PUBLIC SECTOR INTERVENTIONS IN THE RICE SECTOR IN THAILAND

Charmaine G. Ramos
Institute for Popular Democracy

INTRODUCTION

The market for internationally traded milled rice has always been typified as "thin"—a market with relatively few buyers and sellers and where prices are thus prone to volatility. In 2000, 70 percent of the total volume of rice exports in the world was supplied by only four countries, namely: Thailand (28.5 percent), Viet Nam (15.1 percent), USA (13.7 percent) and China (12.8 percent)[1]. Meanwhile, demand, though not as concentrated—in 2000, 60 percent of world imports was accounted for by demand in 25 countries—is highly segmented by type, quality and form. Moreover, only 4 percent of world production is internationally traded, compared to 12 percent for maize and 18 percent for wheat (FAO 2001).

The diminutive share of internationally traded rice in relation to the total volume produced induces the potential for highly variable world prices. Shifts in exportable supplies in the major exporting countries and/or domestic production shortfalls in large consuming countries could result in price volatility. For example, a drastic decrease in the supply of rice from Thailand, say, due to an outbreak of a plant epidemic, could lead to a skyrocketing of world prices. This, in turn, could have significant welfare effects and induce inflationary pressure in small cash-strapped country rice-importing countries that depend on the international market for their staple needs.

In this setting, the importance of Thailand as the world's top rice exporter cannot be overstated. The present health and future prospects of the rice sector in a major rice-exporting country like Thailand are important pieces of information not just for policy makers, scholars and advocates in Thailand but also for those in the Philippines and everywhere else in the world where rice is the central staple commodity. The public policy choices Thailand makes in governing the rice sector will have real implications for people in all parts of the world where rice sustains lives as a means of rural livelihood, as food or as both.

1. Computed from FAOStat (2003) data on paddy production available on the web: http://apps.fao.org/page/collections?subset=agriculture

This paper investigates the current conditions of the rice sector in Thailand and critically explores the public policies that shaped the development of the rice sector. *Part 1* shows the current sectoral situation: Thailand's rice production and trade performance and an overview of the institutional bottlenecks that may strain production in the future. Two types of policies are expected to influence the shape and performance of the sector: implicit and explicit policies. "Implicit policies" are broad macroeconomic and development policy handles that are not necessarily designed for the rice sector alone but have different and substantial bearing—sometimes in a magnitude greater than those engendered by explicit policies—on the performance of the rice sector. "Explicit policies" are sector-specific policy handles that are implemented by the government with the overt goal of shepherding the rice industry. *Part 2* explores the former: the broad policy environment that contextualizes the sector's performance. *Part 3* describes the latter: the specific public policy handles that were employed or are being employed by the Thai government to manage and herd the development of the sector. *Part 4* synthesizes the key aspects of public sector interventions in Thailand's rice sector and their possible implications for a country like the Philippines.

PART I

THE STATE OF THE THAI RICE SECTOR

Overview

Rice is the principal agricultural commodity of Thailand. As of 2000, it continued to dominate the use of agricultural area, with area harvested to rice (9,970 has.) equivalent to 53 percent of the total agricultural area (18,800 has.) (FAOStat 2003).

The share of the population directly involved in rice cultivation has been steadily declining since the 1970s, a trend that goes hand in hand with industrialization and the declining share of employment generated by the agricultural sector as a whole. Isvilanonda and Hossain (2000) say that the share of agricultural labor in total labor force declined from 72 percent in 1971–1975 to 60 percent in 1991–1992. Between the same time periods, workers engaged in rice cultivation deteriorated from 51 percent to 36 percent of total labor force. One can only imagine further declines in 2002, since agriculture generated only 45 percent of total employment (NSO 2002).

However, as more than 90 percent of Thailand's poor live in rural areas, the agricultural labor force may be seen as among the most vulnerable sectors in the country. Eagleton (2001) surmises that a significant number of rice farmers can be expected to account for FAO estimates of the chronically undernourished, which stands at 25 to 30 percent of Thailand's population.

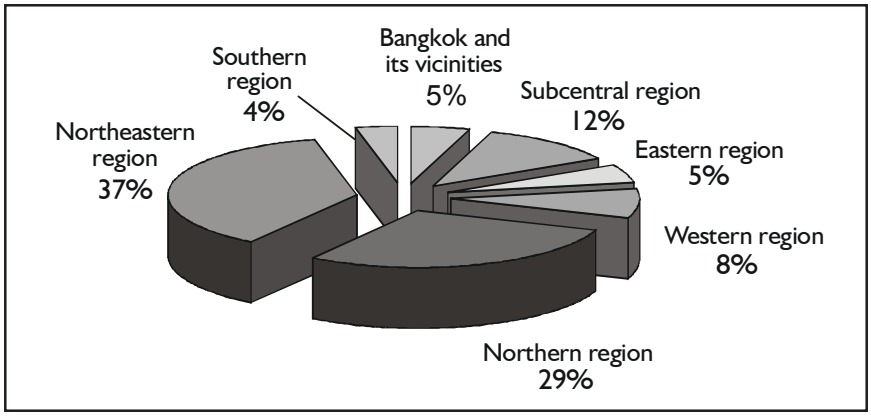
The smallholder rice farmers' vulnerability is traced by Chusakul (1996 in Udomkit undated) to a production system that has turned rice into a cash crop, a system that is said to mire farmers in a cycle of poverty and debt. Thai rice farmers typically turn to middlemen for multiple functions: simultaneously as credit and financing sources, as owners of storage facilities and as paddy buyers (Udomkit undated). This weakens the negotiating leverage of the typical Thai rice farmer.

Rice in Thailand is mostly grown under rainfed conditions, with the rainfed ecosystem accounting for over 80 percent of total rice area. (Isvilanonda and Hossain 2000). FAOStat (2003), estimates irrigated

land at about 4.98 million hectares in 2000. Dry season rice, which could be presumed to be grown in mostly irrigated lands, accounted for about 21 percent of production in 2000 (NSO 2002).

Half of the national rice area is accounted for by the northeastern region, where single-cropping is predominantly practiced and mostly traditional high-quality rice varieties are grown. Here, average rice yield is 1.7 MT/ha. Meanwhile, commercial modern rice varieties are grown in the central plain and lower north regions, where access to irrigation facilities is more pronounced and average rice yield is 2.0 MT/ha in the wet season (rainfed) and 4.3MT/ha in the dry season (irrigated) (Isvilanonda and Hossain 2000). Figure 1, which shows the geographic distribution of rice production in 2000, exhibits the dominance of the northern and northeastern regions in the total volume of rice produced in Thailand.

Figure 1. Regional Distribution of Paddy Production: 2000



Source: Office of Agricultural Economics, Ministry of Agriculture and Cooperatives 2001

Owing to the country's ecological endowments and its the historical development[2], Thailand has a high share of paddy field. This in turn, has important ramifications for the agrarian structure in rural Thailand. In particular, it accounts for the dominance of peasants and small family farms as the main organizations of production. Moreover, because of the abundance of land endowments, tenancy is not so prevalent. The ancient

2. Hayami (2000) suggests that Thailand, Indonesia and the Philippines capitalized on the abundance of natural resources and low population densities to propel their early development. This is akin to Myint's "vent for surplus" theory of growth where international trade is utilized to channel hitherto unvalued and/or unused natural resources. Unlike Thailand and Indonesia, where tropical rain forests were the base of such growth, the opening of the Chao Phray Delta for rice production through the building of canals in 1855 was the basis of the "vent for surplus" growth of Thailand. Due to this type of development, Thailand is characterized by the unimodal distribution of peasants or family farms and the incidence of large estate farms and plantations are insignificant.

