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WESTERN AUSTRALIAN DEPARTMENT OF AGRICULTURE

AGRICULTURAL DEVELOPMENT AND POTENTIAL MARKETS
IN SINGAPORE, MALYSIA AND INDONESIA

Report of a study tour
July 1978

by

K.R. Rutter
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Marketing and Economics Branch

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AGRICULTURAL DEVELOPMENT AND POTENTIAL MARKETS IN SINGAPORE, MALAYSIA AND INDONESIA

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SUMMARY

The study tour of Malaysia, Singapore and Indonesia was undertaken as part of the Government of Western Australia's policy to broaden overseas markets for agricultural products. Preliminary examinations of these economies suggest that each represents a potentially large market given their large populations and levels of foreign reserves. Malaysia and Indonesia in particular have large reserves of petroleum, minerals and timber which provide their economies with the necessary foreign reserves to finance imports. Singapore relies on its strategic position as an entrepot port for its foreign reserves.

One would expect Western Australia, with its geographic proximity to South East Asia, to have a trade advantage over other temperate southern hemisphere countries due to lower transport costs. Because of high Australian stevedoring charges and the relatively small quantities of cargo being handled between Western Australia and South East Asia, transport charges are significantly higher when compared to those of our competitors (the eastern States being the exception).

Singapore's agriculture is limited to intensive vegetable, pig and poultry production because of the lack of land. Substantial quantities of vegetables are imported to supplement domestic production, whilst Singapore is self-sufficient in pig and poultry meat production.

Annual per capita consumption of pork, poultry and fish are each about 30 kg. Per capita consumption of beef and mutton (most of which is imported) stands at four and three kilograms per year whilst vegetable consumption is 67 kilograms per head per year. Average per capita gross domestic product in 1977 was just less than \$A2 500 which provides a standard of living second to Japan in the Asian area.

Singapore's importance as a West Australian trading partner is not limited to catering for the requirements of the 2.3 million residents and the 1.5 million annual tourist population. A significant quantity of imports to Singapore are re-exported via feeder vessels to neighbouring countries such as Peninsula Malaysia, East Malaysia and Indonesia because of the lack of direct shipping facilities to those areas.

Singapore's economy is heavily dependent on the service and manufacturing industries. The tertiary sector, in particular, is rapidly developing to the point where it is beginning to challenge Hong Kong as the financial centre of Asia. This together with a growing manufacturing sector should result in steadily increasing average per capita incomes. Consumption patterns however, are unlikely to change dramatically as per capita incomes increase. Singapore will continue to be an important market for Western Australian agricultural commodities. In order to safeguard our market share, Western Australian producers and exporters must pay careful attention to the market requirements wherever feasible.

Agriculture in Malaysia and Indonesia differs from Singapore's in that both countries have undeveloped land capable of supporting agricultural industries. Both of these nations support high population densities in certain areas of the country. They have lower average standards of living in terms of diet, education facilities, health, etc. than Singapore which is further complicated by a disproportionate distribution of wealth.

Agriculture is the most important sector in the Malaysian economy in that it is the major export income earner, employs the greatest proportion of the workforce and is the greatest single contributor to the gross domestic product. The strange anomaly is that agriculture accounts for the largest poverty group in Malaysia.

The high incidence of poverty results from both the small farm sizes (average less than two hectares amongst the smallholders) and lack of marketing facilities, i.e. processing and distribution facilities. The Malaysian Government is attempting to overcome the incidence of poverty with the development of land settlement schemes with associated marketing facilities. These schemes also contribute significantly to increases in agricultural production. The schemes are directed more at the export crops such as oil palm and rubber although inter-planting with consumption crops is encouraged during the development phase.

Food crop production has become more important in Malaysia since the international grain shortages of 1972 and 1973. The Government has set a target of 100 per cent self sufficiency for rice. Also greater emphasis is being given to the production of consumption products such as milk, meat and vegetables to protect valuable foreign reserves. Ambitious plans for the establishment of beef and dairy industries have been initiated under the Third Malaysia Plan requiring substantial imports of breeding stock.

Malaysia produces large quantities of vegetables both for domestic consumption and export to Singapore and East Malaysia. In order to protect domestic production, import duties are charged on the majority of food imports. On some of the more important food crops, such as cabbages, import licences must be obtained in addition to the duty. However, Malaysia still imports a large quantity of food for their 14.8 million people. On some of the "essential" food items such as potatoes and onions, import duties are waived. Rice imports have, in the past, been subsidised to ensure reasonable prices to the Malaysian consumer.

The rate at which Malaysia's agricultural sector is likely to develop is closely associated with the Government's policy toward the control of assets. Their long term objective is to have 30 per cent of the nation's assets controlled by Malays (c.f. Indian and Chinese Malays) by the year 1990. Education, settlement and many other policies are clearly directed toward this end.

Malaysia currently has large foreign reserves from the export of rubber, palm oil, tin, petroleum and timber. The medium term prospects on international markets for all of these commodities are good but Malaysian reserves of tin, petroleum and timber are being exploited at such a rate that supplies may dwindle by the 1990s.

Whilst the individual buying power of the Malaysian is less than that of the Singaporean, the country still represents a sizeable market - particularly for quality agricultural goods. Whilst we cannot compete with domestically produced products for the average consumer there is a growing market for quality fruit, vegetables and red meats. As the Government establish dairy and beef enterprises, substantial imports of breeding stock will be required.

The Indonesian situation is unique. The huge population of 142 million people is predominantly employed in agriculture. There are regions within Indonesia which export food crops to other regions on islands in Indonesia, but the majority of production is consumed by the producer.

Rice consumption has increased as a result of both per capita consumption as well as an increased population (1.5 per cent per year). There is a growing deficit between production and consumption which is unlikely to be bridged by expanding domestic production in the near future. All rice is purchased through a Government agency whose trading has resulted in severe losses in the past. The Government accepts these losses as necessary in order to supply consumers with a reasonably priced staple food.

Trade with Indonesia is difficult with its complex system of tariffs and import restrictions - both official and unofficial. The importance of dealing with a recognised trader cannot be over-stated. Because of the lack of a direct shipping service to Indonesia most traded commodities are handled through Singapore agents. Their expertise in trade with Indonesia has also been used to advantage. However, adequate harbour facilities now exist for roll on roll off containerised cargo which should facilitate increased trade. Personally selecting an importing agent is vital to ensure that the goods keep moving through customs and once through - to the retailer.

The market for Western Australian agricultural commodities in Indonesia is directed more at the wealthy locals, the expatriate and hotel trade rather than the general population. Imported agricultural commodities tend to be very highly priced after the appropriate import duties have been paid (approaching 100 per cent of c and f prices). As a result, the average Indonesian cannot afford the imported food items.

Indonesian agricultural growth to date has fallen well short of targets under their first two Pelitas or 5 year plans. The main problem with increasing agricultural output is the lack of infrastructure. Because of the subsistence nature of Indonesian agriculture, there has been no need to establish transport and storage facilities throughout the country. The distribution of agricultural inputs is also severely hampered which prevents yield maximisation. Fertiliser and pesticides arrive on farms too late to be of optimal use. Consequently the quality of farm produce is poor and marketing of same is inefficient. There are often food shortages in areas very close to major producing areas - a situation which lends itself to exploitation.

Despite these reservations, the potential does exist to further develop markets for Western Australian agricultural commodities - particularly to populated Jakarta (5 million) now that a direct shipping service exists. Personal visits are vital to these areas to ascertain not only the suitability of the product to the consumer but also the problems of handling and distribution.

Western Australia's competitors in the South Asian Market

Western Australia must expect keen competition from eastern Australian States as the freight advantage enjoyed in the west to South East Asia is comparatively small. New Zealand is also well established

in South East Asian markets as a supplier of quality beef and lamb through its intensive promotional campaigns. Product identification plays an important part of marketing as evidenced by 'New Zealand air flown beef', 'Sunkist' oranges from U.S.A. and Australian 'Kraft Cheese' in the blue packs.

In order to compete more effectively Western Australian exporters must jealously guard the quality of commodities they handle and use this aspect to further promote sales. Regularity of supply (throughout the producing period) is also important to traders in this area. Whilst adequate storage facilities exist in the capitals of the three countries visited, importers prefer to handle smaller quantities more frequently than incur additional storage expenses.

Singapore, Malaysia and Indonesia together import 4 per cent of West Australian exports. They imported \$144.2 million of goods in 1977/78, 60 per cent of which were agricultural commodities. (See Table 1). The three markets take 11 per cent of West Australian unprocessed food exports. This South East Asian market is already an important out-let for West Australian agricultural exports and its importance is likely to increase in the near future. Food exports increased by 28 per cent in 1977/78 compared to the previous year.

If West Australia is to be successful in its diversification of agricultural markets and become more active in the South East Asian area there are two factors likely to effect the trade.

1. The competitiveness of West Australian producers and exporters.
2. The importing policies of the three countries concerned.

TABLE 1

West Australian exports to Singapore, Malaysia, Indonesia (\$A 000 000s)

	1976/77	1977/78
Live animals	3.7	4.1
Meat and meat preparations	4.1	6.7
Dairy produce and eggs	0.1	0.1
Fish and fish preparations	0.1	0.2
Cereal and cereal preparations	53.7	68.4
Fruit and vegetables	4.7	5.9
Sugar and honey	0.6	0.6
Total agricultural exports	67.0	85.8
Total exports to three countries	104.4	144.2
Total West Australian exports	2596.1	2589.5

Firstly, whilst private traders will be quick to capitalise on export opportunities, our long term presence in that market will depend on not only the price but also the quality of the produce and the reliability of our exporters.

For the second point, West Australian competitiveness could easily be lost because of preferential duties charged for other trading partners. The check pricing system for raising duties on fruit imports in Indonesia is a prime example.

Government representation can prove most beneficial in promoting trade with this area by identifying trading disadvantages and ensuring such anomalies are not perpetuated. This visit was a very necessary first step in developing and maintaining closer contact with the potentially large trading partners of South East Asia. Valuable contacts were made with Government officials in the Departments' of agriculture, trade and the various planning authorities who formulate the country's economic future.

If West Australia is to continue the initiative taken to date, regular visits must be made to the area to maintain the contacts made and keep the State clearly in their minds.

West Australia must continually review the export markets to ensure that our share is being maintained from an industry point of view. If the market share is diminishing we must take positive steps to meet the markets' requirements by informing both the producers and exporters if they have not already detected the change.

In Indonesia, the check pricing system of imported fruits should be reviewed to reduce any advantages currently enjoyed by other supply nations. Official trade representation may achieve this.

As the majority of the West Australian *Bos Indicus* cattle population (the type most suited to the tropics) is found north of the 18 Parallel South, attempts should be made to have the Indonesian and Malaysian import restrictions on cattle from this area lifted. The blue tongue virus is found only on a small number of West Australian stations, and State authorities could certify that cattle are supplied solely from blue tongue free herds if this was acceptable to foreign officials.

Now that direct shipping facilities exist exporters should be encouraged to trade more directly with Indonesian importers thereby reducing Singapore's handling fees.

Malaysia and Singapore are keen to embark in joint ventures in the livestock industries both for meat (feed lot) and milk production. Livestock firms should be encouraged to capitalise on these opportunities.

This report summarises the state of development of agriculture in the three countries visited, its contribution to national wealth, employment, foreign earnings and the role it is anticipated to play in each country's longer term development. Western Australia's agricultural trade with these countries is documented where statistics are available. Suggestions are offered throughout as to ways in which Western Australia can increase its exports of agricultural produce to the three countries visited.

Information sources

Information contained herein was compiled from discussion with personnel visited together with the various publications obtained whilst on tour. West Australian exports to South East Asia were summarised from Australian Bureau of Statistics publications. Indonesian and, to a lesser extent, Malaysian statistics are not always an accurate indication of total trade because of the vested interests of groups justifying Government funds and lack of reliable information sources. This is further complicated by smuggling across borders.

Personnel and organisations visited are attached in Annex F.

SINGAPORE

General

The key to Singapore's economic development is its natural harbour and geographical position in relation to world trade routes.

Singapore has an area of 616.3 sq km and a population of 2.31 million (1977) - one of the most densely populated countries of the world. Seventy-six per cent of the resident population are of Chinese origin. Population growth rate in recent years has been approximately 1.4 per cent per annum but is declining under the Government policy of limiting families to two children. The population is expected to be static by the year 2030 at a level of 3.5 million people.

Politics

The Prime Minister, Lee Kuan Yew, heads a cabinet of ten portfolios. The present Government has been in power since 1959. The governing party, the People's Action Party, was returned to power in 1976 with an increased proportion of the total votes, capturing 53 of the 69 seats (the other 16 being uncontested). Singaporeans are politically aware as is evidenced by the 95 per cent voluntary turnout at the 1976 general elections. Agriculture comes under the portfolio of the Minister of National Development and is a relatively small section of that Ministry.

The Economy

Being an entrepot port and deriving the majority of its revenue from trading, Singapore is heavily dependent on world economic conditions for its own welfare.

Between 1969 and 1973 the G.D.P. increased at between 10 to 12 per cent per annum in real terms. The general downturn in world economic activity in 1974 and 1975 was reflected in a real G.D.P. growth rate for Singapore of 7 per cent and 4.2 per cent respectively for these years. In 1976 and 1977 the real growth rate recovered to 7 and 8 per cent respectively.

In 1977 the gross domestic product was \$A5 589 m, which represents a per capita G.D.P. of \$A2 420.

The agricultural sector contributes one per cent of the G.D.P. and employs two per cent of the workforce.

Singapore relies heavily on the labour intensive industries such as the textile industry and the electronics assembly industry to overcome its unemployment problems. Between 1970 and 1974 employment grew at 5.4 per cent whilst the labour force grew at only 4.8 per cent. In 1977 unemployment was reduced to 4.5 per cent. Singapore is also fortunate in that their general level of education is high by Asian standards. This has greatly assisted the employment of surplus labour - particularly in the manufacturing sector.

Between 1960 to 1972, inflation was limited to 2 per cent per annum. In 1973 consumer prices rose by 34.6 per cent. In 1974, inflation was reduced to 22 per cent then to 3 per cent in 1975. As 60 per cent of consumer expenditure is spent on imports, some of the high inflation rates can be attributed to inflation in the economics of Singapore's trading partners.

