



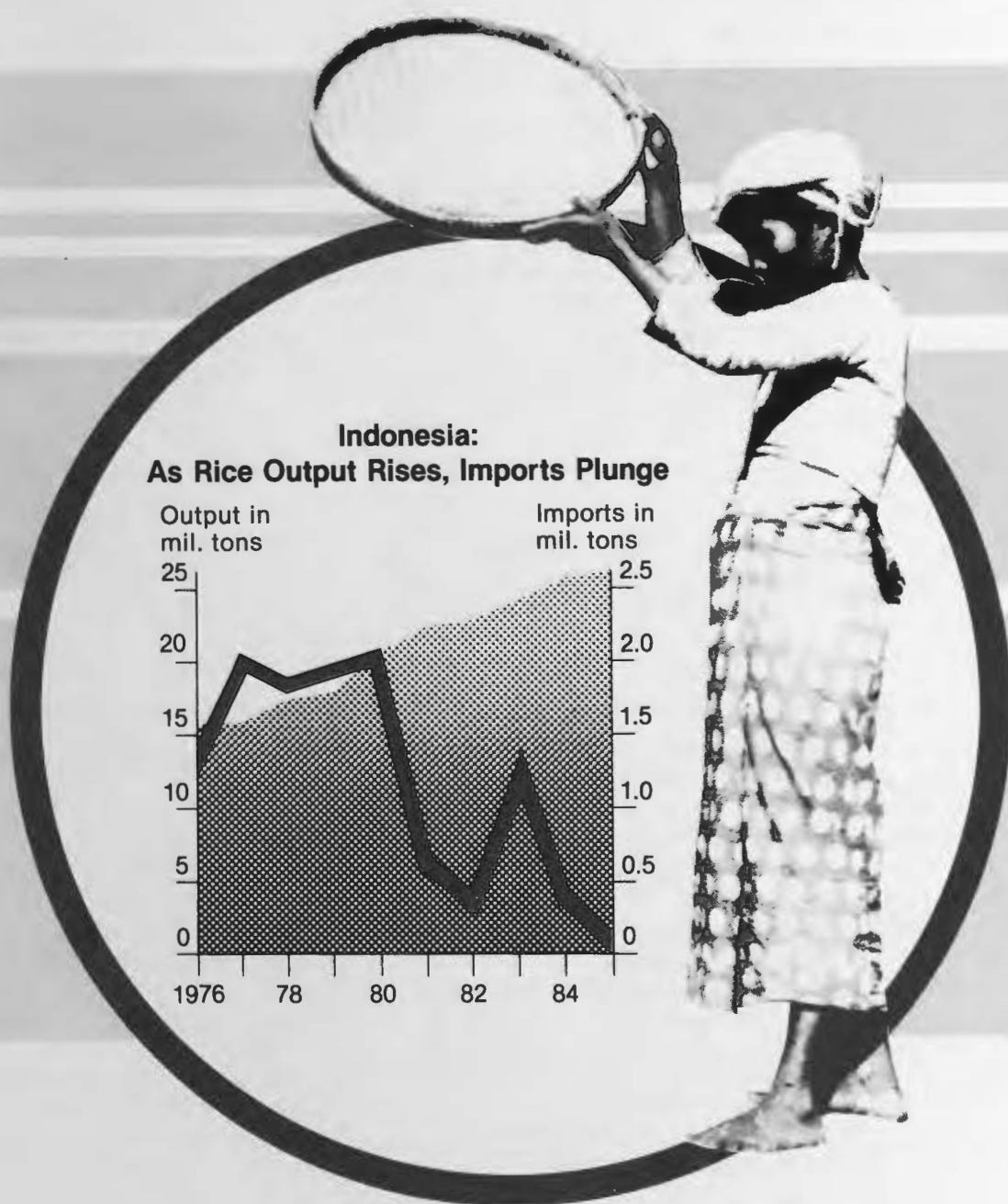
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# Southeast Asia

## Outlook and Situation Report



## CONTENTS

### Page

4	<b>Regional Overview</b>	<b>Situation Coordinator</b>
4	The Macroeconomy	J. Albert Evans (202) 447-8229
7	U.S. Agricultural Trade with Southeast Asia	<b>Principal Contributors</b>
11	Burma	J. Albert Evans
12	Indonesia	William F. Hall
15	Malaysia	Leslie E. Ross
18	Philippines	Sara J. Schwartz
21	Singapore	Donald A. Sillers
22	Thailand	
26	Centrally Planned Southeast Asia	<b>Electronic Word Processing</b>
	<b>Special Articles</b>	Rhodia D. Ewell
26	Agricultural Policies in Thailand	
35	The Philippine Debt Crisis	

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Note: Southeast Asia consists of Burma, Indonesia, Kampuchea, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. Agricultural production is usually reported by calendar year; tons are metric; dollars are U.S., unless otherwise specified; and rice data are for milled rice unless otherwise specified.

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## SUMMARY

In fiscal 1985, U.S. agricultural exports to Southeast Asia are expected to drop to \$950 million, 21 percent under 1984. Reasons include generally good harvests in Southeast Asia, slower regional economic growth, strong competition, currency devaluations in the Philippines and Thailand, and conservative import policies, particularly in Indonesia. Exports will be lower for U.S. grains, cotton, soybeans, and soybean meal. Assuming normal weather worldwide, these general conditions are likely to prevail again in 1986 and keep the overall value of U.S. exports to Southeast Asia near the 1985 level.

Most Southeast Asian nations enjoyed increased economic growth in 1984. A notable exception was the Philippines, whose economy contracted by 6 percent. For the other countries of the region, economic recovery in the United States stimulated strong growth in world trade, boosting demand for the region's exports. However, low world prices for rice, sugar, rubber, and other commodities moderated growth in regional export earnings. Declining world petroleum prices helped oil importers (Thailand and the Philippines) but hurt exporters (Malaysia and Indonesia).

Continued high real interest rates in international money markets compounded the financial weakness of most countries in the region. Prompted in part by the debt crisis that has crippled the Philippines since late 1983, most governments in the region shifted toward monetary and fiscal restraint to help slow the growth of foreign debt.

Most forecasts suggest that world economic trends in 1985 will broadly resemble those in 1984, with one major exception: slower growth in the United States and Japan will result in reduced export growth for most Southeast Asian nations, leading in turn to somewhat slower growth overall.

Most of the Philippines' economic difficulties stem from an acute shortage of

foreign exchange following the late 1983 suspension of principal payments on its \$25 billion foreign debt. Effects of the current Philippine crisis will include slower growth in agricultural imports and, possibly, faster growth in agricultural production. Slower consumption growth will cut into imports of income-sensitive items such as wheat, orange juice, and high-quality tobacco. It will also reduce expansion of demand for livestock products, leading to slower growth in imports of feed corn, soybean meal, and other feedstuffs.

The region's 1984 agricultural output climbed 6 percent from 1983, paced by rice in Indonesia and palm oil in Malaysia. Indonesia achieved rice self-sufficiency in 1984 and has already exported 100,000 tons to the Philippines in early 1985, with sales to other nations possible this year. However, the Indonesian Government has indicated that it cannot afford financial losses associated with rice exports at low prevailing prices. In 1977-80, Indonesia was the world's leading rice importer, taking about 2 million tons annually.

Malaysia's oil palm area expanded 8 percent last year, and oil output surged 23 percent. Palm oil competes strongly with soy and other vegetable oils. Leading markets for processed Malaysian palm oil last year were Singapore (mainly for reexport), India, Pakistan, the USSR, and Japan.

Thailand continues to encourage agricultural exports. Rice, corn, and tapioca products represent about half its farm export earnings. Further expansion of output and exports will depend on price incentives to encourage farmers to invest in modern inputs. Thailand's livestock sector has significant growth potential, although Government regulations hamper production. A shift in policy could lead to increased domestic demand for corn and cassava, reducing export availability of feedstuffs.

## REGIONAL OVERVIEW

### The Macroeconomy

Most Southeast Asia nations enjoyed increased economic growth in 1984. Economic recovery in the United States led to a major increase in world trade, boosting demand for the region's exports. On the other hand, depressed world markets for rice, sugar, rubber, and some other commodities moderated growth in regional export earnings.

Declining world petroleum prices helped oil importers (Thailand and the Philippines) and hurt exporters (Malaysia and Indonesia). Continued high real interest rates in international financial markets compounded the financial weakness of most countries in the region. Prompted in part by the debt crisis that has crippled the Philippines since late 1983, most governments in the region shifted toward monetary and fiscal restraint to help slow the growth of foreign debt.

Most forecasts suggest that world economic trends in 1985 will broadly resemble those in 1984, with one major exception: slower growth in the United States and Japan will result in reduced export expansion for most Southeast Asian nations, leading to somewhat slower growth for these countries.

#### *Burma*

Weak export markets for Burmese rice, teak, and other unprocessed agricultural and mineral commodities allowed little or no growth in total export value during fiscal 1984/85 (April 1984–March 1985). Imports grew an estimated 7 percent to \$754 million, leaving a trade deficit of \$375 million (table 2). Burma has been running large current account deficits since it launched an ambitious development program in 1976/77, as large Government budget deficits and rapid money growth have stimulated import demand. Deteriorating terms of trade since 1981/82 have further worsened the nation's payments problems.

Foreign debt, largely in the form of bilateral concessional loans, rose to \$2.2 billion by the end of 1984/85. Debt service reached 39 percent of total export value, rising steadily. Tightened import controls since 1983/84 have succeeded in slowing

import growth and reducing the current account deficit, but they have also cut the growth of the small industrial sector by reducing inflows of raw materials and components. Together with flagging agricultural growth, this has resulted in a drop in real income growth from 6 percent in 1982/83 to 5.6 percent in 1983/84 and 4.5 percent in 1984/85.

Without dramatic improvement in the world prices of Burma's major exports, the nation will continue to face an unpleasant choice: maintaining strong downward pressure on imports and so risking further deceleration in real income growth, or allowing its foreign debt to reach critical levels. Real income growth in 1985 will probably remain close to 4.5 percent.

#### *Indonesia*

Indonesia's real income rose an estimated 6.5 percent in 1984, up from 4.7 in 1983 (table 3). Strong agricultural growth and increased production of petroleum and liquified natural gas (LNG) led the advance. Other sectors—including manufacturing, services, and construction—suffered a second year of recession because of slow growth in domestic consumption and in foreign and domestic private investment. Abundant supplies of rice and other foods, together with Government monetary and fiscal restraint, helped slow the rate of inflation to 8.8 percent, from 11.5 in 1983.

The external accounts improved substantially: Increased exports of LNG and nonpetroleum products allowed an 8.7-percent increase in export earnings despite little growth in petroleum exports. Together with a 10.6-percent decline in imports, these gains helped boost the trade surplus to \$4.9 billion and cut the current account deficit in half, to \$3.1 billion.

Real income growth is expected to decline to around 4.5 percent in 1985 because of continued weakness in world petroleum prices and slower agricultural growth. The Government's ability to offset the slowdown will be severely limited by the need to restrain the growth of the large foreign debt, which expanded from \$16.8 billion in 1979 to \$32.9 billion in 1984. Even with a stable current account deficit, debt service as a proportion

of export earnings will rise from 16 percent in 1984 to 18 in 1985, and will continue to increase before reaching a plateau of 22 percent in 1987.

### *Malaysia*

Increased exports helped boost Malaysia's real income 7.3 percent in 1984, up from 5.9 in 1983. Merchandise exports rose 17 percent, led by increased sales of petroleum and palm oil. Export receipts from other major commodities—including rubber, tin, and timber—grew slowly or declined because of low world prices. Manufactured exports, notably electronic components assembled from imported materials in free-trade zones, expanded strongly, but the limited domestic content of these products blunted their impact on national income.

In contrast to exports, imports increased slowly, helping raise the trade surplus to \$1.6 billion. However, heavy interest payments on Malaysia's \$14.8 billion foreign debt and other service payments resulted in a current account deficit of \$2.7 billion.

The Government scaled back its 1985 growth forecast from 6.7 percent to 5.5–6.0 percent, but the poor price prospects facing most of the nation's major export commodities suggest growth near the lower end of this range. Malaysia has committed itself to trimming petroleum output 9 percent in 1985 to support OPEC efforts to bolster lagging world oil prices. This move will further cut petroleum export earnings. The Government has responded to reduced export growth and the rapid expansion of the nation's foreign debt by scaling back its ambitious development efforts.

A planned reduction in Government spending in 1985 should help slow import growth and improve the trade balance slightly. However, the debt-service ratio will reach 10 percent in 1985 and continue to rise gradually until the late 1980's, discouraging Government efforts to increase spending for both short-term stimulation and long-term development.

### *Philippines*

The Philippine economy suffered its worst year in recent history in 1984. Trade credit

remained critically short following the October 1983 moratorium on principal repayments on the nation's \$25 billion foreign debt. The manufacturing and mining sectors suffered sharp declines. Only the agricultural, forestry, and fishery sector managed to increase output, estimated at 1.2 percent above 1983. Real income fell 5.5 percent.

Economic policy was dominated by efforts to comply with an International Monetary Fund (IMF) plan for debt restructuring and economic adjustment, as a means of restoring foreign exchange inflows. The peso was devalued and then allowed to float to improve export competitiveness and reduce import demand (table 3); the resulting 41-percent depreciation contributed to a 52-percent rise in consumer prices. A sharp reduction in Government spending on infrastructure trimmed the budget deficit but led to serious unemployment in the construction sector.

Merchandise export earnings grew a modest 6 percent; severely depressed world prices held down export earnings from copper and sugar, while coconut product exports were limited by reduced output. The shortage of foreign exchange needed to purchase imported raw materials and components constrained production of most manufactures for export, with the notable exception of electronic components bound for the United States. A 23-percent drop in imports helped cut the current account deficit to \$1.1 billion from \$2.8 billion, creating one of the few bright spots in the current economic scene.

Economic progress in 1985 will depend partly on support from the international banking community under the IMF plan, and partly on the maintenance of political stability despite tremendous economic strain on the social fabric. Both of these conditions are highly uncertain. In the most optimistic case, real income will grow less than 1 percent in 1985 and average around 3 percent annually in 1986–90.

### *Singapore*

Exports of electronic and computer equipment to the United States, heavy Government spending on mass transit and public housing, and growing financial market activity combined to raise Singapore's real income growth to 8.2 percent in 1984, from

7.9 the previous year. However, the economic pace slackened markedly during the year, a development interpreted by many observers as the beginning of a long-term trend toward slower growth. Income growth seems likely to decline steadily to 5.5 percent per year by 1990, in contrast to the 8.9-percent average pace set in 1980-83.

Much of the problem stems from the concentration of Singapore's capital in industries facing worldwide oversupply and declining long-term prospects:

- Petroleum refining, the largest component of the manufacturing sector, is suffering from severe excess capacity, which will worsen as new refineries in Indonesia, Malaysia, Saudi Arabia, and Kuwait become fully operational in 1985-87.
- Shipbuilding, another local specialty, is currently depressed and has uncertain prospects for recovery.
- The financial services sector received a major boost in 1984 as capital shifted out of Hong Kong, but Singapore is encountering increasing competition from other international money centers.
- Finally, the construction sector, the fastest growing sector of the economy since 1982, suffers a glut of commercial property and is increasingly dependent on Government spending on public investment projects.

Exports of electronic components to the United States will be much slower in 1985, while refining will undergo another lean year; financial activity is expected to slow markedly. Government spending on public construction will take up some of the slack, but real income growth is expected to slow to 6.6 percent.

#### *Thailand*

Thailand enjoyed broad-based growth in 1984, aided by increased export demand and strong growth in agricultural production. Real income growth picked up slightly to 6 percent from 5.8 in 1983. Increased export volumes of rice, corn, and other agricultural products helped raise export earnings 16.5 percent,

while Government monetary and fiscal restraint held import growth to 1 percent. The current account deficit declined to \$2.1 billion from \$2.9 billion, a definite improvement but still uncomfortably high in view of Thailand's sizable foreign debt.