Thai custom where every man has the right to take as much land from the state as he and his family could cultivate is also said to have lent to this phenomenon. Tenancy is only significant in the Central Plains, where land concessions were granted to private canal builders (Hayami 2000).

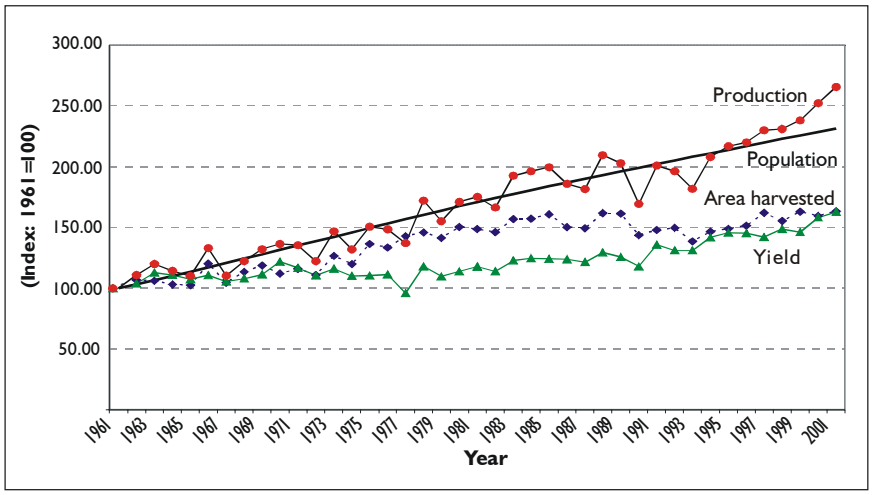
Production and trade performance and their growth drivers

In 2000, total rice production was about 25 million metric tons, of which about 6 million metric tons were exported. The sector bought in almost $2B in foreign exchange earnings in 1999, representing about 2.4 percent of Thailand's total export earnings (FAOStat 2003).

Figure 2, which tracks population growth vis-à-vis the growth of rice production, area harvested and yields, shows that domestic production has generally kept pace with population growth. Furthermore, it shows that from the mid-1990s onwards, production growth even outpaced population growth.

Between 1980 and 2000, Thailand exported an average of 20 per-

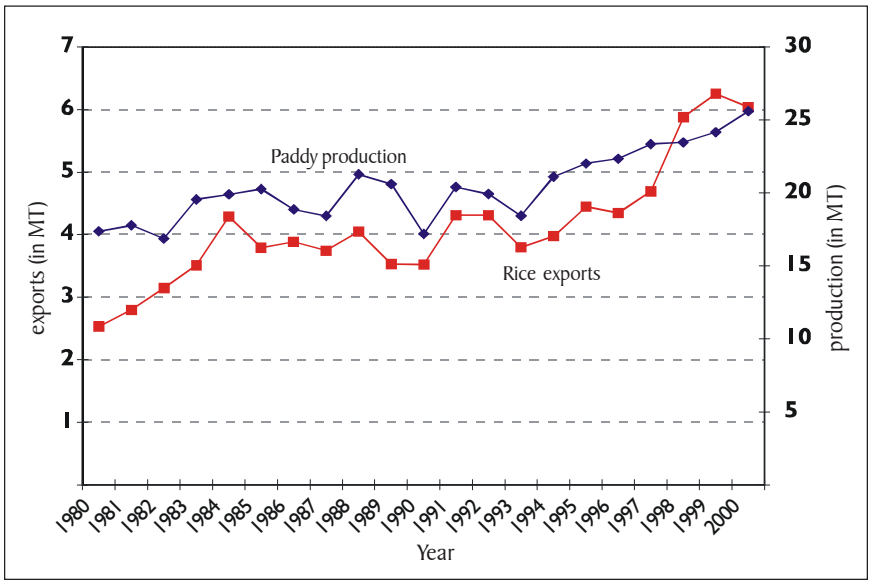
Figure 2. Long-term Trends in Population, Paddy Production, Area Harvested and Yield



Source: FAOStat, 2003

cent of domestic production. Figure 3, which depicts volumes of domestic paddy production and rice exports, suggests that export growth generally tracked production growth between 1980 to 2000, except in the mid-to-late 1990s, when export growth appears to have outpaced domestic production growth.

Figure 3. Volume of Paddy Production and Rice Exports



Source: FAOStat, 2003

Thailand's burgeoning exportable surplus is directly attributed by Nipon (1996) and Poapopsangkorn, et al. (2002) to the diminution of domestic per capita rice consumption. This diminution meanwhile is in line with the changing industrial structure of the Thai economy and corollary improvements in household incomes.

Thailand is known for exporting high-quality, long-grain, white rice, which usually commands a substantial price advantage over lower grade varieties. This partially explains the low adoption rate of modern, high-yielding rice varieties in Thailand. Table 1, which depicts the major export markets of Thai rice in 2000, indicates the USA, Hong Kong, China, Singapore and Malaysia—known high-quality markets—together account for 35 percent of the total value of Thai rice exports.

Land utilization was the key force driving the long-term performance of the sector before the 1980s. Hayami (2000) analyzes long-term trends in cropland areas[3] in Thailand, Indonesia and the Philippines and posits that, based on the data, Thailand has been endowed with relatively favorable conditions for expanding land cultivation until recently. For example, Thailand's cropland per capita is more than twice as large as in

3. Refers to the sum of arable land, the area used for annual cropping and the area used for permanent crops.

Table 1. Destination of Rice Exports

	in metric tons	in percent
USA	465.6	7.51
Hong Kong	359.2	7.50
China	258.1	7.39
Iran	171.4	7.13
Singapore	129.3	6.55
Malaysia	114.5	6.16
South Africa	112.7	5.02
Indonesia	111.9	2.67
United Arab Emirates	108.0	1.80
Other countries	94.3	48.27

Source: National Statistics Office, 2003

Indonesia and the Philippines and increased by 60 percent between 1965–1996 (compared with 20 percent in Indonesia and 40 percent in the Philippines). It is no wonder that crop areas grew at an average of 1.9 percent between 1968-1998, accounting for 75 percent of agricultural growth (Isvilanonda and Hossain 2000).

However, land as source of growth has since dried up. Figure 2 shows that area harvested to rice has relatively stagnated beginning in the 1980s. The continuing rise in Thailand's exportable surplus probably has more to do with the changing consumption patterns in Thailand and abating population growth rather than production-side impetus.

Key production-side bottlenecks

The sustainability of the Thai rice sector's commendable production performance is threatened by both external and internal factors. Aside from the exhaustion of land frontiers, the sector faces the following threats that have the potential to erode the competitive edge of Thai rice exports.

Low productivity. The slow growth of rice productivity in Thailand can be traced to the country's pattern of agricultural development. In particular, Hayami (2000) opines that it results from the major expansion of the cultivation frontier in the Northeast, which is characterized by poor soil conditions and unstable rainfall patterns. It must be also noted that in this region, the diffusion of modern high-yielding varieties has also been slow. In general, Thailand's low productivity is related to the relative unimportance of the irrigated ecosystem in Thailand. More-

over, the export market gives a high premium to the quality of low-yielding varieties, decreasing further incentives for the adoption of high-yielding varieties. Thailand's average productivity in 2002 was 2.72 MT/ha, compared to Vietnam's 4.15, China's 6.26 and USA's 7.41 (FAOStat 2003) The key challenge for Thailand is to increase productivity of traditional high-quality varieties, which dominate production.

