

Governance Of Global Value Chains Impacts Shrimp Producers In Vietnam



Vietnam's thousands of small-scale hatcheries annually produce millions of postlarvae most of which grow into mature black tiger shrimp.

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Summary:

Research by the authors examined the impacts of governmental and non-governmental standards on the ability of seafood producers and processors in Vietnam to maintain access to valuable export markets.

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Research In Vietnam

The lead author spent six months conducting interviews among shrimp farmers, processors, exporters and government officials during 2009 and 2010. Field work focused on the Ca Mau, Soc Trang and Ben Tre provinces in the Mekong Delta, where about 75% of Vietnam's shrimp production occurs.

The general approach was to trace the movement of shrimp and information along a global value chain with farmers at one end and importers in the industrial North at the other.

The value chain framework requires a systematic examination of governance issues that structure relationships among actors – in this case, shrimp farmers, input suppliers, middlemen, processors, exporters and importers. Governance includes both market and non-market coordination of economic activities.

Vietnam is an interesting case for exploring the impacts of non-tariff barriers to seafood trade. It is a poor country in transition to a market economy with weak market institutions and low finan-

cial, technological and managerial capacities compared to other seafood-exporting countries in the region.

According to the Vietnamese Institute for Fisheries Economics and Planning, Vietnam produced 383,000 mt of shrimp from 650,000 ha of ponds with an export value of U.S. \$1.5 billion in 2009. Japan and the United States accounted for 70% to 83% of the shrimp exports from Vietnam over much of the past decade.

Four Functional Stages

Global value chains for shrimp in Vietnam can be divided into four functional stages: input and service supplies, growout production, shrimp collection, and shrimp processing and export. Each stage involves different, separately operating actor groups. Key actors are identified in Figure 1.

Shrimp Production

Shrimp production in Vietnam is primarily done by 250,000 small-scale family farmers using extensive and modified extensive systems. There are also roughly 80,000 semi-intensive and intensive shrimp producers, who account for roughly 10 to 15% of pond area.

The essential points of differentiation between the extensive and intensive operators are artificial seed stocking, associated input investments and management efforts. No artificial seed is stocked in traditional extensive farming, while up to 5 individuals/m² are stocked in modified extensive farming systems. Yields are low in these systems at 230-450 kg/ha/year.

Semi-intensive and intensive farming systems have higher stocking densities ranging 6-20/m² in semi-intensive and 21-

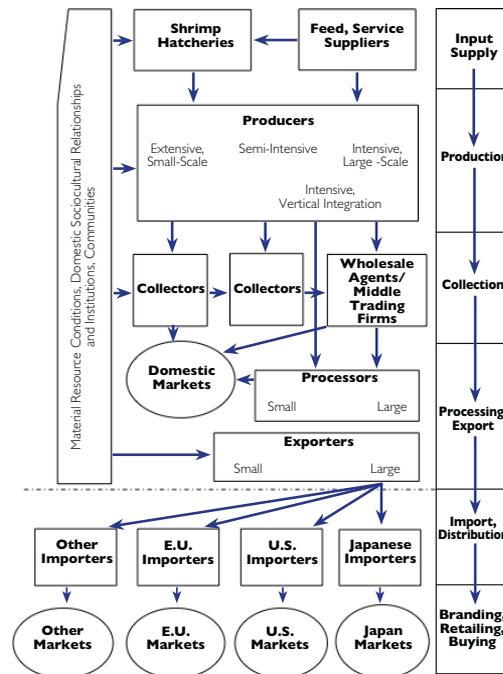


Figure 1. Global value chains for shrimp in Vietnam.

80/m² or higher in intensive farming systems, with correspondingly higher yields of 1.5 and 3.5 mt/ha/year, respectively.

Input Supply

Input supply involves shrimp hatcheries, feed and veterinary drug suppliers, and financial service providers. Most shrimp hatcheries in Vietnam produce black tiger shrimp, *Penaeus monodon*, while only a few produce white shrimp, *Litopenaeus vannamei*. There are over 4,000 small-scale shrimp hatcheries that annually produce 25 million to 30 million shrimp postlarvae.

Feed and veterinary drugs are essential input components for semi-intensive and intensive shrimp farming. There are 53 shrimp feed producers and 105 registered companies supplying drug and chemicals to 1,799 shops supplying producers. Use of these inputs is largely limited to semi-intensive and intensive producers.

