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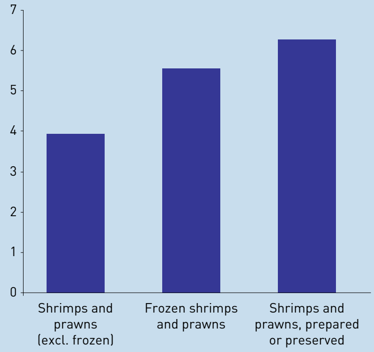
Improving the Competitiveness of Indonesian Shrimp Exports

Significance: The Indonesian shrimp industry is facing strong competitive pressures while suffering from domestic constraints, mainly lack of quality standards and low productivity. The revitalization of the sector is however crucial for export growth and poverty reduction purposes – shrimp exports account for around 1.8% of the country's non-oil exports and the number of farmers involved in the sector is estimated to be 1.7 million. Diversification towards higher value-added processed shrimp products can bring significant trade gains and externalities to the sector.

Figure 1.
Unit value of world trade for shrimp (US$/kg), 2005



Source: UN Comtrade

Analysis: The shrimp sector has been an important pillar to the Indonesian economy through export revenues, income generation and employment. But its potential is far from being fulfilled as it is estimated that 75% of the total farm area (around 240,000 ha) uses traditional low-productivity aquaculture methods.

Strong demand at affordable prices. Despite the stringent trade measures under WTO rules (including antibiotic checks, certification and traceability), the sector is expanding globally as prices have fallen and demand has increased:

- World demand for shrimp products grew at 5.6% per annum between 2000 and 2005;
- Prices have gone down by 5% in the last five years. Intensive farming and the use of technology have increased shrimp productivity worldwide, making prices more affordable to consumers.

Increased competition. Good global prospects have led to international competition worldwide. Indonesia's shrimp sector faces strong competitive pressures from various fronts:

- In the eastern hemisphere, China, Thailand, Vietnam, Malaysia and India have big export-oriented industries. The Philippines also hopes to reinvigorate its industry with the culture of the western white shrimp;
- In the western hemisphere, Ecuador, Peru and Panama have recovered from the whitespot epidemic of the 1990s, and will probably regain world market share, particularly in the US.

Processing adds value to shrimp exports. In a sector with falling prices and mounting competition, adding value through improved quality and processing becomes crucial to sustaining competitiveness. For instance, processing of shrimps brings greater benefits to exporters (US$6.3 per Kg compared to US$5.6 per Kg for frozen shrimp) and generates externalities to the sector as a whole (figure 1):

- Less exposure to international price fluctuations and bans from importers;
- Greater use of technological advances and skilled human resources;
- Push-effect on intensive farming aquaculture for processing purposes, and related industrial subsectors (e.g. canning and preserving).

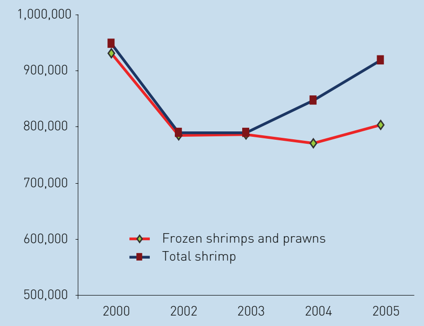
World demand for processed shrimp products has boomed in the last five years (10.2% import growth between 2000 and 2005), fuelled by increased consumption in Europe and the US. Prepared and preserved shrimp products account for 21.5% of total shrimp trade worldwide, up from 17.3% in 2000.

Export performance. Indonesia's shrimp exports reached US$920 million in 2005 – a 3.1% increase per annum of 2002 export levels, but still US$29 million below the export value of 2000 (figure 2). Indonesian processed shrimp exports increased dramatically from US$1.3 million in 2000 to US$112.6 million in 2005, accounting for much of the sector's recovery. This is indeed a promising sign of diversification into higher value-added shrimp products, though export values are still low relative to the country's real potential.