Water shortage. Water scarcity has been identified as a major constraint to further increases in production as it further inhibits the propagation of modern rice varieties. Thai agriculture is currently dominated by water-intensive produce, including rice, flowers and vegetables. Coupled with the pressures of urbanization and industrialization on water supply, this has resulted in intense competition for scarce water resources. Poapongsakor, Ryhs and Tangjitwisuth (1998) trace the problem of water shortage to: (1) the long term decline in rainfall; (2) deforestation inducing the reduction of "sideflows" into the Chao Phraya basin's tributaries and irrigation canals; (3) the drastic reduction of water available in the Central Plain, as the rapid development of the North tripled its water use and (4) a sectoral allocation of water in favor of urban and industrial areas.

Labor scarcity. A declining population growth rate and an increasing demand for labor in the industrial sector both conspire against the agriculture labor market in Thailand. The rapid growth of the non-agricultural sector since the late 1970s and the widening disparity between the development of urban and rural areas have led to rural-urban migration and an absolute decline in the agricultural labor force. Isvilanonda and Hossain (2000) trace the decline back to the 1970s in the Central Plains, which, due to its proximity to Bangkok and the development of transportation infrastructure, experienced substantial labor migration. They say that other regions followed suit in the early 1980s. Poapongsakorn, et al. (1998), meanwhile, also cite the increase in enrolment rates among those between the ages of 15 and 24 as another factor that led to labor scarcity in the agriculture sector.

This diminution of the agriculture labor force has caused wage rates to increase faster than rice prices, thereby inflating the cost of production. Farmers responded to the labor supply shortage by mechanizing farm operations, which in turn further contributed to a reduction in labor use. The scope for further reduction in cost through mechanization is drying up, however, as most of the agricultural activities are already mecha-

nized, except in northeastern areas (Isivilanonda and Hossain 2000).

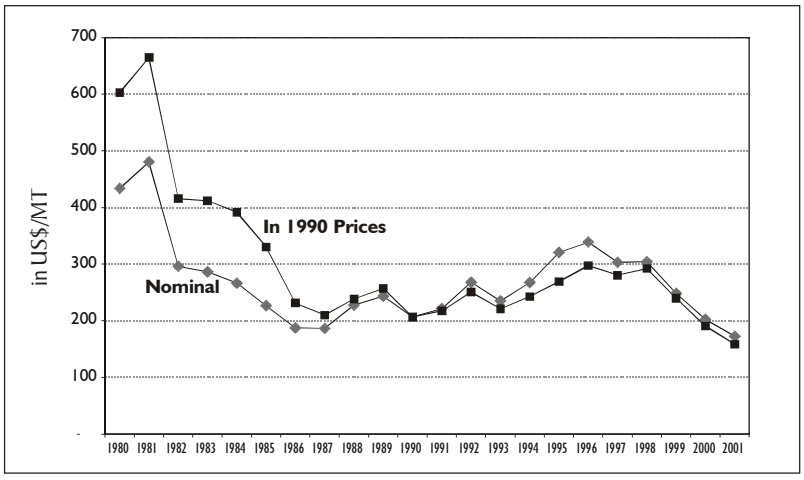
The challenges of competing in the international market

Thailand, by virtue of its huge share in internationally traded rice, is in a relatively unique position of being able to influence international market prices. But the structural bottlenecks the Thai rice industry faces, coupled with the stiffening competition provided by countries like the US (where subsidies are substantial) and Vietnam and China (where labor is cheap) pose very real threats to the ability of the sector to compete internationally.

The social costs of falling international rice prices cannot be overstated in a rice-exporting country where poverty is mostly a rural phenomenon. For example, the drop in international prices of rice and other Thai agricultural tradeables in the 1980s coincided with an increase in poverty rates in 1985, a reversal in poverty trends after more than two decades of decline, as rural incomes also declined.

Figure 4, which shows trends in world rice prices from 1980–2001, depicts a clear trend of dwindling international prices, with the most dramatic decreases happening in the 1980s. And while prices seem to have recovered an upswing trend late 1980s to the late 1990s, there appears to be a pronounced decline in prices from 1998 onwards. What is good news for rice-importing countries is bad news for exporters. To arrest the downward spiraling of prices, Thailand has spearheaded cross-country discussions among rice exporters in Asia in what is seen as a move

Figure 4. World Price of Rice, Thai 5% FOB



Source: WB, 2003

towards the cartelization of international rice trade. This will be discussed further in part 3 of this paper.

Thailand continues to be among the lowest-cost producers of rice in the region. An IRRI survey shown in table 2 and released in 2000 bears this out (Tolentino 2002). However, spot market prices in March 2003 indicate that countries like Vietnam are proving to be increasingly competitive, especially in the market for low-quality rice. Table 3, which depicts the cash price market for rice in Asia featured in a website[4], is an example of this.

Table 2. Annual Costs of Production, Selected Asian Countries 1999
(US$ per hectare, 1999, IRRI survey)

	Central Luzon, Philippines	Central Plain, Thailand	Mekong Delta, Vietnam	West Java, Indonesia	Zhejiang, China
(cost per hectare per year)					
Labor wages	501	207	435	472	404
Hired labor	415	95	60	328	99
Family labor (imputed)	86	112	375	144	305
Fertilizer	139	125	95	73	203
Machine rental and fuel cost	109	147	40	44	32
Pesticides	47	91	44	65	52
Seeds	63	61	56	9	40
Other costs	29	4	12	7	0
Total costs per hectare per year, US$	888	636	683	670	731
Total costs per ton of paddy US$	96	59	74	69	58
Costs as % of Philippines cost, ton	1	0.79	0.77	0.75	0.82
Costs as % of Philippines cost, ha.	1	0.61	0.77	0.72	0.61
(% of total costs per hectare)					
Labor	56	33	64	70	5
Fertilizer	16	20	14	11	2
Machine rental and fuel cost	12	23	6	7	4
Seeds	7	10	8	1	5
Pesticides	5	14	6	10	7
Other costs	3	1	2	1	0
(Not included: land rental)					

4. www.orya.com

Table 3. Cash Market Prices for Rice as of March 19, 2003

Thailand	**in metric tons**
100%B	198
5%	193
10%	190
15%	187
25%	172
35%	169
Jasmine	435
Vietnam	
5% DP	176
5%	174
10%	170
15%	167
25%	162

Source: http://oryza.com/prices/asia.shtml

PART 2

STRATEGIC DIRECTION OF AGRICULTURAL POLICY

Structural shifts in agriculture

The condition of the Thai rice industry is best analyzed in the context of structural shifts in the Thai agriculture sector. These shifts have been induced by changing factor endowments, partially attributable to the natural process of industrialization and development, as well as macroeconomic policies.

The structural shifts in the Thai agriculture sector can be summarized thus:

Declining though still substantial share of agriculture in the economy. Table 4 depicts the declining share of agriculture in employment, real GDP and the value of exports.

