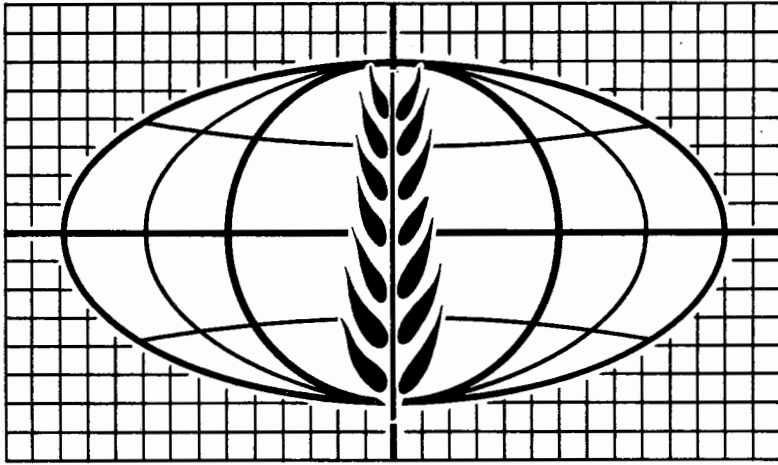


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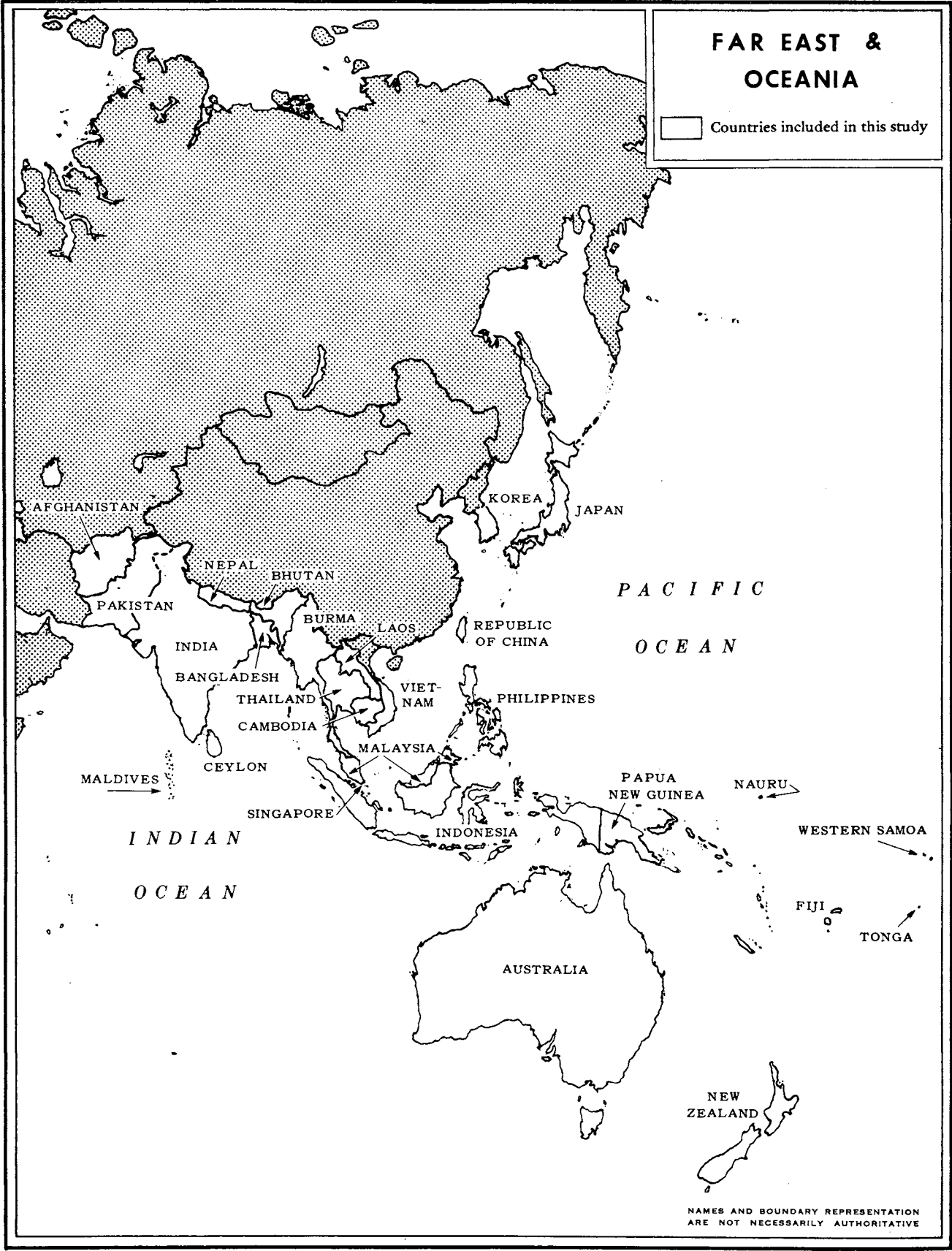
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THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA

Review of 1971 and Outlook for 1972

**U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE**

Washington, D.C.



ABSTRACT: Agricultural output in the Far East and Oceania declined in 1971 in Bangladesh (formerly East Pakistan), Pakistan, Khmer Republic (Cambodia), Ceylon, and Japan. Continued population growth led to a drop in per capita food output in these countries as well as in Indonesia, the Republic of Korea (South Korea), and Taiwan. Military and political conflicts hampered agricultural production in several countries and Japan intentionally cut rice output in order to reduce carryover stocks. Rice production for the region totaled about 165 million tons of paddy, about the same as in 1970. U.S. agricultural exports to the Far East and Oceania totaled \$2.4 billion in 1971, a 4.2-percent decline from a year earlier, while U.S. agricultural imports from the region totaled \$1.5 billion, up 4.6 percent. Exports of U.S. farm products to the Far East and Oceania should show some recovery in 1972. KEY WORDS: Far East, Oceania, Asia, agricultural outlook, foreign trade.

FOREWORD

This annual publication provides an analytical basis for shortrun policy decisions and informs an interested public about current agricultural developments in the Far East and Oceania. It is one of 5 regional supplements to the World Agricultural Situation, WAS-2, November 1971. Other regional reports are published for Western Europe, Communist Areas, Africa and West Asia, and the Western Hemisphere.

Additional statistical information relating to production and trade of agricultural products in the region appears in a separate publication, The 1971 Agricultural Data Book for the Far East and Oceania, ERS-Foreign 267, September 1971. An updated version will be released in the second half of 1972.

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EXPLANATORY NOTES

Far East refers to noncommunist countries in Asia from Afghanistan east. Oceania refers only to Australia and New Zealand except for regional trade data on U.S. agricultural exports and imports.

Unless otherwise stated, split years mean July-June, tons are metric, and dollars are U.S. dollars. The exchange rates per U.S. dollar used in the report are given in Appendix table 1.

Calendar year production includes crops harvested during the spring, summer, and autumn of 1971 (for example) and includes some crops such as rice, where the bulk of the crop is harvested in 1971, but continued into the early part of 1972.

CONTENTS

	Page		Page
Summary.....	1	Korea, Republic of.....	24
Australia.....	2	Malaysia.....	26
Bangladesh.....	6	New Zealand.....	28
Burma.....	8	Pakistan.....	30
Ceylon.....	10	Philippines.....	32
Hong Kong.....	13	Singapore.....	34
India.....	14	Taiwan.....	35
Indonesia.....	19	Thailand.....	37
Japan.....	21	Viet Nam, Republic of.....	39
Appendix tables.....		43	

SUMMARY

Most countries in the Far East and Oceania maintained or expanded total agricultural production in 1971. The exceptions were Bangladesh (formerly East Pakistan), Pakistan, Ceylon, Khmer Republic (Cambodia), and Japan. Three of these countries were involved in military conflict and Japan deliberately cut rice production because of surplus stocks.

Progress was less favorable when population growth is considered. Per capita domestic food production in 1971 declined in Bangladesh, Pakistan, Ceylon, Cambodia, and Japan as well as in the Republic of Korea (South Korea), Indonesia, and Taiwan. India and Thailand managed to hold their indices of per capita food production at the 1970 level.

Paddy rice production in the Far East in 1971 was estimated at approximately 165 million tons, practically the same as in 1970. Japan's output dropped 2.2 million tons and Bangladesh dropped 1.5 million tons while India gained 2.3 million tons and Indonesia 1.1 million.

The increased tempo of rice trade among Far East countries in 1971 is expected to continue in 1972. Major rice importers are likely to be Bangladesh, Ceylon, the Philippines, and South Korea while major exporters will include Thailand, Burma, Pakistan, and possibly Japan. It is likely that the demand for U.S. rice in the Far East will increase in 1972.

The Japanese Government amended its rice production policy in 1971 to further curtail rice output. As a result, milled rice declined to 9.9 million tons, down 14 percent from 1970. The Government is encouraging production of fruits, vegetables, mulberry trees (for silk worms), and soybeans as substitute crops for rice.

Indonesia and Malaysia continued to expand agricultural production last year. However, both countries were unable to achieve self-sufficiency in rice. Production of rubber and palm oil showed a rapid expansion, particularly in Malaysia. Price prospects for these commodities are unfavorable.

India was able to increase total food grain production to 108.8 million tons in 1971 using more multiple cropping, fertilizer, and high yielding varieties. India should move closer to its food self-sufficiency goal in 1972 than at any time in the last decade.

The political strife and armed conflict between Pakistan, Bangladesh, and India placed economic strains on all 3 countries in 1971. A flood of Bengali refugees into India saddled India with a heavy burden. Economic activity in Bangladesh was practically brought to a standstill and per capita incomes in Pakistan declined in real terms. Difficult political and economic problems face Bangladesh and Pakistan in 1972.

Australia and New Zealand expanded their agricultural production and exports in 1971. Australia had record exports of wheat and beef. Delivery quotas for wheat have been increased for 1972 in Australia and beef output is projected to continue rising. Export prices for New Zealand's dairy products and carpet wool have improved.

U.S. agricultural exports to the Far East and Oceania totaled \$2.4 billion in 1971, down 4.3 percent from 1970 as a result of West Coast dock strikes. The major markets

were Japan (\$1.1 billion), Republic of Korea (\$300 million), India (\$272 million), and Taiwan (\$162 million). Main U.S. agricultural commodities exported to the Far East and Oceania in 1971 were wheat, rice, corn, sorghum, cotton, soybeans, soybean oil, and tobacco.

U.S. imports of agricultural commodities from the Far East and Oceania totaled \$1.5 billion in 1971, nearly 5 percent more than in the previous year. About a fourth of U.S. agricultural imports in 1971 were from the Far East and Oceania. The main suppliers from this area were the Philippines (\$385 million), Australia (\$365 million), New Zealand (\$206 million), Indonesia (\$128 million), and Malaysia (\$127 million). The main imports included meat, sugar, rubber, fruit, vegetables, coffee, cocoa, tea, and spices.

U.S. farm exports to the Far East and Oceania should expand in 1972 because of continued growth in population and disposable income. However, dock strikes could again threaten exports and some sales lost through dock strikes in 1971 may not be regained this year. Concessional sales will remain an important component of U.S. exports to the area.

THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA

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AUSTRALIA

Economic Situation

Growth of the economy was generally favorable in 1970/71 outside the agricultural sector. On a current price basis, gross national product (GNP) for 1970/71 totaled \$37.1 billion--up about 10 percent from the previous year. Real GNP at 1966/67 prices was \$31.8 billion or 4 percent over 1969/70.

The gross value of agricultural production dropped from \$3.95 billion in 1968/69 to \$3.65 billion in 1970/71. Farm income for 1970/71 was reported at \$985 million, well below the average farmers realized in the mid-1960's. Most of the decline in income occurred from lower-volume production of wheat and lower prices of wool and dairy products. Agricultural products in 1970/71 accounted for 48 percent of the total value of all exports compared with 60 percent in 1967/68.

Foreign exchange reserves increased in 1970/71 by 48 percent to \$2.6 billion, with a favorable balance of payments of \$676 million.

Agricultural Production

Total agricultural production in 1971 increased 5 percent over 1970 (appendix table 2). Most of the increase occurred in grains, sugarcane, cotton, and meats. Grain harvests totaled 14.6 million metric tons--up 14 percent from the 1970 harvest. Most of the increase was in barley, sorghum, and wheat.

Increased plantings to wheat resulted from raising the basic delivery quota to 327 million bushels (8.9 million tons) in 1971 from the low 306 million bushels (8.3 million tons) in 1970. Larger delivery quotas were authorized because of favorable exports of wheat during the 1970 marketing year and strong demand for hard wheats. Dry weather

in Queensland and northern New South Wales reduced hard wheat production in 1970 and 1971.

New crops which have grown greatly in Australia in the past 2 years are grain sorghum and oilseeds, particularly safflower and sunflower seed, much of which is exported. The cotton crop for 1971 was estimated at 40,000 tons, more than double the low 1970 harvest.

Sugarcane and sugar production continue to increase sharply in line with favorable export prospects and high world market prices. The 1971 sugarcane crop was reported at 19.4 million tons--10 percent above the previous year.

The tobacco marketing quota established for growers for 1971 was 15,400 tons. The price guarantee to producers under the stabilization scheme for tobacco averaged \$1.37 per pound.

The 1971 apple crop was a record 452,000 tons, 7 percent above the crops of 1969 and 1970. Production of pears, on the other hand, was down in 1971 to 167,000 tons compared with 190,000 in 1970. These 2 fruits account for much of the fresh fruit exported. Dried vine fruit production was adversely affected by wet weather during the drying period in 1971, resulting in a small pack of sultanas and raisins.

Estimated production of all meats for 1971 was 2.2 million tons, up from 1.9 million tons for 1970. Domestic consumption accounts for about 60 percent of total production. Beef production rose despite the fact that cattle slaughterings declined somewhat in 1971. The extra volume of meat output was accounted for by heavier weights of animals slaughtered.

Milk production has been declining since 1969, but the production of processed dairy products remains relatively steady. Much of this stability has been the result of the reorganization of the industry and low prices which have prevailed for export products. Since mid-1971, however, export prices of butter, cheese, and casein have increased sharply.

Wool production in 1971 continued the downtrend of 1969 and 1970; output of 882,000 tons was 5 percent below 1969 record.

Agricultural Policy

With depressed prices prevailing for wool, the government in 1971 introduced a deficiency payments scheme for wool growers. The payments are designed to supplement returns received by wool growers and are intended as a temporary measure to help defray costs of production. The payments also provide incentives to growers to market the highest grade wools. Inferior wools are excluded from the scheme.

The government also recently announced higher guaranteed prices for wheat delivery quotas for 1972:

	:	1972	:	1971
	:	- - - Dollars per bushel - - -		:
Fair Average Quality wheat for export (not to exceed 200 million bushels).....	:	1.81	:	1.65
Wheat marketed domestically for human consumption..	:	2.12	:	1.95
Feed and industrial wheat.....	:	1.77	:	1.62

In May 1971 the commonwealth government announced a rural debt reconstruction program to provide financing for all segments of farming. The federal government's share amounts to \$112 million for 1970/71-1974/75. Similar legislation for the dairy sector had been introduced in 1970 to assist uneconomic producers in leaving dairying and help incorporate small farms into larger holdings. The dairy farmers received additional assistance in late 1971 with the introduction of a 2-price quota plan based on domestic and overseas market requirements for butterfat.

The cotton subsidy, which has been operative most years since 1907, was concluded with the 1971 crop. There has been little pressure on the government to renew subsidy payments on cotton, probably because the current price averages 40 cents per pound.

Subsidies are being continued for both nitrogenous and phosphatic fertilizers. The phosphate subsidies, due to expire at the end of 1971, have been extended to the end of 1974. The current subsidy payments on nitrogen expire October 31, 1972, but may be extended.

Beginning with the 1971 marketing season, a stabilization plan is in operation for dried fruits. Effective for 5 years, guaranteed prices for sultanas, currants, and lexia raisins are set each season and subsidies not to exceed \$27 per ton are paid to producers when prices decline by specified amounts.