Controlling the debt was the focus of macroeconomic policy in 1984. Stimulated by large Government budget deficits and loose monetary policy, Thailand's foreign debt increased from \$3.5 billion in 1977 to \$14.4 billion in 1984; debt service increased from 12 to 24 percent of total export value over the same period. The Bank of Thailand imposed tight limits on credit growth in January 1984 in a successful effort to restrain import growth; the credit squeeze also led to a large increase in bankruptcies among smaller firms traditionally dependent on bank lending.

Restrictions on credit growth were lifted in September, but this was followed in November by a 14.8-percent devaluation of the baht, to 27 to the dollar. The devaluation helped spark a 25-percent increase in export earnings in the next 3 months, with a negligible rise in imports. These gains were achieved in spite of a sharp drop in the dollar prices of Thailand's rice, corn, tapioca, and rubber exports during the period, resulting in part from the increased export volumes brought forth by the devaluation.

The devaluation will continue to stimulate exports and limit imports in 1985, further reducing the current account deficit.

Table 1—Southeast Asia: Currencies and 1984 exchange rates

Country	Currency and abbreviation	Exchange rate with US\$	
		Average	Yearend
Burma	Kyat (K)	8.39	8.75
Kampuchea	Riel (KR)	NA	NA
Indonesia	Rupiah (Rp)	1,026	1,074
Laos	New Kip (NK)	35.00	35.00
Malaysia	Ringgit (\$M)	2.34	2.43
Philippines	Peso (P)	16.70	19.76
Singapore	Singapore \$ (\$S)	2.13	2.18
Thailand	Baht (B)	23.64	27.15
Vietnam	Dong	NA	10.62

NA = Not available.

SOURCES: International Financial Statistics, ERS data.

However, an expected decline in rice production and weak international demand for rice, tapioca, and sugar may lead to a 2-percent decline in agricultural income,

pulling the overall growth rate down to 4.5–5.0 percent. Moreover, the devaluation will boost inflation to around 7 percent, from 1 percent in 1984. [Donald A. Sillers (202) 447–8229]

Table 2—Southeast Asia: Merchandise exports and imports, 1982–84

Country	Exports 1/			Imports 2/			Trade balance 3/		
	1982	1983	1984	1982	1983	1984	1982	1983	1984
Billion dollars									
Burma	393	378	380	847 4/	704 4/	754 4/	–490	–353	–375
Indonesia	22,293	21,145	22,132	16,859	16,352	13,506	1,893	963	4,900
Malaysia	12,036	14,144	16,548	12,404	13,234	14,234	–753	495	1,600
Philippines	4,966	4,917	5,212	8,263	7,978	6,159	–2,646	–2,485	–500
Singapore	20,782	21,842	24,068	28,151	28,160	28,656	–6,816	–5,879	–4,400
Thailand	6,945	6,368	7,415	8,549	10,287	10,330	–731	–2,861	–1,800

1/ Net of shipping costs (free on board or f.o.b. basis). 2/ Includes shipping and insurance costs (cost, insurance, and freight or c.i.f. basis). 3/ Difference between value of exports and imports, both on f.o.b. basis. 4/ Burmese imports derived from partner country exports and converted to c.i.f. basis.

Table 3—Southeast Asia: Selected macroeconomic indicators, 1984

Country	GDP 1/	GDP per person 1/	Real GDP 1/ growth	Midyear population	Population growth	Inflation rate	International reserves 2/
	Million dollars	Dollars	Percent	Million	Percent		Million dollars
Burma	6,445	166	5.0	38.7	2.0	6	63
Indonesia	84,058	518	6.5	162.2	2.2	9	5,079
Kampuchea	NA	NA	NA	6.1	NA	NA	NA
Laos	754	184	8.1	4.1	2.4	19	20
Malaysia	31,752	2,089	7.3	15.2	2.3	5	3,958
Philippines	32,091	601	–5.5	53.4	2.5	52	664
Singapore	18,322	7,242	8.2	2.5	1.2	3	10,661
Thailand	41,954	831	6.0	50.5	2.0	1	2,087
Vietnam	16,305	272	5.0	58.3	2.4	NA	16

NA = Not available.

1/ Converted to dollars at official exchange rates. This may overstate actual dollar value of GDP in countries with overvalued exchange rates, notably Burma, Laos, and Vietnam. 2/ Includes reserve holdings of gold, valued at \$35/ounce.

SOURCES: International Financial Statistics, ERS data.

### U.S. Agricultural Trade With Southeast Asia

#### U.S. Farm Exports To Decline To \$950 Million

In fiscal 1985, U.S. agricultural exports to the region are forecast to drop by at least 20 percent to \$950 million (table 4), because of generally good Southeast Asia harvests, slower

economic growth, strong competition, currency devaluations in the Philippines and Thailand, and conservative import policies, particularly in Indonesia. Assuming normal weather worldwide, these factors are likely to prevail in 1986 also and keep the value of U.S. exports to Southeast Asia near the 1985 level.

During fiscal 1984, Southeast Asia purchased \$1.2 billion worth of U.S. farm

Table 4--Major U.S. agricultural exports to Southeast Asia, by quantity and value, fiscal 1983-1985

Commodity	Value			Volume		
	1983	1984	1985 F	1983	1984	1985 F
	--- Million dollars ---			--- 1,000 tons ---		
Animal & animal prod.	74	75	72	NA	NA	NA
Beef & veal 1/	9	9	8	2	1	2
Pork 1/	1	1	1	1	—	—
Poultry 1/	28	31	30	24	26	28
Tallow--inedible	3	3	3	8	5	5
Nonfat dry milk	11	9	9	13	15	15
Cattle hides (MNO)	2	1	1	54	23	24
Other animal prod.	20	21	20	NA	NA	NA
Grains & feeds	466	433	310	NA	NA	NA
Wheat & products	354	342	225	2,222	2,055	1,402
Rice	21	29	42	69	85	140
Feed grains	68	39	12	568	255	75
Feeds & fodders	10	11	12	NA	NA	NA
Other	13	12	19	NA	NA	NA
Fruits & prep.	63	60	57	NA	NA	NA
Nuts & prep.	5	5	6	NA	NA	NA
Vegetables & prep.	29	22	24	NA	NA	NA
Oilseeds & prod.	195	215	131	NA	NA	NA
Oilcake & meal	27	88	46	125	391	245
Soybeans	146	93	56	607	309	235
Vegetable oils	21	32	28	27	35	36
Tobacco, unmanu.	116	108	109	17	16	17
Cotton, excl. linters	191	235	183	128	145	117
Other	63	57	58	NA	NA	NA
TOTAL	1,202	1,210	950	NA	NA	NA

1/ Fresh, chilled, frozen. — = None or less than 500 tons. NA = Not applicable. MNO = 1,000 number. F = Forecast.

SOURCES: Bureau of the Census, U.S. Department of Commerce; ERS estimates.

goods for the fourth consecutive year. This was about 15 percent of Southeast Asia's agricultural imports (table 5). Compared to fiscal 1983, greater quantities of soybean meal and higher prices for cotton, soybean products, and grains (particularly corn) offset the overall decline in volumes shipped. Only 4.5 percent of U.S. sales were made concessionally. However, \$143 million in GSM-102 and blended export credit was extended. This credit most notably boosted soybean meal exports to the Philippines. The United States displaced Brazil as the major supplier and increased its market share from about 25 percent to 90.

Last year, the region maintained a worldwide farm trade surplus of over \$9 billion. Southeast Asia also realized a farm trade surplus with the United States, which imported \$2.1 billion of the region's commodities. The trade surplus with the United States widened by 150 percent from 1983, to \$904 million, largely because of higher prices for the major commodities

Table 5--U.S. agricultural exports to Southeast Asia by country, fiscal 1980-85

Country	1980	1981	1982	1983	1984	1985 F
Million dollars						
Indonesia	451	382	432	410	438	237
Malaysia	71	106	134	131	142	122
Philippines	317	338	320	380	300	325
Singapore	125	170	163	142	160	133
Thailand	171	184	155	139	168	131
Other 1/	23	13	3	—	1	2
Total	1,158	1,193	1,207	1,202	1,209	950
U.S. share of total agricultural imports						
Percent						
Indonesia	29	23	32	27	36	25
Malaysia	6	8	10	10	9	6
Philippines	53	51	40	53	54	55
Singapore	4	6	6	5	4	4
Thailand	26	29	28	23	22	26
Other 1/	NA	NA	NA	NA	NA	NA
Total	16	16	18	17	15	13

1/ Burma, Kampuchea, Laos, and Vietnam. NA = Not available. F = Forecast.

SOURCES: Bureau of Census, U.S. Department of Commerce; various country sources; ERS estimates.

exported to the United States--rubber, coffee, cocoa, and coconut and oil palm products. Significantly reduced U.S. grain and soybean sales further widened the trade balance. Australia's and Thailand's recovery from their 1983 droughts led to greater price competition from Australian wheat and Thai corn and lowered the U.S. share of wheat and corn exports to the region.

#### Stiff Competition for Wheat Sales

Grain sales, primarily wheat, now account for about one-third of U.S. agricultural exports to Southeast Asia. In recent years the grain share of U.S. exports has fallen below the 1979-82 average of 45 percent, partly because of low wheat prices and less demand for U.S. rice. Since 1980, the region has been an annual importer of at least 3.0 million tons of wheat, with the United States' share ranging from 55 to 65 percent. Of the 2.0 million tons of U.S. wheat shipped to the region in 1984, Indonesia and the Philippines bought 88 percent. Sales were one-tenth below 1983, largely because of the



350,000-ton drop in exports to the Philippines. This drop reflected the severe contraction of the Philippine economy and subsequent drop in consumers' incomes.

The outlook for 1985 calls for regional wheat imports near 3.0 million tons, a decline of 15 percent from last year. The United States is projected to send about 50 percent of total imports, or 1.4 million tons—well below the 2.2-million-ton record shipped in 1983. While there will be marginal growth in exports to the Philippines, these sales will not offset the downtrend of U.S. exports to Indonesia. Total wheat imports by Indonesia will fall 24 percent from last year, with the U.S. share falling from 62 percent to 35. Indonesian wheat imports are declining because of ample alternative cereal supplies and higher prices for wheat products. The U.S. share of Indonesia's imports is off because of lower priced Australian and Argentine wheat. In 1986 there could be some growth in Philippine imports, suggesting U.S. exports to the region slightly above the 1.4 million tons of 1985.

#### *Total Feed Grain Imports and U.S. Share Down*

During 1984, Southeast Asian countries imported about 2.9 million tons of feed grains, mostly corn. (These figures include intraregional trade.) Of the feed grain imports, the United States, Australia and Thailand, provided 14, 37 and 45 percent, respectively. The U.S. share was down from 1983, when it climbed to 30 percent because the Thai and Australian crops were reduced by drought.

During 1985, total feed grain imports by Southeast Asian countries are forecast to fall by 17 percent to 2.4 million tons. Largely because exports to the key U.S. market, the Philippines, are off, the U.S. share will slip to only 3 percent, or about 75,000 tons—the lowest level since 1979. Although U.S. financing is available through GSM-102, less expensive corn from Thailand and China is undercutting U.S. sales to the Philippines. Australia will ship about 450,000 tons to the region, but Thailand will supply the bulk of the region's imports. This pattern is likely to continue in 1986 as imports by Malaysia grow, causing regional feed grain imports to rise slightly. Within Southeast Asia, only Malaysia is projected to have rising demand for feed

grain imports. Feed grain sufficiency was achieved in Indonesia in 1984 and is a top priority in the Philippines. Feed grain imports by Singapore are expected to stagnate and then gradually decline in conjunction with the phase-down of its swine and poultry industries.

#### *Credit Aids U.S. Rice Exports*

As with Southeast Asian corn production, rice cultivation remains variable and dependent on favorable monsoons. Including intraregional trade, Southeast Asian countries bought 1.9 million tons of rice in 1984, 3 percent more than in 1983. Indonesia's share of regional rice imports declined sharply, as its rice sufficiency became evident by midyear, following harvest of the wet-season crop. In contrast, Philippines rice sufficiency, attained in 1977, was lost. Largely because of prearranged P.L. 480 shipments to Indonesia, the United States shipped 85,500 tons of rice to the region in 1984, roughly 5 percent of regional imports.

In 1985, 140,000 tons of U.S. rice may be exported, however, this figure hinges on the approval of the proposed P.L. 480, Title I program in the Philippines. The Philippines is reporting a rice deficit, totaling about 600,000 tons. The region will continue to buy mostly from Thailand; compared to U.S. rice, Thai rice is cheaper, of similar quality, quickly delivered, and sales can be negotiated government-to-government. In 1986, U.S. credit will again play a major role in U.S. rice sales to the Philippines; however, it is still unlikely that Thailand will be displaced as the primary supplier to both the Philippines and other regional countries.

#### *Lowered Indonesian Buying Paces U.S. Soybean Exports*

In 1984, exports of U.S. oilseeds to Southeast Asia totaled \$215 million, accounting for nearly 18 percent of total U.S. farm sales to the region. Over the last 5 years, demand has grown rapidly for both soybeans and soybean meal to fill soy-based food needs in Indonesia and livestock feed requirements throughout the region. Oilseed and meal import controls exist within the region; Indonesia and Thailand try to encourage local soybean cultivation and limit foreign exchange expenditures, and Malaysia

attempts to protect locally crushed soybean meal from cheaper imports.

During 1984, the United States supplied over 60 percent of the nearly 500,000 tons of soybeans imported by the Southeast Asian countries. Other suppliers include China, Argentina, and Brazil. In 1985, Southeast Asia is expected to increase soybean imports to 600,000 tons, although Chinese price competition (despite lower protein content of Chinese soybeans) in Malaysia and Indonesia will result in a smaller U.S. market share in the region. The preliminary forecast for 1986 calls for an increase in U.S. soybeans exported to Southeast Asia, the gain mostly going to Indonesia. Yet, total U.S. soybean exports will be well below the 1983 record of over 600,000 tons.

#### *Chinese Soybean Meal Challenges U.S. Exports*

Because of U.S. credit to the Philippines in 1984, the United States became the dominant supplier of soybean meal to that country and the single largest meal exporter (about 40 percent) to the region. Brazil and China each sold about 250,000 tons, together supplying half of the 1.0 million tons exported to the region. Of the 1.1 million tons of projected meal imports in 1985, roughly one-fourth will come from U.S. origins. Neither the United States nor Brazil are likely to expand their market shares, instead being underbid by less expensive Chinese soybean meal. China is anticipated to command a 40-percent market share by shipping about 450,000 tons.

In 1986, assuming the Philippines financial situation improves, meal prices, rather than credit, will again become the determining factor for Philippine imports. Consequently, China and Brazil are likely to gain shares in the Philippine market, causing the presence of U.S. soybean meal in the region to decline.

#### *High U.S. Cotton Prices Slow Sales*

Even though the region is only 25 percent cotton sufficient, textile import quotas imposed by the region's major buyers, the United States and Western Europe, and slower domestic textile demand in most of the Southeast Asian nations, is causing cotton imports to drop in 1985. The United States will send about 117,000 tons to the region, a

20-percent drop from 1984. Indonesia and Thailand are the key buyers, taking over three-quarters of the region's imports. Thai importers are expected to shift away from U.S. supplies to less expensive, lower quality cotton, largely because of Thailand's currency devaluation. While the United States will probably remain the largest single supplier to the region, the U.S. share of imports will likely fall because of abundant world supplies, relatively high U.S. prices, and the strong U.S. dollar. The current projection for 1986 suggests U.S. cotton exports will recover slightly.

