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WORKING PAPER 34

Effects of Trade Liberalization on Agriculture in Malaysia: Institutional and Structural Aspects

Tengku Mohd Ariff Tengku Ahmad

The CGPRT Centre
Working Paper Series, October 1998

The CGPRT Centre

The Regional Co-ordination Centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific (CGPRT Centre) was established in 1981 as a subsidiary body of UN/ESCAP.

Objectives

In co-operation with ESCAP member countries, the Centre will initiate and promote research, training and dissemination of information on socio-economic and related aspects of CGPRT crops in Asia and the Pacific. In its activities, the Centre aims to serve the needs of institutions concerned with planning, research, extension and development in relation to CGPRT crop production, marketing and use.

Programmes

In pursuit of its objectives, the Centre has two interlinked programmes to be carried out in the spirit of technical cooperation among developing countries:

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Humid Tropics of Asia and the Pacific

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Glossary of Acronyms

AFTA	-	ASEAN Free Trade Area
ASEAN	-	Association of South East Asia Nations
BERNAS	-	Beras National Sdn. Bhd ("National Rice" Privated Limited)
BPM	-	Bank Pertanian Malaysia (Malaysian Agricultural Bank)
CEPT	-	Common Effective Preferential Tariffs
CFE	-	Controller of Foreign Exchange
CPKO	-	Crude Palm Kernal Oil
CPO	-	Crude Palm Oil
ECR	-	Export Credit Refinancing
ECTG	-	Export Credit Insurance and Guarantee Scheme
EDI	-	Electronic Data Interchange
FAMA	-	Federal Agricultural Marketing Authority
FAO	-	Food and Agricultural Organization
FELCRA	-	Federal Land Reclamation Authority
FELDA	-	Federal Land Development Authority
GATT	-	General Agreement on Tariffs and Trade
GDP	-	Gross Domestic Product
GMP	-	Guaranteed Minimum Price
IMP	-	Industrial Master Plan
IRPA	-	Intensification of Research in Priority Areas
ITA	-	Investment Tax Allowance
KADA	-	Kemubu Agricultural Development Authority
KLIA	-	Kuala Lumpur International Airport
LPN	-	Lembaga Padi dan Beras Negara (National Paddy and Rice Board)
LTN	-	Lembaga Tembakau Negara (National Tobacco Board)
MADA	-	Muda Agricultural Development Authority
MARDI	-	Malaysian Agricultural Research and Development Institute
MFCV	-	Malaysian Flue-cured Virginia
MIDA	-	Malaysian Industrial Development Authority
MITI	-	Ministry of International Trade and Industry
MPOPC	-	Malaysian Plan Oil Promotion Council
MTC	-	Malaysian Tobacco Company
MTN	-	Multilateral Trade Negotiations
NAP	-	National Agricultural Policy
NDP	-	New Development Policy
NEP	-	New Economic Policy
OECD	-	Organization for Economic Cooperation and Development
OPPI	-	First Outline Perspective Plan
PIA	-	Promotion of Investment Act
POCPA	-	Palm Oil Credit and Payment Agreement

PORIM	-	Palm Oil Research Institute of Malaysia
PORLA	-	Palm Oil Registration and Licensing Authority
PPO	-	Processed Palm Oil
PRMB	-	Paddy and Rice Marketing Board
PWD	-	Public Work Department
SEDC	-	State Economic Development Corporation
SOPP	-	Second Operational Perspective Plan
SSL	-	Self-sufficiency level
TAS	-	Technical Advisory Services
UR	-	Uruguay Round
USDA	-	United States Department of Agriculture
WTO	-	World Trade Organization

Foreword

Responding to the growing concern for the effects of trade liberalization on regional agriculture, the CGPRT Centre started a research project "Effects of Trade Liberalization on Agriculture in Selected Asian Countries with Special Focus on CGPRT Crops (TradeLib)" in March 1997, in collaboration with partners from ten countries: China, India, Indonesia, Japan, Malaysia, Pakistan, Philippines, Republic of Korea, Thailand and Vietnam. In all these countries, important issues regarding trade liberalization were investigated with an identical research framework by national experts.

The investigation covers major crops which might receive either favorable or unfavorable effects of trade liberalization both in export and import. I believe that readers of the reports can obtain broad and practical knowledge on institutional aspects of the effects of trade liberalization; moreover, the information will be useful for researchers and policy planners in other countries in the region. A volume which includes more commodity and location-oriented study on the same subject will follow. I would like to note that, since this project was conceived and started before the current currency and economic crisis began in the middle of 1997, the analysis handles basically the period before the crisis with possible current information.

I am pleased to publish **Effects of Trade Liberalization on Agriculture in Malaysia: Institutional and Structural Aspects** as one of the fruits of the project. I certainly hope this report will be fully utilized for the improvement of agricultural trade and the encouragement of regional agriculture.

I thank Dr. Tengku Mohd Ariff of Malaysia for his intensive research and the Malaysian Agricultural Research and Development Institute for allowing him to work with us and for providing continuous support. Dr Boonjit Titapiwatanakun ably coordinated the various complex steps in the study. I would also like to express appreciation to the Government of Japan for funding the project.

Haruo Inagaki
Director
CGPRT Centre

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Serdang, Selangor
June 30, 1998

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Executive Summary

Introduction

Economic theory indicates that there are gains to be made from free trade. This view goes back a long way and it is supported by numerous empirical studies attempting to estimate the magnitude of such gains. Despite the evidence for the benefits of freer trade, all governments without exception intervene to varying degrees in the workings of natural market-forces. The main reasons for trade protection include the need to protect infant industries, to ensure food security, to redistribute income by protecting specific agricultural industries, and to enhance incomes of small producers. However, the burden of protection increases over the years and many governments realize that it is not sustainable in the long run to continue to protect inefficient industries; hence the global move towards trade liberalization including agricultural trade.

The liberalization initiatives culminated in the signing of the Uruguay Round (UR) Agreement and the establishment of the World Trade Organization (WTO) on January 1, 1995. The main elements of the UR Agreement include market access commitments, concessions on trade in goods and services, and dismantling of quantitative restrictions and subsidies as well as other non-tariff barriers by both developed and developing countries. Apart from being a signatory to the Uruguay Agreement and a member of the WTO, Malaysia, which is also a member of ASEAN, is additionally committed to the implementation of the ASEAN Free Trade Area (AFTA). The AFTA is a commitment by ASEAN to enhance intra-ASEAN trade and to building up competitiveness through increased regional economic cooperation. The members signed the CEPT Agreement (Common Effective Preferential Tariffs Agreement) which is the main mechanism towards implementing the AFTA. The agreement now covers agricultural products.

However, many of the areas under the UR Agreement such as anti-dumping, safeguards, handling of subsidies and dispute settlement are new to developing countries, and the effects of the liberalization itself at both global and regional levels are not well understood by many countries including Malaysia. It is, therefore, the objective of this study to examine the actual effects and extent of benefits and losses to be gained by Malaysia as a result of trade liberalization in agriculture, with special focus on the subsectors that are important to Malaysia, such as palm oil, rice and tobacco and CGPRT related crops. The specific objectives are:

- to review policies affecting trade including financial, fiscal and other related policies,
- to analyze trends in Malaysian agricultural trade and assess the overall impacts of liberalization measures on Malaysia, and
- to make recommendations pertaining to trade liberalization in Malaysia.

The Malaysian economy

Malaysian economic growth has consistently been above the 8% level for the past ten years (1987–1996). In 1995, its per capita GNP was US$4,023, which is ranked third after Singapore and Brunei in South East Asia. When the country gained its independence from the British in 1957, the economy was predominantly based on primary commodities such as rubber, timber and tin. Together they contributed to more than 50% of the country's GDP. The contribution from the manufacturing sector was only 9%. By 1995, the manufacturing sector contributed 33.1% to GDP while the contribution of agriculture declined to just 13.5%.

Between 1982 and 1996, the manufacturing sector registered double digit growth, averaging 12.5% per annum. Agriculture, on the on other hand, grew at only 2.7%. Growth in the service sector was also strong. The changes in the structural composition of the Malaysian economy were also reflected in other major macroeconomic parameters such as composition of exports and employment.

Nevertheless, despite the declining relative contribution of the agricultural sector to the national economy, the role of agriculture is viewed as strategically important. Apart from its critical role of providing food for the nation, the sector is still an important source of employment. Agriculture is also important to support agrobased industrial development and in terms of its linkages with other industries. More importantly for Malaysia, however, is that the agricultural sector is seen as vital sector for the attainment of national unity. The underlying issue concerns the relatively high incidence of poverty in the sector as compared to the other sectors. Policies and programmes in the agricultural sector focussed on enhancement of income of agricultural producers in order to reduce the incidence of poverty and to minimize the intersectoral disparity and inequity between agriculture and non-agriculture. These policies are considered crucial in maintaining and enhancing the social and economic stability of this multi-racial country.

The Malaysian agricultural sector can be primarily grouped into the agro-industrial subsector comprising oil palm, rubber, cocoa and timber, the food subsector comprising paddy, fruits and vegetables, livestock and fishery and the miscellaneous group consisting of tobacco, pepper, coconuts, sugarcane, cassava, sweet potato, maize, tea and coffee. Another subsector consists of the newly-emerging agro-industries such as floriculture, sago and aquarium fish and aquatic plants. The structural composition of the agricultural sector has not changed very much in the last ten years with the agro-industrial subsector, which mainly serves the export market, dominating the agricultural scenario. This composition can be reflected in Malaysia's agricultural land use data for the 1985-1995 period. In 1995, oil palm, rubber and cocoa accounted for more than 77% of the total agricultural land use in Malaysia. In terms of value added, these three crops contributed to about 57% of agricultural GDP in 1995. Composition of exports also showed identical patterns with palm oil accounting for almost 30% of total export earnings in agriculture in 1995 and rubber accounting for 11%.

Malaysia's domestic and trade policies

Malaysia's policy planning can be divided into three phases. The first phase ran from 1956–70, the second from 1971-1990 and a third from 1991 – 2000. During the first phase, the main thrust was in the provision of social and industrial infrastructure to lay the foundation for a free market economy for growth. The second phase of development planning was influenced by efforts to narrow income gaps along racial and regional lines towards establishing political and economic stability. Built on the success of the second phase, the new era maintains the ultimate goal of achieving a united society and of becoming a developed nation by the year 2020. This new phase, referred to as the New Development Policy era, has set the stage for increased opening of the economy including the agricultural sector to external competition. Malaysia's signing of various agreements on trade liberalization is a testimony to Malaysia's stand as a strong proponent of trade liberalization, consistent with the country's development plans.

Policies in the agricultural sector

Agricultural development strategies in the 1960s and 1970s mainly focused on providing employment, as well earning and saving foreign exchange. Strategies and programs during the period were also designed to raise farm incomes to reduce poverty in agriculture. Export crops such as rubber, oil palm and cocoa were actively promoted. Many subsectors in agriculture

were protected through tariffs and nontariff barriers such as quotas and other import barriers to protect producers and save foreign exchange in line with the import substitution strategy during this period. High emphasis was given to food security where a 100% self-sufficiency target was set for domestic rice production. The launching of the National Agricultural Policy (NAP, 1984) marks the actual beginning of liberalization of the agricultural sector. Productivity, efficiency and competitiveness were the main focus of the policy. Self-sufficiency for rice was rationalized to 85% of domestic consumption.

The period of 1984 - 1990 marks an important threshold in the transformation and development of the Malaysian economy. This era saw rapid expansion of the manufacturing sector and altered the relative importance of the agricultural sector. The overall development of the agricultural sector was beset with problems including more favorable policies towards manufacturing, labor shortages and increasing wages, increasing competition for land for other uses and others. A second NAP was introduced in 1992. Greater emphasis was given to productivity, efficiency and competitiveness issues in the context of sustainable development and linkages with other sectors of the economy, in particular, the manufacturing sector. The development effort was geared towards modernization and commercialization of the sector and tariffs on many agricultural products were dismantled to prepare the sector for increased competitiveness. The food security issue was further rationalized and the self-sufficiency level for rice was further revised downwards to 65%. Exports were further encouraged. The government also introduced new and additional incentives to attract investments in the agricultural sector.

Trade policy

Malaysia has a fairly liberal trade regime with low tariffs for most products. In 1993, the simple average and ad volorem tariff was 14%. The average was lower for agriculture at 10.4% while for industry it was 14.4%. The level of tariff protection is regularly revised to harmonize the tariff structure and reduce excessive protection. In most cases, tariffs on products are revised downwards except for products that are luxurious and unhealthy such as luxury cars, cigarettes and alcohol where increases on tariffs were imposed on the importation of these products. With respect to nontariff measures, Malaysia also practices import quotas and licensing (automatic and nonautomatic) on a fairly wide range of products. This is used both for restricting imports to protect certain industries, to ensure adherence to sanitary, phytosanitary, safety, environmental protection as well as copyright requirements and also for the purpose of monitoring. For rice, an import monopoly is held by BERNAS, the privatized state enterprise of the National Paddy and Rice Board. Export duties are levied on a number of primary commodities for revenue and to encourage domestic processing. Malaysia does not have any export subsidies but provides incentives such as tax rebates for certain promoted export-oriented industries.

The trade regime for agriculture

The effective duty rates on imported agricultural products are low by international standards and protection afforded to the industrial sector is still considerably higher than that of agriculture. Over the years, and more so in the 1990s, tariffs have been reduced on a broad range of products to meet Malaysia's obligations to international and regional trade agreements. In addition voluntary cuts have been made to ensure competitiveness of agricultural subsectors in the long term. For agricultural products under chapters 1-24 of the Malaysian Customs Trade Classifications and Customs Duty Order, the number of tariff lines under the 0-5% category has increased from 318 lines to 866 lines from 1978-1997 or from 50.9% to almost 70% of all tariff lines in the 24 chapters. The reduction has been more rigorous for the 1988 - 1997 period,

where the number of tariff lines under the 0-5% group has increased from 52% to almost 70%. Similarly, the number of tariff lines that fall under the 6-15% group has also increased from 21 lines in 1978 to 95 lines in 1988 or from 3.4% to 7.6% of the total tariff lines. Out of the 866 tariff lines that are in the 0-5% category, about 850 lines or 61% are actually duty free.

Policy measures in palm oil, rice, tobacco and CGPRT-related crops

In general, the government maintains a non-interventionist policy for palm oil and the CGPRT crops such as maize, tapioca and sweet potato. In palm oil, direct policy measures that distort trade flows in the edible oil and fats market can be considered as insignificant. However, institutional support from the government for production, marketing, promotion and R&D of palm oil is strong. This includes direct involvement of government owned agencies in production, processing and marketing, the provision of incentives and export credit financing. Maize, tapioca and sweet potato, being important raw materials for other agricultural industries have always enjoyed a free market status. On the other hand, rice and tobacco, being important socio-economic crops have been subjected to heavy intervention by the government in the market place. In the rice industry, a host of interventions are in place, including monopoly on imports, GMP for paddy, controlled prices at milling, wholesaling and retailing, fertilizer subsidy and price support. In addition, the government also provides drainage and irrigation facilities and undertakes R&D for rice. For tobacco, apart from being protected by high tariffs, the Malaysian tobacco industry also received other forms of support from the government. The major interventions include licensing of curers and cigarette manufactures and registering of growers, implementing production quotas to balance production with demand, setting proper grading and pricing of green and cured leaves and control and regulating the marketing of green and cured leaves.

Performance in international trade

The growing significance of Malaysia in international trade is reflected in the expansion of imports and exports. Total imports and exports increased 5.75 fold during the 1985-1996 period from RM 68.5 billion to RM 394.0 billion. In 1994, it ranked 19th in the world in terms of exports and 18th in terms of imports. Malaysia is increasingly becoming a trade-oriented economy with the ratio of exports and imports to GDP increasing form 0.49 to 0.78 and 0.39 to 0.79 respectively between 1985 and 1996. The trade balance was most of the time positive for the period under study, except in recent years. The agricultural balance has always been positive and increasing. Agricultural trade grew at a rate of 10% per annum, from RM 19 billion to RM 52 billion during the same period. Agricultural exports mainly consisted of primary commodities while imports were mainly food items. The agricultural sector is also becoming more trade-oriented with the ratio of exports and imports to agricultural GDP increasing form 0.86 to 1.2 and 0.32 to 0.58 respectively between 1985 and 1995.

Direction of trade

At the aggregate level, ASEAN particularly Singapore, Japan, the USA and the EU continued to be major markets for Malaysia products. Together they accounted for more than 75% of Malaysian exports for the last two decades. Singapore, USA and Japan together have consistently accounted for more than 50% of total exports. Thus, the Malaysian export market remained highly concentrated with limited progress being made in market diversification. The direction of imports was also similar, with Japan, Singapore, USA and the EU being the major source of Malaysia's imports. The trend showed that there was also an increased concentration in the sources of Malaysia's imports. Trade in agriculture, on the other hand, is more successful in terms of diversification. The ten major export destinations for Malaysian agricultural

products were Japan, Singapore, USA, China, Hong Kong, Korea, the Netherlands, Thailand, Taiwan and Pakistan. There is a decrease in concentration of exports to these countries from 64% of total agricultural exports in 1985 to 54% in 1995. For agricultural products, the Asian market is becomingly increasingly important with China and Pakistan displacing USA in the top five export destinations. The sources of agricultural imports were also becoming less concentrated.

Imports of selected agricultural and agricultural related products such agricultural inputs and machinery, fish products, feed grains and livestock products have shown tremendous increases over the years. Ratios of the value of these imports to agricultural GDP have also been continuously increasing for the 1985-1996 period, from 0.016 to 0.034 for fish and fishery products, 0.012 to 0.025 for feed grains and 0.011 to 0.018 for livestock and livestock products. For food crops the ratio increased from 0.11 to 0.15 for the period. These subsectors as a whole have become more import-oriented.

Competitiveness of commodities

Analyses of ratios of f.o.b. and wholesale prices to world prices of major export commodities showed that Malaysia is still competitive in the production and export of palm oil, cocoa beans, saw logs and pepper. Both the f.o.b. and wholesale prices to world price ratios were less than 1. The situation is not so true for rubber where these ratios were consistently above 1 for the 1994-1996 period. For palm oil, the average f.o.b. to world price ratio for the 1985-1990 was 0.66 compared to 0.84 for the 1991-1996 period. This indicates that although Malaysian palm oil can still be considered efficient and competitive, its competitiveness over the years seems to be lower in recent times. In general, although the ratios indicated that Malaysian cocoa beans and pepper were still competitive, labour problems and better economic returns from other crops, especially palm oil, saw many investors and producers exiting the industry for more lucrative ventures.

As expected, Malaysia is not competitive in rice and tobacco production. The ratios of wholesale price to world price of these commodities were consistently more than 1. For rice, the average ratio increased from 1.17 for the 1985-1990 period to 1.51 for the 1991-1996 period, indicating increasing economic efficiencies and decreasing competitiveness.

Effects of liberalization

Past literature indicated that most countries including the developing ones would benefit from trade liberation. However, these studies also indicated that large net-importing food countries would lose due to increases in prices of food items resulting from liberalization. Nevertheless, they would lose more if they do not liberalize when others liberalized.

For Malaysia, major gains are only expected from the exports of palm oil and wood products. Both the USA and EU that are major markets for Malaysian palm oil are expected to reduce their tariffs by 19% for unprocessed or semi-processed and 30% for processed oils and fats. Similarly, developing countries, which are becoming more important markets for Malaysian palm oil, are also reducing their tariffs on palm oil imports. Thailand and the Philippines, for example, are reducing them by 24% and 12%, respectively. For wood products, reduction in tariff escalation in developed countries would certainly benefit Malaysia. Other export crops including cocoa, rubber, and pepper are only expected to register modest gains since Malaysia's competitiveness in exporting these products in the future is uncertain, and further declines in exports of these commodities are expected.

In general, the Agricultural Agreement is not expected to bring radical changes in the import tax regime for Malaysian agricultural products since Malaysia's import tariffs for agricultural products are already low. However, the Agreement can severely affect the rice

industry when all direct support including the price support are withdrawn from the industry. Many producers are expected to exit the industry as profit margins decrease. Unless the government undertakes massive infrastructural upgrading to increase current productivity levels, rice production is also expected to decline. Other protected subsectors such as tobacco, poultry and the swine subsectors are not expected to be significantly affected by the Agreement. However, the CEPT Agreement of ASEAN is expected to inflict significant impacts on these industries, especially on the local tobacco industry. At the pessimistic end, full implementation of the CEPT Agreement for agricultural products may see a total collapse of the industry as most ASEAN countries are more cost-effective producers of tobacco. Overall, the balance of gain and losses in agriculture for Malaysia will very much depend on the in-roads that will be made by Malaysian palm oil as Malaysia will lose in terms of higher import prices and imports of food.

Issues and recommendations

At the international level, there are increasing concerns on the use of non-tariff barriers such as sanitary and phytosanitary measures to protect domestic agriculture. At the same time there is increasing use of non-trade-related issues such as the environment and labour especially by developed countries to restrict imports from developing countries. The other concern is the emergence of a monopoly held by a few countries on food exports resulting from liberalization.

For Malaysia some recommendations were put forward in pursuing the agricultural liberalization agenda. These include the need for a well planned strategy to prepare for adjustments in the protected and most affected subsectors, increasing the capacity for food production, expanding value added and downstream processing, and a quality enhancement program. It may also be necessary for Malaysia to join forces with other smaller countries to exert increased influence in the trade liberalization negotiating process.

1. Introduction

Economic theory in standard economic textbooks has shown that there are gains to be made from free trade. This view goes back a long way from the times when David Ricardo developed the first economic framework of free trade in the early 19th century and theoretically demonstrated the welfare gains resulting from free trade. This is further supported by numerous empirical studies attempting to estimate the magnitude of such gains, including studies by Valdes and Zietz (1980). This study estimated that a 50% reduction in protection accorded to food, processed food and food commodities in the OECD countries would lead to a US$ 3.0 billion increase in exports of 56 less developed countries. There are also other applied studies on trade liberalization in developing countries. These studies all point to the same direction, namely that outward-looking trade policies are superior to restrictive ones and that more liberal trade regimes are associated with better export performance, higher productivity and economic growth.

Despite the evidence provided on the benefits of freer trade, all governments without exception intervene with varying degrees in the workings of natural market forces. This is especially so in the agricultural sector. As the USDA (1987) put it, "there are no free traders among the agricultural trading countries". Why do governments intervene in the market place? The following section discusses some of the reasons for government intervention, especially in the agricultural sector.

1.1 Why protection?

Many governments for a long time were not totally convinced of the benefits of trade liberalization. They were of the view that liberalization of trade can potentially undermine national, social, political and even economic goals. In many developing countries, especially where agriculture is the mainstay of the economy, the agricultural sector provides the base for governments to be elected. Policies and programs in agriculture to a large extent influence the political outcome in many countries. What is seen done and not done in agriculture can make or break governments in these countries. The same to a certain extent is also true for developed countries, where there exist strong lobby groups that can influence agricultural and trade policies of governments. In fact many analysts are of the view that agricultural trade policies in developed countries are more protective than in the developing ones. Tan (1987) pointed out that developed countries tend to protect agricultural producers more than developing countries while the developing countries tend to protect consumers more than producers. This practice results in food surpluses in developed countries and deficits in developing countries. The level of competitiveness reached today in many developed countries can be attributed to the protective measures that they practiced earlier. Previous protection has enabled certain industries to develop and mature and subsequently become competitive. This practice of protecting infant industries is usually used to give birth to new domestic industries.

The basic premise underlying the free trade framework is the factor endowment theory. According to the theory, nations should only produce products based on 'well-endowed factors' for them to be efficient and competitive producers. Nations that are endowed with abundant labour should then only concentrate in labour-intensive industries while those with abundant capital should only concentrate on capital intensive industries. However, this premise of development will 'lock-in' the nature of industries in a country. Nations with high labour will forever find themselves in labour-intensive industries that are usually low value and have low value-added, while nations with high capital will forever be in the upper hand with capital-

intensive industries that are usually associated with high technology, are knowledge intensive and high value. The theory does not take into consideration the capability of a nation to learn and acquire knowledge and move to higher value-added industries. Porter (1990) argued that the competitive advantage of nations does not entirely rest on factor abundance but rather a complex interplay of various factors ranging from government policies, human resource capabilities, technology and others. Based on the above arguments, governments in developing countries also rationalize protecting certain industries based on the 'infant-industry' case, allowing for new industries to grow, mature and be on a reasonably competitive footing before allowing them to be exposed to external competition. This approach seems to be reasonable since no country would want to be entrenched in low value-added labour intensive industries all the time. At the same time, it is also deemed unfair to let 'dwarfs compete against giants'. As such the infant-industry argument has been used to protect new industries in the economy so as to allow developing countries to venture into new economic frontiers.

Second is the sentiment attached to agricultural and food production. Food, being a basic necessity of life, is viewed as a critical prerequisite for a nation to produce while embarking on economic progress. Many countries pursued a policy of self-sufficiency in critical food items especially staples. The emphasis on food security formed a strong basis in the formulation of a country's agricultural and food policies. Many are of the view that it is not in the best long-term interest of a nation to be too heavily dependent on external sources for food. Considering, the instability of world food production and international supply due to the vagaries of climatic conditions, there is strong rationale to institute some protective measures for food production. War, uncertainty in political relationships among nations and the possibility of facing economic sanctions further add to strengthen the sentiment on food security.

Apart from the food security rationale, many governments in developing countries protect their agriculture to enhance producer incomes, which mainly consists of small farmers, many of whom live in poverty. Development programs that are mainly aimed at addressing poverty issues have a direct bearing on the shape of agriculture and agricultural trading policies. The main issue facing developing countries for the last three decades is not economic growth and wealth accumulation per se, but more importantly how that growth has benefited the majority of the population. Thus, the distribution of income and wealth form an important development agenda. High disparity in incomes between social groups can result in social unrest and instability that can negatively influence economic growth in the long term. The balance between growth and income distribution, therefore, formed the main thrusts of many developing economies, and this usually takes the form of policies insulating domestic producers from external competition.

The neoclassical paradigm of economic development on income distribution is based on the 'trickle-down' theory, in that development will trickle down and spread to the masses resulting from an automatic and equilibrating adjustment mechanism - the work of the 'invisible hand'. Therefore poverty would decline as GNP grows. However, in reality this might not be the case. Keynesion economics proposed the reliance on grants and subsidies for redistributing income and reducing poverty should the trickling down mechanism fail. Hence, the policies of protecting agriculture using grants and subsidies by many governments as redistributive instruments are also equally strongly embedded in economic theory.

1.2 The move towards liberalization

Nevertheless, the neoclassical approach has overlooked a critical point that makes it impractical for a country to depend on transfers for redistribution of wealth in the long run. First, the magnitude of transfers needed to reduce relative income inequality has been seriously underestimated. Transfers and support programs have become increasingly costly to taxpayers and food consumers. This was especially true during the 1980s where there was a trade decline resulting from a drop in consumption as economic growth slowed down worldwide. Consequently, the world supply of agricultural commodities has grown faster than demand putting downward pressure on prices. As the situation worsens, increased support and protection are needed by agricultural producers in order to maintain their incomes. Such policy instruments are clearly burdening governments and are viewed as not sustainable in the long run.

The stagnant market of the 1980s resulted in worldwide surpluses of agricultural commodities. Due to depressed economic conditions, many importer countries increasingly pursued restrictive trade policies, resorting to import substitution measures and an array of other measures to restrict imports with the aim of saving foreign exchange and insulating domestic farmers from drops in world prices. This further exacerbated the situation. As a result, major agricultural producers and exporters found it difficult to sell their products and their governments and taxpayers bore a large share of the cost of adjusting to slowed growth in trade. The United States, being the most important agricultural exporter, was hard hit by this slowdown and realized that its farm exports would benefit from a more liberal agricultural trading environment (USDA 1987). This prompted the United States and other major world agricultural exporters to initiate a new round of multilateral trade negotiations (MTN) under the auspices of the General Agreement on Tariffs and Trade (GATT). This resulted in a new round of MTN, the eighth, since the establishment of GATT in 1948, the Uruguay Round (UR) in 1986, where agricultural trade became its main agenda. The objectives of this negotiation were (GATT Secretariat 1989):

- to establish a fair and market oriented agricultural trading system, and
- to reach this objective by substantial, progressive reductions in agricultural support and protection sustained over an agreed period of time resulting in correcting and preventing restrictions and distortions in world agricultural markets.

The UR negotiations culminated in the signing of the UR Agreement and the establishment of the World Trade Organization (WTO) on January 1, 1995. The WTO is to oversee the implementation of the UR Agreement for freer trade. It consists of market access commitments, concessions on trade in goods and services, and dismantling of quantitative restrictions and subsidies as well as other non-tariff barriers. Agriculture is now covered under the UR Agreement through the Agriculture Agreement. Both developed and developing countries are expected to benefit from the UR Agreement. Global income is expected to increase by US$ 235 billion annually by 2005 and merchandise exports by US$ 755 billion by that year. However, developing countries like Malaysia have to subscribe to the same disciplines as the developed ones. Many of the areas under the UR Agreement such as anti-dumping, safeguards, handling of subsidies and dispute settlement are new to developing countries such as Malaysia (Mohamed Ariff et al. 1996).

Apart from being a signatory to the UR and a member of the WTO, Malaysia is also a member of ASEAN and committed to the implementation of the ASEAN Free Trade Area (AFTA). The AFTA is a commitment by ASEAN to enhance intra-ASEAN trade and to build up competitiveness through increased regional economic cooperation. The members signed the CEPT Agreement (Common Effective Preferential Tariffs Agreement) which is the main mechanism towards implementing the AFTA. Recently, the group agreed to include agricultural products in the Agreement.

1.3 Objective of study

The actual effects and extent of benefits to be gained by Malaysia as a result of trade liberalization have not been well studied. This is more so in the area of agriculture and food where more complex mechanisms are practiced worldwide to protect the sector. This study will attempt to evaluate the likely effects and benefits of global and regional trade liberalization initiatives on Malaysia. Specifically, the objectives of this study are:

- to review policies affecting trade including financial, fiscal and other related policies,
- to analyze trends in Malaysian agricultural trade and assess the overall impacts of liberalization measures on Malaysia, and
- to make recommendations pertaining to trade liberalization in Malaysia.

1.4 Organization of the study

This study is organized into five chapters. The first chapter, the Introduction has rationalized the study and outlines its objectives. In the second chapter, the Malaysian economy with emphasis on agriculture will be described. The third chapter reviews the trade-related policies that have been practiced by the government including a description of infrastructural development projects that have been undertaken to facilitate trade, while the fourth chapter will analyze trends in Malaysian agricultural trade and assess the competitiveness of specific agricultural industries. The fifth and final chapter will assess the overall effects of trade liberalization on Malaysia, highlight issues of importance and put forward recommendations with regards to the trade liberalization initiatives by Malaysia.

2. The Malaysian Economy

2.1 Introductions

This chapter describes features of the Malaysian economy. It starts with a general description of the country and its economy followed by an analysis of the evolution of the economy and the structural changes that have taken place over the last three decades. In the last section, a detailed description of the structure of Malaysian agriculture is provided.

2.2 Malaysia in general

Malaysia consists of Peninsular Malaysia, which shares borders with Thailand, and East Malaysia, comprising the states of Sabah and Sarawak on the island of Borneo. It also consists of two Federal Territories, Kuala Lumpur and Labuan. Peninsular Malaysia and East Malaysia are geographically separated by about 650 kilometers by the South China Sea (Figure 2.1). Total population now stands at about 20.69 million with 16.42 million in Peninsular and 4.27 million in East Malaysia. The population density in 1995 was about 63 persons per square kilometer and this is relatively low compared with many other Asian countries. Its population is multi-racial consisting of 62.4% Malays and other indigenous groups, 29.1% Chinese, 8.0% Indians and 0.5% others. With a total land area of 330,000 square kilometers, Malaysia can be considered a small country by international standards. Once a colony of Britain, Malaysia has a political system styled along the British system with parliamentary democracy headed by a monarch at the federal level. Each of the states has it own state parliament. The states have complete jurisdiction over matters relating to land use and religion. However, they usually follow the policy guidelines provided by the federal government in these matters.

2.3 The economy

Since achieving independence in 1957, Malaysia has recorded favorable rates of growth. Economic growth has been more impressive in the last two decades, except for the deceleration in growth in the mid-1980s due to the global economic recession, where there was a decline in real gross domestic product (GDP) in 1985. During the late 1950s, real GDP grew at an average rate of about 4%. It accelerated to 8.1% in the 1970s. After the recessionary years of the 1980s, the country was able to stage a strong economic recovery and growth has consistently been above the 8% level for the past ten years (1987 – 1996). This is a result of prudent fiscal and monetary policies and the adoption of a market-oriented and outward looking approach to economic development. Malaysia enjoyed a per capita GNP of US$ 4,023 in 1995 and is ranked third after Singapore and Brunei in South East Asia. The economic prosperity the country has enjoyed thus far is also due to the conducive investment climate brought about by a relaxation of rules and regulations pertaining to foreign investment and facilitation of the role of the private sector as the main engine of growth of the economy. Until the present financial crisis and economic turmoil affecting the region, Malaysia was considered an exemplary model for development and it was envied by many other developing countries.

2.3.1 Structural composition of the economy

When the country gained its independence from the British in 1957, the economy was predominantly based on primary commodities. The structure of the economy was very much a structure that was deigned by the colonial masters, mainly the extraction of natural resources

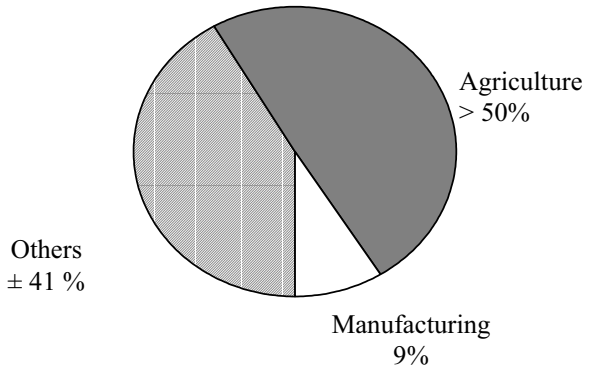
and production of raw materials to be exported back to Britain and her allies for processing into finished products. Very little value added was captured domestically. During this period, economic output was mainly derived from the primary sectors while the contributions from the secondary and tertiary sectors were small. Agriculture, mainly rubber and timber, contributed to more than 50% of the country's GDP (Figure 2.2). Another big contributor to the economy was tin, while the manufacturing sector's contribution to GDP was only 9%.

