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GATT and the Thai Agricultural Economy

Chris Daniel Gingrich
Iowa State University

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Abstract

Thailand has experienced steady economic growth over the last 20 years, in part because of its productive agricultural sector. The primary agricultural commodities produced in Thailand are rice, maize, cassava, poultry, and sugar. Thailand exports significant amounts of these commodities compared to its total agricultural production and the world export market. Thailand's internal and external agricultural policies are basically market oriented, with the exception of sugar and soybean programs. Sugar and soybean production are encouraged by government-subsidized inputs and price support programs. Import quotas also apply to soybeans and soybean meal. In light of Thailand's market-oriented policies, very few government programs would have to be altered to comply with a General Agreement on Tariffs and Trade (GATT) agreement. Furthermore, because Thailand is primarily an agricultural exporter, it stands to reap significant economic benefit from an agreement that increases world trade of agricultural commodities.

Keywords

Agriculture, Policy, Agricultural Economics

Disciplines

Agricultural and Resource Economics | Agriculture | Economic Policy

GATT and the Thai Agricultural Economy

C. D. Gingrich

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Center for Agricultural and Rural Development
Iowa State University
Ames, Iowa 50011

C. D. Gingrich is graduate research associate, department of economics, Iowa State University.

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GATT AND THE THAI AGRICULTURAL ECONOMY

Abstract

Thailand has experienced steady economic growth over the last 20 years, in part because of its productive agricultural sector. The primary agricultural commodities produced in Thailand are rice, maize, cassava, poultry, and sugar. Thailand exports significant amounts of these commodities compared to its total agricultural production and the world export market. Thailand's internal and external agricultural policies are basically market oriented, with the exception of sugar and soybean programs. Sugar and soybean production are encouraged by government-subsidized inputs and price support programs. Import quotas also apply to soybeans and soybean meal. In light of Thailand's market-oriented policies, very few government programs would have to be altered to comply with a General Agreement on Tariffs and Trade (GATT) agreement. Furthermore, because Thailand is primarily an agricultural exporter, it stands to reap significant economic benefit from an agreement that increases world trade of agricultural commodities.

GATT AND THE THAI AGRICULTURAL ECONOMY

Thailand, like several other Asian countries, has experienced significant economic growth in the last 15 years. However, unlike those of other rapidly growing Asian economies, Thailand's agricultural exports are an important part of their economy. Consequently, the General Agreement on Tariffs and Trade (GATT) negotiations are important to the future of Thailand. This paper presents an overview of the Thai agricultural economy followed by a description of government policies that affect Thailand's agricultural trade. The paper then discusses the potential impact of the GATT negotiations on the agricultural sector of Thailand's economy.

The Agricultural Sector

Agriculture plays an important role in the Thai economy, although agriculture's contribution has declined over the last 20 years (The World Bank 1991). In 1985, agriculture was 15 percent of gross domestic production (GDP), compared with 32 percent in 1965. Meanwhile, the combined shares of manufacturing and industry in GDP grew from 37 percent to 59 percent. Agricultural income has also grown at a slower rate than the whole economy. During the 1980s, agricultural income grew at an average annual rate of 4 percent, while the whole economy grew at an average annual rate of 7 percent. Much of the country's labor force (73 percent) is still employed in agriculture (CIA 1990).

Thailand's agricultural sector has undergone significant changes in the last 15 years (USDA 1988). Agricultural production is much more intensive and market oriented. Crop production has increased, mainly because of expanded planted crop acreage and irrigated area. There is a growing diversity of planted crops, although rice is still the primary one, occupying 60 percent of all planted acreage. The livestock industry, specifically poultry and pork production, is characterized by efficient, large-scale operations (Schwartz and Brooks 1990).

Agricultural Production

The major agricultural commodities produced in Thailand are rice, maize, cassava, poultry, and sugar (Schwartz and Brooks 1990; Buzzanell and Langley 1990). Rice is Thailand's main food crop, both for human consumption and for export. Rice production has steadily increased over the last 10 years, mainly as a result of expanded government irrigation facilities. There is immediate potential for higher rice yields because improved seed varieties and fertilizer are not used extensively. Rice products (grains and hulls) also comprise approximately 60 percent of all animal feeds.