A 5-year stabilization plan for apple and pear growers began this marketing season, guaranteeing minimum prices for 23 varieties of fruits when average export prices are below set minimums.

Agricultural Trade

The value of agricultural exports excluding reexports and processed foodstuffs totaled \$2.4 billion in 1970/71, down \$4 million from 1969/70. The chief commodities exported were wool, \$664 million; wheat, \$507 million; meats, \$442 million; sugar, \$168 million; and dairy products, \$117 million. Wool exports showed the greatest decline--18 percent.

Wheat exports registered the highest value returns and volume shipments on record. Over 9 million tons of wheat and wheat flour were exported in the marketing year ending November 31, 1971. This halved wheat stocks to 3.5 million tons compared with 7.3 million tons in 1970. The record exports in 1970/71 were even more significant in that Mainland China was no longer a market. Major markets for Australia's wheat in 1970/71 were Egypt, 1.7 million tons; United Kingdom, 1.3 million tons; Japan, 1 million tons; and the Middle East, 1.5 million tons. The large exports to the United Kingdom consisted chiefly of feed wheat to offset the uncertainties of corn supplies from the United States.

The accumulation of exportable surpluses of barley, oats, and sorghum in 1970 and 1971 resulted in record exports of all these grains. Japan, Taiwan, West Germany, and the United Kingdom were the main markets for barley in 1970/71. Japan, the major market for oats, was also the principal recipient of more than 500,000 tons of grain sorghum exports.

The United States continues to be Australia's major market for beef. Exports to the United States in calendar years 1970 and 1971 climbed from 218,000 to 232,000 tons, comprising well over 60 percent of total beef exports during the 2 years. Other major markets for Australia's beef were Japan, United Kingdom, USSR, and Canada.

Apple exports in 1970/71 totaled 142,000 tons. Nearly half of the total went to the United Kingdom. West Germany was the second largest market, taking 18,000 tons, and other Western European markets accounted for 24,000 tons. Exports to the United States amounted to 6,500 tons.

U.S. agricultural exports to Australia totaled \$36 million in 1971 (appendix table 3). The main commodities were tobacco leaf, \$13.5 million; vegetable oils, \$3.6 million; oilseed cake, \$3.2 million; fruits and nuts, \$2.9 million; pulses, excluding seeds, \$1.8 million; cotton, \$1.8 million; and sausage casings, \$1.4 million.

Agricultural products imported from Australia by the United States in 1971 were valued at \$365 million, a little less than in 1970 (appendix table 4). Farm trade accounted for over a third of our imports from Australia. The main agricultural imports were meats, \$292 million; sugar under quota, \$28 million; wool, \$17 million; casein, \$8 million; and fruit and fruit preparations, \$6 million.

Australia's farm commodities are becoming increasingly competitive with U.S. exports in both the foreign and home markets. U.S. tobacco exports to Australia declined to 5,000 tons yearly in 1970-72 compared with an average of 8,000 tons in 1965-69. No U.S. cotton went to Australia during 1969 and 1970, and shipments of 9,000 bales in 1971 were far below the annual average of 63,000 bales exported in the early 1960's. Aside from soybean oilmeal and cake, Australia is a declining market for U.S. vegetable oils and oilseeds because of rapidly rising domestic production. U.S. fruit shipments to Australia have increased since 1968, particularly offseason fresh apples. They are complemented by U.S. imports of offseason fresh apples, pears, and other fruits from Australia.

With Japan now Australia's major market for agricultural exports, production and exports of products competitive with U.S. commodities have increased. Wheat, grain sorghum, barley, oats, corn, oilseeds and fresh onions are the chief Australian commodities bought by Japan. In 1971, Australia was Japan's principal supplier of sunflower seed. Japan is also becoming an important market for Australian meats. Total meat exports to Japan amounted to 106,000 tons last year. Beef shipments doubled to 40,000 tons.

Australia's fruit exports, particularly raisins and sultanas, continue competitive with U.S. exports in the United Kingdom, Western Europe, and Canada.

Outlook

The base quota for wheat marketings in 1972/73 has been announced at 353 million bushels (9.6 million tons), an increase of 47 million bushels above the 1971/72 quota. Additional special delivery allocations will be permitted for hard wheats in short supply. A recent large sale to East Germany is one indication that wheat exports will continue to be diversified.

Production of grain sorghum is likely to stay at the 1971 level with 1972 exports estimated at 900,000 tons, chiefly to Japan.

Fruit harvests are expected to be about the same as in 1971. Exports may encounter greater marketing difficulties due to the substantial increases in freight rates charged for exports to European, Canadian, and U.S. markets in 1972. Dried vine fruit production in 1972 is expected to be at record levels.

Sugar production and exports are expected to increase due to high world prices prevailing for sugar marketed outside the International Sugar Agreement.

Forecasts indicate excellent prospects for production of oilseeds. Output of sunflower, safflower, and rapeseed are expected to total roughly 350,000 tons. Much of this output will be available for export. The sharp increase in oilseed exports not only increases competition with U.S. exports to Japan but also diminishes our chances of continued exports of vegetable oils and oilseeds to Australia.

Cattle and calf slaughter is expected to increase and higher slaughter weights will prevail as a result of good pastures. Larger quantities of beef will be available for export. Wool production is expected to continue to decline in 1972 as the result of reduced sheep numbers from culling of flocks. (Mary E. Long)

BANGLADESH

Economic Situation

Bangladesh (formerly East Pakistan)) is a new democracy with 75 million people living in an area the size of Arkansas. It was created in December 1971 after West Pakistan's military forces were defeated in a 2-week Indo-Pakistani War.

Despite unsettled conditions in Bangladesh, recovery has proceeded at a faster pace than many observers expected. The refugees have returned from India and agriculture and commerce are beginning to thrive again. A new pattern of foreign trade is developing. Some of the major problems which Bangladesh still faces include:

1. Finding enough skilled people to establish a stable government and to reopen idle factories. Many of the top management positions in both government and business were held by West Pakistanis before December 1971. Their departure and the death of many educated Bengalis during the war left the new nation with a shortage of skilled people.
2. Completing the resettlement of refugees from India, plus other refugees displaced within Bangladesh, and providing food and shelter for them. Before March 1971, less than 9 percent of the people lived in urban centers compared with 14 percent now located in urban areas, creating a larger need for imported food.
3. Repairing and rebuilding the vital structures heavily damaged during the war, especially bridges, railroads, ports, airports, and electrical power stations.
4. Establishing a new financial framework, including a new currency. For the time being, the Pakistani rupee is being used although the official exchange rate has been changed from 4.76 per U.S. dollar to 7.3 per U.S. dollar--about the same exchange rate per U.S. dollar as the Indian rupee. The use of Indian rupees is also allowed, especially by returning refugees.
5. Developing a new pattern of foreign trade which will provide enough foreign exchange to pay for the massive imports of food and manufactured goods which Bangladesh needs. Generous economic assistance from India and programs managed by the United Nations have provided many essentials, particularly grain, agricultural inputs, and medicines.

Agricultural Production

Total agricultural production in Bangladesh in 1971 was about 15 percent below the record level obtained in 1969 and 10 percent below 1970.

Rice usually accounts for over 70 percent of the value of total crop production. The 1971 harvest was about 17 percent below the record 12 million tons of milled rice in 1969. Many rice paddies were abandoned in 1971 as farmers fled to India.

The aman rice crop, harvested from November through early January, usually accounts for about two-thirds of total rice production in Bangladesh. The harvest of this crop at the time when millions of refugees were returning from India provided adequate food

supplies during the early months of 1972. However, a critical shortage of rice is anticipated in mid-1972. To lessen its degree, India provided Bengali farmers with substantial quantities of fertilizer, irrigation pumps, and high-yielding varieties of seed for the boro crop planted in December and January for harvest in April. A marked recovery in rice production in 1972 is anticipated because of inputs from India and planting of improved rice varieties.

The area planted in high-yielding varieties of rice in Bangladesh increased from 264,000 hectares in 1970 to 460,000 hectares in 1971. High-yielding varieties accounted for about 14 percent of the 10.9 million tons of milled rice produced in 1970. Many farmers are likely to replace IR-8 with newer rice varieties from India when the kharif crop is planted this June. Yields of IR-20, a new high-yielding variety from the Philippines with a high-quality grain, have been excellent when grown under irrigation during the boro season.

Jute production declined by 27 percent in 1971 to only 907,000 tons. Floods and fighting in important jute-growing areas caused a reduction in the area planted and damage to the growing crop in some localities. Production of tobacco, another important cash crop, remained about the same as in 1970--40,000 tons. Most of the tobacco was planted and harvested before the military activities became significant.

The production of some spring-harvested crops increased slightly in 1971, especially wheat. The use of high-yielding varieties of wheat on fertile land in northern Bangladesh enabled farmers to harvest a record 112,000 tons of wheat in 1971--triple their production in 1966. An even larger crop is anticipated in 1972. However, local production provides only one-tenth of the nation's usual wheat consumption.

Programs to diversify Bengali agriculture and increase the use of multiple cropping have resulted in significant gains in the production of peanuts, potatoes, and other vegetables in recent years. The construction of many storage facilities has favorably influenced the expansion in potato production.

Tea production in 1971 declined sharply--perhaps by more than 50 percent--because most of the employees of tea plantations located in the northeastern part of the country fled to India during the early summer. Sugarcane output, which increased by 2.5 percent to 7.7 million tons in 1971, is expected to be down by about 12 percent in 1972 because of the effect of the war upon farm operations.

Agricultural Trade

Bangladesh received about 650,000 tons of rice from outside sources in 1971, including over 150,000 tons each from both Japan and the People's Republic of China. West Pakistan sent about 280,000 tons of rice to Bengali ports during January-November 1971. Other suppliers included Burma and the United States.

Large imports of rice were not required by Bangladesh in early 1972. Considerable stocks of rice were on hand when the war ended in December. The aman crop provided supplies of rice for returning refugees. Also, the refugees received a 2-week supply of rice when they departed India.

Wheat imports fell from a high level of about 1 million tons in 1970 to about 700,000 tons in 1971, primarily because many ships were diverted from the war-torn Chittagong harbor to Karachi. Once transportation and storage facilities are again operative, imports of wheat are expected to resume. India is scheduled to deliver over 400,000 tons of wheat--mostly over land--to Bangladesh while the ports are being repaired. Bangladesh is also receiving rice, vegetable oils, processed foods, oilseeds, and many industrial products from India.

Exports from Bangladesh approximated \$270 million in 1971--down about one-fourth from the peak level attained in 1970. This includes exports to foreign countries and West Pakistan. Although exports to West Pakistan have virtually ceased, total exports in 1972 are expected to surpass the 1971 level. Substantial exports of jute, paper and paper products, matches, fish, and fruit and vegetables to India are expected to reach a combined value of more than \$150 million in 1972. Exports of 1.5 million bales of raw jute to India are planned. However, once the large stocks of jute and jute products accumulated during the last year are exported, Bangladesh will reduce exports of raw jute to India and resume large exports of jute products to markets outside South Asia such as the United States, United Kingdom, and the USSR. Plans have also been made to send tea to several European countries in exchange for manufactured products.

Outlook

Agricultural production in Bangladesh is expected to bounce back quickly in 1972 because of sharp gains in the plantings of high-yielding varieties of rice and greater use of imported fertilizer, pesticides, irrigation equipment, and farm machinery. The output of most crops in 1972 should be up with the exception of sugar. However, before the larger crops become available to the consumer, rising demand will spur imports and market prices.

Rice imports in 1972 are expected to range between 1.0 and 1.4 million tons. Wheat imports from India, Australia, and the United States are likely to exceed 1 million tons. Imports of rapeseed from Canada and vegetable oils from Asian suppliers should help ease the critical shortage of cooking oils. Large imports of sugar, vegetable oils, cotton, and tobacco must come from sources other than India. Plans to import 18,000 tons of tobacco have already been announced as part of a program to reopen cigarette factories. Only a small part of the tobacco will be imported from India. During July-June 1972/73, Bangladesh is likely to be the leading agricultural importer in South Asia.

It appears that famine will be averted in Bangladesh because of the availability of large stocks of grain in neighboring India and massive economic assistance from other countries through the United Nations. Many countries outside South Asia have pledged a total of \$627 million in economic assistance to Bangladesh. This includes over \$200 million from the United States. The value of economic and technical assistance provided by India in 1972 is expected to exceed that for all donors outside South Asia combined. Large supplies of protein-fortified foods from the United States and Europe will be sent to Bangladesh for distribution among millions of refugees. The United States is expected to send about 500,000 tons of wheat, more than 175,000 tons of rice, and 50,000 tons of vegetable oils to Bangladesh in 1972.

The Bangladesh Government has indicated a policy of providing a more adequate diet for its people. However, about 20 million people are now dependent upon government food supplies--more than double the number listed in this category a year ago. A new food corporation is being formed which will offer more favorable procurement prices to farmers. (John B. Parker, Jr.)

BURMA

Economic Situation

Burma's GNP rose from \$1.9 billion in the year ended September 1970 to \$2.2 billion by September 1971, an increase of 4.7 percent. A 2.3-percent rate of population growth however, substantially offset the increase in average per capita income.

The most serious economic problem for Burma is a continuing adverse balance of payments.

To improve the balance of payments, Burma has emphasized in recent years the production and export of oilseeds, jute, and pulses, judged to have a stronger export demand than rice. In 1970, Burma liberalized her tourist policy to allow tourists to visit a maximum of 7 days instead of 24 hours. Although the deficit for 1971 is expected to be \$30 million, substantially below the 1970 and 1969 levels of \$47 and \$56 million, respectively, reserves dwindled to about \$68 million by June 1971.

Agricultural Production

Burma's agricultural production increased an estimated 5 percent in 1971.

Rice, which accounts for about 40 percent of Burma's agricultural production, increased modestly in area in recent years. Yields declined despite the fact that the area sown to high-yielding varieties increased. However, the quantity of fertilizer used on rice has declined in recent years, apparently reflecting the cultivator's view that the rice/fertilizer price ratio is too low to justify higher fertilizer inputs.

Due to favorable weather, the preliminary estimate for the 1971 paddy crop is 8.33 million tons, slightly above the 1970 figure of 8.16 million tons. For the 1971 planting, there was a major shift from IR-8 and IR-5 to IR-22 which is more suitable to Burma's climatic conditions.

Oilseeds account for about 16 percent of the planted area and 20 percent of the volume of agricultural production of Burma. Since 1969, when exceptional weather resulted in a bumper crop, production has been adequate to provide domestic edible oil needs. Peanuts make up three-fourths of oilseed production and account for most of the rapid expansion in recent years. Production of peanuts increased at an average rate of 6 percent during the last 5 years to an estimated 450,000 tons (in shell) in 1971.

Production of sesame, the only other oilseed produced in large quantity, doubled in 1967 for a record crop of 108,000 tons and has since vacillated between 80,000 and 100,000 tons. Sown area has held around 1.7 million acres. The 1971 crop is estimated at 91,000 tons, about 5,000 tons above the 1970 crop.

A decision by government officials to raise prices paid to cotton producers prior to the 1970 crop stimulated nearly a 30-percent increase in sown area. Weather and pest damage adversely affected yields so that production increased only a fourth to 14,000 tons. Although there is no official estimate for the 1971 crop, planted acreage probably increased and pests probably were under more effective control. Sevin was substituted for Endrin, to which some pests developed immunity.

Production of other crops--vegetables, fruits, pulses, and sugarcane--are estimated to have increased slightly in 1971 as they did the year before.

Agricultural Trade

Total U.S. exports to Burma were valued at about \$10 million in 1971 but agricultural sales were only valued at \$329,000, almost entirely nonfat dry milk. U.S. imports from Burma, mainly pearls and precious stones, were valued at about \$800,000 in 1970 and \$500,000 in 1971. Agricultural purchases were nil.

Exports of rice, Burma's number-one foreign exchange earner, increased substantially in 1970/71 (Oct.-Sept.). Total white rice exports were estimated at 761,000 tons in 1970/71 compared with 645,000 tons in 1969/70.