Figure 2.1 Map of Malaysia.

The narrow based economy, which is mainly from rubber, tin resources and timber, prompted the government as early as the 1960s to embark on diversification programs. However, the diversification efforts were mainly focused in the agricultural sector. Not much was done to actually broaden the base outside of agriculture. Resulting from these diversification programs, the country successfully ventured into palm oil and cocoa. Palm oil is

now the leading contributor of agricultural output and has often been dubbed the "golden crop" of the country. However, as with all agriculture, Malaysian agriculture also faces problems associated with unstable prices and declining terms of trade of agricultural products. It is fortunate that the government recognized this problem early and started to embark on programs for the industrialization of the economy. It began with an import substitution strategy that was followed by efforts to promote exports. In 1980, the Heavy Industries Corporation (HICOM) was established. This marks the beginning of a series of efforts by the government to venture into heavy industries. In 1985, the Industrial Master Plan was launched, where programs to promote specific subsectors in manufacturing were formulated and established. Growth targets were also set for these subsectors.

Figure 2.2 Gross domestic product, 1950.



The deliberate efforts by the government to industrialize the economy have proven successful, resulting in dramatic changes to the structure of the economy. The share of manufacturing in national GDP increased dramatically, especially in the late 1980s into the 1990s. By 1985, the manufacturing sector accounted for almost 20% of total GDP. The percentage contribution of agricultural GDP, on the other hand, declined by more then 50% since independence to only 20.8%.

The year 1987 marks an important turning point of the Malaysian economy. In that year, the manufacturing sector became the leading growth sector when its contribution to GDP rose to 22.6%, surpassing the contribution of agriculture of 21.7%. For the period 1990 – 1995, the manufacturing sector grew at an average rate of more than 12% per annum. By 1995, the sector's contribution had shot up to 33.1% while the contribution of agriculture continued with its downtrend to just 13.5% (Figure 2.3).

Table 2.1 shows the GDP growth of the various subsectors in the economy during the 1982 – 1996 period. Total GDP in real prices expanded from about RM 50.5 billion to RM 130.6 billion during the period, registering a growth rate of 6.8%. It can be noted that agricultural GDP growth has decelerated over the years. The average growth for agriculture during this period is about 2.7%. It went down to 2.6% during the 1991 – 1996 period from 4.3% during the 1985 – 1990 period. The manufacturing sector, on the hand registered double digit growth for the period, averaging 12.5%. The service sector also recorded impressive performances with electricity and gas at 10.9%, transportation storage and communication at 9.0%, finance and business services at 8.1% and wholesale and retail trade at 7.7%. At the same time, government services grew at only 4.9% reflecting the government privatization policy and the right sizing of the civil service.

Figure 2.3 Gross domestic product by industry of origin.

Parallel to each respective sector's performance in the domestic economy, its contribution in terms of other major macroeconomic parameters such as employment and export earnings also exhibited similar trends. In 1980, employment in the agricultural sector accounted for 37.2% of total employment (Table 2.1). It dropped to 26.0% in 1990 and further dipped to only 18.0% in 1995, a reduction of almost 20% over the 20 year period. On the other hand, the manufacturing sector's share of total employment steadily increased from 15.5% in 1980 to 25.9% in 1995 recording an increase of more than 10% during the period. All other sectors, except for mining and government services, showed increases in shares of total employment.

Table 2.1 Employment (%) by sector, 1980 – 1995.

Sector	1980	1990	1995
Agriculture	37.2	26.0	18.0
Manufacturing	15.5	19.9	25.9
Mining	1.3	0.6	0.5
Construction	5.7	6.3	8.3
Government services	13.3	12.7	11.0
Other services	27.0	34.5	36.3

Source: Economic Planning Unit, Prime Minister's Department, Malaysia.

In terms of exports, agriculture used to account for almost half of the total value of national exports in 1980. By 1995, the share of the sector in total exports had dwindled to only 13.1%. The export promotion strategy for the manufacturing sector saw a dramatic increase in the sector's share of total exports. From a contribution of about 21% in 1980, the sector's share in total exports jumped to 58.8% in 1990 and to almost 80% in 1995, an increase in share of about 60% during the 1980-95 time period.

Table 2.2 Share of exports (%) by sector.

Sector	1980	1990	1995
Agriculture	48.5	22.3	13.1
Mining	26.4	18.3	5.8
Manufacturing	20.6	58.8	79.6
Others	9.3	0.6	1.5

Source: Ministry of Trade and Industry, Malaysia (1996).

2.4 The Malaysian agricultural sector

The agricultural sector in Malaysia has been the core sector of the Malaysian economy for many years, starting from the country's independence in 1957 until the mid-1980s. Apart from its critical role of providing economic growth to the country, the agricultural sector is also viewed as a strategically important sector in terms of social and political perspectives. The sector plays a vital role in fulfilling the food requirements of the nation. It has always been the policy of the government to encourage domestic food production wherever feasible. The general policy on food is to ensure reasonable returns to producers and to supply food to consumers at affordable prices. In pursuing this policy, the "make some-buy some" strategy is generally practiced. The government's attempt to balance producer incomes and consumer prices has resulted in relatively higher intervention in the food subsector compared to the other subsectors. The extent of policy intervention by subsector will be discussed in detail in the next chapter.

Apart from its strategic role of providing food for the nation, the agricultural sector is also an important source of employment albeit on a declining scale. For example in 1980, 40% of the total workforce were engaged in agriculture. As of 1995, 1.4 million people or 18% of the total workforce were still dependent on agriculture for their livelihoods. Activities in agriculture also resulted in the creation of other industries and services through backward and forward and inter-industry linkages. Jobs are also created in sectors outside of agriculture, such as in the input industries consisting of fertilizers, pesticides and other chemical related industries. Other industries that have direct linkages with agriculture include feed milling, refineries (palm oil), seed production, agricultural machinery and equipment manufacturing, veterinary pharmaceuticals, packaging materials, and a host of support services-related industries including marketing and insurance, extension and advisory, credit, warehousing, distribution and transportation.

Agriculture is also viewed as a critical sector to support agrobased industrial development. The need to enhance value added content of agricultural commodities has necessitated a sustained and continuous supply of agricultural raw materials (Abdul Aziz 1994). The Industrial Master Plan (1985 – 1995) and the Second Industrial Master Plan (1996 – 2005) both have emphasized the vital role of agriculture in supporting industrial development as the country strives to become a developed nation by the year 2020.

More importantly for Malaysia, however, is that the agricultural sector is seen as vital sector for the attainment of national unity. The underlying issue concerns the relatively high incidence of poverty in the sector as compared to the other sectors. Policies and programmes in the early stages of development mainly addressed enhancement of income of agricultural producers in order to reduce the incidence of poverty in agriculture and to minimize the intersectoral disparity and inequity between agriculture and non-agriculture. Malaysia has been very successful in its efforts to eradicate poverty and is regarded as a showcase by the World Bank in its success to alleviate poverty. Table 2.3 shows the trend in the incidence of poverty in the agricultural sector between 1970 – 1990. The government will continue to undertake efforts to reduce the number of poor households. It is estimated that by the year 2000, the poverty incidence for the whole country will be reduced to only 5.5% with 2.2% in the urban sector and 10.3% in the rural sector.

Table 2.3 Incidence of poverty (%) in rural and urban sectors, 1970 – 1990.

Sector	1970	1976	1984	1987	1990
Rural	58.7	47.8	24.7	22.4	21.1
Rubber smallholders	64.7	58.2	43.4	40.0	24.0
Paddy farmers	88.1	80.3	57.7	50.2	30.0
Estate workers	40.0	32.9	19.7	15.0	29.0
Fishermen	73.2	62.7	27.7	24.5	39.0
Coconut smallholders	52.9	64.0	46.9	39.2	27.1
Other agriculture	89.0	52.1	10.0	n.a.	n.a.
Other industries	35.2	27.3	10.0	n.a.	n.a.
Urban	21.3	17.9	8.2	8.2	7.3

Source: Abdul Aziz 1993.

Table 2.4 Incidence of poverty and number of poor households, Malaysia 1990 and 2000.

Item	1990			2000		
	Total	Urban	Rural	Total	Urban	Rural
Poverty incidence (%)	16.5	7.1	21.1	5.5	2.2	10.3
Poor households ('000)	574.5	82.0	492.5	253.4	59.9	193.5
Hardcore poverty (%)	3.9	1.3	5.2	0.5	0.1	1.0
Hardcore poor ('000)	137.1	15.5	12.6	23.0	3.2	19.8
Total households ('000)	3,486.6	1,149.2	2,337.3	4,607.2	2,732.6	1,874.6

Source: Seventh Malaysia Plan.

This discussion has shown that the agricultural sector in Malaysia is not regarded as merely for "growth" but also serves to address other more important national agendas. Therefore, while the Malaysian government is a strong proponent of agricultural trade liberalization, the liberalization of certain subsectors in agriculture especially in the 'economically-sensitive' subsectors is still cautiously pursued and undertaken gradually. This is to ensure that the structural adjustment process is gradual and does not affect the livelihood of poor farm families.

2.4.1 The structural composition of Malaysian agriculture

The Malaysian agricultural sector can be primarily grouped into the agro-industrial subsector comprising oil palm, rubber, cocoa and timber, the food subsector comprising paddy, fruits and vegetables, livestock and fishery and the miscellaneous group consisting of tobacco, pepper, coconut, sugarcane, cassava, sweet potato, maize, tea and coffee. Another subsector consists of the "newly-emerging" agro-industries such as floriculture, sago and aquarium fish and aquatic plants. The structural composition of the agricultural sector has not changed very much for the last ten years with the agro-industrial subsector, which mainly serves the export market, dominating the agricultural scenario. In 1985, rubber, oil palm and cocoa accounted for 75% of the total land use in agriculture, while in 1995 total land use in agriculture for the three crops increased marginally to about 77% (Table 2.5). The last decade saw substantial declines in rubber and cocoa hectarage and significant increases in land area devoted to oil palm. Rubber and cocoa areas declined at an average rate of 1.5% and 4.6% per annum, respectively. This is due to the continuing decline in international prices of both commodities and a general shortage of labour in the agricultural sector making these enterprises less economically attractive. Strengthening prices of palm oil resulted in substantial areas of rubber and cocoa being converted to oil palm. For the period 1985 – 1995, the area under oil palm increased from about 1.5 million hectares to more than 2.5 million hectares, up by more than 1.0 million hectares and registering an annual rate of growth of 5.5% per annum. Oil palm now accounts for about 45% of the total land area devoted to agriculture.

Next to industrial crops, the most important crop is paddy. Total physical area in 1993 is estimated to be 598,480 hectares of which 379,470 hectares are located in Peninsular Malaysia

with the remainder in Sabah and Sarawak. Area under paddy has marginally decreased over the years. However, due to increase in cropping intensity resulting from better irrigation and drainage facilities as well as better management practices, paddy planted area has increased from 647,939 hectares to 667,563 hectares between 1985 – 1995, marginally increasing at the rate of 0.3% per annum during the period.

Table 2.5 Agricultural land use (ha), 1985 – 1995.

Item	1985	1990	1995	Average Annual Growth Rate (%)		
				1985-1990	1990-1995	1985-1995
Rubber	1,948,700	1,836,700	1,679,000	-1.2	-1.8	-1.5
Oil Palm	1,482,399	2,029,464	2,539,900	6.5	4.6	5.5
Cocoa	303,879	419,050	190,700	6.6	-14.6	-4.6
Paddy*	647,939	661,953	667,563	0.4	0.2	0.3
Coconut	334,054	315,596	248,900	-1.1	-4.6	-2.9
Pepper	5,423	11,467	10,200	16.2	-2.3	6.5
Vegetables*	25,780	35,180	42,240	6.4	3.7	5.1
Fruits	150,084	204,560	257,654	6.4	4.7	5.6
Tobacco	16,180	10,168	10,525	-8.9	0.7	-4.2
Others**	70,627	85,177	90,356	3.8	1.2	2.5
Total	4,985,065	5,609,315	5,737,038	2.4	0.5	1.4

Sources: Economic Planning Unit, Prime Minister's Department, Malaysia; Department of Statistics, Malaysia.
Notes: * Paddy and vegetables are based on harvested area.
** Others includes sugarcane, coffee, sago, tea and floriculture.

The next most important crop in terms of land area is coconut. Considered as a traditional crop with multiple uses, the crop was once an important source of output for the agricultural sector with coconut oil as its core product. It was planted by plantation houses and also by smallholders. However, with the advent of oil palm as a more efficient producer of edible oil, coconut is now considered a sunset industry with many abandoned holdings. From its high of 409,348 hectares in 1981, the area under coconut has dwindled to only 248,900 hectares in 1995, a reduction of almost 40% in land area during the period. Over the last ten years (1985 – 1995) alone, area under coconut has been reduced by more than 25% or more than 85,000 hectares (Table 2.5). The other notable decline in land area is recorded for tobacco, which declined from 16,180 hectares to only 10,525 hectares during the period.

Resulting form the launching of the first National Agricultural Policy (NAP) in 1984 where fruits and vegetables were actively encouraged, planted area of these crops has increased from about 150,000 hectares and 25,780 hectares, respectively, in 1985 to 257,654 hectares and 42,240 hectares, respectively.

Despite the fact that a more aggressive change is the structural composition of the Malaysian agricultural sector is not happening, Malaysia has been successful to a certain extent in diversifying its agricultural base from just being a producer of rubber and paddy in the 1950s to a more diversified mixed of agricultural enterprises today. Efforts are now being undertaken to further reduce the sector's dependency on palm oil, which mainly utilizes foreign labour in the production process.

In the next section, a detailed review of the subsectors that form the focus of this study will be undertaken. They consist of the palm oil, paddy, tobacco, and the miscellaneous subsectors. In the miscellaneous subsectors, focus will be given to the upland crops consisting of maize, sweet potato and tapioca.

2.4.2 The palm oil subsector

The palm oil subsector forms the single largest agricultural enterprise in Malaysia. The subsector has witnessed phenomenal growth since the 1960s. The industry as a whole has evolved from a mere producer and exporter of crude palm oil (CPO) into a more diversified

entity. Production of palm oil of has given birth to a host of inter-related downstream and supporting industries including milling and refining, cooking oil manufacturing and oleochemicals. The oil palm subsector has also assisted the government in enhancing income of smallholders in the agricultural sector.

The government in the early 1960s and the 1970s through the Federal Land Development Authority (FELDA) undertook heavy investments in new area development, opening new land schemes for the resettlement of the landless for palm oil production. The development of oil palm area was also undertaken by other agencies such as the Federal Land Reclamation Authority (FELCRA), the Rubber Industry Smallholders' Development Authority (RISDA) and also by the respective State Economic Development Corporations (SEDCs). Stable prices and sustained long-term industry profits prompted the private sector to extensively venture into the production of this crop. Vast areas under rubber estates and smallholdings were and are still being converted to oil palm. Currently, out of the 2.5 million hectares of oil palm in the country, private estates account for 49% of planted area while government-organized land schemes account for 41%. Independent smallholders make up the other 10%. Now there are about 250,000 families in government land schemes and independent smallholders that are involved in palm oil production with another 80,000 workers in the private estates of Peninsular Malaysia.

Production and trade

For the period 1985 – 1995, the production of CPO increased from 4.1 million tons to 7.8 million tons, registering a 90% increase over the ten-year period with an annual growth rate of 6.4% (Table 2.6). Its contribution to GDP increased from RM 3.6 billion to RM 6.8 billion within the same time period. It now accounts for 5-6% of the national GDP and more than 42% of the GDP in agriculture.

Table 2.6 Production and exports ('000 tons) of palm oil, 1985 – 1995.

Year	Production		Exports	
	CPO	CPKO	PPO	Oleochemicals
1985	4,134	512	3,421	153
1990	6,095	827	5,634	129
1995	7,811	1,037	6,495	521

Source: Ministry of Primary Industries, Malaysia.
Notes: CPO = crude palm oil; CPKO = crude palm kernel oil; PPO = processed palm oil.

The increase in total production of palm oil is not only the result of area expansion but also due to increase in productivity. The production of CPO per hectare has increased from 2.79 tons to 3.08 tons, recording a productivity increase of 0.29 tons per hectare or a 10% increment over the ten-year period.

Concurrent with the rapid increase in production, exports of palm oil have also grown rapidly. Exports of PPO have increased from 3.4 million tons in 1985 to 6.5 million tons in 1995. In terms of value, this represents about 30% of total agricultural exports. Major export destinations for Malaysian palm oil are Pakistan, China, India, the European Union, Egypt and Japan (Table 2.7). Most of the exports to Singapore are believed to be re-exported to other countries.

Table 2.7 Major export markets of Malaysian processed palm oil (tons).

Destination	1985	1990	1995
China	17,104	737,123	1,047
Pakistan	120,420	701,455	1,059
India	534,953	494,768	742,405
EU	225,829	553,323	955,000
Egypt	27,362	346,742	298,488
Japan	144,084	274,699	322,870
Singapore	781,184	737,658	366,378
U.S.A.	76,254	148,305	80,870

Source: Ministry of Primary Industries, Malaysia.

The downstream industries

Over the years, the palm oil industry has not only managed to expand but also to deepen. Increased production has led to increase in milling and refining activities. Between 1985 and 1995, the number of oil palm mills and refineries proliferated. By 1995, there was a total of 281 oil palm mills and 41 refineries with milling and refining capacities of 50.8 million tons and about 10 million tons, respectively (Table 2.8). While the number of refineries almost stagnated due to excess capacity in the late 1980s and early 1990s, the number of oil palm mills significantly increased during the period with a capacity increase of about 45%.

Intensive research and development in product and process development for palm oil have enabled the production of oleochemicals from palm oil. There are now 13 oleochemical plants throughout the country with annual processing capacity of 820,000 tons per year. In 1995, exports of oleochemicals totaled 521,000 tons, up from 153,000 tons in 1985, recording a more than three-fold increase.

Table 2.8 Milling and processing capacity of palm oil, 1985 – 1995.

Year	Mill		Refinery		Oleochemical	
	Number*	Capacity**	Number	Capacity*	Number*	Capacity**
1985	229	35.12	38	5.34	5	0.28
1990	261	42.87	37	10.45	7	0.39
1995	281	50.80	41	10.15	13	0.82

Source: Ministry of Primary Industries, Malaysia.

Notes: * Number of mills, refineries and oleochemical plants in operation.

** Capacity in million tons/year.

Critical issues

Despite the success of the palm oil industry, the subsector is not without its problems. High on the list is the shortage of labour. Currently the industry heavily depends on foreign labour. Many industry analysts predicted that the industry would not survive without immigrant labor. The government has thus far practiced a liberal labour policy to fulfill the labour requirements for the subsector. In spite of this, it is estimated that about 30,000 hectares of oil palm are not fully harvested due to labour shortages. Emerging social problems arising from immigrant workers have caused certain quarters to call for a halt in issuing working permits for immigrants. The government still maintains that the use of immigrant labour in oil palm plantations is a temporary measure. However, with mechanization of labour intensive operations in oil palm production especially harvesting not foreseeable in the near future, the government may decide to gradually phase out or reduce palm oil production. Already, it is encouraging Malaysian companies to invest offshore in palm oil production to ease the labour situation in the country.

The cost of palm oil production is also on the rise due to increasing costs of land, labour and land development. It is now faced with increasing competition from emerging lower cost producers. Without substantial gains in productivity, the international competitiveness of the

sector may be in jeopardy, which can threaten the sustainability of industry in the future.

2.4.3 The paddy subsector

The paddy subsector has always been accorded special treatment based on its strategic role in the Malaysian economy. The government intervenes heavily in the rice industry from production to distribution and marketing. The rice industry plays a multidimensional role in the Malaysian economy. Since rice is a staple food, the government designed policies to ensure that a "comfortable level" of self-sufficiency is maintained. This is to ensure the country is not too dependent on external sources for its staple and that consumers are protected from changes in the price of rice in the international market.

The incidence of poverty in the paddy subsector is the highest in the nation, as was shown in Table 2.3. Traditionally, paddy farmers have formed a strong political group. Therefore, widespread poverty among paddy producers is an important and sensitive political issue (Fatimah and Mohd. Ghazali 1990). In formulating policies for the rice industry, the government needs to maintain an equitable balance between producers' and consumers' welfare. Tan (1987) outlined three primary objectives of the rice policy:

- ensuring food security,
- raising farm incomes and productivity, and
- ensuring food supply to consumers at reasonable costs.

Paddy is produced mostly by smallholders with an average farm size of about one hectare. Only 3.8% of the farmers worked on plots of more than 3 hectares according to an earlier study (Fatimah et al. 1983). However, of late, there are indications of increased consolidation in paddy production as increasing numbers of farmers leave the subsector to migrate to other more remunerative sectors.

Available statistics indicate that the physical land area under paddy cultivation was about 600,000 hectares in 1993. It is observed that there were marginal decreases in physical paddy land area over the last decade, but there are no reliable statistics to indicate the quantum change. However, there was a marginal increase in paddy planted area from about 648,000 hectares to 667,563 hectares, an increase of about 3% over the ten year period. Wet paddy constituted 85% of the total paddy area and the remaining 15% was made up of hill paddy. In Peninsular Malaysia, 76% of the area is provided with extensive irrigation drainage facilities while only 15% of the area in East Malaysia is irrigated (Table 2.9).

Paddy production recorded a 36% increase in the 1985 – 1995 period from about 1.1 million tons to 1.5 million tons (Table 2.10). This increase is a result of better yield performance, increase in overall cropping intensity and better management practices. The total output in 1995 accounted for 4.1% of agricultural GDP, down from 5.3% in 1985. This is less than 1% of the national GDP. National average yields increased from 2.7 tons per hectare to 3.2 tons per hectare during the period. Yields in Peninsular Malaysia averaged 3.7 tons per hectare in 1995, while in Sarawak and Sabah average yields were 1.2 and 2.7 tons per hectare, respectively.

Table 2.9 Distribution of paddy area, 1993 (hectares).

State	Irrigated	Non-Irrigated Areas*	Total
Perlis	22,039	3,648	25,687
Kedah	93,670	24,857	118,527
Pulau Pinang	14,895	225	15,120
Perak	49,029	4,255	53,284
Selangor	19,583	106	19,689
Negeri Sembilan	8,680	1,449	10,129
Melaka	6,183	3,435	9,618
Johor	3,055	746	3,801

Pahang	17,388	13,796	31,184
Terengganu	14,843	12,173	27,016
Kelantan	40,032	25,382	65,414
Sabah	17,163	33,639	50,802
Sarawak	15,136	153,076	168,212
Total	321,696	276,787	598,483

Source: Ministry of Agriculture, Malaysia.
* Includes dry paddy areas.

The majority of Malaysia's paddy production takes place in the eight designated granary areas or the rice bowls of the country. These eight granary areas have increasingly contributed to national paddy production from 64.3% in 1985 to almost 72% in 1995 (Table 2.10). Yields vary substantially even within the granary areas, ranging from 2.83 tons/per hectare in Kerian Sungai Manik to a high of 4.77 tons per hectare for MADA. Average yields in Sabah and Sarawak are around 1.80 tons and 0.70 tons per hectare, respectively.

Malaysia's rice production has enabled it to achieve a self-sufficiency level of between 74% and 79%. The self-sufficiency level for rice for the 1990 – 1995 has consistently been above the 75% level. This is above the minimum self-sufficiency level of 65% that is targeted for rice (National Agricultural Policy, 1992 – 2010). However, Malaysia still imported 430,000 tons of rice worth RM 356.1 million in 1995. Table 2.11 shows the total production and apparent consumption for rice for the 1985 – 1995 period. For the period, rice imports increased from RM 257.1 million in 1985 to RM 356.1 million in 1995, an increase of close to RM 100 million over the ten-year period.

Malaysia is considered a high cost producer of rice compared to many other rice producing countries. This problem is further compounded by escalating costs of agricultural inputs, labour shortages and more attractive opportunities in the other sectors. Paddy cultivation is still one of the low-income economic farm activities in the country.

Small farm units pose constraints in efforts to increase productivity, efficiency and producers' income. This, coupled with the increasing costs of production, makes rice cultivation an increasingly unattractive activity. However, several attempts by the private sector to venture into rice cultivation on a large-scale estate-type production system showed some success even without government assistance. Nevertheless, high infrastructural costs prohibit their aggressive expansion.

The future of the paddy subsector and the rice industry therefore hinges on the capability of the industry to increase efficiency and productivity. The government is likely to direct the allocation of price support and subsidies to infrastructural allocation in the long run to increase productively of rice production and to be consistent with commitments to the WTO.

Government expenditure to sustain rice production through input subsidies, price support and infrastructural maintenance is also increasing over the years. Given this and the government's commitment to the WTO, which calls for the phasing out of all direct price support, the future viability of the rice industry under the present structure of production is in question.

Table 2.10 Paddy production, 1985–1995 ('000 tons).

Area	1985	1990	1995
Granary			
Muda (MADA) - Kedah	701.0	724.9	862.2
Kemubu (KADA) - Kelantan	108.2	163.7	181.2
Kerian Sg. Manik - Perak	144.1	128.7	163.0
Barat Laut Selangor - Selangor	97.4	142.0	146.7
Seberang Prai - Penang	31.7	35.9	62.7
Seberang Perak - Perak	20.5	70.5	56.9
Ketara (Besut) - Terengganu	19.5	25.5	35.3

Kemasin Semerak - Kelantan	-	6.5	19.7
Total Granary	1,122.4	1,297.7	1,527.7
% of National Production	64.3	68.8	71.8
Non-Granary	623.0	587.3	599.6
% of National Production	35.7	31.2	28.2
Grand Total	1,745.4	1,885.0	2,127.3
Total Planted Area (ha)	654,974	680,647	672,787
Average Yield (kg/ha)	2,665	2,769	3,162

Source: Ministry of Agriculture, Malaysia.

Table 2.11 Production and consumption of rice, 1985 – 1995.

Year	Production ('000 tons)	Consumption ('000 tons)	Self-sufficiency Level (%)	Imports	
				Quantity ('000 tons)	Value (million RM)
1985	1,189.1	1,615.5	73.6	429.5	257.1
1990	1,268.9	1,598.2	79.3	330.3	269.8
1995	1,372.6	1,797.9	76.3	425.1	356.1

Source: Ministry of Agriculture, Malaysia.

2.4.4 The tobacco subsector

The tobacco subsector is another subsector that is highly protected by the government. The industry consists of three major groups of players, the tobacco manufacturers, the curers and the green leaf producers, who are small farmers. The protection accorded to this subsector is to ensure that farmers who are mainly located in the relatively impoverished states of Kelantan and Terengganu in the East Coast of Peninsular Malaysia are able to obtain reasonable returns from tobacco cultivation. The subsector has played a vital role in increasing the income and standard of living of the rural population. In addition, the bris soil along the East Coast offers few alternative crop choices and the tobacco crop has been able to adapt well in the sandy conditions of the bris.

Tobacco cultivation started on an eight hectare plot in the state of Kelantan in 1959, introduced by the Malaysian Tobacco Company (MTC). In 1963, MTC started the Malaysian Flue-Cured Virginia (MFCV) tobacco cultivation scheme on a contract basis. Land area under MFCV tobacco subsequently expanded drastically and the number of private curers also increased. The tobacco industry was then confronted with a variety of problems from uncontrolled expansion leading to excess supply. In addition, poor cultural practices, lack of extension services and supervision, and unhealthy competition affected the quality of tobacco leaves (Bek 1979).

The Lembaga Tembakau Negara (LTN) was then established by the government in 1973 to regulate, control and develop the tobacco industry. In 1995, the cultivation and curing of tobacco was estimated to generate an income of RM 103 million for growers, curers and workers. In 1996, there were 21,658 farm families, 37 curers and 24,684 station workers involved in curing and tobacco cultivation.

Production of tobacco is based on a quota system established by the LTN. The yearly quota is determined by demand for MFCV submitted by the major tobacco manufacturers for the following year. This quota is then allocated to private curers, who then allocate it to the green leaf producers for cultivation. From a mere 8 hectare plot in 1959, tobacco planted area reached its peak of 19,165 hectares in 1986. Planted area subsequently declined to 10,500 hectares in 1995 due to higher growth in productivity compared to demand for cured leaves (Table 2.12).

Table 2.12 Tobacco planted area (ha), 1985 – 1995.

Year	Peninsular Malaysia	Sabah	Total
1985	16,509	281	16,790
1986	17,553	1,612	19,165
1987	12,755	344	13,099
1988	9,847	319	10,166
1989	12,903	539	13,442
1990	10,738	480	11,218
1991	15,687	589	16,276
1992	12,817	746	13,563
1993	13,178	639	13,817
1994	10,767	350	11,117
1995	10,500	n.a.	10,500

Source: Tobacco Statistics, National Tobacco Board, Malaysia.

The production of MFVC has somewhat stabilized at around 10,000 tons per year for the past decade (Table 2.13). As consumer demand for American blended cigarettes increased, burley tobacco cultivation was introduced into the country. However, attempts to expand production have not been very successfully due to inefficiencies in burley tobacco production. Nevertheless, production has increase from 0.195 tons in 1985 to 0.504 tons in 1995 (Table 2.13).

Malaysia also imports substantial quantities of tobacco both unmanufactured and manufactured for flavour and aroma blending and for direct use by consumers. Imports have increased from 5.6 tons in 1985 valued at RM 97 million to 9.5 tons in 1995 valued at more than RM 127 million. The increase in value of imports is due to increase in both quantity imported and also the increase in the price of imported unmanufactured tobacco.

The cost of producing tobacco in Malaysia is one of the highest in the world. Currently tobacco cultivation survives mainly through the protection it enjoys. The average cost of cured tobacco leaves is about RM 11.00 per kg. The yield is also low averaging about 1,000 kilograms per hectare during the 1994 – 1996 period, compared to 1,500 kilograms per hectare in Thailand and the Philippines, 2,100 kilograms per hectare in the United States of American and 2,500 kilograms in Zimbabwe. In addition, the production of local tobacco has not attained the quality required. Most of the local tobacco is used as 'filler'. "Flavoring and aromatic tobacco" has to be imported to obtain the required blend preferred by consumers. The Malaysian tobacco industry is by no means competitive, and with liberalization its future is uncertain.

Tobacco production using the curer system also results in inefficiency. Under this system, farmers are paid according to quantity of leaves they sell rather than the quality of leaves produced after curing. This results in a conflict of interest between farmers and curers and has affected the quality of cured leaves. Efforts to the replace the system with a grower-curer system are slow in coming as curers have formed a strong lobby group in the state of Kelantan where most of tobacco production takes place.

Table 2.13 Tobacco production and imports, 1985 – 1995.

Year	Production		Imports *	
	MFCV (tons)	Burley (tons)	Quantity (tons)	Value (RM million)
1985	9,347	0.195	5,581	97.358
1986	13,641	0.598	5,209	92.518
1987	10,848	0.420	3,386	59.520
1988	7,280	0.162	3,048	57.087
1989	13,637	0.221	3,572	68.333
1990	10,517	0.563	4,567	81.343
1991	9,216	0.690	5,543	112.511
1992	11,245	0.697	5,480	92.179
1993	9,679	0.538	5,718	89.142
1994	6,087	0.424	6,320	94.925
1995	10,300	0.504	9,507	127.043

Sources: Tobacco Statistics, Lembaga Tembakau Negara; Department of Statistics, Malaysia.
Notes: MFCV = Malaysia Flue Cured Virginia Tobacco.
* Flue Cured Virginia Tobacco and Burley.

Tobacco production also does not sit well with the government's efforts to create a healthy society. Increasingly many groups are questioning the morality of growing tobacco with the government supporting the industry

2.4.5 Tapioca, sweet potato and maize subsectors

This group of crops is considered to be a minor group. Its contribution to agricultural output is negligible. Nevertheless, these crops are important components of the raw material supply for processing industries. Grain maize, for example, is important for the feed milling industry, which is critical to support Malaysia's poultry industry. The development of these crops is very much left to market forces and there is very little government intervention.

Tapioca

In Malaysia, tapioca is mainly used to manufacture starch and starch products as well as chips and pellets. The later are used as components in animal feed. Total land area under tapioca has declined from a high of 20,782 hectares in 1976 to just over 2,000 hectares in 1995. The decline was more drastic in the 1980s (Table 2.14) where the decline in planted area was at a rate 11.2% per annum. Similarly, production of tapioca also sharply declined from more than half a million tons in 1976 to 58,375 tons in 1995. The fall in production can be attributed to a shortage of land, unstable tapioca prices, rising cost of production and also shortage of labour. In general, tapioca cultivation today can no longer generate the profitability that it used to in the 1970s, and it is no longer a competitive industry in this country.

There is, however, increasing demand for tapioca in the country. With dwindling production imports have risen over the years. Total imports of tapioca products increased from RM 2.8 million in 1985 to almost RM 47 million in 1995 (Table 2.15).

Sweet potato

Sweet potato has traditionally been a small farmer crop in Malaysia. The majority of the farms in the country are two hectares or less in size. The area under sweet potato has lingered between 1,000 to 2,000 hectares for the last decade (Table 2.16). Production is about 30,000 tons. There does not seem to be much development in the local industry and it can be described as a stagnant industry. At the consumption level, a survey by the Federal Agricultural

Marketing Authority (FAMA) also indicated a declining per capita consumption of fresh tubers among households. However, there is increasing demand for sweet potato for processing into chips and snacks in the country. Currently there is also some interest to use sweet potato to partially substitute for maize in animal feed.

Trade in sweet potato is not significant with exports and imports of about RM 1 million or less (Table 2.17). Unless new uses are found for the utilization of sweet potato, it is unlikely that the industry will expand. Under present conditions it is more likely to remain small and stagnant at best.

Table 2.14 Tapioca production in Malaysia.

Year	Area (ha)	Production of Fresh Root (tons)
1980	12,512	312,800
1981	11,759	293,975
1982	8,393	209,825
1983	7,418	185,450
1984	4,975	124,375
1985	5,764	144,100
1986	5,376	134,400
1987	4,965	124,125
1988	2,978	74,450
1989	3,649	91,225
1990	3,130	78,250
1991	2,539	63,475
1992	3,398	84,950
1993	4,907	122,675
1994	3,921	98,025
1995	2,335	58,375

Source: Ministry of Agriculture, Malaysia.

