The Controversies of Thailand’s Large Shrimp Exports

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Introduction

Due to the extremely high demand for shrimp in world markets starting in the early 1980’s, Thailand has become the world’s leader in shrimp producer and exporter of farmed shrimp for many years. In 2000, the country’s total shrimp output reached 300,000 tonnes, higher than the annual average of 200,000 to 250,000 tonnes and could overcome a supply shortage in the world market (Anantanusuwong 2000). Based on this fact, it is clear that the government need further support Thailand’s shrimp farming industry conglomerate Charoen Pokphand (the CP Group), however there have been ongoing environmental and social impacts of the industry, the continuing impact of shrimp diseases caused by overfeeding of shrimp, a loss of economic value of mangrove forests, increased production costs, three tough political developments threatened by its major consumers: the U.S., the European Union, and Japan, causing a loss of valuable export revenue resulted from a decline in production and a loss of livelihood for a large number of people involved in the shrimp farming sector. Besides that, Thailand’s exports have been decreasing because the neighboring countries, included India, Bangladesh, Indonesia, Vietnam, Philippines, and Malaysia, with having lower production costs and improving in qualities in 1996, have largely entered Thailand market share due to the increased demand for shrimp in world markets (Shrimp sentinel Online, 1997). As a consequence of these causes, Thailand’s total Exports of Shrimp have consecutively decreasing since 1996: $1,720.1 millions in 1996, $1,516.1 millions in 1997, $1,418.9 millions in 1998, $1,274.1 millions in 1999, and $987.3 millions in 2000 (Anantanasuwong, 2000).
Economic gains and losses from Thailand’s Shrimp Exports

The annually increasing in demand for shrimp in export markets especially for the case of Thailand, the largest export markets for Thai shrimp are the United States, Japan, and the European Union, changed traditional farming practices along the coastal areas and some mangrove forests for peasant farmers into shrimp ponds. Believing that they would gain $20,000 to $40,000 a year from the production of shrimp instead of $500 a year for rice production, Thai rice farmers thus converted most of their coastal fields and the mangrove areas into shrimp farms which is partly encouraged by government policy. (TED 1996) However, soon the shrimp farmers found out that these mangrove areas were not suitable for sustainable shrimp farming because it requires high investment to convert mangroves into shrimp farms, mangrove areas contain very poor soil quality from acid sulfate soil, and accumulation of hydrogen sulfide and ammonia eventually release in the pond water (“Mangrove Forest” 1998).

Besides, trades effect income distribution within Thailand due to the significantly large amounts of their shrimp exports. By looking at an example in the recent EEPSEA (Economy and Environment Program for southeast Asia) case study on Tha Po Village in Surat Thani. It revealed that most of the economic feasibility of shrimp farming is financially viable from a private individual’s point of view since an individual entrepreneur can afford the high initial investment required, but such a conversion is not economically feasible from society’s point of view. The study looked at the Surat Thani Province of southern Thailand, where about 130 households depend almost entirely on
fishing for their livelihood and where mainly outsiders who can afford the high initial investment have converted substantial areas of mangrove for shrimp farming, but only 11 households in the Tha Po Village were engaged (Sathirathai, 1999). The area around Tha Po used to be extensively covered with over 1100 hectares of mangrove swamps, but in 1999 over half of this area has been converted for commercial shrimp farms to produce about $1,200 million in annual export revenue where significant amounts of profits gained from export have accrued to transnational companies, such as Charoen Pokphand (CP groups) and Mitsubishi (Sathirathai, 1999). These mangrove’s resources around Tha Po significantly benefited the local community as a source of fuel wood, other minor forest products, and essentially provided primarily as nurseries for fish and as barriers to storms and soil erosion (Sathirathai, 1999). Thus, based on the perspective of the community’s point of view, the benefits for them that would be lost if an area of mangrove was destroyed was as high as US$5,771 to US$4,227 per rai since while an entrepreneur often takes a shrimp project after five years when profits start to diminish, the community has to live with the abandoned shrimp ponds, which can take up to 15 years to re-establish as a mangrove forest plus other additional external costs, such as pollution from the shrimp ponds (Sathirathai 1999). In contrast, based on the perspective of an individual entrepreneur, regardless many of the indirect benefits provided by mangroves, the net present value (NPV) per rai for the mangrove forests after converting into commercial shrimp farm was US$3,734.80 while they bought the mangrove areas for only US$666.42, which is considered relatively cheap (Johnson 1997).
Environmental impacts

There are three major environmental problems resulting from the shrimp industry: overfeeding of shrimp, use of chemicals and antibiotics, and water pollution and the destruction of mangrove areas.