Table 4. Share of the Agriculture Sector in GDP, Employment and Total Exports: 1985 and 2000 (in percent)

	1985	2000
Employment	68.37	48.77
GDP	19.08	11.37
Exports	59.97	22.28

Source: ADB (2002)

Increasing share of agriculture exports and high-value added production in agricultural gross value added (GVA). Meanwhile, structural shifts are occurring even within the agriculture sector. Table 5 shows the increased shares of livestock, fisheries and processed agricultural products in agricultural value added between 1985 and 2000. Though the share of crops has decreased, it still accounts for a lion's share of value added. Within crops, paddy, cassava and maize have had declining shares in GVA while rubber, sugar and other crops have significantly increased.

Declining share of agriculture exports in total exports but diversifying agriculture export product base and markets. Rapid industrialization is said to be the root cause of the declining share of agriculture in total

Table 5. Share of Agricultural Subsectors in Gross Value Added: 1985 and 2000

	1985	2000
Crops	64.6	62.0
Livestock	9.1	9.7
Fisheries	8.9	14.0
Forestry	5.0	1.0
Agricultural services	4.1	1.9
Agricultural processing products	8.3	11.4

Source: Poapongsakorn, et al (2002)

exports. It should be noted however that although its share in total exports is declining, the value of agricultural exports increased at an average rate of 10 percent in the last two decades, as a testament to the continued importance of agriculture in the economy.

Moreover, table 6 shows the diversification of Thailand's export base given the increasing share of fishery, paper products, rubber and animal products in total exports. Moreover Poapongsakorn, et al (2002) attest to the opening up of new export markets for Thailand. While US, Japan, EU and ASEAN nations account for the majority of exports, Thailand is said to have been gradually expanding export opportunities towards a number of Muslim countries.

Table 6. Share of Agricultural Subsectors in Exports (in percent)

	1985	2000
Rice and rice products	20.0	11.1
Food crops, cassava, sugar and their products	29.2	8.2
Oil seed and vegetable oil	0.9	0.5
Fibre crops	4.3	2.9
Garden crops, fruits, spices and misc crops	6.5	7.0
Tea and cofee, tobacco	3.0	3.1
Rubber and products	12.8	17.0
Animal and products, milk	4.8	9.3
Fertilizer and pesticides	0.1	0.4
Fishery	14.5	28.3
Paper, wood, forestry and others	3.9	12.1

Source: Poapongsakorn, et.al. (2002)

Rising agricultural imports, but mostly of inputs and luxury food items imports. Owing largely to the growing importance of agro-industrial exports and the rising standards of living, significant shifts are occurring in

the country's import structure. Table 7 depicts the value of agricultural imports, by subsector in 1995 and 2000. Inputs for the livestock industry show significant year on year change; including oil seeds (Thailand is protein feed and vegetable oil-deficit) animal feeds and animal products. Because of higher incomes, increased consumption of liquor, wheat, malt, vegetable oil confectionery and seasonings is also seen.

Table 7. Value of Agricultural Imports, 1995 and 2000 (in thousands of baht)

	1995	2000	% change
Oil seeds	1,778,189	12,154,204	583.52
Pesticides	3,626,800	7,762,685	114.04
Tobacco	2,505,560	4,870,273	94.38
Fishery products	18,777,198	30,978,533	64.98
Animal feeds	12,358,060	19,546,411	58.17
Animal products	15,262,496	21,657,649	41.90
Fibre crops	23,676,305	32,941,497	39.13
Food crops	9,785,711	13,416,297	37.10
Paper and paper products	32,494,529	39,413,053	21.29
Fertilizers	15,812,074	18,229,967	15.29
Wood and wood products	29,356,050	16,509,031	(43.76)
For consumption			
Garden crop and products	116,843	2,497,455	2,037.45
Other food products	1,666,068	3,358,331	101.57
Sugar and sugar products	392,322	736,184	87.65
Vegetable oil	1,526,380	1,630,819	6.84
Spirit and beverages	3,988,737	4,217,384	5.73
Fruits and fruit products	2,764,436	2,666,878	(3.53)

Basic source of data: Agricultural Statistics of Thailand in Poapongsakorn (2002)

Stylized role of agriculture in development

The shifts outlined above can be traced directly to the type of development Thailand is undergoing.

The stylized role of the agriculture sector in economic development in Thailand is widely written about. In these writings, it is widely held that the sector played an important role in economic growth until the 1980s. In the 1960s, the sector's phenomenal contribution to the economy is attributed to the robust growth in the sector due to the utilization of

the vast land frontiers and the benefits finally being reaped from public investments in irrigation facilities. Meanwhile in the late 1970s, as international prices for agricultural commodities soared, agricultural exports fueled the country's foreign exchange earnings.

Continuing with the above stylized storyline, and as has been posited in part 1 of this paper, land abundance underscored agricultural growth and policy until the 1980s. Siamwalla (1991) summarizes the consequences of land-abundant agricultural growth thus:

- It gave Thai agriculture a natural comparative advantage in agriculture.
- Due to robust world prices in the 1970s, this comparative advantage did wonders for the national economy.
- Motivated mainly by security considerations, the Thai government invested heavily in roads throughout the 1960s and 1970s, and this added further to the competitive edge of the agriculture sector.
- The green revolution, which played a major role in agricultural growth in much of Asia, did not play as big a role in Thailand.
- Land abundance pushed farmers towards mechanization. Thai farmers, having relative larger farm size, required this.

The 1980s saw a dramatic shift in avowed national development strategies, however, which have had important ramifications for the agriculture sector. In the backdrop of this shift are two important developments. First, land was no longer so abundant. Second, massive flows of foreign capital—mostly from Japan—came into Thailand.

This section thus takes off from the 1980s, when government gave up import-substitution industrialization in favor of the export-promotion path. It focuses on the strategic direction of agricultural policy before and after the 1997 Asian financial crisis; the crisis being a watershed in the development of Thai economy as a whole as it gave occasion for the country to review the path it has chosen to take.

Planned agricultural restructuring

Setboonsarng et.al, (undated) opine that the Thai political system has not articulated a coherent and programmatic set of policies towards the agriculture sector as a whole. Except in irrigation, policy pronouncements, say in development plans, were never really carried out. When they are, it is usually in conjunction with other powerful measures such as export taxes and trade restrictions.

The government has historically herded the agriculture sector through three different instruments: through its attempts to manipulate land use, through its expenditure policy and through its pricing policies. The last two will be discussed in part 3 of this paper.

The question of land use has been especially important of late. The Thai agricultural technocracy attributed the agricultural malaise to the oversupply of some commodities. The government tried to address this problem by restructuring production away form those commodities. Through a "planning approach" (Poapongsakorn 2002), the forecast demand for commodities is used to induce farmers to supply the correct amount of production. This is to be implemented through a zoning policy, whose details are yet to be developed at this writing.

In the late 1980s, this approach was already tested. A three-year plan was also devised to restructure Thailand's farming population. The plan aims to reduce-from 4 million to 784,000 hectares-land grown to rice, tapioca, beans and corn and use the freed-up land for the production of more lucrative agriculture products including fast-growing cash crops, fruit trees, and cattle. Three hundred million dollars are said to have been earmarked for low-interest loans to farmers who want to shift commodities, with the Bank of Agriculture and Agricultural Commodities (BAAC), as the lead implementing agency (Udomkit undated). The government tried to "lure" farmers away from growing crops that were deemed to be in excess supply (e.g., rice, cassava, coffee and pepper) through subsidized credit. The program was deemed a failure as it did not have a significant impact on farmers' incomes. The problem was traced to inaccurate forecasts made by the government and its failure to provide technology for production restructuring. Popalngsakorn says lessons from this episode should resonate now that the government is again trying the "planned approach" to agricultural re-structuring.

