



Agricultural Policy Development in Thailand

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INTRODUCTION

This paper examines the policy transition in various stages of Thailand's economic development. The agricultural and agro-processing sectors are one of the leading developmental sectors in Thailand; which can change and affect the whole economy of the country.

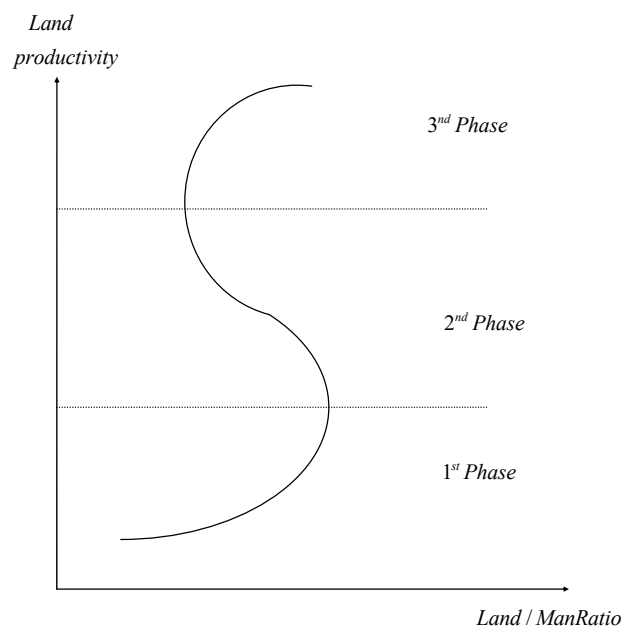
To understand this issue, it needs to clarify stage of Agricultural Development in Thailand that relates to internal and external economic environment such as domestic policy, trade issues, etc. Although, Thailand has been trying to promote trade liberalization through multilateral or bilateral trade negotiations, the country expects that agricultural and food processing industries will get the larger benefit from trade liberalization because of its' strong competitiveness while the industrial sectors such as electronic appliances, petroleum chemical, textile industries will have only the smaller benefits from it. On the other hand, there are several opinions that Thai agricultural sector has been losing comparative advantage or global competitiveness in the process of economic development.

Current Stage of Agricultural Development in Thailand

In general, when we look at the pattern of agricultural development, it can be largely affected by the ability of its production elements. According to Yamada (1992), the existence of an "S-curve development pattern" has been revealed among the labor ratio and land productivity. Fig. 1 sketches an overview of how these changes in Thailand's agricultural development process an "S-curve" in terms of increases in productivity and land used. In traditional agricultural economics, productivity increases which are of necessity are relatively small, but productivity and consequently GNP growth "take off" (Rostow, 1960). In Fig. 1; at the first stage, while the extensive expansion of cultivated land progresses, and land to labor ratio increases, increased land productivity is not observed. In the second stage, the cultivated land reaches its limit of expansion; the rate of increase in labor force is exceeded in comparison, and the land to labor ratio decreases; but through advances in technology for efficient land use, land productivity increases. Moreover, in the third stage, due to an outflow

of agricultural labor force to other sectors resulting from economic growth, the land labor ratio increases, and not only land productivity, but also labor productivity increase.

Fig. 1 “S-shaped” Agricultural Development Pattern



In the case of Thailand, more than 80 percent of cultivable agricultural land has been used for producing the agricultural product. However development of non-agricultural sector has dramatically improved during this time. As a result, it caused the labor mobility from agricultural sector to non-agricultural sector which has high returns for labor. In this stage, the technology for producing in agricultural sector has been employed with land use. Therefore, the land and labor ratio has increased sharply.

According to Shintani [2003], the land productivity of Thai agriculture continues to increase due to development of land saving technology and the man/land ratio turns down due to the progress of labor saving technology induced by labor shortage. This finding suggests that Thailand is at the third stage of an S-shaped agricultural development pattern.

Shintani also found that marginal labor productivity is very close to the wage rate of agricultural hired labor. These findings imply that Thai agriculture is full of the causes of losing comparative advantage. Evidences that support this study can be seen from production cost of Thai agricultural product continue to increase over a decade.