Table 2.15 Imports of tapioca products (1985 – 1995).

Year	Quantity (tons)	Value (RM 1,000)
1985	14,026	2,749
1989	57,799	11,027
1990	41,505	10,544
1991	32,694	14,528
1992	45,090	17,918
1993	59,192	22,335
1994	46,103	27,808
1995	59,796	46,721

Source: Department of Statistics, Malaysia.

Table 2.16 Area and production of sweet potato, peninsular Malaysia (1985 – 1995).

Year	Area (hectare)	Production (tons)
1985	1,154	36,000
1986	1,499	37,000
1987	1,411	37,000
1988	1,752	37,000
1989	2,208	35,000
1990	2,064	36,000
1991	2,118	38,000
1992	1,971	35,359
1993	1,996	35,808
1994	1,771	31,771
1995	1,678	30,103

Source: Department of Agriculture, Peninsular Malaysia; Ministry of Agriculture, Malaysia.

Table 2.17 Imports and exports of sweet potato, 1985 – 1995.

Year	Export		Import	
	Quantity (tons)	Value (RM)	Quantity (tons)	Value (RM)
1988	4,796	1,127,100	293	109,513
1989	4,661	1,234,700	187	77,607
1990	3,706	1,033,418	176	110,205
1991	630	190,335	874	423,970
1992	962	293,721	2,143	769,633
1993	2,613	931,484	3,906	1,428,818
1994	3,095	856,679	1,996	769,748
1995	3,019	841,381	2,651	1,181,201

Source: Department of Statistics, Malaysia.

Maize

Although not grown extensively in Malaysia, maize is a very important raw material. The livestock subsector, especially the poultry industry, is totally dependent on imported maize. The government has not intervened much in the maize market and market development is virtually left to market forces. Most of the maize grown in Malaysia is for fresh consumption. Experimental and pilot project efforts to produce grain maize have not been very successful due to high cost of production and unsuitability of the production environment that limits the applicability of intensive mechanization (Leong 1996).

Maize production has been limited. The area under maize in 1995 is estimated to be about 5,660 hectares, most of which consists of sweet corn. Some expansion in area took place in the mid 1980s into the early 1990s, but area has registered declines since 1992 (Table 2.18). Production in 1994 is estimated to be around 40,000 tons.

To support the poultry industry, which is estimated to be a RM 3.2 billion industry, Malaysia imports substantial quantities of maize yearly. In 1995, total maize imports into the country reached almost RM 1.0 billion up from 362.7 million in 1985 (Table 2.19). The rate of growth in imports during the period was 10.0% per annum. It is now one of the biggest imported agricultural items in the country.

Table 2.18 Area and production of maize, 1985 – 1995.

Year	Area (ha)	Production (tons)
1985	4,740	24,000
1986	4,750	26,000
1987	4,250	30,000
1988	5,900	32,000
1989	6,060	34,000
1990	8,880	35,000
1991	7,875	35,000
1992	8,020	36,000
1993	7,760	38,000
1994	6,480	40,000
1995	5,660	43,000
1996	n.a.	45,000

Sources: Ministry of Agriculture Malaysia; FAO.

It is unlikely that local maize production will expand in the near future. Imports are likely to increase as the livestock industry continues to expand. However, considering that the poultry industry is also protected, liberalization may see some consolidation in poultry production. Smaller farmers who are less efficient may have to cease operations and it is expected that only the larger farmers will survive. Imports will eventually make in-roads in the

Malaysian market. If this happens, domestic poultry production will decline. This will lead to lower imports of maize.

Table 2.19 Imports of maize, 1985 – 1990.

Year	Volume ('000 tons)	Value (RM million)
1985	1,187	362.7
1986	1,210	322.7
1987	1,312	354.8
1988	1,367	458.6
1989	1,521	619.7
1990	1,517	589.1
1991	1,541	588.0
1992	1,840	643.3
1993	2,092	691.3
1994	2,006	707.5
1995	2,414	990.7

Source: Department of Statistics, Malaysia.

3. Malaysia's Trade Policies

3.1 Introduction

This chapter provides an overview of Malaysian trade policy describing the history of trade regimes. It includes a description of the evolution of trade policies in the country including fiscal and financial policies as well as other policies that have direct and indirect impacts on trade. Specific focus will be given to trade policies in agriculture. The last section provides a detailed description of all the policy instruments that are used in the specific subsectors in agriculture that have influence on agricultural trade. It traces the events that led to the adoption of such policies in the specific subsectors and describes how these policies have changed over time. Again in this section, emphasis is given to the country specific subsectors i.e. palm oil, rice, tobacco and the subsectors related to the upland crops that are of relative importance to Malaysia, viz. tapioca, maize and sweet potato.

3.2 Evolution of Malaysian trade policy

Trade policies in Malaysia can be considered an off-shoot of national development policies. These policies are embedded in the various economic development plans of the country, which consist of medium-term plans called the five-year plans, sectoral long-term plans and long-term national plans. The five-year plans started in 1956, a year before the Federation of Malaya, as it was then called, gained independence from the British. It was followed by a Second Five-Year Plan covering the period 1961 – 1965. When Malaysia was formed with the addition of Sabah and Sarawak in Borneo, the planning framework was widened to include these two states. Hence, a third five-year plan called the First Malaysia Plan was launched in 1966 covering the period of 1966 – 1970. Malaysia is now in its seventh plan period since its formation in 1967 and its ninth planned period since gaining independence from the British. In these plans, development policies were reviewed from time to time and shifts in policy focus take place to cater to the needs of changing times and new development agendas. A mid-term review of the five-year plan was also undertaken to take stock of progress and make necessary adjustments for the short term. In 1970, the government introduced the First Outline Perspective Plan (OPP1) covering the period of 1971 – 1990. This is Malaysia's first long-term plan and it outlined and strategized Malaysia's New Economic Policy (NEP). This was followed by another long-term plan, the Second Outline Perspective Plan (SOPP) which is to run from 1991 until the year 2000. The SOPP lays the New Development Policy (NDP) of Malaysia.

Apart from the long-term and medium national plans, there are also long-term sectoral policies and plans. Two important sectoral documents concern industrial and agricultural development. In agriculture, the National Agricultural Policy (NAP) was launched in 1984 to provide guidelines on agricultural development for the country. This NAP was reviewed in 1990 and a second NAP was formulated in 1992, "The National Agricultural Policy, (1992 – 2010)". This NAP is also currently under review due to the dynamic nature of events that have taken place at both the domestic and international levels and that are affecting Malaysian agricultural development. For industrial development, a long-term industrial development plan was formulated in 1985, the Industrial Master Plan (IMP) covering the period of 1985 – 1995. On the expiry of the IMP, a second industrial plan was launched in 1996, "The Second

Industrial Master Plan, 1996 – 2005". All the above policy documents and plans provide guidelines on overall development of the country which impinges on trade policies.

3.3 Phases in Malaysia's economic policy planning

Malaysia's policy planning can be divided into three phases (Mohd Noor 1997). The first phase ran from 1956 to 1970, the second from 1971 to 1990 and a third is running from 1991 to 2000.

3.3.1 The first phase: growth and diversification policy, 1956 – 1970

During this phase, the policy was to nurture growth through the sustenance and development of the country's main exports, rubber and tin. The government also recognized the narrow economic base and initiated development of the manufacturing sector through the establishment of industrial estates to diversify the economy. The diversification strategy also promoted palm oil production for agriculture as well as the exploration of other mineral resources. Infrastructural development, especially for industry, was also given emphasis. Market intervention was gradually increased by the adoption of an import substitution policy. The Tariff Advisory Board was established in 1963 to select sectors and determine the levels of protection for specific sectors. Additionally, the Pioneer Industry Ordinance was introduced whereby selected industries were awarded tax holidays and other incentives.

On the social front, initiatives were undertaken to enhance income and standard of living, especially of the rural populace. This was mainly done through land development by providing land and employment opportunities to the rural landless.

Despite the general success of the policies in stimulating growth, economic activities continued to follow racial lines, with the Malays, which are mainly in the rural areas, locked in low-income small-scale agriculture and poverty. The Chinese, on the other hand, were mostly employed in industry and commerce in the urban areas. They enjoyed a higher level of income and standard of living due to expansion of the industrial and commercial sectors resulting from policies that favour the expansion of these sectors. Resentment at this disparity in income exploded, resulting in bloody racial riots in 1969 (Mohd Noor 1997). This incident prompted the government to formulate policies aimed at narrowing this disparity in income between races. This marked the beginning of the second phase in Malaysia's economic policy planning.

3.3.2 The second phase: national integration with growth and the new economic policy era, 1970 – 1990

Sparked by the 1969 riots, the main policy during this phase was to achieve national unity. The NEP was formulated through the OPP1. The overriding objectives of the NEP were to achieve national integration and unity. The government used a two-pronged strategy to achieve this objective:

- to reduce and eventually eradicate poverty by raising income levels and increasing employment opportunities for all Malaysians irrespective of race, and
- to accelerate the process of restructuring Malaysian society to correct economic imbalances so as to reduce and eventually eliminate the identification of race with economic function.

The emphasis on national unity is considered a critical prerequisite to economic growth considering the high resentment between ethnic groups due to economic imbalances. The formulation of the NEP underlay the government's fundamental principles to create a progressive, economically equitable, socially just, liberal and united Malaysian society. The NEP is an exercise of social engineering designed to reduce the socio-economic imbalances among ethnic groups and across regions. This is to be implemented within the context of a

rapidly growing economy which offers increasing economic opportunities for all Malaysians.

It was during this era that Malaysia shifted its policy from import substitution to export promotion. This shift to export-led growth was due to the realization that the small domestic market was inadequate to generate the desired growth required to expand the economy and enhance income. Foreign direct investments were actively promoted through creation of Free Trade Zones and the introduction of the Promotion of Investment Act, 1986, where promoted activities especially for exports were given more extensive incentives including tax holidays, rebates, accelerated depreciation on capital goods and others. Rural development was also given increased emphasis during this period. The government through its agencies like FELDA opened up extensive new lands for resettlement of the rural landless to be engaged in rubber and palm oil production. Small subsistence farmers engaged in rice production were provided with extensive irrigation infrastructure and a host of support measures from subsidies to research and development.

The NEP recorded significant success with the country registering commendable economic growth. Real growth was at 6.7% for the 1970 – 1990 period, despite the recessionary years of 1985 – 1986. Significant progress was made to increase employment opportunities, enhance income, alleviate poverty and restructure society. Absolute poverty was diminishing and the inequalities in income were narrowed. This was done by raising the levels of rural income and expanding opportunities for the rural population. In this respect, programs in the agricultural sector played a vital role towards achieving this performance.

3.3.3 The third phase: united society, balanced development and the national development policy, 1991 – 2000

During the first phase, the main thrust was in the provision of social and industrial infrastructure to lay the foundation for a free market economy for growth. The second phase of development planning was influenced by efforts to narrow income gaps along racial and regional lines towards establishing political and economic stability. Building on the success of the NEP, the new era of development of the NDP maintains the ultimate goal of achieving a united society. Its objective is to attain balanced development in order to establish a more united and just society. In addition, the NDP follows the thrust of Vision 2020 to make Malaysia a fully developed country by the year 2020. Vision 2020 has a mission statement as follows:

"By the year 2020, Malaysia is to be a united nation, with a confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous and in full possession of an economy that is competitive, dynamic, robust and resilient".

The Vision 2020 mission statement has deep implications for Malaysia's trade policy in that by 2020 the creation of a competitive economy will require the county to entirely open its enterprises to international competition.

While the NDP maintains the basic strategies of the NEP, new dimensions were added to the policy. These are:

- to shift the focus of the anti-poverty strategy towards eradication of hardcore poverty while at the some time reducing relative poverty,
- to focus on employment and the rapid development of an active Bumiputera Commercial and Industrial Community (BCIC) as a more effective strategy to increase the participation of Bumiputera in modern sectors of the economy,
- to rely on the private sector to be involved in the restructuring objective by creating greater opportunities for its growth, and
- to focus on human resource development as a fundamental requirement for achieving the objectives of growth and distribution.

In explaining the Vision 2020 and the NDP to the nation, the Honorable Prime Minister

emphasized the need to secure the establishment of a competitive economy: "an economy that is subjected to the full discipline and rigor of market forces" (Mahathir Mohamad 1991).

In the agricultural sector, the NDP emphasized the need for a market-oriented approach and for concentration on crops that have comparative advantage. It called for a review of development programs and support measures even to the paddy subsector in view of switching to more remunerative crops.

In short, the NDP has set the stage for increased opening of the economy including the agricultural sector to external competition. Malaysia's active participation at international and regional forums on trade liberalization issues leading to signing of various agreements on trade liberalization are testimonies to Malaysia's stand as a strong proponent of trade liberalization, consistent with the country's development plans.

3.4 Policy evolution in the agricultural sector

Agricultural development strategies in the 1960s and 1970s mainly focused on providing employment, and earnings and savings of foreign exchange. Consistent with the NEP, and considering that there was a high incidence of poverty in the agricultural sector, strategies and programs during the period were also designed to raise farm incomes. The country aggressively pursued expansionist policies on export crops such as rubber, oil palm and cocoa and also import substituting strategies to earn and save foreign exchange, create employment and income earning opportunities. Many subsectors in agriculture were protected through tariffs and nontariff barriers such as quotas and other import barriers. High emphasis was given to food security where a 100% self-sufficiency target was set for domestic rice production. At the same time, the export crop subsector was heavily taxed to provide revenue to the government to finance its operating and development costs. The government also undertook heavy investments in infrastructural development, institutional building and new land development.

3.4.1 The National Agricultural Policy (NAP)

To ensure a sustained and consistent development of the agricultural sector, initiatives were undertaken in the early 1980s to promulgate a formal policy on agriculture. Launched in 1984, the first NAP policy's main objective was to maximize income from agriculture through efficient utilization of the country's resources and increase in productivity. The main strategies still emphasized new land development together with in situ development. Agricultural support services such as research and development, extension and marketing were also given emphasis. This policy marks the actual beginning of the liberalization of the agricultural sector, although the country had already started to reduce tariffs for intermediate products and raw materials during the Second (1971 – 1975) and Third Malaysia Plan periods to stimulate manufactured export activity (Samion Abdullah and Tengku Ariff 1990; Tengku Ariff 1997). The NAP explicitly stressed productivity driven growth and recognized the need for the sector to be efficient in order to sustain agricultural growth in the long term. Reflecting this move in emphasizing efficiency, the l00% self-sufficiency level for rice was rationalized to 80 – 85%.

3.4.2 The National Agricultural Policy, 1992 - 2010 (NNAP)

The period of 1984-1990 marks an important threshold in the transformation and development of the Malaysian economy. This era saw rapid expansion of the manufacturing sector and altered the relative importance of the agricultural sector. Although value added in agriculture grew at an average rate of 4.6%, this is however less than half of the manufacturing sector which grew at the rate of 13.7%. Overall development of the agricultural sector was beset with problems, including more favorable policies towards manufacturing, labour shortages and increasing wages, increasing competition for land for other uses and others. To aggravate the

situation, two of the important commodities, namely palm oil and cocoa, experienced a substantial decline in world prices (Ministry of Agriculture 1992).

Subsequently, the first National Agricultural Policy (NAP) was reviewed and a second NAP (1992 - 2010) was introduced. Greater emphasis was given to productivity, efficiency and competitiveness issues in the context of sustainable development and linkages with other sectors of the economy, in particular, the manufacturing sector (Ministry of Agriculture 1992). This is in contrast with the first NAP which gave greater attention to new land development and the creation of employment opportunities. The policy also outlined both medium and long-term strategies for expanding food production, a greater role of the private sector, marketing reform and accelerated agrobased industrial development. The development effort was geared towards modernization and commercialization, especially that of the unorganized smallholders, to enhance the sector's economic/structural integration with the rest of the economy particularly the manufacturing sector. The NNAP called for accelerated transformation of the sector into a dynamic commercial sector, emphasizing efficient farm management and enterprises. Efforts to further liberalize the agriculture sector were intensified. The food security issue was further rationalized. Reflecting this move, the self-sufficiency target for rice was revised downwards to 65% and import taxes on many agricultural products were substantially reduced. The policy also calls for the increased exports of higher value added agricultural products such as floriculture as well as fruits and vegetables.

3.5 Incentives in agriculture

Incentives for agricultural production only attracted coverage through the introduction of the Promotion of Investment Act (PIA), 1986 and the Income Tax Act 1967 (Amended 1986). Prior to this most incentives were only accorded to the industrial sector. The principal agencies that are involved with respect to the PIA are the Malaysian Industrial Development Authority (MIDA) and the Ministry of International Trade and Industry (MITI) while implementation of the Income Tax Act mostly concerned the Federal Treasury and the Inland Revenue Department.

The incentives of the PIA and Income Tax Act provide either partial or total relief from income tax payments. Under the PIA, the Minister of International Trade and Industry shall from time to time determine the list of "promoted activities or products" that are eligible for the incentives. Two of the main incentives provided by the PIA are the Pioneer Status and Investment Tax Allowance (ITA). Companies that are accorded Pioneer Status will only have 30% of their statutory income taxable for a period of five years. Companies granted ITA are given an allowance of 60% in respect of qualifying capital expenditure incurred within the period of five years. More attractive packages for the Pioneer Status and the ITA are also given to companies investing in less developed locations in Malaysia.

In addition to the two main incentives, the PIA also provides incentives to companies involved in promoted agricultural activities that are mainly engaged in the export markets. Some of the activities undertaken by companies in promoting exports are eligible for double deductions. These expenses include costs incurred for overseas advertising, export market research, participation in trade fairs and exhibitions, supply of technical information, public relations work related to exports and the cost of maintaining an overseas sales office for export promotion.

Under the Income Tax Act, 1067 (Amended 1986) additional incentives are also available for investments in the agricultural sector. These include reinvestment allowance, deduction for capital expenditure (including clearing and preparation of land and other approved development costs), incentives for research and development and training, industrial building allowance and double deduction for export credit insurance premiums.

The Central Bank also provides export credit refinancing (ECR) designed to meet the

needs of exporters for finance. Both post and pre-shipment refinancing are available for exporters for most primary agricultural products. This financing is given preferential rates of interest of 5% per annum.

During the early years of the PIA, many analysts were of the view that the incentives of the PIA were designed to meet the needs of the manufacturing sector and were biased against agriculture (Lim 1991; Tengku Ariff et al. 1993). Although most of the incentives awarded to the manufacturing sector were available for agriculture, the unique biological nature of agricultural production made some of the incentives inapplicable to agricultural enterprises. Some of these biases have been corrected over the years to make these incentives more sector-neutral.

3.6 Public development expenditure in the agricultural sector

Agricultural and rural development has always been accorded high priority in government plans. Consistently over the period of 1971 – 1990, the share of public development expenditure to the sector has been above 20% (Table 3.1). The sector's share was highest for the period 1971 – 1980. This reflects the government's commitment to develop agriculture and uplift the income of the rural populace. Most of the expenses incurred were for infrastructural development and the upgrading of facilities in institutions involved in the development of the sector. Substantial expenses were also for poverty eradication programs under the NEP.

However, the share of development allocation to agriculture substantially declined to 11.6% for the 1991 - 1995 period and to 8.1% for the 1996 – 2000 period. This reflects a policy shift of the government in the NDP to reduce support to less competitive sectors as well as to develop and nurture the more competitive enterprises in the economy. The absolute allocation also decreased from about RM 6.35 billion for the 1991 – 1995 period to RM 5.47 billion for the 1996 – 2000 period.

Table 3.1 Sectoral share of public development expenditure (%).

Sector	Period					
	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995	1996-2000
Agricultural and rural	24.0	22.0	21.0	20.8	11.6	8.1
Transportation	17.0	13.0	11.0	19.3	22.4	23.3
Communication	2.0	5.0	4.0	2.2	0.1	0.1
Commerce and Industry	19.0	15.0	14.0	11.4**	7.5**	8.9**
Utilities	4.0	8.0	8.0	10.2	7.8	7.6
Feasibility Study and R&D*	-	-	-	0.9	1.2	2.1
Social Development	17.0	17.0	16.0	24.8	24.8	29.3
Security	14.0	17.0	24.0	7.2	20.1	13.6
Administration	2.0	2.0	2.0	3.2	4.5	7.0
Total Allocation (RM billion)	7	21	43.0	35.3	54.7	67.5

Source: Five-Year Development Plans, Malaysia various issues.

Notes: * Prior to 1986 – 1990, Feasibility Study and research and development were allocated under operating expenditure; ** Includes mineral resources development.

3.7 Review of Malaysia's trade policy

Malaysia is fundamentally a trade-oriented economy with exports and imports of goods and services accounting for more than 70% of the GDP (Mohamed Ariff et al. 1996). Malaysia is ranked among the top 30 trading nations in the world. It ranked 19th in 1994 in terms of exports and 18th in terms of imports. Per capita exports and imports were even higher than

those of the United States, Australia and Japan. Thus, in general, Malaysia strongly believed and extensively practiced openness in trade and the fundamentals of comparative advantage and competitiveness. External trade is of great importance to the development of the Malaysian economy and Malaysia places high importance on a strong, open and viable trading system (GATT 1993a).

The main objectives of Malaysia's trade policies are:

i. improved market access for Malaysia's exports of primary commodities and manufactured products,
ii. the development and promotion of exports of higher value-added and resource based products,
iii. expansion of trade with major trading countries,
iv. diversification of trade into nontraditional markets, particularly developing countries,
v. strengthening of intra-ASEAN trade through closer economic and trade cooperation, and;
vi. expansion of trade and investment links with the East Asian region.

3.7.1 Trade policy formulation process

MITI is mainly responsible and spearheads the planning and implementation of Malaysia's trade and industrial development policies. The Ministry of Finance, however, is the final authority on tariffs and incentives. Other Ministries such as the Ministry of Agriculture and the Ministry of Primary Industries are also heavily involved in the trade policy formulation process for the respective sectors under their purview and have control over matters such as import and export licensing and authority on sanitary and phytosanitary requirements. The Ministry of Domestic Trade and Consumer Affairs also indirectly has influence on trade in view of its responsibility to encourage and facilitate an orderly and healthy development of domestic trade with the aim of protecting the interests of consumers and producers. They are the authority in enforcing price ceilings set by the government on essential products especially food to ensure that there are no excessive monopoly profits made by producers and marketing agents. These policies and plans are subsequently subject to Cabinet approval. If any of the policies involve legislative procedures, they must also be presented to parliament for approval.

3.7.2 The trade regime

Malaysia has a fairly liberal trade regime with low tariffs for most products. In 1993, the simple average and ad volorem tariff was 14%. The average was lower for agriculture at 10.4% while for industry it was 14.4%. As early as 1985, FAO observed that even for the so-called protected subsectors in Malaysian agriculture, such as the fruit industry which attracted a tariff of RM 661 per ton for many imported fruit types, the tariff was still among the lowest in the region (FAO 1985).

The level of tariff protection is regularly revised to harmonize the tariff structure and reduce excessive protection. In most cases, tariffs on products are revised downwards except for products that are luxurious and unhealthy such as luxury cars, cigarettes and alcohol, where there were increases on tariffs imposed on the importation of these products.

With respect to nontariff measures, Malaysia also practices import licensing (automatic and non-automatic) on a fairly wide range of products. This is used both for restricting imports to protect certain industries, ensure adherence to sanitary, phytosanitary, safety, environmental protection as well as copyright requirements and also for the purpose of monitoring. Prior to the formation of the WTO, Malaysia also applied quotas and import bans on certain products. The application of these measures is, however, limited to a number of products. In terms of monopolistic practices, Malaysia has only one state enterprise, the Lembaga Padi dan Beras Negara (LPN) which has since been privatized. This company now holds exclusive rights to the

importation of rice into the country.

Export duties are levied on a number of primary commodities. The revenues collected from these levies are usually channeled back for the sustained development of these commodities such as for research and development and replanting. These levies are also to encourage domestic processing of primary commodities for high value added. Malaysia does not have any export subsidies but provide incentives such as tax rebates for certain promoted export oriented industries.

The trade regime for agriculture

The effective duty rates on imported agricultural products are low by international standards and the protection afforded to the industrial sector is still considerably higher than that of agriculture. Over the years, and more so in the recent period of the 1990s, tariffs have been reduced on a broad range of products, both to meet Malaysia's obligations to international and regional trade agreements and also as voluntary cuts to ensure competitiveness of agricultural subsectors in the long term. In addition, these cuts are also made especially on food products to ensure food prices remain reasonable in the government's efforts to control inflation. Table 3.2 gives the general picture of the tariff structure for agricultural products embodied in Chapter 1 to Chapter 24 of the Malaysian Customs Trade Classifications and Customs Duty Order.

It can been seen that over the last 20 years Malaysia has been continuously reducing its import tariffs. The number of tariff lines under the 0-5% category has increased from 318 lines to 866 lines in 1997 or from 50.9% to almost 70% of all tariff lines in the 24 chapters. The reduction has been more rigorous for the 1988 - 1997 period, where the number of tariff lines under the 0-5% group has increased from 52% to almost 70%, progress of almost 35% in terms of percentile points. Similarly, the number of tariff lines that fall under the 6-15% group has also increased from 21 lines in 1978 to 95 lines in 1988 or from 3.4% to 7.6% of the total tariff lines. Products that attract higher duties (>50%) and with fixed rates also declined over the last decade. Now only 114 tariff lines or about 9.0% of the tariff lines have fixed rates. Malaysia is in the process of converting all the fixed rates into ad volerem rates. Out of the 866 tariff lines that are in the 0-5% category, about 850 lines or 61% are actually duty free.

This analysis indicates that Malaysia has a fairly liberal import regime for agricultural products among developing countries. In the coming years, Malaysia is expected to make further cuts in line with its policy to further liberalized the agricultural sector and make it more competitive.

Regime for the protected subsectors in agriculture

A few subsectors and industries in agriculture are still protected. This protection is accorded to protect the interests of producers. In many cases this protection is in the subsectors where there are still a large number of poor households. The protection is accorded to rice, specific livestock subsectors, tobacco and tropical fruits, coffee and cabbages.

In rice, BERNAS (the privatized LPN) still holds a monopoly on the import of rice. The amount that BERNAS is allowed to import depends on expected domestic production levels and available stocks. On average, Malaysia imports 30 – 35% of its domestic consumption and the applied tariff for all rice products except broken rice (at 2% tariff) is zero (Table 3.3). This is way above the 3 – 5% level that Malaysia is supposed to apply under the Uruguay Round Agreement. Rice is bound at 40% but it is unlikely in the near future that Malaysia will apply this bound rate to rice unless the country enters into an era of 'emergency' that requires the country to drastically increase domestic rice production.

In the livestock sector, three industries are still accorded protection. They include the poultry industry covering products such as live poultry and meat including fresh, chilled or

frozen as well as poultry eggs. Prior to the Uruguay Round Agreement, imports of these products faced a total ban. Now these products are bound at rates of 23% to 85% (Table 3.4). However, the applied rate of duty is zero. A minimum market access of 3% of domestic consumption is now allowed for these products, which will be increased to 5% by 2004. The swine industry is similarly protected. Live swine and meat of swine are bound at rates of 23% to about 139% (Table 3.4). Again, as in the case for poultry, the applied tariff rate is also zero. Fresh milk is also subjected to import restriction, but is only bound at the rate of 6% (Table 3.4).

Trade in tobacco is restricted by high tariffs. The high tariffs are to protect the interests of producers which are mainly in the poor regions of the country with little option to cultivate other crops that can give similar returns to tobacco. The high tariff is also to make cigarette prices higher in order to discourage smoking among Malaysians. Over the years, imports of unmanufactured and manufactured tobacco have never been revised downwards, always upwards. For example, import duty on unmanufactured tobacco was increased from RM 20.72 per kilogram in 1974 to RM 32.54 per kilogram in 1980. In 1982, it was further increased to RM 50.00 per kilogram. Effective from 1990, a 5% surtax was incorporated into the import duty as ad volorum tax. Imports of manufactured tobacco are even higher and attract maximum tariff of up to RM 162.00 per kilogram. Reflecting the high degree of protection to the industry, the bound rates of duty for tobacco and tobacco products are even higher, from RM 100 to RM 270 per kilogram (Table 3.5). However, as in all cases, Malaysia thus far has never applied the bound rates to imported products.

Tropical fruits such as bananas, pineapples, mangosteens, melons and papayas are also protected behind high tariff walls. The tariffs for these products range from RM 220.45 plus another 5% for mangoes to a high of RM 1,322.77 plus another 5% for bananas (Table 3.6). These high tariffs are also to protect producers, who are small farmers.

Coffee and round cabbages are also subject to import restrictions. For coffee, however, most requirements for imports are allowed, although import licensing is still not automatic. Round cabbages are still subject to quantitative restrictions but the amount of cabbage imported into the country sometimes exceeds domestic production and is way above the requirement of the GATT. However, cabbages are bound at a rate of 90% although the applied tariff is now zero. Coffee, on the other hand, is bound at about 69%, also with zero applied tariffs (Table 3.7).

Table 3.2 Import tax rates, Malaysia, 1978 – 1997.

Year	Number of Tariff Lines										
	0 - 5%	% of Total	6 – 15%	% of Total	16 – 50%	% of Total	> 50%	% of Total	Fixed Rates	% of Total	Total
1978	318	50.9	21	3.4	124	19.8	2	0.3	160	25.6	625
1988	728	52.0	35	2.5	268	19.2	1	0.07	367	26.2	1,399
1997	866	69.2	95	7.6	177	14.1	-	-	114	9.1	1,252

Source: Malaysia Customs Trade Classifications and Customs Duty Order: various issues.

Table 3.3 Base, bound and applied rates of duty for rice products.

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Applied Rate of Duty
10.06	Rice			
1006.10	- Rice in the husk (paddy or rough):			
100	Pulut (glutinous rice)	45%	40%	0%
900	Other	45%	40%	0%
1006.20	- Husked rice:			
100	Pulut (glutinous rice)	45%	40%	0%
900	Other	45%	40%	0%
1006.30	- Semi-milled or wholly milled rice, Whether or not polished or glazed:			
100	Pulut (glutinous rice)	45%	40%	0%
	Other			
910	Semi-milled	45%	40%	0%
1006.40	- Broken rice:			
100	for animal feeding	20%	15%	2%
900	other	45%	40%	0%

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

Table 3.4 Base, bound and applied rates for livestock products.

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
01.03	Live swine			
103.91 000	- Weighing less than 50 kg	23%	20.7%	0%
103.92 000	- Weighing 50 kg or more	23%	20.7%	0%
01.05	Live poultry, that is to say fowls of the species Gallus domesticus, ducks, geese, turkeys and guinea fowls.			
	- Weighing not more than 185g:			
0105.11	- Fowls of the species Gallus domesticus			
100	Day old chicks	33%	29.7%	5%
900	Other	33%	29.7%	5%
0105.19	- Other			
100	Day old ducklings	38%	34.2%	5%
900	Other	38%	34.2%	5%
	- Other			
0105.91 000	- Fowls of the species Gallus domesticus	32%	28.8%	5%
0105.99	- Other			
100	Ducks	26%	23.4%	5%
900	Other	26%	23.4%	5%
02.03	Meat of swine, fresh, chilled or frozen			
	- Fresh or chilled			
0203.11 000	- Carcasses and half-carcasses	154%	138.60%	0%
0203.12 000	- Hams, shoulders and cuts thereof, with bone in	154%	138.60%	0%
0203.19 000	- Other			
0203.21 000	- Carcasses and half-carcasses	154%	138.60%	0%
0203.22 000	- Hams, shoulders and cuts thereof, with bone in	154%	138.60%	0%
0203.29 000	- Other frozen			
02.07	Meat and edible offal, of the poultry of heading No. 01.05, fresh, chilled or frozen			
0207.10	- Poultry not cut in pieces, fresh or chilled			
100	fowls of the species Gallus domesticus	63%	56.70%	$1.32
	Other poultry			
900	- Poultry not cut in pieces, frozen	63%	56.70%	66 sen
	- Fowls of the species Gallus			
0207.21 000	domesticus	63%	56.70%	$1.32
	- Poultry cuts and offal, (including livers) fresh or chilled:			
	- Other			
0207.39	Poultry cuts:			
	Fowls of the species Gallus domesticus:			
	- Chicken wings			
111	- Other	82.4%	74.20%	$1.32
119	- Other	94.4%	85.00%	$1.32
190	Offal	94.4%	85.00%	66 sen

Continued …….

Table 3.4 Base, bound and applied rates for livestock products (continued).

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
	- Poultry cuts and offal other than livers, frozen:			
0207.41	- Of fowls of the species Gallus domesticus:			
	Cuts:w			
110	Chicken wings	82.4%	74.2%	$1.32
190	Other	94.4%	85%	$1.32
04.01	Milk and cream, not concentrated not containing added sugar or other sweetening matter.			
0401.10	- Of a fat content, by weight not exceeding 1%			
900	Other	6%	5%	0%
	- Of a fat content, by weight, exceeding			
0401.20	1% but not exceeding 6%:			
900	Other	6%	5%	0%
0401.30	- Of a fat content, by weight, exceeding 6%			
	Milk:			
190	Other	6%	5%	0%
	Cream:			
290	Other	6%	5%	5%
0407.00	Bird's eggs, in shell, fresh, preserved or cooked			
	Fresh:			
	For hatching			
111	Hens' eggs	62%	55.80%	5% + $3.00
112	Duck's eggs	62%	55.80%	
119	Other bird's eggs	62^	55.80%	5% + $3.00
	Other			
191	Hens' eggs	62%	55.80%	5% + $3.00
192	Duck's eggs	62^	55.80%	10% or $3.30 with
199	Other bird's eggs	62%	55.80%	5% + $3.00
	Preserved			
210	Hens' eggs	62%	55.80%	5% + $3.00
220	Duck's eggs	62%	55.80%	10% or $3.30 with
290	Other bird's eggs	62%	55.80%	5% = $3.00
	Other			
910	Hens' eggs	62^	55.80%	5% + $3.00
920	Duck's eggs	62%	55.80%	10% or $3.30 with
990	Other bird's eggs	62%	55.80%	5% = $3.00

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

Table 3.5 Base, bound and applied duty for tobacco products.