Trade policy changes

The diminution of the role of the agriculture sector, in terms of output and employment generated, began in the 1980s. Nipon and Poapongsakorn (2002) say that various internal and external factors led to this development.

The slump in agricultural prices beginning in the mid-1980s, the massive debt build-up and the second oil crisis imposed challenges on the rural sector that led to massive out-migration from and increased poverty

in the countryside. The situation was exacerbated by the natural exhaustion of land frontiers.

Meanwhile, resources moved into the tradable industrial sector as capital from East Asia flowed in the 1980s. The agriculture sector bore the brunt of adjustment costs when the Thai capital market was liberalized as resources were withdrawn from the sector and moved into industry and real estate. Moreover, it is credited for:

- the change in composition of agriculture production; seeing to the rise of the nontraded (e.g. fisheries) and high income-elasticity sectors (e.g., livestock) and a decline in rice;
- leading to the labor shortage in the agriculture sector
- leading to increased poverty in the 1980s
- contributing to the water shortage problem.

Many of the production-side bottlenecks in the rice industry thus find resonance in the sector-wide agricultural malaise. In an attempt to address the downward slide of the sector, the Thai government chose to implement major changes in trade and domestic policies. Some of these policy changes are specific to the rice sector and will be discussed at length in part 3 of this paper. But an important aspect of Thailand's policy response to the erosion of the agriculture sector's comparative advantage is embodied by its posturing in relation to trade liberalization and multilateral trade institutions.

In particular, Thailand decided to participate in the Uruguay round of trade negotiations and later on joined the World Trade Organization in 1995. Poapongsakorn (2002) credits this decision as a response to the diagnosis that the world agricultural markets have been depressed by massive subsidies and protectionism in the developed world. In particular, Thai rice exports were seriously affected by the US subsidy paid to its rice farmers under the 1985 Farm Act. Box 1 summarizes Thailand's commitments to the Agreement on Agriculture, the status of these commitments and some of the issues that have cropped up since 1995.

Besides the Uruguay Round, Thailand also joined the Asia-Pacific Economic Cooperation (APEC) and the ASEAN Free Trade Agreement (AFTA) in the late 1980s and early 1990s. In the former, Thailand agreed to the Early Voluntary Sectoral Liberalization (EVSL) initiatives that aimed to liberalize trade in 15 sectors by 2005. In the latter, the government agreed to common preferential treatment for manufacturing products and agricultural trade.

Box 1. Matrix of Thailand's commitments to the Agreement on Agriculture: Status and Issues

Commitment	Status and Issues
Market Access	
• reduction of tariffs lines, resulting in a reduction of 24% over the 1995-2004 period • rise in the share of agricultural tariff bindings from 5% to 100% • reduction of average tariff from 40% in 1995 to 37.8 in 1999 and 32% in 2004, the highest among ASEAN nations. • tariffication of all import quotas for 23 agricultural products	• Tariff reform that began in 1994, and continued on in 1999 and 2000 had the effect of reducing tariff rates ahead of the agreement. Average applied tariff rate for agricultural products decline from 43.1% in 1995 to 32.1% in 1999 and 28% in 2000. • As a result of tariff increases and 10% surcharge on most import items slapped in October 1997, in the aftermath of the crisis, nearly 550 of applied tariff lines exceeded bound rates. Even after tariff reduction in 1999, 85 percent of the applied tariffs that exceed the WTO commitments are in agriculture and fishery. • Thailand has tarrified all of the import quotas for 23 agricultural products into tariff quotas. Out of the 23 product groups, 5 are either inputs used or products for the livestock sector. Thailand has failed to fill import quotas for 14-15 products. Sectors where imports exceed tariff quotas include between 1995 and 2000 include: milk powder, potatoes, maize, soya bean, onion seeds, palm oil, soya bean cake and tobacco. Sectors where the minimum access volumes did not have an effect as no items were imported include: garlic, dried longan, copra, coconut oil, raw silk and milk and flavored milk. Sectors for which imports are less that tariff quotas include: onion and shallots, coconut, coffee, tea, pepper, rice, soya bean oil, sugar and instant coffee • In principle, ASEAN countries are exempted from tariff quotas by virtue of the AFTA. However, many member countries bend the rule by moving some agricultural products into the sensitive list, where the process of tariff reduction may be delayed. In effect, ASEAN members who are also WTO members are bound to comply with WTO commitments. • Thailand still maintains non-tariff measures for certain sector. Specific import taxes are imposed on grains, edible oil, sugar and petroleum products. Product-specific surcharges are levied on corn for animal feed and non-MFN imported soybean cake. Non-automatic import licenses are imposed for the importation of fish meal, gunny bag, jute, kenaf and silk yarn. • Thailand reserves the right to resort to the special agricultural safeguard for 52 tariff lines.

Box 1. (cont.)

Commitment	Status and Issues
Domestic support	
• One of the few developing countries that have notified a significant amount of total domestic support subject to reduction: from 21.8 million baht in 1995 to 19 billion baht in 2004. • Exempt from reduction of spending on Green Box measures with the following schedule: o 1995: 33,595.33 million baht o 1996: 41,143.31 million baht o 1997: 47,595.87 million baht o 1998: 42,825.82 million baht o 1999: 35,948.93 million baht • Exempt from reduction of spending on subsidies for input and production with the following schedule: o 1995: 4,310.38 million baht o 1996: 9,323.35 million baht o 1997: 4,999.69 million baht o 1998: 4,6000.43 million baht o 1999: 3,058.70 million baht • Exempt from reduction of spending on investment with the following schedule: o 1995: 1,051.51 million baht o 1996: 2,893.96 million baht o 1997: 1,902.23 million baht o 1998: 529,28 million baht o 1999: 78.22 million baht	• Total domestic subsidies in Thailand have generally fallen below bound AMS rates, which were purposefully set high by Thai trade negotiators. • Poapongsakom, et. al, (2002) suggest that bound rates may be exceeded in 2001 given the following policies introduced by Thaksin after his re-election: (1) three year debt moratorium for the farmer who borrowed money from the Bank for Agriculture and Agricultural Cooperative and (2) one million baht fund for all villages. Moreover, the government expanded its rice pledging program, more than doubling its level of support on year 2000. These issues will be discussed further in Part 3 of this paper, as these are mostly rice-specific interventions.
Export subsidies	
• None notified	• Rice enjoys subsidy in the form of packing credit facility loans provided to exporters at below-market interest rates and Exim bank loans that finance exports. Both forms of export subsidy are exempt from reduction

Source: Poapongsakorn (2002), Poapongsakorn et. al. (2002)

In the same spirit of frenzied liberalization, Thailand launched major tariff reforms in 1994, even before the conclusion of the Uruguay Round. Since Thai industries were import-dependent, it was perceived that tariff reforms would have the effect of increasing the competitiveness of exports. The reforms had the effect of lowering the average applied tariff rate from 30 percent in 1994 to 17 percent in 1997 and reducing the number of tariff rates from almost 40 to six. The reforms included restructuring tariffs such that raw materials were levied the least tariffs and finished goods the most.[5]

Further rounds of tariff reductions took place in 1996 and resulted in import duties' share in government revenues falling from 19 percent in 1994 to 13 percent in 1997. In the aftermath of the 1997 financial crisis, the government reacted protectively by imposing high tariffs on imported luxuries and a 10 percent surcharge on all goods subject to tariffs of 5 percent or more. But in 1999, the surcharge was abolished and the tariff reform process was re-instituted, with tariff lines covering inputs of Thailand's main industries reduced further. As a result, the average applied MFN tariff was lowered to 17 percent in 1999 and 15 percent in 2000 (Poapongsakorn 2002).