#### *Other Commodity Highlights*

*Poultry meat.*—Within Southeast Asia, the primary U.S. market for frozen poultry is Singapore, which bought 24,000 tons or 94 percent of U.S. poultry meat sold to the region in 1984. Singapore's total poultry imports grew 35 percent last year (following a 20-percent fall in 1983). However, imports are expected to rise only 2.5 percent in 1985 because its traditional role as a poultry meat re-exporter to Indonesia and Malaysia will change with the recent enactment of a "buy direct" policy in those countries. This policy, however, should not alter the volume of U.S. shipments to Southeast Asia, only the direction of trade within the region. U.S. poultry meat exports are anticipated to continue growing in 1986.

*Pork.*—During 1985, Singapore's imports of frozen pork are expected to nearly double to 15,000 tons, as local production declines and the Government urges consumers to switch from fresh to frozen pork. Although Singapore is the major U.S. pork market in the region, the United States will probably remain a minor supplier, while Denmark and Sweden continue to dominate and accelerate sales.

*Tobacco.*—Southeast Asia is a net exporter of unmanufactured tobacco, with exports nearly double the 40,000 tons imported in 1984. The U.S. share of imports rose to about 40 percent, even though total imports declined by 10 percent from a year earlier. This decline occurred largely because of the cutback in Philippine buying, which is adjusting to falling real incomes and rising consumer demand for cheaper, lower quality cigarettes that use more local than imported leaf.

In 1985, regional tobacco imports are forecast at 42,000 tons. U.S. exports are forecast to rise slightly to surpass 16,000 tons, largely because of increased Malaysian purchases. Heavy flooding in Malaysia reduced the 1984 and 1985 tobacco crops, and most of the shortfall will be filled with U.S. leaf for blending to produce increasingly popular American-type cigarettes. Modest growth of U.S. tobacco exports is projected for 1986. [Leslie E. Ross (202) 447-8230]

## BURMA

After 10 years of spectacular rice yield increases and rising exports, Burma's agricultural sector growth is beginning to slow. Rice production is beginning to level off at approximately 9.0 million tons (milled), diversification into other crops has been slower than expected, and farm exports in 1984 did not expand. Since Burma continues to earn more than 90 percent of its foreign exchange from agricultural exports, reduced growth in this sector has repercussions throughout the economy. Burma has reduced public investments and cut back imports of even necessary commodities such as fuel and fertilizer.

### *Agricultural Output Remains Stable*

Burma is focusing on improving the quality of its rice crop rather than on expanding planted area. The 1984/85 rice crop rose slightly to 9.3 million tons. The 82 townships (out of a total 314) participating in the Whole Township Program, Burma's crop intensification program, continue to receive priority distribution of fertilizer, high-yielding seeds, credit, and other inputs. These townships now produce 45 percent of Burma's rice.

The Whole Township Program has expanded successfully to include other crops—such as oilseeds, corn, cotton, wheat, and pulses—in an additional 86 townships. Production and yield increases have risen dramatically in the last 5 years because of intensified use of farm inputs (table 6). Wheat and corn yields each reached 1,400 kilograms per hectare in 1984, producing 206,000 and 401,000 tons, respectively. Pulse production increased slightly to 665,500 tons. Oilseed yields continue to rise, with output of peanuts

Table 6—Burma: Production of selected commodities

Commodity	1983/84	1984/85	1985/86 F	Share of 1985/85 prod. 1/
	1,000 tons			Percent
Rice (milled)	9,000	9,250	9,100	36.4
Peanuts	531	667	700	21.4
Sesame	207	231	250	8.6
Pulses	600	665	700	9.5
Vegetables	1,150	1,150	1,175	7.2
Total				83.1

1/ See explanatory note following the table of contents. F = Forecast.

SOURCE: Government of Burma, FAS, ERS estimates.

increasing 8 percent over 1983 to 665,500 tons. Sesame is up 9 percent to 231,000 tons, and sunflower production rose 20 percent to 141,200 tons. Sugarcane output has leveled off at 3.7 million tons, while jute production has fallen 9 percent to 52,000 tons.

### *Export Earnings Continue To Fall*

Exports declined 14 percent to \$323 million in 1984. Rice export volume fell 7 percent to 750,000 tons and prices deteriorated. Earnings from teak exports also fell, as the export price declined 6 percent and volume increased only 2 percent. Export earnings from pulses fell 24 percent from 1983. Burma exported only 51,500 tons of black matpe, butter beans, and other pulses, despite quality improvements which allowed it to keep its Japanese market and expand into new markets such as Germany and Pakistan. Small volumes of corn, sugar, cotton, rubber, fish, vegetables, and processed meats were exported, but earnings from these commodities amounted to less than 10 percent of the total value.

### *Technological Changes Improve Crop Quality*

The quality of Burma's rice has remained low because of antiquated storage, milling, and shipping facilities. International donors are helping Burma modernize its infrastructure to support high-quality exports. Twenty-three new rice mills equipped with Japanese machinery will increase Burma's milling capacity by 915,000

tons per year by 1988. This will allow exports of higher quality rice (10 to 15 percent broken versus the current 35 percent). The World Bank is also financing grain storage and port improvement projects which should ease transportation bottlenecks and increase the competitiveness of Burmese rice by 1990.

Fertilizer use has risen from 54,000 tons in 1975/76 to 400,000 (19 kilograms of plant nutrients per hectare) in 1984/85, with most of the increase going to rice. Fertilizer is a critical component of the Whole Township Program. Its use is expected to expand by 60,000 tons per year. Currently, Burma produces 175,000 tons of fertilizer and imports approximately 240,000 tons. Local production is expected to reach 380,000 tons by 1990, but 200,000-400,000 tons of imports may still be required to supplement domestic output.

*Phase II of Program  
Begun in 1984*

The Burmese Government initiated the second phase of the Whole Township Program in 1984. The first phase, which consisted of nonprice incentives to increase yields and production in specified townships, resulted in spectacular agricultural growth. The second phase goals are to increase supplies of fertilizer, seeds, and credit in targeted townships, improve extension services, and institute a crop-monitoring system.

Efforts to diversify crop production have slowed. Government policies have shifted from encouraging nonpaddy production in Upper Burma to emphasizing regional self-sufficiency in rice. Cultivation of crops other than rice is now promoted for irrigated areas and the lower regions which permit multiple cropping (usually rice and a nonpaddy crop). While the potential is very high for nonpaddy production growth in Upper Burma, the cost of infrastructure development, inputs, and expanded extension services is prohibitive given Burma's current foreign exchange position.

*Export Growth Declining,  
But Potential Still Great*

World prices for rice and teak are expected to remain low throughout 1985. Thai exporters have cut their rice price below that of Burma and have penetrated some of

Burma's traditional markets, such as Bangladesh and Sri Lanka. As a result, Burmese rice exports may fall 14 percent to 600,000 tons in 1985. Export earnings may decrease by more than 14 percent if the Burmese choose to match the Thai export price. Agricultural production is expected to remain stable. Area expansion under the Whole Township Program is not anticipated. The second phase of the Whole Township Program is not likely to have an immediate impact on production in the 168 townships eligible for support.

Rice will remain the dominant crop, but double cropping with rice is becoming more common and yields of the nonpaddy crops are increasing. The Government is encouraging the expansion of rainfed wheat on fallow land. Estimates show that area planted to wheat could be doubled if adequate inputs, such as fertilizer and drought-resistant seed, were available. Expansion of pulses is also part of the Government's diversification plan.

There is significant potential for irrigation development. Currently, 13 percent of the sown area is under irrigation, almost all of which is used to supplement monsoon rainfall in paddy producing zones. Development of dams, pump diversions on the Irrawaddy River, and groundwater resources would greatly enhance the productive capacity of Upper Burma and provide water management stability in the lower regions. However, investment in irrigation development will require large amounts of foreign exchange. Until export prices for Burma's traditional products rise, the country's extraordinary resource potential may remain untapped. [Sara J. Schwartz (202) 447-8860]

## INDONESIA

*Structure of Agriculture  
Highly Diversified*

Agriculture is the dominant sector in Indonesia's economy, representing 26 percent of the nation's gross domestic product (GDP). The farm sector consists of two main groups of operators: 14 million small farmers cultivating about 14 million hectares of food crops for domestic use and sometimes for export and about 2,000 large plantations comprising more than 810,000 hectares and

producing perennial crops such as rubber, oil palm, coffee, and tea.

Even though the plantation sector generates a large portion of Indonesia's nonpetroleum foreign exchange earnings, small farmers contribute about 60 percent of agricultural sector GDP and employ 54 percent of the labor force. Small farmers produce 90 percent of Indonesia's coffee and 70 percent of its rubber, but plantations produce nearly all of its palm oil. Of the country's land area of 783,000 square miles, about 73,000 or 9.4 percent is being cultivated, with another 8 percent or so potentially arable.

### *Policy Stresses Growth in Food And Export Crop Sectors*

The current Indonesian 5-year economic plan, *Repelita IV*, extends through March 1989 and seeks to maintain self-sufficiency in rice production and to intensify production of secondary food crops. Emphasis is also on opening up new agricultural land; increasing production of plantation crops such as rubber, palm oil, and sugar for export; and developing fishing and forestry. The Government is promoting job-creating industrialization and value-added exports. Particular stress is placed on developing industries that process food and plantation crops, and fish and timber products, especially for export.

### *Sharply Higher Farm Output Leads Economy*

Agricultural production in Indonesia advanced 9.5 percent in 1984 (compared with 6.2 percent in 1983), led by a record rice crop; impressive gains in rubber, cassava, copra, and sugarcane; and smaller increases for virtually all other major commodities, including secondary food crops (table 7). Over 1975-84 the average rate of increase in agricultural output was 5.4 percent per year, with the sharpest gains since 1979. Grain production (rice and corn) increased to 31.0 million tons during 1984, 6.5 percent above 1983.

### *Record Rice Crop and High Stocks Permit Exports*

Record rice output of 25.8 million tons was attained in 1984 (up 7.6 percent from 1983), despite flooding in central and east

Java. The outturn resulted from several factors:

- 5 percent more harvested area,
- an estimated 15-percent increase in fertilizer use,
- more intense use of plant protection chemicals,
- a higher proportion of disease- and pest-resistant high-yielding varieties,
- generally excellent weather, including an extended rainy season,
- improved irrigation capacity, and
- improved overall farming practices.

The hectareage devoted to rice production was 9.6 million in 1984. During the 1970's rice area fluctuated between 7.9 and 8.9 million, but it has exceeded 9.0 million every year since 1979 except 1982, when a severe drought reduced planting for the dry season. Rice production grew at a compound annual rate of 6.1 percent during 1975-84, while rice area expanded at a 1.4-percent rate.

Although rice imports of perhaps 1 million tons seemed probable early in 1984, the record

Table 7--Indonesia: Production of selected agricultural commodities

Commodity	1983	1984	1985 F	Share of 1985
				prod. 1/
		1,000 tons		Percent
Rice (milled)	24,006	25,825	26,500	51.8
Cassava	11,651	14,700	15,000	6.9
Sugarcane	24,531	26,500	26,700	9.7
Rubber	899	1,230	1,100	5.6
Coconut (copra equiv.)	1,607	1,731	1,740	4.6
Palm oil	983	1,055	1,148	4.9
Coffee	308	318	328	2.8
TOTAL				86.3

1/ See explanatory note following the table of contents. F = Forecast.

SOURCES: Government of Indonesia, FAS, ERS estimates.

wet-season rice harvest enabled BULOG, Indonesia's National Logistics Agency, to halt rice imports completely after August. The result was imports of only 387,000 tons, far less than the 1.1-million-addition to year-ending stocks.

To defend the grower price support system, BULOG purchased large amounts of rice, resulting in record stocks as the year progressed. Late in the year, BULOG contracted to export 100,000 tons of rice to the Philippines before April 1985, raising the possibility of shipments to other countries in 1985. Indonesia achieved rice self-sufficiency in 1984, as in a few other recent years. This is remarkable, considering that during 1977-80 Indonesia was the world's leading rice importer, buying about 2.0 million tons annually.

#### *Secondary Food Crops Deemed Increasingly Important*

The major secondary food crops produced in Indonesia are corn, cassava, sweetpotatoes, soybeans, and peanuts. Although the marketing infrastructure is far from adequate, the Government is increasingly emphasizing production of secondary crops such as soybeans and corn. Corn, cassava, and sweetpotatoes are important in the diets of the lowest income groups, although rice is preferred if it is available and affordable. In recent years, food use of soybeans and peanuts has increased, as cheaper sources of protein than meat and poultry. These crops are usually grown in rotation with rice where scarce irrigation water limits multiple rice crops, and separately or in rotation with each other or rice on unirrigated land.

Corn output was marginally higher in 1984 at 5.2 million tons. Around 80 percent of the nation's corn is for human use, although feed use is growing, especially for poultry. With the current support price at \$2.52 per bushel, the potential for greater corn production is substantial if improved short-season hybrid varieties are developed and use of major inputs, such as fertilizer, is intensified. Varietal development work continues by the National Seed Board and private companies, but hybrid seed is expensive and not yet readily available. Corn marketing infrastructure, corn, proper storage facilities, production credit, and research extension to

farmers are among major needs before corn's potential can be realized.

Domestic soybean production rose 7.8 percent in 1984, although imports of 391,000 tons were still required, with the United States supplying 96 percent. All domestic soybeans are consumed as soybean curd products, tempe and tofu, which are eaten as meat supplements or replacements. To satisfy demands of an expanding feed-manufacturing industry, soybean meal imports will continue to increase in the absence of domestic crushing facilities. Indonesia's investment board, BKPM, has approved three domestic soybean-crushing plants. It seems highly probable that one of these, capable of crushing at least 300,000 tons annually, will be constructed and operating by 1990, possibly within the next year or two.

Indonesia's recent soybean production expansion program has achieved little. Despite high local soybean prices, poor yields have made soybeans an uneconomical crop compared with rice.

#### *Palm Oil Is "Prima Donna" Commodity*

Palm oil is mainly relied upon to fill growing domestic vegetable oil demands. Production of palm oil, 1.06 million tons in 1984 (983,000 in 1983), increased at a compound annual rate of 13.5 percent during 1979-84. Continued rapid growth is planned through the late eighties. Exports of palm oil declined 69 percent in 1984 to 106,000 tons because of export restrictions and heavy export taxes levied to assure an adequate domestic supply when there is a shortfall in world production. The rate of growth in palm oil output during 1975-84 was more than double that for rubber, tea, and other leading plantation export commodities.

#### *Export Performance Strong*

Indonesia's worldwide agricultural trade surplus in 1984 was an estimated \$1.3 billion, compared with \$500 million in 1983. Europe, the United States, and Japan are the country's major export markets. Farm exports came to an estimated \$2.4 billion (11 percent of total exports), 26 percent greater than in 1983, with higher receipts from rubber (41 percent), coffee (22 percent), and tea (9 percent) accounting for 72 percent of the total.



Estimated imports of \$1.1 billion were 29 percent less than in 1983. Leading agricultural imports and percentage shares of the total were: wheat, 26; cotton, 18; rice, 15; soybeans, 11; soybean and fish meal, 10; and dairy products, 6. These commodities accounted for 86 percent of the total farm import bill. Indonesian outlays were higher in 1984 for soybeans, soybean meal, and cotton, but lower for rice, wheat, sugar, and dairy products.

U.S. agricultural exports to Indonesia declined to \$395 million, 6 percent below 1983. Major commodity percentage shares of these exports were: wheat, 33; cotton, 30; soybeans, 17; soybean meal, 5; rice, 4; and unmanufactured tobacco, 3. U.S. agricultural imports from Indonesia totaled \$784 million, 38 percent above 1983. Major commodities and their import percentage shares were rubber and allied gums, 62; coffee and related products, 20; spices, 7; tea, 5; and palm oil and unmanufactured tobacco, 1 each.