Intensive farming is one of the methods of introduced for gaining the large-scale production by the department of Fisheries and the private sector, which can produce 3-4,000 million a year (Shrimp sentinel Online 1997). In intensive farms, overfeeding is applied by supplementing natural feed with artificial food in order to promote faster growth and build higher mass in each shrimp, but all food does not get converted to body mass instead the high amounts of nutrients and organic waste left over from overfeeding are discharged in the water exceeding the carrying capacity of waters and lands can hold. After 100 days of culture at the bottom of the pond will form anaerobic conditions, with low dissolved oxygen levels (high BOD) and high concentrations of toxic gases, such as hydrogen sulphide, ammonia, nitrite and carbon dioxide. Besides, the main nutrients from the feed are nitrate and phosphorus, which if overfeed to shrimp, the high levels of these nutrients cause stress for the shrimps and increase the potential of the shrimps to diseases. (Shrimp sentinel Online 1997)

The heavy use of antibiotics for disease control can also affect the sediment concentration on the bottom, which is then scattered to neighboring lands or waters after harvest when the ponds are cleaned. After that, the antibiotics can enter the non-
cultivated animals’ systems or influence the bacterial composition of soil leading to the accumulation of contaminants in other food products such as shellfish or the antibiotic-resistant of other animals to resist the treatment of disease (Anantanasuwong 2000). Similarity, the excess uses of chemicals in shrimp pond cultivation also can contaminate the environment surrounding the ponds and they are often transferred into other sources of water such as ponds, wetlands, aquifers or canals located between the farms destroying the fish that live there and adversely affecting water quality (Anantanasuwong 2000).

In Thailand, between 1961 and 1993, over 80,000 hectares of mangroves were destroyed (clear-cut) to turn them into shrimp breeding ponds. The destruction of mangrove areas for commercial gain from shrimp farming is one of the most serious environmental problems Thailand has been facing. Mangrove is a dynamic ecosystem that provides many natural commercial resources, including poles, charcoal, woodchips, mangrove crabs, fuel wood, medicines, fish and shellfish. Thus, in July 1991, the use of mangrove areas for shrimp farming was banned and many agencies including The Forestry Department, Department of Fisheries (DOF), private sector, NGOs, National Research Council of Thailand, and shrimp farmers involved in reforestation of mangrove. In addition, the zoning system for shrimp farming has been introduced to choose the best suitable farming area and confine the farms within this area so that any saltwater residue and effluent discharge from the shrimp farms cannot intrude to other neighboring farms.

**Social impacts**

Although the practice of shrimp farming is one of the most valuable Thailand’s exports and an industry central to the economy, however it still does not reduce rural
Individual farmers do thrive, but much of the profits and benefits of the industry go into the hands of large conglomerates especially to the CP Group. Workers who are employed on farms are often locals who have already quit their previous occupations. Since most shrimp is grown over a four-mouth period, with a one or two-month break in between each crop, so during this break they will be unemployed. Besides, the shrimp farming is a risk business depending on many environmental factors such as climate, thus if the farm workers could not successfully harvest during the crop, there are no guarantees of income. In average, the incomes they will receive will be Thailand’s legal minimum wage (about US$4 a day). In the shrimp factories, all the entire workers are female because they are cheaper than male workers. They also receive the minimum wages excluding union and overtime payment. They must play for their own transportations to the factories. If the profits generated by shrimp farming cannot be redistributed more equitably, the livelihoods of both farm and industry workers cannot be improved through the employment. (Goss 2000)

In Thailand, one shrimp company forcibly displaced 4,000 rice paddy farmers (Annantanasuwong 2000) and due to the high salinity levels in the soils and the contaminated water flow of neighboring canals, abandoned shrimp farms after shrimp cultivation has entered, have very little alternative agricultural uses because most farms such as rice farms which depend on large amounts of water cannot survive (normally, it takes about five to seven years before the land can be used again for other agricultural purposes). Even worse, saltwater residue from the shrimp farms diffuse to adjoining lands forcing many of the farmers working on these regions to also abandon their farms
Moreover, the degradation of the coastal resources by the effluent discharge from the shrimp farms has destroyed the fish that live in neighboring aquifers causing many of the fishing communities to lose their source of livelihood.