These major trading partners between 1963 and 1974 were Japan, U.S.A., Malaysia and the United Kingdom. Since then the Middle East countries and China have played an increasing role in trade with Singapore. The top four trading partners in 1977 accounted for 51 per cent of the total trade (imports and exports).

Agriculture in Singapore

Approximately 7 000 hectares are under cultivation, the major crops being coconut and rubber. Small quantities of root crops and mixed vegetables are grown. The two livestock industries of Singapore, pig and poultry, are of major significance in that both approach self sufficiency.

With such a small land area in relation to the population, Singapore's food imports form a significant part of total imports which as a trading nation are sizeable. Food imports in 1977 were valued at \$824 million representing 9 per cent of the total import bill. Australia is a relatively small trading partner of Singapore. Imports from Australia totalled \$240 million in 1977 of which the food portion was \$111 million or 46 per cent. From Western Australia's point of view, the importance of Singapore is even greater. Western Australian exports to Singapore in 1976/77 were \$28 million of which food items represented 57 per cent.

The Australian and West Australian share of Singapore's trade is listed in Table 2. It is interesting to note that Australian exports to Singapore are gradually increasing yet Western Australian total exports have declined from \$47 million in 1975 to \$28 million in 1977.

Australia accounts for 13 per cent of Singapore's feed imports compared to 3 per cent of total imports.

TABLE 2
Singapore Trade Statistics - 1975 to 1977 \$A million +

	1975	1976	1977
Imports	6 156	8 359	9 515
Exports	4 076	6 069	7 490
Food Imports*	529	691	824
Food Exports*	293	354	518
Australian Imports	211	216	240
Australian Food* Imports	95	88	111
Western Australian Imports	47	38	28
Western Australian Food* Imports	23	14	16
		<u>S\$</u>	
+ Conversion (1 \$A)	3.1301	2.6802	2.6824

* Does not include beverages

Singapore's Pig Industry

In 1977, 69 362 tonnes of pork were produced from 1.3 million pigs. The swine industry is concentrated in the north east and north west of Singapore. In the north west areas, there have been problems of pig effluent contaminating water catchments and waterways. Consequently, production has been shifted to the north eastern areas where better drainage exists (Ponggol area). There are about 2 000 producers awaiting re-settlement into the new producing area.

The nine 'commercial' farms (2-5 ha) in the Ponggol area produce 35 per cent of the pigmeat produced in Singapore, whilst the 190 small farmers (0.5-2.9 ha) produce the remaining 65 per cent. The 'commercial' farms are vertically integrated in that they have their own feed mills. Small producers buy feed through bulking agents. Feed costs in April of 1978 were \$A180 per tonne. The pigs are slaughtered in two abattoirs commencing at 9.00 p.m. through to 4.00 a.m. Butchers purchase carcasses from the agents between 5.00 and 6.00 a.m. then the meat is sold warm that day. The combined daily kill is about 3 500 head.

All feed inputs are imported. Based on a breeding sow population of 75 000 and a feed requirement of five tonnes per annum per sow with following, there is a potential market for 375 000 tonnes of feed per annum. Feed prices are very competitive - the major energy source being maize and major protein source soyabean. The large commercial farms and the bulking agents are in continual touch with international price movements.

The Poultry Industry

In 1977, 51 202 tonnes of chicken meat was produced from the 29.75 million chickens. The feed requirement for this industry is about 160 000 tonnes each year. After pork, poultry is the most important protein source, followed closely by fish. Meat supply in Singapore is summarised in Table 3.

The only other important type of agriculture (excluding tree crops) is vegetable production. About 20 per cent of the total vegetables consumed are produced in Singapore. The major supplier of the imported vegetables is West Malaysia which supplies about 50 per cent of total vegetable imports. Vegetable production, trade, and consumption is summarised in Table 4.

Live animals

Australia is the only country currently supplying live sheep and cattle to Singapore although this could change in the near future. Live cattle imports (particularly bulls) have been increasing from 900 in 1975 to just less than 4 000 in 1977. Importers prefer small regular shipments and Western Australia has been ideally placed to supply. Western Australia's share of the total market was 61 per cent in 1975 but has increased to 92 per cent in 1977. Re-exports of cattle to Peninsula Malaysia have also increased from 40 in 1975 to 1 800 in 1977. Increased competition for this trade is likely to result from a Singapore-Thailand joint venture whereby cattle are reared on Thailand pastures and slaughtered in Singapore.

TABLE 3
Meat supply in Singapore (tonnes)

	1976	1977
PORK		
Local production	66 953	69 362
Imports	527	490
Exports	509	478
Consumption	66 971	69 374
BEEF		
Local production	55	28
Imports	8 962	11 456
Exports	1 822	2 307
Consumption	7 195	9 177
MUTTON		
Local production	5	4
Imports	7 535	7 866
Exports	572	736
Consumption	6 968	7 134
POULTRY MEAT		
Local production	47 800	51 202
Imports	14 937	18 086
Exports	2 670	2 847
Consumption	60 067	66 440
Total meat consumption	141 201	152 125
LIVE ANIMALS INCLUDED IN THE ABOVE		
Live sheep for slaughter - Imports No.	142 005	129 982
Re Exports No.	24 970	21 375
Live cattle for slaughter - Imports No.	1 917	3 887
Re Exports No.	489	1 789

TABLE 4
Vegetable supply in Singapore (tonnes)

	1976	1977
LOCAL PRODUCTION		
Leafy and stem vegetables	31 420	30 853
Fruited and leguminous vegetables	4 581	3 060
Rooted and tuberous vegetables	2 388	2 547
Total local production	38 339	36 460
IMPORTS		
Imports from West Malaysia	93 077	83 226
Imports from territories other than West Malaysia	76 549	91 794
Total imports	159 626	175 020
TOTAL AVAILABILITY	207 965	211 480
EXPORTS		
Exports to West Malaysia	34 544	42 785
Exports to Territories other than West Malaysia	13 546	14 732
Total exports	48 090	57 517
TOTAL CONSUMPTION	159 875	153 963

Live sheep for consumption by the Muslim Singaporean has been a lucrative market in the past. Between 110 and 140 thousand head have been imported each year by Singapore for the last three years. West Australia has supplied 80 to 90 per cent of these requirements. This market is likely to increase gradually with Muslim population increases.

Red meats

Australia supplies 85 per cent of the beef and veal imported by Singapore. Western Australia's share is slightly in excess of 25 per cent of this. Australian beef is not recognised as quality beef if New Zealand beef, the major competitor, is available. New Zealand presentation of frozen meats is far superior in the supermarket outlets compared to Australian beef. Australia's exports to this market have been increasing whereas New Zealand exports have fluctuated.

The chilled and frozen sheepmeat market in Singapore is currently 5 000 tonnes per annum of which Australia supplies about three-quarters. The Western Australian share of Australian sheepmeats is about 50 per cent. Only a small portion, 16 per cent of the imported sheepmeats is exported - mainly to Peninsula Malaysia.

The Government established company, Primary Industry Enterprise (Pty) Ltd., has been given the task of supplying food to the Singaporean consumer at reasonable prices. If there is any suggestion of monopolistic tendencies, P.I.E. are empowered to trade in that commodity in an attempt to bring prices down. Interest was expressed in importing red meats during a visit to that organisation. It is a relatively young company with Government backing. Because of its likely roll in future food imports, Western Australian exporters could benefit by showing their ability to supply commodities at this early stage of P.I.E.'s development.

Dairy produce

There will always be a good market for dairy produce in Singapore. In 1977, Singapore imported approximately 8 000 tonnes of solid full cream milk, 15 000 tonnes of skimmed milk for human consumption, 2 000 tonnes for animal feeds, 3 000 tonnes of butter and 1 100 tonnes of cheese.

New Zealand is the major supplier (about 55 per cent) with Australia a close second. Western Australia exports very little in the way of dairy produce to Singapore.

Grains

The major grain export to Singapore is wheat. In 1977, 240 000 tonnes were exported from Australia of which 13 per cent came from Western Australia. Although all negotiations are carried out by the Australian Wheat Board, exports from Western Australia have decreased from 90 000 tonnes in 1975 (55% of Australian exports) to 31 000 tonnes in 1977 (13% of Australian exports). Milling costs in Singapore are about 60 per cent of the Australian costs.

Barley and oat exports are relatively small at 237 and 736 tonnes respectively in 1977. Western Australia supplied only 163 tonnes of oats. This was mainly used for horse feed.

Fruit and vegetables

Singapore imports about 27 000 tonnes of apples each year. The major southern hemisphere suppliers are Australia and New Zealand who in 1977 supplied 6 200 and 4 500 tonnes respectively. Western Australian exports were 60 per cent of the Australian figure - a share which has been increasing from 37 per cent in 1975. The per capita consumption of apples is increasing. This applies particularly to the preferred red varieties. The Apple and Pear Corporation plan an extensive promotional campaign on green apples emphasising their flavour and crispness. Certainly 1978 was a poor year for Western Australian pomme fruit in South East Asia because of cyclone damage in producing areas but if the planned campaign is to be successful, Western Australia must supply fruit of the quality being advertised.

There is a good market in Singapore for Red Emperor grapes. Singapore imported 2 600 tonnes of fresh grapes in 1977 with Australia supplying 410 tonnes. Western Australia supplied 134 tonnes. The prices paid in Singapore are very attractive provided the quality is good. To ensure satisfactory quality, elaborate packaging in wooden crates and cork is necessary, which in turn, with the high labour charges in Australia, is costly. It may pay to explore the possibility of freighting untrimmed grape bunches and packaging them using Singapore's cheaper labour.

As for vegetables, Western Australia supplies a high priced market for quality vegetables (hotel and supermarket trade). The quality required is therefore expected to be commensurate with prices paid. When this does not occur we have only ourselves to blame for importers turning to either the U.S.A., New Zealand or the eastern States for their supplies.

Onions are consumed in large quantities in both Singapore and surrounding countries yet Australia's market share of total imports is relatively small. In 1977 total onion imports were 30 260 tonnes, 1 316 tonnes of which were supplied from Western Australia. Although some imports are of the small purple/red varieties there is still demand for varieties grown in Western Australia.

Singapore is an important distributing centre for Malaysia and Indonesia. Approximately 25 per cent of apples, 14 per cent of pears, 60 per cent of onions, 20 per cent of grapes and 55 per cent of potatoes are re-exported.

In spite of both the direct shipping to Penang and Port Kelang in Malaysia and to a lesser extent Jakarta in Indonesia, and the heavy duties on imported fruit and vegetables to these countries, Singapore has maintained a good share of their markets, mainly through their history of trading.

Detailed information on Singapore trade in specific agricultural commodities of interest to Western Australia is provided in Annex B. General agricultural statistics for Singapore are included in Table 5.

TABLE 5
Quantity and value of Singapore's produce 1976 and 1977

	Unit	Quantity		Value (ex-farm) \$(A'000)	
		1976	1977	1976	1977
LIVESTOCK					
Pigs	Nos.	1 250 000	1 286 300	73 689	90 987
Cattle	Nos.	328	173	98	52
Goats	Nos.	547	372	16	13
Chickens	Nos.	27 962 000	29 731 000	41 731	43 670
Ducks	Nos.	3 905 000	4 403 000	4 954	6 155
Hen eggs	Nos.	508 108 000	514 815 000	21 650	21 764
Quail eggs	Nos.	42 259 000	48 503 000	394	407
*Day-old chicks	Nos.	14 395 145	12 798 20	2 746	2 593
FISHERIES					
Food fish	tonnes	16 429	15 105	13 319	12 521
**Ornamental fish	Nos.	-	-	4 419	7 074
**Ornamental aquatic plants	-	-	-	553	856
Crocodiles	Nos.	5 800	6 100	454	682
AGRICULTURE					
Vegetables	tonnes	38 339	36 460	6 233	7 249
Fruits	tonnes	19 120	16 253	2 469	2 401
Coconuts	Nos.	7 400 000	6 900 000	690	643
Tobacco	tonnes	407	576	808	874
Sugar cane	tonnes	2 520	2 370	122	146
**Orchids, cut flowers and plants	-	-	-	2 049	3 432
Total	-	-	-	176 394	201 518

* Total export figure

** Net export quantity and value

MALAYSIA

General

Malaysia consists of two land masses - Peninsula or West Malaysia and East Malaysia with a combined area of 330 000 sq km. Peninsula Malaysia has an area of 132 000 sq km and an average population density of 112 people per sq km, whilst Sabah and Sarawak (East Malaysia) have areas of 73 700 and 124 500 sq km respectively with an average population density of 12 people per sq km. Eight-five per cent of the 14.83 million Malaysians live in Peninsula Malaysia.

Being situated between the equator and the 7th Parallel North, a tropical climate prevails, characterised by high ambient temperatures, high humidity and high rainfall. Agriculture is predominantly tropical, with rice the major cash crop, rubber, oil palm and coconuts the major tree crops. There is an abundance of tropical fruits available throughout the year. Temperate crops are grown in the central Peninsula Malaysian highlands where climatic conditions are modified by altitude.

Malaysia is divided into 13 States, Sabah and Sarawak in East Malaysia and 11 States in Peninsula Malaysia. The population consists of three basic ethnic groups - Malays, Chinese and Indians, the interaction of which leads to significant political problems that already has, and will in the future, affect the development of Malaysia's natural resources.

The Malays of Chinese origin represent 34 per cent of the total population. They are employed mainly in the business or non-agricultural sectors where they are established as traders, store owners, importers and exporters and members of the tertiary sector. In agriculture, Chinese occupy 15 per cent of household units. The average smallholder (a farmer with less than 40 hectares) Chinese farm is 4.7 hectares compared to the overall smallholder average of 2.2 hectares. Consequently the incidence of poverty is less amongst Chinese Malay farmers than other ethnic groups. The Malays represent 47 per cent of the population and are employed predominantly in the agricultural sector. In the smallholder farming sector, 82 per cent of households are of Malay origin and their average farm size is 1.7 hectares.

The 'Indian' population, which includes those originating from India, Pakistan or Bangladesh, represent 9 per cent of the total population. They are employed uniformly throughout the economy. Two per cent of the smallholders are of Indian origin and these have an average farm size of 3.4 hectares.

Politics

The Prime Minister, Datuk Hussein bin Onn who succeeded Tun Abdul Razak on January 14, 1976 leads a cabinet of 21 portfolios. Two of these portfolios have direct relevance to agriculture - the Ministry of Agriculture and the Ministry of Primary Production. The export oriented agricultural industries, such as rubber, oil palm, pineapple and sugar-cane, are the responsibility of the Minister of Primary Production, whilst meat, vegetables, fruit and all other agricultural commodities, predominantly for domestic consumption, are the responsibility of the Ministry of Agriculture.

