



Food and Agriculture
Organization of the
United Nations

FMM/RAS/298: Strengthening capacities, policies and national action plans on prudent and responsible use of antimicrobials in fisheries Workshop 2
in cooperation with Malaysia Department of Fisheries and INFOFISH

7-9 August 2017, Kuala Lumpur, Malaysia

ASEAN SOP for Responsible Movement of Live Aquatic Animals

Eduardo M. Leaño

eduardo@enaca.org



ANTIMICROBIAL RESISTANCE MANAGEMENT

Avoid development of resistance

- **Biosecurity (prevention of entry of pathogens)**
- **Disease prevention (environmental management; use of disease free stocks; vaccines, immunostimulants; good quality feeds)**
- **Alternate treatments (other chemicals)**
- **Judicious use of antibiotics (approved antibiotics, proper dosage, last resort for treatment [only if necessary])**

L.A. Hanson, 2017



Association of South-East Asian Nations
(ASEAN)



DRAFT (August 2014)

**Standard Operating Procedures
for
the Responsible Movement
of
Live Aquatic Animals for ASEAN**

August 2014



Scope:



- ❖ To provide a general recommendations for a regional control that will **reduce the risk of spread of trans-boundary aquatic animal diseases** resulting from movement of live aquatic animals.
- ❖ The SOP will also facilitate **responsible trade of live aquatic animals among ASEAN member states (AMS)** and **harmonize health certification schemes** and other measures within ASEAN related to live movement.



Scope:



This jointly developed SOP encompass the procedures for the movement of live aquatic animals within the ASEAN and include procedures for:

- quarantine
- disease detection and diagnosis
- inspection and sampling
- capability for diagnosis
- issuance of health certificate.



Base Documents:



“Guidelines on Development of Standard Operating Procedures for Health Certification and Quarantine Measures for the Responsible Movement of Live Food Finfish”



“Asia Regional Technical Guidelines on Health Management for the Responsible Movement of Live Aquatic Animals and the Beijing Consensus and Implementation Strategy”



Looking Back



SOP Process:

NACA in collaboration with ASEAN Network on Aquatic Animal Health Centres (ANAAHC) and the Department of Fisheries Thailand: implemented the Aquatic Animal Health Management Component of the project:

USAID-MARKET (Maximizing Agricultural Revenue through Knowledge, Enterprise Development, and Trade)



USAID
FROM THE AMERICAN PEOPLE



www.naca.or.th



SOP Process:

USAID-MARKET Project

- Thailand has taken the lead in developing a standard operating procedures (SOP) for movement of live aquatic animals in ASEAN.
- This is done together with regional partners NACA, the ASEAN Network of Aquatic Animal Health Centres (ANAAHC) and regional and international aquatic animal health experts.

Association of South-East Asian Nations
(ASEAN)



DRAFT (August 2014)

Standard Operating Procedures
for
the Responsible Movement
of

Live Aquatic Animals for ASEAN

August 2014



SOP Process:

SOP

- Developed in response to the implementation of the ASEAN Economic Community (AEC) which will facilitate globally competitive single market and production base, with a **free flow of goods**, services, labour, investments and capital across the 10 member states



USAID
FROM THE AMERICAN PEOPLE

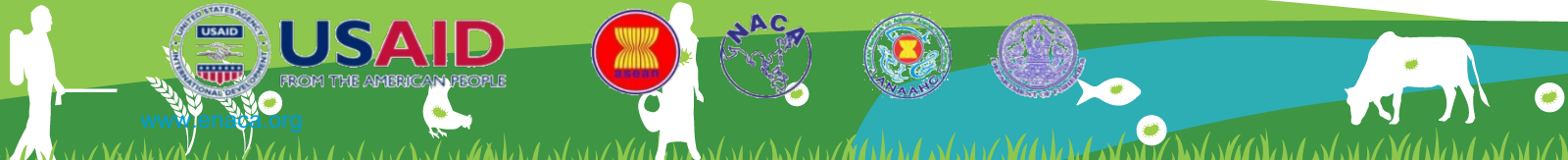
www.enact.org



SOP Process:

AEC visions (Blue Print 2025)

- A highly integrated and cohesive economy
- A competitive, innovative, and dynamic ASEAN
- Enhanced connectivity and sectoral cooperation
- A resilient, inclusive, people-oriented and people-centred region
- A global ASEAN.