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
24.01	Unmanufactured tobacco: tobacco refuse			
2401.10	Tobacco, not stemmed/stripped:			
100	Flue cured, of the Virginia type	170 per kg & 5%	150.00 per kg & 5%	5% + & 50.00
900	Other	170 per kg & 5%	150.00 per kg & 5%	5% + & 50.00
2401.20	- Tobacco, partly or wholly stemmed/stripped:			
100	Flue cured, of the Virginia type	170 per kg & 5%	150.00 per kg & 5%	5% + & 50.00
900	Other	170 per kg & 5%	150.00 per kg & 5%	5% + & 50.00
2401.30 000	- tobacco refuse	170 per kg & 5%	150.00 per kg & 5%	5% + & 50.00
24.02	Cigars, cheroots, cigarillos and cigarettes of tobacco or of tobacco substitutes			
2402.10 000	- Cigars, cheroots and cigarillos, containing tobacco	138.00 per kg	250.00 per kg	$138.00
2402.20 000	- Cigarettes containing tobacco	162.00 per kg	270.00 per kg	$162.00
2402.90	- Other			
100	Cigars, cheroots and cigarillos, containing tobacco substitutes	138.00 per kg	250.00 per kg	$138.00
200	Cigarettes containing tobacco substitutes	162.00 per kg	270.00 per kg	$162.00
900	Other	50.00 + 5%	100.00 + 5%	
24.03	Other manufactured tobacco and manufactured "tobacco substitutes; homogenized" or "reconstituted" tobacco: tobacco extracts and essences			
	- Smoking tobacco, whether or not containing tobacco substitutes in any proportion:			
	Packed for retail sale:			
110	In airtight containers	60.00 per kg & 5%	100.00 per kg & 5%	5% + & 60.00
	Other			
190		60.00 per kg & 5%	100.00 per kg & 5%	5% + & 60.00
	Other			
900		50.00 per kg & 5%	160.00 per kg & 5%	5% + & 50.00
	Other			

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classification and Duty Order, 1997.

Continued …..

Table 3.5 Base, bound and applied duty for tobacco products (continued).

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
2403.91	- "Homogenized" or reconstituted"	60.00 per kg	100.00 per kg	5% + & 60.00
100	tobacco:	& 5%	& 5%	
	for retail sale			
	Other	50.00 per kg	100.00 per kg	5% + $50.00
2403.99	other	& 5%	& 5%	
100	beedies	19.50 per kg	80.00 per kg	5% + $19.50
		& 5%	& 5%	
900	snuff	60.00 per kg	100.00 per kg	5% + $60.00
	other manufactured tobacco	& 5%	& 5%	
911	Cut-rags	70.00 per kg	140.00 per kg	5% + $70.00
		& 5%	& 5%	
919	Other	50.00 per kg	100.00 per kg	5% + $50.00
		& 5%	& 5%	
990	other	50.00 per kg	120.00 per kg	5% + $50.00
		& 5%	& 5%	

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

Table 3.6 Base, bound and applied duty for selected fruits.

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
0803.00	Bananas, including plantains, fresh or			
100	dried:			
200	Pisang mas	5% + $1,455.04	5% + $1,322.77	5% + $1,322.77
300	Pisang rastali	5% + $1,455.04	5% + $1,322.77	5% + $1,322.77
400	Pisang berangan	5% + $1,455.04	5% + $1,322.77	5% + $1,322.77
900	Pisang embun	5% + $1,455.04	5% + $1,322.77	5% + $1,322.77
	Other	5% + $1,455.04	5% + $1,322.77	5% + $1,322.77
08.04	Dates, figs, pineapples, avocados.			
	Guava, mangoes and mangosteens,			
	fresh or dried.			
0804.30 000	- Pineapples	5% + $881.85	$608.00	5% + $881.85
0804.50	- Guava, mangoes and mangosteens:			
100	- Guavas	5% + $490.90	5% + $440.90	5% + $440.90
200	- mangoes	5% + $250.00	5% + $224.70	5% + $224.70
300	- mangosteens	5% + $490.90	5% + $440.90	5% + $440.90
0807.10 000	- Melons (including watermelons)	5% + $900.00	5% + $661.40	5% + $661.40
0807.20	- Papaws:			
100	- Mardi backcross solo	5% + $900.00	5% + $661.40	5% + $661.40
900		5% + $900.00	5% + $661.40	5% + $661.40
0810.90	- Other			
	Tropical fruit			
110	Rambutan	5% + $740.00	5% + $661.40	5% + $661.40
120	Durian	5% + $661.40	5% + $330.70	5% + $330.70
130	Langsat	5% + $740.00	5% + $661.40	5% + $661.40

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

Continued …….

Table 3.6 Base, bound applied duty for selected fruits (continued).

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
140	Jack fruit	5% + $661.40	5% + $330.70	5% + $330.70
150	Mata kucing (including longan)	5% + $850.00	5% + $661.40	5% + $661.40
160	Cikus	5% + $800.00	5% + $661.40	5% + $661.40
100	Star fruits	5% + $800.00	5% + $661.40	5% + $661.00
200	Tamarind	5%	2%	2%
300	Other	5% + $900.00	5% + $661.40	5% + $661.40
900	Other	5% + $1000.00	5% + $661.40	5% + $661.40

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

Table 3.7 Base, bound and applied duty for coffee and cabbages.

Tariff Item Number	Description of Products	Base Rate of Duty	Bound Rate of Duty	Current Duty (Applied)
1	2	3	4	5
09.01	Decaffeinated: coffee husks and skins; coffee substitutes containing coffee in any proportion			
	- Coffee, not roasted:			
0901.11 000	- Not decaffeinated	76.28%	68.70%	0%
0901.12 000	- Decaffeinated	6%	5%	0%
	- Coffee, roasted:			
0901.21	- Not decaffeinated			
100	- Not ground	6%	5%	0%
200	- Ground	10%	5%	0%
0901.22	- Decaffeinated			
100	- Not ground	6%	5%	0%
200	- Ground	6%	5%	0%
	Cabbages, cauliflower, kohlrabi, kale and similar edible brassicas, fresh			
0704.9	or chilled			
110	- Other			
190	Cabbages			
	Round cabbages	100%	90%	$9.84
	Other	9% + $19.05	8% + $12.70	5% + $9.84

Sources: Ministry of Agriculture, Malaysia; Malaysia Customs Trade Classifications and Duty Order, 1997.

3.8 Other policy measures in palm oil, rice, tobacco and upland crop subsectors

In this section, details of policy measures that have direct and indirect effects on trade are described for the palm oil, tobacco and the upland crop subsectors. In general the government has always maintained a non-interventionist policy for palm oil and the upland crops such as maize, tapioca and sweet potato. Although institutional support for the production and marketing of palm oil is strong, direct policy measures that distort trade flows in the edible oil and fats market can be considered as insignificant. However, the government does take 'soft measures' to promote their exports and to expand exports of palm oil. Maize, tapioca and sweet potato, being important raw materials for other agricultural industries, have always enjoyed a free market status. On the other hand, rice and tobacco, being important socio-economic crops, have been subjected to heavy intervention by the government in the market place.

3.8.1 Policy measures in the palm oil industry

Policy measures for palm oil are primarily aimed at increasing productivity and quality as well as expanding export markets. Three main institutions are involved in implementing these policy objectives. They are the Palm Oil Registration and Licensing Authority (PORLA), Palm Oil Research Institute of Malaysia (PORIM) and Malaysian Palm Oil Promotion Council (MPOPC).

PORLA's general function is to ensure the orderly development of the palm oil industry. PORLA issues licenses to those involved in the production, transportation, storage, export and sale of palm oil and its products. Generally, the regulatory activities of PORLA are for quality control of palm oil and its products (Jailani and Malek 1995). All trade contracts are to be registered with PORLA and traders are required to declare the quality of palm oil to be exported and ensure that the exported palm oil meets the quality specifications as declared in the contract.

The task of improving productivity, value-added, quality and all other aspects of the industry's performance is PORIM's main function. PORIM undertakes all aspects of research and development in palm oil to enhance the performance of the industry. The main objectives of research and development activities in palm oil are to i) increase production per unit area, ii) reduce cost of production at all levels, iii) improve quality of oil palm products and by-products, iv) increase value of oil palm and its products, v) create a zero waste, environmentally friendly and pollution free industry and vi) effectively transfer technical know-how and provide advisory services to the industry (Jailani and Malek 1995).

MPOPC was established in 1990 to undertake public relations and market promotion of palm oil mainly in the export markets. It is run as a private company and promotes palm oil by organizing and participating in trade missions, exhibitions and distribution of information on the nutritional aspects of palm oil. The organization also facilitates joint-venture programmes. In promoting exports, PORIM is also engaged in providing technical support and information on palm oil to increase consumer knowledge on palm oil and palm oil products through the Technical Advisory Services (TAS). TAS activities are aimed at increasing the utilization of palm oil. TAS has established five regional offices in the United Kingdom, Pakistan, the United States of America, Hong Kong and Egypt.

The activities of PORLA, PORIM and MPOPC are funded from a compulsory cess of RM 5 per ton for PORIM, RM 1.75 per ton for PORLA and RM 1.00 per ton for MPOPC. In addition, national research and development funds under Intensification of Research in Priority Areas (IRPA) are also available to researchers in PORIM.

Apart from the cess collected from the industry to finance research and development, promotion and regulatory activities, palm oil is also subjected to export duties. During the early years, these duties were aimed at providing revenue for the government. However, recently export duties for most palm oil products were abolished. Duties are only imposed on the export of crude palm oil. This is to encourage local processing of palm oil into higher value-added products. Exports of CPO are subject to duty based on the government gazetted f.o.b. price of CPO. Table 3.8 shows the present export duty structure for CPO.

Table 3.8 Export duty structure of crude palm oil.

CPO f.o.b. Price	Export Tax
On the first RM 650	Nil
Plus next RM 50	10%
Plus next RM 50	15%
Plus next RM 50	20%
Plus next RM 50	25%
Plus on the balance	30%

Source: Jailani and Malek 1995.

Incentives and facilities

Some of the incentives under the PIA 1986 and Income Tax Act 1967 (Amended 1986) can be utilized for selected palm oil industries especially for undertaking export promotion activities. These include double deduction for export promotion and double deduction for export credit insurance. The ECR is also available for palm oil exporters. In addition, exporters can also seek the assistance of export credit insurance services through the Malaysian Export Credit Insurance Berhad. An Export Credit Insurance and Guarantee Scheme (ECIG) was launched in 1990 designed to protect commercial banks and financial institutions against non-payment of loans and advances made to exporters and importers. In government efforts to expand the palm oil market, especially to developing countries with low financial reserves, a Palm Oil Credit and Payment Agreement (POCPA) was introduced. The facility is for a maximum of US$100 million to cover the purchase of at least 50,000 tons of Malaysia palm oil a year for a period of three years.

3.8.2 Policy measures in the rice industry

Policy measures in the rice industry had been and still remain a focus of study for many researchers. Apart from individual researchers, the government also undertook several studies on the impact of its rice policies. The World Bank and the FAO have also studied the rice industry in Malaysia. The study by Fatimah and Ghazali (1990) provides an excellent disposition of the evolution of market intervention in the paddy and rice industry. This section is adapted from that study with added information on more recent developments. Intervention in the paddy and rice market started even before Malaysia gained its independence. Unstable supply of rice in the international market and the Japanese occupation of Malaysia (Malaya at that time) had negatively affected the supply of rice in the domestic market. This led the government to effect the rice security programme. A 100% self-sufficiency level was targeted. The first major intervention was in the introduction of the GMP at RM 15 per picul (60 kilograms) to support paddy prices. At the same time during the 1950s, the government through the Rural Credit Cooperative Societies provided credit to producers in its attempt to minimize exploitative trading practices by middlemen. It also promoted the expansion of Cooperative Price Milling Societies, designed to provide small scale milling services to producers. Nevertheless, these efforts by the government failed to break the hold private traders and middlemen had on paddy farmers, and the latter continued to suffer exploitative actions of the middlemen.

In the effort to address exploitative trading by middlemen, the Paddy and Rice Marketing Board (PRM B) was established in 1966. The Board introduced trading licenses to tighten regulatory control and directly undertook buying, selling and milling of paddy. Again, the Board was not successful in changing the structure of the market. This was due to i) continued issuing of licenses to existing middlemen, ii) the existence and many unlicensed millers and iii) failure of the rice stockpile scheme as an instrument of price support to increase farmers' income. The rice stockpile was used as a buffer stock to meet demand when supply was low. The government bought rice when the price was low and released the stock when the price was high to stabilize the price in the domestic market, thus incurring losses whenever the stockpile was released. To finance this stockpile scheme, import licenses were issued to importers by which licensed importers had to agree to purchase rice from the stockpile in an amount proportionate to the quantity imported. Since the government released the stockpile rice at a price above the wholesale price, the importers suffered a loss on sales of this rice. This loss was covered by profits made in imported rice which is sold at a premium in the domestic market.

The shortage in world supply of grains in 1967 - 1968 weakened the stockpile scheme. The rice shortage led to a price increase and the stockpile failed to meet demand. The stockpile

was evidently too small to serve as the primary means of market stabilization and price support. As production increased and imports declined, the ability to shift the cost of the stockpile operation to importers also declined. At the same time the interventionist policy of the government also failed to reduce poverty among paddy farmers. The implementing mechanism was unable to support the income of producers and protect consumers from price increases. Subsequently the government introduced more direct measures in the 1970s by controlling the price of rice and by direct participation in paddy processing and marketing. Price control was used as a means of protecting consumers while purchasing and participation in the milling of paddy was intended to improve competition in the market by controlling margins of middlemen. The Lembaga Padi dan Beras Negara (LPN) took over the function of the PRM B to ensure fair prices to both producers and consumers. LPN invested heavily in drying facilities and milling and by offering better prices LPN was able to substantially increase its market share. Another world supply shortage in the early 1970s provided an occasion for the government to introduced price controls; prices charged by millers, importers, wholesalers and retailers were fixed. As private imports creased due to reduced margins, LPN took over all import activities and was granted formal import monopoly rights in 1976. This monopoly allowed LPN to maintain a high domestic price even when international prices fell again after the shortages in the early 1970s.

LPN's prominent role in the paddy and rice industry and the government's commitment to subsidizing LPN to protect producers evolved to become politically and economically important to Malaysia. The government also provided and upgraded irrigation and drainage infrastructure to increase productivity and income to producers. Despite intervention in the 1970s, widespread poverty in the paddy sector continued to prevail. Government intervention deepened to improve the income of producers. In 1979, it introduced the fertilizer subsidy scheme, where fertilizers were given free to farmers operating paddy land of not more than 6 acres (2.4 ha). Price support was introduced in 1980 where farmers received RM 2 per picul (RM 0.03/kg) of paddy sold. In 1982, this was increased to RM 10 per picul (RM 0.17/kg).

Today, the paddy and rice industry has a web of policy instruments in place aimed at achieving a 'comfortable level' of self-sufficiency and supporting incomes of producers. Although the government has now relaxed the self-sufficiency level to 65%, the importance of the paddy and rice industry in terms of social, economic and political perspective remains. The price support and fertilizer subsidies are now costing the government about RM 500 million annually. In addition, high expenditure was also incurred to maintain irrigation and drainage facilities and undertake research and development. In 1997, the allocation for fertilizer subsidy was increased by another RM 22 million to offset rising costs of production and the depreciation of the Malaysian ringgit. The price support is now given at the rate of RM 248 per ton. Milling, wholesale and retail prices for rice continue to be controlled and the GMP for paddy is maintained. In 1997, the GMP was again revised upwards after its last revision in 1990. The GMP for paddy can be seen in Table 3.9. However, the increase in the GMP is to be borne by millers at zero cost to the government.

Table 3.9 Guaranteed minimum price for paddy, Malaysia, 1990 and 1997.

	GMP	
Grade	1990	1997
Long grade	RM 49.61/100 kg	RM 55.00/100 kg
Medium grade	RM 43.30/100 kg	RM 51.69/100 kg

Source: Beras Nasional Sdn. Bhd (BERNAS).

Despite increasing intervention over the years, the government is trying hard to

liberalize the industry albeit on a gradual basis. Under the previous scheme, millers, and wholesale and retail prices of all grades of rice were controlled. Under the restructuring programme, the grades of rice are now reduced to only three grades, viz. standard, premium and super. The government now only controls the price of the standard and the premium grades, the grades that are mostly consumed by the lower income group. The price of the super grade is now floated and subject to market forces. The price of standard rice are now set at RM 80 - RM 89/100 kg for millers and RM 90 - RM 95/100 kg for wholesalers. The margin at retail is also fixed. LPN is now privatized and called BERNAS and, in an agreement between BERNAS and, the government, BERNAS will still have exclusive import rights of rice for the next 15 years.

The government is also encouraging reverse investment in rice for strategic souring in the hope that Malaysia can be assured of a stable rice supply from Malaysian companies investing overseas should rice from the international market run short. Below is a summary of the interventions and policy instruments used in the paddy and rice industry:

- monopoly on imports,
- GMP for paddy,
- controlled prices at milling, wholesale and retail,
- fertilizer subsidy,
- price support,
- provision of drainage and irrigation facilities, and
- research and development

3.8.3 Policy measures in the tobacco industry

Apart form being protected by high tariffs, the Malaysian tobacco industry also receives other forms of support from the government. The LTN served as the implementing agency for policy instruments in the industry. Amongst the major activities of the LTN are:

- licensing curers and cigarette manufactures and registering the growers,
- implementing production quotas to balance production with demand,
- setting proper grading and pricing of green and cured leaves,
- controlling and regulating the marketing of green and cured leaves,
- providing input credit,
- providing extension services to curers and growers,
- breeding and supply of tobacco seeds, and
- providing training for staff, growers, curers and station workers from relevant agencies.

With the establishment of the LTN in 1973, the first major intervention was the introduction of a production quota system in 1974. This was to prevent an influx of farmers and curers into the industry. Curers were given a production quota of cured leaves. The amount of quota given was based on the curers' capabilities to produce the quantity required as well as the quality of tobacco. The curers, in turn, allocate the quota to green leaf producers who are small farmers. About 80% of the total quota is allocated to the less developed states of Kelantan and Terengganu. Kelantan alone received about 60% of the total quota.

The government also introduced GMP for both green and cured leaves for all the established grades. The minimum price structure is regulated, specified and revised periodically to stabilize price, ensure profits, encourage production of quality leaves and to avoid conflicts in the marketing of tobacco leaves. Effective from January 1990, premium prices were introduced as an incentive for growers and curers to produce better quality leaves. All the prices were determined on a cost-plus basis to ensure profitability for both curers and growers.

The farmers also received a fertilizer subsidy which amounted to 75% of the total fertilizer requirement. This subsidy is borne by the cigarette manufacturers in proportion to the quantity purchased by them. The main objective of this scheme is to ensure correct fertilizing

practices by farmers in order to increase yield and quality of tobacco.

LTN also provides an input credit scheme to purchase items such as water pumps, small machinery and inputs such as agricultural chemicals, plastic materials and others. This credit scheme is aimed at controlling cost, supply and quality of inputs so as to reduce cost of production. In addition, MARDI also undertakes research in tobacco to improve the output performance of both green and cured leaves. It established a research station in Kelantan that is mainly used to serve the tobacco industry.

In more recent years, with a generally better economic performance and availability of job opportunities in other sectors, as well as an improvement in income of the rural population, coupled with the government emphasis on creating a healthy society, the government is now considering to slowly reduce the level of protection accorded to the industry. The industry is now taking steps to consolidate itself and increase productivity and competitiveness. Parallel with this policy, research and development in tobacco are also slowing down, and research and development are now focussed on finding alternative crops that can be grown by farmers in the tobacco planting areas. Although no definite decision has been made on the industry, the sentiments by planners are heavily biased towards not encouraging tobacco cultivation.

3.8.4 Policies in the upland crop subsector

Policies in crops like maize, sweet potato and tapioca has generally been non-interventionist in nature. These crops are no longer important features in the agricultural landscape of the country. They however received strong institutional support, mostly in the form of research and development where focus is mainly on generating more viable production technologies for these crops. Research and development institutions like MARDI invested substantial resources to research grain maize in the hope of finding feasible technologies that can be adopted to offset the ever-increasing imports of the commodity. Although initial trials were somewhat encouraging, subsequent pilot trials and projects done on a larger scale have proven that cultivation of grain maize is not economically feasible in Malaysia.

3.9 Financial policy

Financial policy plays an important role in influencing not only the economic growth of a country but also the flow of trade. For example high interest rates will limit the growth of credit and will hamper investments leading to slower growth. On the other hand, too low an interest rate will discourage savings and encourage spending. This may lead to inflation as aggregate demand exceeds aggregate supply. Theoretically, one must balance the impacts of fiscal and monetary policies to ensure a sustained growth of the economy. In most cases, as the economy expands and income increases, the level of imports will increase barring restrictive trade policies. Hence, trade will be enhanced.

The Central Bank together with the Ministry of Finance sets the monetary policy of the country. In an attempt to make transactions and exchanges more predictable, Malaysia has always practiced a policy of maintaining and stabilizing the cost of internal money, the interest rate, and the cost of external money, and the exchange rate. The Central Bank, although maintaining a policy of non-intervention in the money market, does intervene from time to time to ensure the stability of the Malaysian ringgit. For the 1985 - 1996 period, Malaysia's exchange rate to the US dollar was fairly stable, ranging from RM 2.48 to RM 2.75 to the dollar (Table 3.10). However, of late, due to speculative attacks against the Malaysian ringgit, the ringgit has depreciated at one time to as low as almost RM 5 to the US dollar. The full effects of the depreciated ringgit have yet to be seen, but one thing is certain i.e. economic growth will decelerate as investment decreases due to the high cost of capital goods, which are mainly imported. Imported consumables will also cost more and demand for such products will

decrease as domestic prices increase. Trade will be expected to slow down as imports decrease.

In terms of monetary exchange, Malaysia practices a liberal control regime except with Israel, Serbia and Montenegro. Payments to all countries can be done with any currency other than currencies of these three countries. The Controller of Foreign Exchange (CFE) exerts very little control on the flow of currencies into and out of the country. Any non-resident can undertake a direct or portfolio investment in Malaysia without the permission of the CFE. At the same time there are no restrictions for foreign investors to repatriate capital, profits and dividends, royalties, fees, proceeds of sales and others from Malaysia. However, residents obtaining domestic credit to finance offshore investments in foreign securities and immovable properties need to obtain approval from the CFE. No permission is required if a resident does not use domestic credit. This is to ensure that domestic credit is utilized towards financing productive investments in the country. A non-resident controlled company can also apply and secure domestic credit. Approval from the CFE is only needed for loans exceeding RM 10 million. Commercial and merchant banks can also give loans to residents in foreign currencies to supplement their domestic funding. However, permission from the CFE is required for residents to borrow from non-residents a foreign currency equivalent to a total of RM 1 million. Another flexibility is the allowance for companies in Malaysia to maintain inter company accounts with associated companies, branches and other companies overseas as long as monthly returns are submitted to the CFE. Companies can apply to the CFE to offset export proceeds through inter company accounts against affiliated companies overseas for the supply of raw materials. Nevertheless, export proceeds are to be repatriated and sold to an authorized bank in Malaysia for ringgit, and these exports must be reported to the Central Bank.

3.9.1 Agricultural credit policy

In agriculture, accessibility to credit is still an issue that constrains the development of agriculture, especially for smallholders. In the past and even today, small farmers still depend on middlemen for credit to finance their farm operations. Most of the credit in agriculture is provided to the plantation sector for palm oil and rubber while credit for good production, which is mainly produced by small and medium scale players, is still much to be desired. Noor Auni et al. (1994) found that loans to agriculture by commercial banks were the smallest loan portfolio given by the banks.

The government established Bank Pertanian Malaysia (Malaysian Agricultural Bank) to ease the credit problem in agriculture for smallholders. Although the conditions imposed by BPM to secure credit are more relaxed compared to the commercial banks, the availability of collateral still pays an important role in assessing loan applications. Small farmers still find difficulty in securing loans due to lack of collateral. Additionally, the government through BPM introduced the Special Agricultural Loan Scheme to give credit to small farmers at low interest rates. This scheme has since ceased, as the recovery rate from farmers is low. To encourage mechanization and automation of farm operations, the government now introduced the Mechanization Fund, which also offers low interests rates of 4 - 6% per year.

To attract the private sector to invest in food production, the Fund for Food Scheme, more popularly know as the 3F fund was set up. Total allocation for the fund now stands at RM 700 million. However, only about RM 300 million of the fund is utilized. The 3F, a fund created under the Central Bank, is administered by BPM and some commercial banks. Although the interest rate is lower than commercial rates, the same stringent procedures that apply to other loans are also applicable to access this fund.

Table 3.10 Malaysian ringgit US dollar exchange rate, 1985 – 1996.

Year	Exchange Rate
1985	2.4800
1986	2.5808
1987	2.5190
1988	2.6181
1989	2.6990
1990	2.7044
1991	2.7498
1992	2.5472
1993	2.5741
1994	2.6231
1995	2.5081
1996	2.5158

Source: Bank Negara Malaysia: various issues.

3.10 Infrastructural developments affecting international trade

The importance of infrastructure as a critical component of economic development is well acknowledged. Good infrastructure facilities will ensure that economic activities can take place more efficiently and as a result productivity can be improved. Similarly, a better infrastructure will facilitate international trade transactions. However, it is difficult to quantitatively estimate how infrastructure has contributed to efficiency gains in trading. In addition, comprehensive data on infrastructure, which is developed by both the public and private sectors, are difficult to obtain. In this section, an attempt is made to document the infrastructural development that has taken place in Malaysia that affects international trade either directly or indirectly. This includes the construction of roads, ports and airports. Hypothetically, any infrastructure that is developed that can facilitate business transactions can be considered as infrastructure that affects international trade. For example, imported products especially agricultural items which are more perishable will not be able reach consumers in a marketable condition if there are no roads to transport the products from import points to the consuming centres. On the other hand, good roads without good marketing infrastructure such as wholesale and retail markets where buyers and sellers can meet will limit marketing transactions. The absorptive capacity of the market can be severely constrained under such conditions hence limiting the quantity of agricultural products that can be imported.

3.10.1 Expenditure for infrastructural development

Infrastructure for economic development encompasses various structures and buildings to facilitate development. It includes structures and accessories for transportation, communication, commerce and others. However, the most important infrastructure that has bearing on marketing and trading is the transportation infrastructure. Recognizing the importance of infrastructure, the Malaysian Government continues to invest heavily in infrastructural building and improvement.

Table 3.11 shows the expenditure/allocation to develop the transportation infrastructure in Malaysia from the First Malaysia Plan to the Seventh Malaysia Plan. Between 1966 – 2000, a total of about RM 90 billion has been spent/allocated for transportation infrastructure including facilities such as roads, railways, ports and airports. The bulk of the expenditure went to the construction of roads and bridges to facilitate internal transportation for the movement of goods and people. The amount spent on transportation infrastructure tremendously increased over the years. During the First Malaysia Plan, about RM 545 million was spent. Planned spending increased by almost 100 fold to RM 53.8 billion in the Seventh Malaysia Plan. As the country progresses and strives to become an industrialized country by year 2020, it is expected that more expenditure will be put into building infrastructure. The emphasis on infrastructural

development was further made evident by the Second IMP (MITI 1996), where a "cluster-based" industrial development approach is adopted. Under this approach the "manufacturing-plus-plus" strategy is pursued whereby the development of an identified core manufacturing activity is to be supported through the establishment and development of a strong supplier sector (consisting of business services, input industry, etc) and a strong economic foundation (consisting of infrastructure, human resources, institutions, and finance).

3.10.2 Roads

The development of roads is given one of the highest priorities in government planning. During the OPPI (1970 – 1990) when development focussed on enhancing the economic status and promoting the rural and under-developed regions of the country, the priority was to implement road projects in these regions so as to facilitate and accelerate development and tap the economic potential of the regions. During the SOPP, road development emphasized improving inter-urban linkages and alleviating transport-related problems arising from rapid urbanization. The general objective is to meet the ever-increasing demand for a good reliable and efficient road network system. A three-pronged strategy is adopted for road development: i) increasing the road network, especially between towns, ii) overcoming constraints to capacity, and iii) increasing the road network for new growth centres and rural areas. Malaysia now has a total of about 61,000 kilometers of road network consisting of toll expressways and highways other federal roads and state roads (Table 3.12). The toll highways are privatized roads built, maintained and managed by private companies under Malaysia's privatization program.

3.10.3 Seaports

Seaports are one of the most important infrastructures to support international trade. More than 90% of Malaysia's international trade is conducted through seaports. Currently, there are 20 seaports throughout the country, 12 in Peninsular Malaysia, 4 in Sabah and 4 in Sarawak. Details of number of berths, cranes, port capacity and throughput at the various ports are given in Table 3.13. The total capacity of Malaysian ports increased from 120.5 million tons in 1990 to 174.1 million tons in 1995, an increase of nearly 45% over the five year period. With the planned expansion and improvement of facilities of the ports, it is expected this capacity will increase to 78.9 million tons by the year 2000. The major ports are Port Kelang, Penang Port, Johore Port and Bintulu. The capacities of all ports and the amount of cargo handled by the various ports for 1990 - 2000 are given in Table 3.14. The total cargo handled by the four major ports accounted for more than 60% of the total cargo handled by all ports in Malaysia in 1995. Port Kelang alone handled more than 25% of the total cargo. For the future, port development will continue to focus on expanding capacity, upgrading and increasing equipment and facilities as well as enhancing the efficiency of port and port-related services. The government together with the private sector also plans to improve the efficiency and production of port operations through increased automation and computerization to upgrade management processes and procedures. The Electronic Data Interchange (EDI) and the pre-custom clearance procedures for container operations will be expanded to cover all major ports.

Table 3.11 Public development expenditure ('000 RM) for transportation, Malaysia, 1966-2000.

Item	1st MP * 1966 - 1970	2nd MP ** 1971 - 1975	3rd MP ** 1976 - 1980	4th MP ** 1981 - 1985	5th MP * 1986 - 1990	6th MP * 1991 - 1995	7th MP *** 1996 - 2000
Transport (public sector):	544.9	1,781.31	2,842.75	7,172.29	11,216.4	11,594.7	15,484.2
i) Road and bridges:	309.3	919.18	1,576.94	4,166.67	4,849.6	7,572.6	9,838.8
a. - Other road programme	-	-	-	-	-	-	-
- PWD roads	-	-	-	-	-	-	-
- K.L City hall roads	-	-	-	-	-	-	-
- Town roads	-	-	-	-	-	95.2	522.6
b. - Rural and village roads:	-	-	188.52	-	1,161.4	-	-
Rural roads	-	-	-	-	525.2	-	-
Village roads	-	-	-	-	499.2	-	-
Security roads KESBAN	-	-	-	-	137.0	-	-
ii) Railways & Light Transit:	50.9	104.49	168.35	650.86	897.1	1,735.4	3,370.0
iii) PWD Plants and Equipment:	30.6	113.66	143.60	-	-	-	-
iv) Ports and marine:	-	441.96	557.08	1,481.02	1,350.6	410.9	486.8
- Ports	93.0	-	548.36	-	657.6	-	-
- Shipping	-	-	-	-	693.0	-	-
- Marine department (Jabatan laut)	-	-	8.72	-	-	-	-
v) Civil Aviation : (Penerbangan awam)	61.1	202.02	208.26	873.74	2,957.7	1,780.6	1,266.0
Transport (Private sector):	-	-	-	-	-	-	38,302.7
i) - Roads	-	-	-	-	-	-	17,505.0
ii) - Ports	-	-	-	-	-	-	4,241.7
iii) - Air Ports	-	-	-	-	-	-	5,956.0
iv) - Railways	-	-	-	-	-	-	10,600.0
Grand Total	544.9	1,781.31	2,842.75	7,172.29	11,216.4	11,594.7	53,786.9

Source: Malaysia Plans: various issues.

Notes: * Actual Expenditure; ** Estimated Expenditure; *** Allocation; MP = Malaysia Plan; PWD = Public Work Department.

Table 3.12 Roads in Malaysia.

Class/Category	Total Length	Paved Length	% Paved
Toll expressways and Highway	973	973	100
Other Federal Roads	14,554	13,590	93.4
State Roads	45,207	30,710	67.9
Total	60,734	45,273	-

Source: Malaysia Plans: various issues.

3.10.4 Airways

There are presently 10 main airports in Peninsular Malaysia, six in Sabah and four in Sarawak. Except for building the new Kuala Lumpur International Airport (KLIA), the policy focus for the last two planned periods was to upgrade and improve existing airports. This is in view of the fact that the nation has a fairly adequate airport network. The main thrust in the aviation sector is to accommodate and adequately respond to the growing demand for air travel and air cargo resulting from greater industrialization. Table 3.15 shows the aircraft movement and the volume of air cargo handled at all Malaysian airports in 1985 - 1995 and the expected aircraft movement and cargo handling in year 2000.

Total air cargo handled by Malaysian airports increased from 121,700 tons in 1985 to 395,042 tons in 1995, recording a growth of almost 12% per annum during the period (Table 3.15). During the ten-year period, the amount of international cargo also increased by more than 3.5 times, registering a growth rate of about 12.7% per annum. This reflects the increase in international trade during the period. By the year 2000, it is expected that total cargo handled by the airports will increase to about 607,800 tons, more than double the current handling. In anticipation of such an increase to cater for both domestic and international transportation of goods, focus is now on building and establishing KLIA as a regional air-hub through competitive pricing for refueling and landing to encourage airlines to use KLIA as their center of operations. KLIA is located in the Multimedia Super Corridor (MSC), which will be developed into a global information hub to attract investors and visitors. KLIA will link with three highways including one dedicated highway to Kuala Lumpur. To increase efficiency, EDI will also be employed at all Malaysian airports. A free trade zone will be established around KLIA to facilitate trade.

Table 3.13 Number of berths, cranes, port capacity and throughput at ports, Malaysia, 1990 – 2000.

