

Lessons Learned in Response to Aquatic Animal Disease Emergencies in Thailand

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Aquaculture in Thailand*

- Freshwater aquaculture
 - 880,530 rai
 - 509,059 farms
 - 413,263 ton, > 50% tilapia





- Marine aquaculture: marine shrimps
 - 294,683 rai
 - 21,561 farms, 85.29% intensive farm
 - 359,679 ton, 94.77% L. vannamei



Disease Control Structure, DoF

Ministry of Agriculture and

Cooperatives (MoAC)
Department of Fisheries

(DOF) Director-General

Deputy Director-

Research and Development Division (AAHRDD): 26 FH, 10

Expert

Other Divisions and

Offices Coastal

Inland Aquaculture

Research and **Development**

A Divitio A M44)a

Genetics Research and Development

Fisheries Commodity Standard System and Traceability Division

Aquaculture Research and Development n-inspection

Quality

and Inspection
Division (28)
Fisheries Provincial

Office (77)

Headquarter in Bangkok

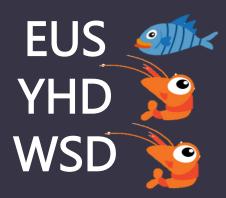
Songkhla **Aquatic Animal Health** Research Center (SAAHRC)

Role and Responsibility of AAHRDD for MME

- Investigate: epidemiological study, sampling, diagnosis and confirmation if possible
- Public awareness: cause of MME
- Movement control: if cause due to pathogens
- Provide appropriate prevention and treatment measure
- Eradication: if MME caused by the disease listed in the Animal Epidemic Act. (National listed diseases)
- Outbreak report will be submitted to NACA, OIE
- Disease surveillance, including nearby infected area

Emerging aquatic animal diseases in Thailand

Almost 40 years, Thai aquaculture has been facing with many serious diseases







AHPND: Emerging Disease in Thailand

 Disease information was delivered via publications between Network and stakeholders

 Diagnostic techniques were developed while pathogenic agent and case definition was not confirmed yet



DoF Response Action after the Outbreak

- Public awareness
- Setting up war room committee for AHPND
- Mitigation measure dissemination in early 2013: hatchery sanitation, PL screening and broodstock management
- Specific and stringent management measure dissemination: hatchery, nursery, culture pond and exported shrimp
- Research development on AHPND epidemiological study

Implications from Emergency response

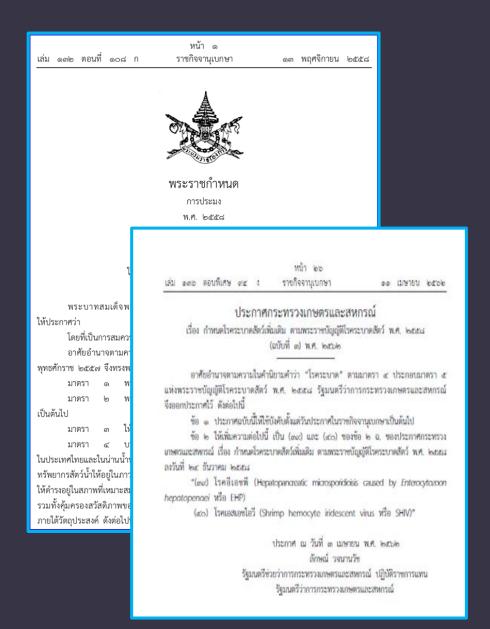
- Rapid preparedness and response through public awareness, disease investigation and mitigation measures
- Effectiveness of emergency response and disease control were likely to be hampered by confusion and unclear of pathogenic identification and definition (2010-2013), including disease detection (2014)
- AHPND outbreak contributed to production loss of US\$ 7.38 billion during 2010-2016*

Lessons Learned

- Confusion information delay effective prevention and control
- AAH collaborations strengthen emergency response against diseases
- Responsible movement of LAA and good management practices through biosecurity system is inescapable
- One health, one world

Improvement

- Relevant laws and legislations must be in place and up to date
 - Royal Ordinance on Fisheries B.E. 2558 (2015)
 - Animal Epidemic Act. B.E. 2558 (2015)
 - Notification of MOAC on Additional Epidemic in accordance with Animal Epidemics Act B.E. 2562 (2019): National listed disease
 - DoF Regulation on registration of compartment for exportation of aquatic animals B.E. 2562 (2019)



- Rapid and accurate disease detection are necessary
 - Improve diagnosis capability of DoF staff
 - Participate proficiency testing (PT) program
 - Encourage laboratory to obtain ISO/IEC 17025 accreditation
- ASEAN Network on Aquatic Animal Health Centre (ANAAHC)

5 Emergency Preparedness Response Requirements

- Communication and collaboration through active AAH network and stakeholders
- Capacity building on AAH personnel in the region
- Rapid and accurate disease detection
- Implementation and enforcement of laws and regulations
- Emergency budget allocation

• FAO

Sustainable Fisheries Partnership