SOP Process:

First draft of the *SOP for Transboundary movement of live aquatics* was developed by NACA, IAAHRI Thailand DOF and the MARKET project.

The First Meeting of the Technical Working Group (TWG) on Aquatic Animal Health Management to review and edit the 1st draft SOP was held in 1



SOP Process:

1st Meeting of the TWG

- Identified ANAAHC and NACA as technical leads. The working group activities are under the activities of ANAAHC, an existing ASEAN mechanism.
- Private sector and IGOs were welcomed as participants and as presenters as needed.



SOP Process:



All ten ASEAN member states attended the Pattaya meeting, represented by ANAAHC Focal Points, together with NACA, SEAFDEC, FAO, international and regional experts, and participants from private and public sectors.



SOP Process:

Based on comments from the Pattaya meeting, a **second revised draft** of the *SOP* was circulated before the second workshop was held.

Second workshop was held as a side event to the DAA9 and its objective was to review and edit the 2st draft SOP.



SOP Process:

The 2nd Workshop was held in HCMC, Vietnam on 28 November 2014.

Nine ASEAN member states were present at the meeting together with experts from NACA, SEAFDEC, OIE and representatives from private and public sectors.



SOP Process:

The 3rd and Final Draft of the SOP was developed with input from the 2nd workshop in HCMC.

Third meeting to review and edit the final draft SOP was held in Bangkok, Thailand on 26 February 2015



SOP Process:

Only eight ASEAN member states (ANAAHC focal points) were present together with NACA, SEAFDEC and other experts.



Requested and received written comments from the two non-present ASEAN focal points (Brunei Darussalam and Singapore)



SOP Process:

The Final Draft of the SOP was developed with inputs from the 3rd workshop in Bangkok.

The SOP was then handed to Thailand (DOF), the representative of AMS, for presentation during the 7th ASEAN Fisheries Consultative Forum (AFCF) and for endorsement at the ASEAN Sectoral Working Group of Fisheries (ASWGFi) held in Naypyitaw, Myanmar on 8-9 June 2015.



SOP Process:

Dr. Waraporn Prompoj (former Deputy DG of DOF) presented the SOP during the 23rd ASWGF_i on behalf of the ASEAN.

The SOP was duly endorsed by ASWGF_i.



ASSOCIATION
OF SOUTHEAST
ASIAN NATIONS



SOP Process:

The SOP was further endorsed during the 37th SOM-AMAF, held on 8 September 2015 in Makati City, Philippines

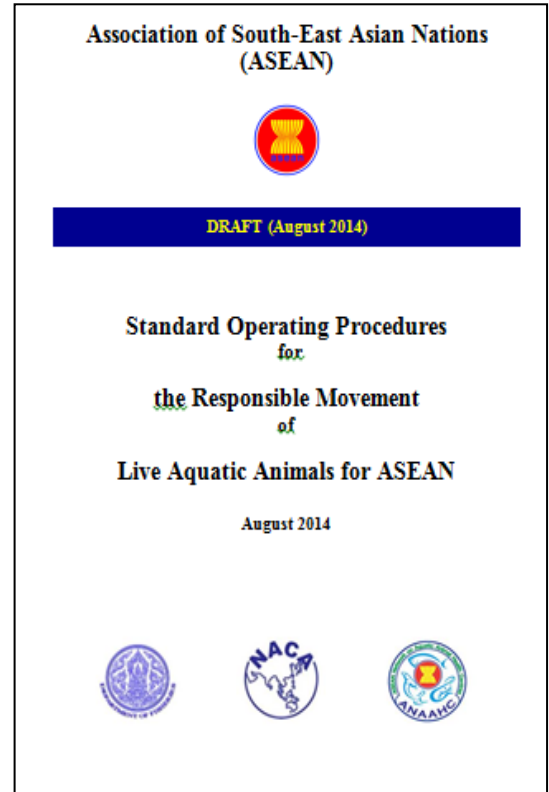


SOP Process:

Officially became an ASEAN Document.

