Trade Standards Challenges in the Shrimps and Pangasius Value Chains: Extracts from Asian TSC Report

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- 1. Introduction
- 2. Pangasius and shrimp value chains
- 3. What is required by importing countries
- 4. Policy implications

1. Introduction

Brief history

- Before 1980: a few SOEs in the seafood industry
- 1980-1990: more than 100 state-owned seafood companies
- 1990-2000:

Market liberalized, export quota removed Emergence of private processors and exporters Establishment of VASEP in 1998

- 2001: the U.S. Vietnam BTA
- 2007: member of WTO

Current trends: One of the largest fish and fishery exporters in the world

Export value of fish and fisheries products (in million USD)



Source: General Statistic Office

High port rejection rate for VN fish and fishery products exported to the U.S., EU, and Japan

Top 10 Reasons and Share of Port Rejection for Vietnamese Fish and Fishery Products (EU & US 2002-08; Japan 2006-10)

EU		US		JAPAN		
Reasons	%	Reasons	%	Reasons	%	
Veterinary drug residues	34.1	Filthy/unsanitary	24.4	Violation of element standard	66.7	
Microbiological contaminants	26.9	Labeling	22.5	Violation of compositional standard	19.6	
Heavy metals	8.4	Microbiological contaminants	21.7	Generation of mold	4.1	
Industrial contaminants	5.5	Unregistered process/ manufacturer	10.6	Violation of standard of use	3.9	
Product composition	5.1	Unauthorized food additives	8.0	Detection over the amount unlikely to cause damage to human health	1.8	
Unauthorized food additive	4.8	Veterinary drug residues	4.8	Undesignated additive	1.8	
Mycotoxins	3.7	Poisonous	3.0	Aflatoxin (mycotoxin) detected	1.4	
Biotoxins/contaminants	2.4	Biotoxins/ contaminant	2.8	Non-conformity with standard for materials (lead, cadmium)	0.4	
Pesticide residues	1.5	HACCP	0.8	Packaging	0.4	
Bad or insufficient controls	1.3	Mycotoxins	0.6	Violation of toy or its materials standard	0.2	

Questions

- Why is the rejection rate so high?
 - ✓ Vietnam is no longer an amateur
 - Port rejection is costly for exporters
- What are the effects on various stakeholders in the value chains?
- What are policies towards the problem?

Potential rejection at each stage



Fingerling growers Fish growers Collectors Processor/Exporters EU/US/JPN Ports EU/US/JPN Consumers

If the rejection at each stage can be minimized, the gains would be large.

Main area where fish and fisheries products are processed and exported



Main area where fish and fisheries products are processed and exported

2. Value Chains of pangasius and shrimp

Pangasius value chain

- Several types of producers
 - Independent
 - Contract farmers
 - Farms owned by processors

Khiem et al. (2010)

Artificial	Fin	Fingerling		Adult				
Seed		6-8 months		1-3 da	ys			
Fingerling farmer	Grov Fee Cha Cor	w-out farmer ed ange water (6-7hrs/day) ntrol disease	Collec Trans	tor - porter	Pro	cessor		

• Fingerling production: breeding more frequently and using more chemicals and veterinary drugs

• Fish production: rapid expansion \rightarrow high stocking density \rightarrow water pollution \rightarrow more diseases \rightarrow overuse of veterinary drugs, chemicals and probiotics

• For chemicals and drugs: many farmers are not aware of what to use and how to use

• Quality checking: fingerling farmers, grow-out farmers, and even collectors have no facility to test quality; quality is often checked by vision

Agent checking the quality of meat before final negotiation over farm gate price

Khiem et al, 2010

Artificial	Fing	Fingerling		Adult			
Seed		6-8 months		1-3 da	iys		\square
Fingerling farmer	Grov Feed Cha Con	v-out farmer d nge water (6-7hrs/day) trol disease	Collec Trans	ctor - porter	Pro	cessor	

• Compared to shrimp production, collectors are less important and gradually become transporters \rightarrow easier for processors to trace out (traceability)

Shrimp value chain (Black tiger)

Figure 1: Mapping of the black tiger value chain in the Mekong Delta (Note: using the proportion of cultured area by farming systems in the MKD in 2008) 15

Sinh (2012)

- Farming system: extensive, improved extensive, semi-intensive, intensive
- Gradual shift to intensive production, higher density (exp: farming area declined and production increased in 2009): prone to diseases \rightarrow use more chemicals, pesticides, antibiotics...; use more feed \rightarrow feed residue \rightarrow water pollution, contaminated sediment
- Quality checking: fingerling farmers, grow-out farmers, and even collectors have no facility to test quality; quality is often checked by vision
- Compared to pangasius, collectors are more important; they often mix shrimps from different sources \rightarrow more difficult to trace out (traceability)

Pangasius vs. Shrimp chain

Pangasius:

- Cash intensive (production costs 20-100 times that of shrimp)
- Many processors produce on large-scale; small-scale farmers tend to exit or downgrade.

Shrimp:

- Need coastal land
- More labor intensive
- Small-scale farmer dominant

Proportion of Farm Sizes in the Pangasius Industry in An Giang Province

Source: Khiem and others 2010

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Table 3: List of Relevant CertificationsSource: Khiem and others 2010;Mantingh and Nguyen 2008

Certifications	Main contents	Level applied	Coverage
SQF2000	Food safety assessment program covering processors,	Factory	Global
	distributers and warehousing		
SQF1000	Food safety assessment program for primary producers	Farm, Hatchery	Global
HACCP	Management system for the prevention of contamination by physical, chemical, and biological hazards	Factory	Global
GlobalGAP	Initiated by the members of the Euro-Retailer Produce Association, main focus is on food safety and traceability,	Factory, Farm	Global
BRC	and concerns on social and environmental issues. Food safety and quality criteria required for supplying to UK retailers and designed to standardizing food criteria and monitoring procedures	Factory	UK
GMP	Developed by the US Food and Drug Administration for verifying the safety and purity of drug and food products	Drug & Chemical supplier	USA
ISO22000	International food safety management system involving interactive communication between chain actors, and a system management approach based on the HACCP principles	Factory	Global
ISO 9001-2000	Quality management system for providing consistent products and services to meet customer expectations focusing on quantitative measurement of performance	Feed suppliers	Global
BAP	Address environmental and social responsibility, animal welfare, food safety and traceability in a voluntary certification program for aquaculture facilities	Farms	Global
OHSAS	British standard for occupational health hand safety management system	Factory	UK
PAD	Pangasius Aquaculture Dialogue, Initiated by WWF and is a set of standards based on the multi-stakeholder consultation.	Farms	Global
BMP	Targeted to improve farmers' management practices, delivering increased profitability and environmental performance by making more efficient use of resources.	Farms	Global

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Characteristics of certifications

- Earlier certifications: focus more on what is physically included in the products

- Current certifications: more complicated and include more environmental and social issues;

- Each country (region) has its own set of standards and certification requirements;

- Each country (region) has its own concern (EU is more on certifications, Japan is more on how the production is carried out);

- Certifications change over time with "very short notice"

→ Confusion for exporters and high compliance costs for exporters

- Possess multiple

certifications

too costly.

4. Policy Implications

- To keep the position of small-scale farmers in the value chain, establishment of public lab would be effective
- Proper policies to support consolidation of farmers
- More efforts of government agencies and associations in providing information, financial, technical and institutional supports to farmers/exporters
- International efforts to harmonize certifications / standards

Thank you for your attention