Other offices of relevance to agriculture are the Ministry of Land and Regional Development, the Prime Minister's Department and the Ministry of Public Enterprise. The operations of The Federal Land Development Authority (FELDA) and other land development schemes are the responsibility of the Minister for Land and Regional Development, whilst the marketing and processing of padi is the responsibility of the Minister of Public Enterprises. The economic planning unit of the Prime Minister's Department has relevance in that it oversees development of agriculture within the Malaysian economy.

The present Government, the National Front, consists of a coalition of 10 parties. It was re-elected to power with an increased majority in the General Election of July 8, 1978 for an additional four year term. The National Front won 94 of the 114 Parliamentary seats and won control of all State assemblies. Such a result would appear to give support to Hussein Onn's previous two years of leadership and imply the country's political stability. However, some of the circumstances surrounding the election warrant special mention.

Very short notice was given for the general election and various restraints were enforced right up to the election date. Political rallies were totally banned. Certain opposition candidates were disqualified for misfiling their papers, and others were arrested for raising "inflammatory issues". Although campaign posters were displayed wherever space was available, some observers noted that the press gave restricted coverage to opposition party policies.

The political differences between contesting parties are basically those of race origins. The stated aim for the Malaysian Government is to increase the Malays' control of the economy to 30 per cent of all assets by 1990. Education policies heavily favour the Malay population. For example, 85 per cent of available university student vacancies are reserved for Malays. Prior to independence, Malay students occupied 10 per cent of these vacancies. Similar bias toward the Malay are evident in many other aspects of every day living.

The Government appears to be maintaining political stability by catering for the requirements of ethnic Malays which could impair the long term rate of development in Malaysia.

The Economy

Under the influence of the Second Malaysia Plan (SMP) Malaysia recorded an annual G.D.P. growth rate in real terms of 7.4 per cent. The key contributors to this growth were transport, manufacturing, public administration and other services. Agriculture grew at 5.9 per cent over the 1971 to 1975 period and occupied 30 per cent of the G.D.P. in 1975 - a share which has gradually been declining since the commencement of the First Malaysia Plan (FMP) in 1967.

Exports provided the main thrust of economic growth during the SMP - particularly in 1973 and 1974 when international prices of raw materials were high. Major exports include rubber, tin, saw logs, timber, palm oil, palm kernel oil, crude petroleum, and petroleum products. Exports of rubber, palm oil, sawn timber increased in quantity and price over the SMP which meant that foreign reserves increased markedly. Export quantities of tin decreased over 1971-75 but international price increases more than compensated for the reduction and export revenue grew at 3.7 per cent annually over that period. Tin industry leaders claim

that the reduced production is a direct result of heavy tax burdens preventing exploration and further development of existing mines. Mining companies received 21 per cent of net revenue from tin sales. They claim that the brevity of mining leases makes developmental work unattractive. (This is further aggravated by the fact that States own the land and Federal bodies find it difficult to obtain control of land for special purposes).

Export quantities of saw logs, crude and partly refined oil and petroleum products declined over the 1971 to 1975 period. Timber reserves are estimated to be dwindling and the importance of timber as an export earner will decline further because logging rates in the past 20 years have exceeded reafforestation rates. Petroleum reserves similarly are estimated to last to 1992 given the current daily drawing of 190 000 barrels of crude oil. Multinational petroleum companies currently receive 16.5 per cent of net revenue from oil sales.

Total exports during the SMP accounted for 41 per cent of the G.D.P. at market prices. Agricultural exports accounted for 56 per cent of export income in 1971 compared to 11.4 per cent for manufacturing. By 1975 manufactured exports grew to 23 per cent of export income whilst agriculture's share fell to 49 per cent - mining remained at 21 per cent.

Malaysian imports exceeded exports for the greater part of 1971 to 1975. However, large capital inflows, reflecting the country's credit worthiness amongst both foreign investors and the Asian Development, and World Banks, have maintained a positive balance of payments. Foreign reserves at the end of 1975 stood at \$A1 219 million - sufficient to sustain 6 months of imports at current prices. In June 1977 the foreign reserves stood at \$A2 213 million.

Employment

Unemployment is currently running at 7 per cent of the workforce. There is however, a tremendous amount of under-employment, particularly in the agriculture sector. Unemployment in the 15 to 19 year old group is 16.6 per cent. This is a very high figure considering the Malaysian population structure. Of the total population 42.1 per cent is less than 14 years old 54.5 per cent between 15 and 64 and 3.5 per cent is over 65 years old.

In the period 1976 to 1980 there is expected to be a need for 0.75 million new jobs. The level of unemployment is expected to be reduced to 6.5 per cent by 1980. Under the Third Malaysia Plan, 1976 to 1980 (T.M.P.) the manufacturing sector, the wholesale and retail sectors and the public administration sector are expected to provide 42 per cent of the new jobs required. The agricultural sector, which employed 49 per cent of the labour force in 1975, is expected to provide 17 per cent of the new employment. By 1980 the agricultural sector should employ 44 per cent of the workforce.

The Third Malaysia Plan

The objectives of the Third Malaysia Plan (1976 to 1980) are as follows:-

- To reduce the incidence of poverty in rural areas by, among other measures, increasing productivity in existing agricultural areas,

expanding employment opportunities through new land development, establishing new growth centres and absorbing excess labour into other sectors.

- To increase the employment of Malays and other indigenous people in mining, manufacturing, construction and the employment of other Malaysians in modern agriculture and services so that the employment structure by 1990 reflects the racial composition of the nation.
- Raise the share of the Malays and other indigenous people's ownership of productive assets and wealth, so that by 1990, their share of the total equity capital will be at least 30 per cent with the share of the other Malaysians being at least 40 per cent.
- Assist the growing of entrepreneurship among the Malays and other indigenous people in order to create a viable commercial and industrial community among them.

Under this Plan, the Government intends investing a total of \$A5 billion in the public sector of which 25.5 per cent will be spent on agriculture and rural development. Of the \$A5 billion to finance the public sector, a third will be raised by overseas borrowing from the Asian Development Bank and World Bank.

The private sector is expected to play a greater roll than it did in the S.M.P. Between 1971 to 1975 the private sector grew at 7.2 per cent per annum. The growth rate is planned to increase to 10 per cent under the T.M.P. The private sector growth is particularly important to Malaysian development as the manufacturing industries are expected to take up much of the unemployment arising from the modernisation of agriculture. Export of manufactured goods is expected to increase by 19.9 per cent over 1976 to 1980 compared with 10.9 per cent per annum achieved throughout the S.M.P.

The agricultural sector is of major importance in the T.M.P. Its contribution to the G.D.P. is expected to be 26.5 per cent by 1980. The Government is placing greater emphasis on the development of existing agricultural land compared to new land development. Increased spending will be directed at rubber replanting schemes and the improvement of existing irrigation facilities.

The Malaysian per capita G.D.P. was \$A800 in 1976 which was the fourth highest in Asia behind Japan, Singapore and Hong Kong.

Agriculture in the Malaysian economy

Agriculture is singly the most important of the sectors in the Malaysian economy. In 1975 it contributed 46 per cent of foreign exchange earnings, 30 per cent of the gross domestic product and employed 49 per cent of the labour force, yet this sector accounts for the highest incidence of poverty. In 1975, 69 per cent of households assessed as 'in poverty' were involved in agricultural production.

Malaysia differs from Indonesia in that agriculture is not practised totally on a subsistence basis. The major percentage of agricultural production is marketed in some form or another predominantly for an export market. Under the T.M.P., 25.5 per cent. of the total budgeted \$A5 000 million will be spent on agriculture and rural development as detailed in Table 6,

TABLE 6
Agriculture and Rural Development Expenditure 1976 to 1980

	\$A million
1. Pineapple replanting	12.8
2. Coconut replanting	12.8
3. Crop diversification	76.5
4. Agricultural extension services	38.3
5. MADA	-
6. KADA	-
7. Rubber replanting	178.5
8. Land development	420.8
9. Youth Land Scheme	12.8
10. Public estates	-
11. Felcra	25.5
12. Development authorities	76.5
13. Forestry	12.8
14. Veterinary	25.5
15. Majuternak	12.8
16. Majuikan	25.5
17. F.O.A.	25.5
18. F.A.M.A.	12.8
19. L.P.N.	12.8
20. MARDI	12.5
21. Others	255.0

Funds allocated to agriculture are almost twice as much under the T.M.P. and occupy a greater proportion of the total allocation compared with the S.M.P. Agriculture will continue to be the largest employer of labour between 1976 and 1980 and is expected to provide new jobs for 125 900 over this period.

Experience in the first two Plans has shown that new land development benefits relatively few. For this reason greater emphasis is being placed on raising the productivity of existing agriculture where the greatest impact on poverty is sought.

Total agricultural production is expected to grow by an average of 7.3 per cent per annum over the period 1976 to 1980 compared to an annual growth rate of 5.6 per cent achieved under the S.M.P.

This target is certainly ambitious. A large proportion of the growth in the S.M.P. resulted from the oil palm industry, particularly from land settlement schemes. 16 000 hectares was cleared each year between 1971 and 1975 and planted to various crops - predominantly oil

palms. The same development rate is planned under the T.M.P. Even if this clearing rate is achieved it will be difficult to show the same percentage increase in production despite the young palms coming into production.

Rubber production is expected to increase as a direct result of the replanting programme. At this stage 60 per cent of trees requiring replanting have been replanted. The gestation period for rubber production is 5 to 6 years but the changing structure within the industry is likely to keep total production fairly constant. Furthermore prices of rubber cannot increase too rapidly as competition from synthetic rubber will result in synthetic rubber's substitution. It is considered that the proposed T.M.P. agricultural growth rate is ambitious and will probably be reviewed downwards at the mid-term review (due to be published in April 1979).

Statistics on Malaysian agriculture categorise farming on either estate or smallholder agriculture. A smallholder is a farming unit of less than 40 hectares whereas estates are units in excess of this area. Statistical data for Peninsula Malaysia is good but for East Malaysia it is not so readily available. Many of the statistics quoted will be relevant only to Peninsula Malaysia.

The total area of cultivated land in Peninsula Malaysia is 3.2 million hectares, 80 per cent of which supports tree crop production, e.g. rubber, oil palm, coconuts. Padi is the other important form of land use occupying about 0.5 million hectares. Rubber is found on 55 per cent of cultivated land, coconuts on 7 per cent, oil palm on 20 per cent, padi on 13 per cent and miscellaneous crops on the remaining 5 per cent.

There are 2 300 estates farming 31 per cent of the cultivated land area and 550 000 smallholders farming 62 per cent. The remaining 7 per cent is owned by the Federal and State land development schemes.

Agricultural production is concentrated on the west and east coastal belt of lowlands, the areas on the east coast being of less importance. Agriculture in central or highland areas of Malaysia is limited by the rugged topography. Potential for further land development has been estimated at double the existing cultivated area. However, a more realistic estimate by the Department of Agriculture suggest a further 2 million hectares are suitable for agricultural development. The main impact of agricultural development of new lands will be through the land settlement schemes. Peasant agriculture will gradually increase cultivated areas wherever possible, e.g. Cameron Highlands but this form of land development will be relatively insignificant when compared with the total.

The Smallholder Sector

The average Malaysian smallholder farm is 2.2 hectares. Ten per cent of smallholders have farm sizes less than 0.41 hectares, 35 per cent have areas between 0.41 ha and 1.2 ha and 22 per cent have farms between 1.2 ha and 2 ha. A total of 37 per cent of smallholders have farm size less than 2 hectares.

It is interesting to observe the incidence of the three community groups within these smallholders. Seventy-two per cent of Malay smallholders have farms less than 2 hectares compared to 42 per cent for Chinese and 68 per cent for Indians.

Another interesting observation is that, in all the land settlement schemes, the size of holdings provided for settlers is 4.1 hectares. It is considered that this area provides an average sized family with a reasonable standard of living and that the labour resources of the family unit are sufficient to satisfactorily manage this area.

The Estate Sector

Estate farms tend to be well run, well planned, and usually mechanised. They are more efficient - mainly because of the higher yields obtained. Many of the estates are owned by foreign interests and are vertically integrated from the production through to the marketing of the processed product.

Of the estate crops, rubber is the most important occupying 60 per cent of all estate crops followed by oil palm (30 per cent) coconuts (three per cent) tea and pineapple the remaining 7 per cent. Estate oil palm production is increasing in importance as estate rubber trees are being replanted with the more profitable crop, oil palm.

Mechanisation has had a large impact on the labour employed by the estate sector. In 1963, 317 000 were employed by estates. By 1972 this number had fallen to 252 000 workers.

The Rubber Industry

The total area of rubber in 1976 was slightly in excess of two million hectares. Estates accounted for 28 per cent of the area and 41 per cent of total production in that year. The rubber industry contributes 9 per cent of the gross domestic product and is a major foreign exchange earner. Rubber production has slowly increased from 1.4 million tonnes in 1973 to its present level of 1.6 million tonnes. About 2 per cent of this is used domestically - the remainder is exported. In 1976 rubber exports contributed 23 per cent of total export earnings.

The structure of the rubber industry has gradually changed over recent years. In 1968, rubber estates occupied 39 per cent of the total area planted to rubber and produced 54 per cent of production. By 1976 the area of estate rubber had declined to 28 per cent of the total area and its share had fallen to 41 per cent of total production. Over that period smallholder areas and production have increased to maintain the combined area and production. This reflects not only the rubber plantings on the land settlement schemes but also the fact that many estates have carried out replanting with oil palm in preference to rubber trees.

This industry, so vital to Malaysia's economy has the greatest incidence of poverty. Table 7 details the incidence of poverty in 1975 amongst the major agricultural producer groups.

TABLE 7
Number of smallholders in poverty by agricultural industry

Agricultural Industry	Number of poor households (000's)	Proportion of total for that industry (%)
Rubber	233.8	64.7
Oil palm	0.9	30.3
Coconut	17.5	52.8
Padi	114.3	88.1
Other	124.1	91.8

The rubber smallholders living in poverty account for 29 per cent of all people living in poverty.