Can be accessed through this link:

<http://www.asean.org/wp-content/uploads/images/2015/November/AMAF/App%207%20-%20ASEAN%20SOP%20movement%20of%20live%20aquatics.pdf>



SOP Contents

- Diseases Covered by the SOP
- Competent Authority
- Flow-chart of the Export and Import Process
- Diagnostic Standards and Capability
- Risk Analysis
- Health Certification for Live Aquatic Animals
- Quarantine Measures
- Communication
- Registration of importer and exporter
- Transportation Requirements
- Requirements at the Point of Export
- Requirements at the Point of Import
- Requirements for Trans-shipment
- Management of Risk and Auditing in the Importing Country
- Disease Surveillance, Monitoring and Reporting
- Emergency Response

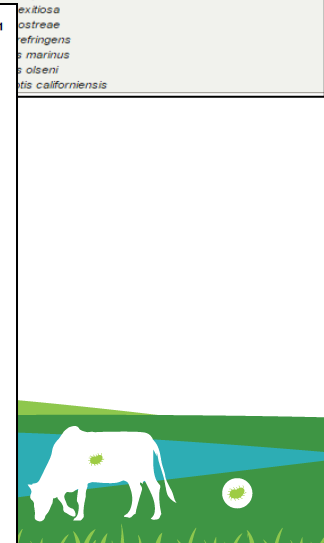
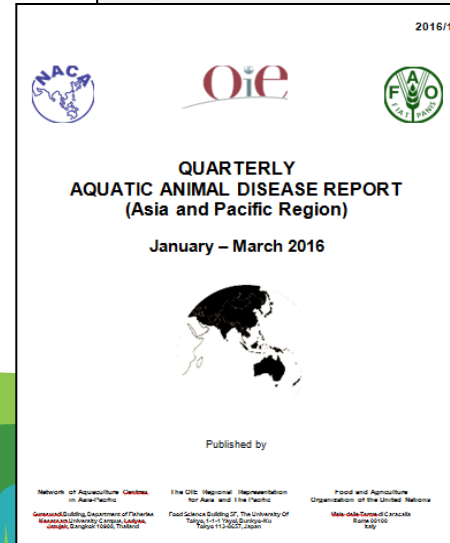


SOP Contents:

Diseases covered by SOP

- OIE listed diseases
- NACA QAAD listed diseases
- National disease list by each AMS

 WORLD ORGANISATION FOR ANIMAL HEALTH <i>Protecting animals, preserving our future</i>	
SECTION 8. Chapter 8.1. Chapter 8.2.	DISEASES OF AMPHIBIANS Infection with <i>Batrachochytrium dendrobatidis</i> Infection with ranavirus
SECTION 9. Chapter 9.1. Chapter 9.2. Chapter 9.3. Chapter 9.4. Chapter 9.5. Chapter 9.6. Chapter 9.7. Chapter 9.8.	DISEASES OF CRUSTACEANS Crayfish plague (<i>Aphanomyces astaci</i>) Infection with yellow head virus genotype 1 Infectious hypodermal and haematopoietic necrosis Infectious myonecrosis Necrotising hepatopancreatitis Taura syndrome White spot disease White tail disease
SECTION 10. Chapter 10.1. Chapter 10.2. Chapter 10.3. Chapter 10.4. Chapter 10.5. Chapter 10.6. Chapter 10.7. Chapter 10.8. Chapter 10.9. Chapter 10.10.	DISEASES OF FISH Epizootic haematopoietic necrosis Infection with <i>Aphanomyces invadans</i> (Epizootic ulcerative syndrome) Infection with <i>Cyrodactylus salaris</i> Infection with infectious salmon anaemia virus Infection with salmonid alphavirus Infectious haematopoietic necrosis Koi herpesvirus disease Red sea bream iridoviral disease Spring viraemia of carp Viral haemorrhagic septicaemia
SECTION 11. Chapter 11.1.	DISEASES OF MOLLUSCS Infection with abalone herpesvirus



