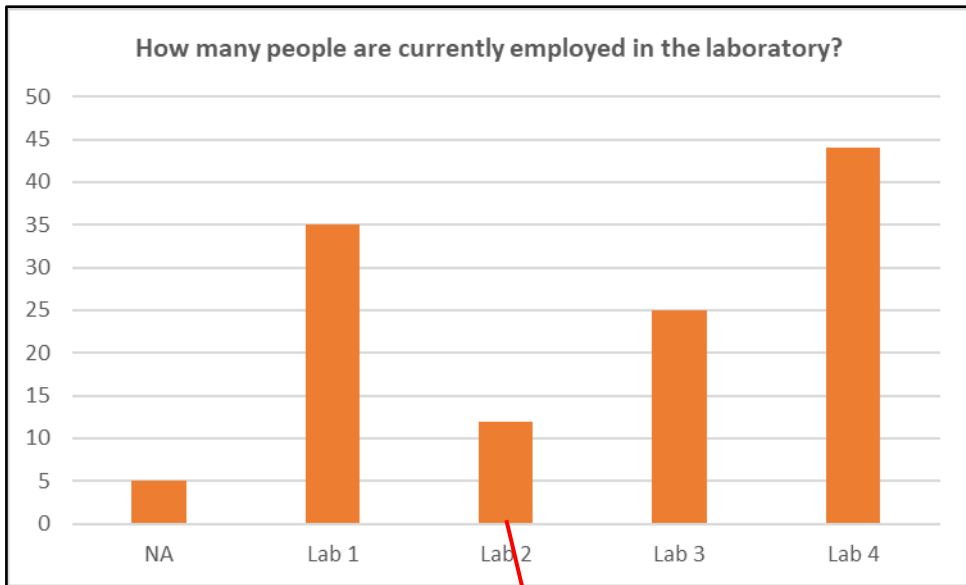


Important critical point but at the same time an opportunity to be exploited...see also slide 30

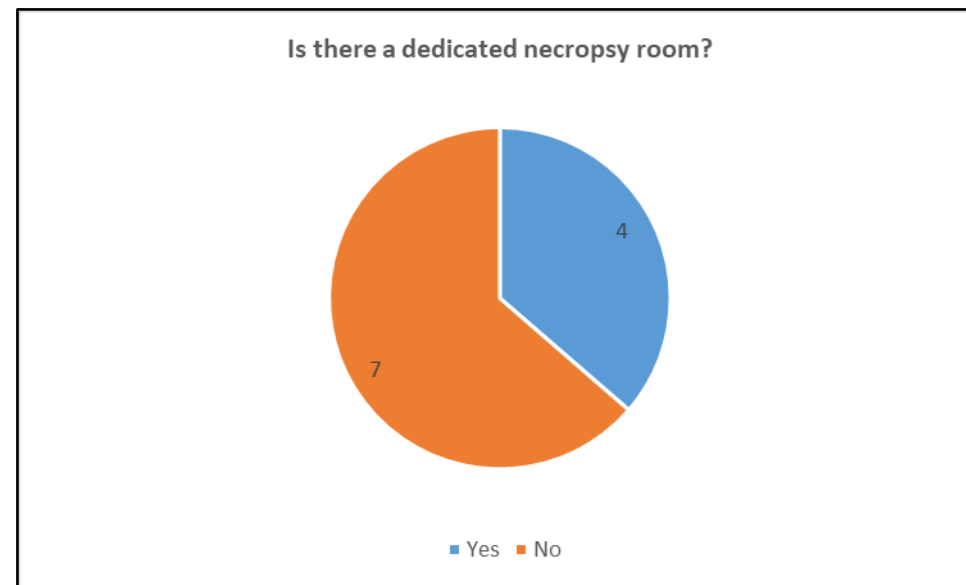
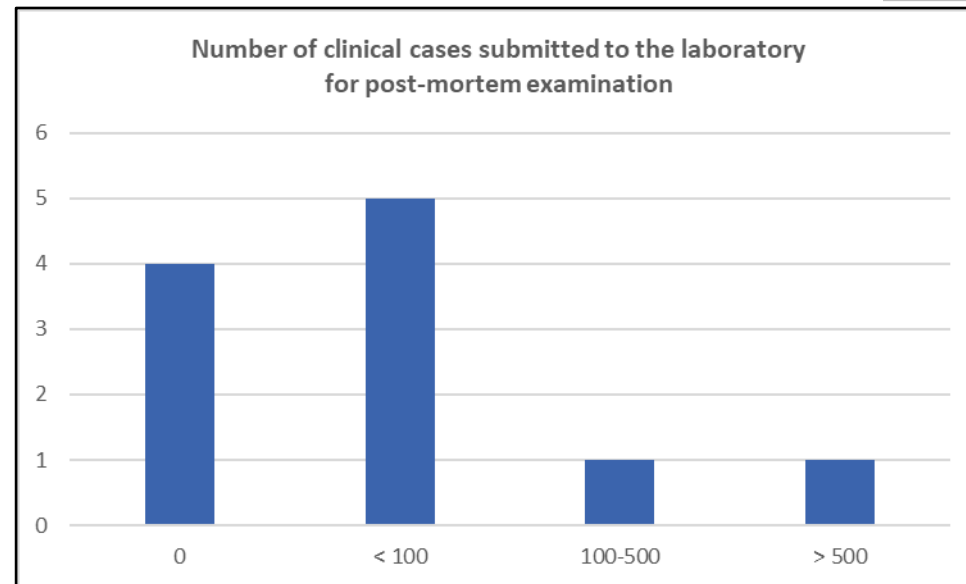
● Aquatic Animal Health Laboratory Assessment