One of the major problems, confronting the rubber smallholder is the gross inefficiencies in the marketing of their rubber. Smallholders' latex is of poor quality as they have neither the technical ability nor facilities to produce high quality rubber. This, together with a lengthy marketing chain, leads to extremely poor on-farm prices even though world prices may be buoyant. Rubber may be handled by as many as six organisations before it is exported.

To rectify this situation, smallholder development centres have been established. These are designed to

- (a) improve the quality by providing smoking and drying facilities and
- (b) to enable smallholders to group their production thus enabling better marketing.

These smallholder centres are controlled by the Rubber Industry Smallholder Development Authority (RISDA) - a government organisation with significant influence on the industry.

Established in 1973, this authority was given the task of administering the rubber replanting scheme. Under this replanting scheme, rubber smallholders receive a grant of M\$1 200 per acre (increased from M\$900 just prior to the July 1978 general elections). Of this 50 per cent is funded from a CESS collected on all exported rubber (M4.5 c/kg), and 50 per cent from general revenue. RISDA pays this grant in six instalments - the first after the ground is ready for planting followed by 5 successive annual instalments.

To date 0.65 million hectares have been replanted and 0.3 million hectares still require replanting. Growers can replant with a range of approved crops but the most common to date has been rubber. The only other crop of any significance is oil palm which occupies 12 per cent of the replanted area.

In addition to its replanting function, RISDA have the responsibility of implementing and co-ordinating the Government's long term development programme and uplifting the socio economic status of the smallholder. Consequently, RISDA has become involved in all aspects of rubber management from extension to provision of technical skills, schools and the provision of credit. Credit advances have been instrumental in encouraging intercropping in the five unproductive development years. These credit advances, for the intercropping of groundnuts, bananas, cocoa, maize, tapioca and sugar-cane, are interest free for the purchase of seed, fertiliser and sprays for pest control. Repayment of these loans to date has averaged 30 per cent of the agreed rates.

RISDA have also become involved in the marketing of smallholder rubber through the provision of the smallholder development centres. There were more than 1 200 such centres in 1976 providing processing facilities for in excess of 20 000 smallholders.

Another Government body, the Malaysian Rubber Development Corporation (MARDEC) have in excess of 200 standard Malaysian rubber producing factories which process smallholder rubber from the smallholder development centres. MARDEC handles approximately 9 per cent of Malaysian rubber production.

Another function of RISDA is to develop pockets of plantation rubber which are shared by nearby smallholders with the aim of increasing their farm size, hence reducing under-employment. These pockets are a short distance from the smallholders' main farm. The two farms are run as one unit, although the control remains with RISDA until they are satisfied of the smallholder's managerial ability. RISDA's activities in the field of land development are limited because of the States' ownership of land and their reluctance to hand over control to Federal bodies.

The rubber industry is well catered for with research facilities - the Malaysian Rubber Research Development Board (MRRDB) is funded by a research levy of M2.2 cents per kilogram on all exported rubber.

Rubber production is expected to increase by an average of 6 per cent per annum between 1976 to 1980. Approximately 242 000 ha are planned to be replanted over this period, the priority being, given to smallholders with holdings less than two hectares.

The Oil Palm Industry

In 1975 the area under oil palm in Peninsula Malaysia was 582 000 hectares, of which 43 per cent was in small holdings. There were 60 000 hectares of oil palm in East Malaysia. Approximately 30 per cent of the oil palm area is held by smallholders in FELDA schemes and 5 per cent in RISDA schemes. In 1975 oil production was 1.276 million tonnes. The average yield was approximately 3.2 tonnes per hectare. Although yields have fluctuated from year to year, recent massive plantings have resulted in rapidly increasing levels of production. (An annual growth rate of 21.1 per cent between 1971 and 1975). About 80 per cent of palm oil produced is exported. This proportion should increase as production increases. Palm oil represented 14 per cent of the total value of exports in 1975.

The oil palm industry doesn't present the same problems in terms of social or welfare standards as does the rubber industry. Farm sizes amongst the smallholders are on the average larger than the rubber

smallholders and there are less people involved in the industry. In 1975 there were about 60 000 farm labourers working on oil palm estates compared to 190 000 in rubber estates.

The marketing of palm oil was previously handled by the Malaysian Palm Oil Producers' Association under a pooling system which benefited both the exporter and the producer. The exporter could negotiate larger contracts and arrange lower cost shipping (in bulk) whilst all producers received the same price. However, some exporters considered they were disadvantaged by such arrangements. Since 1974 open marketing has been in operation.

Fresh fruit bunches, the oil palm fruit, must be processed within 24 hours of harvest. For this reason there is a need for mills scattered throughout producing areas within Malaysia. Estates usually have their own associated mills and smallholders in close proximity use these private mills. FELDA schemes have their own processing and marketing facilities. (See section on FELDA).

The Rice Industry

Rice is the staple food of Malaysia and represents up to 40 per cent of the monthly household food budget. The average annual per capita consumption of rice in Malaysia is 125 kg. The area sown to padi in Malaysia is just in excess of 400 000 hectares from which 1.5 million tonnes of padi was produced in 1975 (87 per cent of total domestic requirements). Whilst the area of padi has remained constant over the past few years, the area on which double cropping is practiced is increasing as irrigation facilities are improved. In 1975, 66 per cent of the padi area was doubled cropped.

Rice production is carried out by the majority of the smallholders usually in conjunction with rubber or fruit and vegetables. Specialist padi farmers occupy three quarters of the area planted to rice but represent only 47 per cent of the total number of farms cultivating padi. Because of their small size, (average of 1.3 ha) there is a large amount of under-employment hence the desire for off farm work or mixed farming where land is available.

After the international grain shortage from 1972 to 1973 the Government announced a policy to become 100 per cent self sufficient in rice. The increasing incidence of double cropping using short maturation rice varieties (130-140 days) enabled 87 per cent self sufficiency in 1975.

With the more intensive double cropping there has been severe water management problems. At MADA, a huge irrigation project at Kedah in the north of Malaysia, water has to travel up to 70 km from the first to last user. Without adequate supply channels water has to pass through other farmers' fields which may not suit those farmers who have already planted their crop. The Government announced an allocation of \$A155 million to improve existing irrigation facilities of MADA to increase double cropping.

The incidence of pest and disease has also increased with double cropping. Farmers are reluctant to use pesticides because of the expense involved and treatment is often too late.

Mechanisation is slowly taking place with animal cultivation seen only on the exceptionally boggy country. Planting and harvesting are still carried out by hand.

The irrigation schemes have been very effective in both increasing padi production and also increasing the farmer's income. The net annual disposable household income to a padi farmer in Kedah before the irrigation project was \$A339. After the establishment of irrigation facilities the net annual disposable household income was \$A1 500.

Lembaga Padi Negara (LPN) or the National Padi and Rice Authority currently have the responsibility of maintaining an adequate stock pile of rice to ensure a supply of the staple food throughout the year. This authority is the sole importer of rice into Malaysia. LPN releases rice from its stock piles, via the wholesalers, when the consumer price is high. Rice producers are paid a guaranteed minimum price which sometimes exceeds the ruling world price. This is made possible by L.P.N's sole importing rights.

With two thirds of the padi area being double cropped, a significant portion of the rice is harvested in wet conditions. L.P.N. has been responsible for the establishment of huge drying mills so that growers will not be penalised price wise, when selling to the licensed dealers, private millers, or farmer co-operatives.

L.P.N's main objective is to guarantee rice producers a reasonable price and to ensure a supply of reasonably priced rice for the consumer throughout the year. Malaysia's rice imports are listed in Table 8. The major suppliers are the low cost producers such as Thailand, Burma and China which account for 90 per cent of rice imports.

TABLE 8
Net imports of rice to Peninsula Malaysia

Year	Quantity (tonnes)	Average import price per tonne M\$/tonne
1970	263 433	357
1971	142 774	305
1972	97 360	371
1973	157 204	700
1974	204 541	1 065
1975	60 595	1 028
1976	114 400	583

Fruit and Vegetable Industries

The major fruit industry in Malaysia is that of pineapples for canning. The major producing areas are found in the south of Peninsula Malaysia. Production has been decreasing in recent years because of the lack of profitability for the producer. There are relatively few canneries. The poor collection and delivery facilities to the canning factories result in high fruit losses.

Malaysian fruits are categorised as either seasonal, such as rambutan or durian, or non seasonal such as banana, pineapple, papaya and pomelo. Both seasonal and non seasonal fruits have an equivalent crop area of about 27 000 hectares each.

Fruit imports to Malaysia consist of oranges (about 50 per cent) of total fruit, apples, pears and grapes. A duty of M\$1.32 per kilogram is charged on the majority of fruit imports. A 5 per cent surtax is also charged on imported fruits. Whilst the duty is intended to provide a stimulus for local production, it results in higher prices being charged on imported fruits. Under these circumstances, quality is of primary importance to the importing agent.

Much of the imported fruit comes through Singapore where it is either re-shipped to Kelang, Penang, or road freighted across the causeway to Johore. Singapore is the key export market for Malaysia's wide range of fresh tropical fruits. In 1976, 36 000 tonnes valued at about \$A5 million were exported. Imports of fruit in that year amounted to \$A9 million.

As for vegetables, the area under cultivation in Peninsula Malaysia is about 20 000 hectares - much of which is for personal consumption. Production takes place in highland areas (for example the Cameron Highlands) in central Peninsula Malaysia. Areas planted to vegetable crops fluctuate markedly because of the changing profitability of the various crops.

There are in excess of 50 types of vegetables produced of the leafy or stem varieties. Highland producing areas specialise in the more temperate vegetables such as cauliflowers, cabbage, tomatoes, carrots and lettuces. In these areas production is carried out on narrow beds approximately one metre wide depending on terrain using both organic and inorganic fertiliser. Pests and disease are common and varying degrees of chemical control are practiced. The quality of Malaysian grown vegetables is poor by western standards in that pest infestations are the norm rather than the exception because of the high cost of pesticides.

Peninsula Malaysia, whilst exporting a large quantity of vegetables to Singapore and East Malaysia, is a net importer of vegetables. Imports exceed exports by about 50 000 tonnes and consist mainly of potatoes, beans, peas, onions and garlic - those crops which are not successfully cultivated in Malaysia.

Imports of most vegetables to Malaysia are subject to a tariff of \$A3.75 per tonne plus a general surtax of 4 per cent advalorem. On some occasions, total import embargoes of cabbages are established to protect the local producers in the likely event of an oversupply. Potatoes, onions and garlic are exempt as they are considered essential food items.

The major imported vegetables of interest are listed in Table 9.

TABLE 9
Vegetable imports to Malaysia 1975, 1976

	1975 tonnes	1976 tonnes
Potatoes	23 847	23 379
Peas - dried	2 801	3 381
Tomatoes	307	315
Onions	41 751	43 094
Cabbages	9 662	6 926

Livestock Industries

Typical Malaysian livestock include buffalo, oxen, goats, pigs, poultry and, to a far less extent, sheep. Malaysia is self sufficient in eggs, poultry meat, pork, with respective annual per capita consumption rates of 171 eggs, 8 kg of poultry and 15 kg of pork. Malaysia imports in excess of 300 000 tonnes of animal feed a year for these industries. Average beef consumption is 3 kg per head per annum, and sheepmeat consumption is marginally greater. Malaysia produces 85 per cent of its beef and 25 per cent of its sheepmeat requirements. The Muslim Malays are the main consumers of red meat but cannot afford to pay high prices for it. Red meat consumption has been fairly static in recent years.

Prices of imported frozen meat is controlled by the Government whereas fresh meat prices are free. It is common, yet illegal, for importers to purchase frozen meat from Australia and New Zealand and then market it as fresh meat after thawing thereby reaping a far greater margin.

In 1974, meat and meat products imports were valued at \$A4.5 million which represented eight per cent of total livestock product imports. The major import item in this category was milk and dairy products which accounted for 18 per cent of the total of \$A58 million. In an attempt to protect foreign reserves, the Government wishes to establish both beef and dairy cattle farms. The National Livestock Development Authority called Majuternak, which was established in 1972, has the task of cattle multiplication, abattoir re-organisation and management training. At the conclusion of the S.M.P., Majuternak had established 5 000 ha of pasture stocked with 10 000 head of breeding cattle (on multiplication farms). Under the programme of stocking the multiplication farms, Majuternak will need to import up to 15 000 head of cattle by 1980. Furthermore, a total of \$A4 million has been put aside in the T.M.P. to establish 8 commercial dairy/beef farms. It is in this area of livestock imports that Western Australia has an opportunity to increase trade with Malaysia.

Majuternak is a relatively new organisation utilising foreign expertise wherever possible. Already two joint ventures have been undertaken by Majuternak, one in milk production (Dutch Baby) and the other in a feedlotting operation using pineapple waste in Johore. They are keen to develop their expertise further through joint ventures.

It is unlikely that per capita consumption of red meats will increase drastically in the next few years. If red meat becomes more readily available through increased domestic production, consumption could increase marginally. The greatest opportunity for Western Australia is in the provision of store and breeding animals for the Government developed farms.

Agricultural Marketing Organisation in Malaysia

Agricultural marketing in Malaysia is complicated by small farms, high rural indebtedness, low productivity, lack of uniformity of quality, absence of standards and a high incidence of middlemen monopolies. This situation lends itself to exploitation by the middlemen.

Because of these market imperfections it is difficult to promote increased production when farm gate prices are so low. Marketing margins are large and for some commodities there is neither sufficient processing capacity nor transport and storage facilities available to the producers.

This has led to the development of co-operative societies, which are most common amongst the padi producers. These bodies have definite marketing functions. In 1972 there were 240 such co-operatives handling \$A10 million of padi and \$A12 million of rice. Similar co-operatives exist for coconuts, pineapples, groundnuts, tobacco, maize and vegetables.

In an attempt to assist and streamline the marketing of agricultural produce, and to assist the operations of co-operatives, the Malaysian Government established the Federal Agricultural Marketing Authority (F.A.M.A.). The body is responsible for the initiation, planning and implementation of marketing programmes for agricultural producers.

F.A.M.A.'s objectives are -

- to co-ordinate and co-operate with the various existing marketing organisations and those Government bodies entrusted with marketing in order to improve marketing practices and raise marketing efficiency:
 - * by introducing and implementing marketing schemes;
 - * by providing marketing facilities, such as storage, transport, etc.
 - * by regulating quality, packing standards, marketing procedures and sales, etc;
 - * by facilitating a more precise adjustment of the qualities, quantities and types of produce sold on particular markets through market research and extension, so that the producers can be assured of equitable treatment and a larger share of the consumer's price than they now obtain.
- To protect producers and consumers against the impact of sharply fluctuating agricultural prices; and
- To provide a favourable economic and social climate for the expansion and diversification of agricultural production and development.