#### *Economic Growth Target: 5 Percent Through 1988*

Repelita IV is based on assumptions of average real economic growth of 5 percent, no increase in petroleum prices, continued budget austerity, and an increasing role for the private sector. Targeted growth of 5 percent is about 50 percent less than over the previous decade. A major Repelita IV objective is to reduce the share of oil and gas in export earnings from 71 percent to 65. Equally significant, the share of oil and gas in Government revenues is to decline from 64 to 55 percent.

Following are the Government's targets for food crop production by 1988, with 1984 estimated production in parentheses: rice, 29.4 million tons (25.8); corn, 6.7 million tons (5.2); sweetpotatoes, 2.6 million tons (2.3); cassava 17.9 million tons (14.7); and soybeans, 1.4 million tons (.6). Except for rice and perhaps corn, the production targets seem overly optimistic, especially for soybeans.

#### *Less Agricultural Growth Expected in 1985*

Farm sector output growth (9.4 percent in 1984) is projected to decline to about 4 percent in 1985. Lower rubber production and

smaller increases in rice, corn, cassava, and sugarcane will be major factors in shrinking growth. Production of palm oil could increase to about 1.15 million tons, 8.8 percent above 1984. As always, the outcome for rice, which accounts for slightly over half of farm sector output, is crucial to overall agricultural performance. The 1985 total rice harvest is forecast at a record 26.5 million tons, (2.6 percent above 1984). This is based on a timely and ample 1984/85 monsoon, which indicates a large wet-season rice harvest by midyear and improves prospects for establishing dry season rice and secondary food crops. Record Government rice stocks (2.8 million tons on January 1) and a recent BULOG decision not to export more rice now because of losses to be incurred at low world prices enhance Indonesia's food security in case of unexpected adversity.

Imports of wheat, soybeans, soybean meal, and cotton from the United States are expected to decline in U.S. fiscal 1985, contributing to a possible 43-percent decline in overall U.S. farm sales to Indonesia. Major factors which lower prospective U.S. sales are relatively high domestic food production and stocks, intense price competition among exporters, no subsidies on domestic wheat flour prices since early 1984, the relatively high valued U.S. currency, and a desire to conserve foreign exchange.

Because of Indonesia's low per capita income (US\$583) the bulk commodities will continue to lead U.S. farm exports to Indonesia in the eighties. Although Indonesia's status as a developing country makes for a relatively small market in high-valued items, the United States was experiencing increasing sales in this area until 1982, when the Indonesian Government placed restrictions on imports classified as "luxury goods." This reduced U.S. sales of apples, pears, grapes, citrus fruits, and wines, although sales of some items recovered in 1984. [J. Albert Evans (202) 447-8229]

## **MALAYSIA**

### *Malaysia Diversifies Economy*

Malaysia over several decades has evolved from an agricultural economy dependent on rubber and tin exports to a well-developed

exporter of electrical components and products, rubber, tin, petroleum, LNG, palm oil, cocoa, and other goods. The rapidly expanding manufacturing sector contributes about a fifth to GDP and provides employment for over one-sixth of the work force.

Although agriculture's importance has diminished, it still accounts for 22 percent of GDP, provides employment for 34 percent of the work force, and contributes a third of export earnings. Paced by a sharp recovery in palm oil output, overall agricultural output increased 8 percent in 1984 (table 8).

#### *Large Estates More Efficient Than Smallholdings*

Malaysia has a strong comparative advantage in producing tropical tree crops—especially rubber, palm oil, and cocoa—on large, efficiently managed estates for export markets. Output of these crops is rising and the Malaysian share of world trade is increasing. In contrast, relatively inefficient small farm producers (smallholders) of rubber, rice, coconuts, tobacco, fruits, vegetables, and other crops contribute heavily to the high incidence of poverty in rural areas.

#### *Government Seeks To Boost Production Efficiency*

The central objective of Malaysia's relatively new National Agricultural Policy (NAP) is to maximize income from agriculture while revitalizing the sector's contribution to overall economic development. Farm income maximization would require raising the productivity of traditional export crops, further developing others such as cocoa, and greatly expanding production of food crops such as fruits and vegetables. Agricultural planners seek to make smallholder cultivation patterns rational by forming cooperatives and encouraging greater private sector initiative to reverse the pattern of stagnant or declining output for most crops other than oil palm and cocoa.

Government agencies developed 249,300 hectares of new agricultural land during 1981–83. Of this, 37 percent was planted to rubber, 54 to oil palm, 6 to cocoa and coconut, and 3 together to rice, sugarcane, and coffee. In total, the Federal Land Development Agency (FELDA) has developed more than

Table 8—Malaysia: Production of selected agricultural commodities

Commodity	1983	1984	1985 F	Share of 1985 prod. 1/
	1,000 tons			Percent
Rubber	1,562	1,580	1,596	18.9
Palm oil	3,015	3,712	4,000	31.7
Meat, eggs, milk	399	409	420	13.4
Rice (milled)	1,171	1,130	1,200	17.5
Bananas, pineapples	658	660	665	4.4
Palm kernels	830	1,047	1,155	4.6
TOTAL				90.5

1/ See explanatory note following the table of contents. F = Forecast production.

SOURCES: Government of Malaysia, FAS, ERS estimates.

650,000 hectares, about 17 percent of the country's cultivated land. New land development by Government agencies will be intensified, with priority again given highly profitable estate crops.

#### *Subsidies and Credits Benefit Smallholders*

Smallholder producers of rubber, rice, coconuts, and tobacco continue as beneficiaries of Government policies and programs to increase productivity. For example, small rice farmers are supplied with free seed and fertilizer, interest-free production credit, free irrigation water, and subsidized pesticides. The Government would like to reduce agricultural subsidies but recognizes the political necessity of continuing them selectively.

#### *Rice Output Down, Cereal Imports Up in 1984*

Production of rice, the major food staple, was 1.13 million tons in 1984, the lowest in 5 years. The northeast region of peninsular Malaysia was flooded late in 1983 and early in 1984, lowering the yield. The exclusive Malaysian importer of rice, the Government agency LPN, bought 500,000 tons or 40 percent more than in 1983 because of the disappointing crop.



Although rice imports drain foreign exchange, present policy acknowledges that Malaysia, a high-cost producer of rice, should not strive for production self-sufficiency but rather for 70 percent of the national requirements. Still, the Government plans to further intensify rice production by providing drainage and irrigation in existing areas to facilitate double cropping, using of high-yielding varieties, and adopting other modern farming practices.

Rice prices in Malaysia are controlled by LPN. This Government agency monitors the supply and distribution of rice and negotiates imports with the governments of rice-exporting countries. Nearby Thailand, with acceptable-quality cheap rice, dominates Malaysia's market.

Tropical Malaysia produces no wheat. Consumption per capita, 35.0 kilograms in 1984/85 (July/June), has risen as living standards have improved, climbing also during the last 3 years because of low wheat flour prices relative to rice. Although wheat is unlikely to replace rice in the diet, per capita use will continue to rise. Imports in 1984 increased marginally from 1983.

#### *Poultry and Pork Dominate Livestock Output*

Malaysia is essentially self-sufficient in poultry and pork production, but it produces less than half its beef and mutton and has only a limited Government-sponsored smallholder dairy industry. Domestic milk production is only about 4 percent of total requirements. Almost no corn is produced in Malaysia, with the little produced going mainly for human use; 1984 imports of 1.0 million tons were used almost entirely for feed.

Poultry constitutes more than 50 percent of total meat production in Malaysia and pork about 43 percent, for non-Muslims. Commercial beef production is limited to one feedlot and two beef cattle breeding farms operated privately.

In 1984 broiler prices were well above 1983. Pork prices reached record levels before declining sharply late in the year due to overproduction. Overall, the broiler industry entered 1985 with larger profit margins than a year earlier.

Soybean, palm kernel, and copra are the only oilseeds crushed in Malaysia. Animal feed production is increasing at an annual rate of 5-10 percent. In 1984, cheap Chinese soymeal probably displaced some corn in feeds and also lowered demand for U.S. soybeans for crushing.

#### *Estate Performance Was Mixed in 1984*

Oil palm, rubber, and cocoa accounted for 62 percent of Malaysia's total agricultural production in 1984. The country is the world's largest producer and exporter of palm oil and natural rubber, and the fifth greatest producer of cocoa beans. Together these crops occupied 3.6 million hectares in 1984, 12.8 percent more than in 1980.

Natural rubber production in 1984 increased marginally to 1.6 million tons, or about 38 percent of world output. With exports of about 1.6 million tons (2.4 percent over 1983), rubber was the nation's second largest agricultural foreign exchange earner, trailing only palm oil. Most rubber exports go to the world automobile industry for tires. Over the last decade, generally low returns to producers have resulted in a steady shift of land from rubber to oil palm.

#### *Palm Oil Production Shot Up in 1984*

Last year saw an 8-percent expansion in palm area and a 23-percent surge in palm oil output. Large scale cultivation of oil palms did not begin in Malaysia until the early sixties, in accord with the Government's agricultural diversification policy. Favorable climate, abundant suitable land, and land development projects enabled Malaysia to produce 59 percent of the world's palm oil and 80 percent of its exports in 1984.

Domestic palm oil requirements are low, so about 90 percent of output is exported, mostly as refined, bleached, and deodorized (RBD) palm oil, stearin, and olein. Of processed oil exports from peninsular Malaysia in 1984, Singapore took 28 percent (mainly for reexport) and India took 21, the two combining for nearly half of total sales. Other leading markets were Pakistan, the USSR, Japan, the Netherlands, the United States and Saudi Arabia.

### *Cocoa Area and Output Expanding Rapidly*

In recent years, the Malaysian cocoa industry has achieved impressive growth, stimulated by the upsurge in cocoa prices during 1974-78. Production of cocoa beans rose to 90,000 tons in 1983/84 (October-September), 32 percent above 1982/83. The Government has agreed to establish a Malaysian Cocoa Board to oversee and stimulate the growth of the industry through research and development, regulatory arrangements, and market promotion. The national marketing authority introduced a grading scheme in August to upgrade and standardize Malaysian dry cocoa beans for export. The cocoa moth has emerged as a threat to cocoa output and quality, but expert opinion is sharply divided on the severity of the problem, in both the intermediate and the long term.

### *Agricultural Expansion Likely To Slow But Continue*

In 1985, agricultural sector growth of possibly 3-5 percent will contribute to overall economic growth of 5-7 percent. The general outlook will be determined largely by the economic performance of Malaysia's major trading partners, particularly Japan, the United States, and the European Community. The Malaysian Government projects export value to increase 7.5 percent in 1985, far below the 17.0 percent in 1984. Economic growth could be dampened by conservative 1985 Government spending, resulting in a reduction in imports and external borrowings.

Growth in 1985 agricultural output will be led by palm oil and cocoa. Palm oil production could total near 4.0 million tons in 1985, 8 percent above 1984. Output in February and March was less than expected, raising again the possibility that the Cameroon weevil, released in 1982 to enhance pollination, has in fact not only changed the normal monthly production cycle of the oil palm but also increased annual production variability.

Production of cocoa beans will likely increase about 39 percent in 1984/85 (October-September), to 125,000 tons. Malaysia is enroute to becoming the world's third largest cocoa bean producer by 1990, with production to exceed 200,000 tons.

Severe flooding in the Northwest region of peninsular Malaysia during March reduced prospects for the offseason 1985 rice crop and destroyed an estimated 60-70 percent of the area's main flue-cured tobacco crop. Total tobacco production may only decline slightly to 5,700 tons, dry weight, from 1984's flood-reduced level. Still, imports of U.S. unmanufactured tobacco could increase 53 percent to about 5,300 tons in 1985. [J. Albert Evans (202) 447-8229]

## THE PHILIPPINES

### *Only Farm Sector Posts Growth*

Although the Philippine economy contracted 5.5 percent in 1984, the farm sector recovered by 1.2 percent from the drought-reduced performance of 1983, when output fell 2.1 percent. Still, farm sector growth was below the 10-year average of 3.9 percent, largely because of two typhoons, low coconut output, and the disruptive drag that the weakened economy is placing upon farm credit, input imports, and consumer demand. 1/ Producer costs have outpaced both overall inflation of 52 percent and farm support price increases, discouraging use of costly inputs.

Within the farm sector, losses in the livestock, fishery, and coconut industries were offset by growth in the rice, corn, sugar, banana, and poultry sectors (table 9). As a share of GNP, agriculture's contribution increased to 26 percent in 1984 from 25 in 1983. However, it continues to trail industry's 34 percent. The Philippines had an agricultural trade surplus; imports fell 22 percent to \$556 million, and exports grew 9.5 percent to \$1,582 million, despite low prices for sugar and reduced supplies of coconut products. The Philippines also continued a farm trade surplus with the United States, shipping about \$600 million worth of commodities—primarily desiccated coconut and coconut oil, sugar, and pineapple products.

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1/ For a review of the current Philippine economic plight, see "The Philippine Debt Crisis," a special article in this issue.

Table 9--Philippines: Production of selected commodities

Commodity	1983	1984	1985 F	Share of 1984 prod. 1/
	1,000 tons			Percent
Rice (milled)	5,097	5,183	5,499	29.4
Copra	2,015	1,337	1,726	6.7
Sugarcane	25,384	17,360	14,520	5.9
Pork	500	460	450	10.6
Corn	3,346	3,373	3,600	12.3
Pineapple	800	869	903	4.5
Total				69.3

1/ See explanatory note following table of contents. F = Forecast.

SOURCES: Government of the Philippines; FAS; ERS estimates.

### *Rice Demand Outpaces Supply*

For 1984/85 (July/June), rice output rose about 1.7 percent from 1983/84, to 5.18 million tons. Area cultivated expanded to 3.2 million hectares, but expensive credit and higher input costs hindered significant strides in production. Pushed by a rapid 10-percent rise in rice demand, the Philippines became a net importer of rice for the first time since self-sufficiency was attained in 1977, importing 280,000 tons by the end of 1984. The prevailing price discount of rice to wheat flour is keeping pressure on rice supplies and dampening demand for wheat products.

The 1984/85 corn harvest is projected at 3.5 million tons, equal to last year's record. Area increases are expected to offset declining yields. Typhoons, dry weather, and less use of fertilizer are depressing yields and thwarting Government self-sufficiency efforts. Also, farmers are reluctant to plant high-yielding yellow corn because of depressed demand from livestock producers and higher farm prices for white (food) corn.

### *Drought and Typhoon Damage Coconut Trees*

The effects of the September 1982-June 1983 drought and 1984 typhoons devastated coconut production in 1984. Copra output fell by one-third to 1.3 million tons, resulting in copra meal production of 427,000 tons and a

coconut oil outturn of 866,000 tons--both down about 30 percent from 1983. The Philippines remained the world's leading exporter of coconut products, even though exports of coconut oil fell 43 percent to 586,400 tons, copra meal dropped 39 percent to 376,000 tons, and desiccated coconut fell 19 percent to 68,500 tons. Copra exports have been banned since 1983. The rise in world prices for coconut oil and desiccated coconut more than offset the substantial decline in copra meal prices, increasing total export revenue 2.4 percent above a year earlier.

### *Problems Continue To Beset Sugar Industry*

Planting of the 1984 sugarcane crop was reduced because of low world sugar prices, the expiration of favorable long-term contracts, difficult crop financing, and uncertain policy reform. Area devoted to sugar declined nearly 25 percent, with cane output falling by 32 percent to 17.4 million tons. Mill use slipped to only about 45 percent of capacity. Because of good weather and despite rising input and operating costs, some yield improvement occurred, producing 1.54 million tons of raw sugar. However, this production is still 34 percent below 1983. The Philippines will likely export about 1.1 million tons of the 1984 sugar crop, slightly below year-earlier shipments. As usual, but unlike the year before, imports will not occur.

Production of most other crops recovered to predrought levels. Banana production was up; pineapple output reached 869,000 tons; and higher prices and good weather increased both area and yield of aromatic and cigar tobacco, boosting output to 95,600 tons. Expensive crop financing discouraged cotton cultivation, with area falling 40 percent to 7,000 hectares. However, improved cotton yields led to output of 18,000 bales, only 20 percent below 1983/84 (August/July).