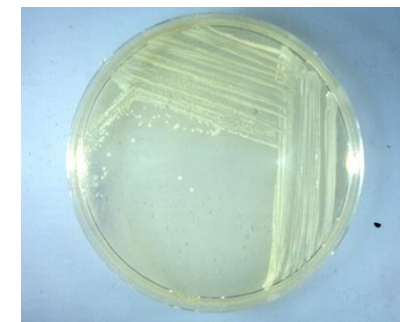
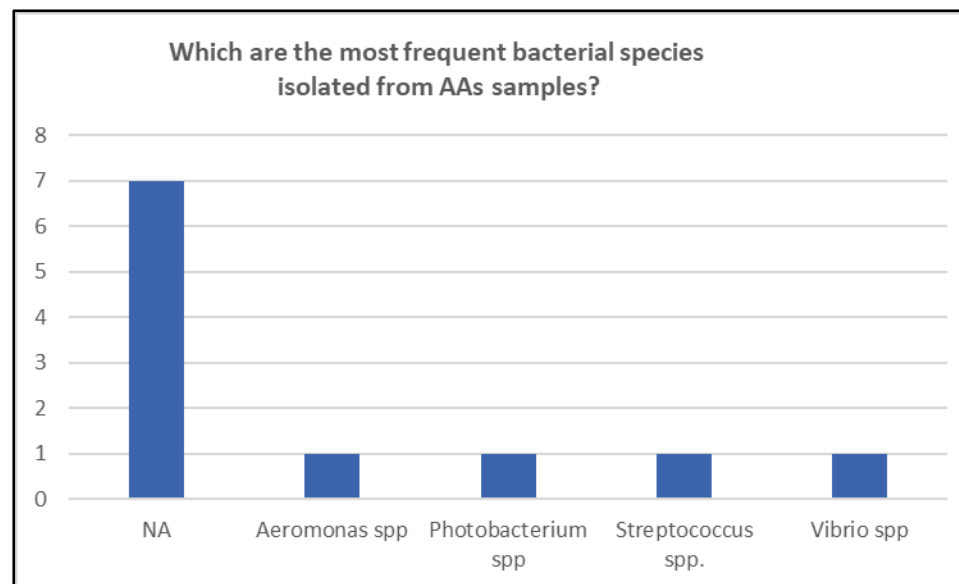
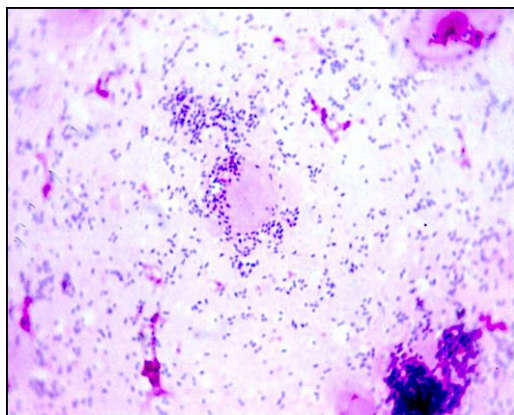
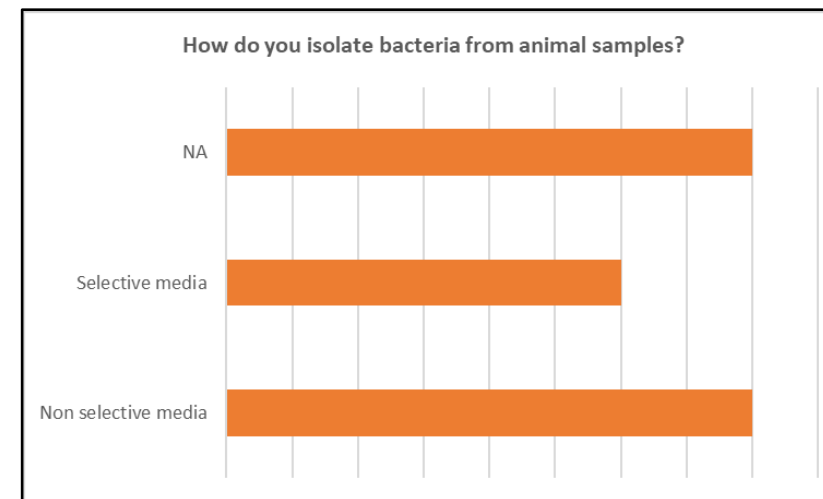
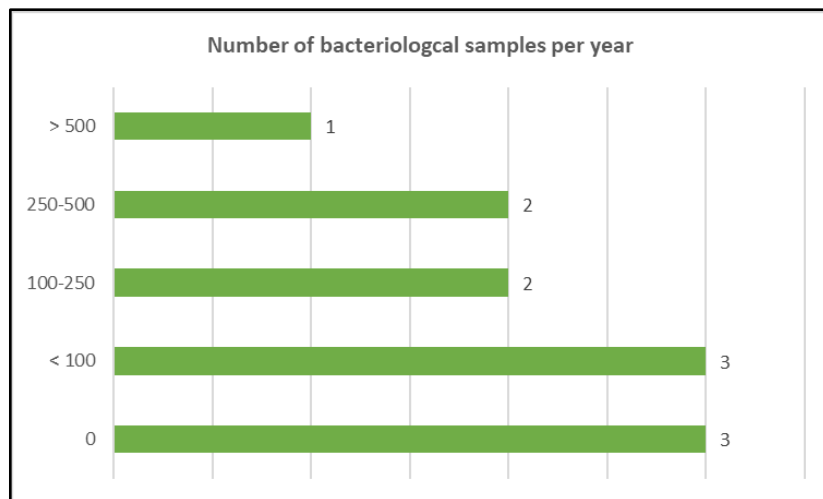
Laboratory assessment (necropsy)