SOP Contents:


Health Certification of Live Aquatic Animals

- Will be based on the certification of consignments of live aquatic animals;
- There should be a clearly defined mechanisms for submission, processing and issuance of HCs, which satisfies traceability requirements;
- Reasonable timeframe for issuance, cancellation or refusal of HCs
- HCs based on surveillance and inspection of premises/consignments;

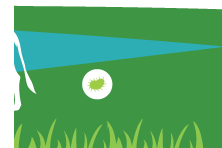


SOP Contents:

Health Certification of Live Aquatic Animals

 Department of Fisheries Ministry of Agriculture and Cooperatives THAILAND Aquatic Animal Health Certificate		
Part I: Details of dispatch/consignment	I.1. Consignor Name: _____ Approval number: _____ Address: _____	I.2. Certificate reference number: _____
	I.4. Consignee Name: _____ Address: _____	I.3. Competent authority: _____
	I.5. Country of origin: _____ ISO code: _____	
	I.6. Country of destination: _____ ISO code: _____	
	I.7. Place of origin Name: _____ Approval number: _____ Address: _____	
	I.8. Place of shipment: _____	I.9. Date of departure: _____
	I.10. Means of transport: <input type="checkbox"/> Airplane <input type="checkbox"/> Ship <input type="checkbox"/> Railway wagon <input type="checkbox"/> Road vehicle <input type="checkbox"/> Other, Identification: _____	I.11. Country of transit: _____
	I.13. Description of commodity: _____	I.12. CITES permit number(s): _____
		I.14. Commodity code (HS code): _____
		I.15. Total quantity/weight: _____
	I.16. Identification of container/seal number: _____	I.17. Type of packaging: _____
	I.18. Commodities intended for use as: <input type="checkbox"/> Breeding <input type="checkbox"/> Grow out <input type="checkbox"/> Slaughter <input type="checkbox"/> Restocking <input type="checkbox"/> Ornamental <input type="checkbox"/> Competition/Exhibition <input type="checkbox"/> Other, specify: _____	
	I.19. For import or admission: <input type="checkbox"/> Definitive import <input type="checkbox"/> Re-entry <input type="checkbox"/> Temporary admission	
	I.20. Identification of commodities: <input type="checkbox"/> Amphibian <input type="checkbox"/> Crustacean <input type="checkbox"/> Fish <input type="checkbox"/> Mollusc <input type="checkbox"/> Other <input type="checkbox"/> Wild stock <input type="checkbox"/> Cultured stock <input type="checkbox"/> Live <input type="checkbox"/> Chilled <input type="checkbox"/> Frozen	
	Species (Scientific name) _____	Number (pcs) _____