Capital shortage is one of the production constraints most often reported, especially for small-scale producers. When facing a serious financial crisis,

most farmers must rely on local money lenders or input suppliers, who tend to charge high interest rates.

Shrimp Collection

Few roads exist in the Mekong Delta, and large numbers of small-scale buyers travel by boat from farm to farm collecting shrimp, often in small 10- to 20-kg amounts from each farm. These buyers then sell to other collectors, who in turn sell to others, so that shrimp change hands as many as five times before reaching the wholesaler who supplies shrimp to processors.

The combination of many small-scale producers selling small amounts of shrimp to a large number of collectors who trade up through a series of intermediaries to wholesalers makes tracing the origin of shrimp that reach the processor a practical impossibility.

Processing, Export

Processing plants in Vietnam commonly are integrated with exporting enterprises. Processing and export companies often work with five to 15 whale-

salers. Of the 479 government-approved seafood-processing and export enterprises, the top 100 accounted for 99% of all exports in 2010. To maintain access to markets, these firms also must be aware of standards set by buyers who may require customized product standards and adoption of certification systems to avoid health risks and criticisms associated with socially or environmentally irresponsible production practices.

Exporters know that whole shipments can be rejected if they fail to meet phytosanitary or other standards. Shrimp importers must consider consumer awareness and increasingly stringent governmental standards when negotiating with processor-exporters.

Governance Within Value Chains

The government of Vietnam plays an important role in the governance of international seafood trade, but real power resides with governmental and non-governmental actors outside Vietnam. Importing nations have the authority to establish and enforce food safety standards. More recently, non-governmental organizations have become involved in seafood trade issues, with groups such as the World Wildlife Fund promoting market-based certification systems and others supporting community-based management and co-management approaches to address food safety, socioeconomic and environmental issues associated with the shrimp industry.

Industry organizations such as the Global Aquaculture Alliance, Global-GAP in Germany and elsewhere, and British Retail Consortium in the United Kingdom work closely with large retailers

such as Walmart to promote the adoption of certification systems designed to assure consumers that the products they eat are safe and produced in a socially and environmentally responsible manner.

The World Wildlife Fund has documented over 30 different aquaculture certification schemes promoted by industry organizations and other non-governmental organizations. The net result, from the perspective of many exporters from Vietnam, is growing confusion and concern that inconsistent standards will adversely affect their business.

To assure market access, shrimp processor-exporters in Vietnam must respond to buyers and certification systems that buyers adopt. To this point, non-governmental certification standards have affected only processor-exporters, not other actors further up the global value chain in Vietnam.

Implications For Food Safety, Socioeconomics

The world economy is organized through global value chains, geographically spread across nations and functionally integrated, coordinated and governed by powerful actors, including private corporations and government institutions. The state in Vietnam plays important roles in driving shrimp value chains to ensure market requirements are met to maintain access to global markets.

As foreign markets increase the stringency of seafood standards, government networks have to establish strict inspection and monitoring systems for regulating the actors involved in shrimp value chains. Vietnam's history as a centrally planned economy with "big government" creates the potential for strong state con-

trol over export standards. This potential has not yet been realized.

Producers, input suppliers, middlemen, processors and exporters in Vietnam all participate in value chains, but governance of the chains resides elsewhere – with regulatory agencies, buyers and consumer advocates in buyer nations. As technical and non-technical standards proliferate, actors who are able to master these standards will capture the most lucrative markets, leaving less-lucrative markets (including domestic markets in Vietnam) to those that are less adept.

Will small-scale operations be viable, given the increasing trends of stringent standards for food safety and environmental management imposed by global markets? The authors expect these trends will lead to consolidation in the shrimp-processing sector, as smaller processors are often unable to sufficiently upgrade their technical and marketing skills.

A moral beauty contest orchestrated by a variety of actors is shaping how processes of globalization affect shrimp production and consumption. On one hand are the rights to consume safe and certified products in the industrial North, while on the other are the rights of small-scale producers to earn a livelihood in the developing South.

Affluent consumers in the North may benefit from increasing vertical organization and governance of shrimp value chains. They demand more stringent standards to ensure food safety and protect consumer health as well as enhance social and environmental responsibility. The irony of such efforts is that small-scale producers and entrepreneurs are likely to become marginalized in the process.

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