Changing Patterns in the Comparative Advantage of Asian Seafood Processing Industry, with Focus on Shrimp Processing and Tuna Canning

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Summary

The promotion of seafood processing industry, such as shrimp and tuna processing, is an effective way for developing countries to acquire foreign currency and to reduce rural poverty because it can lead to job creation. However, there is a question about whether rising wage rates might constrain further development. Thailand, for example, has already established a solid position in these industries, but the quantity of its exported frozen shrimp has peaked, and newly emerging countries such as Vietnam are following in its path. This paper tries to analyze the relationship of wage rates and comparative advantages by applying an analysis that is based on the revealed comparative advantage (RCA).

As a result, we found that the RCA of processed shrimp depended not only on the RCA of frozen shrimp but also on real GDP per capita of the country, which is an indicator of wage rates. A real GDP per capita of around US\$2,700 could provide the maximum value for the RCA of processed shrimp, given the RCA of frozen shrimp. This finding implies that countries with a lot of brackish water and mangrove areas for shrimp farming can take a long-term development strategy, starting with frozen shrimp export in the initial stage of economic development and moving to the export of high-value processed shrimp when income levels reach to middle stages. With respect to the tuna canning industry, the comparative advantage is maximized when the real GDP per capita is near US\$1,000. Therefore, a strategy of developing the tuna canning industry would be recommended for countries that lack natural resources as is often seen in island countries.

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