### *Economic Crisis Curbs Meat Consumption*

Throughout 1984, the livestock and poultry sectors adjusted to consumer demand, depressed by lower consumer incomes and higher meat prices. Poultry consumption fell most dramatically, dropping 24 percent to 137,000 tons; beef and veal declined 14 percent to 170,000 tons; and pork, the

preferred meat, fell 9 percent to 460,000 tons. Meat prices rose because of higher prices for feed, vaccines, and breeding stock, as well as the high interest rates that discouraged expansion. The rising costs also hurt Philippine exports of live hogs to Hong Kong (initiated in 1983), resulting in a 30-percent decline to 17,860 head.

### *Farm Policy Receives Major Overhaul*

The Philippines developed a comprehensive program for agriculture called the "Agenda for Action in Agriculture: 1984-88." In light of the ongoing debt crisis, the program recognizes the urgent need to cut Government spending; the Government is financing 70 percent of its deficit through foreign borrowing. For agriculture, this means eliminating subsidies and mobilizing local financial resources to expand farm credit. Additionally, a shift from self-sufficiency to exportable products is emphasized.

While several sectors are marked for deregulation--namely sugar, coconut, and rice--procedures for enacting these changes are still being formulated. Program changes as of May 1985 include:

- revamping of Ministry of Agriculture into the Ministry of Agriculture and Food, with emphasis on greater coordination among agricultural institutions;
- price deregulation on basic farm commodities, excluding rice;
- establishment of a 4-tier rice price for varying grades of rice, with complete deregulation scheduled for October 1985;
- opening of imports and distribution of fertilizer to the private sector;
- opening of wheat imports and wheat flour distribution to the private sector;
- dissolution of the coconut oil export monopoly;
- return of domestic sugar trade to the private sector by September 1985;
- eligibility of the private sector to import and export feed grains, with Government approval; and

- removal of input subsidies, notably credit and irrigation, within one year.

Subsequent effort will focus on productivity programs and investment incentives for selected crops; a rededication to agrarian reform; expansion of farm credit; more efficient marketing and input/output pricing systems; and a stronger institutional framework.

### *Export Credit Aids U.S. Farm Exports*

During fiscal 1984, U.S. farm sales to the Philippines fell 27 percent to \$300 million; nearly 50 percent was backed by U.S. credit guarantees. The major U.S. products bought by the Philippines were wheat, corn, soybean meal, nonfat dry milk, cotton, and tobacco. Export credit shifted the Philippines' primary soybean meal purchases from Brazil to the United States in 1984. U.S. tobacco exports to the Philippines fell by 50 percent in 1984 because domestic demand shifted to lower quality, cheaper cigarettes that use more local leaf.

The outlook for fiscal 1985 calls for a slight increase in U.S. sales, to \$323 million, the gain largely in rice. About 135,000 tons of U.S. rice exports are proposed, using P.L. 480, Title I funds. Quantities of most other commodities will decline. The recent opening of feed grain imports to the private sector will enhance Thai and Chinese competitiveness relative to the United States because they can cheaply and promptly offer small shipments.

With real income likely to continue declining, a further slip of U.S. tobacco exports is forecast. Soybean meal exports will be lower than last year, as cheaper meal from China and Brazil limits the United States' performance. Wheat demand is likely to remain sluggish, with only a minor increase in U.S. exports to 750,000 tons. Although cotton demand is down, U.S. credit guarantees will improve the U.S. share of Philippine cotton imports.

### *Farm Sector Is Priority in Economic Recovery Program*

According to the updated Philippine development plan (1984-87), GNP is targeted to average annual growth of 2.8 percent, with agriculture slated to post the most rapid

expansion, 4 percent. The poultry, coconut, fishery, and rice sectors are projected to set the pace. This growth rate depends on strong private sector initiative, sizable growth of rural incomes, and identification and expansion of nontraditional farm exports.

Assuming normal weather, record production of the country's staples, rice and corn, is expected in 1985/86 (July/June). These crops are receiving top priority. Largely because of area expansion (up 3 percent to 3.3 million hectares) but also because of some yield improvement, rice output is anticipated to be nearly 5.5 million tons. Double-digit inflation may inhibit a greater input response.

Corn area is projected to increase more rapidly (up 4 percent to 3.4 million hectares) and for the second year surpass rice area. Greater area, combined with significant boosting of yields, as more farmers accept the high-yielding corn varieties, is estimated to bring corn output to 3.6 million tons. The recent option to export corn is expected to encourage farmers further.

Except for less expensively priced poultry meat, declining consumer demand for beef and pork is likely to result in another contraction year for the livestock sector. Coconut stands will begin to recover, yielding 1.7 million tons of copra and 1.1 million tons of coconut oil. However, uncertainty surrounding the implementation of liberalized coconut trading policies is inhibiting coconut product exports in the first quarter of 1985.

The Philippine sugar industry will probably show the weakest performance, as it weathers low world prices, rising input costs, expensive crop financing, and an uncertain policy climate. Sugarcane production in 1985 is projected to fall to 14.5 million tons as planters opt to switch land to alternative crops such as corn, leave it idle, or lease it to sugar laborers for food production. [Leslie E. Ross (202) 447-8230]

## SINGAPORE

### *Strong Export Orientation Necessary*

The well-managed city state of Singapore, with extremely limited natural

resources and an increasingly important export-oriented manufacturing sector, depends on trade. Situated at the crossroads of international shipping and air routes in Southeast Asia, Singapore serves as a center for transportation and communications. Its principal economic roles in Southeast Asia include:

- processing, packing, and marketing the region's raw materials, such as rubber, palm oil, timber, coffee, spices, and grains;
- distributing within the region the manufactured products of industrialized countries; and
- conducting trade-related activities, such as banking, shipping, insurance, and storage.

Previously, up to two-thirds of Singapore's total trade had consisted of transshipping, but transshipping's relative importance has declined, reflecting the shifts toward importing capital goods and materials for industry and exporting locally manufactured products.

Singapore must import at least 80 percent of food consumed by its population of 2.5 million. U.S. agricultural products face a highly competitive and diversified market in Singapore, basically a duty-free port without trade restrictions. Total U.S. shipments to Singapore amounted to \$145 million in 1984, down 5 percent from 1983. Leading items were chicken meats (\$26.6 million), grains and feeds (\$9.6 million), fresh fruits (\$24.2 million), vegetable oils and waxes (\$18.5 million), sugar and tropical products (\$17.6 million), vegetables and preparations (\$11.7 million), cotton (\$8.1 million), nuts and preparations (\$3.8 million), and unmanufactured flue-cured tobacco (\$3.6 million). U.S. agricultural imports from Singapore (mostly transshipments) totaled \$70 million, the major commodities being cocoa and products (\$23.0 million), crude rubber and allied gums (\$22.0 million), vegetable products (\$12.0 million), feathers and down (\$6.0 million), coconut oil (\$4.3 million), and fruits and preparations (\$2.8 million).

During 1984 the Singapore Government underscored its intention to phase out

production of hogs and poultry in the country. The Government has decided to cut back its total agricultural land from the present 10 percent to 1 percent over the next 10 years. Licenses of smaller farms were not renewed as they expired. Moreover, an intense promotional campaign encouraging consumers to switch to frozen pork from fresh was carried out in January 1985. Imports of both frozen pork and chicken will continue to rise in the near term as production of fresh pork falls. It seems unlikely that the local production of pork and chicken will cease completely by 1990.

#### *Slower Economic Growth Expected Through 1985*

Singapore's 1985 economic growth will likely slow to 6-7 percent from 1984's 8.2 percent. Slower growth would reflect slackening demand in major export markets such as the United States. The manufacturing, trade, and construction sectors are likely to experience slower growth, but financial service, transport, and communications will perform better in comparison. [J. Albert Evans (202) 447-8229]

### THAILAND

#### *Agricultural Exports Aid Strong Economic Growth*

Good weather, improved commodity prices in 1983, and high export demand encouraged record 1984 production of several crops. However, commodity prices in general fell throughout 1984 and increased export earnings were due to greater volume. Lower farm prices will mean a slowdown in rural consumer demand in 1985.

The agricultural sector continues to diversify into exportable commodities. However, production gains have been achieved by expanding cultivation into marginal areas. Lack of irrigation, low input use, and poor soil management in these areas have led to declining yields. Previous gains due to improved water management in the most fertile regions are now leveling off.

Agriculture's contribution to the total GDP has fallen to 20 percent from 22 in 1983. While rice still dominates the Thai economy in

production and exports, other crops have reduced the country's dependence on this grain. Rice exports reached a record 4.5 million tons in 1984, and corn, tapioca products, rubber, and canned pineapple exports showed substantial gains over 1983 (table 10). Thailand maintained a net agricultural trade surplus of \$3.7 billion, up nearly 13 percent from 1983 but 5 percent below the 1982 record.

#### *Farm Output Growth Slightly Behind 1983*

Agricultural output increased 3.5 percent in 1984, down from 3.8 in 1983. The average growth for the last 3 years is 2.8 percent, well below the 5th Five Year Plan (1982-1986) target of 4.5 percent. Still, rice, corn, sorghum, rubber, and commercial pork production reached record levels (table 11). However, farm prices fell for all except corn, rubber, and soybeans, limiting the agricultural sector's contribution to the country's general economic growth.

Rice production in 1984/85 (wet-season 1984, dry-season 1985) is expected to decline to 12.0 million tons (milled basis), 7 percent below last year's record. The late and short monsoon season affected the main crop.

Table 10--Thai agricultural exports, 1983 and 1984

Commodity	Volume		Value	
	1983	1984	1983	1984
	1,000 tons		Million dollars	
Rice (milled)	3,700	4,528	876	1,090
Cassava prod.	4,834	5,950	583	625
Sugar (raw eq.)	1,335	1,750	236	208
Rubber	555	588	512	565
Corn	2,718	3,179	365	427
Meat & fish prep.	78	111	188	257
Fishery prod.	130	138	298	293
Fruit & veg. prep.	183	225	103	151
Tobacco	36	35	80	73
Pineapple prod.	142	170	86	115
Mung & black matpe beans	157	160	67	72
Poultry	23	28	41	60
Sorghum	228	244	34	38
Molasses	727	615	26	19
Fruit	75	72	31	30
Orchids	8	7	15	17
Other	NA	NA	359	210
TOTAL			3,900	4,250

SOURCE: Foreign Agricultural Service, USDA.

Table 11--Thailand: Production of selected commodities

Commodity	1983	1984	1985 F	Share of 1985 prod. 1/
	1,000 tons			Percent
Rice (milled)	12,931	12,045	12,375	47.8
Cassava	19,000	20,000	20,000	10.6
Rubber	594	650	700	9.3
Sugarcane	23,900	23,100	24,500	8.7
Corn	4,000	4,500	4,500	9.1
Tobacco	86	86	80	2.7
TOTAL				88.2

1/ See explanatory note following table of contents. F = Forecast.

SOURCES: Government of Thailand; FAS; ERS estimates.

Reduced fertilizer supplies will result in lower dry-season yields. These declines will be offset somewhat by the continuing shift from glutinous to nonglutinous rice production in the northeast. The 1984/85 outturn and large carryover stocks (1.08 million tons) will allow 1985 export availability to equal that of 1984.

Plentiful rains and increased use of improved and high-yielding seed have contributed to a high-quality 1984/85 (July-June) corn output of 4.5 million tons, exceeding last year's harvest by 12-13 percent. Dry conditions during the harvesting of both the main and late crops have improved quality. The moisture content is much lower than in previous years and aflatoxin (a carcinogenic fungus) should pose less of a problem than in the past.

Sorghum output is also up, rising 25 percent and reaching 350,000 tons. Red sorghum accounts for the bulk of the increase. Approximately 30,000 hectares previously planted to cassava have been planted to sorghum as part of a cassava diversification program. Red sorghum production is expected to expand. The domestic feed industry may increase its use as the domestic price declines relative to corn.

#### *High Returns Stimulate Cassava Production*

Strong farm prices in 1983 stimulated record cassava production in 1984. Planted

area increased 9 percent over 1983 to 1.4 million hectares. Output reached 20 million tons; this, when processed, produces 8.2 million tons of pellets, chips, and flour. The EC has limited 1985 imports of Thai tapioca to 4.5 million tons. A huge surplus is expected to develop, as there are already 2.0 million tons in stock and few alternative markets. Export demand kept local cassava prices high in December 1984 because of the devaluation and the issuance of new export quotas. As a result of the high prices received, low sugarcane prices, and good weather, cassava production is likely to remain high. Prices are expected to fall later this year and may encourage increased cassava use in domestic feed.

Soybean production rose sharply, 35 percent above 1983/84, reaching 172,000 tons. The Government's seed program pushed yields from 911 kilograms per hectare to 1,060. Farmers planted 22 percent more area to soybeans. Area and yield increases are expected to continue into 1985, with production forecast to climb to 240,000 tons. The increased production still will not meet domestic demand, though, and 30,000 tons may be imported.

Sugarcane output is estimated at 24.5 million tons, up 6 percent from the 1983/84 (April-March) season. Planted area has remained stable at 645,000 hectares, although less chemical inputs were used because depressed farm prices were expected. Cool weather at harvest has increased the sucrose content of the cane. As a result, sugar output is expected to reach 2.5 million tons, up 7 percent from 1983/84.

Per capita consumption remained relatively flat at 14 kilograms in 1984, for a total domestic consumption of 707,000 tons. While Government-controlled retail prices have remained stable since 1980, they are currently triple the world price. The large cane crop will lead to an increase in molasses production to 1.33 million tons, 8 percent above 1983/84. Local molasses prices fell dramatically when a large export tax was imposed in February 1984, causing a sharp decline in exports. Prices strengthened again 6 months later when the tax was repealed because large surpluses had developed.

Strong farm prices encouraged farmers to increase planted cotton area by 12 percent to



114,400 hectares in 1984. Yields were down because of summer drought and late rains which led to insect infestations. Labor shortages prevented adequate pesticide applications and weeding early in the season. As a result, while total production will be up 5 percent (40,000 tons, lint basis) from 1983, crop quality will be lower.

#### *Cropping Patterns Altered As Commodity Prices Shift*

Pulse production in 1984 fell 5–10 percent to 400,000–420,000 tons, as farmers reduced area in response to higher cotton and sorghum returns. Mung bean production remains relatively stable, but black matpe bean output has declined because of depressed farm prices in 1984. Reduced exports and surplus stocks depressed farm prices for tobacco, discouraging growers from using chemical inputs. As a result, 1984/85 yields declined and production fell to 86,000 tons, 7 percent below 1983/84. Declining demand for low-quality leaf tobacco has led farmers to reduce area planted to tobacco by 7 percent in 1985. Rubber production reached a record 650,000 tons in 1984, 11 percent higher than 1983.

Livestock sector growth has been slowing after a decade of rapid expansion, particularly in poultry. Domestic consumption of poultry meat is leveling off at 10–12 kilograms per capita and export demand remains relatively stable. While the swine industry continues to modernize, herd expansion has led to an oversupply and prices fell in 1984. Herds are being cut back, and pork production may drop 5 percent in 1985. Beef consumption is low because of the low quality and the Thai taste preference for fish, chicken, and pork. The domestic dairy industry supplies only 10–12 percent of Thailand's total dairy product demand of 448,000 tons.

#### *Trade Expansion Spurs Record Imports and Exports*

Thailand's 1984 agricultural exports increased to \$4.25 billion, 9 percent above 1983. Export earnings attributed to rice, tapioca, rubber, corn, and canned pineapple rose steadily during the year. Export prices for rice and tapioca products fell but the price decline was more than offset by the increased

export volume. Both the volume and value of rubber, corn, and canned pineapple increased in 1984.