**Political Developments**

In 1996, three tough political developments threatened the Thai shrimp industry in its ability to increase the exports and global market shares. Besides one of the three political developments, which involved the US shrimp embargo threatened Thailand’s ocean-caught shrimp exports in 1996 and about 10 percent of Thailand’s shrimp industry came from ocean trawling that produced about $90 million a year in revenue, the others involved: the European Union has decided to drop Thailand from the list of countries receiving lower tariffs on shrimp imports under the EU’s Generalized System of Preferences (GSP) and Japanese government declared that it will insist on higher equality standards for shrimp imports.

**The European Union tariffs on shrimp imports from Thailand:**

In 1999, the EU has become Thailand’s second most important trading partner. The EU is Thailand’s fourth-largest market for shrimps. Thai shrimp, prawn and lobster exports to the EU in the first eight months in 1999 increased 30% to $105 million compared to the same period last year.

**EU imposed “Zero-Tolerance” food safety policy on Thai shrimp products:**

In March 2002, after reports about chemical contamination in Thai shrimp shipments released from the Netherlands, the EU implemented its “zero tolerance” food safety policy (Bangkok Post, January 1, 2003). On January 27, 2003, EU has lifted its
100% inspections of Thai shrimp products after Thai shrimps were found in 2002 to be contaminated with two chemicals known as chloramphenicol and nitrofurans (Market Report: Food Market Exchange, January 31, 2003). The main object of the inspections is to detect residues of chloramphenicol and nitrofurans, two antibiotics applied in shrimps but now banned because of potential harmful effects on humans. The EU sets the standard for the residues of these two antibiotics used between 0.1 and 0.3 parts per billion (ppb), but the standard is almost impossible for Thai producers to be able to achieve in practice (Market Report: Food Market Exchange, January 31, 2003). Thai farmers and traders complained that the EU applied zero-tolerance requirements that were higher than accepted international standards while other shrimp exporting rival countries like Vietnam and Brazil only had to pass random inspections. As a consequence, the EU inspections significantly impacted Thai shrimp exports since consumers worldwide would believe that Thai shrimp farming and processing did not meet safety and health standards. For instance, the US Ministry of Commerce will enforce lower shrimp import quotas and US customs will raise tariffs on shrimp imports with a resulting increase in their prices in the US market.

**EU increased tariffs on Thailand’s shrimp products:**

The European Union increased tariffs on Thailand’s shrimp imports. The European Union has decided to no longer allow Thailand shrimp industry to benefit from the EU’s Generalized System of Preferences (GSP). The GSP allows for reduced tariffs for countries with weak economies and a history of below average economic growth. Thailand no longer qualifies because it is the world’s largest exporter of shrimp and has
experienced phenomenal growth in the last fifteen years (Shrimp Sentinel Online: National Reports, 1997.

However, according to the president of the Thai Marine Shrimp Farmers’ Association, Dr. Surapol Pratuantum has claimed, the EU had intended to reduce their transactions cost and exchange risks for Thai exporters by reducing imports of Thai shrimps since 1995 to protect EU countries’ own industries as the EU sees Thai shrimps have high export potential (Bangkok Post, October 16, 2002). Thus, EU abolished the Generalized System of Preferences (GSP) in stages to Thailand, which will increase some tariffs into the EU, while tariff preferences to rival countries remained unchanged (Bangkok Post, 2003). As a result, Thailand’s tariff on shrimp imported into the EU will increase from 4.5% to 14.5%, while he “ready to cook” shrimp will increase from 6% to 20% causing Thailand’s shrimps to be more expensive (Chauvin, March 11, 1999). Due to the main loss of their market share in the European Union resulted from the increase in EU tariffs, Thailand’s total shrimp exports are went down from 100 billion baht in 2001 to 70 billion baht in 2002 since Thai shrimp exporters need to cut prices to offset the rising cost of exports to be incurred by increased tariffs (Bangkok Post, October 10, 2002).

