

its very low heights make the bunches of nuts look like golden yellow or golden orange aprons extending from fronds to ground level; thus assisted pollination, thinning, and harvesting become comparatively easy tasks.

The hybrid is conducive to the cultivation of an inter-crop like cocoa. Application of a multi-crop system will provide the coconut farmer not only a higher volume and value from nuts but also added income from complementary cash crops. The hybrid has an average output of four tons per hectare and a biological maximum of six tons per hectare. On average, the hectare of coconut land planted to 155 hybrid palms would provide a harvest of 667 kilograms every 60 days of the year or .667 tons six times a year. The current average is one ton per year out of the traditional coconut tree stands in the Philippines or a harvest of only 167 kilograms or .167 tons six times a year.

If we replant 40,000 hectares of coconut lands yearly to hybrids from 1980 to 1983, 60,000 hectares yearly 1983-1988, 75,000 hectares yearly by 1988-1998, 100,000 hectares yearly after 1998, more than one-half of Philippine coconut lands shall have been replanted to hybrids by the year 2000 and output increased to four times the current level.

The replanting scheme is expected to continue at 100,000 hectares annually after 1998 and the program completed by the year 2012, eight years ahead of the 40-year program being considered today. Domestic consumption is not expected to change radically from the current 80:20 ratio favoring exports over domestic requirements. By the year 2012 the Philippines should have a population of 120 million people. A per capita consumption of 7 kilograms of edible coconut oil per year would equate to an annual domestic consumption of 1,486,800 metric tons (copra basis) or only 15% of estimated total production in the year 2000 leaving 85% for exports.

#### Financing the replanting scheme

When abnormal worldwide developments affected our domestic requirements for coconut products in 1973 to 1974, a mechanism called the Coconut Consumers Stabilization Fund (CCSF) was adopted which assessed copra sold at first domestic purchase or farm level. This was recommended by the industry itself and was the first private-industry-financed consumer subsidy program in the country. The CCSF was institutionalized by Presidential Decree No. 276 issued on August 20, 1973.

The fund is a flat fee based on 100 kilos of copra at farm gate. Procedurally, the fee is deducted by either the copra exporter, oil miller, or manufacturer on payment of the goods; this deduction being carried down to farm gate via a system of receipts. At the bottom line, the subsidy is funded by the farmers and not reflected in the export value of our coconut export products.

The CCSF fund was used to aid consumers of coconut-based products weather the ill effects of world supply and price dislocations by subsidizing the prices of edible cooking oil, laundry bar soap, and filled milk; all important items in the household basket of goods placed within the reach of low-income groups.

We feel the mechanism instituted by our coconut industry, which takes the form of a self-financing system, is the best answer to the challenges confronting many primary commodities in the developing world.

With the normalization of the world oilseeds, oils and fats price system, the huge demand for funds to subsidize social goods eased off, and levy proceeds were then re-oriented toward other goals. One was to assure that future production abnormalities would not be cause for a crisis such as that experienced in 1973/74; thus the existence of a huge investible fund for the national coconut replanting

program.

Presidential Decree No. 582 was then issued on November 14, 1974, to set up a Coconut Industry Development Fund (CIDF) initially with one hundred million pesos (about U.S. \$13.5 million). Its purpose being: (a) to finance the establishment and operation of a hybrid coconut seed-nut farm on Bugsuk island, Palawan, in the Mindanao region that will provide the national replanting program with seed materials; (b) to fund the distribution, by the Philippine Coconut Authority, of the hybrid seednuts to coconut farmers free of charge; and (c) to finance extension services, model plantations, and other activities to insure that coconut farmers are well oriented on the replanting and care of hybrid trees on a commercial scale.

The national replanting program includes sections involving the financing of foregone income when trees are cut, agricultural input and technology financing, initiation and participation in modern processing and marketing structures, among others.

As of July 1, 1977, the CIDF resources totaled P1.1 billion (U.S. \$146.7 million), and the fund is expected to accumulate at the rate of P476 million (U.S. \$63.5 million) a year.

The CCSF levy has also enabled the country's coconut farmers under the umbrella organization called Philippine Coconut Producers Federation (COCOFED) to purchase a commercial bank, renamed United Coconut Planters Bank, which has been the spearhead in the move to make coconut farmers institutional participants in farm production, manufacture, and marketing of coconut products on a domestic and international scale.

All these efforts should complement each other not only to insure an output growth of the Philippine coconut industry but also to assure the availability of supply and the reliability of the Philippine trade to the world users of our coconut oil and copra, or our copra cake, meal and desiccated coconut. ●

## Major issues concerning palm oil

*During the International Seed Crushers' Association meeting, Malaysia's Primary Industries Minister, Y.B. Datuk Amar Taib B. Mahmud, spoke to the registrants on "Major Issues Concerning Palm Oil." Following are excerpts from that talk:*

Malaysian production of palm oil, which exceeded one million tons in 1975, can be expected to reach around 2.5 million tons in 1980 and 4 million tons by 1985. The increase in Malaysian palm oil production, together with supplies from other sources, will likely raise the current palm oil share in world export of vegetable oils and fats from 13% to approximately 22% in 1985.