Record rice exports (4.5 million tons) earned \$1.09 billion in 1984. Prices are expected to remain low, allowing Thailand to continue its expansion into traditional U.S., Burmese, and Pakistani markets. Corn exports are likely to reach 3.1 million tons during the 1984/85 marketing year. Sales to drought-stricken East Africa and the USSR have offset declines in East Asia resulting from heavy competition from Chinese corn. Corn export earnings in 1984 increased by 15 percent to \$420 million.

Tapioca exports reached 6.4 million tons in 1984, 37 percent above 1983. The European Community continued to take 95 percent of all tapioca products. Efforts to diversify Thai export market destinations for tapioca products were largely unsuccessful in 1984. However, tapioca flour exports were up 24 percent due to large sales increases to Japan, Taiwan, and the United States.

Thailand became the world's fourth largest sugar exporter in 1984. However, exports declined 22 percent to 1.24 million tons and export earnings dropped 19 percent to \$222 million. Rubber exports increased 6 percent in 1984 and are expected to expand another 10 percent in 1985 as a result of lower export duty. Canned pineapple exports were up 27 percent in volume and 37 percent in value. Export earnings from frozen prawns, tobacco, and flowers fell, but the gains made in export earnings from mung beans, pineapple, and other fresh fruits and vegetables more than offset the loss.

Thailand imported record levels of agricultural commodities in 1984, the value reaching \$760 million, 21 percent above 1983. Most imports were raw, bulk, or semiprocessed commodities supplying the country's textile, canning, livestock, and food processing sectors. Cotton imports reached a record 120,000 tons, 8 percent above 1983, valued at \$185 million, 16 percent more than the previous year. Soymeal imports rose 46 percent in 1984 to 280,000 tons valued at \$70 million, the gain a response to the 10-percent increase in commercial feed sales. Flat demand and high stock levels led to a 20-percent decline in wheat and wheat flour



imports, which fell in fiscal 1984 to 158,000 tons valued at \$31 million.

The United States remains Thailand's primary source of agricultural imports. Imports in 1984 from the United States were valued at \$164 million (22 percent of the total value of Thai purchases), 9 percent above 1983. Cotton, wheat, and tobacco make up 80 percent of U.S. exports. High cotton prices and increased tobacco volume offset lower wheat imports. No U.S. soybean meal was imported in fiscal 1984 (\$8.4 million in fiscal 1983), despite record imports of 280,000 tons, mostly from China and Brazil.

### *Policies Give Exports A Competitive Edge*

The Government continued to promote exports and to support a market-oriented trade strategy in 1984. Since the November 1984 baht devaluation, export prices of major export commodities, such as rice and corn, have declined and export volume is up significantly over the previous year.

Import surtaxes were lifted on all agricultural commodities, to dampen the domestic impact of the devaluation. Prices of a wide range of goods were frozen to limit fears of inflation. Some imports were restricted to protect local production, to reduce imports of luxury goods, and to raise revenue. Pasturized and sterilized milk imports were banned. A 330-percent import duty was imposed on raw cotton. The duties on wheat, wheat flour, fruit, corn and sorghum (including seeds), soybean oil, and cigarettes were raised. However, a ban on soybean imports was lifted.

Export duties on rice remain low and may continue to decline. The export tax on rubber was also reduced. While sugar export earnings are down, the Government continues to support farm prices to maintain wholesale and retail prices at a level three times higher than the world price, and to allow milling capacity to grow. Exports in 1985 are expected to increase to 1.6 to 2.0 million tons as a result of large stocks and the demise of the International Sugar Agreement limitations. Thailand's U.S. quota continues to decline and will be limited to 32,259 tons in 1984/85, 16 percent below 1983/84 U.S. imports.

### *Agricultural Export Earnings To Fall in 1985*

Prices for key agricultural commodities are expected to remain low throughout 1985. Rice, sugarcane, cassava, corn, and tobacco output is expected to decline because of a less favorable monsoon and price-related area reductions. Even though production of rubber, soybeans, cotton, sorghum, and mung beans is expected to rise, it will not offset the cut in earnings from primary commodities. Weak international demand may result in a 5-percent decline in rice exports, at lower prices than in 1984. The cassava surplus, continued EC quotas, and lack of alternative markets may drive cassava export earnings down as much as 15 percent. However, the Soviet Union has agreed to purchase 2 million tons, Korea may take 250,000, and Japan has agreed to buy 200,000, offsetting losses in the EC market.

Earnings from corn exports will probably decline as competition from China keeps the price down. Thailand still has not been able to regain its corn markets in Taiwan or Japan, despite an earlier agreement with Japan which set an import target of 300,000 tons of Thai corn. Disagreements over price and quality make it doubtful that the Japanese will buy any Thai corn in 1985.

It is also unlikely that Taiwan will resume imports of Thai corn in the next few years due to a controversy over the quality of 49,000 tons of Thai corn shipped in late 1984. However, exports to Malaysia, Africa, and the USSR are expected to remain strong, offsetting the loss of East Asian markets to China. Sugar and rubber exports are expected to increase slightly. Overall, agricultural export earnings may decline 7-14 percent in 1985.

Agricultural imports are also likely to decline because of the devaluation and reduced buying power in rural areas. While soybean imports will increase to 30,000 tons, primarily from the United States, cotton imports will decline because of the new tariff. Competition from China and Pakistan may lower the U.S. market share to 40 percent. Tobacco imports will climb slightly but wheat demand may decline. [Sara J. Schwartz (202) 447-8860]

## CENTRALLY PLANNED SOUTHEAST ASIA

Centrally Planned Southeast Asia's 1984 rice harvest is estimated at 10.6 million tons (milled basis), compared with 10.8 million tons in 1983. Rice output fell in Vietnam and Kampuchea but increased in Laos. Rice imports for the region are an estimated 500,000 tons, up 52 percent from 1983. Regional rice consumption in 1984 is estimated at 11.2 million tons, up 3 percent.

### Vietnam

Vietnam's 1984 output of paddy rice and paddy equivalent is estimated at 17 million tons, more than 300,000 above 1983. The rice harvest was down 1 percent from 1983 although the spring and fall crops were larger than a year earlier. The main season crop

harvested in the late fall was reduced by typhoon and insect damage.

Improvements were reported in the production of industrial crops. Output of peanuts, tobacco, rubber, and coffee increased in 1984 by 23, 28, 32, and 50 percent, respectively.

In the livestock sector, 1984 buffalo and cattle populations reportedly increased by 2 percent, and poultry numbers by 1 percent.

Agricultural targets set for 1985 include producing 19 million tons of paddy rice and paddy equivalent; planting 750,000 hectares of short-term industrial crops and 416,000 hectares of perennial industrial trees; and providing irrigation water for 4.5 million hectares of rice and 380,000 hectares of industrial crops and vegetables. [William F. Hall (202) 447-8229]

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## AGRICULTURAL POLICIES IN THAILAND

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**Abstract:** During the last 5 years, Thailand has implemented policies to expand agricultural exports, increase the use of inputs, and raise farm incomes. Export taxes on rice have been reduced and other export controls on rice and corn have been abolished. Further expansion of output and exports will depend on price incentives to encourage farmers to invest in modern inputs. Thailand's livestock sector has significant growth potential. However, Government regulations hamper production. A shift in policy could lead to increased domestic demand for corn and cassava, reducing export availability of feedstuffs.

**Keywords:** Thailand, rice, corn, cassava, livestock, poultry, policy, exports, production

Thailand has successfully made the transition from subsistence rice farming to the production of diverse export commodities. The initial achievements were due to the expansion of cultivated area, irrigation systems, and credit. During the last 5 years, the Royal Thai Government has developed and implemented policies to expand agricultural exports, increase input use, and raise farm incomes. Major export controls have been reduced or eliminated. The baht was devalued

in November 1984 to increase the competitiveness of exports. The Government has also provided investment and subsidized credit privileges to export-oriented industries and exporters.

Domestic policies have been developed to complement the export strategy. In general, the Government is relying on free market forces to provide the necessary production incentives. However, some policies, designed

to benefit farmers or consumers, have created internal barriers to the growth of major sectors (notably, livestock) and created inefficiencies in what is considered an efficient and competitive market system.

In 1984, the agricultural sector contributed 20 percent of Thailand's GDP. The country earned 60-65 percent of its foreign exchange from agricultural exports. Rice, corn, and tapioca products represent 48 percent of agricultural export earnings. The growth of Thai exports and regional market share can be seen in tables A and B. In 1984,

Thailand captured 37 percent of the world export market in rice and 5 percent in corn.

### Rice

Rice is basic to Thailand's agricultural economy. It is grown by 98 percent of all farm families, who in turn represent over half the households in Thailand. Rice is grown on 60 percent of all farmland and accounts for one-third the total value of farm output; it represents 15 percent of total export earnings and 25 percent of total farm export earnings. Thailand accounted for 37 percent of world

Table A.--Thai exports: Rice, corn, and cassava

Region of dest.	1981/82	1982/83	1983/84	1984/85
	1,000 tons			
N. AM. Rice 1/ Corn 2/	7.7 0	17.4 0	22.4 10.7	36.3 NA
LATIN AM. Rice Corn	110.7 0	78.5 0	179.7 0	232.6 0
WEST EUR. Rice Corn Cassava 1/	76.0 12.2 5,457	78.0 1.9 7,297	132.9 74.2 4,579	275.4 NA 5,600
EAST EUR. Rice Corn	54.4 3.8	50.0 0	61.2 0	22.7 NA
USSR Rice Corn	277.8 261.9	0 46.8	0 171.6	0 NA
MIDEAST Rice Corn	587.5 851.8	635.9 422.9	713.9 774.6	841.7 NA
AFRICA Rice Corn	773.2 102.2	1,432.5 41.9	1,280.3 245.8	1,417.7 NA
ASIA & OCEANIA Rice Corn	1,163.0 2,028.1	1,327.7 1,623.3	1,166.9 1,636.3	1,732.1 NA
WORLD Rice Corn	3,050.2 3,260.1	3,620.2 2,137.0	3,700.2 3,100.0	4,500.0 3,100.0

1/ Estimates refer to January to December of the first year. 2/ Estimates refer to the July/June marketing year.

SOURCES: Foreign Agricultural Service and Economic Research Service estimates.

Table B.--Thai market share of regional imports

Region of dest.	80/81	81/82	82/83	83/84	84/85
	Percent of total imports				
N. AM. Rice 1/ Corn 2/	0 0	7 0	16 0	16 0	26 0
LATIN AM. Rice Corn	8 0	7 0	8 0	12 0	16 0
WEST EUR. Rice Corn Cassava 3/	12 0 100	5 0 88	6 0 95	10 0 94	21 0 86
EAST EUR Rice Corn	0 0	17 0	14 0	20 0	7 0
USSR Rice Corn	29 2	22 1	0 1	0 3	0 NA
MIDEAST Rice Corn	23 23	29 29	31 17	31 25	35.6 NA
AFRICA Rice Corn	25 2	28 2	45 1	42 4	51 NA
ASIA Rice Corn	26 6	26 9	47 6	36 7	46.1 NA
WORLD Rice Corn	21.0 3	23.2 5	31.9 3	31.3 5	37.0 5

1/ Estimates refer to January to December of the first year. 2/ Estimates refer to the July/June marketing year. NA = Not available.

SOURCES: Economic Research Service and Foreign Agricultural Service estimates.

rice exports in 1984, a substantial increase from its average share of 27 percent during the period 1980 through 1983. Increased exports resulted from attractive prices, declining domestic per capita consumption, and increased planted area.

Various forms of export controls have historically shielded domestic consumers from international price fluctuations. These have included an ad valorem tax (currently 2.6 percent of the f.o.b. price), a specific tax known as a rice premium, and a rice reserve requirement which requires exporters to sell a certain amount of rice of a given quality to the Government at below-market rates for every ton exported.

#### *Export Taxes Keep Domestic Prices Down*

Rice export taxes have been a major source of Government revenue. They provided 25 percent of Government income just after World War II and were an important means of generating public savings and development financing. At the same time, the taxes served as a wedge between domestic and world prices.

The resulting low rice prices in urban centers kept the wage rate low, allowing the nonagricultural sector to increase profit margins and investment levels. As the Thai economy diversified, the contribution of the rice export taxes dropped. Less than 2 percent of Government revenues now come from rice export taxes.

Because of the elastic world demand for Thai rice, an increase in export taxes leads to a relatively large drop in the domestic wholesale price and only a small rise in the export price. Moreover, since marketing margins are fixed, this drop in the wholesale price leads to a more-than-proportional drop in the farm price. The burden of export taxes has thus been borne mainly by the farmer (8).\*

In 1980, the Thai Government began to address simultaneously the issues of export promotion and raising farmers' incomes. When world rice prices dropped in 1982, the export

tax was lowered and the rice reserve requirement was abolished (8). The total reduction lowered the tax component from 30 percent of the f.o.b. price in 1981 to 11 percent in 1982. In 1983, the tax was reduced again to 5.8 percent of the f.o.b. price. It is possible that if world prices rose sharply, the reserve requirement and higher taxes could be imposed again to stabilize domestic prices.

#### *Price Support Programs Have Limited Impact*

The Government has attempted to raise domestic rice prices by purchasing paddy at above-market prices since 1969. However, these purchases have been too small to influence market prices. In 1980, the Government instituted a price support program which has continued in various forms to the present.

Target prices were set to increase and stabilize farmers' income. Steps were taken to concentrate demand early in the season when abundant supplies normally drive market prices down. The Government bought rice from mills in an effort to achieve target prices. Government-to-government contracts, representing up to 50 percent of export sales, were written for delivery in the initial marketing months. Export quotas were imposed on exporters, who were also required to maintain pre-established minimum stock levels. Despite these efforts, the impact of the support program on domestic price has been limited, and the program has been a multimillion-dollar drain on the national budget (8).

In an effort to raise export earnings, the Government devalued the baht 14.8 percent in November 1984. Between the devaluation and January 1985, export prices fell 14 percent. To avoid a decline in farm prices, the Government instituted a series of support policies for the 1985/86 marketing year. The rice export tax will remain at its current low level. The Government will continue to purchase paddy, but the available budget is only enough to procure 110,000 tons (out of an estimated 11 million tons of rice marketed in the 1984/85 main season) at the prevailing price.

A "paddy mortgage" program instituted in two northeastern provinces in 1983/84 is to be

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\*Numbers in parentheses refer to literature cited at the end of this article.

expanded to 15 provinces. The program provides farmers with low-interest loans, backed by paddy delivered for storage in Government agency warehouses. Export quotas have also been reimposed. While the overall quota has been set at a high enough level so as not to constrain total exports, individual quota allocations are based on the exporter's stocks. In addition to requiring all exporters to maintain minimum stocks, the Government will decide who will fill its government-to-government contracts based on the size of the exporters' stocks.

### *Fertilizer Application Rate Is the Lowest in Asia*

World market forces and export tax rates have traditionally had a far greater impact on farm prices than any Government support program. Thai export taxes and the formerly imposed reserve requirements have substantially lowered farm prices. On the other hand, Government policies have kept fertilizer prices high and discouraged marketing of fertilizer by private firms. These policies have given Thailand the most unfavorable paddy rice/fertilizer price ratio in Asia, discouraging farmers from investing in fertilizer and other modern inputs.

Largely as a result, Thailand has the smallest share of total rice area planted to modern varieties, the lowest fertilizer application rate, and the lowest average yields in Asia. Past production increases were achieved by expanding land area under rice cultivation.

As rice cultivation expanded beyond irrigated areas into rainfed areas, average yields declined. The number of farmers using fertilizer has stagnated, partly because fertilizer use is uneconomic on rainfed rice. Moreover, the intensity of fertilizer use among farmers using fertilizer has declined in recent years.