Port	1990				1995				2000 *			
	No. of Berths	No. of Cranes[1]	Capacity (mil. tons)	Throughput (mil. tons)	No. of Berths	No. of Cranes[1]	Capacity (mil. tons)	Throughput (mil. tons)	No. of Berths	No. of Cranes[1]	Capacity (mil. tons)	Throughput (mil. tons)
Port Klang	30	7	27.2	22.1	40	16	40.2	40.0	46	44	78.9	74.9
Pulau Pinang	12	6	10.1	10.9	16	9	23.2	16.7	20	15	28.2	27.4
Johor[2]	9	2	8.6	10.0	14	6	15.6	16.5	28	12	42.2	40.9
Kuantan	8	1	4.9	3.3	11	2	8.7	4.2	13	4	15.0	7.8
Kemaman	4	3	7.9	1.3	4	3	7.9	2.6	5	3	7.9	5.8
Bintulu	6	-	21.6	11.5	7	-	31.9	18.6	10	-	32.0	26.7
Sabah[3]	27	-	6.9	13.1	27	-	9.5	16.3	31	-	19.5	18.9
Sawarak[4]	21	8	10.3	12.6	23	7	11.0	14.5	33	12	17.8	17.6
Others[5]	27	4	23.0	18.6	31	8	26.1	22.9	34	9	280.4	34.5
Total	144	31	120.5	103.4	173	51	174.1	152.3	220	99	280.4	254.5

Source: Seventh Malaysia Plan.

Notes: [1] Includes gantry and multipurpose cranes.

[2] Figures for the year 2000 include Tanjung Pelepas Port.

[3] Kota Kinabalu, Tawau, Lahad Datu and Sandakan.

[4] Kuching, Miri and Rajang.

[5] Includes Teluk Ewa, Kuala Perlis, Kuala Kedah, Tanjung Bruas, Lumut, Port Dickson and Labuan.

* Estimated.

Table 3.14 Port capacities and cargo handling in Malaysia, 1990 - 2000.

Port	1990		1995		2000	
	Capacity (mil. ton)	Cargo (mil. ton)	Capacity (mil. ton)	Cargo (mil. ton)	Capacity (mil. ton)	Cargo (mil. ton)
Kelang	27.2	22.1	40.2	40.2	78.9	74.9
Penang	10.1	10.9	23.2	16.7	28.2	27.4
Johor	8.6	10.0	15.6	16.5	42.2	40.9
Kuantan	4.9	3.3	8.7	4.2	15.0	7.8
Kemaman	7.9	1.3	7.9	2.6	7.9	5.8
Bintulu	21.6	11.5	31.9	18.6	32.0	26.7
Sabah [1/]	6.9	13.1	9.5	16.3	14.3	18.9
Sarawak [2/]	10.3	12.6	11.0	14.5	19.5	17.6
Others	23.0	18.6	26.1	22.9	38.9	34.5
Total	120.5	103.4	174.1	152.3	280.4	254.5

Source: Seventh Malaysia Plan.

Notes: [1/] Kota Kinabalu, Tawau, Lahad Datu and Sandakan.

[2/] Kuching, Miri and Rajang.

[3/] Teluk Ewa, Kuala Perlis, Kuala Kedah, Tanjung Bruas, Lumut, Port Dickson and Labuan.

* Estimated.

Table 3.15 Number of aircraft and cargo handing at Malaysian Airports.

Item	1985			1990			1995			2000		
	Domestic	International	Total	Domestic	International	Total	Domestic	International	Total	Domestic	International	Total
Cargo (tons)	40,300	81,400	121,700	68,853	172,737	241,590	105,380	289,662	395,042	158,031	449,781	607,812
Aircraft Movement (no.)	-	-	-	235,463	51,688	287,151	321,717	89,606	411,323	454,680	142,014	596,694

Source: Seventh Malaysia Plan.

4. Performance in International Trade

4.1 Introduction

In this chapter, Malaysia's performance in international trade is described. This includes an analysis of the major trade performance indicators such as total imports, exports, trade balance, agricultural imports and exports, agricultural trade balance as well as an analysis of trends of specific indicator ratios to assess industry performance and competitiveness. Towards the end of the chapter, an analysis of specific selected commodities is given, including palm oil, rice, tobacco and the upland crops sub-sector. In addition, trade performance of other important export and import commodities such as rubber, saw logs, cocoa, pepper, soybeans, sugar and wheat is also discussed.

4.2 Macro trends in trade

The growing significance of Malaysia in international trade is reflected in the expansion in volume of its trade. Volume of trade expanded from RM 68,453.9 million in 1985 to RM 393,993.4 million in 1996, registering a 5.8 fold increase over the 11 year period and a growth rate of 15.9% per annum (Table 4.1). At the same time, Malaysia's share in world trade also increased. Its export share in total world exports increased from 0.75% during the (1980 - 1984) period to l.11% for 1990 - 1994, while her import share in total world imports increased from 0.66% to 1.11% for the two respective periods (Mohamed Ariff et al. 1996). During the 1985 - 1996 period, imports increased from RM 30.4 billion to RM 197.3 billion or at the rate of 17% per annum, while exports increased from about RM 38.0 billion to RM 196.7 billion or at the rate of 14.9% per annum. The higher growth rate of imports compared to exports has led Malaysia to register a negative overall trade balance in the later years of the 1990s.

In terms of exports, machinery and transport equipment accounted for about 45% of total exports in the 1990s, up from about 15% in the early 1980s. Other important export components are the inedible crude materials and mineral fuels. However, their share have been declining from about 54% in the early 1980s to just over 23% in the 1990s. The other export component that is gaining significance is the miscellaneous manufactured articles. Its export share in total exports increased from 2.8% in the 1980 - 1984 period to 10.4% in the 1990 - 1994 period. Exports of animal/vegetable oil were also significant.

In terms of imports, machinery and transport equipment also accounted for the largest import component. Mohamed Ariff et al. (1996) attributed this to the country's increased capability in the manufacturing of more capital intensive products due to declining comparative advantage in labour intensive products. The important imported components were refined petroleum products, machinery and equipment, telecommunication equipment, electrical apparatus and other intermediate manufacturing components, passenger motorcars and other motor vehicles (Table 4.2).

Increased liberalization of the world trade environment coupled with the increased opening of the Malaysian market, have made international trade more important to the Malaysian economy. Over the 1985 - 1996 period, the ratio of total exports to total GDP increased from 0.49 to 0.79, reaching a high of 0.85 in 1995 (Table 4.3). The ratio of imports to GDP also exhibited a similar trend, rising from about 39% of GDP to 79% of GDP during the period, peaking in 1995 at 88.8%. From both export and import data as well as the ratios, it can be seen that growth in exports and imports was almost similar, with imports marginally edging exports.

Table 4.1 Malaysia's trade, 1985 - 1996 (RM million).

Year	Imports	Exports	Trade Balance	Total Trade
1985	30,437.8	38,016.7	7,578.9	68,453.9
1986	27,921.4	35,720.9	7,799.5	63,642.3
1987	31,933.9	45,138.4	13,204.5	77,072.3
1988	43,293.4	55,260.0	11,966.6	98,553.4
1989	60,858.1	67,824.5	6,966.4	128,682.6
1990	79,118.6	79,646.4	527.8	158,765.0
1991	100,831.0	94,497.0	(6,334.0)	195,328.0
1992	101,440.5	103,656.7	2,216.2	205,097.2
1993	117,404.7	121,237.5	3,832.8	238,642.2
1994	155,921.0	153,921.2	(1,999.8)	309,842.2
1995	194,344.5	184,986.5	(9,358.0)	379,321.0
1996	197,306.2	196,687.2	(619.0)	393,993.4

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.2 Leading import commodities of Malaysia, average over 1991-1994 (RM million).

Commodity	Value*
Petroleum products, refined	3,183.5 (2.67)
Machinery & equipment, specialized for industries & parts, NES	4,106.5 (3.45)
Parts & accessories for office machinery	2,672.6 (2.25)
Auto processing machinery	
Telecom equipment NES, parts & accessories	5,814.5 (4.89)
Electrical apparatus, resistors & other electrical Bases	4,609.5 (3.88)
Thermionic valves & tubes, integrated circuits & parts	18,184.8 (15.29)
Electrical machinery & apparatus, NES	2,758.8 (2.32)
Passenger motor cars & other motor vehicles	2,249.2 (1.89)
Aircraft & associated equipment; spacecraft & parts thereof	4,097.8 (3.45)
Gold, non-monetary (excl. gold ore & concentrates)	3,047.5 (2.56)
Grand total (all imports)	118,899.3

Source: Mohamed Ariff et al. 1996.
Notes * Figures in parentheses refer to the share in overall imports.
NES = Not elsewhere specified.

Table 4.3 Ratio of exports and imports to GDP.

Year	Total Exports/GDP	Total Imports/GDP
1985	0.490	0.393
1986	0.502	0.392
1987	0.577	0.408
1988	0.636	0.479
1989	0.703	0.631
1990	0.725	0.718
1991	0.770	0.821
1992	0.742	0.726
1993	0.734	0.711
1994	0.810	0.819
1995	0.746	0.888
1996	0.787	0.790

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Arising from almost equal growth in imports and exports, the ratio of the balance of trade to GDP remained small, except during the 1980s where Malaysia registered substantial surpluses in trade (Table 4.4). This was during the period when the country was recovering from the recession where imports, especially of capital goods, were low. Subsequently in the 1990s, due to high investments in the industrial sector and modern infrastructure, imports of capital

goods and intermediate products grew substantially, hence narrowing the surplus in trade. For the 1994 - 1996 period, the overall trade surplus turned from positive to negative.

Table 4.4 Ratio balance of trade/GDP.

Year	Balance of Trade/GDP
1985	0.098
1986	0.110
1987	0.169
1988	0.138
1989	0.072
1990	0.005
1991	- 0.052
1992	0.016
1993	0.023
1994	- 0.063
1995	- 0.043
1996	- 0.003

Sources: External Trade Statistics, Department of Statistics, Malaysia: various issues; Economic Planning Unit, Prime Minister's Department, Malaysia.

The ratio of balance of trade to GDP decreased from about 10% in 1985 to a negative value of only 30% in 1996. This means that the overall net impact of trade per se on the GNP of the country was small, and the other components of GNP such as government and consumer spending as well as investments remained the main components of GDP and economic output. Nevertheless, this does not preclude the fact that increased trade opened up opportunities for increased investments in new areas and directly contributed to the growth of the economy through its linkages and multiplier effects.

While the national GDP (at market prices) grew at a rate of 10.6% per annum between 1985 - 1996, agricultural GDP grew at only 6.12% during the period (Table 4.5). During the 1990s, growth in agriculture was higher at 7.3% per annum compared to 4.9% during the 1985 - 1989 period. Agriculture and livestock grew at 6.7% while forestry and logging and fisheries grew at 3.1% and 6.3% respectively.

4.2.1 Macro trends in agriculture and non-agriculture

Agricultural trade grew at a much faster rate compared to growth in agricultural GDP. Total trade in agriculture expanded from RM 19,075.6 million in 1985 to RM 52,381.5 million in 1995, registering a growth rate of more than 10.0% per annum (Table 4.6). Of this total, agricultural exports expanded from RM 13,937.7 million to RM 35,427.4 million, while agricultural imports increased from only RM 5,173.9 million to RM 16,964.1 million during the same time period. Although the volume of agricultural imports was less than that of exports, agricultural imports grew at a faster rate (11.9%) compared to agricultural exports (9.3%). Due to the large export volume base compared to imports, the net agricultural trade balance for Malaysia remained positive over the 1985 - 1995 period, despite the lower growth rate in exports. The agricultural trade balance grew from about RM 8.8 billion in 1985 to RM 18.5 billion in 1995, expanding at a rate of 7.4% per annum. However, this balance grew at a decreasing rate, from 12.8% during the 1985 - 1990 period to only 6.7% during the 1991 - 1996 period. If this trend of imports and exports of the 1990s continues, the agricultural trade balance of the country will be zero in about 25 - 27 years.

Most of Malaysia's agricultural exports consist of primary commodities, viz. palm oil, rubber and cocoa, while imports mainly comprise food items. Tables 4.7 and 4.8 show the country's exports and imports of agricultural products by selected SITC codes. Exports under the category of animal, vegetable oil and fats, which mainly consists of palm oil was the largest, accounting for RM11.73 billion or 33% of all agricultural exports in 1996, while imports of

agricultural products mainly consist of food and live animals. The imports of food and live animals in 1996 were more than RM 9.0 billion, representing more than 53% of all agricultural imports. This gives a rough indication that Malaysia is competitive in producing vegetable oils but less competitive in producing food and live animals. Nevertheless, Malaysia also exports food and live animals, amounting to RM 4.7 billion in 1996. However, most of these products consisted of value-added products made from imported raw materials as well as fruits and vegetables.

For non-agriculture, the trade balance has been negative for most of the years during the period under study. Non-agricultural exports expanded from RM 24,979 million to RM 147,559 million from 1985 - 1996, growing at a rate of 17.8% annually (Table 4.9). However, imports grew at a marginally higher rate of 19.5% during the same period, from RM 25,264 million to RM 177,390 million. The deficit in trade for non-agricultural products increased from RM 1.28 billion in 1985 to more than RM 27.83 billion in 1996. The expansion in the trade deficit was at a rate of more than 30% per annum. The 1990s saw an acceleration of this deficit rising to more than double, from about RM 12.63 billion to RM 27.83 billion in 1995. This can be attributed to the drive to industrialize and equip the nation with better infrastructure and facilities resulting in higher imports of capital goods and intermediate products for manufacturing. Investments in these areas are expected to increase the economic efficiency of the nation in the long term. This in turn is expected to increase productivity, thereby, creating more competitive export-oriented industries. Hence, for the longer term, this increased competitiveness will further enhance exports and reverse the balance of payment situation for non-agricultural products. Despite experiencing a negative trade balance, non-agricultural exports are gaining increasing prominence in the export structure of Malaysia. In 1985, agricultural exports were about one-half of non-agricultural exports, but in 1995 agricultural exports were only about one-quarter of non-agricultural exports. Overall, the share of agricultural exports in total exports has experienced a steady decline over the years, while the share of non-agricultural exports is increasing (Table 4.10). Agriculture's share in total exports declined from about 34% in 1985 to slightly more than 19% in 1995, while the share of non-agricultural exports in total exports increased from about 66% to more than 81% during the same period.

The significance of agricultural trade to the GDP has not changed much over the years. The ratio of agricultural exports to GDP marginally declined from 0.18 to 0.16 for the 1985 - 1995 period, while the ratio of agricultural imports to GDP marginally increased from 0.07 in 1985 to 0.08 in 1995 (Table 4.11). This shows that, at the national level, the level of trade orientation in agriculture remained almost the same in the last decade. The ratio of balance of agricultural trade to total GDP also showed a declining trend (by about 3 percentage points) from 0.11 to 0.08 (Table 4.12). The trend is almost similar as the ratio of total trade balance to the GDP.

Table 4.5 Gross domestic product, 1985 - 1996 (RM million, current prices).

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Growth rate	
Non-agricultural GDP	61,381	55,910	61,240	68,678	76,784	89,669	101,679	116,405	138,596	162,240	189,216	218,083	5.6	14.8
Agricultural GDP by sector:														
Agricultural & Livestock	11,524	11,191	12,119	13,483	14,519	15,225	15,621	16,938	19,693	20,722	22,092	24,065	5.8	7.6
Forestry & Logging	2,855	2,490	3,088	3,037	3,309	3,168	3,259	3,957	4,074	4,093	4,100	4,031	3.7	4.0
Fisheries	1,787	1,553	1,756	1,752	1,836	2,125	2,198	2,482	2,840	2,967	3,314	3,608	0.007	8.8
Sub-total	16,166	15,234	16,963	18,272	19,664	20,518	21,078	23,377	26,607	27,782	29,506	31,704	4.9	7.3
Total GDP	77,547	71,144	78,203	86,950	96,448	110,187	122,757	139,782	165,203	190,022	218,722	249,787	5.5	13.6

Source: Economic Planning Unit, Prime Minister's Department.

Table 4.6 Agricultural exports and imports, 1985-1996 (RM million).

Year	Exports	Imports	Total Trade	Trade Balance
1985	13,937.7	5,173.9	19,075.6	8,763.8
1986	13,868.4	4,940.3	18,808.7	8,928.1
1987	18,010.2	5,468.4	23,478.6	12,541.8
1988	21,938.6	7,208.9	29,147.5	14,729.7
1989	23,209.9	8,549.7	31,759.6	14,660.2
1990	22,283.7	9,127.8	31,411.5	13,155.9
1991	23,173.9	10,420.4	33,594.3	12,753.5
1992	25,223.4	10,811.3	36,034.7	14,412.1
1993	26,905.9	11,570.4	38,476.3	15,335.5
1994	32,000.8	13,860.7	45,861.5	18,140.1
1995	35,427.4	16,954.4	52,381.5	18,473.3

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.7 Agricultural export by SITC selection, 1985 - 1996 (RM million).

Year	Food & Live Animals	Beverage & Tobacco	Animal, Vegetable Oil & Fats
1985	1,659.8	25.5	4,845.6
1986	1,964.5	37.4	3,609.6
1987	2,458.2	57.4	4,167.6
1988	2,851.4	83.1	5,762.6
1989	3,128.9	80.2	6,197.4
1990	3,453.2	95.2	5,679.7
1991	3,651.6	169.2	6,226.8
1992	3,718.4	190.6	6,874.3
1993	3,975.2	184.7	7,242.1
1994	4,478.9	211.2	10,485.0
1995	4,515.8	397.7	12,634.0
1996	4,724.8	577.0	11,725.2

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture, Malaysia: various issues.

Table 4.8 Agricultural imports by SITC selection, 1985 - 1996 (RM million).

Year	Food & Live Animals	Beverage & Tobacco	Animal, Vegetable Oil & Fats
1985	3,075.4	228.7	81.5
1986	2,914.2	209.6	68.5
1987	2,965.3	192.4	205.1
1988	3,825.9	208.2	267.2
1989	4,613.9	241.5	257.1
1990	4,582.5	292.9	218.0
1991	5,138.9	423.8	394.8
1992	5,436.2	398.2	330.3
1993	5,816.1	390.8	403.9
1994	6,668.1	429.6	559.1
1995	7,884.7	558.2	380.1
1996	9,089.5	498.6	262.9

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture, Malaysia: various issues.

Table 4.9 Non-agricultural imports and exports, Malaysia 1985 - 1996 (RM million).

Year	Non-Agricultural Import	Non-Agricultural Export	Non-Agricultural Trade Balance
1985	25,263.9	24,979.0	-1,284.9
1986	22,981.1	21,825.5	-1,128.6
1987	26,465.5	27,128.2	+662.7
1988	36,084.5	33,321.4	-2,763.1
1989	52,208.4	44,614.6	-7,693.8
1990	69,990.8	57,362.7	-12,628.1
1991	90,410.6	71,323.1	-19,087.5
1992	90,629.2	78,433.3	-12,195.9
1993	105,834.3	94,331.6	-11,502.7
1994	142,060.3	121,920.4	-20,139.9
1995	177,390.4	147,559.1	-27,831.3

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture, Malaysia: various issues.

Table 4.10 Ratio of agricultural and non-agricultural exports to total exports, 1985-1995.

Year	Agricultural/ Total Exports	Non-Agricultural/ Total Exports
1985	0.343	0.659
1986	0.388	0.612
1987	0.399	0.601
1988	0.397	0.603
1989	0.342	0.658
1990	0.280	0.720
1991	0.245	0.755
1992	0.243	0.757
1993	0.222	0.778
1994	0.208	0.792
1995	0.192	0.808

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.11 Ratio of agricultural exports and agricultural imports to GDP, 1985 - 1995.

Year	Ratio of Agricultural Exports/GDP	Ratio of Agricultural Imports/GDP
1985	0.180	0.067
1986	0.195	0.069
1987	0.230	0.070
1988	0.254	0.083
1989	0.241	0.089
1990	0.202	0.083
1991	0.189	0.085
1992	0.180	0.077
1993	0.163	0.070
1994	0.168	0.073
1995	0.162	0.078

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department.

Table 4.12 Ratio of agricultural trade balance to GDP.

Year	Ratio
1985	0.11
1986	0.13
1987	0.16
1988	0.17
1989	0.15
1990	0.12
1991	0.10
1992	0.10
1993	0.09
1994	0.10
1995	0.08

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department, Malaysia.

However, the significance of agricultural trade in the agricultural sector itself is getting increasingly important. This is indicated by the ratios of agricultural exports and imports to agricultural GDP, which have been steadily increasing over the last decade. The ratio of agricultural exports to agricultural GDP increased substantially from 0.86 in 1985 to 1.20 in 1995, while the ratio of agricultural imports to agricultural GDP increased from 0.32 to 0.57 in

the same period (Table 4.13). The sector itself, no doubt, has become more trade orientated. However, at the national level, due to higher GDP and trade growth from other sectors relative to agriculture, the significance of agricultural trade is less prominent.

Table 4.13 Ratio of agricultural exports and imports to agricultural GDP, Malaysia, 1985-1995.

Year	Agricultural Exports/ Agricultural GDP*	Agricultural Imports/ Agricultural GDP
1985	0.862	0.320
1986	0.910	0.324
1987	1.062	0.322
1988	1.229	0.404
1989	1.180	0.435
1990	1.086	0.445
1991	1.099	0.494
1992	1.079	0.462
1993	1.011	0.435
1994	1.152	0.499
1995	1.201	0.575

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department.

* The ratio of agricultural exports/agricultural GDP can be greater than one since the data on agricultural exports include agricultural-based processed products, which are considered as manufactured products in national accounts while agricultural GDP is based only on primary agricultural output.

4.3 Direction of trade

In this section, the direction of imports and exports of Malaysia's major trading partners is described and analyzed. A specific subsection of the direction of trade for the major agricultural products is also included.

4.3.1 Exports

At the aggregate level, ASEAN, particularly Singapore, Japan, the United States of America (U.S.A.) and the EU continued to be the major markets for Malaysian products. Together, they accounted between 75.1% to 78.1% of Malaysia's total exports for the last two decades (Table 4.14). Singapore, the U.S.A. and Japan alone have always accounted for more than 50% of Malaysia's exports. In the period of 1970 - 1994, the diversification of markets for Malaysian products was still minimal. Even exports to ASEAN countries outside of Singapore showed little progress with the percentage share expanding from about 3% to 6%. Some progress, however, was recorded with the People's Republic of China and Hong Kong. Their share, however, is still small at about only 8%. The export market for Malaysia, thus, has remained highly concentrated in the traditional markets with limited progress made over the past 25 years in market diversification.

Table 4.14 Average share (%) of Malaysian exports with major trading partners, 1974-1994.

Country/Region	1970-1974	1975-1979	1980-1984	1985-1990	1990-1994
Singapore	22.5	17.7	22.0	19.0	22.3
Japan	17.7	20.2	21.2	19.7	14.0
U.S.A.	12.9	17.2	13.5	16.4	18.8
Sub-total	53.1	55.1	56.7	55.1	55.1
EU	20.4	20.0	14.9	14.6	14.6
Other ASEAN	2.8	3.0	4.8	5.3	6.3
Total	76.3	78.1	76.4	75.1	76.0

Source: Mohamed Ariff et al. 1996.

4.3.2 Imports

The trend in direction of imports was also similar with that of exports, with Singapore, Japan, U.S.A. and the EU being the major source of Malaysia's imports (Table 4.15). In fact, as the data reveal, there was actually increased concentration in the sources of Malaysia's imports. The share of Singapore, Japan and the U.S.A. in Malaysian imports increased from 37.5% for the 1970 - 1974 period to 57.5% for the 1990-1994 period, while the share from ASEAN, Japan, the U.S.A. and the EU increased from 57.5% to 75.1% during the some period. It is also interesting to note that despite the efforts to enhance intra-ASEAN trade through regional initiatives, Malaysia as a market for ASEAN products other than Singapore remained small and its share, on other hand, contracted from 6.0% to only 4.4% during the period.

Table 4.15 Average share of Malaysia's imports from major trading partners 1970 - 1994.

Country/Region	1970-1974	1975-1979	1980-1984	1985-1990	1990-1994
Singapore	7.7	8.6	13.2	14.5	15.1
Japan	21.3	22.2	24.8	22.6	26.1
U.S.A.	8.5	12.9	15.9	17.5	16.3
Sub-total	37.5	43.7	53.9	54.6	57.5
EU	19.7	18.1	13.8	13.9	13.2
Other ASEAN	-	6.0	5.3	6.0	4.4
Total	57.2	67.8	73.0	74.5	75.1

Source: Mohamed Ariff et al. 1996.

4.3.3 Direction of agricultural trade

This section provides a general description of trade flows with regard to exports and imports of agricultural products with major trading partners of Malaysia. Overall trends indicate that Malaysia was able to diversify its markets for agricultural products and also its sources of imports.

Exports

The ten major export destinations for Malaysian agricultural products for the 1985 - 1995 period were Japan, Singapore, the U.S.A., China, Hong Kong, Korea, the Netherlands, Thailand, Taiwan and Pakistan. The value of exports to the respective 10 countries is depicted in Table 4.16. Contrary to the general trade direction whereby the export markets are becoming more concentrated, the export markets for agricultural products are becoming less concentrated. In 1985, ten countries accounted for 64% of Malaysia's total agricultural exports, while in 1995, they accounted for only 54% of total agricultural exports (Table 4.17). Similarly, the share of the five major export destinations dwindled from 55% to 32% during the same period. In fact, shifts occurred in the export market destinations. In 1985, the five major export markets were Japan, Singapore, the U.S.A., Korea and the Netherlands while in 1995, the market shifted to Japan, Singapore, China, Pakistan and the Netherlands. The positions of the U.S.A. and Korea in the top five were displaced by China and Pakistan during that period. Agricultural exports to Thailand also showed increased significance, overtaking the U.S.A. in 1996. While

the export markets for non-agricultural products remained a north-south relationship, the market for agricultural products is increasingly dominated by intra-Asian trade. It appears that the country is more successful in diversifying its markets for agricultural products compared to non-agricultural products.

Imports

The ten major sources of imports for agricultural products for the period 1985 - 1995 were Thailand, the U.S.A., Japan, Australia, Indonesia, China, Germany, India, Singapore and Taiwan. The value of imports from these countries is shown in Table 4.18. The source of imports was relatively concentrated compared to export markets. However, the concentration was decreasing over the time period. In 1985, these ten countries accounted for 75.6% of all agricultural imports. The share declined to 68.8% in 1995 (Table 4.19). Similarly, imports from the five major sources consisting of U.S.A., Japan, Australia, Thailand and China were also becoming less concentrated. Between 1985 - 1995, imports of agricultural products from these countries declined from 58.3% to slightly more than 50%. Similar to exports, Malaysia has been able to diversity its source of agricultural imports. The five top import sources consisting of Thailand, Australia, the U.S.A., Japan and China remain unchanged for 1985 and 1990 (with Australia taking over the top spot from Thailand). However in 1995, Indonesia replaced China in the top five group, reflecting the increase in intra-ASEAN agricultural trade. In that year, the U.S.A. was replaced by Australia as the leading import source of agricultural products for Malaysia.

4.4 Imports of selected agricultural and agricultural-related product groups

This section describes the imports of major agricultural and agricultural-related products with regards to their trends and sources. Where appropriate, analyses of ratios of imports to agricultural GDP were also undertaken. The products covered under this section include agricultural inputs and machinery, fish and fishery products, feed grain, livestock and related products as well as food crops.

4.4.1 Imports of agricultural inputs and agricultural machinery

The main agricultural inputs imported were seeds, fertilizers and pesticides and insecticides (Table 4.20). Total value of these imports increased from RM 408 million in 1986 to more than RM 1 billion in 1996. The more than two-fold increase over the 10 year period was a result of an average growth rate of imports of more than 9.4% per annum. The largest growing imported item in this category was fertilizers, which accounted for about 75% of total imports in 1986. The fertilizer component increased to 85.2% of the total imports of agricultural inputs in 1996.

The imports of agricultural machinery are shown in Table 4.21. Total imports increased from RM 82.8 million in 1985 to RM 276.5 million in 1996 registering a growth rate of about 11% per annum. The major component of the imports came from the importation of tractors.

Table 4.16 Value of agricultural export to major trading partners (RM million).

Year	Japan	Singapore	U.S.A.	China	Hong Kong	Korea	Netherlands	Thailand	Taiwan	Pakistan
1985	2,550.1	2,556.2	775.1	380.1	120.6	772.4	942.7	88.8	451.0	285.8
1986	2,508.5	1,745.9	783.5	362.7	123.2	869.1	1,018.9	101.9	585.7	492.3
1987	3,646.9	2,304.5	819.6	631.9	184.2	1,126.5	1,212.5	216.5	856.6	410.5
1988	3,753.2	3,045.6	1,202.8	859.5	320.1	1,439.4	1,261.1	319.7	1,069.3	613.9
1989	4,118.2	2,993.3	1,063.5	930.8	286.6	1,459.6	1,680.6	650.2	873.6	597.9
1990	3,706.6	2,865.6	934.1	1,157.0	353.7	1,473.8	1,297.0	821.2	812.2	584.8
1991	3,763.8	2,912.1	1,007.7	1,232.8	468.5	1,682.7	1,311.4	744.0	993.2	924.9
1992	3,751.3	3,099.2	1,112.3	1,147.0	486.3	1,253.4	1,329.4	995.3	1,094.8	883.9
1993	3,814.8	2,975.9	1,076.7	1,219.6	531.2	1,642.3	1,468.1	822.0	1,170.0	1,029.6
1994	3,791.3	3,066.0	1,239.2	2,582.5	759.1	1,440.3	1,511.9	1,279.6	1,209.3	1,535.5
1995	3,876.9	3,166.3	1,306.0	2,436.0	1,047.3	1,529.1	1,558.4	1,282.0	1,104.2	1,677.4
1996	3,513.6	3,097.7	1,261.1	1,916.3	1,385.8	1,317.1	1,488.7	1,321.8	928.3	1,510.6

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.17 Percentage of agricultural exports with major export partners.

Year	Percentage of 10 Major Countries*	Percentage of 5 Major Countries **
1985	64.0	55
1987	63.0	50
1989	63.0	49
1991	65.0	46
1993	59.0	41
1995	54.0	32

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

* Japan, Singapore, U.S.A., China, Hong Kong, Korea, the Netherlands, Thailand, Taiwan and Pakistan.

** Japan, Singapore, U.S.A., Korea and the Netherlands.

4.4.2 Imports of fish and fishery products

The import value of fish and fishery products increased more than three-fold for the period 1985 - 1996, from RM 184.9 million to RM 569.7 million (Table 4.22). The average growth rate in imports of this product group was 10.2% per annum. These imports as a ratio to agricultural GDP, also increased during the period, from about 1.6% in 1985, reaching a high of 3.7% in 1994 and decreasing to 3.4% in 1996 (Table 4.23). This indicated that imports of this product group, although small compared to agricultural GDP, are gaining importance in agriculture and that this sub-sector has become more import oriented.

4.4.3 Imports of feed grain

Feed grains are one of the most significant import items of Malaysia. The country depends almost entirely on imported feed inputs to support its livestock subsector (mainly poultry and swine). The impact of the rising costs of feed inputs due to the higher exchange rate resulting from the current financial crisis has badly affected the poultry industry and has substantially increased the price of chicken in the local markets. The import value of this product group, which mainly consists of grain maize and soybean has increased almost five-fold during the 1985 - 1996 period, from RM 201.6 million in 1985 to close to RM 800 million in 1996, registering double digit growth in imports of 12.5% annually (Table 4.24). Its ratio of imports to agricultural GDP has doubled during the period, from 1.3% to 2.5%, also indicating that the feed industry and thereby the livestock industry are becoming more import oriented (Table 4.25)

4.4.4 Imports of livestock and livestock products

Imports of livestock and livestock products also grew substantially over the 1985-1995 period. Most of these imports consisted of beef and mutton where the self-sufficiency levels in Malaysia are currently very low. Over the period, imports increased by more than 2.5 times, from RM 221.8 million in 1985 to RM 590.7 million in 1996 (Table 4.26).

This is equivalent to a rate of growth of 8.9% per annum. Similar to feed grains and fishery products, imports of livestock and livestock products are also becoming more import oriented. The ratio of imports of this product group to agricultural GDP increased by about 5 percentage points from 0.014 to 0.019 during the period (Table 4.27).

4.4.5 Imports of food crops

The food crops considered in this section are rice, sugar, wheat, maize, soybean, fruits and vegetables, tapioca and sweet potato. The total import of these food crops is shown in Table 4.28. Aggregate imports have increased from RM 1.7 billion to about RM 4.6 billion from 1985 - 1996, an increase of 2.7 times. Growth in food crops imports was about 9% per annum. The food commodities that registered the highest rates of growth in imports were sweet potato (19.0%), soybean (10.5%), vegetables (10.3%), maize (9.9%) and wheat (9.4%). Similar to other food groups, the ratio of imports to agricultural GDP for food crops also increased. This ratio increased from 0.106 in 1985 to 0.145 in 1995 (Table 4.29). In percentage terms, the ratio increased by almost 37% during the 10 year period. This also indicates that importation of food crop products is playing an increasing role in the agricultural economy of the country and its importance is increasing in the whole economy. The increase is also a reflection of the increasing trade-orientation of the food crop subsector resulting from liberalization of the sub-sector over the years.

Table 4.18 Value of agricultural imports from major trading partners (RM million).

Year	U.S.A.	Japan	Australia	Thailand	Indonesia	China	Germany	India	Singapore	Taiwan
1985	566.1	500.0	712.0	883.2	186.1	354.4	215.9	150.2	176.7	182.6
1986	523.2	376.5	704.9	782.3	179.7	397.6	195.1	146.8	163.8	149.6
1987	516.9	472.7	794.3	748.8	224.6	701.8	214.8	151.3	182.5	159.6
1988	735.7	112.1	1,028.2	801.3	412.6	597.6	163.7	187.4	249.7	338.7
1989	680.8	571.7	1,075.5	1,267.1	447.5	760.5	220.8	222.6	271.0	164.0
1990	817.8	707.9	1,244.7	1,101.1	364.8	581.8	256.6	255.3	313.2	213.5
1991	920.2	1,010.5	1,249.3	1,202.1	559.1	884.1	296.6	328.9	427.5	236.1
1992	967.2	1,082.0	1,196.6	959.2	587.4	1,058.0	291.6	368.0	392.1	270.6
1993	1,052.0	1,401.3	1,457.5	1,057.6	656.8	1,158.6	353.5	399.9	397.5	283.2
1994	1,153.7	1,829.6	1,754.7	1,191.7	872.6	1,365.5	453.0	425.1	503.2	318.4
1995	2,156.2	2,075.6	1,989.8	1,553.3	969.5	721.0	759.8	458.1	560.4	424.4
1996	2,293.5	1,599.4	2,180.5	2,028.0	963.3	661.1	591.4	813.6	566.1	357.1

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.19 Percentage of imports from major source countries.