One of F.A.M.A.'s first tasks was to devise a new padi marketing scheme - a task that has since been taken over by the L.P.N.

I see the establishment F.A.M.A.'s as yet another instance where a problem has been recognised, and a Government body established to overcome the problem which has led to duplication between government departments.

F.O.A.

To further develop or increase the effectiveness of the farmer co-operatives, the Government established the Farmers' Organisation Authority (FOA). Initially farmer co-operatives had one common objective - to increase the bargaining power of its members. Since the introduction of the F.O.A. these farmer co-operatives have been used as vehicles for group extension. They are also used to supply agricultural inputs, provide carry-on credit, and market the products more effectively through better processing, transport and ware housing.

Each F.O.A. group comprises one specific interest group covering an area of 2000 to 4000 hectares on which there are between 1000 and 2500 families. The functions of the Farmers Organisation Authority is detailed below.

Functions of the F.O.A.

The Farmers' Organisation Authority will provide the stimulus for accelerated development of farmers' organisations by:-

- o provision of basic infra-structure for agricultural development such as the establishment of farmers' development centres;
- o the administration of agricultural credit to padi double cropping areas and later to extend this service to other areas;
- o provision of essential services to farmers' organisations for the expansion of agricultural production, marketing, processing, milling, transportation;
- o establishing a revolving fund to finance development programmes and the trading activities of farmers' organisations;
- o promote the distribution of essential consumer goods and farm inputs through a chain of retail shops;
- o provide assistance to farmers' organisations in the setting up of agricultural mechanisations servicing centres; and
- o promote programmes for the socio-economic advancement of farm communities.

LAND DEVELOPMENT

A major government instrumentality for land development is the Federal Land Development Authority (FELDA).

The establishment of FELDA schemes have been one of the most significant developments in the Malaysian economy during the first two five year plans. Not only have these schemes contributed significantly to rural output but they have provided a means of changing the structure of peasant agriculture, creating opportunities for better utilisation of labour and removing some of the pressure from traditional agriculture.

FELDA is the largest single agricultural land development authority. It has been in operation since 1958 and has established 245 separate schemes on 420 000 hectares accommodating 47 000 families.

The basic aim of FELDA is to increase the welfare of the rural population. It does this by developing areas of agricultural land from native jungle, establishing the necessary infra structure such as roads, houses, schools, clinics, shops etc. then placing settlers to farm the land.

Each area is approximately 1200 to 1600 hectares - equivalent to an average estate. A central village comprising accommodation and services for 400 families or about 2 000 people is built for the settlers prior to occupation. The development phase takes about four years and costs about \$A10 900 per family. This cost is recouped from the settler over a 15 year repayment period. Each farmer is allocated a four hectare plot within the estate area. One of the conditions of settlement is that the plot cannot be further subdivided - thus aggravating the small farm problem.

Settler allocation is done on a points system taking account of the settler's and his wife's health, their educational status, their technical skills (e.g. carpentry, tailoring, rubber tapping, business skills) his own experience and finally the number of dependants. Only Malays are eligible settlers. Currently there are 18 500 awaiting settlement as schemes become developed.

FELDA's performance to date has been very good. In the S.M.P. they exceeded their target for land development by 40 000 hectares, clearing 35 per cent of all cleared land in Malaysia during that period.

Farmer settlements have, however, fallen behind targets. During 1971 to 1975, 20 000 farmers were to be settled but the figure achieved was 13 779.

The main crop planted in FELDA schemes is oil palm followed by rubber, sugar-cane, and cocoa. By 1976, 208 800 hectares of oil palm, 114 730 hectares of rubber, 4 000 hectares of sugar-cane and 1 600 hectares of cocoa had been planted.

Because of the need for immediate processing of the oil palms, fresh fruit bunches, processing plants have been established in the FELDA schemes. In 1976 the 22 FELDA oil palm processing factories produced 244 000 tonnes of palm oil. Also 58 000 tonnes of rubber were produced from their four rubber factories.

Once the commodities have been processed they are marketed through FELMA - The Felda Marketing Corporation - although growers have the option of selling their product independently. FELMA took over marketing of palm oil from the Malaysian Palm Oil Producers' Association in 1974. In that year alone they handled \$A60 million worth of palm oil. FELMA have offices established in Europe and U.S.A. to assist in the marketing of FELDA commodities.

Despite this impressive performance there has been some criticism of the schemes. Some say that the money could benefit a greater number if spent differently. In the Third Malaysia Plan (1976 to 1980) land development targets are fixed at the same as those for 1971 to 1975 and a greater portion of agricultural funds will be directed to the development of existing cleared areas.

FELDA schemes only provide a short term solution for the generation currently occupying the schemes. As Malaysian families average about 5 children and FELDA farms cannot be subdivided, either new land must be found or the next generation trained to accept non-farming work. The Government is obviously placing hope in the manufacturing sector to absorb the surplus rural labour. This aspect should not detract from the success the scheme has enjoyed to date, both through its contribution to rural employment, agricultural out-put and foreign reserves.

INDONESIA

General

Indonesia is an archipelago of approximately 3 000 islands lying between the sixth Parallel North and the eleventh South. It has a total area of 1 904 569 sq km spread over 5 000 km from west to east. The four major islands - Java, Sumatra, Kalimantan and Sulawesi represent 7, 25, 28 and 10 per cent of the land area respectively.

Indonesia's soils are predominantly acidic reflecting a high rainfall (approximately 2 000 mm per annum) and their volcanic origin. Agriculture is most intensive on the less acidic soils of East Java and Bali.

Indonesia is one of the most intensely populated nations in the world with an estimated 142 million people in 1978, giving a population density of 74 people per sq km. Java occupies 7 per cent of the land area and has approximately two-thirds of the population, i.e. a population density of 565 per sq km leaving the remainder of Indonesia with an average population density of 22 per sq km.

About 80 per cent, of the population are Islamic but practice it to varying degrees. Indonesia has an abundance of natural resources - in particular, oil, natural gas, timber, tin, bauxite and nickel - but is one of the poorest nations in the world. The average per capita income in 1976 was \$A132 and 58 per cent of the population were officially recognised as in 'absolute poverty'. A steadily increasing average per capita gross domestic product since 1970 provides no indication of the great disparity in wealth distribution between the rich and the poor. The buying power of the majority of the population has not altered significantly.

The major food commodities consumed are rice, cassava, maize, sweet potatoes, coconut, vegetables, bananas and soyabeans. The major animal protein is supplied from fish and poultry. Total fish consumption is approximately 8.5 kg per head per year and total meat consumption (excluding fish) is 3 kg per head per year. This diet provides an average daily intake of 2 250 calories, and 45 gm of protein per day.

Personal and general health standards are poor although they are reported to have greatly improved in recent years. Doctors number 0.55 per 1 000, the annual death rate is 17 per 1 000 and the life expectancy is 48 years for Indonesian males. By comparison in Singapore, doctors number 0.7 per 1 000, the death rate is 5.1 per 1 000 and male life expectancy is 65 years. Education levels are generally poor. Tertiary students number 0.25 million, secondary students 2.6 million and primary students 14.2 million. This is a relatively small number attending educational institutions when 58 per cent of the 142 million (82 m) are under the age of 21.

Politics

The Government (Golkar) headed by President Suharto, was returned to power in May 1977. It won 232 of the 360 seats which were contested in the 460 seat House of Representatives. The Golkar polled 62 per cent of national vote, slightly less than was anticipated. By winning 99 seats the Muslim Party, showed it was still an important political group, particularly in east and central Java. The Democratic Party won only 29 seats. Seventy-five seats are reserved for the army, which is pro-Golkar, and 25 are reserved for functional groups.

The People's Congress, the highest authority in Indonesia, consists of the House of Representatives plus an equal number of nominated delegates - 135 chosen by regional assemblies, 155 from the armed forces, 52 from non-armed forces functional groups, plus 118 political party representatives chosen in proportion to the seats held in the general election.

The People's Congress meets every 5 years and appoints the President and Vice President. This Congress is powerful only in that it elects these two positions. It suffers two major criticisms. Firstly, that only 30 per cent of this People's Congress is elected by the people and, secondly, that appointments are made to this group to protect the status quo. Once the President has been elected, the Peoples' Congress has virtually no say in the running of Indonesia.

Leadership in a country with Indonesia's characteristics and resultant problems is an extremely difficult task. It is impossible to satisfy the requirements of the majority of the population with such magnitude and diversity of problems. Many accuse the Government of wastage, corruption and ineffective development policies which, to a certain extent, are valid. But to formulate a plan to overcome the problems of Indonesia's order and complexity is nearly an impossible task. It is understandable that Suharto has his problems in Government and that there is obvious dissatisfaction amongst the people. It is also understandable that the State of emergency rule is still in operation, 13 years after the attempted coup.

The Economy

In terms of contribution to employment and gross domestic product, Indonesia's most important industry is agriculture. In 1971 it contributed 45 per cent of the gross domestic product and 33 per cent in 1975. Mining and quarrying is the next major contributor to the G.D.P. occupying 8 per cent in 1971 which grew to 20 per cent by 1975. Manufacturing industries have not shown the marked growth which was expected to ease their under and un-employment problems. Manufacturing industries contribute about 8 to 9 per cent of G.D.P.

The major earners of foreign exchange are crude petroleum and petroleum products. These accounted for 75 per cent of export income in 1975. Timber is the second most important export item earning 7 per cent with rubber providing 5 per cent of the 1975 export income. Apart from rubber, the major agricultural exports are coffee, tea, pepper, tobacco, copra and palm oil which, in 1975, collectively contributed five per cent to the total export income. Agriculture employed 62 per cent of the workforce followed by commerce 11 per cent with manufacturing and mining 8 per cent.

The major Indonesian imports are machines, fertiliser, iron and steel, rice, chemicals and pharmaceutical products. The major suppliers are Japan, the United States of America, Germany and Singapore supplying 26, 17, 9, 9 per cent respectively of the value of imports in 1976.

Since 1970 Indonesia has enjoyed a trade surplus varying from US\$50 million in 1970 to US\$1 419 million in 1975, with a peak of US\$2 631 million in 1974. Foreign reserves in April of 1977 stood in excess of US\$2 000 million compared to a low of US\$450 million after Pertamina's (the Government owned oil company) collapse in the last quarter of 1975. Most of the increase in foreign reserves reflects increased world prices rather than increased production - with tin being the notable exception.

Australia is a relatively small trading partner of Indonesia providing 3 per cent (\$A163 million) of imports and receiving 0.4 per cent (A\$22.3 million) of their total exports. Their main imports are electrical and engineering machinery, iron and steel. Cereals, rice in particular, account for 9.5 per cent of total imports. Food imports are less than 15 per cent of total imports. (see Table 10).

TABLE 10
Value of Indonesian imports 1975 to 1977 (\$A millions)

	1975	1976	1977
From Australia	126.5	174.7	163.2
From all sources	3802.2	5229.1	5469.9
% Australia	3	3	3
<u>From all sources</u>			
Live animals	314	503	684
Meat and edible offals	1 226	2 502	2 995
Fish, crustaceans and molluscs	134	245	100
Dairy produce, birds eggs, etc.	21 751	36 057	46 721
Other animal produce	85	128	161
Edible vegetable roots and tubers	2 118	3 559	3 607
Fruit and nuts	2 899	4 968	7 983
Coffee and tea and mate	71 469	41 090	14 114
Cereals	313 959	492 471	631 854
Produce for milling industry	4 957	10 580	13 418
Oil seeds	1 781	10 945	21 516
Sugar	27 248	101 954	93 349
Preparation of meat fish and crustaceans	2 079	9 871	8 883
	449 958	724 873	845 374
Agriculture as % of total imports	12	14	15

Foreign investment is encouraged by the Government through the attractive profit repatriation, tax incentives and the establishment of a one stop group with the authority to approve foreign investment. However foreign investment has been slow because of the many difficulties in conducting business in Indonesia. Inflation has also been a serious discouragement in recent years but has been brought under control since the collapse of Pertamina with the tight credit policy that followed. Inflation is currently running at about 12 per cent in Indonesia.

Under President Suharto's rule, Indonesia has embarked on five year development plans called Pelitas. The first of these from 1969 to 1974 was a modest plan with total expenditure equal to half the national income. Emphasis in this first plan was given to the development of an efficient infra structure to assist agriculture and encourage foreign investment. Agriculture received 78.3 per cent of the US\$3 851 million spent in Pelita I. Three quarters of agriculture's allocation was spent on the construction and maintenance of irrigation systems.

Other agricultural funds were spent on developing BUUDs and KUDs which are village level co-operatives. These village units service an area of about 1 000 hectares of irrigation land. Associated with the co-operative are one extension worker, one farmer co-operative, one office of the people's bank, and one retail shop to service the villagers' needs. These BUUDs were utilised as a means of administering the Bimas schemes (i.e. Mass intensification schemes). The Bimas schemes in the first Pelita were designed to increase the production of rice alone by the provision of credit advances for the purchase of fertiliser, superior seed varieties, pest and disease control chemicals.

To a certain extent the scheme was successful in that average rice yields increased from 2 to 2.5 tonnes per hectare. Because of the emphasis on rice, other food crops were neglected. Farmer repayment rates on loans under the Bimas schemes varied from 30 per cent to 90 per cent of the scheduled repayment rates. In 1975 the Bimas schemes were extended to cover corn, soyabean, cassava and groundnuts.

In the second five year plan or Pelita II, (1974-79) the total expenditure was set at US\$12 650 million - a 321 per cent increase over the first plan. Agriculture's share of this was 19.1 per cent being spent mainly in the development of the BUUDs. Currently, in Indonesia's 27 provinces, there are about 5 000 village units, 6 000 extension workers 3 500 credit banks and 4 000 co-operatives at the village level.

The problems encountered by the Indonesian planners is that areas requiring the greatest attention contribute least to export income. The relatively under developed Kalimantan and Sumatra contribute the greatest to export earnings (mainly through oil) and also offer the greatest potential for development. However the social pressures originating in populated Java necessitate the spending of considerable funds in this island. This conflict has led to considerable dissatisfaction amongst the occupants of Sumatra in particular and Kalimantan.