Rice prices declined and export earnings were up only about \$1 million to \$63 million. The 1970/71 increase in rice exports continued an upward trend from a 1968 low of 352,000 tons. While only 5 percent of Burma's rice exports were purchased by private buyers (as opposed to government to government transactions) in 1966/67, private sales accounted for 40 percent in 1969/70 and 60 percent in 1970/71.

Burma ceased importing cotton in 1970/71 because domestic supplies were sufficient to keep mills operating on 2 shifts. Efforts are in progress to reduce substantial imports of yarn and fabrics (worth \$34 million in 1968/69) which are a drain on foreign exchange. Two new cotton mills are scheduled for completion in 1972 and 3 others are included in the 1971-1975 development plan. The 2 new mills scheduled for completion in 1972 will increase Burma's annual cotton milling capacity to 20,000 tons, or to 30,000 tons if the new mills are operated 3 shifts per day. Production is not expected to keep pace with this added capacity and cotton imports are expected in 1973.

Exports of teak, Burma's second major source of foreign exchange, rose marginally in 1970/71 to 116,000 tons but were still considerably below exports in the early 1960's. Improved prices did allow earnings to increase substantially from \$23.8 million in 1969/70 to \$27.5 million dollars in 1970/71. The 1972 completion of a U.S.-financed teak mill will partially replace old and worn machinery and could brighten the 1973 export picture.

Outlook

The first decade of Burma's socialist-oriented government is drawing to a close. During this period the ratio of investment to GDP has been nearly 10 percent and the ratio of capital-goods imports to consumer-goods imports has been about 50 percent. The government appears to be exercising more flexibility in adopting policies designed to stimulate economic development. A mild uptrend in the economy can be expected to continue.

Burma's brightest hope is for the discovery of offshore oil, although even without oil the economy will advance. Cotton production is being encouraged by the government and new textile mills nearing completion should reduce textile imports. More aggressive marketing by the government will continue to improve export prospects for rice. Bottle-necks in the production and marketing of teak will be ameliorated through better management.

Burma initiated the first of five 4-year plans on October 1, 1971. ^{1/} In the first 4 years, emphasis will be placed on using investment capital to complete and maintain existing and initiated projects and to launch only projects that are absolutely indispensable. The goal is for GDP to increase 4.8 percent per annum. For the entire 20-year period, priorities are to exploit natural resources for export, lay the foundations for heavy industry, and where feasible, organize cooperatives or nationalize the economic sectors. (Thomas A. Twomey)

CEYLON

Economic Situation

Ceylon's GNP increased about 3 percent in 1971 to slightly over \$2 billion at current prices. This was far below the average growth rate of 12 percent during 1967-70 and 8 percent in 1970. Floods curtailed agricultural production and civil disturbance in April 1971 hindered growth in industrial output, disrupted rubber harvesting, and temporarily

^{1/} Report on Guidelines for the Framing and Implementation of the National Plan for the Economic Development of the Union of Burma, presented to the First Party Congress, Rangoon, June 1971.

halted the island's flourishing trade industry. In contrast to the floods last year, crops suffered from drought in early 1972.

Generous welfare and food distribution programs conducted by the government have not been accompanied by sufficient efforts to boost food production. Government programs provide each Ceylonese with a free ration of 2 pounds of rice per week, plus 2 pounds at about half the wholesale price. The program, implemented in September 1970, has led to increased rice imports.

Despite smaller exports, Ceylon's foreign **exchange reserves** improved in 1971 because of capital inflows related to the construction of large new hotels by American and European firms and to reduced imports.

Agricultural Production

Total agricultural production in 1971 remained about the same as the record level attained in 1970, when the rice output peaked. The 10-percent decline in rice production in 1971 to 1.4 million tons of paddy was offset by larger crops of tea, coconuts, and root crops. Floods in January heavily damaged the maha rice crop in southern Ceylon.

About two-thirds of the rice area is planted in improved varieties, especially Hybrid 4 and Hybrid 8, which have provided the highest yields in the Dry Zone of eastern Ceylon when accompanied by adequate quantities of fertilizer. Plantings of improved rice varieties and the use of fertilizer doubled in 1966-68, but since then the growth in the use of these inputs has sharply diminished.

Government programs have promoted the production of import-substitution crops such as onions, sugar, chillies, and potatoes. Programs to produce more crops for export have resulted in increased production of tobacco, cardamons, tropical fruits, and cashew nuts.

Tea plantations, which provide over half of Ceylon's foreign exchange, are still privately owned, although most estates are now managed by Ceylonese. Higher wages for workers have caused a profit squeeze for owners in recent years.

Cooperatives now handle the marketing of many crops produced on small farms. The guaranteed prices offered to farmers by the cooperatives are set by the government.

Agricultural Trade

Agricultural commodities account for over 94 percent of Ceylon's exports, worth about \$330 million in 1971. Sharp reductions in tea production in Bangladesh caused Pakistan to purchase tea in Colombo. Prices for Ceylonese tea increased about 8 percent in August 1971, followed by the usual seasonal price rises. Tea exports almost matched the \$188 million recorded in 1970. The United Kingdom, the United States, Iraq, Australia, and South Africa accounted for over half of Ceylon's tea exports last year.

Exports of rubber declined sharply in 1971 because of smaller deliveries to the People's Republic of China through the rubber-rice trade agreement. ^{2/} The value of rubber exports in the first 9 months of 1971 was 42 percent below the previous year.

^{2/} This 1957 agreement has provided Ceylon with a market for rubber ranging from 17,000 to 85,000 tons annually. Ceylon receives the prevailing price for rubber in Singapore markets plus a bonus of 5 cents per pound for use in payments for rice supplied by the People's Republic of China.

The Chinese took about half of Ceylon's \$74-million rubber exports in 1970. Chinese purchases declined in 1971, partly because of large imports of Malaysian rubber.

The decline in rubber exports was partially offset by exports of coconut products which increased from \$40 million in 1970 to about \$50 million in 1971. Larger exports of coconut oil went to India, Pakistan, and the USSR in 1971.

Rice, wheat, and wheat flour usually account for over half of Ceylon's agricultural imports, and were valued at \$177 million in 1970. Sugar, pulses, chillies, and onions also are important agricultural imports.

Imports of wheat, all from Australia, increased sharply from 17,000 tons in 1968 to about 90,000 tons in 1971. Wheat flour imports declined from a peak of 513,000 tons in 1967 to less than 370,000 tons in 1971.

Ceylon's rice imports declined from 545,000 tons in 1970 to about 380,000 tons in 1971. Rice imports from the People's Republic of China declined from 300,000 tons in 1970 to 50,000 tons in 1971, although the Chinese financed the purchase of 150,000 tons of Burmese rice which they owned.

U.S. agricultural exports to Ceylon increased from \$6.5 million in 1970 to \$11.6 million in 1971 because of sharply larger deliveries of wheat flour and powdered milk. Wheat flour shipped to Ceylon was up three-fourths and exports of nonfat dry milk tripled.

U.S. agricultural imports from Ceylon increased 18 percent in 1971 to \$28 million because of larger arrivals of tea and spices. Tea accounted for four-fifths of our agricultural imports from Ceylon in 1971 and rubber accounted for 13 percent. Cinnamon, citronella oil, sugar, and cocoa are also imported from Ceylon. A new item appeared among imports from Ceylon in 1971--50 tons of cigar tobacco--evidence of progress in Ceylon's program to diversify exports.

Outlook

Total imports of grain by Ceylon are expected to almost double in 1972 because of programs to maintain the rice ration system. Also, further reductions in rice production are anticipated because of a drought during January-March 1972. Combined imports of rice, wheat flour, and wheat could reach 1.3 million tons.

Rice imports may exceed 650,000 tons in 1972, compared with about 380,000 tons in 1971, mostly through larger imports from Burma, Pakistan, and Thailand. Pakistan could divert to Ceylon some of the rice previously sent to Bangladesh. Imports of rice from the United States will depend upon prices and financing.

The United States has already agreed to send 160,000 tons of wheat flour and 25,000 tons of wheat to Ceylon under P.L. 480 in 1972, and additional shipments could occur. Total imports of wheat flour in 1972 are likely to approximate 500,000 tons while imports of wheat are likely to exceed 125,000 tons.

Ceylon's agricultural exports are likely to increase in value in 1972 because of expected higher tea prices and a resurgence in rubber exports to the People's Republic of China and Eastern Europe. The value of new export items such as tobacco and tropical fruits is also expected to increase.

Through the 1971-77 Agricultural Development Plan, Ceylon hopes to boost agricultural diversification and input use, while reducing dependence on rice, tea, rubber and coconuts, and increasing the importance of crops which reduce imports or provide new exports. (John B. Parker, Jr.)

HONG KONG

Economic Situation

Hong Kong's 4 million residents are enjoying unprecedented prosperity because of their expanding foreign trade and greater income from services. Income per capita increased sharply in 1971 to more than \$800.

Over 90 percent of Hong Kong's industrial output is exported. Exports increased 11.4 percent in 1971 to \$2.3 billion. Reexports, tourism, and inflow of capital provided additional foreign exchange.

Hong Kong is the second-largest importer in Asia, following Japan. With an area of only 400 square miles, most agricultural commodities and raw materials for industry must be imported. Total imports increased about 15 percent in 1971 to a record \$3.34 billion.

Industries requiring higher skills are now expanding more rapidly than some of the traditional industries because of rising wages and rents. About 40 percent of the labor force is employed in manufacturing, one-fourth in services, 17 percent in commerce, and 5 percent in agriculture and fishing. Many industries suffer from a shortage of labor.

Agricultural Production

Over 85 percent of Hong Kong's food supply is imported. About half of these imports come from nearby areas of the People's Republic of China.

The production of rice declined last year as farmers switched to more profitable vegetable crops. Vegetables accounted for about three-fourths of total crop production valued at \$30 million. Farmers use about 30,000 acres for crops in the New Territories leased from the People's Republic of China.

Some livestock enterprises in Hong Kong use imported feed to raise chickens, ducks, quail, and pigs.

Food processing plants located in Hong Kong obtain most of their supplies from the People's Republic of China.

Agricultural Trade

Hong Kong's thriving reexport trade increased 18 percent in 1971 to \$563 million. Some countries purchase certain goods reported through Hong Kong because of political considerations, currency problems, or the size of order they are making. Most of the reexports consist of products from the People's Republic of China, Japan, and the United States.

The major markets for Hong Kong's exports are the United States, the United Kingdom, West Germany, Japan, and Canada. The United States bought about 40 percent of Hong Kong's exports in 1971, mainly clothing, toys, transistor radios, and wigs. Hundreds of American firms have investments in Hong Kong because of its skilled labor and free trade policies.

The leading suppliers of imports to Hong Kong are Japan, the People's Republic of China, United States, the United Kingdom, and Taiwan. Agricultural commodities account for one-fifth of imports.

Agricultural imports increased about 8 percent in 1971 to a value of more than \$720 million. Imports of live animals, especially hogs, from the People's Republic of China increased about 30 percent in 1971, exceeding \$100 million for the first time. Imports of raw cotton increased from \$87 million in 1970 to almost \$100 million in 1971 because of larger imports from the United States, USSR, and the Sudan. Fruit and vegetable imports increased about 18 percent over the \$111 million recorded in 1970 because of larger arrivals from the People's Republic of China and the United States.

Imports of rice remained at 345,000 tons last year. Smaller arrivals of rice from Cambodia were offset by larger imports from Thailand, supplier of over half of all rice imports. Per capita consumption of rice is declining slightly as incomes rise and consumers switch to more livestock products, vegetables, and processed foods.

Imports of bakery products, chocolates, dairy products, frozen poultry, beef, and other processed foods from Australia, New Zealand, and Western Europe have increased in recent years.

U.S. agricultural exports to Hong Kong increased 21 percent in 1971 to \$69 million, mostly because of larger deliveries of cotton. Hong Kong is also one of our most important export markets for oranges and grapes.

U.S. agricultural imports from Hong Kong increased one-fourth in 1971 to \$4.3 million. Included in the agricultural imports from Hong Kong were about \$1.2 million worth of products which originated in the People's Republic of China, especially \$500,000 worth of prunes.

Outlook

Hong Kong's economy is expected to remain buoyant in 1972. Exports of processed foods likely will increase because of growing demand in developing countries of Asia.

Agricultural imports by Hong Kong are likely to exceed \$800 million in 1972 because of continued gains in imports of live hogs for slaughter and high-quality foods. Imports of fruits and vegetables from both the People's Republic of China and the United States are expected to increase and imports of corn should reach 200,000 tons this year.

Hong Kong will benefit from renewed diplomatic and trading contact and cultural activities between the United States and the People's Republic of China. Many of these contacts will be made through services provided by Hong Kong. Economic progress in the United States, the major export market, will provide a boost to Hong Kong's economic growth in 1972. U.S. agricultural exports to Hong Kong are likely to surpass \$85 million in 1972, partly because of 1971 deliveries delayed by dock strikes. (John B. Parker, Jr.)

INDIA

Economic Situation

India's GDP reached \$52.5 billion at current prices during the year ended March 1971--10 percent above the previous fiscal year. GNP growth during 1971/72 is likely to fall below 6 percent because of slowdowns in industrial and agricultural production. Agriculture's share of GNP declined from about 52 percent in 1968 to about 43 percent in 1971.

The general price level increased sharply in late 1971 after remaining relatively stable during the first part of the year. Contributing factors included an increased money supply, higher wages, increased employment in commerce and services, and uncertainties associated with the Indo-Pakistani war.

Most agricultural commodities increased in price during 1971. Vegetable-oil prices increased sharply in the last 4 months due to a smaller peanut crop and expectations of reduced soybean oil imports in early 1972. Prices for rice and wheat increased as government stocks were pulled down to feed the Bengali refugees. A large jute crop in India and prospects of imports from Bangladesh caused jute prices to decline below 1970 levels.

Debt repayments, scheduled at about \$500 million annually, have caused India to restrict imports of nonessential items. The country's foreign exchange reserves remained above \$1 billion throughout 1971, compared with \$628 million in 1968.

Agricultural Production

Food grain ^{3/} production in India increased from 104.5 million tons in 1970 to 108.8 million tons in 1971 (table 1) and should exceed 110.5 million tons in 1972.

Recent introductions of quick-maturing, high-yielding varieties of wheat with the color and quality desired by Indian consumers have provided a new impetus for the expansion of wheat production. ^{4/} Farmers harvested 23.2 million tons of wheat in the spring of 1971--16 percent above the previous harvest and more than double the 1967 crop. High-yielding varieties accounted for about two-thirds of the 1971 harvest compared with only 11 percent in 1967. Through multiple cropping and the use of new varieties, the wheat-growing area has spread eastward and southward. Prices for wheat remained between \$2.40 and \$3.30 per bushel in 1971. State governments procured about 5 million tons.

Production of milled rice reached a record 44 million tons in 1971, 3.7 percent above the previous harvest and 45 percent above 1966. Floods in West Bengal in September and damage from tidal waves in Orissa in October limited production gains in those states. The area planted in high-yielding varieties of rice increased from 900,000 hectares in 1967 to 6.5 million hectares in 1971 and has been estimated at 7 million hectares for 1972. High-yielding varieties now account for over 30 percent of the rice crop. IR-8 is still the leading high-yielding variety, although farmers are being introduced to new varieties providing higher yields, better quality grain, and more resistance to certain insects and diseases.

Rice prices increased in late 1971 and restrictions on private movements of rice from one state to another continued. Government procurement centers purchased about 3.2 million tons of milled rice in 1970/71, considerably below the target of 4.7 million tons. The distribution of about 1 million tons of rice to Bengali refugees placed a strain on supplies of rice for fair-price shops in urban areas of India.

The production of coarse grains in 1971 declined slightly to approximately 30 million tons. Corn production declined from a record 7.4 million tons in 1970 to about 6.5 million tons in 1971 because of lower 1970-crop prices and floods during the monsoon season. Inadequate rainfall in some areas of western India again limited the production of grain sorghums, although output increased about 4 percent to 8.5 million tons. Bajra (spiked millet or pearl millet) output, which had jumped 50 percent to a record 8 million tons in 1970 when 40 percent of the crop was in high-yielding varieties, was estimated slightly larger for 1971. High-yielding varieties accounted for over one-fifth of the coarse grains harvested in India last year.