II. Health information		II. a Certificate reference number:
II.1 General requirements I, the undersigned official inspector, hereby certify that the aquatic animals referred to in Part I of this certificate: a) have been inspected within 72 hours of loading, and showed no clinical signs of disease; b) are not subject to any prohibitions due to unresolved increased mortality; c) are not intended for destruction or slaughter for the eradication of diseases; d) originate from aquaculture farms that are all under the supervision of the competent authority; and e) no un-explained mass mortality during the past 3 months.		
II.2 Declaration of health information I, the undersigned, certify that the animals identified above meet the following conditions: They come from a farm establishment/ zone/ country where they are submitted to a health supervision set up to operate according to the procedures described in the <i>Manual of Diagnostic Tests for Aquatic Animals</i> from World Organisation for Animal Health and that is recognized officially unaffected by the following diseases: a) for fish: epizootic haematopoietic necrosis, infection with <i>Aphanomyces invadens</i> (epizootic ulcerative syndrome), infection with <i>Gyrodactylus salaris</i> infection with infectious salmon anaemia virus, infection with salmonid alphavirus, infectious haematopoietic necrosis, kot herpesvirus disease, red sea bream iridoviral disease, spring viraemia of carp, and viral haemorrhagic septicemia b) for mollusc: infection with abalone herpesvirus, infection with <i>Bonamia ostreae</i> , infection with <i>Bonamia exitiosa</i> , infection with <i>Marteilia refringens</i> , infection with ostreid herpesvirus-1 microvariant, infection with <i>Perkinsus marinus</i> , infection with <i>Perkinsus olseni</i> , and infection with <i>Yenohyalosis albertensis</i> c) for crustacean: crayfish plague (<i>Aphanomyces astaci</i>), infectious hypodermal and haematopoietic necrosis, infectious myonecrosis, necrotising hepatopancreatitis, taura syndrome, white spot disease, white tail disease, and yellow head disease d) for amphibian: infection with <i>Barachyctosium dendrobatis</i> and infection with ranavirus		
II.3 Transport and labeling requirements I, the undersigned official inspector, hereby certify that: a) the live aquatic animals referred to above are placed under conditions, including with water quality, that do not alter their health status; b) the transport container is clean and disinfected or previously unused; and c) the consignment is identified by a label on the exterior of the container with the relevant information referred to in boxes I.16 of this certificate.		
This certificate is valid for ten days from the date of issue.		
Certifying Official:		
Name and address (in capital letters):		
Official position:		
Date:	Signature:	
Stamp:	E-mail address:	

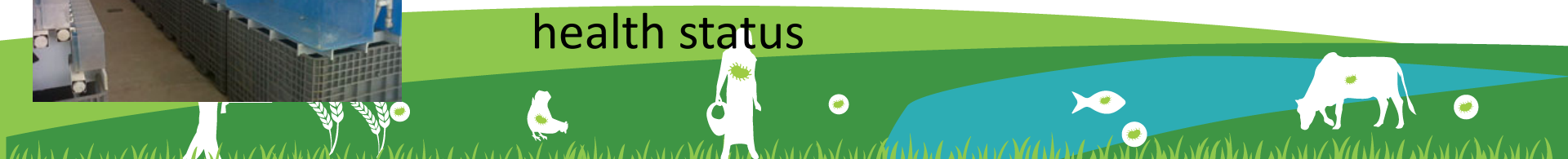


SOP Contents:

Quarantine Measures



- Extent of the quarantine measures applied should be in line with the estimated level of risk (source and destination);
- Stricter quarantine measures:
 - ❖ Exotic species (including first introduction);
 - ❖ Those originating from wild populations;
 - ❖ Sources of unknown or poorly documented health status



SOP Contents:

Quarantine Measures

- Quarantine procedures can be conducted in
 - ❖ country of origin
 - ❖ country of transit; and/or,
 - ❖ receiving country.



Way Forward



Way Forward

AMS with established national protocols for movement of live aquatic animals:

- Align the existing regulations and procedures with the ASEAN SOP;
- Improve capacity (personnel and infrastructure) for proper implementation of the ASEAN SOP;
- Coordinate and collaborate with other AMS towards a more responsible movement of live aquatic animals for disease management and prevention of spread of transboundary aquatic animal diseases



Way Forward

AMS which are on the process of establishing national protocols for movement of live aquatic animals:

- Make use of the ASEAN SOP as base document in the formulation of laws and regulations pertaining to:
 - ❖ Movement of live aquatic animals;
 - ❖ Prevention and management of transboundary aquatic animal diseases;
 - ❖ Capacity building programs



Way Forward

Harmonisation

- With the implementation of AEC, AMSs should act as one economic block, including the aquaculture sector;

- **The main challenge:**

Gaps in the capacity of AMSs in the implementation of ASEAN SOP and compliance to national and international standards:

- ❖ Human capacity (expertise)
- ❖ Facilities
- ❖ Government support



Way Forward

Harmonisation



- The long term goal: a harmonised procedures for responsible movement of live aquatic animals in the ASEAN for:
 - Prevention of spread of transboundary aquatic animal diseases;
 - Improved management of important and emerging aquatic animal diseases;
 - Strong stand in the global trading of live aquatic animal products;



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

- Held on 20-21 June 2017, Bangkok, Thailand
- Attended by representatives from ASEAN Member States (except Myanmar)



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Implementation of SOP

- The SOP, as official ASEAN document, should be properly endorsed to member governments and eventually implementation at national level;
- One option for such is the inclusion of the SOP in national legislations to make it **mandatory** (and not recommendatory) for the importers/exporters, farmers and other related sectors to comply.
- Cooperation, coordination and collaboration among AMS should be promoted towards the implementation of SOP, and if possible harmonisation of the relevant procedures pertaining to aquatic animal movement and aquatic animal health management in the region;



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Implementation of SOP

- Countries with capacity to implement the SOP should proceed accordingly
- Assistance should be extended to other developing countries for a stepwise implementation of the SOP



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Quarantine System and Border Control

- Strengthen quarantine facilities in entry points and border control in AMSs;
- Standardise quarantine period for the ASEAN;
- Discourage the cross border transport (towing) of live animals contained in floating net cage;
- Apply/use proper transportation procedures and containers/ vessel;
- Proper communication and coordination with the involved agency should be promoted for the proper management of ballast water, which can be a source of transboundary aquatic animal pathogens.



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Human Resource Development (For AAH management)

- Human resource development should be the priority for capacity building activities, especially in AMS that are still developing their aquaculture industry and aquatic animal health management strategies;
- It is also needed for AMS with fully developed aquaculture but now experiencing gaps in the succession of expertise for AAH management or lack of enough/qualified personnel;



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Human Resource Development (For AAH management)

- Younger generations of AAH specialist should be properly trained in handling different issues related to AAH management, including important procedures on movement control of live aquatic animals;
- Promote aquatic animal health management courses and trainings for key personnel of the CA institutes, including levels II and III diagnostic capabilities;
- Involve the private sectors (aquatic animal health laboratories) to offer training to interested students/staff through internship and short-term training.



1st ANAAHC Meeting on the Implementation of ASEAN SOP for Responsible Movement of Live Aquatic Animals

Recommendations: Public Private Partnership (Project Fund Sourcing)

- As pilot implementation of the SOP will require project funds, it is recommended that sourcing should not be limited to donor agencies;
- Private sectors should be highly considered as one of the possible sources of project funds, by encouraging them to share minimal percentages of their business revenue for important government-funded projects in aquaculture, including the implementation of SOP in selected AMS. This will be for their own business benefits in the long run;
- Mobilization of government revenues (e.g. tourism industry) to allot certain percentage for use in relevant capacity building projects, including implementation of the SOP.



Few last words....

- **Aquaculture development** brings new challenges to biosecurity and aquatic animal health;
- **Outbreaks of damaging aquatic animal diseases** are likely to continue – potential consequences are likely to increase with the expansion (intensification) of aquaculture systems, trading/movement of aquatic animals, and introduction of new species for culture;
- Trade/movement of aquatic animals and animal products should **comply** with regional and international standards (e.g. food safety, quarantine); prevent spread of transboundary and emerging diseases



Few last words....

- Aquatic animal disease, once introduced into the country/area, is often very **hard to eradicate**; even with the use of antibiotics (for bacterial diseases)
- Risks associated with emerging and transboundary diseases as well as aquatic animal health management are **shared** – shared water bodies and epidemiological links through trade (especially live movement);
- **Collaborative approach** (in dealing with these diseases) is therefore warranted and necessary. Each stakeholder in the value chain has an essential contribution to the process.



ขอขอบคุณ

ຂອບໃຈ

Maraming Salamat Po

Cảm ơn bạn

THANK YOU

Terimah Kasih

谢谢

អរគុណ

ကျေးဇူးတင်ပါတယ်