Agriculture in the Indonesian economy

Sixty-two per cent of the Indonesian workforce (45 million) is employed in agriculture and 70 per cent of the total population live in rural areas. The size of land holdings is therefore very small -

leading to considerable under-employment. The ownership of land is inequitable in that 60 to 70 per cent of land is owned by 20 per cent of rural families. There is a high level of indebtedness amongst peasants and high interest rates and rents. As such payments are often made in kind, farmers retain about 30 per cent of their harvest for personal consumption.

Rice

Rice is by far the most important crop to Indonesia. It is grown under irrigation on 86 per cent of total area planted. The Bimas schemes operating since 1967 were instrumental in increasing rice yields. Padi production for both irrigated and non-irrigated land has gradually increased (see Table 11) but is still inadequate to meet Indonesia's domestic requirements. Rice is imported in large quantities through BULOG - the Government authority responsible for maintaining a supply of rice to Indonesian consumers. Imports have fluctuated from half a million tonnes in 1970 to two million tonnes in 1977.

TABLE 11
Indonesian padi production 1973 to 1976

	Wet padi		Dry padi	
	Area (000's ha)	Quantity (000 000 tonnes)	Area (000's ha)	Quantity (000 000 tonnes)
1973	7 064	25 901	1 340	2 189
1974	7 340	27 531	1 168	1 846
1975	7 334	27 265	1 161	1 936
1976	7 226	28 282	1 137	1 930

Indonesia's rice requirements are increasing at an increasing rate. Their per capita consumption is gradually increasing on top of a population growth rate of about 1.1 per cent per annum.

The major suppliers of rice to Indonesia are the cheaper producing countries such as Thailand, Burma and China. The United States of America export significant quantities to Indonesia at a low average price. Some of the USA rice is exported to Indonesia under P.L.480 at prices which are less than world prices. Australian rice exports to Indonesia have increased over the last three years from 10 000 tonnes in 1975 to 109 000 tonnes in 1977. This was all produced in the eastern States.

Indonesian rice supplies are administered by BULOG - both the re-distribution of domestic production between the islands and total foreign imports. Rice imports are financed by Government funds through BULOG and are sold internally, to wholesalers, sometimes at prices below import prices. The Indonesian Government is prepared to accept the losses to keep consumers supplied with low priced rice.

The Government's policy of maintaining reasonably priced rice for consumers is hard on producers. The Government partially overcomes this by heavily subsidising agricultural inputs such as fertiliser (10 per cent of import prices) and pesticides (70 per cent of import prices). On top of this, the Government pays for all handling and distribution costs of these inputs to the village level through the Department of Trade.

BULOG collects rice through the village level co-operatives in return for credit advanced under the Bimas schemes prior to planting. When drought conditions are experienced, BULOG's deliveries are the first to suffer and stockpiles diminished dramatically. Price control becomes less effective and BULOG incurs huge losses as foreign reserves are spent on large imports of rice.

Throughout Pelita I, BULOG transhipped approximately 500 tonnes of rice within Indonesia because of regional shortages and imported between one half to one and a half million tonnes for local distribution. Despite these injections, prices have fluctuated both between regions and between years.

Once the Bimas programmes became more closely associated with the BUUDs and KUDs, BULOG's performance in managing the Indonesia rice supply improved. Not only were deliveries more reliable but the management expertise of BULOG improved after their experience in Pelita I.

The major disadvantage confronting BULOG in maintaining a supply of rice at a reasonable price to the consumer is its lack of information - both from the production and consumption aspects. Consequently, injections or withdrawals of rice are not always timely nor of sufficient quantity to have the desired effect. Furthermore its interpretation of the market signals have not, by their own admission, always been correct. BULOG freely admits the performance during Pelita I was marginal, but hasten to add they are "learning by doing".

Despite the development funds being spent on increasing rice production, Indonesia will continue to be a net importer for some time to come. Although the modernisation of irrigation facilities, the use of improved seed, fertiliser and pesticides have resulted in a marked increase in production, domestic supplies remain inadequate in meeting the demands of the rapidly increasing population and increasing per capita consumption.

Sheep

Although largely Muslim, Indonesians eat very little sheepmeat. Their per capita consumption of 0.1 kg per head per year is derived almost totally from domestic sheep (numbering 3.7 million). Imports of sheepmeats from all sources have been less than 60 tonnes each year for the past three years. The annual kill of sheep in 1975 was just over a quarter of a million sheep. Most of the imported sheepmeat is consumed by the tourist and expatriate population (0.4 and 1.139 million respectively in 1975).

Cattle

Meat from bovine animals is being consumed at increasing rates in Indonesia. Whilst average per capita consumption is relatively small, it has shown a definite increase over the past six years to the present

level of 1.5 kg per head per year. Two categories of trade in beef should be considered in this figure. Firstly, the expatriate/tourist trade sold through the major hotels and secondly the native cattle killed at village level for special occasions and supplied through abattoirs for urban consumption. The former is high quality chilled and frozen beef, either air flown or imported via Singapore. The major supplier of this beef has been Australia in the past with significant quantities of prime beef being supplied by New Zealand and the U.S.A. To date annual imports have been of the order of 1 000 tonnes. It is unlikely that significant beef price increases will affect the size of this market for the prime beef. Most of the Australian meat supplied to Indonesia is from Queensland and New South Wales. In the three years since 1974, Western Australia's annual supplies were 8, 2 and 0 per cent of the Australian beef exports to Indonesia.

New Zealand in particular, and America have, over the past three years, been increasing their share of this premium market. The impression obtained from importers supplying this market was that New Zealand "air flown" beef was of superior quality to meat supplied from Australia. Certainly its appearance surpassed that of Australian beef available in supermarket outlets where the rich Indonesians and expatriates buy their meat. New Zealand's promotional efforts have, no doubt, also contributed significantly to this attitude. The Australian Meat Board has obviously promoted meat in Indonesia in the past, as evidenced by the display of dilapidated posters, but they do not compare with display material used by the New Zealand Meat Board.

There is potential for small quantities of third class beef for the local consumers but I would suggest this market is very sensitive to price movements.

Offals are also consumed by the local population in small but useful quantities. One of the six major Indonesian meat importers reported a market for 1 to 2 containers of offal per month (liver, tail and tripe).

The major problem with meat shipments to Indonesia is the long delay in clearing goods from customs. There can be up to four weeks delay necessitating storage whilst documentation is processed. The retail cost is approximately 100 per cent of the c and f value after the various taxes, levies, etc, have been paid. For this reason it is important to utilise an experienced importer - one who knows how to keep goods moving through customs, particularly on consignments with a short storage life. Currently all meat imports go through Singapore because of the expertise in dealing with Indonesia by Singapore traders and secondly because of the lack of container handling facilities in Jakarta. The latter should be rectified by the end of 1978 when container facilities are expected to be operational at Tanjung Priok - Jakarta's port.

Whilst meat exports offer some potential in Indonesia, the greatest potential exists in the export of live cattle. This includes both dairy and beef animals.

Indonesia's imports of milk products in 1976 were valued at \$A34.8 million - the equivalent of 400 000 tonnes of fresh milk. It is planned that the milk equivalent imports be reduced to approximately 282 000 tonnes by importing milking cows for distribution throughout Indonesia. In 1978 the Indonesian Government planned on importing 5 000

milking cows. Already a tender for 1 200 heifers destined for West Javanese farmers has been called. Indonesian officials in the Animal Husbandry Branch have developed a close liaison with cattle trading firms in both Queensland and New South Wales - so much so that in a recent contract, these two States were specified as the only eligible supply States. Rationale for such specification could only be on climatic grounds. Climatic conditions are not the only limiting factor regarding milk production in Indonesia.

The quality of pasture and feed supplements are such that the imported animals from Australia to date, have not maintained their Australian production levels. Imports of a similar number of dairy cattle will be required under Pelita III which commences in April 1979.

The Indonesians also have plans to import approximately 40 000 to 48 000 cattle over the next five years as part of their transmigration policy. Under this policy families are resettled from the densely populated islands of Java and Madura to the outer less populated areas of Southern Sumatra and Kalimantan. An entire infra-structure is established, similar to the Malaysian Fel'da Schemes, prior to the families, occupation. As well as being given the opportunity to farm a larger unit, farmers are provided attractive loans, advances for carry on, etc under the transmigration scheme. The Government also provides one beast for every two families resettled.

Cattle required in this resettlement scheme must be of *Bos Indicus* stock and originate from areas below the 18th Parallel South (to prevent the risk of the introduction of the blue tongue virus). There are other restrictions nominated by the Indonesian officials, but these could easily be met by Australian livestock traders.

The potential market for the export of *Bos Indicus* cattle to Indonesia is hampered only by the 18th Parallel restriction. It would be well worthwhile requesting that the Indonesian Government accept cattle certified blue tongue virus free by a competent authority even though they originate north of the 18th Parallel South. Many cattle in the northern areas of the State would then qualify. Furthermore Western Australia must seek Indonesian acceptance as an "eligible supply State."

Temperate vegetables

Vegetables form an important part of the Indonesian diet. Average annual consumption of all vegetables is about 30 kg per head. They are grown widely by the peasant farmers on the small holdings for their immediate food requirements.

There are areas in the highlands where vegetable production is carried out more extensively. Produce from such areas is marketed in the nearby villages or transported to the major markets of the larger cities. The vegetable growing areas are situated in highland areas in the mountainous backbone of Java. Another important vegetable growing area is in North Sumatra at Barastagi. This area supplies Peninsula Malaysia, Penang in particular, with large quantities of vegetable in competition with the Cameron Highland vegetables. Some of the vegetables are smuggled across the Straits of Malacca because of the import duties levied on fresh fruit and vegetables into Malaysia.

Vegetables are grown with limited fertiliser, both organic and inorganic, and usually with inadequate pest control. The quality is generally poor.

West Australian vegetables imported to Indonesia are sold through supermarket outlets and some of the more expensive markets. They are consumed by the rich locals and the expatriate population who can afford to pay the higher prices. There is, however, one notable exception and that is for onions.

Indonesian imports of onions amount to about 1 000 tonnes per annum. The major supplier is New Zealand followed by Australia and the Netherlands. Western Australia supplies about 15 per cent of total onion exports to Indonesia from Australia. Our southern hemisphere competitor, New Zealand, supplied 377 tonnes compared to Australia's 279 tonnes in 1977.

One Indonesian importer advised of a market for 50 tonnes of onions per month. However, he hastened to add that continuity of supply was a must during the southern hemisphere season and that the onions must arrive in satisfactory condition, i.e. unsprouted and unaffected by fungal attack. He complained that both of these problems occurred with past imports of Western Australian onions.

Temperate fruits

Currently all apples and pears exported to Indonesia are handled by the Wirontono Group who, because of their prawning activities, have extensive cold storage facilities throughout Indonesia. Their cool room facilities in Jakarta are being expanded to handle larger quantities of fruit and vegetables and also to commence trading in meats.

Australian fruit trade with Indonesia is somewhat handicapped by the 100 per cent duty on c and f values that is paid before the fruit can be distributed. Under invoicing is a common practice amongst fruit traders so that prices to the consumer may be kept to a minimum.

The Indonesian Government, in an attempt to prevent this under invoicing, has established a list of check prices for each imported commodity. This forms the basis for the official duties to be charged.

The check price system is currently under review as Indonesian officials are touring major supply countries to equate the Indonesian check prices with the true market prices operating in the supply countries. Some check prices are listed in Table 12.

TABLE 12
Indonesian check prices from some imported fruits 1978

Australian	Packham pears	US\$11.00/bushel
Australian	Delicious apples	US\$11.00
Australian	Granny Smith	US \$9.80
New Zealand	Delicious apples	US \$9.80

The fact that New Zealand has a lower check price than Australian equivalent means they have an immediate price advantage in the market.

The poor distribution systems in Indonesia prevent imported fruit from being displayed in their best condition. Fruit is easily damaged when transported in unrefrigerated lorries over the rough roads throughout Java. Most of the fruit is sold in Jakarta (population 5 million) and imported fruit is purchased by the more affluent local population together with the expatriate population. There are ample cheap tropical fruits which meet the demands of the local people.

Until handling conditions improve and wastages are reduced, this market is unlikely to increase beyond its present level. The number of fruit importers is restricted by cool storage facilities. The wholesalers and retail traders - hawkers, etc. have no cool storage facilities and consequently fruit is stored by the importer. The Wirontono Group obtain apple and pear supplies through a Singapore dealer who takes a commission on each transaction.

Containerised service exists to Singapore where the fruit is put on to conventional vessels for transshipment by feeder vessels to the major Indonesian ports. Indonesian importers are hopeful of increased trade when the container handling facilities become operational in 1979.

General restrictions to trade

Australian trade in agricultural commodities is likely to be hampered by three barriers.

1. The high rate of tariff/import tax, etc. leads to increased retail prices of 100 per cent on c and f values. Australian fruit, as a result sells for approximately \$A4/kg which is well outside the average consumer's budget. Whilst this excessive import restriction exists, Western Australian fruit and vegetables can only be sold to the local affluent, the expatriates and the hotel trade.
2. The present lack of direct shipping. Only the Shipping Corporation of India Ltd provides a direct service from Australian ports (Fremantle included) to Jakarta and Surabaya. This situation should be rectified when container facilities are completed at Jakarta's port.
3. The experience necessary for direct trade with Indonesia. There are problems associated with keeping perishable items moving through customs. Australia has in the past utilised the experience of the Singapore based Chinese traders who have developed the necessary contacts and expertise required for the task.

These latter two are more easily overcome. However, the first is the largest and most difficult barrier to trade. Not only does the check price system limit the market on which our commodities can be sold but the inequitable way in which the check prices are established for the different supply countries makes competition on a reduced market particularly difficult. For this reason it is imperative that our quality be very closely checked, particularly on all perishable items exported from Western Australia.

ANNEX A

TRANSPORT FACILITIES TO SOUTH EAST ASIA

Considering Western Australia's geographical proximity to South East Asia it is surprising that freight rates do not play a more significant role in Western Australia's ability to compete against the Eastern States and other southern hemisphere countries in South East Asian markets.

Four of the five major lines offering regular services to South East Asia belong to the Singapore and West Malaysia Outward Bound Conference which established Australia-wide rates for the various cargoes. One line withdrew from the conference and now offers freight approximately 7½ per cent cheaper than 1978 conference rates. The conference sometimes accepts requests to reduce shipping rates between Australia and South East Asia. The resulting reduced rates apply to the whole of Australia and not preferentially to the requesting State. On some commodities there is a slight freight cost advantage to Western Australian exporters, e.g. apples. This is not significant enough to provide Western Australian commodities with a distinct competitive advantage in South East Asian markets.