Ammonium phosphate (16-20-0) is by far the most common fertilizer for rice cultivation in Thailand. Although urea is used extensively for rice in other Asian countries, it has not been widely adopted by Thai farmers because of an 8.8-percent import tax (the only significant tax on fertilizer) and also because of brand loyalties established in the early

1970's when quota protection was given to domestic nitrogenous fertilizer plants.

At that time (1968-1974), domestic urea prices were set at 66 percent above world prices. The private sector marketed compound fertilizer as an alternative to urea and continued to do so even after protective measures were revoked in 1975. The Government promoted ammonium phosphate rather than urea. Ammonium phosphate was subsidized, discouraging local distributors from promoting or stocking urea or other fertilizers.

The Government began conducting research and promoting urea use in 1980 as part of its effort to intensify agricultural production. Researchers found that incremental benefit/cost ratios could be doubled by applying urea to the rice crop in irrigated areas, even at the prevailing price of urea.

### *National Fertilizer Corporation Promotes Urea*

In 1982, the National Fertilizer Corporation (NFC), a joint Government-private firm, was established to develop and operate a national fertilizer production complex. The complex, to be completed in the 1990's, is designed to supply 900,000 tons of fertilizer, including 265,000 tons of urea. The 900,000 tons represents 83 percent of Thailand's projected requirements, which are an estimated 1.2 million tons, and the urea production would allow a projected 5-fold increase in urea use (8).

In 1984, the NFC was granted permission to import urea duty-free. While this would allow NFC an effective monopoly, it has chosen instead to import urea on behalf of 15 fertilizer companies and Government organizations. As a result, more urea will be available to farmers at a competitive price. The Government continues to promote ammonium phosphate at subsidized rates but has begun to reduce its market share. At the same time, the NFC has begun a campaign to replace ammonium phosphate with urea.

### *Rice Export Growth Remains Uncertain*

Future Government policies will most likely follow a market-oriented strategy of

emphasizing improved input supplies rather than price supports. Rice production growth (as a result of increased fertilizer use) will most likely occur in existing irrigated areas. Current Government policy is to improve the efficiency of irrigation systems rather than expand them.

Dry-season irrigated production accounts for only 14 percent of total production and 5 percent of planted paddy area. But, significant production and export growth could occur given sufficient price incentives, adequate water availability and control, and greater use of pesticides and fertilizers.

Average yields could increase from the current 1.2 tons/hectare (milled basis) to 1.7 in 1995. Based on historical trends, total production in 1995 could reach 14 million tons, with export availability exceeding 5 million. However, if irrigation does not expand and if the fertilizer/price ratio stays unfavorable and crop risks high, the 1995 production level will remain around 12 million tons and exports may decline to 2.8 million tons.

### Corn

Corn, while subject to export controls in the past, is now characterized by a lack of Government intervention, rapid growth, and efficient, competitive domestic and international markets. Production increased in the sixties and seventies in response to growing Japanese feed demand. As the Thai livestock industry expanded in the late seventies and early eighties, local feed demand also rose.

The supply response was large. Farmers shifted into corn as the price of substitute crops (cotton and soybeans) declined. Newly cleared land was brought under cultivation and planted to corn (1). Harvested area has increased from 0.3 million hectares in 1960 to 2 million in 1984. While area expansion is now limited, there is excellent potential for yield increases.

When Thailand first began exporting corn in the late fifties, the market consisted of many small producers and trading firms. Export contracts were often broken because of chaotic marketing conditions. The

Government stepped in to regulate exports. Thailand signed a corn agreement with Japan in 1962 and later entered into a similar agreement with Taiwan. The agreements were negotiated annually until 1981.

To ensure supplies to Japan and Taiwan and to regulate market flows, the Government instituted export quotas to other countries. Exports to other countries could only be filled after the terms of the Japan and Taiwan agreements had been met. Export prices were required to be higher than those set by the Government, to prevent price slashing. While no exporter was allowed more than a 5-percent market share, individual quotas could be sold and traded among firms (2).

### *Exports to Japan and Taiwan Decline*

In the 1980's, Japan and Taiwan substantially reduced corn imports from Thailand because of the high aflatoxin levels. This, together with high shipping costs resulting from the need to use small vessels in Bangkok's port, led the Japanese and Taiwanese to switch to U.S. corn. Thai corn exports to those countries declined from 1.03 million tons in 1974 to 54,000 in 1984.

However, by 1981 Thailand had significantly diversified its markets to include the Middle East, the USSR, Africa, and other Asian countries. Nevertheless, 1981 exports were slow throughout the year and domestic prices fell. Following its new policy of stimulating exports and production and raising farm incomes, the Thai Government lifted all export quotas and abolished minimum export prices.

Since 1982, production and exports have increased to record levels as farmers have begun to adopt more improved and hybrid seeds. Seed development and distribution by Government agencies has been limited, but it is a priority of the Thai extension agency. Private feed companies have also been aggressively marketing and distributing improved seed to ensure adequate supplies for their own operations.

Quality problems continue to inhibit Thai exports. The Government and the Maize and Produce Trade Association are currently conducting a nationwide educational campaign

to teach farmers better methods of harvesting, storing and handling corn. Yields could increase significantly with intensified fertilizer use. Improved quality and higher yields could enhance Thailand's long-run export position in the world market.

### Cassava

Cassava is Thailand's most valuable export crop after rice. Cassava production and exports underwent phenomenal growth in the seventies in response to European feed demand and the EC's Common Agricultural Policy, which placed a very small levy on cassava relative to coarse grains. Cassava products became an attractive substitute for traditional grains. As European demand for cassava grew, Thai farmers responded by dramatically increasing production. Area planted to cassava expanded from 140,800 hectares in 1967 to 1.41 million in 1984. Exports to the EC skyrocketed from less than 1 million tons in 1968 to 6 million in 1978, representing 90 percent of Thailand's cassava exports (1).

The growth in production and trade continued unhampered and unassisted by domestic Government policy. However, in 1982 the Thai Government had to take a more active role in response to EC cassava import restrictions and their impact on the Thai economy. Export quotas were imposed and annual exports to the Community are now restricted to 4.5 million tons. The Government provides incentives to traders who ship cassava products to non-EC countries, but only in that they are allowed to add 1 ton to their individual EC quota for every ton sold elsewhere.

The Government is also aggressively marketing cassava in Asia. Korea has accepted 100,000 tons in exchange for fertilizer and Japan has agreed to import 200,000 tons for the first time in 1985. The USSR has begun importing cassava and has agreed to buy 2 million tons in 1985. However, in 1984, only 350,000 tons were sold to non-EC countries. Large surpluses are accumulating and prices are falling. To soften the impact of declining revenues, the Government is encouraging farmers to diversify into alternative crops and limit area planted to cassava. Low farm prices will be the strongest incentive to diversify.

### The Commercial Feed Industry

Government policies have indirectly subsidized and encouraged the growth and dominance of the commercial feed industry. The industry is oligopolistic, with four feed mills capturing 80 percent of the market and one firm, Charoen Pokphand, controlling 50 percent. These mills are large, vertically integrated, technically advanced firms, dominating the poultry and commercial hog industries. The feed mills use approximately 1.2 million tons of corn and sorghum to produce 2 to 3 million tons of mixed feed annually. Other raw feed materials include broken rice, rice bran, and oilseed and fish meal.

Domestic soybean producers have been protected by soybean import taxes and a soybean import ban lasting from 1982 until November 1984. Thai soybean and meal prices are higher than the world price and the quality uneven. However, soybean meal can be imported duty-free, although importers must purchase 1 ton of domestic meal for every 2 tons imported.

The feed companies have developed the poultry and hog industries to ensure demand for their products. They have also developed backward linkages to ensure supply. The firms have been active in seed distribution, corn and soybean production, fishmeal manufacturing, and the construction of drying and storage facilities. The Government has not discouraged this kind of growth. As a result, the feed mills have become the driving force behind the modernization of the poultry and hog industries.

### Livestock and Poultry

Thailand's livestock industry provides the most interesting view of the dynamism of the Thai private sector and the inefficiencies which can result from Government intervention. The poultry industry has increased commercial production and exports dramatically since the early 1970's. In 1973, Thailand exported 135 tons of chicken. By 1984, exports had reached 30,000 tons (88 percent to Japan), valued at \$52.7 million (table C). Government participation in the expansion has been limited to slaughterhouse inspection, aggressive promotion in

non-Japanese markets, and investment privileges given to modern chicken processing plants and feed mills. Export taxes are minimal.

Charoen Pokphand began importing the necessary technology to modernize broiler production in 1970. The company began exporting frozen boneless chickens in 1973. The other major feed companies quickly entered the market by establishing their own processing plants and using the most modern equipment available. Production grew from 36.4 million birds in 1974 to 400 million in 1984.

By 1977, domestic and export demand was met by large commercial farms, many of which supplied the processing plants with birds on a contract or wage basis. In 1965, only 1.85 percent of the commercial poultry farms raised more than 5,000 birds. Ten years later, 96 percent of the farms raised 5,000 birds or more (4).

The companies have been successful in exporting boneless chicken to Japan even though production costs are 30 percent higher than in the United States. The lower costs of labor and shipping have offset the higher production costs, allowing Thailand to capture approximately 30 percent of the Japanese market. The annual export growth rate was 65 percent from 1973 to 1982, although exports are now beginning to level off because of stable demand in Japan and competition from the United States and Brazil. To regain the

momentum of the last 10 years, the Thai Government is actively lobbying the Japanese Government to reduce its 18-percent tariff on boneless chicken. The Thai Government is also aggressively promoting frozen chicken exports to the Middle East and Europe.

### *Regulations Restrict Hog and Beef Production*

In contrast, the hog and bovine industries have been tightly regulated in all areas of production and trade. As a result, beef production is stagnant despite increasing urban demand, and the modernization of the hog industry has been hampered by Government control of slaughterhouses.

The 1959 Animal Slaughtering and Meat Sale Control Act stipulates that only local authorities can establish a slaughterhouse. Private slaughterhouses can be established with special permission but the property rights are retained by the local Government. All animals must be inspected, a permit issued, and taxes levied before they can be slaughtered. Carcasses cannot be sold or transported outside the legal market area of each slaughterhouse (4).

The purpose of the act was to prevent illegal and unhygienic slaughter and to provide local governments with a source of revenue to enforce the law. In fact, the effect has been the opposite.

Since investors have no property rights, the slaughterhouses are leased from the local government. There is no incentive to build, maintain, or modernize slaughter facilities. Slaughterhouse inspections are often carried out by unqualified officials. To avoid inspection and taxes, more than 50 percent of the hogs are illegally slaughtered, usually under unhygienic conditions.

### *Few Incentives Exist To Produce Quality Meat*

The law prohibits the transport of carcasses between provinces, yet 85 percent of the marketable hogs reach Bangkok consumers. This means that live animals must be transported long distances and arrive bruised and stressed, resulting in lower quality meat. The situation was remedied to some extent in 1979, when wholesalers in provinces

Table C.—Livestock poultry and products

	1981	1982	1983	1984
	1,000 head			
Livestock numbers				
Swine	7,500	8,000	8,600	8,100
Poultry	76,645	78,900	83,250	86,000
Cattle	5,250	5,350	5,650	5,600
	1,000 tons			
Animal products				
Pork	300	320	400	440
Poultry meat	395	410	450	450
Beef	143	145	155	162
Poultry exports	26.8	33.2	22.9	30.0

SOURCE: Foreign Agricultural Service estimates.



close to Bangkok were allowed to slaughter and transport carcasses into the city, thereby reducing the marketing margin (4).

The local monopoly exercised by each slaughterhouse (usually limited to one per province) has provided little incentive to local growers to improve production practices. Since inspection is inadequate and illegal slaughter common, all animals are acceptable no matter what their condition.

Prior to 1981, nearly all hog production took place on a small scale on rice farms with 2 to 3 native-breed hogs fed on farm wastes. Fifty percent of Thai hogs are still produced on these farms. The hogs are sold to middlemen who act as local assemblers and agents of hog and carcass wholesalers.

#### *Charoen Pokphand Modernizes Industry*

In 1981 Charoen Pokphand began developing the hog industry using the successful poultry industry model. The company contracts with farmers to raise crossbred hogs and provides high-grade feed, the latest technology, and veterinary services. The hogs are then shipped and slaughtered in Bangkok and the pork is sold to meat wholesalers and retailers (4).

Modernization began in response to two changes in Government regulations. The first was to allow movement of carcasses from provinces near Bangkok into the city. The second was the removal of price controls on meat in 1981. Retail prices had been set by a Government board at below-market prices. These controls were largely ignored. The transport restrictions had a greater influence on meat availability and price than the controls ever did. Prior to these changes, hog prices in the provinces were low, marketing margins high, retail prices remained 40 percent above chicken, and production stagnated (5). Once some of the controls were eliminated, the feed companies were more willing to make the necessary investment in large-scale hog production.

No feed companies have invested in slaughterhouses, since the Government would retain the property rights. Private ownership is allowed only if 50 to 70 percent of the products are exported. Since the export

market is for lean meat, including few byproducts, this high export ratio has deterred investors. One joint-venture abattoir has been established under these rules with the help of U.S. AID, but none of the major feed companies is participating. Currently, the export market for both pork and live hogs is severely limited because of the poor quality of the meat and the reputation of disease-prone pigs from Thailand.

The Government has tried to maintain a disease-free zone in southern Thailand. It established Sing-Thai Farms as a state enterprise in the south to raise hogs for export to Singapore. In 1982, export controls on live animals were lifted to facilitate this operation.

However, depressed prices in Singapore have led to a sharp decline in exports and large losses to exporters. Sing-Thai Farms has never turned a profit and is in the process of being sold to private investors. While commercial hog operations are making inroads into the domestic market (by 1983, the feed companies produced 15 percent of all swine), there is little prospect for their entry into the export market until Government policies regarding slaughterhouse ownership and internal marketing are revised.

#### *Many Obstacles Limit Beef Production*

The same restrictions limit beef production in Thailand. Environmental conditions impose additional obstacles. Cattle and buffalo are used primarily for draft. They are usually slaughtered when they are too old to work (after 8 to 12 years). An estimated 75 percent of bovine animals are slaughtered illegally and under unhygienic conditions (1).

Domestic consumption of beef is estimated to be 4.2 kilograms per capita per year. Meat is not graded or classified. Mixtures of cuts and bones are sold at one standard price, representing a 100-percent markup over the farm price. The retail price has been increasing more rapidly than that for other livestock products; demand has been rising and supply is reduced because Thai farmers have begun to substitute tractors for buffalo and cattle. Quality cuts of beef are imported to supply large hotels and Western supermarkets in Bangkok. The high price of

this meat (which includes 60 percent ad valorem tax) keeps it out of the range of most Thais.

About 3,000 head of live animals are legally exported each year, mostly to Malaysia. Illegal exports to Malaysia are estimated at 12,000–15,000 head. Malaysia, which is declared free of hoof and mouth disease, occasionally bans imports because of outbreaks of the disease in Thailand. Thai exports of beef are negligible. No change in domestic beef production, consumption, or exports is anticipated until Government restrictions are lifted and farm management practices are improved.

#### *Dairy Industry Is Protected From Low-Priced Imports*

Domestic dairy production meets only 12 percent of local demand despite low annual per capita consumption—12 kilograms liquid milk equivalent. The balance is supplied by imports of skim milk powder, which is processed into canned milk and other dairy products (3). Twenty units of fresh milk must be purchased by processors at a guaranteed price from Government or cooperative processing facilities for each unit of skim milk powder imported. Raw, pasteurized, and sterilized milk imports are banned to protect the domestic dairy industry.

The dairy cattle population is estimated at 60,000 head, of which 25,000 are milk cows. The average herd size is 10 to 12 head. Large herds, accounting for 10 percent of the cows in milk, are operated by the Government and private commercial investors. Milk output is low (2,200–2,500 kilograms per cow) due to environmental stress, inferior genetic stock, poor nutrition, and inadequate herd management. No change in the output rate is expected until the Government programs supporting production research, artificial insemination, and herd expansion begin to have an impact.