Bubble, bust and the agriculture sector

The strategic prospects of the agriculture sector in Thailand cannot be discussed devoid of the macroeconomic developments that led to the 1997 Asian financial crisis. As has been posited in the beginning of the section, these developments wrought structural implications on the Thai economy that have had serious repercussions on the agriculture sector.

Siamwalla (1999) dissects the impact on the agriculture sector of both the "bubble economy" and its aftermath-the financial crisis that wrought havoc throughout the region. The "bubble economy" refers to the spurt of growth between 1986–1997, fueled by a large inflow of foreign direct investments in the late 1980s, and later on by a property and construction boom in the 1990s. The latter was in turn fed by an expansion of credit made possible by the opening of capital accounts, which enabled Thai entrepreneurs to avail themselves of cheap dollar loans from abroad. This inflow of foreign capital, mostly short-term loans, created a classic "bubble": it jacked up asset (i.e., land and stock) prices, induced a rapid increase in real wages and severely threatened export

5. In particular: tariffs were based on a value-added escalation system, i.e., 0–1% for raw materials, 5% for machinery and parts, 10% for semi-finished products and 30% for protected goods.

competitiveness as the real exchange rate took a dive.

When exports in 1996 took a sharp dip as speculative capital fuelled the bubble, expectations on the ability of the Thai economy to carry on in its high-growth path took a beating. Analysts began to take note of the precarious macroeconomic fundamentals, particularly the high exposure of the private sector to mostly short-term loans, which amounted to about 35 percent of the gross domestic product.

By 1997, caution turned to alarm and what happened next is now widely known. The "Asian miracle" that was Thailand was driven by the influx of foreign capital that went into speculative sectors. When these sectors went bust, bad debts grew; confidence in the Thai baht was lost, and fleet-footed capital went out. Siamwalla (1999) opines that the massive exodus of foreign capital was sufficient to explain the sharp decline in Thailand's 1998 GDP in the order of 8 percent.

The "bubble economy" left its most lasting repercussions on the agriculture labor force. A speculative episode traditionally increases the value of the non-traded sector as opposed to tradables. Labor being "non-traded", real wages increased, especially for university and high school graduates. Poapongsakorn (2002) suggests that intra-family remittances, presumably from family members who found opportunities for wage employment generated by the rapid economic growth, dominated sources of rural income in the boom period. This is in consonance with the exodus of labor from the agriculture sector, especially for people aged 15–34. Much of this departure appears permanent, as it was not reversed even after the crisis.

Meanwhile, the most pronounced repercussion of the burst bubble was in the form of fiscal contraction on agriculture spending, which contracted by 20 percent in 1998. This was in response to the IMF prescription of fiscal restraint. Baht devaluation, on the other hand, lent to improved agriculture export performance—although not in the magnitude expected, as world prices continued to decline.

The most important repercussions of the 1997 financial crisis may well be in the public policy posturing of the Thai government in its aftermath.

Current policy directions

After the Thai economy took a beating in 1997, the agriculture sector was the only sector with a positive growth rate of 1.9 percent in 1998. The Thai economy was forced to generate a current account surplus to

pay for the external debts generated by the property boom. Resources moved back from the non-tradable to the tradable sector. Poapongsakor (2002) says this explains why crops like maize and rice enjoyed greater growth than non-traded and import-competing industries like fisheries and vegetables in the aftermath of the crisis. Agricultural exports became important again.

Trade protectionists gained stronger ground. Heavy opposition from both industrial and agricultural interests groups derailed attempts to implement a second round of tariff reforms in 1998.

To be sure, Thailand continued to streamline trade measures in order to facilitate international trade. Inefficient custom procedures, which have had the effect of acting as non-tariff barriers, were streamlined, resulting in a shorter time for customs clearance and valuation. Tariff reductions continue to be pursued.

What we have shown so far is how the strategic direction of the agriculture sector in Thailand has largely been a function of structural changes wrought by a policy of capital liberalization and the natural processes of industrialization and exhaustion of land frontiers. Since agriculture is an important source of foreign exchange earnings, the financial crisis of 1997 served to underline the importance of rice exports in the overall economic conditions of Thailand.

However, Thaksin's election in 2000 introduces a new complexion to agriculture policy-one that can be traced to the renewed interest in protectionist policies and Thaksin's penchant for populism. The government drastically increased price support measures and used government credit facilities towards populist ends. Among the populist measures are a one-million baht direct transfer to all rural villages, three-year debt moratorium for farmers' debts incurred from the government and the expansion of the government' paddy procurement program. As these measures are mostly direct public sector interventions in rice, they will be discussed at length in the next section.

PART 3

RICE SECTOR-SPECIFIC PUBLIC SECTOR INTERVENTIONS

Rice policy: evolution, features and institutions

Rice policy in Thailand is set yearly by the Committee on Rice Policy, which is headed by the Office of the Prime Minister (usually the Deputy Prime Minister) and made up of the ministers and permanent secretaries of the following ministries: Agriculture and Cooperatives, Finance, Commerce and Interior and the Office of the Prime Minister The annual rice policy outlines the main instruments of intervention that will be used by the government in promoting its avowed objectives.

These objectives have evolved through the years. From the 1950s to the 1980s, the government largely taxed rice exports through four measures: rice premium (a fixed fee on rice exports charged from 1950 to 1986), export duty, quotas and reserve requirements. The rice premium was the primary tool of intervention and was especially important in two ways: (1) as a source of revenues and (2) as a fund to support public support programs for the rice sector. After 1965, when the premium contributed much less to public coffers, the premium performed rice price stabilization functions, largely with a consumerist slant to support the incipient industrialization and urbanization processes (Yamada 1998). Because of Thailand's market power in the international market, export taxation was a particularly expedient way of influencing international market prices. The government did not need public capital for warehouses and transport facilities to influence prices; all it needed was to vary border taxes (Siamwalla, et al. undated). Through export taxation, the government insulated Thai farmers from the instability of world markets. Meanwhile, since it had the effect of decreasing domestic prices, it benefited urban consumers.

Beginning in the 1970s, the government instituted measures with a bias for producers, principally through higher support prices. When world agricultural prices fell sharply in the 1980s, government's first response was to support domestic prices, through public procurement above the market price. However, a mixture of institutional bottlenecks rendered

the policy ineffective. First, the program did not have a coherent organizational framework. The program was run by two agencies under different ministries (Agriculture and Commerce), and leadership depended on the willingness of the incumbent ministers (Poapongsakorn 2002). Second, the purchases were too small to influence prices.

By the mid-1980s, the government ditched both export taxation and public procurement as the main tools of public intervention. The former seemed to be in line with efforts to reduce barriers to trade in general. The rice premium was completely abolished by 1986, amidst strong resistance from interest groups; the premium, after all, was the main source of fund for the Farmers' Aid Fund, which was an instrument used by the government to finance price support programs. Public procurement, meanwhile, was replaced by a paddy mortgage scheme, which will be discussed at length in one of the succeeding subsections.

Box 2 summarizes the thrust of rice policy from 1998 to 2000. The current mix of policy measures show the most recent public intervention tools of choice of Thailand. The specific measures are categorized as "price support", "production support" and "export-related." Details will be discussed in the relevant subsections.