Year	Percentage of 10 Major Countries*	Percentage of 5 Major Countries **
1985	75.6	58.3
1987	76.2	59.2
1989	66.5	50.9
1991	68.3	50.5
1993	71.0	53.0
1995	68.8	50.1

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: Various issues.

* U.S.A., Japan, Australia, Thailand, Indonesia, China, Germany, India, Singapore and Taiwan.

** Thailand. Australia, U.S.A., Japan and China.

Table 4.20 Imports of agricultural inputs.

Year	Seeds		Fertilizers		Pesticides & Insecticides					Grand Total (Value)
	Quantity (ton)	Value (RM '000)	Quantity (ton)	Value (RM '000)	Quantity (litre)	Value (RM '000)	Quantity (ton)	Value (RM '000)	Total value (RM'000)	
1985	1,244.00	5,832.7	1,638,349	45,659.9	4,986,040	63,315.90	4,474	31,125.40	94,441.30	145,933.9
1986	1,242.00	5,792.5	1,330,454	306,395.7	5,374,117	67,411.10	3,331	28,552.70	95,963.80	408,152.0
1987	1,032.00	6,646.1	1,638,776	365,405.4	5,337,701	68,933.20	2,969	26,838.40	95,771.60	467,823.1
1988	1,450.11	6,419.7	1,223,207	591,734.3	6,351,361	84,941.80	3,495	35,027.00	119,968.80	718,122.8
1989	1,470.74	7,442.0	1,785,489	579,508.5	4,437,297	57,773.35	3,109	30,254.21	88,027.56	674,978.1
1990	3,090.75	8,806.0	2,234,966	662,474.3	4,815,553	81,132.12	3,070	30,956.59	112,088.71	783,369.0
1991	1,717.59	9,029.9	2,089,158	614,705.4	3,559,274	65,182.44	3,915	34,408.58	99,591.02	723,326.3
1992	2,157.38	9,788.4	1,170,792	624,370.6	4,004,443	68,786.63	4,214	37,881.11	106,667.74	740,826.7
1993	1,960.17	9,155.7	1,901,002	717,671.1	3,397,133	70,838.83	3,969	37,316.57	108,155.39	834,983.0
1994	2,199.00	10,367.6	2,114,472	780,663.8	4,532,413	86,342.52	3,096	42,052.11	128,394.63	919,426.0
1995	2,735.28	15,109.3	2,274,566	983,345.4	10,408,599	7,810.49	6,854	77,585.90	155,795.90	1,154,250.6
1996	1,984.78	14,690.2	2,041,660	843,475.6	6,085,503	100,882.00	7,123	86,777.20	187,659.56	1,045,825.4

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture Malaysia: various issues.

Table 4.21 Imports of agricultural machinery.

Year	Agricultural Machinery								
	Agricultural Machinery (excluding tractors)		Agricultural Machinery Parts (excluding tractor parts)		Tractors		Tractor Parts		Total
	Quantity (number)	Value (RM '000)	Quantity (number)	Value (RM '000)	Quantity (number)	Value (RM '000)	Quantity (number)	Value (RM '000)	Value (RM '000)
1985	35,576	25,642.5	(value)	5,836.3	2,302	29,115.7	120,129	6,093.50	82,784.20
							(value)	16,096.20	
1986	13,951	17,866.3	(value)	6,187.9	3,602	33,163.9	137,557	4,817.90	76,566.70
							(value)	14,530.70	
1987	12,447	21,699.8	(value)	7,227.2	1,122	17,659.9	213,134	8,114.10	73,713.60
							(value)	19,012.60	
1988	965,635	31,489.30	2,245,380	7,439.20	2,866	38,967.90	1,193,272	30,092.30	109,038.70
			(value)	1,050.00					
1989	18,656	22,567.03	3,784,525	7,289.12	3,855	54,503.64	1,870,130	135,595.40	120,805.59
			(value)	850.40					
1990	288,604	31,402.36	4,269,467	8,188.01	4,830	65,944.53	1,586,833	37,336.48	143,970.59
			(value)	1,099.21					
1991	1,969,790	57,677.16	1,452,656	14,652.95	4,706	62,749.22	1,510,556	37,230.21	173,562.71
			(value)	1,253.17					
1992	24,001	71,908.88	1,358,949	12,533.64	4,513	61,891.70	616,203	30,229.87	177,293.91
			(value)	729.82					
1993	19,018	47,024.98	5,455,657	14,492.43	4,806	72,891.81	920,517	27,238.46	163,082.39
			(value)	1,434.71					
1994	32,383	48,553.79	1,987,614	13,702.28	4,369	71,940.19	496,705	16,385.62	152,512.52
			(value)	1,930.64					
1995	29,552	71,719.70	1,372,015	17,366.90	5,553	97,050.48	365,454	18,337.54	205,874.90
			(value)	1,400.28					
1996	14,954,970	95,176.98	4,013,387	28,338.34	63,835	126,180.86	942,990	20,959.63	276,517.93
			(value)	5,862.13					

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture Malaysia: various issues.

Table 4.22 Imports of fish and fishery products, 1985 - 1996.

Year	Value (RM)
1985	184,845,700
1986	202,257,200
1987	217,447,500
1988	247,534,000
1989	267,411,240
1990	258,806,389
1991	344,747,901
1992	446,203,038
1993	456,451,881
1994	591,016,485
1995	556,463,312
1996	569,694,958

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture Malaysia: various issues.

Table 4.23 Ratio of imports of fish and fishery products to agricultural GDP, 1985 - 1996.

Year	Imports of Fish & Fishery Product/Agricultural GDP
1985	0.013723
1986	0.014016
1987	0.013291
1988	0.013973
1989	0.013207
1990	0.014538
1991	0.016782
1992	0.014688
1993	0.011635
1994	0.015858
1995	0.01826
1996	0.018633

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department.

Table 4.24 Imports of feed grain, 1985 - 1996.

Year	Value (RM)
1985	201,643,500
1986	238,028,600
1987	237,649,200
1988	294,713,100
1989	373,062,877
1990	300,651,736
1991	325,774,574
1992	443,970,748
1993	451,976,546
1994	543,030,927
1995	595,111,520
1996	797,458,093

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.25 Ratio of imports of feed grains to agricultural GDP.

Year	Imports of Feed Grain/Agricultural GDP
1985	0.012473
1986	0.015625
1987	0.014010
1988	0.016129
1989	0.018972
1990	0.014624
1991	0.015456
1992	0.018992
1993	0.016987
1994	0.019546
1995	0.020169
1996	0.025153

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department.

Table 4.26 Imports of livestock and livestock products (RM).

Year	Value (RM)
1985	221,840,900
1986	213,520,700
1987	225,449,600
1988	255,312,900
1989	259,705,795
1990	298,290,071
1991	353,736,145
1992	343,371,907
1993	309,560,582
1994	440,568,415
1995	538,792,022
1996	590,742,021

Source: Import and Export Trade in Food and Agricultural Products, Ministry of Agriculture Malaysia: various issues.

Table 4.27 Ratio imports of livestock and livestock products/agricultural GDP.

Year	Imports of Livestock and Livestock Product/Agricultural GDP
1985	0.015515
1986	0.016326
1987	0.016453
1988	0.017766
1989	0.018107
1990	0.017472
1991	0.023265
1992	0.028730
1993	0.028167
1994	0.036830
1995	0.034286
1996	0.034360

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department.

Table 4.28 Import value of food crops by principal commodity, 1985 - 1996 (RM).

Year	Rice	Tapioca	Sugar	Wheat	Maize	Sweet Potato	Soybean	Fruits	Vegetables	Total
1985	257,100,000	2,759,500	313,100,000	242,200,000	362,700,000	n.a.	131,800,000	198,718,000	209,315,900	1,717,693,400
1986	118,100,000	610,400	345,400,000	209,400,000	322,600,000	n.a.	149,100,000	182,260,000	225,976,600	1,553,447,000
1987	104,200,000	295,500	333,800,000	214,600,000	354,700,000	n.a.	227,900,000	190,837,000	216,254,300	1,642,586,800
1988	212,000,000	3,222,800	414,500,000	320,200,000	346,500,000	109,700	312,600,000	199,937,000	270,173,100	2,079,242,600
1989	342,900,000	7,437,000	531,400,000	356,800,000	599,000,000	77,600	350,200,000	179,299,000	290,048,892	2,657,162,492
1990	269,800,000	5,008,000	602,200,000	390,400,000	570,600,000	110,200	385,100,000	203,035,000	300,306,936	2,726,560,136
1991	350,500,000	1,905,200	617,600,000	501,000,000	564,200,000	420,700	355,200,000	203,631,000	343,513,659	2,937,970,559
1992	346,100,000	2,448,100	549,100,000	412,000,000	629,500,000	769,700	368,600,000	229,600,000	348,569,395	2,886,687,195
1993	283,000,000	2,736,500	554,300,000	474,900,000	661,400,000	1,428,700	356,200,000	280,763,000	407,202,821	3,021,931,021
1994	294,600,000	104,300	663,900,000	561,800,000	683,700,000	770,500	400,900,000	322,362,000	441,185,990	3,369,322,790
1995	358,100,000	162,200	771,800,000	600,100,000	957,300,000	1,180,900	389,200,000	333,039,000	558,006,301	3,968,888,401
1996	537,527,535	617,700	822,400,000	678,000,000	1,076,500,000	883,200	419,800,000	399,520,500	650,948,385	4,586,197,320
Growth Rate/ Annum	6.7%	-13.6%	8.7%	9.4%	9.9%	19.0%	10.5%	4.9%	10.3%	8.9%

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

4.4.6 Overall comparison

All the food/feed product groups analyzed showed an increasing ratio of imports to agricultural GDP. This indicates that imports are playing a more prominent role in the agricultural economy of the country. The highest ratio is for the food crops, and it was about 15% of agricultural GDP in 1996 (Table 4.29). The ratio of imports of other product groups such as fishery and fishery products, livestock and livestock products and feed grains, although still small, is exhibiting an increasing trend (Table 4.30). This is consistent with the overall scenario where the ratio of agricultural imports to agricultural GDP also registered substantial increases.

4.5 Production vs imports of specific agricultural commodities

Of the major imported commodities discussed in earlier sections, only tobacco, rice, tapioca, maize, sweet potato and sugar are grown in the country. For wheat and soybean, production is non-existent due to climatic incompatibility. The production and import of major importing commodities are given in Table 4.31.

Table 4.29 Ratio of imports of food crops/agricultural GDP.

Year	Imports of Food Crops/Agricultural GDP
1985	0.106253
1986	0.101972
1987	0.096834
1988	0.113794
1989	0.135128
1990	0.132886
1991	0.139386
1992	0.123484
1993	0.113577
1994	0.121277
1995	0.134511
1996	0.144657

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department, Malaysia.

Among the five commodities, notable increases in the quantity imported were recorded for tobacco and maize. The total quantity imported for tobacco increased from 2,537 tons in 1985 to 11,695 tons in 1996. Despite the protection accorded to the industry, the country still imports increasingly more tobacco over the years. This is to satisfy the quality requirements for cigarettes, which require flavored tobacco (which Malaysia cannot produce) to be blended with local tobacco. In addition, imported tobacco is also used to manufacture specialized cigarettes and cigars, which are gaining popularity in the country. The ratio of production to import increased from 0.27 in 1985 to more than 0.92 in 1995, showing that the industry and the tobacco market are increasingly dependent on imported tobacco.

Table 4.30 Ratio of imports of selected product groups to agricultural GDP, 1996.

Product Group	Imports/GDP
Fish and fishery products	0.018
Livestock and livestock products	0.019
Feed grains	0.025
Food crops	0.145

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Economic Planning Unit, Prime Minister's Department, Malaysia.

For rice, the quantity imported was almost level over the years, except for 1996, where there are significant increases in imports compared to other years. The country's policy to maintain a minimum 65% self-sufficiency level on rice production can be considered highly successful. The ratio of imports to production decreased from 0.36 to 0.28 from 1985 - 1996. This is the result of the effects of various supportive measures given to the rice industry and also an increase in productive capacity due to increases in productivity.

For tapioca and especially for sweet potato, production and imports still remain small relative to other commodities. Their importance in the economy is also declining as consumers switch to other carbohydrate and protein-based products.

The country continues to be highly dependent on imports for maize. Imports increased from 599,000 tons to more than one billion tons during the 1985 - 1996 period. The ratio of imports to production, however, remained almost stable averaging about 43% over the 11 year period. However, it is important to note that local maize production mainly consists of sweet corn, which is used for fresh consumption, while the imported item is mainly grain maize used for making animal feed.

4.5.1 Direction of imports for specific commodities

This section covers the direction of imports for major import commodities including tobacco, rice, maize, soybean, sugar, the upland crops and wheat.

Tobacco

The U.S.A. has remained the single most important source of imports of tobacco for Malaysia for the period of 1985 - 1996, although its import share is showing a declining trend (Table 4.32). The unweighted average of the U.S.A.'s share in the imports of tobacco into Malaysia declined from 85.7% during the 1985 - 1990 period to 74.7% for the 1991 - 1996 period, dipping to a low of 68.2% in 1996. However, the share of imports from any other single country remained small, although the imports from "others" have gained an increasing share of the Malaysian tobacco market.

Rice

Thailand remained the top supplier of rice to Malaysia, although in the 1990s Vietnam has aggressively gained ground and increased its share in the Malaysian market (Table 4.33). This is made possible through bilateral arrangements between the two countries for the supply of rice. Since rice is a strategic commodity, the government's policy is to diversify the source of imports for rice to avoid shortfalls during times of low supply from major supplier countries. Malaysia is also encouraging Malaysian companies to undertake reverse investment in rice production in lower cost countries to secure a future supply of rice. If this happens it is expected that the concentration of imports will be further reduced.

Maize

The supply of maize from major Malaysian suppliers seems to be erratic, especially in the 1990s. From 1985 - 1991, Thailand was the leading supplier of maize to Malaysia, accounting for 24.1% to 87.4% of all imports of maize (Table 4.34). In 1992, Thailand's share dropped sharply to only 7.0%, due to reduced exports by Thailand as a result of an expanding poultry industry in the country. The vacuum left by Thailand was gradually filled by China.

The country's share increased to almost 75% in 1994 and l995. However, production problems plus an increasing domestic demand in China also resulted in lower exports by the country. Its share of maize imports into Malaysia drastically dropped from 74.5% in 1994 to only 2.3% and less than 1% in 1995 and 1996, respectively. This share is now being filled by the U.S.A., which had 59.4 and 47.5% shares in the Malaysian maize market in 1995 and 1996, respectively. The aggregate share of "other countries" is also increasing. Thus, the source of maize imports has now become less concentrated, but the major source has shifted from Asia to the U.S.A.

Soybean

Soybean is another important import commodity for Malaysia. It is used to make a variety of soybean products and also used as an ingredient together with maize in feed manufacturing. Traditionally, Malaysia has depended of China for its major supply of soybean, but as with maize, the export supply of soybean from China also dwindled. The other major suppliers are the U.S.A. and Argentina (Table 4.35). Together, they account for 58.0% to 91.6% of total maize imported into Malaysia. The import sources for maize have become more concentrated with supply from these countries increasing from an average of 67.2% for the 1985 - 1990 period to 82.5% during the 1991 - 1996 period. The source of supply has now been narrowed to only two countries with the U.S.A. as the leading supplier. As with maize, the supply of soybean to Malaysia has also shifted from Asia to the Americas.

Other upland crops

Imports of other upland crops that are included in this study, viz. tapioca and sweet potato remain small (Table 4.32). Imports of these crops are mainly from Malaysia's neighbors particularly Thailand and Indonesia. Other major suppliers include China, Japan, Hong Kong and Vietnam, but the amount is small. There were no major shifts in supply sources for these products, and trade has very much remained an ASEAN affair.

Wheat

The composition of major exporting countries of wheat into Malaysia very much remained the same over the 1985 - 1996 period with Australia, Canada and the U.S.A. as the leading suppliers. However, the concentration of import sources has been diluted with other counties such as India coming into the picture. Average imports from Australia, Canada and the U.S.A. declined from 90.3% for the 1985 - 1990 period to 81.0% for the 1991 - 1996 period (Table 4.36). This was mainly due to the decline of imports from Australia whose import share declined from 68.3% to 58.0% for the respective periods. The share of Canada and the U.S.A. remained almost the same albeit with yearly fluctuations.

Table 4.31 Production, imports and import production ratios for selected commodities, Malaysia, 1985-1996.

	Tobacco			Rice			Tapioca			Maize			Sweet Potato		
Year	Prod.	Imports (tons)	Import/ Prod.	Prod.	Imports ('000 tons)	Import/ Prod.	Prod.	Imports ('000 tons)	Import/ Prod.	Prod.	Imports ('000 tons)	Import/ Prod.	Prod.	Imports ('000 tons)	Import/ Prod.
1985	2,537	9,347	0.27	1,189	428	0.36	144	14	0.10	24	599	49.47	36	n.a.	-
1986	2,368	13,642	0.17	1,123	191	0.17	134	2	0.02	26	435	46.54	37	n.a.	-
1987	1,539	10,848	0.14	1,094	197	0.18	124	0.5	n.s.	30	620	43.73	37	n.a.	-
1988	3,049	7,280	0.42	1,148	284	0.25	75	21	0.28	32	758	47.72	37	0.3	0.008
1989	3,572	13,637	0.26	1,186	368	0.31	91	49	0.53	34	652	36.69	35	0.2	0.005
1990	4,567	10,518	0.43	1,269	330	0.31	78	28	0.36	35	841	36.69	36	0.2	0.005
1991	5,543	9,217	0.60	1,377	400	0.29	63	11	0.18	35	1,312	37.00	38	0.9	0.023
1992	5,480	11,245	0.49	1,415	437	0.31	84	15	0.17	36	931	42.54	35	2.1	0.061
1993	5,718	9,680	0.59	1,357	389	0.29	123	18	0.15	38	1,097	47.36	35	3.9	0.109
1994	6,320	6,087	1.04	1,379	335	0.24	98	0.5	n.s.	40	1,179	43.27	32	2	0.063
1995	9,507	10,300	0.92	1,373	428	0.31	58	0.5	n.s.	43	1,121	48.47	30	2.7	0.088
1996	10,000	11,695	0.86	2,065	578	0.28	40	11.9	0.30	45	1,101	43.59	n.a.	n.a.	-

Source: Statistics on commodities Ministry of Primary Industry Malaysia; Ministry of Agriculture, Malaysia; Tobacco Statistics, National Tobacco Board, Malaysia.
Notes: n.a. = not available
n.s. = non-significant.

Table 4.32 Agricultural imports by principal commodity, 1985-1996 (RM million).

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
1. Tobacco												
U.S.A.	82.4	67.0	51.5	53.7	62.6	69.3	93.4	59.0	66.6	70.4	97.1	112.8
Brazil	7.9	3.6	5.3	1.6	2.3	4.6	10.2	5.3	4.9	4.7	4.7	9.9
Greece	0.009	0.7	-	0.4	0.7	1.0	2.5	2.4	0.1	1.3	1.8	3.4
Korea Rep.	1.2	0.6	1.9	-	-	-	0.2	0.1	0.02	0.01	0.2	-
Thailand	1.6	0.3	-	-	0.1	0.0003	0.8	1.0	3.2	4.6	5.5	5.6
Others	4.3	20.3	0.9	1.5	2.7	5.6	5.7	14.4	14.4	13.8	17.7	33.5
Total	97.4	92.5	59.6	57.2	68.4	80.5	112.8	82.2	89.2	94.8	127	165.2
2. Rice												
Thailand	200.0	113.3	91.8	202.6	339.8	260.0	292.0	145.2	154.8	152.6	229.0	461.7
Vietnam	-	-	-	-	0.1	0.1	51.4	165.1	105.6	113.4	119.9	62.9
Taiwan	-	-	-	-	-	-	-	-	-	-	-	2.4
Pakistan	27.7	4.2	1.5	2.3	1.9	2.5	5.0	6.4	4.8	3.4	5.9	7.4
U.S.A.	-	0.3	-	-	-	0.2	1.1	-	-	-	1.2	2.2
Others	29.4	0.3	10.9	7.1	1.1	7.0	1.0	29.4	17.8	25.2	0.1	0.9
Total	257.1	118.1	104.2	212.0	342.9	269.8	350.5	346.1	283.0	294.6	358.1	537.5
3. Tapioca												
Indonesia	0.0016	0.0003	0.0004	-	1.8028	0.5033	0.3919	0.3634	0.9230	0.0002	0.0071	0.0188
Thailand	4.9674	0.8397	0.6567	2.8737	5.3855	4.1974	2.0284	1.7452	1.8161	0.0141	0.1186	0.0655
China	-	0.0067	-	0.0733	0.1573	0.3214	0.0923	0.0306	0.0376	0.0679	0.0120	0.0196
Vietnam	-	-	-	-	0.0014	0.0410	-	-	-	0.0270	0.0179	0.5413
Japan	0.0048	0.0284	0.0069	-	0.000764	0.0004	0.0004	0.0862	0.0002	0.0005	0.0015	-
Others	0.1865	0.1000	0.2310	0.0374	0.1730	0.0585	0.0585	0.3718	0.0036	-	0.0171	-
Total	5.1603	0.9751	0.8950	2.9844	7.5208	5.1220	2.5308	2.5972	2.7805	0.1097	0.2148	0.6452
4. Sugar												
Australia	232.0	203.7	214.0	300.5	258.2	389.5	363.7	280.2	353.3	436.3	457.9	421.5
Thailand	21.1	69.5	46.9	21.2	146.6	132.6	156.0	202.6	128.3	127.3	218.1	270.3
Fiji	48.5	48.5	64.8	35.7	64.8	75.5	71.8	66.3	62.7	82.7	73.9	54.1
Others	13.5	23.7	8.1	57.1	61.8	4.6	26.1	-	10.0	17.6	21.9	76.5
Total	313.1	345.4	333.8	414.5	531.4	602.2	617.6	549.1	554.3	663.9	771.8	822.4

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.
Notes: n.a. = not available; - = no import.

Continued……

Table 4.32 Agricultural imports by principal commodity, 1985-1996 (RM million) (continued).

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
5. Wheat												
Australia	140.2	143.3	167.3	204.3	259.6	269.4	217.1	199.0	289.1	347.0	380.9	475.3
Canada	28.9	5.4	18.9	48.2	63.2	57.0	86.0	93.9	62.5	51.6	78.1	60.1
India	-	-	-	-	-	-	19.8	17.5	-	-	0.4	56.3
U.S.A.	28.9	30.7	28.2	21.9	17.3	37.5	36.7	32.3	33.7	67.5	75.2	47.5
Hungary	-	-	-	-	-	-	-	-	-	-	-	20.8
Others	44.2	30.0	0.2	45.8	16.7	26.5	141.4	70.2	89.6	95.7	65.5	18.2
Total	242.2	209.4	214.6	320.2	356.8	390.4	501.0	412.0	474.9	561.8	600.1	678.0
6. Soybean												
China	62.4	82.1	111.7	118.5	145.3	43.6	172.2	123.7	28.7	81.1	18.4	2.0
U.S.A.	0.5	6.7	20.6	41.8	44.7	114.4	12.4	78.7	152.0	134.0	199.9	243.5
Brazil	0.0962	0.0006	55.6	6.8	75.2	34.2	13.7	59.0	38.4	45.8	5.8	42.9
Argentina	28.8	19.7	0.6	64.6	8.9	128.6	98.2	80.4	119.8	115.2	138.0	92.1
Taiwan	0.8	0.4121	0.5	1.5	1.0	6.3	1.0	0.3	0.2	0.2	0.1	0.5
Others	39.2	40.2	38.9	79.4	75.1	58.0	57.7	26.5	17.1	24.6	27.0	38.8
Total	131.8	149.1	227.9	312.6	350.2	385.1	355.2	368.6	356.2	400.9	389.2	419.8
7. Sweet Potato												
Thailand	n.a.	n.a.	n.a.	0.0984	0.0541	0.0503	0.0245	0.0115	0.2793	0.2563	0.4906	0.6318
Indonesia				-	0.0099	0.0039	0.0643	0.7541	1.0336	0.4581	0.6364	0.2015
China				0.0099	0.0095	0.0424	0.1308	0.002	0.0148	0.0377	0.0208	0.0198
Japan				0.0003	0.0025	0.0038	0.000001	-	0.0074	0.0079	0.0163	0.0174
Hong Kong				-	-	-	0.0011	0.0007	0.000031	0.0068	0.01019	0.0028
Others				0.0011	0.0016	0.0098	-	0.0014	0.0936	0.0037	0.0066	0.0099
Total	n.a.	n.a.	n.a.	0.1097	0.0776	0.1102	0.4207	0.7697	1.4287	0.7705	1.1809	0.8832
8. Maize												
Thailand	316.0	282.2	236.4	84.7	308.9	300.2	319.1	43.9	61.8	32.6	43.4	14.3
China	20.8	3.4	7.8	77.3	129.2	75.7	191.4	430.9	495.1	509.5	21.9	9.4
Indonesia	0.04	0.07	0.01	4.2	52.2	33.2	4.3	49.2	12.6	6.9	21.7	7.6
U.S.A.	0.4	0.43	41.9	69.6	11.5	13.2	0.5	23.4	0.3	3.3	481.8	479.2
Netherlands	1.4	0.81	0.2	0.6	0.1752	0.4717	0.0501	0.0759	0.2251	0.27083	0.1130	0.0258
Others	24.1	35.7	68.4	104.7	97.0	147.8	48.8	82.0	91.4	131.1	388.4	566.0
Total	362.7	322.6	354.7	346.5	599.0	570.6	564.2	629.5	661.4	683.7	957.3	1076.5

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.
Notes: n.a. = not available; - = no import.

Table 4.33 Thailand and Vietnam's share (%) in rice imports into Malaysia, 1985 – 1996.

Year	Thailand	Vietnam	Thailand + Vietnam
1985	77.8	-	77.8
1986	95.9	-	95.9
1987	88.1	-	88.1
1988	95.6	-	95.6
1989	99.1	n.s.	99.1
1990	96.4	n.s.	96.4
1991	83.3	14.7	98.0
1992	42.0	47.7	89.7
1993	54.7	37.3	92.0
1994	51.8	38.5	90.3
1995	63.9	33.5	97.4
1996	85.9	11.7	97.6

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.
Notes: n.s. = not significant.

Table 4.34 Source of major maize imports into Malaysia (%).

Year	Thailand	China	Indonesia	U.S.A.	Total
1985	87.1	5.7	n.s.	n.s.	92.8
1986	87.4	1.1	n.s.	n.s.	88.5
1987	66.7	2.2	n.s.	11.8	80.7
1988	24.4	22.3	1.2	20.1	68.0
1989	51.5	21.6	8.7	1.9	83.7
1990	52.6	13.3	5.8	2.3	74.0
1991	56.6	33.9	n.s.	n.s.	90.5
1992	7.0	68.5	7.8	3.7	87.0
1993	9.3	74.8	1.9	n.s.	86.0
1994	4.8	74.5	1.0	n.s.	80.3
1995	4.5	2.3	2.3	50.3	59.4
1996	1.3	n.s.	n.s.	46.2	47.5

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.
Notes: n.s. = not significant.

Table 4.35 Major sources of imports of soybean into Malaysia (%).

Year	China	U.S.A.	Argentina	Total
1985	47.3	n.s.	21.9	69.2
1986	55.1	4.5	13.2	72.8
1987	49.0	9.0	n.s.	58.0
1988	37.9	13.4	20.7	72.0
1989	41.5	12.8	2.5	56.8
1990	11.3	29.7	33.4	74.4
1991	48.5	3.5	37.7	79.7
1992	33.6	21.4	21.8	76.8
1993	8.1	42.7	33.6	84.4
1994	20.2	33.4	28.7	82.3
1995	4.7	51.4	35.5	91.6
1996	n.s.	58.0	21.9	79.9

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.36 Import share (%) of wheat imported from major sources into Malaysia, 1985 – 1996.

Year	Australia	Canada	U.S.A.	Total
1985	57.8	11.9	11.9	81.6
1986	68.4	2.6	14.7	85.7
1987	78.0	8.8	13.1	99.9
1988	63.8	15.5	6.8	86.1
1989	72.8	17.7	4.9	95.4
1990	69.0	14.6	9.6	93.2
1991	43.3	17.2	7.3	67.8
1992	48.3	22.8	7.8	78.9
1993	60.9	13.2	7.1	81.2
1994	61.8	9.2	12.0	83.0
1995	63.5	13.0	12.5	89.0
1996	70.1	8.9	7.0	86.0

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Sugar

Another important imported commodity for Malaysia is sugar. Only very small quantities are produced in the country, mostly in the northern region of Peninsular Malaysia, where the presence of a distinct dry spell makes sugar growing more suitable. The three main sugar suppliers to Malaysia are Australia, Thailand and Fiji. The share of sugar imports of these countries into Malaysia remained the same ranging from 86.2% to 100% for the 1985 - 1996 period (Table 4.37). However, imports from Australia showed a decreasing share with that share taken up by Thailand. The import share of Fiji sugar remained almost the same over the years except during the latter years of the 1990s. Thus, the source of imports for sugar remained highly concentrated with the three countries accounting for almost all the sugar imported into Malaysia.

Table 4.37 Import share (%) of sugar imported from major sources into Malaysia, 1985 - 1996.

Year	Australia	Thailand	Fiji	Total
1985	74.1	6.7	15.5	96.3
1986	58.9	20.1	14.0	93.0
1987	64.1	14.1	19.4	97.6
1988	72.5	5.1	8.6	86.2
1989	48.6	27.6	12.2	88.4
1990	64.7	22.0	12.5	99.2
1991	58.9	25.3	11.6	95.8
1992	51.0	36.9	12.1	100.0
1993	63.7	23.1	11.3	98.1
1994	65.7	19.2	12.4	97.3
1995	59.3	28.3	9.6	97.2
1996	51.3	32.9	9.3	93.5

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

4.6 Production vs exports of specific agricultural commodities

The major agricultural commodities exported by Malaysia are palm oil, rubber, cocoa, logs, sawn timber and pepper. The quantity and value of these commodities exported by Malaysia for the 1985 - 1996 period are given in Table 4.38. Of the six major export commodities, only palm oil and sawn timber registered increases, while exports of other commodities showed a declining trend. Based on the average export value for the two periods of 1985 - 1990 and 1991 - 1996, average palm oil exports increased by more than 45% during the 1991 - 1996 period compared to the 1985 - 1990 period, from RM 5.25 billion to RM 7.62

billion (Table 4.39). Sawn timber increased from RM 2.15 billion to RM 3.46 billion for the two respective periods, an increase of about 61%. On the hand, rubber, which was at one time the top agricultural export earner, continued its declining trend from RM 3.70 billion for the 1985 - 1990 period to about RM 2.99 billion for the 1991 - 1996 period, a decline of 19.2%. Significant declines were also recorded for saw logs, cocoa and pepper, which declined by 19.5%, 50.7% and 44.7%, respectively, for the two periods. The decline in saw log exports is in line with government policy to reduce timber production to sustainable levels and a ban imposed on saw log exports from Peninsular Malaysia to encourage further higher value-added processing of timber based products. The trend also indicates that Malaysia appears to be losing her comparative advantage in rubber, cocoa and pepper production. The competitiveness of palm oil, however, seems to remain strong.

4.6.1 Ratio of exports to production

The ratios of exports to production of the major export crops are shown in Table 4.40. Since most of these crops are primarily aimed for the export market, most of the production for these crops was exported. Nevertheless, there appears to be some improvement in domestic utilization of these commodities, as the government continues its drive to encourage increased domestic utilization and exports of higher value-added finished products.

The ratio of export to production for palm oil decreased from 0.90 to 0.81 from 1985 - 1995. Most of the exports consisted of refined palm oil. There was a significant increase of domestic utilization as more downstream processing of palm oil such as oleochemicals takes place. For rubber, the ratio of exports to production did not appear to change much. The ratio declined to a low of 0.87 in 1992 from 0.97 in 1985. It increased again in the years that followed to 0.91 in 1996. In some years, exports were much higher than production. This may be due to the release of stocks by exporters/producers during the years when rubber prices in the international market were perceived to be more attractive. The government continues to encourage local manufacturers to produce higher value-added products of rubber for export. As the country's competitiveness of rubber declines, Malaysia's strategy for the rubber industry is shifting its focus on production to marketing for rubber products.

The ratio of exports to production of cocoa beans showed marked declines from 1985 - 1996. The ratio decreased by more than 50% in this period, from 0.65 to 0.35. This can be attributed to two major reasons. First is the decline in cocoa production leading to lower exports. The other reason is an increase in the local processing of cocoa beans into cocoa powder, paste and butter, resulting in higher domestic utilization and lower exports. There was also an increase in exports of final cocoa products including chocolates from Malaysia.

Other export products that show marked declines in the export:production ratio were logs and sawn timber. The ratios declined from 0.63 to 0.25 for logs and 0.49 to 0.45 for sawn timber for the 1985 - 1995 period. This was attributed to the ban on export of logs and the various incentives offered to local manufacturers to export higher value-added timber-based products such as plywood, moldings and furniture.

Domestic utilization of pepper has remained small and is estimated to be only 2 - 3% of production. Calculations from statistical records show that the ratio of exports to production ranges between 0.83 to 1.43 for the 1985 - 1995 period for pepper. The commodity remained very much an export oriented crop and industry performance is highly influenced by the vagaries of international pepper prices. Pepper producers and exporters usually hold their stocks when pepper prices are low and release them when prices are higher.

Table 4.38 Agricultural export by principal commodity.