The most significant development in trade between Australia and South East Asia is the introduction of the "roll on roll off" container service provided by the three Anro vessels. These vessels have excellent freezer and chiller space. Each container's interior temperature is monitored throughout the journey.

The Anro vessels, run by a consortium of four shipping companies currently service eastern States ports, Fremantle then Singapore, Port Kelang then returns via eastern States ports. As of November 1978 Tanjung Priok - the port of Jakarta will have completed construction of facilities to accept cargoes from 'roll on roll off' vessels.

The Anro service currently provides three sailings per month. This could increase if an Indonesian shipping company were to join the Anro consortium and provide an additional vessel. The Anro vessels sail an east to west direction between Australian ports which means Western Australian commodities are on board ship for five days compared to 13 days (approximately) from the eastern States ports. Whilst storage facilities on board are excellent, perishable goods such as fresh vegetables from Western Australia arrive in better condition than do those from the eastern States.

The shipping Corporation of India have vessels travelling both east to west and west to east. They call at Indian ports after South East Asia before returning to Australia. The turn-around period is approximately 50 days. Previously they provided the only direct service to Indonesia calling at Surabaya and Tanjung Priok. The Jumbo Line have vessels travelling in both directions around Australia to South East Asia. Some of their routes service only the eastern States ports direct to South East Asia. Lack of shipping space is certainly no restriction to Western Australian trade with South East Asia as surplus capacity, of all cargo types exists between Fremantle and Singapore.

The 1978 conference rates for agricultural commodities of interest are listed in Annex E. These freight rates are relatively high by comparison with other countries brought about partly by high stevedoring charges.

Air transport

Air transport is being utilised by importers in South East Asia to supply the more expensive, exclusive and perishable items mainly for the hotel trade. Strawberries, grapes, lettuce and prime chilled beef cuts are currently being exported by air to Singapore, Jakarta and Kuala Lumpur.

S.A.T.S. - Singapore Air Terminal Services who produce in the vicinity of 50 000 in flight meals daily, fly in large quantities of fresh vegetables on a regular basis from Western Australia utilising the vacant cargo space on their parent company's craft (Singapore Airlines).

Tourist hotels in Singapore advertise air flown beef (usually New Zealand beef) as do the three major supermarket outlets - Coldstorage, Fitzpatrick's and Jasons.

Freight rates vary depending on the type of product being flown. Freight on grapes for example costs 68 cents per kg from Sydney and Melbourne compared to 74 cents per kg from Perth (1977 prices). Air freight is unlikely to shift large quantities of a commodity because of the high cost of transport. However, one market that offers potential for growth is that of air flown prime meat currently being supplied by New Zealand. Increased utilisation of air transport could provide Western Australia with a better landed product and enable keener competition to the already well established New Zealand product.

ANNEX B

SELECTED COMMODITY IMPORTS AND RE EXPORTS - SINGAPORE 1975-1977

COMMODITY Country of Origin	IMPORTS			COMMODITY Country of Destination	RE-EXPORTS		
	1975	1976	1977		1975	1976	1977
LIVE CATTLE (Nos)							
Australia	936	1 917	3 887	Peninsula Malaysia	41	289	1 789
TOTAL	936	1 917	3 887	TOTAL	41	289	1 789
W.A. Exports	575	1 485	3 582				
% of Australia	61%	78%	92%	% re-exported	4%	15%	46%
LIVE SHEEP (Nos)							
Australia	110 176	142 009	129 982	Peninsula Malaysia	19 688	24 970	21 375
TOTAL	110 176	142 009	129 982	TOTAL	19 688	24 970	21 375
W.A. Exports	101 583	112 921	154 047				
% of Australia	92%	80%	119%	% re-exported	18%	18%	16%
BEEF AND VEAL (tonnes)							
Australia	4 461	5 783	8 502	Peninsula Malaysia	558		966
New Zealand	2 382	2 571	2 118	Sarawak	310		647
				Bangladesh	139	n.a.	249
TOTAL	7 121	8 701	10 981	TOTAL	1 315		2 307
W.A. Exports	1 309	1 463	2 273				
% of Australia	29%	25%	27%	% re-exported	19%		21%

COMMODITY Country of Origin	IMPORTS		
	1975	1976	1977
MUTTON (tonnes)	4 005	3 507	3 798
New Zealand	1 034	991	1 215
TOTAL	5 057	4 520	5 025
W.A. Exports	1 713	1 856	1 737
% of Australia	43%	53%	46%
EDIBLE OFFALS (tonnes) excluding pig offal			
Australia	2 429	2 286	2 723
TOTAL	2 889	2 552	3 134
W.A. Exports	759	692	1 030
% of Australia	31%	30%	38%
FATS OF CATTLE/SHEEP/ GOATS (tonnes)			
Australia	5 722	9 688	6 550
New Zealand	329	282	2 612
TOTAL	6 062	9 970	10 688
W.A. Exports	2 151	630	1 166
% of Australia	38%	7%	18%

COMMODITY Country of Destination	RE-EXPORTS		
	1975	1976	1977
Peninsula Malaysia	294		525
Brunei	60	n.a.	84
Israel	103		
TOTAL	579		736
% re-exported	11%		15%
Peninsula Malaysia	178	192	221
Sarawak	155	206	211
TOTAL	425	480	517
% re-exported	15%	19%	16%
Burma	1 223	5 300	3 804
Pakistan			1 466
Bangladesh	813	432	662
Tanzania		2 000	
TOTAL	3 133	8 695	9 010
% re-exported	52%	87%	84%

COMMODITY Country of Origin	IMPORTS			COMMODITY Country of Destination	RE-EXPORTS		
	1975	1976	1977		1975	1976	1977
FULL CREAM MILK (tonnes) SOLID (incl. Powder)							
Peninsula Malaysia	1 042	1 121	1 764	Thailand	27	91	201
Australia	1 726	1 302	1 443	Pakistan		432	624
New Zealand	752	2 994	1 608	Japan	33	500	529
Netherlands	5 724	3 007	1 207	Peninsula Malaysia	511		246
				Vietnam	448	442	
TOTAL	12 125	9 837	7 918	TOTAL	1 373	1 464	2 104
W.A. Exports	-	-	-				
% of Australia	-	-	-	% re-exported	11%	15%	27%
SKIMMED MILK FOR HUMAN CONSUMPTION (tonnes)							
New Zealand	4 339	7 327	5 778	Nepal	2 832	146	172
United Kingdom	127	496	3 256	Pakistan	446	992	415
Australia	1 822	3 160	2 078	Bangladesh	469	18	227
Irish Republic	-	15	1 264	Peninsula Malaysia		312	
				Thailand	1 578		
TOTAL	8 760	12 101	14 472	TOTAL	4 965	1 786	967
W.A. Exports	150	214	-				
% of Australia	8%	7%	-	% re-exported	57%	15%	7%

COMMODITY	1975	IMPORTS	1977
Country of Origin		1976	

SKIMMED MILK FOR ANIMAL
FEED SOLID INC. POWDER
(tonnes)

Australia	439	1 635	1 154
New Zealand	2 276	1 429	455
TOTAL	2 831	3 735	1 918
W.A. Exports	-	-	-
% of Australia	-	-	-

BUTTER (NOT CANNED)
(tonnes)

New Zealand	848	1 285	1 399
Australia	1 035	1 063	1 316
TOTAL	1 935	2 402	2 919

CHEESE (tonnes)

Australia	471	457	364
New Zealand	142	199	178
Netherlands	158	162	160
TOTAL	1 133	1 173	1 131
W.A. Exports	-	-	-
% of Australia	-	-	-

COMMODITY	1975	RE-EXPORTS	1977
Country of Destination		1976	

Peninsula Malaysia	952	857	243
Sarawak		84	214
Netherlands	554		
TOTAL	1 588	1 087	465
% re-exported	56%	29%	24%

Peninsula Malaysia	130	105	105
Pakistan	15	85	114
Sabah	48		
TOTAL	346	448	363
% re-exported	18%	19%	12%

Peninsula Malaysia	58	47	50
Brunei	37	43	44
Thailand	21	18	17
TOTAL	195	173	168
% re-exported	17%	15%	15%

IMPORTS				RE-EXPORTS			
COMMODITY Country of Origin	1975	1976	1977	COMMODITY Country of Destination	1975	1976	1977
WHEAT (tonnes)							
Australia	166 479	120 858	239 888	Peninsula Malaysia	17 932	9 424	48 291
U.S.A.	44 238	34 768	48 573	Sarawak	1 228	1 146	2 833
				Sri Lanka			5 339
				Aden		1 250	
				Other West Asia	4 178		
TOTAL	211 387	156 793	338 415	TOTAL	26 736	15 373	65 500
W.A. Exports	90 777	35 394	30 935				
% of Australia	55%	29%	13%	% re-exported	13%	10%	19%
BARLEY (tonnes)							
Netherlands	127	217	146	Peninsula Malaysia	168	244	177
Thailand	24	65	63				
Australia	21	23	16				
TOTAL	177	306	237	TOTAL	168	245	180
W.A. Exports	-	-	-				
% of Australia	-	-	-	% re-exported	95%	80%	76%
OATS (tonnes)							
Australia	658	739	721	Brunei	2	10	55
				Peninsula Malaysia	21	37	41
				Sarawak	18	41	-
TOTAL	661	739	736	TOTAL	54	93	104
W.A. Exports	94	195	163				
% of Australia	14%	26%	23%	% re-exported	8%	13%	14%

COMMODITY Country of Origin	IMPORTS		
	1975	1976	1977
RICE (tonnes)			
Thailand	78 282	142 414	128 619
Vietnam	11 004	2 200	4 454
Pakistan	684	1 090	3 603
Burma	1 084	4 871	3 207
Australia	10 713	1 816	1 512
China	10 158	6 036	
TOTAL	114 093	158 583	141 720
% of Australia	9%	1%	1%
APPLES (tonnes)			
Australia	11 419	5 610	6 231
China	9 267	5 204	8 743
U.S.A.	5 292	6 484	6 685
New Zealand	4 004	4 182	4 517
TOTAL	31 227	22 690	27 156
W.A. Exports	4 241	2 931	3 760
% of Australia	37%	52%	60%

COMMODITY Country of Destination	RE-EXPORTS		
	1975	1976	1977
United Kingdom			640
Mauritius			230
Bangladesh			293
Sabah	2 050	651	
Australia		90	
Peninsula Malaysia	9 364		
Sri Lanka	4 500		
TOTAL	17 226	1 013	2 000
% re-exported	15%	1%	1%
Peninsula Malaysia	6 663	3 760	3 980
Sabah	953	664	623
Sarawak	499	311	416
Brunei	855	810	911
TOTAL	9 273	5 576	5 989
% re-exported	30%	25%	22%

IMPORTS				RE-EXPORTS			
COMMODITY Country of Origin	1975	1976	1977	COMMODITY Country of Destination	1975	1976	1977
PEARS AND QUINCES (tonnes)							
Australia	5 829	4 973	4 781	Brunei		346	376
China	11 903	11 439	11 245	Peninsula Malaysia		1 757	1 931
Korea	2 239	1 180	1 974	Sabah	n.a.	148	134
U.S.A.	287	476	900	Sarawak		130	166
TOTAL	20 282	18 132	18 900	TOTAL		2 415	2 631
W.A. Exports	1 136	1 442	1 088				
% of Australia	19%	29%	23%	% re-exported		13%	14%
FRESH GRAPE'S (tonnes)							
Australia	703	430	410	Peninsula Malaysia	529	449	382
U.S.A.	2 787	2 339	1 611	Sabah	131	109	78
Thailand	301	93	361	Sarawak	44	34	26
Spain	164	293	228	Brunei	47	52	55
TOTAL	3 940	3 156	2 611	TOTAL	755	646	544
W.A. Exports	248	179	134				
% Australia	28%	42%	33%	% re-exported	19%	20%	21%
POTATOES (tonnes)							
Australia	6 102	806	3 874	Peninsula Malaysia	12 189	13 725	15 950
China	12 730	14 047	14 573	Sabah	1 055	607	1 024
Netherlands	4 729	349	5 686	Brunei	717	791	790
Taiwan	3 320	9 223	7 842	Sarawak	840	860	1 058
TOTAL	29 348	31 708	34 554	TOTAL	15 633	16 589	19 126
W.A. Exports	1 325	3 721	1 204				
% Australia	22%	462%	31%	% re-exported	53%	52%	55%

IMPORTS				RE-EXPORTS			
COMMODITY	1975	1976	1977	COMMODITY	1975	1976	1977
Country of Origin				Country of Destination			
TOMATOES FRESH (tonnes)							
Peninsula Malaysia	6 734	6 007	6 384	Hong Kong	580		
China	62	223	540	Sarawak	141		
Australia	1	4	25	Brunei	108	n.a.	n.a.
TOTAL	6 798	6 372	6 966	TOTAL	922		
ONIONS (tonnes)							
Australia	837	1 101	1 316	Peninsula Malaysia	8 739	9 733	15 081
New Zealand	343	613	261	Sabah	2 193	2 906	3 017
China	6 337	4 305	5 864	Sarawak	1 995	2 066	2 287
India	12 001	15 440	10 596				
Netherlands	2 763	1 154	8 133				
TOTAL	25 649	25 655	30 260	TOTAL	14 117	15 952	22 437
W.A. Exports	743	982	1 053				
% of Australia	89%	89%	80%	% re-exported	55%	62%	74%
LEAFY OR STEM VEGES (tonnes)							
Peninsula Malaysia	19 079	26 906	14 238	Peninsula Malaysia	925	856	1 074
U.S.A.		550	652	Sarawak	22	70	93
Taiwan		265	231	Hong Kong		148	
Australia	621	138	222				
China	487						
TOTAL	20 577	28 297	15 499	TOTAL	1 062	1 155	1 385
W.A. Exports*	3 415	3 009	3 464				
% Australia	-	-	-	% re-exported	5%	4%	9%

* Carrots, cauliflowers, lettuce, others.