Public spending

Among developing countries and within the Southeast Asian region, Thailand is noted to for its relatively robust public investment in agriculture. Table 8, which compares public spending of selected countries in the region on agriculture as a percentage of total spending and of GDP between 1995–2000, illustrates how Thailand tops most of its neighbors, except Korea. Tinakorn and Sussangkarn (1999) made an international comparison of Thailand's budget allocations, specifically among developing countries, and found that Thai spending on agriculture was moderately above the average.

Criticisms leveled against public spending on agriculture have thus largely been of the following nature. First, there are concerns about specific types of public investments. Second, there are misgivings about the mix rather than the level of spending. These issues can be summarized thus:

Research-related issues. Much of public investment in research has gone into crop diversification rather than rice research. Isvilanonda and Hossain (2000) estimate that the share of rice research institutions in the total budget of the Department of Agriculture[6] declined from an

Box 2. Matrix of "Rice Policy" measures: 1998-2001

1998-1999	1999-2000	2000-2001
Price support		
Bureau of Agriculture and Agricultural Cooperatives mortgage program. Principal BAAC-administered program to support farm prices wherein rice farmers can mortgage their paddy for loans with 3% interest, valued at 90% of government "target prices."	*BACC paddy mortgage program.* (BAAC handled 2.5 million tons of mortgaged paddy.)	*BACC paddy mortgage program.* (BAAC handled 1.5 million tons of mortgaged paddy.)
Export subsidies		
Seed distribution program. Selected farmers and farmers' institution are asked to "produce and sell cheaply high-yielding seeds. Government pays for part of seed production cost to encourage widespread use of such seeds and boost farmers' incomes. *Low interest credit from BAAC* Credit extended to individual farmers and farmers' institutions for production investment.	*Milled rice program.* • Marketing Organization for the Farmers can buy rice not exceeding **250,000 tons.** • Public warehouse Organization can buy rice not exceeding **250,000 tons.** • Department of Agricultural Cooperatives authorized to spend up to **1,500 million baht** to purchase paddy that will be milled by cooperative mills and sold to local market. • Farmer's Association, a unit under Department of Agricultural Extension, can spend up to **200 million baht** to buy paddy. • Ministry of Interior can spend up to **300 million baht** to buy paddy, to be milled and sold to local market. • Royal Thai Air Force received **5 million baht** and the National Security Command/Supreme Command Headquarters, **15 million baht**, to purchase paddy to be milled and resold to its military personnel.	*Milled rice program.* • Marketing Organization for the Farmers can buy rice not exceeding **500,000 tons.** • Public warehouse Organization can buy rice not exceeding **500,000 tons.** • Department of Agricultural Cooperatives authorized to spend up to **1,500 million baht** to purchase paddy that will be milled by cooperative mills and sold to local market. • Farmer's Association, a unit under Department of Agricultural Extension, can spend up to **100 million baht** to buy paddy. • Ministry of Interior can spend up to **300 million baht** to buy paddy, to be milled and sold to local market. • Royal Thai Air Force received **2.5 million baht** and the National Security Command/Supreme Command Headquarters, **10 million baht**, to purchase paddy to be milled and resold to its military personnel.

Box 2. continued

1998-1999	1999-2000	2000-2001
Export-related policies		
	"G-to-G" rice sales. Department of Foreign Trade under Ministry of Commerce can make "G-to-G" rice sales not exceeding 750,000 tons. *Bank of Thailand packing credit.* Bank of Thailand provides packing credit to rice exporters and millers. 20,000 million baht allocated through Exim Bank to liquidated paddy transaction for exporting rice.	*"G-to-G" rice sales.* Department of Foreign Trade under Ministry of Commerce can make "G-to-G" rice sales not exceeding 500,000 tons. *Bank of Thailand packing credit.* Bank of Thailand provides packing credit to rice exporters and millers. 20,000 million baht allocated through Exim Bank to liquidated paddy transaction for exporting rice. *"Rice pool exports."* Department of Foreign Trade, Public Warehouse Organization. "Thai logo. Encourage exorters to sell quality rice abroad by using Thai logo.

Source: 1998-1999: Office of Agricultural Economics, 1999-2001: USDA Foreign Agriclultural Service

Table 8. Share of Agriculture in government spending

	1995	1996	1997	1998	1999	2000	2001
as a percentage of total government spending							
Korea	12.22	11.16	8.69	8.72	7.28	no data	no data
Indonesia	8.07	5.66	4.75	4.09	7.54	2.79	3.12
Malaysia	4.93	4.48	3.98	3.32	3.33	2.97	2.79
Philippines	6.34	6.94	8.32	5.83	5.68	5.70	6.50
Thailand	10.24	10.00	8.02	7.19	7.48	8.03	8.27
as a percentage of GDP							
Korea	2.12	2.05	1.77	2.07	1.78	no data	no data
Indonesia	0.58	0.87	0.83	0.74	1.58	0.48	0.57
Malaysia	1.12	1.03	0.85	0.73	0.77	0.74	0.83
Philippines	1.24	1.33	1.69	1.18	1.11	1.12	1.29
Thailand	1.57	1.78	1.58	1.31	1.35	1.40	1.47

Basic Source of Data: ADB Indicators, 2002

average of 15 percent in 1971–1975 to about 10 percent in 1996–1998. Moreover, the major focus of rice research has been in relation to increasing yield for the irrigated ecosystem and pest and disease-resistance. Given that the rainfed ecosystem constitute much of the rice system in Thailand, Isvilanonda and Hossain fear that public investments in rice research will then have little impact on improving rice farmers' welfare.

Irrigation-related issues. Ever since the end of World War II, Thailand has funneled enormous amounts of public resources on irrigation. From the 1950 to the 1980s, much of these investments went into the central plains, which explains why this region dominates in the production of commercial hybrid varieties. However as the current irrigation system already taps into the available water resources, no major dam projects have been implemented. Since the 1970s, investments were already being channeled into small-scale irrigation projects. Siamwalla et al. (undated) suggest that there has been considerable wastage in these types of projects as implementers have tended to ignore the need to involve the local population in various aspects of the project. Without the development of local management skills, failure rates are expectedly high. The potential for further expansion of the irrigation infrastructure is limited by the growing scarcity of water, rapid increase in the cost of development and the growing concern for the adverse environmental effects of such projects. Poapongsakorn et al. (1998) thus opine that public sources are better spent on developing demand side rather than supply-side solutions to the water problem.

6. In Thailand, the Department of Agriculture is in charge of food crop research.

The issue of "crowding out." Concerns are also being raised about the efficacy of price support policies of the government. Poapongsakorn (2002) cites a study conducted by the Asian Development Bank in 2002 suggesting that the costs of the rice pledging program outweigh its benefits. He also suggests that the benefits of the price support programs might not be going to farmers but to other interest groups like millers or worse, as wasteful rent and corruption. Because of such concerns, there is a question about whether price support programs merely crowd out investments for other pressing items like research for the rainfed ecosystem.

Price support policies

The Thai government uses the paddy pledging program as its main price intervention tool. The government also finances the direct price support program for rice operated by the Organization of Marketing for Farmers (MOF), the Public Warehousing Office (PWO)[7], the Department of Interior and the army. Said programs are financed by the Farmers Assistance Fund (FAF), which was set up in 1992 in lieu of the rice premium fund and which gets funding direct from the national budget.