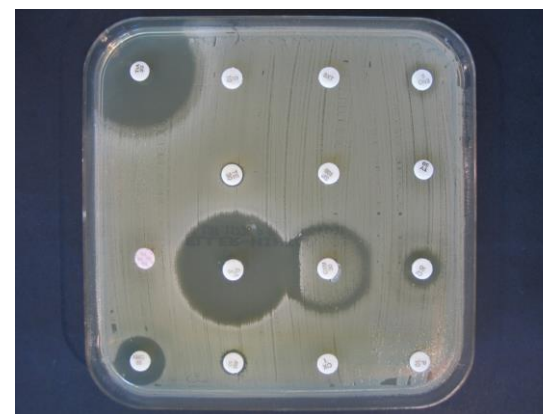
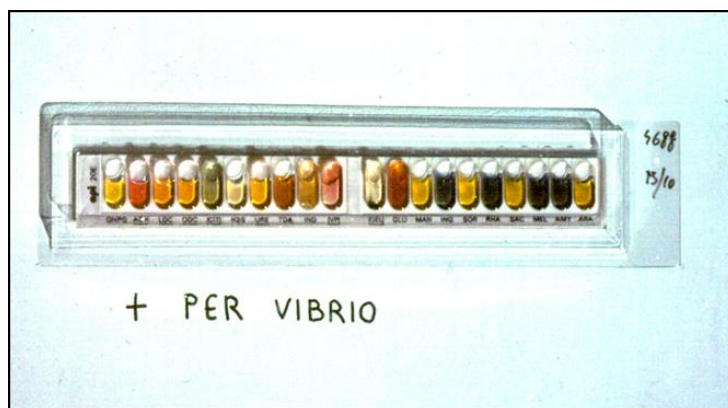
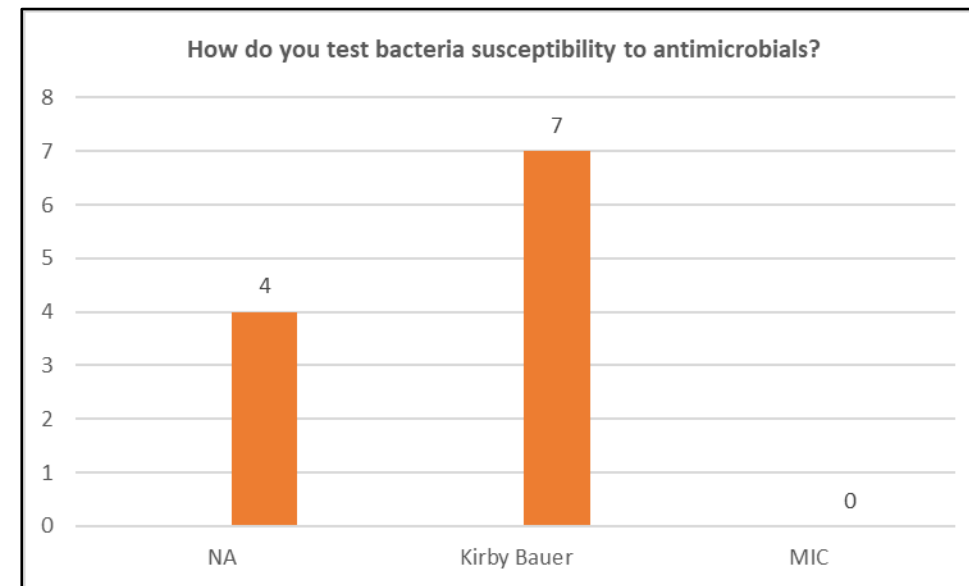
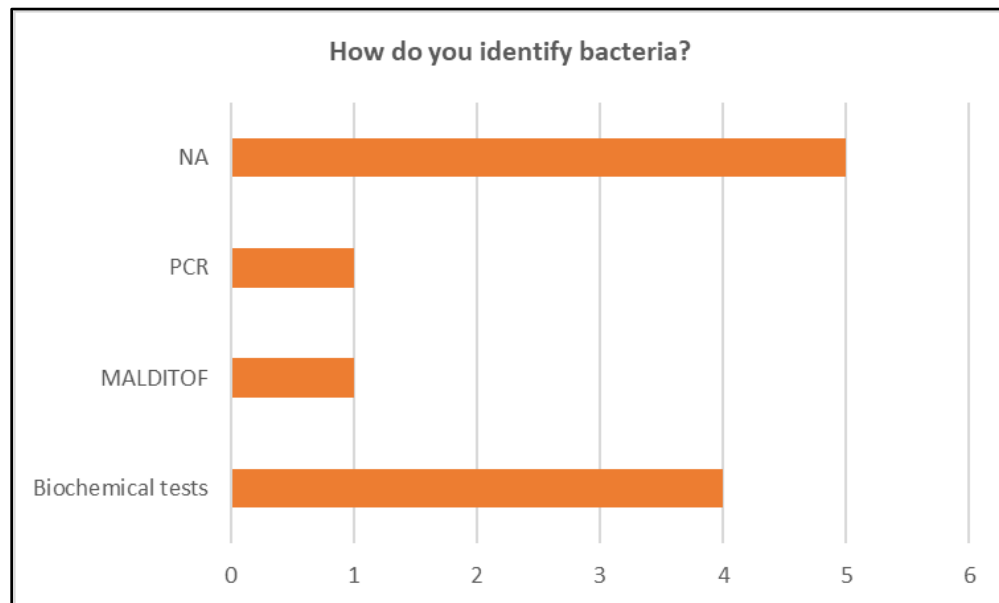
Only 1 veterinarian in Lab 2