Year	Total Palm Oil & Palm Kernel Oil		Rubber		Cocoa Beans		Saw Logs		Sawn Timber		Pepper (black & white)	
	Quantity (ton)	Value (RM million)	Quantity (ton)	Value (RM million)	Quantity (ton)	Value (RM million)	Quantity ($1,000m^3$)	Value (RM million)	Quantity ($1,000m^3$)	Value (RM million)	Quantity (ton)	Value (RM million)
1985	3,652,115	4,488.1	1,497,400	2,871.4	81,465	409.5	19,771.0	2,781.6	2,740.0	1,009.5	18,895	140.3
1986	4,839,066	3,335.1	1,516,900	3,182.7	106,083	496.1	18,995.0	2,849.9	2,991.0	1,235.9	15,204	163.4
1987	9,415,374	3,721.6	1,623,000	3,915.0	157,428	683.6	22,853.2	4,238.1	3,829.0	1,680.2	13,887	159.1
1988	4,770,665	9,690.0	2,014,200	5,256.0	189,389	708.3	20,571.3	4,011.8	4,102.0	1,871.3	18,610	158.4
1989	5,841,623	5,420.4	1,884,100	3,949.0	169,281	520.2	21,109.8	4,327.4	5,135.0	3,944.9	25,788	163.4
1990	6,516,727	4,848.9	1,321,800	3,028.1	162,618	448.5	20,315.9	4,041.2	5,283.0	3,065.0	28,491	117.5
1991	7,206,454	5,451.1	1,131,800	2,689.8	148,115	408.0	19,320.0	4,096.6	4,932.0	3,008.0	26,267	86.6
1992	6,020,999	5,819.2	1,035,000	2,357.2	125,440	314.9	17,797.0	3,851.4	5,417.1	3,487.7	22,612	53.9
1993	7,212,584	6,392.4	937,100	2,131.7	123,148	312.9	9,381.8	2,914.1	5,370.9	4,545.7	16,575	61.1
1994	7,121,735	9,211.4	1,017,100	2,926.7	83,028	263.1	8,561.2	2,543.4	4,560.4	4,331.1	23,035	122.1
1995	7,092,258	11,106.0	1,013,300	4,038.3	52,533	172.0	7,863.8	2,263.5	4,151.3	3,837.5	14,628	101.8
1996	6,638,928	7,758.3	980,362	1,807.0	42,532	137.6	6,984.6	2,249.1	5,606.2	1,528.0	11,814	70.5

Source: External Trade Statistics, Dept. Of Statistics, Malaysia.

Table 4.39 Average exports of major commodities.

Commodity	1985 - 1990	1991 - 1996
Palm Oil	5.251	7.623
Rubber	3.700	2.658
Saw Logs	3.708	2.986
Sawn Timber	2.150	3.457
Cocoa	0.544	0.268
Pepper	0.150	0.083

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia.

Table 4.40 Export and production ratios of the major agricultural export commodities, 1985 - 1996.

Year	Palm Oil	Natural Rubber	Cocoa Beans	Logs	Sawn Timber	Pepper
1985	0.90	0.97	0.65	0.63	0.49	0.99
1986	0.98	0.99	0.65	0.64	0.57	0.99
1987	0.97	1.02	0.71	0.64	0.65	0.98
1988	0.90	1.21	0.86	0.55	0.62	0.93
1989	0.92	1.33	0.70	0.53	0.61	0.93
1990	0.93	1.02	0.66	0.51	0.58	0.83
1991	0.93	0.90	0.64	0.48	0.55	0.90
1992	0.86	0.88	0.57	0.41	0.57	0.88
1993	0.82	0.87	0.62	0.25	0.58	0.94
1994	0.89	0.92	0.47	0.24	0.52	1.43
1995	0.81	0.93	0.40	0.25	0.45	1.12
1996		0.91	0.35	0.32	1.71	-

Sources: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues and data from Ministry of Agriculture and Ministry of Primary Industry, Malaysia.

4.6.2 Direction of exports for specific agricultural commodities

In this section the export flows of major agricultural products to the main market destinations are described and analyzed over the 1985 - 1996 period. These export commodities include palm oil, rubber, cocoa, saw logs, sawn timber and pepper.

Palm oil

The exports of palm oil were mainly to China, Pakistan, Singapore and Japan. Beginning in 1990, Egypt became a major importer of Malaysia palm oil (Table 4.41). Pakistan is now the major importer of Malaysia palm oil, accounting for 19.3% of the value of Malaysian palm oil exported (Table 4.42). The palm oil market appears to be quite well diversified with the five major countries accounting for not more than 56.0% of the total market during the 1985 - 1996 period. During the early years, Singapore, which acts as a transitional market point, was the main export channel. However, aggressive promotion and a direct marketing strategy employed in potential markets saw the palm oil market diversifying into non-traditional markets. Singapore's share was effectively reduced from 33.1% in 1985 to only 5.4% in 1996, while other countries such as China, Pakistan and Egypt increasingly became more important markets for Malaysian palm oil.

Rubber

Similar to palm oil, the rubber market also appears to be well diversified. The main markets were Korea, the U.S.A., Germany, Italy and the United Kingdom. However, their combined share was well below 50% during the 1985 - 1996 period, with Korea and the U.S.A. being the major export markets (Table 4.43). Nevertheless, the rubber export market seems to be more concentrated over the years. The market share of the five major importers increased from 35.3% in 1985 to 41.7% in 1996 reaching a high of 45.4% in 1993. Contrary to palm oil where markets consist mainly of developing countries, the rubber export markets mainly consist of developed countries.

Table 4.41 Principal agricultural commodity exports (RM million) to selected major importers, 1985 – 1996.

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
1. Palm Oil												
China	39.1	24.3	63.5	229.5	492.2	733.5	583.1	554.9	786.9	1,879.8	1,808.4	1,216.5
Pakistan	255.1	412.3	342.4	556.2	508.4	470.2	841.2	819.2	1,005.5	1,469.3	1,586.7	1,364.8
Singapore	1,189.7	526.4	456.0	623.1	729.4	567.7	659.3	689.1	522.0	538.5	704.7	383.7
Egypt	-	-	-	-	-	256.3	228.4	266.3	376.5	426.4	452.4	349.6
Japan	248.9	158.7	178.3	252.2	250.6	208.5	287.8	298.3	338.9	429.2	515.6	464.5
Others	2,217.9	1,887.9	2,239.1	2,867.0	2,684.7	2,089.4	2,250.9	2,659.8	2,868.6	3,735.3	5,327.5	3,283.1
Sub-total	3,950.7	3,009.6	3,279.3	4,528.0	4,665.3	4,325.6	4,850.7	5,287.6	5,898.4	8,478.5	10,395.3	7,062.2
2. Rubber												
Korea	213.5	278.6	367.0	527.4	407.9	370.4	362.8	296.5	291.5	403.8	439.9	205.0
U.S.A.	283.5	304.8	351.1	461.7	398.6	293.4	329.6	311.0	304.0	367.6	513.3	237.0
Germany	214.3	204.1	240.0	290.4	252.4	175.4	163.7	135.6	121.3	144.1	276.0	142.0
Italy	153.7	174.2	199.0	254.3	220.9	146.6	147.1	133.0	126.7	146.0	205.9	87.0
U. Kingdom	149.7	158.1	194.4	231.1	182.3	155.8	142.2	133.7	126.2	237.9	216.8	84.0
Others	1,856.7	2,062.9	2,562.7	3,491.1	2,486.9	1,886.5	1,544.4	1,347.4	1,162.0	1,627.3	2,386.4	1,052.0
Sub-total	2,871.4	3,182.7	3,915.0	5,256.0	3,949.0	3,028.1	2,689.8	2,357.2	2,131.7	2,926.7	4,038.3	1,807.0
3. Cocoa Beans												
Singapore	198.3	182.6	271.8	279.0	195.6	195.6	152.7	135.2	87.2	107.4	84.9	40.2
China	9.7	17.6	6.8	20.8	22.9	18.5	50.3	44.3	52.2	72.9	43.3	59.6
Netherlands	124.8	186.9	236.0	217.0	128.5	56.1	49.2	46.1	66.6	33.4	19.2	6.7
Japan	9.6	15.4	12.5	14.6	9.6	9.2	10.5	8.0	7.4	6.9	5.2	6.5
Thailand	-	-	-	-	-	0.9	2.5	2.8	0.3	4.6	10.5	7.8
Others	67.1	93.6	156.5	176.9	163.6	168.2	142.8	78.5	99.2	37.9	8.9	16.8
Sub-total	409.5	496.1	683.6	708.3	520.2	448.5	408.0	314.9	312.9	263.1	172.0	137.6
4. Saw Logs												
Japan	1,839.9	1,875.7	2,733.2	2,478.1	2,737.6	2,315.0	2,222.1	2,129.2	1,913.9	1,581.1	1,301.3	1,306.9
Taiwan	326.9	373.2	362.3	524.9	500.1	466.1	573.8	565.8	312.2	374.9	313.9	316.8
Korea	402.5	419.8	557.9	585.8	629.9	605.5	653.5	399.7	278.5	184.5	193.8	177.1
China	124.0	55.8	126.8	112.2	40.0	102.3	224.9	268.9	174.0	115.0	131.5	89.9
Thailand	15.6	14.1	28.9	45.5	146.2	159.0	145.2	158.0	59.1	97.6	90.5	100.4
Others	72.7	111.3	429.0	265.3	303.6	393.3	277.1	329.8	176.4	190.3	232.5	255.9
Sub-total	2,781.6	2,849.9	4,238.1	4,011.8	4,327.4	4,041.2	4096.6	3,851.4	2,914.1	2,543.4	2,263.5	2,249.1

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Continued ……

Table 4.41 Principal agricultural commodity exports (RM million) to selected major importers, 1985-1996 (continued).

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
5. Sawn Timber												
Thailand	-	-	-	-	-	494.0	417.0	579.5	576.2	917.3	822.0	417.0
Japan	99.7	83.6	172.7	210.4	380.6	412.0	407.0	504.6	707.0	659.0	675.0	192.0
Netherlands	230.4	376.0	410.4	358.6	698.8	487.0	435.0	488.8	642.4	519.0	430.0	178.0
Singapore	146.2	172.9	241.8	264.7	268.4	273.0	244.0	243.5	256.8	256.1	195.0	95.0
Taiwan	-	-	-	-	-	76.0	87.0	195.2	444.2	368.9	259.8	72.0
Others	533.2	603.4	855.3	1,037.6	2,597.1	1,323.0	1,418.0	1,476.1	1,919.1	1,610.9	1,454.9	5,74.0
Sub-total	1,009.5	1,235.9	1,680.2	1,871.3	3,944.9	3,065.0	3,008.0	3,487.7	4,545.7	4,331.1	3,837.5	1,528.0
6. Pepper (black & white)												
Singapore	91.5	90.9	71.4	68.1	69.9	38.5	16.5	13.5	17.4	36.5	31.3	49.7
Japan	21.7	35.2	35.5	36.0	22.4	22.3	18.8	14.4	16.9	28.2	33.1	32.5
U.S.A.	2.3	9.4	17.5	15.9	37.0	26.7	24.7	3.1	0.9	6.3	1.9	6.6
Germany	13.2	10.5	17.3	19.4	12.0	9.6	6.4	6.1	7.2	17.9	7.6	5.7
Korea	-	-	-	-	-	4.6	3.5	3.0	4.9	8.9	6.7	8.4
Others	11.6	17.4	17.4	19.0	22.1	15.9	16.7	13.8	13.8	24.4	21.2	25.2
Sub-total	140.3	163.4	159.1	158.4	163.4	117.6	86.6	53.9	61.1	122.2	101.8	128.1

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.42 Major importing countries (%) of Malaysian palm oil, 1985 - 1996.

Year	China	Pakistan	Singapore	Egypt	Japan	Total
1985	1.1	7.1	33.1	-	6.9	48.2
1986	0.8	13.7	17.5	-	5.3	37.3
1987	1.9	10.4	13.9	-	5.4	31.6
1988	5.1	12.3	13.9	-	5.6	36.8
1989	10.6	10.9	15.6	-	5.4	42.5
1990	17.0	10.9	13.1	5.9	4.8	51.7
1991	12.0	17.3	13.6	4.7	5.9	53.5
1992	10.5	15.5	13.0	5.0	5.6	49.6
1993	13.3	17.1	8.8	6.4	5.7	51.3
1994	22.2	17.3	6.4	5.0	5.1	56.0
1995	17.4	15.3	6.8	4.4	5.0	48.9
1996	17.2	19.3	5.4	5.0	6.6	53.5

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Cocoa

The main export markets for Malaysian cocoa beans were Singapore, China, the Netherlands and Japan. Towards the mid-1990s, Thailand also emerged as a major market outlet for Malaysian cocoa beans (Table 4.44). The cocoa export market remained highly concentrated with Singapore, China and the Netherlands as the largest importers. China, which only accounted for only 2.4% of the value of Malaysia cocoa beans exported in 1985, increased its share to 43.3% in 1996, while the share of the Netherlands decreased from 30.5% to only 4.9% during the period. There appears to be some dilution of concentration in the export markets for the 1989 - 1991 period when exports of beans were still high. However, as exports started to decline, most of the beans were diverted to the traditional export markets.

Table 4.43 Major importing countries (%) of Malaysian rubber, 1985 - 1996.

Year	Korea	U.S.A.	Germany	Italy	UK	Total
1985	7.4	9.9	7.5	5.3	5.2	35.3
1986	8.8	9.6	6.4	5.4	5.0	35.2
1987	9.4	9.0	6.1	5.1	5.0	34.6
1988	10.0	8.8	5.5	4.8	4.3	33.4
1989	10.3	10.1	6.4	5.6	4.6	37.0
1990	12.2	9.7	5.7	4.8	5.1	37.5
1991	13.5	12.3	6.1	5.5	5.2	42.6
1992	12.5	13.2	5.8	5.6	5.7	42.8
1993	13.6	14.3	5.7	5.9	5.9	45.4
1994	13.8	12.6	4.9	5.0	8.1	44.4
1995	10.8	12.7	6.8	5.1	5.4	40.9
1996	11.3	13.1	7.9	4.8	4.6	41.7

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.44 Major Importing countries (%) of Malaysian cocoa beans, 1985 – 1996.

Year	Korea	U.S.A.	Germany	Italy	UK	Total
1985	48.4	2.4	30.5	2.3	-	83.6
1986	36.8	3.5	37.7	3.1	-	81.1
1987	39.8	1.0	34.5	1.8	-	77.1
1988	39.4	2.9	30.6	2.1	-	75.0
1989	37.6	4.4	24.7	1.9	-	68.6
1990	43.6	4.1	12.5	2.1	0.2	62.6
1991	37.4	12.3	12.1	2.6	0.6	65.0
1992	42.9	14.1	14.6	2.5	0.9	75.0
1993	27.9	16.7	21.3	2.4	0.1	68.4
1994	40.8	27.8	12.7	2.6	1.7	85.6
1995	49.4	25.1	11.2	3.0	6.1	94.9
1996	29.2	43.3	4.9	4.7	5.7	87.8

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Saw logs

The major importers of Malaysian saw logs are given in Table 4.45. They consist of Japan, Taiwan, Korea, China and Thailand. The export markets for saw logs appear to be concentrated with these five countries accounting for 88.6% to 97.6% of all saw logs exported from Malaysia. In fact, Japan, Taiwan and Korea alone represent about 90% of the combined imports of these five countries while the imports by China and Thailand were at most only 12% of the imports of these countries.

Sawn timber

Between 1985 and 1989, the major markets for Malaysian sawn timber consisted of the Netherlands, Singapore and Japan, accounting for between 34% to 51.2% of all sawn timber exported. The Netherlands was the largest importer during the period. Beginning in 1990, Thailand emerged as a one of the largest importers. Imports by Taiwan were also significant (Table 4.46). The five countries now are responsible for 53% to 63% of all sawn timber exported from Malaysia, with the leading importer status shifting from the Netherlands to Thailand.

Table 4.45 Major importing countries (%) of Malaysian saw logs, 1985 – 1996.

Year	Japan	Taiwan	Korea	China	Thailand	Total
1985	66.2	11.8	14.5	4.5	0.6	97.6
1986	65.8	13.1	14.7	2.0	0.5	96.1
1987	64.5	8.5	13.2	3.0	0.7	89.9
1988	61.8	13.1	14.6	2.8	1.1	93.4
1989	63.3	11.6	14.6	0.9	3.4	93.8
1990	57.3	11.5	15.0	2.5	3.9	90.2
1991	54.2	14.0	16.0	5.5	3.5	93.2
1992	55.3	14.7	10.4	7.0	4.1	91.5
1993	65.7	10.7	9.6	6.0	2.0	84.0
1994	62.2	14.7	7.3	4.5	3.8	92.5
1995	57.5	13.9	8.6	5.8	4.0	89.8
1996	58.1	14.1	7.9	4.0	4.5	88.6

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Table 4.46 Major importing countries (%) of Malaysian sawn timber, 1985 – 1996.

Year	Thailand	Japan	Netherlands	Singapore	Taiwan	Total
1985	-	9.9	22.8	14.5	-	47.2
1986	-	6.8	30.4	14.0	-	51.2
1987	-	10.3	24.4	14.4	-	49.1
1988	-	11.2	19.2	14.1	-	44.5
1989	-	9.7	17.7	6.8	-	34.2
1990	16.1	13.4	15.9	8.9	2.5	56.8
1991	13.9	13.5	14.5	8.1	2.9	52.9
1992	16.7	14.5	14.0	7.0	5.6	57.8
1993	12.7	15.6	14.1	5.6	9.8	57.8
1994	21.2	15.2	12.0	5.9	8.5	62.8
1995	21.4	17.6	11.2	5.1	6.8	62.1
1996	27.3	12.6	11.7	6.2	4.7	62.5

Source: Calculated from External Trade Statistics, Department of Statistics, Malaysia: various issues.

Pepper

The main markets for Malaysia pepper are Singapore, Japan, the U.S.A., Germany and Korea (Table 4.47). During the early period, most of the pepper was shipped to Singapore, which acted as a transitional point before re-export to other countries. Towards the later years as exporters became less dependent on Singapore and more involved in direct marketing to terminal markets, the role of Singapore as a major source for the pepper market declined.

Nevertheless, Singapore still remains an important importer of Malaysian pepper. Its share in total imports of Malaysian pepper has, however, declined from 65.2% in 1985 to 38.8% in 1996. On the other hand, terminal markets such as Japan and Germany continue to be increasingly important markets. Malaysia's pepper exports to Japan and Germany on the average accounted for 19.1% and 9.1%, respectively, during the 1985 - 1990 period. For the 1990 period, their import shares of all Malaysian pepper increased to 26.2% and 9.6%, respectively.

Table 4.47 Major importing countries (%) of Malaysian pepper.

Year	Singapore	Japan	U.S.A.	Germany	Korea	Total
1985	65.2	15.5	1.6	9.4	-	91.7
1986	55.6	21.5	5.8	6.4	-	89.3
1987	44.9	22.3	11.0	10.9	-	89.1
1988	43.0	22.7	10.0	12.2	-	87.9
1989	42.8	13.7	22.6	7.3	-	86.4
1990	32.7	19.0	22.7	8.2	3.9	86.5
1991	19.1	21.7	28.5	7.4	4.0	80.7
1992	25.1	26.7	5.8	11.3	5.6	74.5
1993	28.5	27.7	1.5	11.8	8.0	77.5
1994	29.9	23.1	5.2	14.6	7.3	80.1
1995	30.7	32.5	1.9	7.5	6.6	79.2
1996	38.8	25.4	5.2	5.2	4.4	79.0

Source: External Trade Statistics, Department of Statistics, Malaysia: various issues.

4.7 Competitiveness indicators

In this section, some competitiveness indicators for both major export and import commodities are analyzed. These include the analysis of trends in specific ratios such f.o.b. prices, c.i.f. prices and wholesale prices to world prices. Where these prices are not available, other proxies, such as farm prices and border prices, are used All the available prices of the commodities involved are shown in Appendix 1.

4.7.1 Export crops

In palm oil, the ratio of f.o.b. to world price (WP) was lower than l except in 1991 where the ratio was 1.14 (Table 4.48). Between 1985 - 1990, the average ratio was 0.66 compared to 0.84 for the 1991 - 1996 period. This indicated that, although Malaysian palm oil can still be considered competitive in the international market, its competitiveness seems lower in recent times. This is not surprising considering the high cost of inputs, especially labour, that Malaysia is experiencing. The ratio of farm price (process equivalent) to world price of palm oil also indicated Malaysia is still competitive in palm oil production. Similar to the f.o.b./WP ratio, the wholesale price/WP ratio also indicated that Malaysian palm oil is facing some erosion of competitiveness. The ratio of wholesale price to WP increased from 0.88 for the 1985 - 1990 period to 0.90 for the 1991 - 1996 period (Table 4.49).

For rubber the situation is rather different. The f.o.b./WP and the farm price/WP ratios show that Malaysian rubber was still competitive until 1993. However, the last three consecutive year ratios indicate that Malaysian production of natural rubber may no longer be internationally competitive. Both ratios have consistently been above one from 1994 - 1996 (Tables 4.48 and 4.49). This loss of competitiveness is due to the emergence of lower cost rubber producing countries, continued depressed rubber prices and a general rise in the cost of rubber production in Malaysia. Reflecting this is the steady decline in rubber area in Malaysia. Between 1990 and 1995 alone, the rubber area contracted by 8.6%. This trend is expected to continue further unless there are technological break-throughs that can effectively enhance productivity.

The ratios for cocoa beans indicate Malaysia is still competitive in producing cocoa beans with the respective ratios being less than one. However, on the ground, many are exiting cocoa production and switching to palm oil, due to the higher labour intensity required for cocoa and better returns from palm oil production. The area under cocoa has declined by more than 44% between 1991 and 1995.

Saw logs remain highly competitive with the f.o.b./WP and wholesale price/WP ratios well below one. The level of competitiveness also remained similar with the average ratios of f.o.b./WP at the 0.36 levels for both the 1985 - 1990 and the 1991 - 1996 periods. However, Malaysia is not so concerned about the competitiveness of saw logs, since the country is concentrating on exporting higher value timber products such as furniture that can be highly differentiated. Furthermore, the country is also expected to cut back its production of logs to achieve the sustainable production objective.

For pepper, the competitiveness scenario is similar to that of cocoa. If the ratios are to be used as indicators, both the f.o.b./WP and wholesale price/WP ratios indicate that pepper production is still competitive for Malaysia. However, as with cocoa, pepper area and production are also exhibiting a declining trend. This is also mainly due to the shortage of labour in the economy.

Table 4.48 Ratio of f.o.b. Malaysia to world prices of major export commodities, 1985-1996.

Year	Palm Oil	Rubber	Cocoa Beans	Saw Logs	Pepper
1985	0.52	0.84	0.90	0.42	0.74
1986	0.72	0.90	0.88	0.38	0.70
1987	0.70	0.99	0.86	0.33	0.78
1988	0.39	1.16	0.90	0.31	0.71
1989	0.64	0.92	1.25	0.34	0.82
1990	0.98	0.77	0.81	0.37	0.85
1991	1.14	0.82	0.83	0.35	0.85
1992	0.86	0.87	0.89	0.43	0.67
1992	0.88	0.85	0.86	0.31	0.64
1994	0.70	1.02	0.87	0.35	0.68
1995	0.77	1.27	0.91	0.35	0.76
1996	0.71	1.12	0.86	0.35	0.51

Source: Calculated from data from the Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 4.49 Ratio of Malaysian wholesale prices to world prices of major export commodities, 1985-1996.

Year	Palm Oil*	Rubber	Cocoa Beans	Saw Logs	Pepper
1985	0.84	0.76	0.84	0.52	0.67
1986	0.87	0.82	0.79	0.32	0.64
1987	0.89	0.92	0.75	0.28	0.65
1988	0.90	0.98	0.74	0.28	0.57
1989	0.88	0.78	0.75	0.41	0.65
1990	0.90	0.69	0.74	0.46	0.71
1991	0.90	0.74	0.74	0.43	0.65
1992	0.92	0.80	0.76	0.60	0.52
1992	0.92	0.76	0.88	0.35	0.43
1994	0.93	1.04	0.81	0.43	0.57
1995	0.93	1.22	0.80	0.56	0.65
1996	0.80	1.07	0.78	0.57	-

Source: Calculated from data from Economic Planning Unit, Prime Minister's Department.
*Farm price (process equivalent) to world price.

4.7.2 Major import crops

In this section, only rice and tobacco will be discussed. Other major import commodities such as grain maize, soybean, sugar and wheat will not be analyzed since these crops are non-existent in the country or at best grown on a very limited scale. There is also no policy alternative for these crops, other than to depend on imports to satisfy local demand. The relevant prices such as wholesale price, world price and c.i.f. prices for rice and tobacco are given in Appendix 2.

Table 4.50 shows the ratios of wholesale price to WP for rice and tobacco. For rice, the ratio increased from l.41 in 1985 to l.62 in 1996. The average ratio increased from 1.17 for the period 1985 - 1990 to 1.51 for the 1991 - 1996 period. This indicates that there is increasing inefficiency in the economy by producing rice. The competitiveness of Malaysian rice is also declining vis-a-vis the rest of the world. However, socio-economic and strategic reasons will continue to be strong reasons for Malaysia to continue to focus on rice production.

The ratio of wholesale price/WP for tobacco indicates that Malaysia is also not competitive in tobacco production. The ratios for most of the years were well above 1 and exceeding 2 in some cases (Table 4.50). However, there appeared to be some gains in efficiency as the average ratio for the 1991 - 1995 period dropped to 1.70 compared to 1.80 for the 1985 - 1990 period. A change in structure of production and a consolidation of the industry may be able to turn the industry into a more competitive one.

4.7.3 Overall assessment

The ratios analyzed and used to indicate competitiveness appear to be adequate in assessing the competitiveness of the major export and import commodities. This is especially true for palm oil, saw logs and rubber whereby developments taking place on the ground actually indicate the competitiveness of the industry as reflected by the analyses. For example, high investments are still taking place for palm oil, while many are now going out of rubber production due to the higher opportunity costs. However, the case is not so clear for pepper and cocoa. Although these indicators suggest that the industry is still competitive, many industry analysts believe that the future of these industries is uncertain and many have exited the industry to venture into more attractive economic activities.

Table 4.50 Ratio of Malaysia's wholesale prices to world prices for rice and tobacco in 1985-1996.

Year	Rice	Tobacco
1985	1.41	2.06
1986	1.41	1.89
1987	1.31	1.80
1988	0.98	2.00
1989	0.89	1.60
1990	1.02	1.47
1991	0.91	1.31
1992	1.15	1.52
1993	1.89	1.93
1994	1.73	1.70
1995	1.76	2.05
1996	1.62	n.a.

Source: Calculated from data from the Economic Planning Unit, Prime Minister's Department, Malaysia.

5. The Effects of Trade Liberalization

5.1 Introduction

This chapter analyses the effects of agricultural trade liberalization on agricultural trade and to a limited extent the welfare effects of liberalization in Malaysia. The analysis includes literature from past studies and also evaluation of current developments taking place in the country, including specific actions that have been taken to fulfill the country's obligations in the Agriculture Agreement of the Uruguay Round. In addition, the potential effects of the regional move towards liberalization, specifically in implementing the ASEAN Free Trade Area (AFTA), with regards to agricultural products will also be assessed. This chapter consists of three main components. First is a general review of the literature on trade liberalization, and it is followed by a general assessment of implications for Malaysia and for the major trading commodities that are of importance to Malaysia. The third section focuses on issues pertaining to trade liberalization in agriculture in general and recommendations for Malaysia in pursuing the agricultural trade liberalization agenda.

5.2 The agriculture agreement and the CEPT Scheme of AFTA

The two main agreements that Malaysia is involved in with regards to agricultural liberalization are the Agricultural Agreement and the CEPT Scheme of AFTA. In the Agricultural Agreement members agreed to the following main components:

i. Market access commitments - this involves the conversion of all existing NTBs into bound duties that are no higher than the tariff equivalent of the protection levels in the base period (1986 - 1988). Developing countries are to reduce new and existing tariffs by an average of 24% over 10 years with a minimum reduction of 10% per tariff line, while developed countries are to reduce by an average of 36% and a minimum of 15% over six years. In addition, minimum market access has to be granted through tariff quotas starting from 3% to 5% of domestic consumption. This market access to imports has to have low or minimal duties.
ii. Export subsidy commitments - no new export subsidies are allowed and developing countries are required to reduce the volume of subsidized exports and expenditures on subsidies by 14% and 24%, respectively, over 10 years while developed countries have to do so by 21% and 36%, respectively, over six years.
iii. Domestic support-developing countries are committed to reduce their Aggregate Measure of Support (AMS) by 13.3% in 10 years while developed countries are to reduce the AMS by 20% in 6 years.

Apart from obligations to the UR Agreement, Malaysia is also committed to AFTA through the CEPT agreement. At the 26th ASEAN Economic Ministers Meeting in 1994, the ministers decided to phase unprocessed agricultural products (UAPs) into the CEPT Scheme. These products have been categorized into four major lists:

i. immediate inclusion list,
ii. temporary exclusion list,
iii. sensitive list, and
iv. highly sensitive list.

UAPs in the immediate inclusion list were included in the CEPT Scheme by 1996 and by year 2003 tariffs on these products will be within the 0-5% range. QRs and other NTBs on these products will also be eliminated. UAPs in the temporary exclusion list will need to be phased in by equal installments by 1997. All phasing is to be completed by year 2003 whereby tariffs on these products will also be in the 0 - 5% range. Products in the sensitive list are given more flexibility in terms of the duration of phasing into the CEPT Scheme. However, all products in this list will also have 0-5% final tariff. For the highly sensitive list, the modality of liberalization is still being worked out among ASEAN member countries.

5.3 Review of literature on agricultural trade liberalization

Most studies on trade liberalization in agriculture have concentrated on two major analyses. One is the analysis on how liberalization affects trade in terms of changes in imports and exports and the prospects of increased trade resulting from liberalization. This kind of study also includes the effects of liberalization on production of major commodities and the likely price changes resulting from liberalization. The second analysis mostly concerns the welfare effects of liberalization, addressing economic welfare gains and losses accruing to the parties involved (producers, consumers and government) in the regions and countries.

Very few studies concentrated on the issue of employment and income in agriculture, especially of the small farmers and the effects on specific regions and countries. This is actually the main concern facing many developing countries, with a production structure consisting of smallholders depending on agriculture as their main source of income. Liberalization in agriculture can potentially deprive them of their livelihood, unless the economic structural adjustment in employment can be made more efficient to facilitate the smooth transition of employment into other sectors.

Almost all studies predict trade-related benefits at the global level resulting from liberalization in agriculture. However, the extent of the benefits vary from region to region and from country to country, depending upon the composition of exports and imports and the existing level of the support given by individual countries.

Valdees and Zietz (1980), estimated that a 50% reduction in agricultural protection in OECD countries would result in an increase in exports of approximately US$ 8.5 billion (in 1977 prices) per year, of which 36% would accrue to developing countries, 20% to OECD and 44% to the rest of the world. This represents an 11% increase in total agricultural exports of developing countries. Net welfare gains of all developing countries as a result of increased exports and imports were estimated to be US$ 473 million. The most promising export commodities predicted were wine, roasted coffee, malt, and cocoa paste cake. Other commodities with significant potential were tobacco, maize, sugar and beef. However, Tyers and Anderson (1991), who simulated the effects of trade liberalization policies of industrialized economies for the 1980 - 1995 period, estimated a net welfare loss of US$ 2.3 billion (in 1985 prices) for all developing countries resulting from liberalization initiatives in 1980 - 1982 and predicted a US$ 13.5 billion loss for the effects of 1995 liberalization. However, they estimated that producers' welfare in these countries was substantially improved as a result of liberalization and they argued that income distribution in these countries would be significantly improved.

In a more recent study, GATT (1993) estimated that there will a 2 - 3% expansion in imports of tropical products or a US$ 2.0 billion increase in exports of tropical products based on 1990 imports. The biggest gains among tropical products predicted were rubber, tropical wood, tropical beverages and fruits and nuts. On the welfare aspects, a study by Krisoff et al. (1990) found that as many developing countries lose as those that gain from the liberalization of industrialized countries alone. However, the study estimated that the losses could be offset if developing countries also participate in trade liberalization. Nevertheless, the large net food importing countries would still lose from agricultural liberalization.

The study by Anderson and Tyers (1991) which also captured the effect of induced technological change predicted larger gains, and estimated that most developing countries would benefit from liberalization even if the liberalization were undertaken by industrialized countries only. If both developed and developing countries participated in the liberalization process, the study predicted that the gains to developing countries would double. However, they were consistent in predicting that high food importing countries would still lose, although the magnitude of the lost was smaller. A study by Duncan et al. (1995) further confirmed the findings of the two studies. They found that large net importing countries will generally lose from liberalization in industrialized countries, but their losses would be substantially reduced if these developing countries also participated in the liberalization process. This is because of the gains obtained from correcting their own distortions.

It is the general view that agricultural trade liberalization will increase prices of most food commodities. This happens as a result of decreased support measures given to agricultural production in developed countries, particularly the EU and the U.S.A. This tends to lower production of these commodities in the OECD countries, while the supply response from developing countries would be unable to fully offset the increases in world prices. The study by Duncan et al. (1995) provided a comprehensive analysis of the impacts of agricultural trade liberalization of the Uruguay Round. Five liberalization scenarios were analyzed. They found that prices for most food products would increase as a result of agricultural liberalization. Price changes can be as high as 15% (Table 5.1). Among the products that were predicted to have substantial increases in prices were rice, wheat and milk products.

Most analysts also agree that agricultural trade liberalization would reduce the instability in agricultural prices (Anderson and Tyers 1991). Greenfield et al. (1996) also found that the effects of tariffication would reduce price instability, but other factors are also equally important. Golden and Knudsen (1990) also agreed that trade liberalization is conducive to price stability, but other factors such as weather are also important.

In evaluating the Agriculture Agreement, Valdes and McCalla (1996) argued that for most developing economies, liberalization and its impacts would be quite modest in the short-term. In Asia, agricultural trade liberalization seems to be quite slow, especially when it comes to reducing quantitative restrictions. The overall conclusion they made was that, except in a few cases, the Agricultural Agreement would not likely present developing countries with major policy adjustment problems. Interpreted in a different perspective, this means that domestic macro-policies in agriculture would not undergo much change as a result of the Agreement. However, in the long term, the Agreement would certainly prevent future reversion to agricultural protectionism and it would provide the basis for more liberalization measures in the next round of negotiations.