^{3/} In India, "foodgrains" is a collective term and includes all cereals and pulses.

^{4/} For a discussion of technological advances in Asian agriculture, see The Agricultural Situation in the Far East and Oceania--Review of 1970 and Outlook for 1971, ERS-For. 315, Econ. Res. Serv., U.S. Dept. of Agri., April 1971, pp. 12-20.

Table 1.--Production, net imports, and supply of foodgrains in India, 1964-1971.

Item	Unit	1964	1965	1966	1967	1968	1969	1970	1971
Rice:									
Production.....	Mil. m.t.:	33.7	30.6	30.4	37.6	39.8	40.4	42.4	44.0
Net imports.....	do. :	0.6	0.8	0.8	0.5	0.4	0.5	0.2	0.4
Total availability.:	do. :	39.3	31.4	31.2	38.1	40.2	40.9	42.6	44.4
Per capita availability <u>1</u> /.....	kg. :	83.2	65.9	63.9	76.2	78.5	77.9	79.3	80.0
Wheat:									
Production.....	Mil. m.t.:	9.9	12.3	10.4	11.4	16.5	18.7	20.1	23.2
Net imports.....	do. :	5.6	6.5	7.8	6.5	4.8	3.1	3.4	1.8
Total availability.:	do. :	15.5	18.8	18.2	17.9	21.3	21.8	23.5	25.0
Per capita availability <u>1</u> /.....	kg. :	33.3	39.5	37.3	35.8	41.6	41.6	43.8	45.1
Other Grain:									
Production.....	Mil. m.t.:	23.7	25.2	21.2	24.1	28.8	25.2	30.4	30.0
Net imports.....	do. :	0.1	0.2	1.8	1.9	0.5	0.3	0.1	0.1
Total availability.:	do. :	23.8	25.4	23.0	26.0	29.3	25.5	30.5	30.1
Per capita availability <u>1</u> /.....	kg. :	51.2	53.3	47.1	52.0	57.2	48.6	56.8	54.2
Pulses:									
Production.....	Mil. m.t.:	10.1	12.4	9.8	8.4	12.1	10.4	11.7	11.6
Net imports.....	do. :	--	0	0	0	0	0	- .1	0
Total availability.:	do. :	10.1	12.4	9.8	8.4	12.1	10.4	11.6	11.6
Per capita availability <u>1</u> /.....	kg. :	21.7	26.0	20.1	16.8	23.6	19.8	21.6	20.9
Total foodgrains:									
Production.....	Mil. m.t.:	82.4	80.5	71.8	81.5	97.2	94.7	104.5	108.8
Net imports.....	do. :	6.3	7.5	10.4	8.9	5.7	3.9	3.7	2.3
Total availability.:	do. :	88.7	88.0	82.2	90.4	102.9	98.6	108.2	111.1
Per capita availability <u>1</u> /.....	kg. :	189.4	184.7	168.4	180.8	200.9	187.9	201.5	200.2

1/ Estimated.

Source: Directorate of Economics & Statistics, Ministry of Food, Agriculture, Community Development, and Cooperation, New Delhi and Agricultural Attache reports.

Production of pulses remained steady in 1971 at about 11.6 million tons. Shifts of some of the best land in northern India from pulses to wheat and a decline in the total area planted kept pulse production below the higher level attained in 1968. A revival in pulse production is planned through programs to increase yields. Some high-yielding, short-duration varieties of pulses have been developed which fit well into multiple cropping rotations and show greater response to fertilizer than traditional varieties.

Programs to increase cotton production through increased plantings of the new varieties such as Hybrid-4 and MCU-5 produced positive results in 1971: cotton production increased about 13 percent to 1.1 million tons. Jute production also benefited from expanded plantings of improved varieties, rising 15.5 percent to 1.02 million tons in 1971.

Inadequate rainfall in western India caused peanut production to decline 8 percent to 5.5 million tons in 1971. Other oilseed crops did well, especially rapeseed, castor beans, and soybeans.

Sugarcane production declined again to 129 million tons. Rationed distribution of sugar in fair-price shops was introduced as supplies available in the market declined and prices increased. Coffee production in 1971 shot up to about 109,000 tons, compared with a crop of 63,000 tons in 1970. Tea production increased about 1 percent.

Tobacco production in spring 1972 is being favored by good weather and improved cultural practices. Farm prices for tobacco have increased and export demand for quality leaf has exceeded supplies in recent years.

Programs to improve the quality of livestock have generated imports of purebred sheep from the United States and cattle from Europe. Dairies and commercial poultry operations are expanding rapidly. Improved methods of marketing and preserving milk have enabled more urban residents to purchase higher-quality milk.

Agricultural Trade

India's agricultural exports increased about 10 percent in 1971 to more than \$700 million. Higher prices for tea and cashews contributed substantially to the rise. Larger exports of coffee followed a bumper harvest in 1970 and exports of tobacco increased about 9 percent in value.

During 1971, the USSR replaced the United Kingdom as India's major agricultural export market. Exports of tea, peanut meal, castor oil, coffee, pepper, tobacco, jute, and processed foods to the USSR have increased markedly in the last 3 years. India's agricultural exports to the USSR in 1971 were valued at about \$200 million, compared with approximately \$90 million for shipments to the United States. The major agricultural exports to the United States are cashew kernels, tea, sugar, and coffee. The United States and United Kingdom account for over 90 percent of India's sugar exports.

Exports of peanut meal increased from about 655,000 tons in 1970 to about 850,000 tons in 1971. Larger exports to Japan and the United Kingdom occurred in 1971, but future gains in sales of peanut meal in these markets will depend on success by Indian exporters in removing all toxic materials from the meal. Exports of peanut meal to the USSR and East European markets increased slightly but remained below the levels recorded in the late 1960's.

India's agricultural imports declined from a peak of \$1.1 billion in 1966 to about half that value in 1971. However, the decline between 1970 and 1971 was less than 10

percent. Imports of wheat and grain sorghums declined sharply since 1966, while imports of vegetable oils, tallow and cashew nuts increased considerably. Imports of many food items are severely restricted unless obtained through special trade arrangements such as those for fruit from Afghanistan.

Wheat imports declined from a peak of 7.8 million tons in 1966 to 1.8 million tons in 1971. We supplied 1.3 million tons last year. Prices paid by consumers for wheat have increased sharply as the proportion of imported wheat distributed by the food corporation has declined. Domestic wheat was delivered to Bombay for about \$110 per ton in 1971, compared with \$70 for imported wheat. The Food Corporation of India lost about \$40 million in 1971 from the distribution of wheat, and higher prices at fair price shops will be necessary in 1972 to reduce losses by the food corporation.

Rice imports doubled between 1970 and 1971 because of the heavy needs of Bengali refugees. Burma supplied about half of the 460,000 tons of rice and the United States supplied 92,000 tons. India also received 80,000 tons of rice from Thailand as the first delivery in a 3-year agreement to exchange Thai rice for Indian industrial products. Rice was also received from Japan and Italy for use by the Bengali refugees, who consumed about 1 million tons.

Imports of vegetable oil, cotton, tallow, and dairy products increased, especially from the United States. Imports of cotton from African countries also increased while deliveries of expensive extra-long-staple cotton from Egypt declined.

Outlook

India will be closer to food self-sufficiency in 1972 than at any time in the last decade. Less than 2 percent of about 2,200 calories consumed daily in the average diet are from imported foods.

Wheat production is likely to exceed 24 million tons this year and milled rice production might reach 45 million tons. India's exports of wheat to Bangladesh should approximate 400,000 tons in 1972, consisting mostly of varieties not preferred by Indian consumers or bakers. India will import about 200,000 tons of rice from Thailand and Burma in 1972 under long-term arrangements.

Cotton imports will increase if India can find adequate supplies at reasonable prices. The pent-up demand for imported cotton is so strong that more imports are needed to supplement the large 1971 crop. Large imports of cotton from the USSR are planned in exchange for Indian textiles. The Sudan and Latin America have been mentioned as possible sources of supply. India's new market for textiles in Bangladesh will further stimulate her search for cotton.

The shortage of vegetable oils in India is even more severe than the shortage of cotton. The matter is further complicated by absence of any immediate plans to receive soybean oil from the United States. Imports of sunflower oil from the USSR in the past have not provided a satisfactory solution to the vegetable oil shortage. Large shipments of U.S. soybean oil will be needed in late 1972 to prevent further price hikes for cooking oils.

India's total exports are likely to increase in 1972 because of the favorable outlook for exports of jute products and most agricultural commodities. The value of leaf tobacco, cashew kernels, and processed foods exported to markets outside South Asia will increase in 1972, while the value of sugar exports will decline.

Total agricultural imports by India are likely to fall below \$500 million in 1972 for the first time in a decade. However, the value of total imports will probably rise due to larger purchases of nonagricultural items such as industrial machinery and steel. (John B. Parker, Jr.)

INDONESIA

Economic Situation

Reelection of the incumbent regime in 1971 strengthened the confidence in Indonesia of foreign observers and investors. As in 1970, inflation was held in check showing a rise in retail prices of only 2.6 percent. ^{5/}

Indonesia devalued its rupiah twice in 1971. Extremely low foreign exchange resources coupled with the U.S. decision to levy a 10-percent import surcharge caused Indonesia to announce a devaluation of 8.9 percent in August. In an effort to improve the trade balance, selective import subsidies, reduction of certain export taxes, and a broad reduction of import tariff levels accompanied the devaluation. The tariff reductions and import subsidies partly offset the effects of devaluation on imports while reduction of export taxes augmented the devaluation's effect on exports. As a result, the devaluation of the rupiah in August caused only slight increases in the cost of living.

A second devaluation occurred in December when the rupiah rate was maintained at 415 per U.S. dollar after the dollar was devalued.

Agricultural Production

Favorable growing conditions enabled output of most agricultural commodities to advance in 1971. However, only rice, sweet potatoes, and tea reached the production goals for 1971, the midpoint of Indonesia's current 5-year plan.

Rice production advanced by 6 percent in 1971 to an estimated 12.7 million tons (milled), a result of expanded area and higher yields. Adequate rains at the beginning of the growing season coupled with increased fertilizer use boosted yields.

Corn production was the lowest in a decade and more than a fourth below the 1970 crop. Both area and yields showed sharp declines from 1970. Depressed corn prices were largely responsible for farmers switching their emphasis from corn to rice. A large portion of the area decline was attributed to shifts from corn to rice in region with sufficient moisture for rice production. Much of the land shifted to rice was relatively productive in corn, lowering average corn yields.

Cassava production continued to slide during 1971. Although total cassava area expanded, yields declined lowering production 12 percent to 9.2 million tons. Since cassava is consumed primarily when rice is unavailable, its use as a food is likely to decline.

Palm oil production increased nearly 6 percent to 226,000 tons, but the Indonesian oil palm industry is not maintaining its position among major producing countries. World production of palm oil is increasing dramatically and prices are starting to decline.

Sweetpotato production continued to climb in 1971 with output of 3.2 million tons-- a 5-percent increase over 1970. The increased production was due entirely to expanded area, however, since yields decreased nearly 9 percent.

Among other major commodities in Indonesia, tea and sugarcane recorded substantial advances over low 1970 levels. Production of rubber advanced slightly to 810,000 tons, but shows no sign of moving ahead more rapidly this year, since rubber prices remain depressed. Production of pepper and peanuts also advanced slightly while output of copra and soybeans declined.

^{5/} Based on the government's 62-item index for Djakarta.

Agricultural Trade

Indonesia's total exports for 1971 were an estimated \$1.24 billion--6 percent over 1970 and a fourth over 1969.

Based on data from the first half of 1971, rubber--second only to petroleum in export earnings--rose only slightly in volume and fell by about 9 percent in value. Coffee declined about 7 percent in value and even more in volume during this period. Lumber export value registered the most dramatic increase, climbing 146 percent over the first half of 1970. Pepper, tea, palm oil and tobacco also showed improved export performance.

Imports showed a strong upswing in the first half of 1971, outpacing exports by \$30 million. With the currency devaluations in August and December, the trade balance may have improved during the second half of the year.

Indonesia's agricultural trade with the United States declined in 1971, due mainly to the dock strikes which curtailed U.S. exports. The value of U.S. agricultural exports to Indonesia fell one-fourth to \$99 million. The quantity of major agricultural commodities shipped to Indonesia--all of which are sold under P.L. 480--declined substantially. Rice exports were reduced from 365,000 tons in 1970 to 259,000 in 1971, wheat flour from 351,000 to 183,000, bulgur from 66,000 to 31,000, and cotton from 247,000 bales to 197,000.

U.S. agricultural imports from Indonesia advanced to \$128.3 million in 1971, 5 percent above the 1970 total. Coffee became the leading import, surpassing rubber for the first time. Rubber imports were valued at \$40 million, \$1 million less than coffee and about \$14 million less rubber imports in 1970. U.S. imports of palm oil, tea, and spices registered advances in 1971.

Outlook

The 1972 rice growing season started with rains beginning on schedule, but floods in West and Central Java may curtail the anticipated rice increases in those areas. However, the government is making every effort to attain rice self-sufficiency and rice production will likely increase in 1972.

A BIMAS (mass guidance) program for corn expansion similar to the one used for rice is now operative. If the program is successful, both corn production and exports should increase in 1972.

Cassava and copra production may show further declines in 1972 but pepper should continue to recover. Palm oil production will show a strong uptrend in 1972 as more oil palm trees mature. Poultry and egg production is being emphasized and should continue its dramatic increases.

Indonesia's currency devaluation should improve the competitive export position this year, although this may be somewhat offset by the depressed rubber market. In addition, the currency revaluations of West European countries and Japan are expected to increase Indonesia's export expansion to an even greater extent in those countries.
(E. Wayne Denney)

JAPAN

Economic Situation

Despite an economic slowdown, Japan's GNP for 1971 was estimated at \$220 billion at current prices or \$2,062 per capita. (Our own GNP per capita was \$5,200 last year.) Japan's GNP rose 5 percent at 1965 constant prices.

Consumer prices continued their uptrend, increasing 6.1 percent in 1971, nearly all due to rising food prices. Another 6-percent increase in consumer prices is forecast for 1972.

The gross value of agricultural output in 1971 was \$12.6 billion. All but 15 percent of Japanese farmers receive either a part or most of their income from non-farm sources.

Agricultural Production

Farm land in Japan plunged from 6.8 million hectares in 1969 to 6.0 million in 1971, partly accounting for the 6-percent decline in farm production between 1970 and 1971. Agricultural land now represents about 16 percent of total land area. Over 90 percent of cultivated land area is planted to food crops.

Japan produced 9.9 million tons of milled rice in 1971 down 14 percent from 1970. Planted rice area in 1971 was 2.7 million hectares, 600,000 hectares less than in 1970. Most of the decline in plantings resulted from the government's rice diversion program. Rice stocks, which totaled about 6 million tons in 1970, are now down to less than 4 million tons and are likely to decline to 2 million tons by 1973. Annual consumption of milled rice is around 12 million tons.

Wheat production declined steadily from 1 million tons in 1968 to 440,000 tons in 1971, mostly because of decreased plantings. Imports have increased each year to satisfy requirements. On a per capita basis, however, wheat consumption has remained relatively steady and the increased total supply has accommodated the 1-percent population growth.

Feed grain area and production continued its long-term decline. Soybean production, declining steadily since 1967, dropped to a low of 122,000 tons in 1971. Production accounted for an average of only 4 percent of total consumption during 1967-71.

Fruit production, particularly mikan oranges, has increased since 1968, despite fluctuations due to weather.

Hog slaughter for 1971 was estimated at a record 13 million head yielding 760,000 tons of pork. The record pork output--17 percent above 1970--was still insufficient to fully meet domestic demand.

Production of poultry meat increased 11 percent in 1971 to 539,000 tons. Egg production was estimated at 1.8 million tons.

Both dairy cattle numbers and milk production increased in 1971. Fluid milk output was up 2 percent to a total of 4.9 million tons and butter production was up 11 percent to 48,000 tons.

Agricultural Policy

For the past 2 years, Japan has been active in the formulation of new policies to aid agriculture.