Agricultural Policy Transition in Thailand

The study of Anderson and Hayami(1986) said about agricultural policy during the economic development of many developing countries is that a key element in the explanation for the rise in levels of agricultural protection is the changing role of agriculture as economy grows. The economic theory suggests that many things are likely to occur in the consumption patterns, production structure and trade specialization of an economy as it grows. First, the decreasing importance of food prices in household budgets as income grows ensures that political pressure from consumers and industrialists for low food prices diminishes with economic growth. Second, the declining relative importance of agricultural production and employment as the economy's industrial and service sectors expand makes it less and less costly politically for the government to succumb to farmers' demands for assistance measures designed to reduce the pressure for structural adjustment. Moreover, the demands from farmers for such policies increase markedly once an economy has reached the point where the incentives for intersectoral adjustment are such that the absolute number of farmers begins to fall. And third, there is tendency for growing economy to lose their comparative advantage in agriculture. This provides increasing scope for assisting farmers through covert policy instruments, such as import controls, that do not require budgetary outlays, and for justifying rural assistance on the grounds of food security.

Moreover, the study of Anderson and Hayami has been concluded about the changing role of agriculture in an open and growing economy in two important aspects. First, while primary production is typically the most important export sector in the countries, agriculture may eventually become an import-competing sector, particularly if the rate of technological change in agriculture is comparatively slow. The prospect of becoming a net food importer is more likely, and will occur earlier, the more densely populated the economy and hence the less scope there is for expanding food production. It is also more likely to occur earlier and faster as this economy grows relative to the rest of the world. The second conclusion is that agricultural employment and output are likely to grow comparatively slowly as the industrial and service sectors expand, so that agriculture will become less significant in growing economy. Indeed, the absolute number of people employed in agriculture may eventually decline.

As we mentioned before, this phenomenon has been confirmed by the policy transition hypothesis that increase in agricultural protection levels in developed and some developing countries seems to be associated with a decline in a country's agricultural comparative advantage and a contraction of agriculture's importance in the economy. A decline in agricultural comparative advantage would impose resource adjustment costs that would have to be shouldered by agricultural producers and hence, would increase the demand for agricultural protection aimed at reducing the need for adjustment. A decline in relative importance of the farm sector would lessen the significance of and hence the opposition to agricultural protection, because its cost per non-farm household would constitute an ever-smaller protection of the household's raising income. Thus, in the process of economic

development, both the demand for and supply of agricultural protection are expected to shift to the right, leading to rising levels of agricultural protection over time (Honma and Hayami, 1986). Therefore the hypothesis can be said that comparative advantage weakens as economy grows, the higher the protection level.

As a relatively small and open economy, Thailand is highly exposed to external economic force. Agriculture as a low yielding sector requiring long term major capital investment was unattractive to the private sector and government alike during the pre-1997 economic growth. Just two decades earlier, farmers were encouraged through irrigation development to plant a second rice crop. By the 1990s, farmers were encouraged to plant crops with lower water demands as priority for water shifted from agriculture to electricity and metropolitan supply. So much has changed to past assumptions of rural inequities being of little threat to political stability. Past policy that was biased against agriculture, apparent resilience to a poor regulatory environment, the yet informed disadvantage rural dwellers, a changed natural environment, and a continuing downward trend in commodity prices, are now increasing concern of instability in rural areas.

The forces on Thai agriculture now are global in the forms of market pressures and foreign influence associated with economic stabilization. Thailand's comparative advantages in agriculture are difficult to determine at present, as wage rate, availability of capital, adaptability of technologies, and confidence of producers are adjusted to post-crisis norms. Trends suggest that horticultural and livestock products will be of importance, while traditional crops, particularly rice, will continue to decline. Future uncertainties exist in environmental and social policies, outcome of domestic and regional competitions for water, returns from flood irrigated agriculture, and the reliability of water catchments. These might only be reduced by the association of lower production costs, not only with yield increases, but with increased quality, and the development of new processed products.

The brief history of Thai agricultural policies after the World War II

Thailand had adopted import substitution policies from 1960s' until 1980s' when the industrial policies have been switched over to the export oriented industrialization policies. During the period of import substitution policy, Thai government burdened export tax on primary goods such as rice, rubber, tin etc. while she protected import substitution industries by import tax and non-tariff barrier. Such industrial and trade policies caused the deficit in balance of payments and the currency overvaluation. The export tax and currency overvaluation had negative effects on agricultural development through downward pressure on farm gate price (Siamwalla and Setboonsarng[1991]). As for sugar, the government continuously adopted protection policies while the level of protection had been reduced as the industry had developed. Since late 1980s' when the switchover of industrialization policy from import substitution to export oriented took place, the agricultural policies as above mentioned have started to be liberalized.