Maize production has increased slightly over the last 20 years. In the past, maize was primarily an export crop. However, recent expansion in the livestock industry has diverted much of Thailand's maize crop to domestic animal feed production.

Cassava is primarily an export crop, sold in the form of pellets for animal feed. Cassava production has increased steadily over the last 20 years. Unlike other parts of the world, Thailand does not use cassava for human consumption. Nor is cassava used for local animal feed to a great extent.

Poultry production is expanding very rapidly. Recently, the poultry industry moved toward large-scale commercial production. Poultry production costs in Thailand are estimated to be 20 percent less than those in the United States. Per capita poultry consumption steadily increased in Thailand until the mid-1980s and has been steady since then. Significant quantities of poultry are exported, with Japan the primary import market.

Sugarcane has become an increasingly important crop (Buzzanell and Langley 1990). As a result of both improved yields and expanded acreage, Thai sugar production doubled between 1978 and 1989. Increased fertilizer use was a primary reason for the improved sugarcane yields.

Other less important agricultural products are beef, pork, dairy products, soybeans, and commercial aquaculture (Schwartz and Brooks 1990). The beef industry is undeveloped and there is

no large-scale production by commercial farmers. The industry is also hampered by disease, especially hoof-and-mouth disease. Pork production has become more commercialized and efficient, although total production has held steady after an initial expansion in the mid-1970s. The dairy industry is relatively small, but is increasing in size and production efficiency. Soybean production has expanded since the mid-1980s to provide protein for the growing livestock industry. A new agricultural industry is commercial aquaculture, primarily shrimp farming, which has expanded rapidly in response to growing export markets.

Agricultural Trade

Thailand exports much of its agricultural production (Table 1). Thailand's exports of several commodities also comprise significant proportions of the world market (Table 2). Rice is Thailand's most important agricultural export, accounting for 8.6 percent of all foreign exchange earnings in 1988 (Schwartz and Brooks 1990). Over the past 20 years, Thailand has steadily increased the share of its rice production that is exported and has captured a larger share of the world export market. In 1970, Thailand exported only 18 percent of its total rice production, compared with 36 percent in 1988. Thai rice exports in 1970 were only 12 percent of the world's total exports. However, by 1989 Thailand provided more than 40 percent of the world's rice exports.

Cassava is Thailand's second most important export crop (Schwartz and Brooks 1990). Nearly all of Thailand's cassava production is exported, although the exported share has steadily declined over the last 10 years. Thailand exports cassava pellets primarily to the European Community, but exports have been hindered recently by EC import restrictions. The share of Thai cassava exports in the world market is unknown.

Table 1. Percentage share of Thailand's agricultural production that is exported

| Year | Rice | Cassava | Maize | Poultry ^a | Sugar ^b |
|------|------|---------|-------|----------------------|--------------------|
| 1970 | 12.0 | 81.4 | 88.4 | NA | 45.8 |
| 1980 | 26.0 | 70.1 | 65.2 | NA | 51.8 |
| 1988 | 36.1 | 69.9 | 29.3 | 17.7 | 79.2 |

SOURCES: Schwartz and Brooks (1990); Buzzanell and Langley (1990).

^aFigure for 1988 is actually 1987.

^bFigure for 1988 is actually 1990. Figure for 1970 is actually 1975.

NA = not available.

Table 2. Percentage share of Thailand's agricultural exports in the world market

| Year | Rice | Maize | Poultry | Sugar |
|------|------|-------|---------|-------|
| 1970 | 13.4 | 4.7 | 0.0 | 0.3 |
| 1980 | 21.4 | 2.7 | 1.3 | 1.6 |
| 1989 | 42.4 | 1.5 | 5.0 | 10.1 |

SOURCE: *FAO Trade Yearbook* (various issues).

Maize has been an important export crop, but is now used mainly for animal feed. In 1970, 88 percent of the maize crop was exported and only 5 percent used for animal feed. By 1988, the figures had become 29 percent and 69 percent, respectively. Consequently, Thailand's share of the world maize market fell from 2.7 percent in 1980 to 1.5 percent in 1989.