A significant development in recent years which is changing the pattern of Malaysian palm oil exports is the increase in the production of processed palm oil. The Malaysian government has since 1970 encouraged the processing of palm oil as one of the measures to expand the manufacturing sector and to attain a higher level of value-added in the export of Malaysian raw materials. Toward this end, the government has given approval to no less than 50 companies to undertake palm oil processing. These refineries, it is estimated, will produce about 800,000 tons of process palm oil in 1978, 900,000 tons in 1979, and nearly 1,000,000 tons in 1980. Currently, the bulk of the palm oil

undergoing processing by these refineries emerges in the form of neutralized palm oil, neutralized and bleached palm oil, palm olein and palm stearin, with a limited quantity of end products such as cooking oil and vanaspati. It is expected that more of the end products will be produced in the future.

With regard to regulation of palm oil trade practices, the Malaysian government has established the Palm Oil Registration and Licensing Authority to regulate, to coordinate, and to promote activities related to the supply, purchase, sale, storage, and shipping of palm oil. The authority will take strict measures against any trader who does not fulfill the highest standard required of him in the performance of his contractual obligations. The authority, however, is not intended to control the marketing of Malaysian palm oil but rather to promote the efficient marketing of palm oil for the benefit of both producers and users in association with the work of trade organizations in the country.

With regard to research and development, the Malaysian government is taking steps to establish a Palm Oil Research Institute. The main objectives are to provide the means to improve further the efficiency in the palm oil industry and

to provide appropriate supportive services for palm oil promotion. Besides consolidating works on production research, the institute is expected to give greater attention to end-use research and to integrate this with more effective market promotion, and, in due course, the establishment of a technical advisory service along lines of the Malaysian Rubber Bureau. ●



Fresh fruit bunches of oil palm await unloading at Malaysian processing plant.

## India's import requirements to rise

Rising population and irregular oilseed production is likely to keep India a net importer of vegetable oils for the next decade, according to a report at the International Seed Crushers Association meeting by C.V. Mariwala, president of the Central Organization for Oil Industry & Trade in Bombay.

Production of edible oilseed crops (groundnut, rape/mustard, and sesame) averaged 1.2% annual increases for 1964-65 through 1975-76, Mariwala said, compared to a 3.3% annual growth rate for the preceding decade. More than 93% of India's oilseed production comes from areas subject to irregular rainfall, Mariwala said, which contributes to the stagnant growth and irregular annual crops.

Last year India imported 900,000 tons of vegetable oil. Imported oils generally are used to produce vanaspati, Mariwala said, preserving traditional oils for liquid use.

Rising population and rising per capita consumption (5 kg in 1977) will continue to raise demand faster than results will be realized from governmental programs to increase oilseed production, Mariwala said (Table I). "As a result, I personally feel that India will continue to be a

prominent purchaser of vegetable oils in the international markets," he said.

"India's requirements of liquid oils will, in my opinion, be met by imports of liquid oils like refined soya oil, rapeseed oil, palmolein, and sun oil, price being the determining factor," he said.

Approximately 1,200 persons attended the IASC meeting held Jan. 30-Feb. 2, 1978, in Kuala Lumpur, Malaysia.

Other speakers at the meeting, and their topics, were: Y.A.B. Datuk Hussein Onn, prime minister of Malaysia, who extended a welcome and discussed Malaysian agricultural development, N.A. Adams, chief of the agricultural commodities branch, UNCTAD, Geneva, Switzerland, "New Approaches to International Commodity Policy"; K. Durham, board member of Unilever, London, "Developments in Raw Material Usage"; Jacques Besnard, division head of the Directorate General for Industries of the European Commission, Brussels, "The European Community and International Trade"; and U.S. Ambassador Alan W. Wolff, "The Role of Developing Countries in the International Trading System." ●

TABLE I  
Likely Supply and Demand Position of Edible Oils  
(Including Vanaspati) 1977 to 1987

Year	Population (millions)	Likely per capita consumption (kg)	Likely demand (million tons)	Assuming annual growth rate of 1-2% for domestic production (million tons)	
				Production	Shortfall
1977	631	5.00	3.16	2.36	.800
1978	641	5.10	3.27	2.388	.882
1979	651	5.20	3.39	2.416	.974
1980	661	5.30	3.50	2.444	1.056
1981	671	5.40	3.62	2.473	1.147
1982	681	5.50	3.75	2.502	1.248
1983	691	5.60	3.87	2.532	1.338
1984	702	5.70	4.00	2.562	1.438
1985	713	5.80	4.14	2.592	1.548
1986	724	5.90	4.27	2.623	1.647
1987	735	6.00	4.41	2.654	1.756