The government has amended legislation to permit ownership of larger parcels of land, facilitating modernization and greater efficiency in farming. Encouragement has also been given to greater investment in farms through increased loans and to coordination of farm management and technical services through cooperatives.

In 1971, the government amended the rice production curtailment program, which is effective through 1975. Payments to farmers for diverting rice land to perennial crops were increased to \$1,100 per hectare. Payments to farmers diverting from rice to annual crops were continued at \$972 per hectare, while payments on land allowed to remain fallow were decreased 14 percent to \$833 per hectare. Farmers reacted to these changes by diverting more than 540,000 hectares from rice to other crops or allowing the land to remain fallow.

Programs to encourage production of vegetables and other horticultural crops, instead of rice, resulted in little increase in area and production last year. Emphasis was placed on expanding soybeans and mulberry trees as substitute crops. Mulberry trees are needed to expand silk production and soybeans are needed for the livestock and poultry industries.

In 1971, 1.26 million tons of soybean meal was used in mixed feed, as well as 3.1 million tons of corn and an equal amount of grain sorghum. Total sales of rice for feed in 1971 amounted to 1.2 million tons compared with 300,000 tons in the late 1960's. About 735,000 tons of barley was fed as grain.

The Japanese Government has also increased emphasis on production and consumption of high-protein animal foods. Livestock enterprises have been promoted through stabilized price schemes for dairy producers and long-term projects for the development of beef production. Under a 5-year program for livestock which began April 1, 1972, farmers receive subsidies for dairy bull calves used for beef and for construction of feedlots and payment of half the construction costs of other projects to encourage beef production. Projects include beef breeding-feeding centers, pasture development schemes, and use of forest areas for grazing.

Rapid growth of the general economy has caused a shift in the farm labor supply from surplus to shortage. The total number of persons employed in agriculture declined 3 percent in 1971 to 7.5 million, 14 percent of the total work force, and the percentage of middle-aged and older persons remaining on farms increased. The government has sponsored planned farm communities, which include small industries for employment of farmers during winter months to pool farm labor.

Agricultural Trade

Total agricultural imports by Japan were estimated at \$4.3 billion for 1971. The United States was the principal supplier, furnishing roughly 30 percent of the total.

Japan's wheat imports in 1971 totaled 4.9 million tons, half from the United States. Canada supplied 1.2 million tons and Australia, 1.1 million tons. Imports of U.S. wheat were the same as in 1970 but total imports rose approximately 187,000 tons. Imports of U.S. wheat rose during the first half of 1971 but dropped in the second half due to West Coast dock strikes.

Corn imports declined 1 million tons in 1971 to 5 million tons. Imports from the United States were roughly half the total compared with 4.4 million tons in 1970. This decline was explained by dock strikes in the United States, diversion of 1 million tons of rice to feed uses, and to a lesser extent, larger imports of oats. While importing less U.S. corn, Japan increased purchases from Thailand, the Republic of South Africa, and Brazil, a new supplier.

Imports of U.S. grain sorghum dropped to 1.6 million tons or 40 percent of Japanese sorghum imports, compared with 57 percent in 1970. Imports of grain sorghum from Australia quadrupled to 1 million tons.

Despite U.S. dock strikes, Japan's imports of U.S. soybeans in 1971 were maintained at the 1970 level of 2.9 million tons. The United States supplies about 90 percent of Japan's soybean imports; the only other notable supplier is the People's Republic of China.

Raw cotton imports by Japan declined to 3.6 million bales from 3.7 million in 1970, but the U.S. market share increased from 17 percent in 1970 to 25 percent. Tobacco leaf imports from the United States last year totaled 24,000 tons and accounted for half of foreign supplies.

Japan's tallow imports from all sources totaled about 257,000 tons, the same as in 1970. Imports from the United States amounted to 156,000 tons, down 17 percent because of shipping difficulties. Australia benefited by increasing exports of tallow to Japan.

Meat imports rose substantially in 1971. Expanded import quotas raised beef imports to a record 42,000 tons compared with 23,000 tons imported in 1970. The tariff on pork was also suspended and pork imports were up 59 percent to 27,000 tons. The United States was the principal supplier of pork.

U.S. exports of farm products to Japan totaled \$107.6 billion in 1971--down from \$1.21 billion the previous year. Principal items were: soybeans, \$311 million; wheat, \$152 million; corn, \$148 million; grain sorghum, \$75 million; hides and skins, \$52 million; fruits and vegetables and preparations, \$50 million; tallow, \$31 million; alfalfa meal and pellets, \$22 million, and tobacco leaf, \$21 million.

Japan's rice exports for 1971 totaled 966,000 tons, 40 percent above total 1970 shipments. Most of this trade was in the form of aid shipments to South Korea, Indonesia, and Pakistan.

Liberalization of agricultural imports in 1971 consisted chiefly of the removal of import restrictions on grapefruit and oilseeds (excluding peanuts used for food). As of April 1, 1972, the tariff was eliminated on such commodities as soybeans, soybean meal, rape, safflower and mustard seeds, and tallow. Miscellaneous refined vegetable oils will also be admitted at reduced duty rates of 3.7¢ per pound, 8 percent below the previous rate.

Outlook

On the basis of the current yen value GNP may approach \$296 billion in 1972/73. This represents a 13-percent increase and includes the GNP of Okinawa which is to return to Japan this year.

The 1972 rice crop is forecast at 10.7 million tons (milled basis). The greater production would result from a smaller land diversion program diverting 490,000 hectares instead of 541,000 hectares in 1971, and more normal yields after unseasonably cold weather reduced yields in northern Japan last year.

An uptrend in beef production is expected to reach the 290,000-ton level in 1972. To satisfy growing consumer demand, the government is expected to expand beef import quotas to 50,000 tons.

Japan's overall trade position in 1972 is expected to remain strong despite revaluation of the yen and other international developments.

Imports of feedgrains are expected to increase even with increased allocations of surplus rice stocks for feed use. Production of mixed feeds in 1972 is forecast at 17 million tons, 7 percent above 1971. U.S. corn is expected to be in greater demand because of smaller exportable supplies of Argentine sorghum and corn.

Japan is expected to continue its program of foreign agricultural assistance encouraging recipients to expand production for export. This program is part of Japan's policy of diversifying sources of farm product imports. Emphasis this year is being placed on commodities which Japan must import in large volume to satisfy domestic requirements. (Mary E. Long)

REPUBLIC OF KOREA

Economic Situation

South Korea's economy maintained strong momentum in 1971, supported by rapid industrialization and rising exports. GNP totaled \$9.9 billion at current prices and advanced 11 percent at constant 1965 prices. Agriculture, forestry, and fisheries accounted for 28 percent of GNP.

The won was devalued 13 percent on June 28, 1971. Benefits of the devaluation were partly offset in August by imposition of a temporary 10-percent surcharge on imports by the United States. Revaluation of the Japanese yen by 14 percent should aid South Korea exports in 1972.

Gold and foreign exchange holdings at the end of 1971 were estimated at \$561 million, down \$26 million from 1970 because of slowdown in foreign capital investments and smaller outlays by Americans stationed in South Korea.

Agricultural Production

Farm area shrank as more land was used for industry and roads, helping to keep the index of agricultural production unchanged from 1970 at 128.

Rice, South Korea's chief crop, made a minor production gain to 5.44 million tons in 1971 from 5.36 million tons in 1970. Plantings of IR-667 and Japanese Akibare, both recently introduced varieties, accounted for 13 percent of total rice area in 1971.

Wheat production for 1971 was estimated at 322,000 tons, the smallest crop since 1967. Combined production of barley, corn, millet, and sorghum fell about 6 percent from 1970 output.

In spite of government encouragement, planted area and output of soybeans declined in 1971. Planted area dropped 7 percent to 275,000 hectares, while production dropped 4 percent to 222,000 tons.

Pulses, sweetpotatoes, and potatoes showed a slight decline from the previous year. However, other vegetable production made an impressive gain to 2.7 million tons in 1971, and increases were registered for some fruits.

Tobacco is one of South Korea's expanding export crops. Production in 1971 was estimated at 63,000 tons, an increase of 7,000 tons over 1970.

Beef and veal production declined 4 percent in 1971 to 46,000 tons. However, in response to rising demand for meat and milk, cattle numbers increased to approximately 1.3 million head in 1971. Pig numbers and pork production declined.

Food Consumption

South Korea's Third 5-Year Plan (1972-76) seeks improved diets. Per capita daily meat consumption is projected to increase from 4.3 kilograms in 1970 to 8.0 kilograms in 1976, and fish consumption is projected to increase from 15 to 20 kilograms. Individual consumption of milk and eggs is projected to increase by 50 and 150 percent, respectively. Preliminary calculations ^{6/} indicate that the daily per capita intake of 2,500 calories projected for 1976 appears quite attainable in view of progress achieved in the last decade.

Agricultural Trade

South Korea's imports totaled \$2.4 billion in 1971 while exports totaled \$1.1 billion. The trade deficit was mainly covered by medium- and long-term foreign loans.

Food grain imports in 1971 totaled 3.15 million tons, primarily reflecting a rice shortage and rising consumer demand.

Rice imports rose sharply to over 1 million tons, a 30-percent increase over 1970. The United States and Japan were the major suppliers.

Wheat imports increased from 1.2 million tons in 1970 to nearly 1.7 million tons in 1971. The demand for bread, noodles, and pastries continues to rise. The U.S. share of South Korea's wheat market in 1971 was about 82 percent, compared with 99 percent in 1970. At the same time, Australia's share of the market increased. South Korea's commercial wheat imports in 1971 totaled 900,000 tons, or about 53 percent of all wheat imported.

Expansion of the poultry and livestock industries caused corn imports to rise from 3,000 tons in 1966 to 311,000 tons in 1971. Imports of corn are expected to increase to 500,000 tons in 1972. Nearly all of the corn is imported from the United States.

Imports of various other agricultural commodities, including wheat flour, soybeans, beef tallow, alfalfa meal, and sugar increased in 1971.

Wool imports slipped to \$12 million in 1971 after hitting a record of \$15 million in 1970. Imports of cotton, nearly all from the United States, rose to 124,000 tons from 106,000 tons in 1970. Artificial fiber imports, mainly from the United States, increased significantly to about \$40 million.

South Korea plans to import 1,700 dairy cattle a year during 1972-75. The first shipment of 850 heifers arrived on January 13, 1972, from the United States. An expansion of cattle feedlots also is planned.

Export earnings for 1971 were a record \$1.1 billion, up 28 percent from 1970. Agricultural exports accounted for only 5 percent of all exports in 1971. Raw silk,

^{6/} Foreign Demand and Competition Division, Economic Research Service, USDA, Unpublished material.

tobacco, canned mushrooms, ginseng, apples, beans, live hogs, pork, and hog bristles were the principal agricultural exports. Major nonagricultural exports last year were textiles, plywood, wigs, dried laver, fish, and electronic manufactures. Half of total exports went to the United States and a fourth to Japan.

U.S. agricultural exports to South Korea rose sharply to \$300 million in 1971, up \$82 million from 1970. The greatest gains were made in rice, wheat, corn, and barley. Alfalfa meal, beef tallow, soybeans, and soybean oil also increased in 1971. A third of U.S. agricultural exports to South Korea moved under Title I, P.L. 480. Major concessional items were rice, wheat, corn, and cotton.

U.S. imports from South Korea in 1971 reached \$462 million including \$4.5 million in agricultural items. South Korea's major exports to the United States were textiles (mainly clothing), plywood, raw silk, wigs, tobacco, ginseng, canned mushrooms, footwear, and electrical machinery.

Outlook

South Korea's Third 5-Year Economic Development Plan began in January 1972. The plan allocates \$12 billion for economic development. The agricultural share (including forestry and fishery) is about 11 percent or \$1.3 billion, not including expenditure on dams and roads which will also benefit agricultural development. Major goals for agriculture are: (1) self-sufficiency in rice, (2) rapid expansion of farm income, (3) a 6-percent annual increase in agricultural production, primarily in grains and livestock products, and (4) further consolidation of rice plots to facilitate mechanization.

A long-term irrigation project is planned to raise the area of fully irrigated paddy fields from 773,000 hectares in 1970 to 1.1 million hectares by 1976. The feed supply will also be improved by increased production of forage including pasture, silage, and grains. However, imports of feedgrains primarily corn, and protein supplements, alfalfa, fish, and soybean meal, will continue to expand.

The South Korean Government plans significant increases in foodgrain production in 1972. Accordingly, it has allocated \$1 billion to agriculture--a 30-percent increase over 1971--to subsidize such items as farm chemicals, fertilizer, farm machinery, irrigation, and farmland improvement. This funding is in addition to monies provided in the Third 5-Year Economic Development Plan. (Charles E. Goode)

MALAYSIA

Economic Situation

Malaysia embarked on its 1971-75 plan aimed primarily at reduction of poverty and unemployment. The agricultural sector will be encouraged to increase double-cropping, and intercropping, improve production techniques, expand use of rural credit, and systematize the marketing of farm products.

With a population growth rate estimated at 3.5 percent annually, many new job opportunities must be created to keep the current 8-percent unemployment rate from rising. Government-financed projects will use labor-intensive techniques in an attempt to lower the unemployment rate.

Malaysia's GNP continued its recent expansion in 1971, reaching an estimated \$4.28 billion, 6 percent above 1970. Per capita income climbed 2 percent to \$364.

Agricultural Production

Production of West Malaysia's major crops, rice, rubber, and palm oil, showed significant advances in 1971.

Rice production showed a moderate increase to 951,000 tons (milled), a 2.2-percent increase over the 1970 crop. With a scarcity of natural rice lands, the government is focusing on increased irrigation facilities and double-cropping to expand rice production. Malaysia is estimated to be about 80 percent self-sufficient in rice.

Rubber production expanded to a record 1.36 billion tons in 1971, over 11-percent more than the previous year's output. An extensive replanting program coupled with better planting equipment and methods has raised rubber yields rapidly in recent years. Nearly 17 percent of Malaysia's rubber is now produced under the Standard Malaysian Rubber Scheme, developed to help natural rubber more effectively compete with synthetic rubber. Use of a growth-stimulating chemical has resulted in dramatic yield increases. High-yielding variety trees chemically treated have produced up to 6,000 pounds of rubber per acre, but use of the chemical has been relatively limited so far.

Palm oil continues to be Malaysia's fastest increasing agricultural commodity; 1971 production totaled 480,000 tons, a fifth above the 1970 outturn. Oil palm area expanded from 269,000 hectares in 1970 to 280,000 hectares in 1971, but slightly less than half of the oil palm area is mature enough to produce. By 1975 nearly all of the currently planted area will be producing.

Combined efforts of the Malaysian Agricultural Research and Development Institute and the Federal Land Development Authority led to the accelerated oil palm plantings. Large regional projects in southeast Malaysia enabled smallholder oil palm area to expand. Estate expansion ^{7/} is primarily the result of replacing old rubber and coconut trees with oil palm.

Several other agricultural commodities also showed production increases in 1971. Pineapple output increased 6 percent to 340,000 tons; copra production advanced slightly to 146,000 tons; palm kernel output expanded nearly 15 percent to 100,000 tons, paralleling the increase in palm oil. Production of bananas and sweetpotatoes was estimated the same as the previous year.

Experimental plantings of cacao have revealed that certain varieties can be successfully intercropped with mature coconuts on coastal alluvial soils. Cacao area has expanded from 648 hectares to 3,360 hectares in the last 5 years. The Malaysian Government plans to interplant another 8,000 hectares of coconut with cacao by 1975.

Agricultural Trade

Malaysian trade through August 1971 showed a favorable trade balance of \$127.8 million. Total export value was \$763 million--a 20-percent increase over the same period in 1970. Palm oil showed the major gain with export earnings of \$65.8 million for the first 7 months of 1971 compared with \$42 million a year earlier. The value of rubber exports for the 7-month period showed a sharp decrease as increased export volume failed to offset a decline in rubber prices.