The government began the paddy pledging program in 1984 in cognizance of the failure of previous price support schemes to shore up the market price of rice. Under this scheme, the Rice Policy Committee sets a minimum guaranteed price for paddy, normally set at 90–95 percent of the target price, which is a three-year moving average. The Bank of Agriculture and Agricultural Cooperatives, in turn, lends to farmers at preferential and subsidized credit rates (3 percent paid by farmers, 5 percent paid by government) using the pledged paddy as collateral. Each farmer is given five months to redeem the pledged crop, otherwise the crop would be sold to BAAC and the farmer's loan paid off at the end of the pledging period. The government provides for storage, handling costs and the loss from selling the paddy at price lower than the pledged price (Poanpongsakorn, 2002).

The program is designed to provide liquidity to the farmers and enable them to keep their products and delay sale until after the harvesting season, when prices are expected to be better. Farmers are given the choice to either sell their produce to the market or to the BAAC, depending on the prevailing market prices.

7. These agencies are the state trading enterprises of Thailand. These agencies have very little to do with local trade, as much of the trading is in private hands.

At its core, the program is essentially a direct subsidy to farmers. Farmers receive two kinds of benefits. The first emanates from the subsidized rate of credit, which is about 2 percent lower than the informal market credit rate. The second emanates from the expected improvement in the price of the farmers' pledged crop during and at the end of the redemption period. Since absorption rates have not been consistently high enough to shore up paddy prices, the former outweigh the latter.

Between 1997 and 2000, paddy price was fixed at 5,383 baht per ton. This was increased to 5,453 baht per ton in 2001, on the strength of Thaksin's populist campaign promises. Moreover, the program was expanded to include paddy from second-rice cropping season and even rice.[8] Poapongsakorn (2002) says that this has led to the sharp increase in the cost of the program from 3.28 billion baht in 1999 to 6.92 billion baht in 2000 and 30.03 billion baht in 2002. As has been stated, this will lead to Thailand's breaching of its WTO commitments in AMS reduction.

Poapongsakorn (2002) has extreme reservations about the program. Aside from the question of efficacy cited above, he argues that the program has had limited impact on shoring up paddy market prices. Although the program can raise the farm price at the beginning of the harvest season, the same cannot be said at the end of the harvest season, when the government begins to release the paddy back into the market. He also opines that the expanded pledging program in 2001 is even more problematic and prone to corruption. Because the program has expanded to include rice pledging, a large number of rice mills throughout the country has had to be involved. The Public PWO and the MOF have had to be mobilized to implement the program. Both organizations, he says, are heavily influenced by politicians, as their chief officers are political appointees.

Production support policies

Aside from price support programs, the government also implements programs in support of production, some of which are outlined in box 2. It utilizes the FAF to finance input subsidy such as fertilizer distribution. Table 9 shows a breakdown of the FAF and depicts portions of the fund that directly go to rice.

In September 2000, a commodity insurance scheme covering rice and maize received a budget allocation of 1 billion bah. (FAO 2001). The

8. The program has been expanded further to cover other agricultural products, including maize, cassava starch and pellets, cassava roots, coffee and dried longan.

Table 9. The Farmers Assitance Fund Programs 1998-2001 (in million baht)

	1998	1999	2000	2001
Program				
Input subsidies	3,618.09	2,520.54	2,371.16	1,141.92
Short-term	3,139.65 (14 programs)	2,381.79 (7 programs)		
Medium and long term	478.44 (8 programs)	138.75 (2 programs)		
Marketing	2,313.10	8,117.05	11,020.16	9,311.71
Rice	1,645.60	2,676.95	3,471.61	3,431.43
Paddy pledging scheme	681.00	1,023.00	1,203.00	679.90
Rice pledging scheme			543.50	1,211.83
G-to-G trading	360.00	360.00	525.00	400.00
Rice price support scheme	367.00	555.95	555.95	
Other schemes (shallots, onion, eggs, swine)	237.60	738.00	824.16	1,139.70
Others	667.50	5,440.10	7,548.55	5,880.28

Source: FAF, Bureau of Budget in Poapongsakorn (2002)

plan insures producers against natural disasters such as floods or drought and compensates farmers for cost incurred within a ceiling of 1,000 baht/rai (about 152 US dollars per hectare) for the first rice crop and 1,500 baht (about 228 US dollars) for the second rice crop. Premiums were to be shared equally by the farmer and the government (59 baht per rai or 9 US dollars per hectare for the first crop; 30 baht per rai or 4.6 US dollars per hectare for the second crop).

In general, production subsidies are not based on a systematic program aimed at addressing the structural deficits of the rural sector. The program features vary from year to year, and to a large extent depends on the political whims of the various departments and their reaction to the demands of both farmers and rural business interest groups.

Export policies

FAO (2001) posits that assistance to exporters in Thailand has usually been in the form of subsidized credit. In 2000, 20,000 million baht (about 487 million US dollars) was allocated for the "Export Support Fund" operated by the EXIM bank. In the same year, exporters were requested to purchase one million tons of domestic rice at the prevailing market prices and to keep them in storage pending a price recovery. In exchange, government provided interest-free credit to back the purchases and covered the storage costs.

International rice cartel formation

In October 2002, Thailand hosted a meeting for rice-producing countries in Asia, including China, India, Pakistan and Vietnam, with the goal of setting up a Council on Rice Trade Cooperation (CRTC). Thailand succeeded in herding support, "in principle", for its initiative to promote export price stability. Prior to this meeting, Thai Commerce Minister Adisai Bodharamik says[9] that Thailand and Vietnam had already been sharing information regarding rice exports for a year, which "has resulted in higher export prices and greater price stability." He adds that the meeting hoped to achieve similar results with China, Pakistan and India. These are all unprecedented moves and deserve close monitoring.

9. The quote is from a newspaper article entitled "Rice Talks Scheduled for October," written by Achara Pongvutitham and published in The Nation, Copenhagen on September 20, 2002.

PART 4

SOME POINTS OF REFLECTION FOR THE PHILIPPINES

By way of ending this paper, this section raises questions and points of reflection that Thailand's public interventions in rice pose for the Philippines.

How will the Philippines deal with Thailand's impending breach of WTO-set subsidy limits? Thailand has more fiscal muscle to subsidize its farming sector. But unlike the US and the EU, the farming sector in Thailand counts among the poor in the country. How the Philippines deals with the question depends on who is answering the question. For trade negotiators in the country, this is a point for empirical scrutiny and verification. For advocates, this will surely pose a puzzle: how to react to subsidies that breach international trade rules but that intend to benefit the vulnerable in another developing country.

What is the feasibility and desirability of designing direct farmer subsidies as opposed to price support programs for the paddy sector? The Thai paddy pledging program is not without loopholes. But by giving farmers liquidity, the welfare effect of such a program is higher than for direct procurement programs. The program might be further improved by introducing mechanisms for targeting.

What are the implications of the cartelization of international rice trade? Price stability is surely desirable. However, if cartel behavior leads to the artificial jacking up of international prices, this will have dire implications on a rice-importing country like the Philippines. This deserves careful thought and may have strategic implications on rice policy in the Philippines.

How did the mix of policies lend to the apparent diversification of Thai agriculture? Thailand seems to have been forced to deal with the problem of diversification as the confluence of industrialization and the exhaustion of land frontiers weaken its comparative advantage in agriculture. It would be interesting to evaluate its agriculture policy through the lens of diversification-as this will be at the heart of the sustainability of rural livelihood. To be sure, the replicability of its strategy may be limited, as it was designed and implemented in the context of land abundance, which the Philippines certainly does not have.