Poultry meat is a rapidly expanding agricultural export from Thailand. Between 1978 and 1987, poultry exports grew at an annual average rate of 20 percent. In 1987, 18 percent of domestic poultry production was exported. Thailand's share of the world poultry market grew from 1 percent in 1980 to 5 percent in 1987.

Sugar exports rose steadily during the 1980s. From 1980 to 1989, Thailand's share of the world sugar market grew from less than 2 percent to more than 10 percent. The share of Thailand's sugar production that is exported has also increased. In 1975, 46 percent of the sugar crop was exported, compared with 79 percent in 1990. Sugar exports accounted for 3.7 percent of Thailand's 1989 export earnings (Buzzanell and Langley 1990).

Soybeans and soybean meal are two agricultural commodities imported by Thailand (Schwartz and Brooks 1990). Between 1970 and 1983, Thai soybean meal imports grew at an average annual rate of 62 percent to meet the needs of the growing livestock industry. However, in 1984 the government imposed restrictions on soybean meal imports. Domestic soybean production has since increased to partially offset the growing need for animal feeds. Most of the remaining protein meal deficit is met with fish meal. By 1988, 47 percent of Thailand's soybean meal supply was produced from domestically grown soybeans, compared with only 28 percent in 1980. Thai imports of soybeans and soybean meal are insignificant on the world market, comprising less than 1 percent of total world imports. However, Thailand's total soybean supply in 1988 (domestic production plus imports) was equal to 1.4 percent of the world's soybean imports.

Agricultural and Trade Policies

For the most part, Thailand maintains a market-oriented agricultural sector. Soybean products and sugar are the only agricultural products to receive significant government support through production incentives or trade policies. Other than controlling these two products, government involvement in agricultural production is limited to research and infrastructure development (USDA 1988). Most notably, the government greatly expanded irrigation facilities in the 1960s and 1970s. Otherwise, the private sector has been responsible for providing transportation, storage, credit, and other inputs needed for Thailand's expanding agricultural production. Government support for soybean production includes input subsidies and price support programs (Schwartz and Brooks 1990).

Similarly, sugar producers benefit from price supports and operating loans provided at below-market interest rates (Buzzanell and Langley 1990).

The Thai government uses very few border measures to limit agricultural imports (USDA 1988; Bishop et al. 1990; Hyberg, Mercier, and Hoffman 1990). Soybeans and soybean meal, however, are two exceptions. There are two types of import restrictions imposed on soybean products (Schwartz and Brooks 1990). First, a ban on soybean imports was imposed in 1982, although the ban was eased slightly in 1988. Second, to prevent domestic feed processors from importing cheap soybean meal, they must purchase a given amount of meal on the domestic market for every ton that is imported. For example, in 1989 the government required two tons of meal purchased on the domestic market for every ton imported.

Thailand does not subsidize its agricultural exports. On the contrary, agricultural exports are often taxed, thus depressing farm-gate prices well below border prices (USDA 1988). This is especially the case for rice, for which the farm-gate price in the past has ranged from 20 percent to 80 percent of the border price as a result of the export tax (Lim et al. 1980).

Impacts of GATT on Thailand's Agricultural Sector

Because Thailand's agricultural sector is, for the most part, market oriented, there are few policies that would have to be altered to comply with a GATT agreement. Specifically, government policies toward rice, maize, cassava, and poultry would not require any adjustment.

Two products that would require policy adjustments are soybean products and sugar. For soybeans, the most notable violation of a GATT agreement is the import quota. To comply with an agreement, the quota would need to be converted to a tariff and then be reduced gradually over time. Furthermore, the requirement for feed processors to purchase domestically produced soybean meal would have to be eliminated because this requirement is an effective quota. On the production side,

soybean price supports and input subsidies would also have to be eliminated. Similarly, government price supports and input subsidies for sugar would have to be eliminated.

Conclusions

Because Thailand is a major exporter of agricultural products, it stands to benefit greatly from an agreement that liberalizes agricultural trade. Assuming that such an agreement would result in increased international trade of agricultural commodities and higher world prices, Thai agricultural exports and foreign exchange earnings would also increase, given that agricultural production continues to meet domestic needs and provide a growing exportable surplus. Increased agricultural export earnings would likely dwarf any increase in expenditures for agricultural imports, specifically increased imports of soybeans and soybean meal.