The reduction of government intervention in Thai agriculture can be better understood through a little more examination of the policies for key commodities: rice, rubber, maize, sugar.

Rice;

The government intervention in rice began after WWII, when, in response to an Allied demand that Thailand pay its war indemnity in rice, the government imposed a rice export monopoly. Over time, the taxation and multiple exchange rate systems evolved into the specific export premium and other forms of export taxation were added. The government system of export barriers included the export premium, an *ad valorem* export duty, a rice reserve requirement for exporters as a measure to subsidize domestic consumers and quantitative restrictions on export (Siamwalla[1975]). These export barriers contributed to providing low domestic price of rice with consumers, stabilizing domestic prices and government revenue.

The export barriers have been maintained until 1980s' when the government policies began to shift away from pro-consumer slant (Siamwalla *et al.*). In 1982, the government did away with the cheap rice program. And in 1983, when the world price of rice trended downward, the government began to establish price support policy ("Paddy mortgage program") for farmers. In 1986, for the first time since WW II, the Thai government lifted all the export restrictions.

The paddy mortgage program, which is pro-farmer and pro-miller slant, has been maintained until now. The farmers who participated in this program, can be given a farm loan by BAAC (Bank of Agricultural Cooperative) mortgaging their harvests with BAAC. And when the market price is higher than the support price, the farmers can repay the loan by selling the mortgaged paddy at the market price, while when the market price is lower the support price, the farmers can sell the mortgaged paddy to BAAC at the support price. The number of the participants changed from 111,117 in 1998 to 683,769 in 2002 depending on the market price.

Rubber;

The government collected two types of taxes on rubber: duty general revenue and a small levy to finance a rubber-replanting program. But there was no export quota to be given out, and rubber alone among leading agricultural commodities in Thailand, required no licensing.

In 1981 when there was a sharp fall of rubber price, the tax rates were brought down due to the pressure by Parliament members from rubber growing regions (Siamwalla *et al.*).

Since then, when the rubber price has been at the lower level, the government has implemented the price support program for the producers to support the rubber sector characterized by small land holders.

Maize;

Thai government intervened in maize between 1965 and 1981 to maintain Thailand's then largest markets, Japan and Taiwan. (Siamwalla *et al.*, pp.246-247).

In the early 1980s' when the world prices of leading agricultural export commodities were declining, the Thai government began to implement the maize mortgage program similar to rice mortgage program in order to support the maize producers and maintained it until the present.

In the latter half of 1980s' when the world prices rose up, maize and maize substitutes were liberally imported with a surcharge. To cope with this, the government imposed the import tariff on them until 1989.

Sugar;

Thai government's approach to sugar has been quite different from its approach to rice. Thailand imported sugar until 1960. Since 1961, it had protected the sugar industry to attempt at import substitution. Even after the sugar industry became an export industry in early 1960s', the government heavily protected it. For the purpose of protection, the government used price policy instruments for sugar industry such as cross-subsidization from high-priced domestic market to support losses of sugar millers in the export market and export subsidy. To implement the policy, the government closely supervised production and distribution of sugar so that sugar would not leak into the domestic market. This policy has still been maintained. But the export subsidy has been reduced as the export of sugar has expanded.

CONCLUSION

Thailand has passed the turning point and come into labor shortage economy. This fact suggests that agricultural sector has been losing its comparative advantage. The agricultural policy transition hypothesis which indicates that the relative decline of comparative advantage and importance of agriculture lead rising level of protection or depressing level of surplus extraction.

In our study, the agricultural policy transition hypothesis is not supported in the case of Thailand. We found that for rice, rubber and maize, there was the tendency for the government to decline the level of surplus extraction (or to raise the level of protection) as its comparative advantage gained while relative decline of agriculture's importance reduce the level of surplus extraction (or to increase the level of protection).

This implies that if agricultural commodities still have comparative advantage but are losing it, government may be forced to begin agricultural protection policies because its importance declines as economy grows.

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