Laboratory assessment (bacteriology)

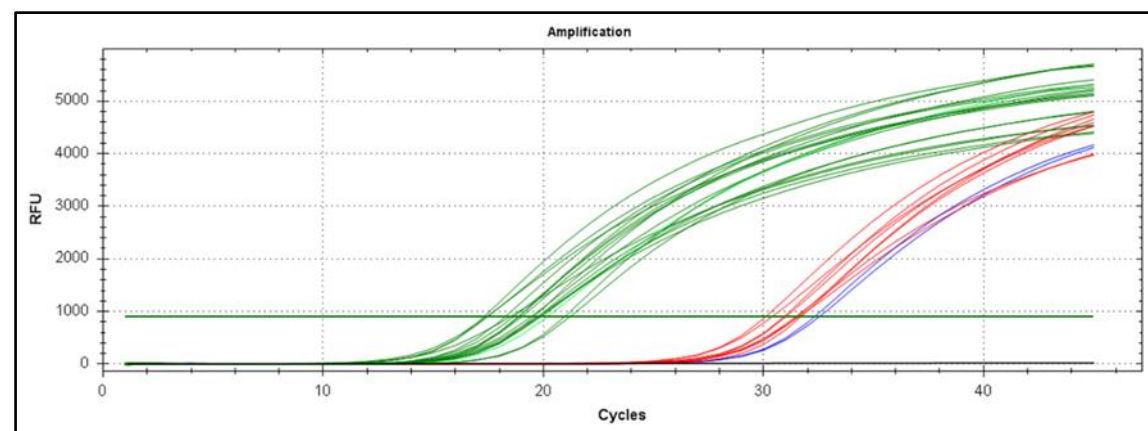
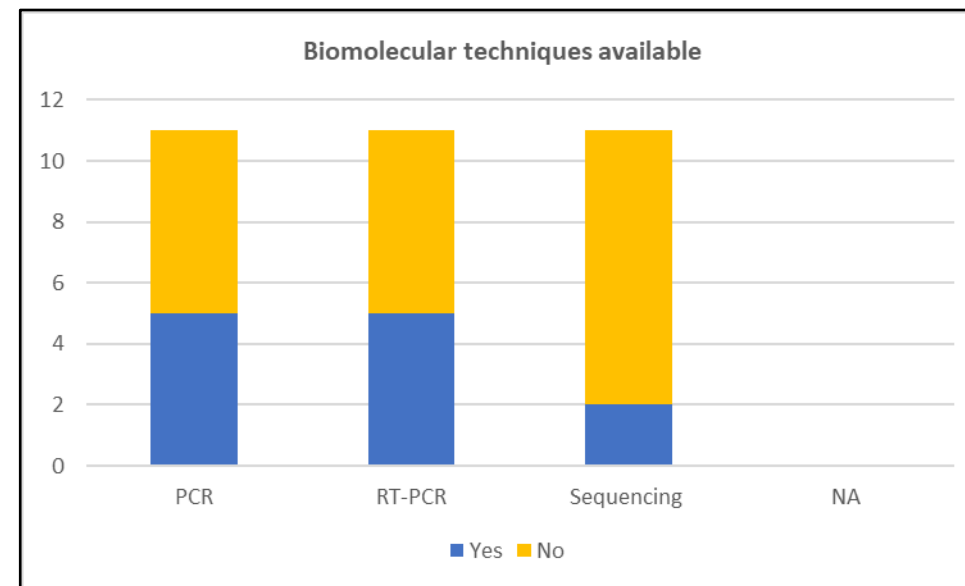
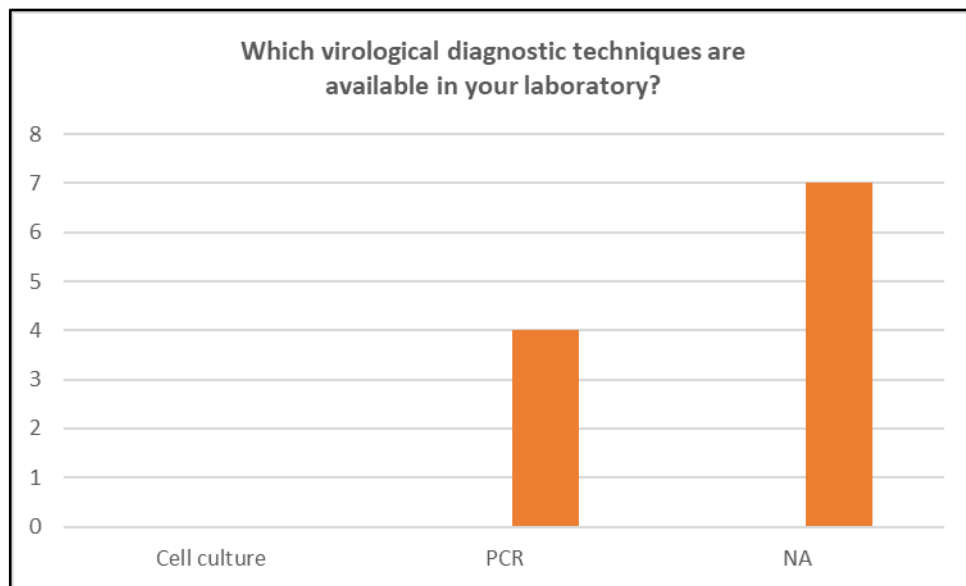


Laboratory assessment (bacteriology)





Virology laboratory



● Final conclusion

- General situation good, but many labs with **little experience with aquatic animals**.
- More or less 10 fish/crustacean species are farmed in AQMENET partner countries.
- Mainly bacterial diseases.
- **Lack of familiarity with the quality system** (reduced number of SOPs, only few positive/negative control available, poor maintenance of equipment).
- Staff needs **“training on the job”** so twinning projects with more experienced lab (CEFAS; IZSve, NVI or other reference/collaborating centres) are welcome