#### **Conclusions**

The long-run prospects for rice, corn, cassava, livestock, and poultry production remain uncertain. During the last 5 years, the Thai Government has taken significant steps to liberalize the grain trade and to enhance

the competitiveness of its exports. However, unless irrigation facilities are expanded and farm prices rise, farmers may not make the necessary investment in fertilizers, high-yielding seeds, and other inputs needed to expand production and maintain export growth. Unless quality and yield improvements are made, Thai corn exports are unlikely to expand beyond 3.3 million tons by 1995. If Government restrictions regulating the livestock industry were relaxed, domestic demand for both corn and cassava could increase sharply and curtail export availability. While the Government plans to continue trade liberalization policies by reducing remaining export taxes, no change in domestic policy is anticipated in the near future.

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## THE PHILIPPINE DEBT CRISIS

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**Abstract:** The Philippines suspended principal payments on its large foreign debt in late 1983. Foreign creditor banks responded by withholding trade credit, leading to reduced foreign exchange availability and severe economic disruption. Implementation of a complex arrangement to reschedule the debt and stabilize the economy has been repeatedly delayed. Longrun effects of the crisis will include slower growth in agricultural imports and, possibly, faster growth in agricultural production.

**Keywords:** Philippines, debt, international capital markets.

While most Asian market economies enjoyed strong growth in 1984, the Philippines remained locked in economic crisis, with declining real income and inflation of more than 50 percent. Most of the nation's difficulties stemmed from an acute foreign exchange shortage precipitated by the suspension of principal payments on its \$25-billion foreign debt in October 1983. This article briefly surveys the events leading up to the Philippine debt crisis, reviews the complex program developed to reschedule the nation's foreign debt and stabilize its economy, and assesses the implications of the current crisis for Philippine economic prospects through 1990.

### Background to the Crisis

Following severe balance-of-payments problems in 1968-69, the Philippines enjoyed overall external balance and moderate growth of around 5 percent a year in 1970-72. The international commodity boom of 1973-74 gave rise to a large current account surplus in 1973, as higher prices for the nation's primary exports (sugar, coconut products, hardwoods, and copper) outweighed the increased price of its imported oil.

However, oil prices remained high after other commodity prices declined in 1975, and recession in the industrialized countries cut demand for Philippine exports. A series of large current account deficits followed, varying between 3.6 percent and 5.9 percent

of GNP through 1979 <sup>1/</sup>. These deficits were financed through a steady accumulation of foreign debt.

These deficits mainly reflected the rapid growth after 1972 of investment in large-scale, capital-intensive infrastructure projects under the auspices of 12 (later 13) major nonfinancial public corporations. These projects included irrigation development, roads and, especially, power-generating stations (including hydroelectric, geothermal, coal, and nuclear plants).

Many of these projects may ultimately prove themselves worthwhile. However, most involved long gestation periods before any increased output could be realized, and, except for the energy-related projects, few led directly to increased net inflows of foreign exchange to service the debt incurred to build them. A more general factor behind the growing deficits was the nation's trade and industrial policy, which encouraged manufacturing for the domestic market rather than for export, and discouraged production of agricultural exportables through export taxes and marketing and price controls.

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<sup>1/</sup> A nation's current account balance measures the balance between its total spending and its income; a current account deficit represents an excess of spending over income, which must be financed either through foreign borrowing or through the sale of domestic assets to foreigners.

The ambitious Philippine investment strategy made considerable sense in the international financial environment of the 1970's, when low interest rates and high inflation effectively subsidized international borrowing. The situation changed dramatically in 1979-82, when developments in the world economy dealt the Philippines a series of heavy blows: the second round of oil price increases in 1979-80, recession in the industrialized countries, a severe drop in Philippine export earnings, and greatly increased real international interest rates. Finally, the peso became increasingly overvalued, reducing the competitiveness of Philippine exports and stimulating import spending. Each of these developments tended to increase the balance-of-payments deficit.

Under these conditions, increased foreign borrowing could have been avoided only through strongly restrictive Government policies aimed at reducing total spending in line with the decline in real income. Instead, the authorities adopted expansionary policies to offset the export slowdown, on the assumption that a strong world economic recovery would emerge by mid-1981. Infrastructure investment continued at high levels, and several large-scale industrial and transportation projects were initiated.

### The Emerging Crisis

With \$13.3 billion in foreign debt already outstanding by the end of 1979, higher interest rates created a snowball effect, with increased debt service payments leading to higher deficits, increased borrowing, and yet higher debt service. As the world economy slipped deeper into recession in 1981 and 1982, the Government began bailing out many faltering businesses, further straining the balance of payments. The current account deficit rose from 5.4 percent of GNP in 1980 and 1981 to 8.1 percent in 1982. Total foreign debt (including banking system liabilities) rose to \$24.3 billion in 1982—72 percent of GNP, up from 44 percent in 1979.

With current account deficits far in excess of available multilateral and bilateral development aid, the credit mix became increasingly skewed toward commercial bank loans. As the nation's financial indicators

deteriorated in 1981-82, foreign banks reduced the availability of medium- and long-term (MLT) lending, forcing the Philippines to borrow at short term and at variable interest rates to get new credit and to replace maturing MLT debt.

By late 1982 it was clear that the Government's gamble on early world economic recovery had failed. The Philippines sought standby credits from the IMF, which approved the credits in return for committing the nation to a new course of monetary and fiscal restraint and exchange rate flexibility. The Government also instituted World Bank-designed structural reforms aimed at improving the tax structure and freeing the economy from excessive Government regulation. By mid-1983, these policy changes were starting to pay off, and the emerging recovery in the United States held forth the prospect of renewed growth in export earnings.

This resurgence was abruptly reversed after the August 21 assassination of opposition leader Benigno Aquino, which sparked a crisis of confidence within the Philippines and among the nation's creditors. The next 2 months saw international reserves drop from \$2 billion to \$600 million, as wealthy Filipinos shifted their money abroad and foreign banks refused to renew short-term loans.

In mid-October, the Philippines declared a 3-month moratorium on principal repayments on its foreign debt and turned to the IMF for help in designing a program for rescheduling its foreign debt payments and opening new lines of credit. The overall terms of the IMF restructuring and stabilization plan were worked out within a month of the moratorium, with the IMF, the commercial banks, and bilateral and multilateral official lenders all scheduled to play a role.

However, final agreement on the rescue package has proved extraordinarily difficult to secure; negotiations among the commercial banks remained deadlocked in April 1985, as the repayment moratorium was extended for a sixth 3-month period. In the meantime, essentially all trade credit has dried up, and the economy has been crippled by an acute shortage of foreign exchange.

## A Complex Financial Rescue Package

One fundamental problem has been the complexity of the negotiating framework itself. In addition to the Philippine Government and the IMF, the rescue package requires commitments from the Consultative Group for the Philippines (representing 21 bilateral lending nations, the World Bank, the Asian Development Bank, and other multilateral bodies), and nearly 500 commercial bank creditors, represented by a committee of the 12 largest lenders. Each of the three lending groups has made its participation conditional on the cooperation of at least one of the other two. At the same time, the participation of the commercial banks depends on agreement among over 100 of the largest lenders, and this agreement has proved painfully difficult to secure.

Under the restructuring plan as it has evolved, the bilateral and multilateral lenders are to provide \$2.2 billion in development assistance over 18 months. The commercial banks are to:

- reschedule nearly \$6 billion in loan arrears over 10 years, including a 5-year grace period,
- provide \$3 billion in revolving trade credits, reactivating credits suspended when the moratorium was announced, and
- supply \$925 million in new loans.

For its part, the IMF is to provide 615 million Special Drawing Rights (\$630 million) in standby credit to build up foreign exchange reserves, to be disbursed in seven installments (or tranches) over an 18-month period. As conditions for opening the standby credit facility, the IMF required that the banks commit themselves to providing at least 90 percent of the new lending quota (prorated according to each bank's outstanding loans to the Philippines), that the bilateral and multilateral lenders agree to provide their share of new lending, and that the Philippines commit itself to a comprehensive and demanding set of economic austerity measures and policy reforms designed to improve the nation's creditworthiness.

Each credit tranche is to be contingent on a scheduled program review which will assess

compliance with the agreed-upon performance standards. The banks have also scheduled their new money payments in installments, to be provided only as the Philippines passes each of its scheduled IMF program reviews.

Agreement with the IMF has thus emerged as the lynchpin in negotiations with the other parties to the financial package, because the other parties have relied on the IMF's technical expertise to design an appropriate set of adjustment measures and to monitor Philippine compliance with the agreement. Recent economic performance suggests that the nation has a fair chance of continuing to receive IMF approval.

The IMF structural adjustment program is based on the need to improve creditworthiness in the short run by limiting public and private spending and in the medium term by improving the efficiency of investment and the economy's ability to earn foreign exchange. Specific measures to reduce spending include strict limits on credit creation and money supply, reduced Government spending, and a broadened tax base. Special emphasis is placed on limiting the deficits of the public corporations: only those projects near completion and likely to produce increased net foreign exchange inflows are to go forward, while others are to be postponed or abandoned. Deficits are to be further reduced through increased utility rates.

In the area of foreign trade, the peso is to be allowed to float freely, and the tax structure thoroughly reoriented from its emphasis on taxing foreign trade to domestic revenue sources. Price controls and administrative controls affecting many industries are to be phased out. The "bottom line" goals are to reduce the current account deficit from 8.2 percent of GNP in 1983 to 2.3 percent in 1986, in line with the expected availability of new capital from banks and official lenders.

### Delays in Finalizing The Rescue Package

The first blow to a finalized rescue package was the discovery in late 1983 that the Central Bank had overstated the nation's foreign exchange reserves by \$600 million, and that the money supply had been allowed to

expand far beyond the limits specified in the previous IMF standby agreement. This disclosure further shook the confidence of the foreign financial community, and convinced the IMF to take a hard line on future issues of program compliance.

Little progress was made toward an agreement during the first half of 1984, as the Philippine authorities delayed implementing the harsh economic policies spelled out as preconditions to IMF approval until after the general elections set for May. The authorities finally devalued the peso in June and adopted strongly contractionary monetary and fiscal policies to demonstrate their determination to carry out the stabilization program.

The Philippines finally reached agreement with the IMF in September, and in mid-December pledges for the required 90 percent of the new money facility were lined up by the commercial banks. More than a year after talks on the rescue package were opened, the first tranche of the standby credit was at last released.

By February 1985, however, fresh problems had arisen. The National Commercial Bank of Saudi Arabia, one of the nation's top 50 creditor banks, demanded that it be exempted from the obligation to provide new loans to the Philippines. Although most other large banks strongly supported the rescue package, they refused to agree to this demand for special treatment lest a precedent be set that would endanger future rescheduling negotiations.

The IMF then delayed release of the second credit tranche in March while it weighed certain failings in recent Philippine performance, including somewhat excessive money growth, against achievements in other areas, notably the sharply reduced Government budget and current account deficits.

By the end of April, National Commercial Bank finally consented to go along with the agreement, and release of the second IMF credit tranche appeared likely. Even with these hurdles cleared, however, the agreement remains vulnerable to any number of potential threats: new problems could arise with participating banks, or political disturbances could disrupt the economy enough to make

attainment of the required performance goals impossible. Indeed, the austerity measures needed to attain these goals may yet induce just the kind of political unrest that could throw the economy off track.

If the present financial rescue package were derailed, work would probably commence on assembling a new package, possibly involving more modest performance standards but also more modest financial support. With confidence in the ultimate success of such a program further shaken, agreement could again be long delayed. In the meantime, the Philippines would have to muddle through its crisis with stagnant or declining real income, growing unemployment, and continuing cycles of inflation and devaluation. These conditions could seriously threaten the nation's political stability.

### Implications for the Future

Even if the rescue package remains in effect through 1986, the longrun effects of the current debt crisis will continue to dominate Philippine policymaking for years to come. The nation faces the challenge of improving its foreign exchange-earning capacity to handle increased principal repayments when the grace period on its rescheduled debts expires at the end of the decade, and this will require that major structural reforms be carried out. Many of the needed changes—including continued restraint on Government and public corporation deficits, trade liberalization, tariff reduction, and continued exchange rate flexibility—are extensions of reforms begun under the IMF program.

Other important changes are needed at the sectoral level. One of the most promising areas for reform is the agricultural sector. Agriculture's potential as a source of income and export growth has long been neglected, but it is now seen as playing a key role in helping the nation weather the present crisis and providing foreign exchange in the long run. Stimulated in part by a series of World Bank structural adjustment programs, the Government has detailed a number of agricultural policy reforms to be introduced through 1988.



Agricultural price policy is to undergo a major shift in emphasis from maintaining low consumer prices to stimulating domestic production. Retail price ceilings have been removed from poultry meat, eggs, and pork, leaving rice the only major product subject to ceilings. The producer support price for rice has been raised to help reverse declining area and production, and private firms are to be permitted to export rice in years of surplus. These moves could result in limited competition with U.S. rice exports to third countries.

The Government is making a major effort to achieve an exportable surplus of corn by 1987, and is already eyeing Japan, South Korea, and Taiwan as potential markets. The Government is promoting new disease-resistant hybrid corn varieties and offering better credit terms to producers. Trade in corn is being taken out of the hands of the National Food Authority and entrusted to private firms.

Producer prices, so far kept substantially below world levels through export controls, are to be boosted slightly above these levels through the imposition of a 10-percent import duty. The response among producers so far has been enthusiastic. If successful, the corn program could eliminate Philippine imports of U.S. corn and possibly produce a modest surplus which could compete with U.S. corn exports to East Asia.

Other moves intended to boost agricultural exports include deregulation of the coconut and sugar industries. In principle, trade in coconut products is being opened to

all millers rather than reserved as a special privilege of a single milling and trading group, while sugar producers will be allowed to market their output domestically rather than selling it to the official marketing agency. Many observers argue that the changes made in these industries so far are cosmetic rather than substantive. However, further reforms in both sectors are being studied.

The World Bank argues that vigorous macroeconomic and sectoral reforms could help real income grow about 4 percent per year in 1985-90. If the necessary reforms are not carried out, real GNP growth could grow as slowly as 1.1 percent per year. In either case, consumer expenditures will grow even more slowly; increased taxes and public utility charges will be needed to generate the savings with which to face increased principal payments when the grace period lapses in 1989.

Under the more optimistic growth scenario, real private consumption is forecast to grow 2 percent per year in 1985-90, which would leave 1990 living standards (real consumption per person) 9 percent lower than in 1983. Under the slow-growth scenario, real consumption is forecast to decline .1 percent per year, implying a drop of more than 18 percent in consumption per person relative to 1983. Slower consumption growth will cut into imports of income-responsive products such as wheat, orange juice, and high-quality tobacco. It will also reduce the growth of demand for livestock products, leading to slower growth in imports of feed corn, soybean meal, and other feedstuffs.

#### LIST OF TABLES

Page	Table
6	1 Southeast Asia: Currencies and 1984 exchange rates
7	2 Southeast Asia: Merchandise exports and imports, 1982-84
7	3 Southeast Asia: Selected macroeconomic indicators, 1984
8	4 Major U.S. agricultural exports to Southeast Asia, by quantity and value, fiscal 1983-1985
8	5 U.S. agricultural exports to Southeast Asia by country, fiscal 1980-85
11	6 Burma: Production of selected agricultural commodities
13	7 Indonesia: Production of selected agricultural commodities
16	8 Malaysia: Production of selected agricultural commodities
19	9 Philippines: Production of selected agricultural commodities
22	10 Thai agricultural exports, 1983 and 1984
23	11 Thailand: Production of selected agricultural commodities

#### SPECIAL ARTICLE TABLES

27	A. Thai exports: Rice, corn, and cassava
27	B. Thai market share of regional imports
32	C. Livestock poultry and products



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