U.S. agricultural trade with Malaysia in 1971 showed no major changes from 1970. Agricultural imports from Malaysia rose 2.5 percent to \$126.8 million; U.S. agricultural exports to Malaysia showed a 2-percent decline to \$14.6 million. The major import item continued to be rubber, followed by palm oil, and coffee. U.S. agricultural exports to Malaysia consist primarily of tobacco, wheat products, soybean oil, and nonfat dry milk.

^{7/} Estate oil palm, which accounts for most of West Malaysia's oil palm production, is produced on farms having 100 acres or more.

Outlook

Agricultural production under the Second Malaysia Plan is projected to accelerate to an 8.3-percent rate of growth in 1975. Of the major agricultural commodities, rubber, palm oil, and palm kernels are expected to grow most rapidly. Rice, coconut, and pineapple production are projected to increase less than the average of agricultural commodities.

The economic situation for Malaysia in 1972 will depend to a large extent on the successful implementation of projects. If proposed projects are begun in 1972, unemployment should decrease and GNP may climb at an even higher rate than in 1971.

Agricultural production is certain to show overall expansion in 1972. However, the prices of rubber and palm oil are still major concerns to the Malaysian economy. Rubber prices have dropped sharply since 1969 but some recovery is expected in 1972. Palm oil producers have enjoyed relatively high prices, but the large output of palm oil in recent years has caused prices to decline. (E. Wayne Denney)

NEW ZEALAND

Economic Situation

New Zealand's GNP showed an estimated 15-percent increase in the 12 months ending March 1972 to \$7.1 billion, compared with \$6 billion a year ago. However, discounting inflation, real growth in GNP was only about 4 percent. The balance of payments deficit, which totaled \$202 million in 1970/71, was expected to decline to \$60 million for 1971/72.

The slower rate of real growth in GNP reflected sluggish conditions in both agriculture and industry. Increases in net farm income were reported for 1970/71 and are forecast for 1971/72, but real net farm income showed little gain. In fact, farm income in 1971/72 would have declined if export prices and the demand for dairy products had not risen significantly in mid-1971 and the government had not made subsidy payments to sheep farmers.

Agricultural Production

Production of farm products for 1971 was up nearly 2 percent over 1970. Output remained below the 1969 record high, with farming still recovering from drought conditions in 1969 and 1970.

During the last 3 seasons, agriculture lost the output momentum of the 1960's. The rate of growth in cattle numbers was only about one-half percent in 1971 compared with 2 percent in 1970 and 4 percent in 1969. Dairy cattle declined in 1971 due to culling of herds but are expected to increase 2 percent in 1972. Total sheep numbers remained relatively static through 1970 but declined 2 percent in 1971. Hog numbers dropped in 1969 and 1970 but increased 7 percent in 1971.

Dry weather in 1970 and some shifts from dairy to beef cattle in 1971 caused reductions in milk production in both years. Milk production in 1970 and 1971 remained at 5.9 million tons, about 6 percent below 1969 production, causing New Zealand difficulty in fulfilling its butter quota exports to the United Kingdom. Exports of butter to the United Kingdom declined from 187,000 tons in 1968/69 to 160,000 tons in 1970/71. Milk production in 1972 is forecast to increase 3 percent because of improved pastures, and butter production is estimated at 244,000 tons, a 4-percent gain over 1971.

Beef production increased slightly in 1971 to 365,000 tons, and a 4-percent increase to 380,000 tons is forecast for 1972. Mutton production declined in 1971 but is likely to increase about 3 percent in 1972 due to larger sheep slaughter. Lamb slaughter peaked at 27.7 million head in drought-ridden 1970. Average weights are expected to be heavier this year, so lamb production may be up 4 percent from the 1971 output to 365,000 tons. Wool production decreased about 1.5 percent in 1971 and the forecast for 1972 indicates a further slight decline because of heavy ewe slaughter in late 1971.

Total grain output in 1971 was 22 percent above 1970 but still significantly below 1969. Grain production in the current season is the largest since 1969, with record barley output. Wheat production is estimated at 403,000 tons, a fourth above 1971 and a record corn crop is also expected in 1972. With the exception of pears, fruit crops, particularly apples, are significantly above 1971 levels.

Agricultural Policy

The low prices for wool and dairy products and the relatively poor seasons for livestock and crop production in 1970 and 1971 resulted in a depressed financial situation for farmers. The government provided subsidies in the 1971/72 budget totaling \$39 million to encourage dairy farmers to divert to beef production and to defray farm costs of fertilizers and pesticides. The program for diversion of dairy cattle to beef production was suspended in mid-1971, however, as world shortages of butter and favorable export prices for butter and cheese developed. In the fall of 1971, the government provided special assistance to sheep farmers with direct payments on a graduated basis. Farmers with a minimum flock of 250 head received from 24 cents to \$1.19 per head as compensation for low prices prevailing for lamb and wool.

For the first time, the New Zealand Meat Board obtained legislative authority to support prices for lamb export for the season beginning October 1, 1971. As of early 1972, the board had purchased about 50 percent of all lambs slaughtered since the price support program was implemented. These programs of financial assistance to sheep and lamb producers were particularly important to farmers on hill country properties not adaptable to cattle raising or other types of agriculture.

Agricultural Trade

Exports of agricultural products including casein for 1970/71 were valued at \$1.1 billion, 6 percent above the previous year, and accounted for 88 percent of New Zealand's total export earnings. The rise in farm exports was the smallest since 1967/68. Principal products exported were beef and lamb, dairy products, wool, hides and skins, and fruits and vegetables.

The relatively static situation in export earnings from farm commodities resulted from low prices for dairy products, particularly butter and cheese, and wool. There were also lower volume shipments in 1970/71 of such key commodities as butter, wool, tallow, mutton, and nonfat dry milk.

Imports of agricultural products totaled \$91 million in 1970/71--up a fifth from 1969/70. Principal imports were sugar, fruits and vegetables, coffee, tea, unmanufactured tobacco, and wheat. Grain imports totaled \$7 million--up from \$3 million in 1969/70. Wheat valued at \$4 million was imported from Australia to compensate for the below-average wheat crops of 1969/70 and 1970/71. The remaining grain imports were chiefly rice and barley.

New Zealand's total exports to the United States in 1970/71 were valued at \$213 million; farm commodities accounted for 86 percent of this total. Meats accounted for \$127

million; wool, \$23 million; hides and skins, \$17 million; and dairy products, \$9 million. Total imports from the United States were valued at \$145 million with agricultural products accounting for \$11 million. The chief farm products involved were unmanufactured tobacco, \$6 million; fruits and vegetables, \$3 million; and hog casings, \$1 million.

Outlook

Marketing prospects for New Zealand's agricultural products appear good in 1972. Since early 1971, wholesale prices of N.Z. butter on the U.K. market increased from 36 cents to a record 64 cents per pound in February 1972. High prices and increased demand developed in recent months for casein and nonfat dry milk. Carpet wool prices have risen sharply in 1972 to 43 cents per pound--9 cents above prices in December 1971. Beef prices, both in the domestic and foreign markets, are high. Beef shipments to New Zealand's major market, the United States, are governed by voluntary restraint programs based on the U.S. market supply situation. In 1972, New Zealand will receive a portion of a 7 percent increase in the import restraint level which could result in increased imports of 10 percent over 1971. Sheep prices are currently rising influenced by government subsidies, higher crossbred wool prices, abundant feed crops in 1972, and recent restocking of flocks to offset losses of the past 2 years.

Dairy quotas for exports to the United Kingdom were finalized early in 1972 for 1973/74-1977/78--the British period of accession to membership in the European Community. This action guarantees markets for New Zealand's butter and cheese exports to the United Kingdom during the period of accession. The world shortage of butter and cheese caused the United Kingdom to suspend its import quotas on these commodities during both 1971/72 and 1972/73.

The government, still actively engaged in a program of diversification of exports of farm products to markets other than the United Kingdom, has announced a plan to phase out import licensing and preferential tariffs by 1977. (Mary E. Long)

PAKISTAN

Economic Situation

Growth in Pakistan's GNP slowed to 1.4 percent in 1970/71 compared with 6.6 percent in the previous year. Per capita income in real term declined for the first time in several years. The balance of payments deficit increased in 1970/71 by 3.1 percent to \$381.3 million. Food prices increased during the year.

Pakistan's economic deterioration was brought on by prolonged political strife with Bangladesh (formerly East Pakistan) which culminated in a 2-week war with India in December 1971. In addition, labor unrest disrupted the economy, widespread drought adversely affected agriculture, and foreign assistance was curtailed because of the conflict with Bangladesh dampening economic growth.

Agricultural Production

Agricultural production in 1971 was adversely affected by civil disturbances, war with India, drought, and scarcity of canal water. The agricultural production index fell from 157 in 1970 (1961-65=100) to 151 in 1971.

The area planted to foodgrains declined 4 percent to 237 million acres in 1971. However, foodgrain production fell even more, about 5 percent, to 11.9 million tons.

Wheat production, which slid from 7.3 million tons in 1970 to 6.5 million tons in 1971, accounted for the major share of the foodgrain production decline. Acreage decreased 4 percent to 6 million hectares. Wheat production in both rainfed and irrigated areas suffered from lack of water, which also negatively affected the use of fertilizer. The area planted to high-yielding varieties comprised about 46 percent of the total wheat acreage, 6 percent more than in 1970, and yielded about 75 percent of total wheat output.

Production of milled rice during 1971 was about 2.3 million tons, a little more than in 1970. Acreage was up about 2 percent from the 3.7 million acres in 1970, and included 1.5 million acres planted to high-yielding varieties.

Cotton production increased 61,000 tons to 588,000 tons in 1971 due to improved varieties and heavy use of fertilizer, nearly achieving the government target level. The average yield of cotton during 1971 was about 270 pounds per acre, down slightly from 1970.

Pulse production excluding chickpeas rose from 170,000 tons in 1970 to 183,000 tons. Because of dry weather, acreage used for pulse production was above average. Pulses are a good cash crop and an important source of protein in Pakistan, especially for the poor. The government is developing improved varieties. Chickpea production declined slightly from 511,000 tons in 1970 to 504,000 tons in 1971.

Agricultural Trade

Pakistan's total exports increased 27 percent to an estimated 443 million in 1970/71. Major exports were cotton, rice, hides and skins, wool, and cotton waste.

Exports of cotton during 1970/71 totaled 102,000 tons, a fifth over the 1969/70 level. Basmati rice exports were 182,000 tons, double the 1969/70 exports. These 2 commodities accounted for three-fourths of the value of Pakistan's agricultural exports in 1970/71.

U.S. imports of agricultural commodities from Pakistan declined from \$1.5 million in 1970 to an estimated \$1.3 million in 1971. Pakistan's trade policy gives priority to exporting finished goods rather than agricultural commodities to earn more foreign exchange. In 1971, the United States imported \$10 million worth of cotton products and fabrics from Pakistan.

Pakistan's total imports were valued at \$757 million in 1970/71, about 10 percent above 1969/70. Agricultural commodities imported by Pakistan were valued at about \$94 million, up nearly 40 percent from the level of 1969/70.

Wheat and vegetable oil were the 2 commodities imported in large quantities. Wheat imports in 1970/71 were valued at \$13.2 million, an increase of nearly 26 percent. Imports of vegetable oils and animal fat rose two-thirds to a record \$38.2 million. Tobacco was the third-largest commodity imported by West Pakistan in 1970/71.

Pakistan is the major recipient of U.S. agricultural commodities under P.L. 480. U.S. exports of agricultural commodities to Pakistan increased from \$35 million in 1970 to \$40 million in 1971. Wheat and vegetable oil were the major commodities involved. Wheat was valued at approximately \$12 million in 1971, up from about \$5 million the year before, and vegetable oil was valued at approximately \$27 million.

Outlook

Pakistan's new government is attempting to overcome setbacks under the previous government. Agricultural commodities previously imported from Bangladesh such as raw

jute, ginger, hides and skins, and tea will have to be imported from other areas, which is likely to necessitate larger outlays of foreign exchange.

Wheat acreage and production in 1972 are likely to be close to the levels of 1971. Rice acreage and production are estimated a little higher than in 1971 due to expansion in the use of improved varieties. The 1972 crop was sown well before the separation of Bangladesh and substantial surplus production of coarse rice could result without this market. Area in coarse rice production is likely to be shifted to long grain (Basmati) rice or to cotton.

Wheat import requirements for 1971/72 are reported at about 650,000 tons. Some of this tonnage will be imported under P.L. 480 and some will be imported for cash and under commodity credit loans. Edible oil imports in 1972 are estimated at 66,000 tons; most of it will be supplied by the United States.

Pakistan's foreign trade outlook for 1972 appears generally good. Barter trade with East European countries is expected to increase and trade with Arabian countries should also expand. (Amjad H. Gill)

PHILIPPINES

Economic Situation

The Philippine economy recorded a 6.5-percent real GNP growth rate in 1971, up from 5.0 percent the previous year. However, the problems of external trade deficits, inflation, and widespread unemployment continued. Total 1971 exports were estimated at \$1.12 billion while imports reached \$1.15 billion, leaving a trade deficit of nearly \$34 million. Inflation affected all basic commodities, with rice and corn prices reaching record levels. The wholesale price index increased 19 percent during 1971 despite creation of the Price Control Council.

Agricultural Production

Adequate rainfall, expanded irrigation, and improved cultural practices enabled agricultural production to show a significant increase during 1971.

Record harvests of coconut and sugar contributed to increased crop output. Coconut production of 1.7 million tons (copra equivalent) was 31 percent above the 1970 output. The record sugarcane output of 23.8 million tons surpassed the 1970 total by 11 percent.

The 1971 rice crop was originally expected to advance 5 percent over the 3.47 million tons (milled) recorded in 1970. More recent estimates place the 1971 crop only slightly above 1970 output and far short of consumption requirements. Typhoon damage, civil disturbances, and tungro virus hampered production increases. Consequently, rice prices soared to \$220 per ton in November 1971. Both domestic traders and consumers were reported to be hoarding rice.

Tungro virus disease did not infest the Philippines until 1971. The infestation is attributed to the use of other than first generation seed. Over 20,000 hectares of rice have been destroyed by tungro with an estimated production loss in excess of 90,000 tons.

The 1971 corn crop of 2 million tons was slightly above the previous year's output. Earlier production expectations were not reached because civil disturbances curtailed plantings and unfavorable weather prevailed in northern Luzon. Corn prices remained high--averaging about \$100 per ton throughout the year.

Banana production is forecast to reach 1 million tons in 1972, a 22-percent rise from the typhoon damaged crop in 1971. Part of the production expansion is occurring in the export-oriented plantations in Mindanao. Fresh pineapple production in 1971 was

estimated at 365,000 metric tons, with expectations for a 10,000-ton increase in 1972.

Tobacco production dropped sharply from the average of recent years. An estimated 30 percent of the native tobacco was destroyed by floods.

Farmers reduced planted tobacco area because of low prices during the 1970 buying season. Flue-cured production was estimated at 30,000 tons for 1971 while an outturn or 38,000 tons was estimated for native tobacco.

Livestock numbers in the Philippines as of March 1, 1971, totaled 19.8 million head, a 3-percent increase from a year earlier. Hogs are the most predominant and numbers have increased rapidly to reach 12.5 million head. Water buffalo totaled 4.1 million, exceeding the previous year's estimate by only 1 percent. Cattle numbers, primarily beef animals, increased 2.5 percent to total 2 million. Although no figures on poultry population are available, production is increasing.

Agricultural Trade

Agricultural exports for 1971 were an estimated \$530 million, up a tenth from 1970 and 55 percent above the 1969 level. Exports of sugar, coconut products, and bananas showed significant increases. Sugar exports to the United States catapulted to 1.6 million tons in 1971--a 23 percent increase. Coconut oil exports increased by 69,000 tons in 1971 to 400,000 tons. Japan continued to be the sole market for Philippine banana exports, which totaled 175,000 tons in 1971.

Agricultural imports by the Philippines increased by 20 percent in 1971 to \$150 million. The U.S. share declined to 49 percent as large rice imports came from nearby Asian suppliers.

