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Asean Agriculture: The Situation In Malaysia

By

Yeap Jin Soo
"ASEAN AGRICULTURE": THE SITUATION IN MALAYSIA

by Yeap Jin Soo

There are a number of reasons why Malaysia should give greater priority to and revitalise its agricultural sector in this decade. First, while agriculture is still the largest sector as a ratio of GDP, taking up 23.5 percent in 1982 (down from 31 percent in 1970 and projected to fall to 18 percent in 1985), growth has slowed in recent years although the rate is still above the average for Southeast Asia. According to the World Bank, during 1976-82, the growth rate was 4.1 percent, down from 6.2 percent during 1960-72. Indeed, minus palm oil's contribution, there would have been an actual decline of one percent since 1976, which suggests that diversification has not succeeded in making this sector less vulnerable.

Secondly, agricultural growth has to be emphasised because Malaysia needs to offset the current soft prices for its commodity exports by higher export volumes -- even though in the case of rubber and timber, the outlook is for supply falling short of demand in the latter part of this decade. The potential contribution of cash crops to export earnings is illustrated by a central bank economist's estimate that an additional 100,000 acres each year of replanting rubber and cocoa can, in theory, result in annual output of 50,000 and 33,000 tonnes respectively, with a combined export value of about M$250 million.

A third reason for laying emphasis on agriculture is that it is the single largest source of jobs and still employs about two out of every five in the labour force (the ratio for the peninsula is 36 percent) -- even as the ratio engaged in agriculture has declined from one in two in 1970. A rise in agricultural incomes, concomitantly with poverty redressal, would provide additional purchasing power for domestic industries -- as experienced during the import-substitution phase of the economy in the late 1960s. Another indication of the spinoff from agriculture is that about 40 percent of value-added in industry in recent years was attributable to downstream processing of agricultural products.

Some problems stand in the way of higher agricultural growth, however. One is that the peninsula at least is running out of new land to open up. (In any case, there are serious drawbacks in FELDA-type land development.) Also, crops like rubber, oil palm and cocoa have a maturity period of five to seven years, thus delaying their contributions till the latter part of this decade at the earliest.
In addition, there is at present a shortage of manpower in the countryside. The major cause of declining workers in agriculture was the high demand for labour in the late 1970s in the urban sector where earnings are higher. Moreover, in a largely tree crop agriculture, possibilities for substituting machines for labour are very limited. This historical trend will continue. Making the wage differential less unequal will however slow the pace of out-migration.

The corollary to this manpower shortage is idle land: some 880,000 hectares of land, or about a quarter of the total area cultivated, lay idle in 1978, according to official statistics. To put this another way, the total new land developed in the last decade by all agencies, including joint ventures with the private sector, was only about 866,000 hectares.

This much idle land suggests opportunities of the sort the central bank economist cited. However, not all this land is suitable for cultivation, either because the plots are of uneconomic size or the soil quality is inferior, and it is not clear what can be done to overcome the problem of uneconomic-sized plots. Voluntary purchase or rental, land consolidation, placing a ceiling on the size of holdings, land reform of one sort or another -- whatever the measure to be taken, however, one cannot avoid the thorny question of ownership rights.

Food Imports averaged M$1.1 billion a year, or about six percent of the merchandise trade bill, between 1978 and 1980. About one-fifth of food imports was rice which is not a crop that has substantial production potential in Malaysia outside the double-cropped areas.

Another 10 percent was made up of cereals like wheat, which is not grown in Malaysia. Another 20 percent was dairy products, production of which has a history of repeated failures in Malaysia.

The only items on which import substitution could conceivably have an impact are fruit, vegetables and fish, the bill for which came to about M$400 million per year in 1978-80.

Agricultural exports, on the other hand, earned about M$10 billion per year in 1978-80 - agricultural exports have accounted for some 55 percent of all merchandise export earnings since 1960 -- suggesting that while it would make sense to pay more attention to food production, especially of rice, priority should remain on cash-crop production.
CROPS GROWN IN MALAYSIA

In PADI, yields are now close to five tonnes a hectare, following the release of the first hybrid in 1964. But improvement in the last 10 years has been less than five percent and it is doubtful if further technological advances are in the offing. According to Prof. Mokhtar Tamin of the University of Malaya, conditions in Muda and Tanjung Karang -- the country's two major rice-bowls which between them account for more than half Malaysia's total -- are close to the long-run limits of existing rice production technology.