EU’s new system for GSP consideration is considered unequal and discrimination against Thailand:

Shrimp producers in Thailand has called the increased tariffs as unequal and discriminating against Thailand because the other large exporters of shrimp included Ecuador, India, Bangladesh, and Indonesia continue to retain GSP privileges and benefit
from the EU tariff for developing nations (Bangkok Post, October 16, 2002). In retaliation for the EU raising its tariffs, Thailand’s shrimp exporters called for a boycott starting in January 1997 on European Union products such as French wine, Scottish whiskey, and milk form Denmark, Ireland and the Netherlands. On December 11, 1996, an association of shrimp exporters was also urging the Thai government, as a retaliatory measure against imported EU goods, to suspend purchases of airbus airplanes and electric trains from Germany and Belgium (Shrimp Sentinel Online, 1997). Besides, the CP Group decided to stop importing aquatic feed from the EU for its aquaculture operations (Shrimp Sentinel Online, 1997).

**Thailand’s Trade Negotiations with EU: (Bangkok Post, January 1, 2003)**

In order to resolve these trade conflicts between the EU and Thailand, by the end of January, 2003, Thailand’s government will use the visit to the United Kingdoms (UK) secretary of state for trade and industry to raise problems of bilateral trade between them concerning about the EUs stringent inspections of Thai shrimp imported to EU and the issue of abolishing the GSP to Thailand. Thailand would like EU to stop using stringent inspection measures on the Thai shrimps and lower the import tariffs for shrimps in order to be able to stay competitive markets.

In order to achieve the negotiations with EU, Thai government is encouraging Thai shrimp farmers to adopt a Code of Conduct and do not use any banned chemical or even produce bio-shrimps. By following to the code, the farmers would automatically overcome any sanitary barriers imposed by importing countries. The French government has also assisted the Thai Fisheries Department to train the farmers to ensure the
environmentally friendly raising of hygienic marine shrimps at every step of production starting from hatcheries to farming and harvesting. Besides, Thailand also agreed to buy new testing machines from the Netherlands to test Thai products before they are exported to ensure that local officials would be able to detect, to the same precise levels as their European counterparts, any chemical residues.

**Japanese’s insistence on higher quality standards for shrimp imports:**

Japan used to be the leading importer of Thai shrimp until the Japanese economy has been declining. The Japanese yen fell in 1996, which was partially responsible for a 17.8 percent decrease in the export of frozen prawns from Thailand to Japan in the first three quarters of 1996 (Shrimp sentinel Online, 1997). The weakened yen has prevented any improvement in the Japan shrimp market. The economic depression in Japan has also deterred demand for shrimp. The Japanese has been looking to countries with lower production costs for its imported shrimp. With other countries like, Vietnam, Malaysia, Indonesia, India, and Bangladesh, producing "better" quality shrimps for fewer prices, the Thailand’s export of shrimps decrease dramatically. According to the National Marine Fisheries Service, the five largest shrimp exporters to Japan from January to November 2002 were Indonesia (48,827 tons), Vietnam (37,999 tons), India (32,201 tons), China (17,689 tons) and Thailand (17,033 tons) (Food Market: Market Report, January 31, 2003). Total Thai shrimp exports fell 7.4% in terms of quantity and 14.8% in term of value within the same period in 2001 (Food Market: Market Report, January 31, 2003).

In order to overcome with this problem of the rapid decrease in shrimp exports from Thailand, in 2001, shrimp farmer and exporter associations have asked the
government to rapidly implement a national policy encouraging shrimp farming, facilitating rapid expansion, minimizing regulation (which has already been so poor in the past), and maximizing profits to prepare for tougher export competition from neighboring countries like India, Bangladesh, Indonesia, Vietnam, Philippines, and Malaysia. Many shrimp farmers and exporters feared that Thailand could be pushed out of the export market if a national policy to support the Thai shrimp sector was not developed.
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