Given the harsh international pressures, Indonesia's export performance needs to be assessed in a comparative perspective:

- Indonesia's world market share for shrimp declined from 7.9% in 2000 to 5.8% in 2005. This is mainly due to the comeback of the big Latin

Figure 2.
Trend in Indonesia's shrimp exports, (US$ thousand) 2000-2005

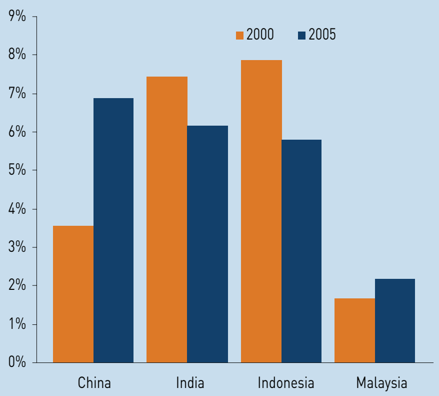


Source: UN Comtrade

American shrimp exporters like Ecuador; the enhanced productivity and cost-efficiency of East Asian competitors like Thailand; and the emergence of newcomers in the region, China (see figure 3);

- Indonesia is reducing its export dependency on shrimp, while moving up the value chain towards high value-added processed shrimp exports (figure 4). However it still is far from best practice in the region (see Thailand and China);
- Indonesia and India share a similar trade path in export capacity (as depicted by the bubble size) and processing levels in shrimp. Indian processed shrimp exports grew by US$120 million between 2000 and 2005.

Figure 3.
World market share of shrimp for Indonesia and comparators, %, 2000-2005



Source: UN Comtrade

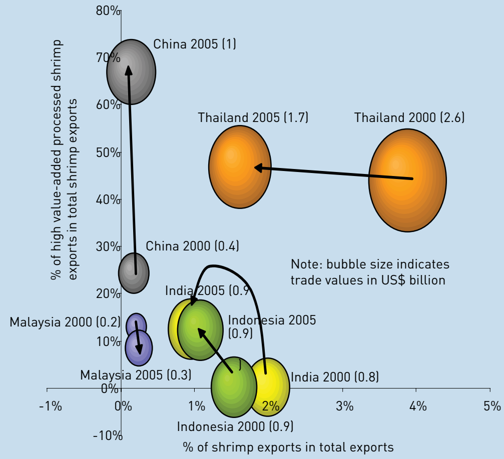
Structural constraints. According to the FIAS-World Bank report (2006), Indonesia faces severe obstacles for enhanced export competitiveness, including:

- Weak enforcement of existing aquaculture product and process standards. Indonesian shrimp farms often fail to comply with health conditions, which could lead to an import ban;
- Poor quality of the brood stock used by domestic hatcheries to produce fry. This significantly undermines survival rates, productivity and quality of the output;
- High cost of shrimp feed. The cost in Indonesia is between 15% and 40% more than in Thailand and China, respectively, mainly due to the higher import content of Indonesian shrimp feed;
- Poor management practices. Poor feeding practices and indiscriminate use of antibiotics are good examples of how poor farm management practices impact the sector's competitiveness;
- 'Bad image' of Indonesian shrimp. The main reason of this perception from global buyers is the industry's inability to achieve consistent product quality.

The road ahead. There are several areas that call for urgent action if Indonesia is to improve the competitiveness of the shrimp sector:

- Improving enforcement of quality standards. This is a long-gestating process that requires the prior construction of 'shrimp clinics' in key hatchery production areas to test for disease before stocking and production;
- Improving productivity. Setting up 'one-stop-aqua-shops' has proved to be a successful mechanism to boost productivity in competing countries. These are mobile shop/service providers selling products and providing services and up to date information to farmers;

Figure 4.
Competitiveness and upgrading in the shrimp value chain for Indonesia and comparators, 2000-2005



Source: UN Comtrade

- Improving the image and branding in key markets. There is the need to develop a market information tool as a 'one-stop shop' for shrimp exporters in Indonesia, including accurate industry data, data on international prices, market trends, legislation, and experiences of problems and successes.

Conclusion: Indonesia needs to revitalize its shrimp industry and make it more competitive. Failing to do this would negatively affect the lives of many. Indonesia has to reap the benefits of increased global demand through enhanced quality, productivity and diversification into high value-added processed shrimp products. The road ahead may be bumpy but the cost of inaction is surely greater.

Further reading:

FIAS-World Bank, 2006. 'Improving Indonesia's Competitiveness: Case Study of Textile and Farmed-Shrimp Industries', http://siteresources.worldbank.org/INTINDONESIA/Resources/Publication/280016-1152870963030/TextileShrimpv1.pdf

For further information, contact:

Manuel Albaladejo
fpd_id@worldbank.org
Ph. 62 21 5299 3000
Fax. 62 21 5299 3111

Financial & Private Sector Development
World Bank Office Jakarta
Jakarta Stock Exchange Building
Tower 2, 13th floor
Jl. Jenderal Sudirman Kav 52-53
Jakarta 12190, Indonesia

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