Rice import authorizations by the National Economic Council totaled nearly 460,000 tons since April 1971, when Philippine self-sufficiency in rice came to an abrupt halt. Purchases under these authorizations were the first rice imports since 1967/68. Although all of the import authorizations had not been filled at the end of 1971, negotiations for delivery were made with Thailand, Burma, Taiwan, People's Republic of China, Italy, and Japan. Only low-quality rice was purchased, with prices averaging about \$85 per ton c.i.f. Purchases from Thailand, Taiwan, and Japan were on a long-term credit basis.

Corn imports amounted to 30,000 tons in 1970/71, but about 165,000 tons of corn are expected to arrive in 1971/72. About 30,000 tons of corn have been purchased from Thailand and most of the remainder is being negotiated with the United States under the P.L. 480 program.

Cotton imports declined about 15 percent in 1970/71 to 32,000 tons. Imports from the United States purchased through CCC credit and P.L. 480 programs amounted to 31,000 tons.

U.S. agricultural exports to the Philippines declined from \$77.6 million in 1970 to \$74.0 million in 1971. Shipments of wheat and wheat flour to the Philippines showed sizable decreases from 1970.

U.S. agricultural imports from the Philippines rose 7.4 percent to \$385.1 million in 1971. Sugar imports showed the biggest change, increasing by \$24 million to \$222.2 million.

Outlook

The rapid expansion of GNP in the Philippines is expected to continue in 1972. The world monetary realignment may have some impact on the mix of Philippine imports, but no major changes are anticipated. Philippine imports from the United States should reach \$75 million in 1972, with substantial increases expected in corn and tobacco imports. Various import restrictions, designed to conserve foreign exchange, will remain in effect.

Expansion of the agricultural sector should continue as a more concentrated effort is made to increase crop production--particularly rice and corn. Production of coconut and bananas should show significant increases once again in 1972, while tobacco and sugar output should increase slightly from the 1971 crop. (E. Wayne Denney)

SINGAPORE

Economic Situation

While maintaining its position as the leading entrepot economy in Southeast Asia, Singapore has rapidly expanded in other areas. Related industries such as shipbuilding and repairing, oil refining, and electronics, as well as other specialized services, have aided in diversifying Singapore's trade-based economy. Industrialization and urbanization have been so rapid that a land reclamation program has been adopted to utilize the Republic's numerous outer islands.

Singapore's per capita GDP in 1971 was estimated at \$1,000--a 10-percent increase over 1970, by far the highest in Southeast Asia, and third only to Japan and Israel among Asian countries. In addition, Singapore continues to generate a balance of payments surplus and has a strong foreign currency reserve.

Agricultural Production

Land is such a valuable resource in Singapore that the agricultural sector is rapidly diminishing in importance. The increasing premium being placed on land forces agricultural endeavors to be highly intensive, with emphasis on production of fruits, vegetables, coconuts, and miscellaneous root crops. In 1971, the agricultural sector contributed slightly less than 3 percent of the GDP. Production of major agricultural commodities is shown in table 2.

Table 2.--Singapore: Production of selected agricultural commodities, 1965-71

Commodity	Unit	1965	1966	1967	1968	1969	1970	1971
Rubber	:Metric tons	: 1,524	: 1,524	: 2,540	: 2,540	: 2,540	: 2,032	: 1,778
Coconuts	:Million nuts	: 11	: 11	: 11	: 11	: 11	: 11	: 11
Fruits	:Metric tons	: 3,851	: 3,820	: 3,759	: 3,930	: 4,501	: 4,501	: 4,247
Vegetables	: do.	: 32,361	: 31,990	: 31,853	: 31,680	: 31,497	: 30,481	: 30,481
Root crops	: do.	: 9,246	: 9,053	: 8,992	: 8,962	: 9,144	: 11,685	: 11,177
Tobacco	: do.	: 508	: 476	: 398	: 508	: 342	: 490	: 528

Agricultural Trade

Singapore's balance of payments has shown increasing surpluses since 1966, characterized by rising trade deficits which have been more than offset by surpluses in the service account and large capital inflows. In recent years, entrepot trade has become less important while trade for domestic use has shown rapid expansion. Entrepot trade as a percent of total trade declined from about 80 percent to slightly less than 40 percent during the 1960's.

Singapore is a small but growing market for U.S. agricultural products. A small portion of the U.S. agricultural products imported by Singapore are reexported to nearby markets but most are consumed locally. Exports of U.S. agricultural products to Singapore in 1971 totaled \$15.1 million, a decline of 12 percent from 1970. However, this was due mainly to the U.S. dock strikes and was the first such decline in recent years.

Unlike most U.S. export markets, Singapore imports a large amount of processed foods. This is mainly because higher U.S. freight rates are easier to absorb on a product ready for retail than on a commodity which requires further processing. However, imports of frozen beef and fresh fruits have grown rapidly in recent years. Singapore's leading agricultural import from the United States continued to be tobacco in 1971, despite slight declines since 1969.

The bulk of Singapore's agricultural exports to the United States consists of rubber, pineapple, and pepper. In 1971, rubber exports alone amounted to \$17.1 million, 87 percent of the total.

Outlook

In 1972 and in subsequent years, Singapore should continue to develop export-oriented industries and depend less on entrepot trade. As industrialization gains momentum, Singapore will import its food, tobacco, and fiber requirements to a greater extent and agriculture will continue to diminish in importance. (E. Wayne Denney)

TAIWAN

Economic Situation

Despite diplomatic adversities faced by Taiwan (the Republic of China), the economy continued rapid growth in 1971. GNP increased 11.4 percent in current prices reaching \$6.2 billion. Agricultural production including forestry and fisheries accounted for 17.6 percent of the GNP.

Per capita income increased from \$293 in 1970 to \$329 in 1971. Population growth, although slowing down, was 2.1 percent in 1971 and population reached 15 million.

Taiwan's total foreign trade expanded tremendously during 1971, exceeding \$4 billion, up a third from 1970. Exports totaled \$2.13 billion while imports reached \$1.95 billion, leaving a favorable balance of trade of \$186 million. Taiwan's gold and foreign exchange reserves increased about 27 percent during 1971, surpassing \$800 million. The United States and Japan remain Taiwan's chief trading partners.

Agricultural Production

Total agricultural production in 1971 remained about equal to the previous year. Rice production last year accounted for approximately half of total crop value but declined to 3.01 million tons of paddy from the 3.23 million tons produced in 1970. It was the smallest harvest since 1964. Typhoon damage as well as earlier dry weather in Central Taiwan combined with lower acreage to account for the production decline. The area planted in rice in 1971 totaled 753,000 hectares, a 3-percent decline from 1970.

Sweetpotato output in Taiwan decreased in 1971, as it did in 1970, due to smaller planted area. Farmers are becoming less interested in this crop due to high labor costs, low cash value, and competition from imported feedgrains. The bulk of Taiwan's sweetpotato production is used as hog feed.

Sugar is Taiwan's major agricultural export. Production of sugarcane increased from an unusually low 6 million tons in 1970 to 7.9 million tons in 1971. The cane production increase was attributed to a higher yield per hectare since planted area dropped from 86,000 to 84,000 hectares. Yields rose from around 70 tons per hectare in 1970 to nearly 94 tons per hectare in 1971. The sugar extraction rate also rose slightly in 1971. Production of centrifugal sugar rose a fourth last year.

Tobacco production in Taiwan declined 19 percent to 17,000 tons. The decline in output was the result of the tobacco monopoly's decision to cut acreage 20 percent due to a large carryover of domestic tobacco.

Production of citrus fruits increased nearly a fifth from 1970, the result of new plantings coming into production. Banana production increased about 7 percent despite substantial weather damage in some areas. Vegetable output including mushrooms and asparagus increased from 1.69 million tons in 1970 to 1.74 million tons in 1971.

Total meat production rose 2.6 percent to 472,000 tons in 1971. Both poultry and pork rose 3.5 percent.

Taiwan's total agricultural exports excluding timber and fish amounted to \$303.6 million in 1971, an increase of 10 percent over 1970. Sugar exports rose a fifth to \$55 million; canned mushrooms increased over a third to \$46 million. Increased prices for bananas on the Japanese market brought receipts up sharply from \$38.1 million in 1970 to \$45 million in 1971. Fresh pineapple exports rose 25 percent to \$6.2 million. Exports of canned asparagus, fresh vegetables, canned pineapple, and tea increased slightly.

Wheat imports during the first 9 months of 1971 rose 16 percent to 429,000 tons, and total feedgrain imports rose about 15 percent. Corn imports, mostly from Thailand, decreased while imports of barley and sorghum, mostly from Australia, rose from the previous year.

Imports of cotton in the first 9 months of 1971 were 115,600 tons compared with 87,000 tons a year earlier. Taiwan's imports of soybeans during the first 9 months last year declined to 382,000 tons from 419,000 tons during the same period of a year before. The first imports of feeder cattle began in late 1971 and additional imports are expected in 1972 from the United States.

Total U.S. exports of agricultural commodities to Taiwan amounted to \$162 million in 1971, up 21 percent from the 1970 level. U.S. cotton exports to Taiwan more than doubled the 1970 level as a result of a P.L. 480 agreement signed in January 1971. Under this program, U.S. cotton accounted for almost one-half of Taiwan's cotton imports. Although U.S. soybean exports to Taiwan dropped 9 percent to 534,000 tons in 1971 because of the dock strike and higher soybean prices, they still accounted for 95 percent of Taiwan's imports.

Wheat exports to Taiwan in 1971 fell about 36 percent from the level of 556,000 tons in 1970, due to the dock strikes and strong competition from Australian wheat. Corn exports rose 70 percent from the 1970 level of 27,000 tons. Leaf tobacco exports increased 11.6 percent, reflecting strong demand for higher priced cigarettes. The value of U.S. hides and skins exports to Taiwan increased 35 percent.

U.S. agricultural imports from Taiwan increased from \$50.5 million in 1970 to \$53.2 million in 1971. The major agricultural commodities imported from Taiwan during 1971 were: mushrooms, \$16.5 million; sugar, \$11 million; pineapple, \$7.8 million; oranges, chestnuts, and tea, \$3.0, \$2.2, and \$2.0 million, respectively.

Outlook

Another year of rapid economic growth for Taiwan is forecast for 1972. The growth in GNP is forecast between 9 and 10 percent. Pegging of the Taiwan dollar to the U.S. dollar will make Taiwan's exports more competitive.

Agricultural production is targeted to increase about 4.4 percent annually under the current 4-year plan. Rice production is likely to exceed 1971 output but not to reach the 1972 target of 3.4 million tons of paddy. Government policy emphasizes increasing output per unit rather than expanding total rice acreage.

Higher per capita income, population growth, and rapid urbanization assure continued expansion of Taiwan's imports. Soybeans, wheat, and feedgrain imports will rise in 1972, while cotton imports will level off or decline somewhat due to suspension of the P.L. 480 program and high prices. Exports of canned pineapple, mushrooms, processed pork, and live hogs are expected to rise in 1972. (Amjad H. Gill)

THAILAND

Economic Situation

Thailand's general economic situation in 1971 was essentially unchanged from 1970. The economic growth rate continued easing downward from 9.4 percent in 1969, but remained basically strong. The most significant change since 1970 was a marked improvement in the balance of payments.

Thailand's trade balance steadily worsened after 1964 to a deficit of \$588 million in 1970. In 1971, although year-end figures were not available, it was clear that increased exports and decreased imports resulted in a trade deficit well below the 1970 level. Preliminary figures for the first 3 quarters of 1971 showed a deficit of \$249 million contrasted with \$457 million for those quarters of 1970.

Agricultural Production

Total agricultural production in Thailand increased an estimated 4.3 percent from 1970 to 1971.

Rice, which accounts for about half of agricultural output, was estimated to have declined slightly from the 13.5 million tons produced in 1970. An estimated 100,000-ton reduction in output for 1971 reflected a decline in average yield, apparently due to less favorable growing conditions.

Thailand's corn production continued to accelerate as producers responded to good prices and strong demand. In the last decade, corn output increased at an average annual rate of 14 percent and since 1967 the average annual rate of increase has been 20 per-

cent. In some areas, the 1971 crop was affected by downy mildew and locust attacks and an earlier estimate of 2.2 million tons was adjusted downward to 2.1 million tons--8 percent above the 1970 crop.

Cassava, Thailand's fourth most important agricultural export, has become increasingly important as a livestock feed in Western Europe. Consequently, prices have been good and the outlook for cassava as an export crop is bright. Production was up 7 percent from 1970, double the rate of increase of recent years. However, the future of cassava production, a traditional crop usually cultivated in a rudimentary manner without the use of fertilizers or crop rotation, will depend to a considerable extent on the adoption of modern methods.

Cotton production in 1971 was estimated at 10,000 tons, 1,000 tons higher than in 1970 but less than a third of the record 36,000 tons produced in 1968. Severe pest problems were responsible for recent crop reductions. Thailand has a growing need for cotton and imports substantial quantities each year. Cotton is considered a high-priority crop, but it is likely to be some time before pests are brought under control and production returns to the 1968 level.

Rubber output in Thailand in 1971 was up nearly 15 percent from the previous year. Production of tobacco, sugarcane, kenaf, and peanuts each increased 10-12 percent. Output of most other crops remained unchanged in 1971.

Agricultural Trade

Higher export volumes of a number of major commodities and reduced imports improved Thailand's trade position in 1971.

Rice exports in 1971 soared to an alltime record of 1.6 million tons, 60 percent above 1970 and equal to the 1976 target in the 5-year economic plan. The main stimuli for this surge in rice exports were the removal of Thailand's long-standing export tax on lower grades of white rice and the granting of government-to-government sales on long-term credit. Another development that may be important in the future is Thailand's increased interest in trading with the USSR and East European countries.

Although declining world prices negatively affected export earnings from rice, prices tended to stabilize in the last half of the year. The prospects of more stable rice export prices in 1972 are encouraging; rice exports are estimated to reach 1.8 million tons.

Corn exports for 1971 were an estimated 1.7 million tons compared with 1.4 million tons in 1970. However, lower unit prices dampened the increase in foreign exchange earnings. Corn exports to neighboring traditional markets, particularly Japan and Taiwan, look promising in 1972.

U.S. imports from Thailand decreased to \$96.3 million in 1971 compared with \$99.6 million in 1970. The United States is a significant importer of tapioca products, teak, jute, and kenaf. In 1970, tapioca imports were valued at \$5.4 million, teak at \$1.3 million, and jute and kenaf at \$1 million.

Larger rubber exports in 1971 were offset by lower world prices. This situation was reversed for cassava and kenaf. Improved prices for kenaf and cassava partially offset expected smaller exports.

Japan, the leading exporter to Thailand, provides about 35 percent of all imports, and the United States provides about 10 percent. In 1971, total U.S. exports to Thailand were valued at \$143.3 million, below the \$150 million of 1970.

The makeup of U.S. exports to Thailand changed last year. The share of agricultural products in the total increased from 21 percent in 1970 to 32 percent in 1971. Nearly all of this increase was due to cotton and wheat. Cotton exports doubled from 72,000 bales to 150,000 bales in 1971 and surpassed tobacco as the number-one export to Thailand. Cotton accounted for nearly 43 percent of U.S. agricultural exports to Thailand while tobacco made up about 41 percent. Wheat exports increased from 12,000 tons to 32,000 tons.

Outlook

A steady increase in Thailand's production and exports of rice, corn, cassava, and kenaf is projected for the next several years. Furthermore, Thailand is pursuing a program of crop diversification, and production of oilseeds particularly soybeans and castor beans, will expand rapidly. These crops are accepted by farmers, have yielded well, and are in demand on the world market.

September 30, 1971, marked the end of Thailand's second 5-year development plan-- a period which has seen substantial economic progress with an average annual growth rate of 8 percent or better in GDP and investments. Under the next 5-year plan now being finalized, the government can be expected to attempt maintaining its enviable record of price stability. Efforts will be made to maximize the use of the extensive infrastructure built in the last decade to promote economic growth. There will be continued efforts to develop export-oriented and import-substituting industries, including greater emphasis on agricultural output and agricultural diversification. Nevertheless, opportunities for foreign investment in Thailand and export to Thailand appear promising. (Thomas A. Twomey)

REPUBLIC OF VIET NAM

Economic Situation

The Republic of Viet Nam (South Viet Nam) has pressing economic problems with a rapidly rising inflation and economic dependence on the United States. Consumer prices for working-class families in Saigon rose moderately from an index of 100 in 1955 to 149 in 1965, but then accelerated rapidly to 670 by 1971. The first year of rapid inflation, 1966, corresponded to the period when regular trade channels from the countryside to Saigon were disrupted. In this period there was also a large influx of American personnel living, at least in part, on the local economy.