(There is also the danger of a small genetic stock which makes the crop more vulnerable to disease: the high-yielding varieties grown in Muda, for example, derived from no more than three strains, in contrast with 75 different varieties of traditional padi grown earlier.)

As a result, self-sufficiency in rice production which peaked in 1974-75 at 93 percent has dropped markedly as population continued to grow at about 2.7 percent, and may drop to as low as 88 percent by 1990 and 80 percent in the year 2000.

Expansion of acreage under rice -- either through wider double-cropping or by the opening up of new land -- would be the quickest way to achieve a substantial production increase. The success of double-cropping since the late 1960s has made it the main choice: in Kemubu in Kelantan and Muda, the area double-cropped rose from 3,600 hectares in the 1950s to over 300,000 in 1980.

Opening up of new land is another strategy. The government, in the long-delayed National Agricultural Policy to be made public later this year, is said to have identified 200,000 hectares as having potential to grow padi. Half of that is in Sabah and Sarawak.

But actually bringing new land under cultivation is another story altogether, especially if a good part of the total is at present idle land. For example, it has been argued that mini-estates are likely to alleviate the problem of idle land but not that of low income because the share in returns would be based on the amount of land contributed by participants. Ultimately, if fragmentation continued, the end result would be a sharing of poverty among the smallholders.

This applies particularly to cultivators of padi but would also apply to the rubber smallholding sector. In padi, income levels have almost certainly risen in the past half-dozen years, less as a result of greater productivity than through the raising of the government minimum guaranteed price.
As a World Bank report puts it: "Since 1976, there has been a steady abandonment of rice areas as without double-cropping, potential for mechanisation and reasonable-sized plots, rice is an unremunerative crop for farmers to grow."

In the case of OIL PALM, yields increased by 24 percent in just one year, 1982. The credit for this largely goes to the West African pollinating weevil which when introduced also released workers from manual pollination. But 1983 output is estimated at only 3.7 million tonnes, an increase of 5.7 percent.

By the end of 1985 output of crude palm oil is expected to rise to four million tonnes, according to the Fourth Plan. By that time too, it is expected that palm oil will account for one-third of total income from agriculture as against less than one-quarter from rubber.

Palm oil is however easily substituted by other edible oils, and is thus even more a price-taker on the world market than rubber. World supply of edible oils generally is likely to continue growing rapidly, according to World Bank forecasts. In fact, since the mid-1970s the price in real terms of all such oils has declined.

New markets and new end-users thus have to be found for palm oil. The bulk of exports of processed palm oil now is to only a handful of countries. There are countries, however, which are significant importers of edible oils and fats, but where processed Malaysian palm oil accounts for only a small fraction. The main markets yet undeveloped are to be found in other developing countries and in East Europe.

RUBBER production entered a period of decline from 1976. This was due in part to shifts to lower yielding smallholders, labour outflow, and a reduced level of replanting in the late 1960s which meant younger trees that give lower yields.

Rubber smallholders account for about 60 percent of total production which in 1982 was 1.4 million tonnes.

A socio-economic profile of rubber smallholders contained in the Treasury's 1983 report shows that their standard of living has improved. The poverty incidence among them dropped from 64.7 percent in 1970 to 41.3 percent 10 years later in spite of an increase in the number of households.
Even if the official poverty index is suspect - the poverty line has been fixed at M$300 per household for a dozen years -- rubber smallholders in Peninsular Malaysia undoubtedly enjoy greater prosperity now in terms of the consumption goods they possess: bicycles, motorcycles, cars and TV sets. In addition, 91 percent of smallholders own their dwellings.

However, because of diversification of cash crops, rubber today plays a smaller role in Malaysia's agriculture. In terms of estate acres under rubber, the drop between 1970 and 1980 was about 12 percent.

Output did not fall. The aggregate rise in output per year (including the smallholder sector's) averaged 2.3 percent in the last decade, though since 1978 the increase in yield has flattened out to stabilise at around 1.53 million tonnes in 1982.

At the same time, World Bank projections show that natural rubber's prospects are better than that of oil palm, which the crop growers started moving into in the late 1960s. The bank projects a shortfall in rubber supply by 1990, which implies rising or at least firm prices.

How can output of natural rubber be raised in Malaysia? Unlike Indonesia where land which can be opened up is still aplenty, Peninsular Malaysia's land frontier will close in the next decade or so. More crucially, land suitable for rubber cultivation is practically unavailable now.