ANNEX C

TRADE STATISTICS - PENINSULA MALAYSIA - 1975, 1976

	1975 Quantity (Nos)	1976 Quantity (Nos)
LIVE ANIMALS		
Cattle from Australia	4 275	1 347
Total Cattle	5 103	1 864
Sheep from Australia	26 480	32 845
Total Sheep	26 654	32 925
MEATS	(tonnes)	(tonnes)
Beef and veal from Australia	2 410	4 051
from New Zealand	551	561
Total Beef and Veal	3 017	4 674
Sheep and goat meat from Australia	1 960	2 666
from New Zealand	379	491
Total Sheep and Goat Meat	2 340	3 159
GRAINS		
Wheat from Australia	264 318	363 406
Total Wheat	273 911	398 213
Barley from Australia	23	38
Total Barley	305	300
Oats from Australia	2 720	4 490
Total Oats	2 720	4 490
FRUIT		
Apples from Australia	3 469	1 539
Total Apples	7 147	5 160
Grapes from Australia	121	91
Total Grapes	557	435
Pears and quinces from Australia	520	277
Total Pears and quinces	3 016	1 859
VEGETABLES		
Potatoes from Australia	1 715	755
Total Potatoes	23 847	23 379
Onions from Australia	258	256
Total Onions	41 751	43 094
Cabbages from Australia	0.5	0.3
Total Cabbages	9 662	6 927

IMPORTS				RE-EXPORTS			
COMMODITY	1975	1976	1977	COMMODITY	1975	1976	1977
Country of Origin				Country of Destination			
TOMATOES FRESH (tonnes)							
Peninsula Malaysia	6 734	6 007	6 384	Hong Kong	580		
China	62	223	540	Sarawak	141		
Australia	1	4	25	Brunei	108	n.a.	n.a.
TOTAL	6 798	6 372	6 966	TOTAL	922		
ONIONS (tonnes)							
Australia	837	1 101	1 316	Peninsula Malaysia	8 739	9 733	15 081
New Zealand	343	613	261	Sabah	2 193	2 906	3 017
China	6 337	4 305	5 864	Sarawak	1 995	2 066	2 287
India	12 001	15 440	10 596				
Netherlands	2 763	1 154	8 133				
TOTAL	25 649	25 655	30 260	TOTAL	14 117	15 952	22 437
W.A. Exports	743	982	1 053				
% of Australia	89%	89%	80%	% re-exported	55%	62%	74%
LEAFY OR STEM VEGES (tonnes)							
Peninsula Malaysia	19 079	26 906	14 238	Peninsula Malaysia	925	856	1 074
U.S.A.		550	652	Sarawak	22	70	93
Taiwan		265	231	Hong Kong		148	
Australia	621	138	222				
China	487						
TOTAL	20 577	28 297	15 499	TOTAL	1 062	1 155	1 385
W.A. Exports*	3 415	3 009	3 464				
% Australia	-	-	-	% re-exported	5%	4%	9%

* Carrots, cauliflowers, lettuce, others.

ANNEX C

TRADE STATISTICS - PENINSULA MALAYSIA - 1975, 1976

	1975 Quantity (Nos)	1976 Quantity (Nos)
LIVE ANIMALS		
Cattle from Australia	4 275	1 347
Total Cattle	5 103	1 864
Sheep from Australia	26 480	32 845
Total Sheep	26 654	32 925
MEATS	(tonnes)	(tonnes)
Beef and veal from Australia	2 410	4 051
from New Zealand	551	561
Total Beef and Veal	3 017	4 674
Sheep and goat meat from Australia	1 960	2 666
from New Zealand	379	491
Total Sheep and Goat Meat	2 340	3 159
GRAINS		
Wheat from Australia	264 318	363 406
Total Wheat	273 911	398 213
Barley from Australia	23	38
Total Barley	305	300
Oats from Australia	2 720	4 490
Total Oats	2 720	4 490
FRUIT		
Apples from Australia	3 469	1 539
Total Apples	7 147	5 160
Grapes from Australia	121	91
Total Grapes	557	435
Pears and quinces from Australia	520	277
Total Pears and quinces	3 016	1 859
VEGETABLES		
Potatoes from Australia	1 715	755
Total Potatoes	23 847	23 379
Onions from Australia	258	256
Total Onions	41 751	43 094
Cabbages from Australia	0.5	0.3
Total Cabbages	9 662	6 927

ANNEX D
INDONESIAN IMPORTS 1975-1977

COMMODITY		1975		1976		1977	
Country of Origin		Quantity	value \$US '000's	Quantity	value \$US '000's	Quantity	value \$US '000's
BREEDING COWS (No.)							
Australia		63	45	-	-	1 830	176
New Zealand		-	-	-	-	8	37
TOTAL		63	45	-	-	1 838	213
LIVE SHEEP							
Australia		-	-	-	-	10	7
MEAT FROM BOVINE ANIMALS (tonnes)							
New Zealand		66	149	143	274	268	249
Australia		224	423	307	561	208	1 808
U.S.A.		216	40	122	106	188	309
Singapore		93	150	137	212	73	164
U.K.		2	3	-	-	9	8
TOTAL		614	787	719	1 164	751	2 549
W.A. Exports		19	-	6	-	-	-
% of Australia		8%	-	2%	-	-	-
MEAT FROM SHEEP AND GOATS (tonnes)							
U.S.A.		2	4	-	-	7	42
New Zealand		7	15	10	15	7	13
Australia		-	-	48	66	7	6
U.K.		-	-	1	1	2	5
TOTAL		12	24	59	83	23	67
W.A. Exports		3	-	-	-	-	-
% from W.A. of Australia		43%	-	-	-	-	-

COMMODITY	1975		1976		1977	
Country of Origin	Quantity	value \$US '000's	Quantity	value \$US '000's	Quantity	value \$US '000's
POTATOES (tonnes)						
Australia	18	4	48	22	8	3
U.S.A.	-	-	2	1	7	4
Netherlands	1	-	8	3	3	1
Malaysia	-	-	-	-	1	1
TOTAL	20	5	72	30	22	9
TOMATOES (tonnes)						
Hong Kong	-	-	-	-	100	23
China	25	7	-	-	20	4
Malaysia	-	-	3	2	5	4
Australia	3	2	11	14	3	3
Singapore	2	1	24	7	-	-
TOTAL	30	10	39	23	130	35
CABBAGE (tonnes)						
Australia	1	-	13	10	1	0.5
Singapore	-	-	-	-	2	0.5
TOTAL	2	1	20	27	3	1
ONIONS (INCLUDING SHALLOTS) (tonnes)						
New Zealand	19	2	305	54	377	87
Australia	76	16	184	37	279	62
Netherlands	25	3	45	6	105	27
China	49	5	7	1	35	7
India	41	4	68	10	32	5
Hong Kong	103	14	-	-	-	-
Singapore	167	21	-	-	-	-
TOTAL	524	69	720	128	905	202
W.A. Export	-	-	32	-	35	-
% of Australia	-	-	17%	-	13%	-

COMMODITY		1975		1976		1977	
Country of Origin		Quantity	value \$US '000's	Quantity	value \$US '000's	Quantity	value \$US '000's
OTHER VEGETABLES (tonnes)							
China		64	18	48	13	60	13
Australia		68	38	59	62	33	16
U.S.A.		5	4	7	7	19	18
New Zealand		-	-	-	-	15	4
Singapore		116	23	-	-	-	-
TOTAL		305	104	218	134	149	66
GRAPES (FRESH) (tonnes)							
U.S.A.		1 104	334	2 212	633	1 316	1 038
Australia		152	81	236	109	198	188
Chile		-	-	-	-	84	67
China		48	16	3	1	-	-
TOTAL		1 341	443	2 459	747	1 603	1 297
W.A. Exports		64	-	187	-	130	-
% of Australia		42%	-	79%	-	66%	-
APPLES (FRESH) (tonnes)							
U.S.A.		1 209	354	2 074	709	2 674	1 500
Australia		1 696	509	1 608	473	1 058	541
New Zealand		727	221	891	249	743	412
Canada		227	77	669	226	508	231
China		802	164	450	121	473	207
South Korea		447	61	-	-	-	-
TOTAL		5 169	1 404	5 887	1 840	5 723	3 000
W.A. Exports		139	-	180	-	133	-
W.A. Exports as % of Australian Exports		8%	-	11%	-	13%	-

COMMODITY

1975

1976

1977

Country of Origin

Quantity
value
\$US '000'sQuantity
value
\$US '000'sQuantity
value
\$US '000's

PEARS AND QUINCES (FRESH) (tonnes)

South Korea	958	228	770	184	990	413
China	613	159	584	171	920	406
Australia	337	103	331	103	468	244
U.S.A.	52	17	91	28	35	18
TOTAL	2 010	522	1 881	510	2 425	1 087
W.A. Exports	22	-	57	-	-	-
% of Australia	7%	-	17%	-	-	-

WHEAT (tonnes)

Australia	429 762	38 693	441 374	31 910	483 842	19 384
U.S.A.	190 271	11 113	482 921	40 379	179 059	8 919
Canada	52 984	12 792	8 395	609	61 110	10 744
France	10 798	1 016	21 336	979	-	-
TOTAL	716 635	66 964	964 526	74 299	752 864	39 627
W.A. Export	252 081	-	193 922	-	379 377	-
W.A. Exports as % of Australian Exports	59%	-	44%	-	78%	-

BARLEY (tonnes)

China	-	-	2.5	1	2.5	0.7
Netherlands	4	3	5	1	2.5	0.2
Australia	-	-	2.5	1	-	-
Singapore	1	1	-	-	-	-
TOTAL	5	4	10	3	5	1

COMMODITY	1975		1976		1977	
	Quantity	value \$US '000's	Quantity	value \$US '000's	Quantity	value \$US '000's
Country of Origin						
OATS (tonnes)						
Australia	347	93	76	23		
U.S.A.	348	129	819	329	245	60
Singapore	47	4	29	3	73	32
TOTAL	743	227	939	371	321	95
W.A. Exports	55		-		-	
% of Australia	16%					
RICE (tonnes)						
Thailand	14 345	6 710	487 367	167 252	802 400	287 159
U.S.A.	10	5	260 176	80 390	297 300	81 379
Burma	74 892	33 093	211 449	90 342	196 636	81 650
China	320 179	152 954	90 751	34 812	182 188	65 719
Australia	10 044	3 784	76 697	22 801	109 181	32 092
North Korea	189 613	98 332				
TOTAL	690 180	325 274	1 290 979	446 868	1 973 354	678 003
W.A. Exports	-		-		-	

ANNEX E

FREIGHT RATES TO S.E. ASIAN PORTS - 1978

		Containers		Break Bulk	
		East \$	West \$	East \$	West \$
Frozen meat (per tonne net)					
- cartons		209.09	203.59	211.42	205.92
- carcasses or bags		144.95	138.95	146.56	140.56
Chilled meat (per tonne net)					
- cartons)	243.27	233.27	245.27	235.98
- carcasses)				
Live cattle (open rated) (approximate rates per head)				135.34 (plus c.a.f. 7.88%)	
Live sheep (open rated) (approximate rates per head)				9.17 (plus c.a.f. 7.88%)	
Rendered and unrendered Bovine Animal Fats (per tonne) -					
- Bulk				Open Rated	
- Drums		92.54	90.38	93.57	91.41
Dairy produce					
- Butter	Per kg net	19.12¢	18.57¢	19.33¢	18.78¢
- Cheese	Per kg net	19.12¢	18.57¢	19.33¢	18.78¢
- Liquid milk	per cubic metre	118.12	115.47	119.43	116.78
- Dried Wholemilk	per tonne	82.86	81.88	83.78	82.80
- Skimmed milk	per tonne	82.86	81.88	83.78	82.80
- Skimmed milk powder	per tonne	82.86	81.88	83.78	82.80
- Cassein	per tonne	80.57	78.60	81.47	80.64
Grains					
wheat	per bagged tonne	64.07	63.09	64.78	63.80
barley	per bagged tonne	69.74	68.75	70.52	69.53
oats	per bagged tonne	77.08	76.09	77.94	76.95
rice	per bagged tonne	71.75	77.07	72.55	71.57
Grains - bulk				Open Rated	
Fruit -					
apples and pears	per carton	3.76	3.08	3.76	3.08
grapes	per tie	3.83	3.60	3.83	3.60
peaches)					
plums)	per case	-	1.92	-	1.92
Oranges and lemons	per bushell	3.53	2.90	3.53	2.90
Vegetables					
lettuce, cabbage,)	per cubic metre	91.80	87.00	92.82	87.00
cauliflowers, carrots)	or				
potatoes, onions, tomatoes	per kg	22.02¢	21.76¢	22.26¢	21.76¢

ANNEX F
SINGAPORE

- | | | |
|--------------------------|---|------------------------------------|
| 1. C.J. Messervy |) | Australian Trade Office |
| Asst. Trade Commissioner |) | Australian High Commission |
| |) | 25 Napier Road |
| 2. L. Chong |) | SINGAPORE 10 |
| Agric. Marketing Officer |) | |
| 3. Mr Loy Wei Sun | | Dept of Primary Production |
| Marketing Economist | | Ministry of National Development |
| | | National Development Building |
| | | Maxwell Road |
| | | SINGAPORE 1 |
| 4. Dr Leong Poo Chow |) | Dept of Primary Production |
| |) | 7th Floor, National Development |
| 5. Mr Chuo Sin Kwang |) | Building |
| |) | Maxwell Road |
| 6. Mr Yong Kong |) | SINGAPORE 1 |
| 7. Dr Ngiam Tong Tau | | Pongol Pig Centre |
| Manager | | J1 Serangoon, KEVHIL |
| | | SINGAPORE |
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| Director | | 14 Hong Kong Street |
| | | SINGAPORE 1 |
| 12. Peter B.H. Lim |) | Fook Huat Tong Kee Pty Ltd |
| Manager |) | 17C Upper Circular Road |
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| 13. Ee Tai Tong |) | |
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| 14. Richard Lee Sian Lin | | Lee Assoc. Pty Ltd |
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| | | 20 Maxwell Road |
| | | SINGAPORE 2 |
| 15. Mike Low Kee Guan | | Eng Cheong Peng Kee Pty Ltd |
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| 16. Johnny Cheng Chih Li | | Prima Ltd |
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| | | SINGAPORE 4 |

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| 9. Jamaluddin Nawi |) | SELANGOR |
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| 10. Dr E.T. Gibbons |) | |
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| |) | |
| |) | FAMA |
| 11. Ragavan Nair |) | Federal Agric. Marketing Auth. |
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