Three economic reforms have been initiated by the government to stem inflation and to restructure the economy away from dependence. The first reform was in October 1970, the next was announced in March 1971, and the last reform came in November 1971.

The economic reforms featured devaluation of the piastre as a major weapon for restructuring the economy. The exchange rate changed from 118 piastres per U.S. dollar in October 1970 to 400 piastres per U.S. dollar in November 1971. Devaluation makes the cost of the imported goods much higher relative to domestic goods for the Vietnamese consumer. Demand shifts to the domestic market and the implicit assumption is that supply of domestic goods can respond to the increased demand.

Another policy common to the reform programs was pay raises for civil servants and the military. This provision helped to soften the effects of the devaluation for these groups. Raises also served to bring compensation of civil servants and military more in line with the rapidly rising general price level.

The latest reform in November 1971 also reduced import restrictions. Those that had been set up for the protection of inefficient local industries were most heavily affected.

The short-run market reaction to devaluation and increased salaries was more inflation. As a result of rumors of an impending devaluation in November 1971 followed by the announcement of the reform, rice prices in Saigon rose 20 percent and condensed milk prices rose 50 percent within a month. The retail price index, calculated by the United States Agency for International Development, rose 7 percent during the last 2 months of 1971; this was equal to the increase for the first 10 months of the year. The 14-percent inflation for all of 1971 was, however, the lowest in recent years.

Agricultural Production

In 1971, total agricultural production in South Viet Nam rose 8 percent above the 1961-65 average but per capita food production was only 88 percent of the 1961-65 average. Production per capita hit a low index of 74 in 1968 but then increased. This rise was largely a result of the introduction of high-yielding rice varieties.

The IR-5 and IR-8 varieties were introduced in 1967. Area of these varieties increased to 520,000 hectares or a fourth of total rice area by 1971. The goal for 1972 is 750,000 hectares but indications are that actual area is closer to 650,000 hectares. Because the yields of these varieties are 3-6 tons per hectare compared to an average of 2.2 for traditional varieties, paddy production increased from 4.4 million tons in 1968 to 6 million tons in 1971. The original goal of self-sufficiency by 1971 was not met and 1971 imports were approximately 165,000 tons. Nevertheless, the recent large increases in rice production remain the most important agricultural success in South Viet Nam in the last decade.

Since Vietnamese consumers consider the new varieties of lower eating quality, larger amounts of these varieties are fed to animals than ordinary rice. Newer high-yielding varieties, IR-20 and IR-22, recently have been introduced. IR-20 has been more enthusiastically accepted by consumers because it is much like the traditional Vietnamese high-quality rice. IR-20 is rapidly replacing IR-5 and IR-8 where water depths permit this variety to grow. About one-fourth of the area in new varieties this year is in IR-20 and IR-22.

There has also been increased production in South Viet Nam's most important protein foods, pork and fish, in the past few years. The hog population has reached 4 million, above the 1964 high of 3.7 million. Fishery-product output at fishing centers has reached 500,000 tons annually. The buffalo and cattle populations are still on the decline; buffaloes were down to 565,000 in 1970 from a high of 848,000 in 1963; cattle were down to 908,000 from a high of 1.2 million in 1963.

The increases in fish and pork production are probably a response to 75 percent and 73 percent increases, respectively, in the real wholesale prices in Saigon between 1960 and 1971. Real prices of beef products, on the other hand, increased by only 30 percent.

The production picture for secondary crops is very mixed. Corn, sugarcane, soybeans, tea, rubber, and coconut showed moderate signs of recovery in the past 2 years. Production of pulses, cassava, sweetpotatoes, and peanuts continued to decline.

The outlook for agricultural production will largely depend on the extent of military hostilities. If hostilities are at a low level, rice production should continue to increase, but at a slower rate than in the past few years. Most of the paddy area with sufficient water control for production of new varieties is already being used, so

future rice output gains will be limited. Animal products and secondary crops will likely continue on their present trends, at least for the next year.

Plans for Development

The government is encouraging foreign and local private investment for development of industry to create a "mass capitalist society".

In recent years, substantial industrial expansion occurred only in the war services industries. Attempts are now being made to change the focus of industrial programs to supply of inputs for agricultural production and processing of primary products. In the forestry sector, arrangements are being made with international lumber companies for the cutting of 100,000 hectares of timber in the southern part of central Viet Nam. The fishery program will emphasize the development of private sector processing of shrimp and other high-quality and selective fish products for export to Hong Kong, Singapore, and Japan. A fertilizer blending and bagging plant is also being planned.

Foreign investment for various industrial projects is being attracted through the use of a "one-stop investor service organization." This service is patterned after similar organizations in Thailand, Singapore, and Taiwan. Investments can be made in a planned export processing zone on the Cam Ranh peninsula. This will include processing of salt, timber, and fish for export and will be modeled after the Kaohsiung Port in Taiwan.

Another focus for development is agriculture. The government is trying to achieve agricultural self-sufficiency. The 1971-75 rural economic development plan anticipates an increase of 84 percent in total value of agricultural and fishery production during the period, implying 13-percent annual increases. Aggregate annual percentage rates of growth by type of commodity are summarized in table 3.

Table 3.--Republic of Viet Nam: Projected annual growth in value of production, selected commodities, 1971-75

Item	: 1971	: 1972	: 1973	: 1974	: 1975	: Annual average
	: - - - - - <u>Percent of 1970</u> - - - - -					
Crops	: 16.97	8.38	15.68	13.07	13.27	13.43
Fisheries	: 13.92	12.82	12.03	11.53	10.95	12.24
Animal husbandry	: 8.68	9.71	10.59	12.99	15.31	11.43
Forestry	: 41.75	42.84	40.00	35.71	31.58	38.38
Average	: 14.64	19.43	14.18	13.08	13.67	12.98

Source: "Vietnamese Agriculture," Viet Nam Bulletin, Viet Nam Inf. Series, No. 44, March 1971, p. 11.

Projects in the plan are designed to diversify agriculture as well as to intensify production of traditional commodities. There will be "support programs" such as increased fertilizer production and extended credit facilities to augment the basic commodity projects. Projects are planned for rice, feedgrains, vegetables, fruit, industrial crops (rubber, tea, coffee, sugar), forestry, fishing, and animal products.

After the first year of the plan ended, fisheries, and animal husbandry achieved about two-thirds of their 1971 goals and forestry fell behind the two-thirds mark. Thus, the plan appears to be optimistic. Some changes in emphasis for rural development in 1972 were announced. Increased production of rice, vegetables, and corn will be stressed for all provinces. For other commodities, regional comparative advantage will be the rule with, for example, sugarcane suggested for some specific areas and sorghum for others. There will also be special emphasis on cattle raising in the highlands and on poultry, swine, and forestry production.

Land Reform

The land-to-the-tiller program initiated in March 1970 is running into difficulty. ^{8/} One million hectares of land is to be distributed by the end of 1972, but the halfway mark had not been reached by the end of 1971, with titles to 333,000 hectares of land distributed. Applications were approved for nearly another 150,000 hectares.

Wartime conditions in the countryside and conflict with existing institutions have been the major obstacles. Where landowners are strong in the countryside, tenants have received reprisals for applying for land and land reform officers have been intimidated. Payments to landlords for expropriated land have been running behind schedule; this encourages landlords to attempt to collect rent from former tenants--even those who hold a new title to the land.

Trade

South Viet Nam is basically an import economy. The imports in 1969 and 1970 outweighed exports by 50 to 1. The government has been trying to change this situation by discouraging imports through devaluation and by encouraging exports. Preferential exchange rates have been set for export items and certain recognized exporters have been exempted from obtaining export licenses.

South Viet Nam's imports totaled \$690 million in 1969. As a result of the government's economic reforms, 1970 imports decreased to \$640 million and for the first half of 1971 they were down \$20 million from the same period in the previous year.

Total U.S. shipments, mostly concessional, to South Viet Nam rose from \$50 million in 1965 to \$352 million in 1970. The value of rice shipments dropped drastically from \$92 million in 1970 to \$9 million last year, decreasing the total value of exports to Viet Nam to \$297 million. Shipments other than rice, however, rose by \$8 million.

U.S. shipments of agricultural products other than rice increased by \$15 million to \$90 million in 1971. Tobacco shipments increased by 3,000 tons to 7,803 tons in 1971. Corn exports were down slightly to 87,000 tons in 1971. Cotton shipments rose from 115,000 bales in 1970 to 117,000 bales. Wheat flour shipments dropped from 123,000 tons to 61,000 tons but wheat shipments rose from 90,000 to 164,000 tons. (Nancy W. Hancock)

^{8/} For additional details see The Agricultural Situation in the Far East and Oceania--Review of 1970 and Outlook for 1971, Econ. Res. Serv., U.S. Dept. Agri., ERS-For. 315, April 1971, pp. 20-24.

Appendix Table 1.--Exchange rates per U.S. dollar,
selected currencies 1/

Country	Monetary unit	Exchange rate per U.S. dollar
Australia	Australian dollars	1970 & 1971- .893 1972- .840
Bangladesh	Pakastani rupees	4.76
Burma	Kyats	4.76
Ceylon	Rupees	5.945
China, Republic of	Taiwan dollars	40.00
Hong Kong	Hong Kong dollars	6.06
India	Indian rupees	7.5
Indonesia	Rupiahs	378
Japan	Yen	1970 & 1971- 360 1972- 306
Korea, Republic of	Won	316
Malaysia	Malaysian dollars	2.86
New Zealand	New Zealand dollars	1970 & 1971- .893 1972 .840
Pakistan	Pakastani rupees	4.76
Philippines	Peso	6.435
Singapore	Singapore dollars	2.86
Thailand	Baht	20.825
Viet Nam, Republic of	Piastres	118

1/ Exchange rates used in this report.

Appendix Table 2.--Indices of total agricultural production and per capita food production, by country, 1967-71

Country	Total agricultural production					Per capita food production				
	1967	1968	1969	1970	1971 1/	1967	1968	1969	1970	1971 1/
	(1961-65=100)									
Bangladesh	114	113	121	114	102	102	101	104	94	84
Ceylon	110	109	122	125	123	97	107	106	112	101
India	104	111	116	124	129	94	99	101	107	107
Pakistan	124	139	149	157	151	107	121	129	133	123
Total	106	113	119	125	127	95	101	104	107	106
Burma	101	101	103	101	106	93	90	91	88	83
China, Republic of	125	130	128	134	134	113	114	109	113	110
Indonesia	104	114	115	123	126	92	99	96	104	103
Japan	115	119	115	110	103	109	113	108	102	95
Khmer Republic (Cambodia)	129	104	146	100	86	118	90	131	93	79
Korea, Republic of	113	114	130	128	128	101	99	111	108	105
Malaysia, West	118	133	149	156	172	100	111	119	130	135
Philippines	111	115	124	131	140	98	98	102	104	108
Thailand	126	116	136	137	143	112	100	112	110	110
Viet Nam, Republic of	91	84	94	103	108	84	76	84	90	92
Total	114	117	120	119	118	104	105	104	102	97
Australia	105	126	121	119	125	97	109	109	106	111
New Zealand	114	119	121	118	120	105	111	112	107	108
Total	107	124	121	119	123	99	117	109	105	110

1/ Preliminary. Source: Calculated by Economic Research Service, USDA.

Appendix Table 3.--U.S. agricultural exports to the Far East and Oceania, 1970 and 1971

Area	1970	1971	Change	Percent change
- - - - - Million dollars - - - - -				
World	7,173.7	7,694.9	521.2	7.3
Far East and Oceania <u>1/</u>	2,518.4	2,411.6	-106.8	- 4.2
Far East	2,466.5	2,359.4	-107.1	- 4.3
Afghanistan	0.7	6.8	6.1	871.4
Burma	0.6	0.3	- 0.3	- 50.0
Ceylon	6.5	11.6	5.1	78.5
China, Republic of (Taiwan)	134.4	162.3	27.9	20.8
Hong Kong	57.2	68.9	11.7	20.5
India	256.3	272.3	16.0	6.2
Indonesia	131.2	98.5	- 32.7	- 24.9
Japan	1,214.1	1,073.0	-141.1	- 11.6
Khmer Republic (Cambodia)	--	5.0	5.0	N.C.
Korea, Republic of	218.0	299.7	81.7	37.5
Laos	1.9	0.9	- 1.0	- 52.6
Macau	0.2	0.1	- 0.1	- 50.0
Malaysia	14.9	14.6	- 0.3	- 2.0
Nepal	0.1	--	- 0.1	N.C.
Pakistan <u>2/</u>	119.1	99.2	- 19.9	- 16.7
Philippines	77.6	74.0	- 3.6	- 4.6
Ryukyu Islands	18.4	13.1	- 5.3	- 28.8
Singapore	17.1	15.1	- 2.0	- 11.7
Thailand	31.9	46.3	14.4	45.1
Viet Nam, Republic of (South Viet Nam)	166.4	98.7	- 67.7	- 40.7
Other	0.1	--	- 0.1	N.C.
Oceania	51.9	52.2	0.3	0.6
Australia	34.0	36.0	2.0	5.9
British Pacific Islands	1.2	0.1	- 1.1	- 91.7
French Pacific Islands	2.0	2.4	0.4	20.0
New Guinea	0.3	0.7	0.4	133.3
New Zealand	10.3	8.5	- 1.8	- 17.5
Trust Pacific Islands	3.1	3.2	0.1	3.2
Other	1.0	1.2	0.2	20.0

N.C. = Not calculated.

1/ Excluding Communist countries.

2/ West Pakistan and East Pakistan (Bangladesh).

Source: U.S. Department of Commerce.

Appendix Table 4.--U.S. agricultural imports from Far East and Oceania, 1970 and 1971

Area	1970	1971	Change	Percent change
: - - - - - Million dollars - - - - - - - Percent -				
World	5,667.0	5,825.6	158.6	2.8
Far East and Oceania <u>1/</u>	1,450.5	1,517.2	66.7	4.6
Far East	856.0	922.0	66.0	7.7
Afghanistan	0.3	3.4	3.1	1,031.5
Burma	0.1	0	- 0.1	-100.0
Ceylon	24.0	28.3	4.3	17.9
China, Republic of (Taiwan)	50.5	53.2	2.7	5.4
Hong Kong	3.4	4.3	0.9	26.4
India	78.1	89.9	11.8	15.2
Indonesia	122.2	128.3	6.1	5.0
Japan	37.1	46.4	9.3	25.1
Khmer Republic (Cambodia)	1.1	0.1	- 1.0	- 93.7
Korea, Republic of	4.9	4.5	- 0.3	- 6.4
Laos	0.1	0.1	--	- 14.9
Macau	--	0.1	0.1	N.C.
Malaysia	123.8	126.8	3.0	2.5
Nepal	1.1	0.4	- 0.7	- 60.5
Pakistan <u>2/</u>	6.3	5.3	- 1.0	- 16.1
Philippines	358.6	385.1	26.5	7.4
Ryukyu Islands	--	0.1	0.1	N.C.
Singapore	17.6	19.6	2.1	11.7
Thailand	26.7	25.2	- 1.4	- 5.4
Viet Nam, Republic Of (South Viet Nam)	0.1	0.4	0.3	303.7
Oceania	594.5	595.2	0.7	0.1
Australia	370.3	365.4	- 5.0	- 1.3
British Pacific Islands	9.0	--	- 9.0	N.C.
French Pacific Islands	--	0.1	--	N.C.
New Guinea	11.3	15.9	4.6	40.1
New Zealand	203.8	206.4	2.6	1.3
Other	--	7.5	7.5	--

N.C. = Not calculated.

1/ Excluding Communist countries.

2/ West Pakistan and East Pakistan (Bangladesh).

Source: U.S. Department of Commerce.

**UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C. 20250**

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