Yield improvement is the obvious answer. In the estate sector, this has been taking place over the last decade. But it is the smallholding sector -- which accounts for more than 50 percent of aggregate output -- that needs attention. Yields here are still low compared to the estates, though the level has been rising as a result of replanting with better seeds provided by the authorities; in the 1970s the yield increase was a remarkable 47 percent.

Yet, as is the case with other agricultural questions, the solution cannot be a technical one because the problem is not technical in nature. The uneconomic size of smallholdings -- which has been identified as the problem by the rubber smallholders authority -- and their abandonment by cultivators, are themselves due to wider forces at work in economy and society.
That a national land use policy does not yet exist is at the root of the problem. Fragmentation into holdings thus continues unchecked. The suggestion to write off marginal holdings until such a policy is formulated, as was put forward by some officials, can only be a temporary palliative; indeed it is a symptom of the problem.

Likewise the suggestion that rubber smallholders should exchange their lands for a stake in land settlement schemes under the federal land development authority, FELDA, overlooks the latter's shrinking resource base, at least in the peninsula. As FELDA officials admit, it is progressively becoming more difficult to get land of suitable size and inherent soil quality; parcels of land considered marginally suitable 10 years ago are now being given a second look, it seems.

In any case, land development of the sort undertaken by FELDA over the past 27 years can be considered only a qualified success in terms of poverty redressal. Settlers, it is true, enjoy monthly incomes considerably above subsistence, unlike many smallholders. In 1982, settlers on palm oil estates earned an average of M$624 while those on rubber estates earned M$403. Two-thirds of FELDA's acreage is under oil palm.

But the cost of providing such relatively high levels of income to a relatively small number, 78,500 families, of the rural population has been high. It currently costs M$45,000 to settle each family, and the figure will rise if land previously considered marginal is opened up.

Also, the income level has been kept relatively high in part because the plot size has been increased -- from 2.4 hectares when the scheme started to four hectares. This was made necessary mainly because of declining commodity prices. Downward revision of plot size is considered difficult by FELDA officials -- because cultivators immediately lifted above the poverty line on settlement refuse to have their higher incomes depressed, and because out of their income they have to repay over 15 years some three-quarters of the cost of settlement.

FELDA's role, on the admission of its officials, is not primarily to redress rural poverty. Its target age-group is between 18 and 35; it leaves behind six rural families for every one it settles; and it is not clear that fragmentation in following generations won't occur, since ownership is on the basis of individual plots (as in the case of 'traditional' smallholdings), not in common or by the state.
FELDA estates, insofar as they are cleared en bloc from virgin jungle and enjoy economies of scale in cultivation of oil palm and rubber, thus resemble privately owned estates run on commercial lines and employing wage labour. Insofar, however, as plots are individually held, they resemble 'traditional' smallholdings -- with some of the attendant difficulties of this ownership pattern. Also, in social terms, FELDA-type settlement has wittingly or otherwise created a privileged class of cultivators with characteristics in common with 'traditional' rich peasantry elsewhere.

Current output of COCOA in Malaysia is insignificant as a ratio of total world production. Nevertheless the push to expand cocoa as the third commercial crop has begun with the setting up of a research institute this year. As an intercrop with coconut, or by itself, cocoa, will provide a yearly return higher than rubber or oil palm, in addition to having a longer yield life of 30 years (compared to 20 for rubber and 25 for oil palm).

In terms of acreage, cocoa has expanded eight-fold from 14,430 hectares in 1972 to about 126,000 hectares in 1980 and there is still sufficient land available which is suitable for cocoa cultivation. A major advantage Malaysia possesses in looking towards cocoa as a new export crop is that recorded yields here are extremely good -- averaging 1,000 kg per hectare in the peninsula and 1,500 kg in Sabah where soil and climate conditions are highly favourable -- more than double the yields in West Africa or Brazil (Ghana, for example, obtains 365 kg, Nigeria 395 kg, Ivory Coast 575 kg and Brazil 745 kg.) Other advantages Malaysia has are experience in estate cultivation and in agricultural R and D. The latter is needed in, among other things, cloning more pest-resistant varieties and lowering the acidity of the beans.

On the minus side, however, is the prospect of soft market prices until 1990, mainly because of increased world supply. Cocoa is also more labour-intensive than any other cash crop grown in Malaysia.

Another crop which has long-term potential is TOBACCO for which the east coast of the peninsula has about 150,000 hectares of suitably sandy soil. At a pilot project, each family netted an average income of M$31,800 per year -- much higher than returns from any other crop -- on yields of 1,981 kg per hectare.