5.4 Effects on Malaysia

The UR and the CEPT agreement to which Malaysia is committed will certainly affect the Malaysian agricultural sector in the years to come. Although it is now too early to know the actual effects these agreements will have on Malaysian agriculture, a qualitative assessment of the potential effects of the agreements on Malaysian agriculture, especially with regards to the export crop sector and the protected sector of Malaysian agriculture, can nevertheless, be made.

In this section, the likely effects of the UR Agriculture Agreement are assessed for Malaysia's main export crops. Also, its potential effects on imports and on the protected sub-sectors are also evaluated.

5.4.1 Export commodities

Table 5.2 shows the tariff reduction offered by the developed economies for agricultural products. The product categories that are important to Malaysia are oilseeds, fats and oil with a percentage reduction of 40%, spices, flowers and plants with reduction of 52% and tropical beverages with reduction of 46%. Except for the category oilseeds, fats and oils, Malaysian exports of other products are not very significant. In this category, the export of Malaysia palm oil is expected to substantially benefit from the Agriculture Agreement. Both the EU and the U.S.A. are important markets for Malaysian palm oil and Malaysia will benefit from tariff reductions for Malaysia palm oil products in these markets. For example, the U.S.A. will reduce tariffs on oilseeds, fats and oils by 19% for unprocessed or semi-processed products and 30% for processed products. In addition, developing economies, which are increasingly becoming more important markets for Malaysian palm oil, are also reducing their tariffs on these products. Thailand and the Philippines, for example, are reducing them by 24% and 12%, respectively. Apart from the increased competitive footing that can be obtained from tariff reductions in major palm oil markets, Malaysian palm oil will also gain effective competitive strength from the reduction of domestic support and export subsidies by developed countries on their oilseeds, fats and oils products. This will assist Malaysian palm oil exports to be on a more equal footing compared to other vegetable oils, considering that Malaysian palm oil is devoid of any production and export subsidies.

Table 5.1 Impact of agricultural reform scenarios on world prices (c.i.f.), various scenarios (percentage change).

Products	E1	E2	E3	E4	E5
Rice	6.9	7.8	7.7	8.1	8.5
Wheat	10.4	10.5	10.4	10.0	10.5
Other grain	6.8	7.2	7.0	7.1	7.6
Non-grain crops	3.4	3.9	3.5	4.4	5.2
Wool	2.8	3.0	2.6	2.8	2.8
Other livestock	1.5	1.5	1.4	2.0	2.3
Forestry	0.2	0.2	-0.5	1.7	2.5
Fishery	0.3	0.3	0.0	0.6	1.6
Processed rice	1.0	1.5	0.9	2.9	2.9
Meat	5.0	5.1	4.9	4.9	4.8
Milk products	12.8	13.1	12.8	12.8	12.7
Other food products	0.7	0.6	-0.3	0.6	1.1
Beverages and tobacco	0.2	0.2	-6.4	-0.2	0.5
Minerals	0.2	0.2	0.3	0.1	1.2
Textiles and clothing	0.3	-0.2	-0.2	-9.4	-8.0
Other manufactures	0.0	0.0	0.0	-0.3	0.4
Services	0.1	0.1	0.0	0.1	1.1

Source: Duncan et al. 1995.

Scenario: (E1) Industrial country agricultural liberalization as agreed in the Uruguay Round;
(E2) Global agricultural liberalization as agreed in the Uruguay Round;
(E3) Global liberalization of all agricultural distortions;
(E4) Complete Uruguay Round trade liberalization;
(E5) Complete Uruguay Round trade liberalization with induced technological change.

Table 5.2 Tariff reductions by developed economies on agricultural product categories.

Product Categories	Import Value from (US$ mil.)		Percentage Reduction in Tariffs
	All Sources	LDCs	
All agricultural products	84,240	38,038	37
Coffee, tea, cocoa, sugar, etc	13,634	10,280	34
Fruits and vegetables	14,575	8,887	36
Oilseeds, fats and oils	12,584	6,833	40
Other agricultural products	15,585	4,233	48
Animals and their products	9,596	2,690	32
Beverages and spirits	6,608	2,012	39
Flowers, plants, vegetable materials	1,945	1,187	48
Tobacco	3,086	1,135	36
Grains	5,310	725	39
Dairy products	1,317	48	26
Tropical products	24,022	18,744	43
Tropical beverages	8,655	8,041	46
Tropical nuts and fruits	4,340	3,672	37
Certain oilseeds, oils	3,443	2,546	41
Roots, rice, tobacco	4,591	2,497	40
Spices, flowers and plants	2,992	1,987	52

Source: GATT 1993.
Note: LDC = least developed countries.

Another export product that is expected to gain from the Agreement is wood and wood products. Reductions in tariff escalation of these products by developed economies would certainly encourage the exports of more higher value added products to these countries. The weighted average of pre and post UR tariffs on these products are to be reduced by between 30% to 67% (Table 5.3). Panels are to be reduced from 9.4 to 6.5% and articles from 4.6 to 1.6%.

Other major export crops such as cocoa, rubber and pepper are expected to register only modest gains from agricultural liberalization of the UR Agreement. Rubber products are mostly already subjected to low tariffs in major markets, while cocoa will still be subjected to quite high tariff escalation in major cocoa markets such as the EU. Furthermore, Malaysia's competitiveness in these subsectors is already on the decline and future production and exports are expected to be well below the current levels, especially for rubber. Therefore, unless there are substantial increases in the prices of these commodities resulting from liberalization measures, gains accrued to these crops are expected to be minimal.

In addition to the expected increase in overall exports due to reductions in tariffs and support in developed countries, Malaysian export commodities are also expected to gain from the effects of price increases from liberalization. This is especially so for the more competitive sectors such as palm oil and forestry. Brando and Martin (1993) estimated that the price of oilseeds would increase by 4.5% as a result of agricultural liberalization while Golden et al. (1993) estimated the increase to be 4.1%. Although these figures may not reflect the actual price increase in the future, most studies were consistent in their predictions of upward price movements for many agricultural products resulting from liberalization.

5.4.2 Import commodities and the protected sectors

In general, the Agriculture Agreement is not expected to bring about radical changes in the import tax regime for Malaysian agricultural products. This is mainly due to the fact that Malaysia's import tariffs for agricultural products are already low by international standards. Import duties on a wide variety of food products have already been abolished or reduced during recent years. This is done to fulfill Malaysia's obligation to the Agreement and also as part of the government's policy to make food products available to consumers at a lower price in its efforts to control inflation. For the WTO, Malaysia's general offer is an average of 19% reduction on all agricultural products. The largest reductions are for processed dairy products,

coffee, tea, mate and cocoa, cereals, unprocessed and semi-processed oilseeds, fats and oils and beverages and spirits (Table 5.4). Since Malaysia is not a large producer of these products, (except for oilseeds, fats and oils), these reductions are not going to pose a threat to domestic agriculture. These reductions, on the other hand, will benefit consumers.

Table 5.3 Changes in tariff escalation in selected product categories.

Product Category by Stage of Processing	Weighted Average		Change in Tariff Escalation
	Pre-Uruguay	Post-Uruguay	
Rubber			
raw	0.1	0.0	-
semi-manufactures	5.5	3.3	-39
finished products	5.1	3.6	-28
total	3.4	2.3	-
Wood			
in the rough	0.0	0.0	-
panels	9.4	6.5	-30
semi-manufactures	0.9	0.4	-50
articles	4.7	1.6	-67
total	2.0	1.1	-
Jute			
fibers	0.0	0.0	-
yarns	5.4	0.1	-98
fabrics	5.7	3.2	-43
total	5.1	1.8	-
Tobacco			
unmanufactured	14.7	11.5	-
manufactured	22.1	9.2	-131
total	17.3	10.7	-
All tropical industrial products			
raw materials	0.1	0.0	-
semi-manufactures	6.3	3.5	-100
finished products	4.2	1.9	-19
total	4.2	1.9	-

Source: GATT 1994.

However, there is a strong possibility that the Malaysian rice sector, a heavily subsidized sector, can be significantly affected by the Agreement. The effect on the domestic rice industry is not so much related to the market access commitments but in the commitments to reduce direct support to the sector. As was described earlier, the paddy subsector is heavily protected through a web of policy interventions including fertilizer subsidies, the GMP and also a direct price support scheme. The survival of domestic paddy producers may be at stake since a large share of the profits obtained from paddy production comes from price support and fertilizer subsidy. Fatimah et al. (1983) found that both the fertilizer and the price support significantly contributed to profits and output. The price support scheme was able to increase output by 34.2% and contributed to a 71.5% change in the level of income. Additionally, the fertilizer subsidy was estimated to increase output by 65.8% while contributing to a 38.6% change in income. Tan's (1987) findings also supported the study by Fatimah et al. (1983) that the paddy subsidy scheme had contributed 60% to the total income of paddy producers. Hence, the removal of all these subsidies and supports would see many producers being displaced from the industry, resulting in a contraction in paddy national output. This will have serious implications on the socio-economy of paddy producers and national food security. Malaysia will have to be more dependent on imported rice and the move to withdraw subsidies and support can have serious social implications.

Table 5.4 Malaysian pre-Uruguay and post-Uruguay tariff rates for selected agricultural products.

Products	Pre-Uruguay (base rate)	Post-Uruguay (bound rate)	Percentage Reduction (average)
Fruits and vegetables	0		
fresh and dried	24	13	45
other, processed	24	14	36
Coffee, tea, mate, cocoa preparation			
unprocessed	26	22	18
semi-processed	35	15	57
prepared or preserved	34	15	55
Sugar and confectionery			
semi-processed	18	16	13
processed	35	30	14
Cereals and cereal preparations			
grant	21	17	17
flours	13	10	25
preparations	25	13	46
Meat and meat preparations	46	40	14
Oilseeds, fats and oils			
unprocessed or semi processed	9	4	58
processed	9	7	18
Cut flowers, plants, vegetables			
materials	6	5	27
Beverages and spirits	28	14	48
Dairy products			
unprocessed or semi processed	33	30	11
processed	26	8	70
Other agricultural products			
unprocessed	5	4	36
other, processed	10	9	12
Aggregated*			
unprocessed	13	9	31
other, processed	14	5	30

Source: WTO Secretariat; Mohamad Ariff et al. 1996.
* Excluding tobacco and spices.

The impact of the Agreement on other protected sectors such as poultry, swine, milk, tobacco, cabbages and tropical fruits is not expected to be great. Adverse effects on domestic production are also unlikely. Most of the products from these subsectors are subjected to QRs except for tobacco, where both QRs and tariffs were applied, and tropical fruits, where only tariffs are used. All these products are now with tarifficated bound rates and a minimum market access of 3% of the domestic consumption is now allowed. This will be raised to 5% by 2004. Since the market access provision requirement is quite small in relation to domestic production, the effect of the Agreement on domestic production is not expected to be significant. On the other hand, the partial opening of the domestic market for these products will initiate local producers to be aware of competition and take measures to increase productivity and efficiency. This will be beneficial to the respective industries in the long term.

Table 5.5 shows the in-quota imports of some of these products for the calendar year 1996. For many of these products, a total import ban was imposed prior to the Agriculture Agreement. A total of 4,923 tons of poultry meat and chicken wings as well as close to 3 million day-old chickens were imported as a result of the market access provision. In addition, in-quota

imports of swine and swine meat, milk and milk products, tobacco and cabbages also took place during the year. It is expected that these imports will increase as the minimum market access opening increases. In addition, wheat and meslin flour are now opened to all exporters with only an import license requirement that is automatic and is no longer subjected to any quota volume or other restrictions.

Table 5.5 Market access on selected protected products, Malaysia 1996.

Product	Tariff Quota Quantity for Calendar Year	In-quota Imports
Chicken, Live, Eggs, Meat and products		
Day-old chicks	1,492,725 chicks	2,965,534 chicks
Meat, fresh, frozen and chilled	2,985 tons	3,348 tons
Chicken wings, fresh chilled	498 tons	935 tons
Other poultry cuts fresh, chilled	640 tons	2,414 tons
Milk and milk Products		
Liquid, milk	640,000 liters	1,195,412 liters
Liquid, cream	92,000 kg	696,000 kg
Swine and Swine Meat		
Live Swine	18,417 head	226 head
Meat of swine, salted dried or smoked - ham and shoulders	1,005 tons	24 tons
Cabbage (round)	25,812 tons	32,378 tons
Coffee, not roasted	9,873 tons	17,197 tons

Source: Ministry of Agriculture Malaysia 1997.

5.4.3 Effects of the CEPT agreement

The inclusion of unprocessed agricultural products in the CEPT scheme of AFTA can have profound effects on Malaysian agriculture and the agriculture of ASEAN member countries. Due to almost similar climatic and environmental conditions, countries in the ASEAN region produce a range of agricultural products that are similar to one another. Thus, in the past, trade policies of each member country aimed to protect its domestic agricultural industries against other member countries. The similar structure of production and the socio-economic importance of primary agriculture to these countries have resulted in hesitation among ASEAN countries to include primary agriculture into the liberalization program. However, as of 1995, unprocessed agricultural products are now included in the scheme.

5.4.4 Export commodities

Among the major export commodities, such as palm oil, rubber, cocoa, forestry products and pepper, it is expected that only palm oil will benefit substantially from the CEPT. For other commodities especially rubber, cocoa and pepper, Malaysia's position vis-a-vis other ASEAN countries can be considered as less competitive. Indonesia and Thailand's rubber production are lower cost compared to Malaysia's as is Indonesia's pepper. In this respect, it is likely that there will be reverse flows of these products into Malaysia when the CEPT is fully implemented for all agricultural products. Table 5.6 shows the CEPT tariff reduction schedules for member countries for fats and oils. The potential major in-roads that Malaysian palm can exploit are in the Philippines and Thailand markets, where tariffs are to be reduced by more than 75% and 73% respectively. Nevertheless, Malaysian palm oil needs to compete with palm oil from Indonesia for these markets. The only consolation is that Indonesia may have to satisfy its

growing domestic demand for oils before it can aggressively expand its exports. In other products, Malaysia is not expected to gain even when the sensitive list is liberalized in the year 2010. Most of the item sunder the sensitive lists of members consist of products such as beverages, poultry, poultry eggs, swine, tapioca, maize, and sugar, for which Malaysia is not so competitive compared to other ASEAN countries.

Table 5.6 CEPT tariff reduction schedules for fats and oil.

Country	1996	1998	2000	2003	Percentage Reduction
Brunei	0.00	0.00	0.00	0.00	-
Indonesia	7.93	5.43	4.74	4.63	41.61
Malaysia	1.50	1.47	1.38	1.38	8.00
Philippines	13.00	6.22	3.88	3.19	75.46
Singapore	0.00	0.00	0.00	0.00	-
Thailand	15.42	9.42	5.31	4.16	73.02
Vietnam	4.00	4.00	4.00	4.00	-

Source: ASEAN Secretariat 1996.

5.4.5 Import commodities and the protected subsectors

Not much change is expected for Malaysia in terms of the major import commodities such as grain maize, soybean, rice and other food crops. Except for rice, most of these commodities are sourced outside of the ASEAN region and imports of most of these commodities into Malaysia already attract zero tariff. At the same time, liberalization of the rice market under CEPT, which is considered highly sensitive by most ASEAN countries, is still uncertain and as such the pattern of trade of this commodity within the ASEAN region is expected to remain unchanged.

However, the CEPT is expected to have significant impact on the protected subsectors of agriculture in Malaysia. Most of the agricultural products that are protected by Malaysian domestic and trade policies are either currently in the temporary exclusion list or the sensitive list. They will have to be liberalized by the year 2003 or at the latest by the year 2010 when these products will have a tariff of not more than 5% with all QRs and other NTBs removed. Current rates of protection for these products such as tobacco, poultry, swine and tropical fruits are high.

Among the protected subsectors, the most severe impact is expected be in the tobacco subsector, where a host of protective measures including import quotas and extremely high tariffs are used to protect the local industry. The cost of production of unmanufactured tobacco in Thailand, Indonesia and the Philippines was estimated to be less than half that of Malaysia. Liberalization of the tobacco market will certainly see flooding of the domestic tobacco market with imports from these countries. A very substantial reduction in domestic production is expected to take place.

Samsudin and Mohammed (1992) estimated that a 50% reduction in the production quota would reduce green and cured tobacco production by 65% and 70%, respectively, in the first year alone. This would have serious impact on the welfare of producers, especially those of green leaf who are mainly small farmers and poor. A large majority of them will have to move out of the industry and seek new sources of employment and income opportunities. The government at the same time will suffer loss of income from tax revenue.

The next subsector that is expected to be affected is the poultry industry. Poultry, which is protected by an import ban until the UR Agreement comes into force, will see stiff competition from poultry imports from Thailand, which is reputed to be more efficient than the local industry. However, the local poultry industry, in contrast to the tobacco industry, mainly comprises large-scale integrators that are involved throughout the production and value added chain, from feed milling, poultry production and retailing. Under this structure of production, and based on the past performance of big producers and their capability to consolidate and

increase productivity, the poultry industry may be more resilient in the wake of external competition. Nevertheless, producers' welfare is expected to be reduced as a result of this liberalization. On the other hand consumers will gain from the expected decreased prices of chicken in retail markets. The same line of rationalization and arguments can be applied to assess the impact on the local swine industry, which receives similar protective measures as the poultry industry.

5.4.6 Overall assessment

From the commodity perspective, the only sure winner from the UR and ASEAN agricultural liberalization initiatives is palm oil. Rubber, cocoa, pepper and forestry products may also benefit from decreased tariffs, and reductions in tariff escalation in developed countries can encourage the export of higher value-added products from these primary commodities. However, in the domestic scenario, the production of these commodities especially rubber, cocoa, and pepper is no longer seen as an attractive venture and, unless there are substantial increases in prices in the international market resulting from liberalization, production of these commodities by Malaysia is expected to continue to decline. In terms of intra-ASEAN trade, Malaysia also faces competition in these product markets from other lower cost producing countries in the ASEAN region and hence will not gain very much from the CEPT. Furthermore, Malaysia's intra-ASEAN trade in agriculture, although increasing, can still be considered small relative to the rest of the world.

The Agriculture Agreement is also expected to exert upward pressure on food prices. Malaysia, a net importer of food of products, will incur higher import costs. Prices of major foodstuffs imported by Malaysia such as wheat, rice, grain maize, sugar and beef are expected to increase from between 10% for sugar and 4% for rice (Brando and Martin 1993). Assuming a 5% increase in food prices, Malaysia's cost of imports of food will increase by RM 500 million, based on 1997 imports. The balance of trade effect on Malaysia is therefore still uncertain. Much will depend on in-roads that will be made by palm oil and other major export commodities resulting from reduced trade restrictions. However, the study by Duncan et al. (1995) predicted an all round gain by Malaysia, both in terms of balance of trade and economic welfare. However, minerals, services and other manufactures are also included in the study. As such, the gain estimated by the study was more associated with the economy as a whole and did not isolate the effects of liberalization on gain and loss in the agricultural sector per se.

5.5 Issues and recommendations

Initiatives towards liberalization of world trade including that of agricultural products are taking place at a fast pace. Many developing countries, including Malaysia, are committed to liberalizing their trade regimes in agriculture as well as to reducing distortions in their agricultural markets to increase national and global economic efficiency. However, the impacts especially at the micro-level as a result of the liberalization moves are not well understood by many governments in developing countries. But there is no turning back. Developing countries must make the best out of these liberalization measures, since non-participation when others are liberalizing will only mean greater losses, even for countries that are predicted to originally lose from liberalization, especially the large net food importing countries. Nevertheless, there are still a number of issues at both the international and national levels concerning agricultural liberalization. At the same time, many developing countries, including Malaysia are still grappling with strategies on how to effect structural economic changes within agriculture. They need to resolve the pressing need to formulate concrete programs to take care of the welfare of small farmers in the agricultural sector, who may have to move to other subsectors in agriculture or even to an entirely different sector altogether.

5.5.1 Some specific issues

The following are a number of specific issues that can have implications on the future direction of the trade liberalization agenda. These issues need to be quickly addressed to ensure smooth and fair implementation of trade liberalization.

Increasing use of non-tariff barriers to protect agriculture

The removal of tariffs may increase the use of other measures such as sanitary and phytosanitary measures by countries to inhibit imports and continue protection for domestic agricultural industries. There are already certain moves by developed countries that are being construed by developing countries as moves toward impeding imports. One such move is the decision by EU to impose the EU food hygiene directive of 1993 which requires the transportation of foodstuffs destined to the EU in dedicated vessels. This requirement can seriously effect the costs of palm oil into the EU. Although the directive may have relevant health-related rationale, the fact that it is imposed at a time when EU is required to reduce tariff barriers on food and agricultural products naturally raises questions among the countries affected by the move.

Magnitude of support by developed countries

The essence of the GATT for agriculture is to reduce the support to the agricultural sector. However, a number of analysts showed that the opposite was taking place. Panchamukkhi et al. (1995) observed that many developed countries increased their subsidies immediately after the UR negotiations. For several countries the level of support would be higher compared to the beginning of 1980s, even after the UR commitments. Table 5.7 shows that the producer subsidy equivalent increased from 13% to 54% for Canada, 45% to 66% for the EU, 79% to 93% for Japan and 8% to 45% for the U.S.A. between 1979 - 1986. This being the case, developing countries should call for increased cuts in the level of support by developed countries in the next round of negotiations.

Table 5.7 Net percentage of producer subsidy equivalent (PSEs) to crops, 1979 - 1986.

Countries	1979	1980	1981	1982	1983	1984	1985	1986
Australia	3	5	8	15	8	9	13	19
Canada	13	15	16	20	19	25	39	54
EC (10)	45	25	30	42	26	24	44	66
Japan	79	71	65	77	79	81	86	93
New Zealand	2	4	10	13	8	9	10	15
United States	8	9	12	14	34	21	26	45

Source: Ingersent, K.A.; A.J. Rayner; and R.C. Hine (eds), Agriculture in the Uruguay Round, St. Martin's Press, London 1994.

Non-trade-related issues

Another concern is the increasing use non-trade-related issues to influence trade by developed countries. Issues concerning the environment, labour and the so-called "human rights" issue have consistently been dragged into the negotiations on agricultural trade liberalization. The rationale of developed countries is that they impose stricter regulations pertaining to those issues to their agricultural producers compared to developing countries. As a result, producers in developed countries allegedly have to incur higher costs of production resulting in unfair competition in the market place. Unilateral actions have been taken by some governments to impose import bans and other trade restriction to countries that do not follow their standards of practice in production. However, it must be realized that in moving towards a totally liberalized market, one has to adhere to the principle of comparative advantage, which formed the very basis of this liberalization move. The international community has little right to question how the respective nations achieved that advantage can as long as it is within the scope

of the Agricultural Agreement and international law. A classic example is the total ban unilaterally imposed by the U.S.A. on imports of shrimps from ASEAN countries. The U.S.A. alleged that the method of capture of shrimps by ASEAN countries is threatening the sea-turtle population and is deemed environmentally unfriendly. The U.S.A. is insisting that ASEAN countries use sea-turtle exclusion devices in their capture of shrimps. If issues similar to this are freely allowed in the liberalization agenda, a free flow of other non-trade-related issues may follow, and this can jeopardize the original objective of the UR Agreement.

The "legality-binding question" of the agreement at state and municipality levels

The question that has been raised lately is whether the UR Agreement is legally binding at the level of state, municipality or the local authorities, since the Agreement is signed only between nations. Some states, municipalities and local authorities in a nation may have laws that are quite independent of the federal laws. This interpretation has been used by a number of local authorities in Europe to prohibit the sale of tropical timber products in their districts. They alleged that countries producing these products do not adhere to environment-friendly practices and are over-exploiting their forests for economic gains.

Signs of emerging monopolies

There is now a tendency for a small number of countries to dominate and monopolize world food production. As comparative advantage works its way through the global food production system, the probability is that only a few highly efficient producers will remain. This is an unhealthy development as liberalization itself is supposed to make the market free from distortions including monopoly. Furthermore, with world food production in the hands of a few countries, the political powers that they carry can also be unhealthy.

The financial crisis

The middle 1997 saw a number of countries in South-East Asia experiencing a financial crisis. These countries include Indonesia, Thailand, Malaysia and to a lesser extent the Philippines. This crisis, resulting from speculative attacks on the currencies of these countries, has caused the meltdown of the currencies of these countries against the US dollar. The situation is further aggravated when there is 'loss of confidence' resulting from this meltdown on the economy of these countries from the international community. This in turn leads to lower investments and slower or negative economic growth of these countries. Thus, while initiatives towards trade liberalization are supposed to enhance trade and economic welfare, the negative effects of the exchange rate are likely to offset the gains made from trade liberalization. Since international transactions are made in US dollars, it is now becoming more expensive for these countries. Imports will surely go down and this will retard international trade in the region.

In addition, the respective governments will now be more cautious towards liberalization and are likely to pursue another round of import substitution measures to save foreign exchange and protect their economies from price fluctuations due to the fluctuations of their domestic currencies.

This single development is certainly not good for trade liberalization and may thwart years of negotiative efforts towards trade liberalization. The international community needs to resolve the basic underlying cause of this problem, i.e. speculation of currencies, and formulate some form of regulatory measures to minimize and prevent extensive speculative trading of currencies.

5.5.2 Recommendations

In this section some recommendations are put forward with special emphasis on how Malaysia should continue to pursue its trade liberalization measures.

Strategy for adjustments in the affected subsectors

The primary concern of the Malaysian government is on how carry on with liberalization and not deviate from national objectives. Two main issues are at hand. First, recognizing the fact that the most severely effected subsectors, rice and tobacco, consist of many small producers, many of which are poor, withdrawing support to these subsectors will seriously affect the income of small farmers and can lead to serious socio-economic and political implications. Without alternative programs the incidence of poverty in agriculture and the nation will increase. This will undermine almost three decades of government effort to eradicate poverty and bridge the income gap of the rural and urban populace. Second, is the issue of national food security. Withdrawal of support from rice production will lead to a contraction in production and Malaysia will increasingly depend on external sources for rice. This will not be favorable to the country, especially under the current financial crisis where higher exchange rates can lead to foreign exchange reserve constraints to finance imports.

The government basically has three options or a combination of the three options:

- formulate strategies to facilitate the movement of producers into other areas/sectors;
- devise a de-coupled income program to enable farmers to maintain present level of income; and
- take steps to increase efficiency, productivity and competitiveness by utilizing other 'green-box' exceptions of the Agriculture Agreement and enhance government support services to these subsectors.

The first option by itself will pose some problems. Most of the farmers in these two subsectors are aging farmers. Re-training programs for them to acquire new skills and capabilities can be difficult. This is especially so if the opportunities available are outside of the agricultural sector, where the skills required are entirely different from what they currently have. Furthermore, movements into other sectors and areas may involve geographical displacement and this can be socially unacceptable. The only feasible solution to this option is to find new alternative crops that are equally remunerative to the farmers. However, the crop choice that is available may be too limited to cater for the whole group.

In the second option, the government can give direct income support for a stipulated period to maintain income levels and allow the "natural process" of displacement to take place. However, for the rice sector, this move will not help address the food security issue. Since income support is not linked to production, there would not be any supply response resulting from the support.

The third option can be more feasible. The government can increase the budget allocation to provide a better economic foundation for production to increase productivity and competitiveness. This includes increased investments in infrastructure, research and development, and the strengthening of institutional support in the affected subsectors. In this manner, yields can be improved at lower cost to the producers, thereby increasing the competitiveness of the subsectors. Alternatively a combination of option two and three can also be conducive. With this combination, less efficient farmers can opt out of production, but are assured of a fixed income for a period before they find new economic opportunities.

Increasing capacity for food production

The liberalization measures in agriculture are expected to increase prices for food commodities. This development is disadvantageous for a net food importing country such as Malaysia. Apart from having to pay more for imports, the country will also be more vulnerable

to externalities which are beyond its control, such as exchange rate fluctuations, international food shortages and imported inflation.

The predicted increases in prices of food products will present some opportunities for domestic producers to venture into selected food commodities that were previously not economically attractive. The government now needs to provide the necessary environment conducive for the private sector to invest in food production on a large-scale commercial basis. This includes the provision of infrastructure, increased accessibility to land and credit as well as appropriate incentives. In the past, government programs in food production were more skewed towards fulfilling the needs of small farmers. Most of these programs are intended to increase incomes of small farmers and alleviate poverty. Programs that are targeted for increased participation of larger operators to exploit economies of scale are lacking. New infrastructure and new forms of institutional support are required to make this happen and to shift the focus of development from the farmer to the commodity.

Expanding value-added and downstream processing

The UR Agriculture Agreement also provides opportunities for increased exports of higher value-added food products. This is in view of decreasing reductions in tariff escalation in many countries. Although the reductions are not as much as expected, this can nevertheless provide new opportunities to increase exports of more value-added and downstream products.

Preparing and upgrading facilities for increased quality

The post-Uruguay period is expected to see increasing demands for higher quality food products and stricter regulations pertaining to quality and health standards in importing countries, especially the developed ones. Developing countries like Malaysia need to be prepared for this development. Facilities and capabilities for food inspection and quality control need to be expanded and upgraded. In addition, programs for creating awareness among producers on the importance of and adherence to the proposed health and safety standards are also required.

Effective negotiating platform

Smaller countries including Malaysia require an effective platform to enable them to have increased influence in the negotiating process in agricultural trade liberalization. Currently, Malaysia and other members of the ASEAN grouping are using the ASEAN platform to forward common stands on issues of importance. It may be necessary to enlarge this platform to include other smaller countries with similar interests.

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Appendix 1. Prices of Export Commodities

Table 1 F.o.b. price of logs, Malaysia, 1985-1996.

Year	US $/m^3
1985	56.85
1986	57.36
1987	73.41
1988	73.28
1989	75.93
1990	72.96
1991	77.09
1992	84.31
1993	122.18
1994	111.07
1995	90.03
1996	88.89

Source: Ministry of Primary Industries Malaysia, Statistics on Comodities: various issues.

Table 2 World price (WP) and world price at border for logs, 1985-1996.

Year	US $/m^3 (WP)	US $/m^3 (WP at border)
1985	136	136.29
1986	151	151.16
1987	221	221.43
1988	233	233.21
1989	225	225.19
1990	211	211.11
1991	222	221.82
1992	197	196.47
1993	389	389.49
1994	316	316.79
1995	258	256.97
1996	254	253.17

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 3 Wholesale price (WPPCM) of logs Malaysia, 1985-1996.

Year	US $/m^3
1985	70.16
1986	47.67
1987	62.70
1988	66.03
1989	93.33
1990	97.41
1991	95.27
1992	118.04
1993	135.80
1994	136.26
1995	143.43
1996	144.44

Source: KPU, forestry statistics 1985-1996 Ministry of Primary Industries Malaysia, Forestry Statistics: various issues.

Appendix 1

Table 4 F.o.b. price of crude palm oil, Malaysia, 1985-1996.

Year	US $/ton
1985	262
1986	185
1987	241
1988	171
1989	223
1990	284
1991	287
1992	340
1993	333
1994	368
1995	482
1996	379

Source: Ministry of Primary Industries, Malaysia, Statistics on Commodities: various issues.

Table 5 World price (WP) and world price at border of crude palm oil, 1985-1996.

Year	US $/ton (WP)	US $/ton (WP at border)
1985	501	501
1986	257	257
1987	343	342
1988	437	437
1989	350	351
1990	290	290
1991	339	339
1992	394	393
1993	378	378
1994	529	530
1995	629	627
1996	532	531

Source: PORLA up-date: various issues.

Table 6 Farm price of crude palm oil, Malaysia, 1985-1996.

Year	US$/ton (process equivalent)
1985	421.77
1986	224.42
1987	306.75
1988	392.75
1989	304.44
1990	259.63
1991	304.36
1992	359.61
1993	346.30
1994	490.08
1995	586.85
1996	473.02

Source: PORLA statistics: various issues.

Table 7 F.o.b. price of natural rubber, Malaysia, 1985-1996.

Year	US $/ton*	US $/ton**
1985	774	760
1986	814	807
1987	959	987
1988	1245	1182
1989	983	969
1990	848	864
1991	864	824
1992	893	858
1993	885	829
1994	1098	1126
1995	1588	1568
1996	1356	1325

Source: Ministry of Primary Industries, Malaysia, Statistics on Commodities: various issues.
* Average f.o.b. price for all types of rubber, ** Average f.o.b. price grade Rubber Smoke Sheet 1 (RSS1).

Table 8 World price and world price at border of rubber, 1985-1996.

Year	US $/ton (WP)	US$ /ton (WP at border)
1985	921	922
1986	908	909
1987	972	972
1988	1,077	1,076
1989	1,074	1,077
1990	1,106	1,108
1991	1,050	1,050
1992	1,029	1,028
1993	1,044	1,045
1994	1,079	1,081
1995	1,249	1,246
1996	1,209	1,027

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 9 Farm price of natural rubber, Malaysia, 1985-1996.

Year	US $/ton
1985	699.60
1986	741.47
1987	890.08
1988	1,060.69
1989	840.00
1990	757.78
1991	774.91
1992	818.43
1993	789.49
1994	1,121.37
1995	1,524.30
1996	1,291.67

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 10 F.o.b. price of cocoa beans, Malaysia, 1985-1996.

Year	US $/ton
1985	2,027
1986	1,812
1987	1,723
1988	1,427
1989	1,550
1990	1,021
1991	995
1992	983
1993	960
1994	1,209
1995	1,304
1996	1,256

Source: Ministry of Primary Industries, Malaysia, Statistics on Commodities, 1985-1996.

Table 11 World price (WP) and world price at border of cocoa beans, 1985-1996.

Year	US $/ton (WP)	US $/ton (WP at border)
1985	2,255	2,257
1986	2,068	2,069
1987	1,998	1,997
1988	1,584	1,583
1989	1,242	1,246
1990	1,268	1,270
1991	1,193	1,193
1992	1,099	1,098
1993	1,111	1,113
1994	1,396	1,398
1995	1,433	1,433
1996	1,455	1,453

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 12 Farm price of cocoa beans, Malaysia, 1985-1996.

Year	US $/ton
1985	1,892.34
1986	1,631.78
1987	1,490.87
1988	1,175.57
1989	928.52
1990	940.74
1991	887.27
1992	839.22
1993	922.76
1994	1,125.57
1995	1,144.62
1996	1,140.08

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 13 F.o.b. price of pepper, Malaysia, 1985-1996.

Year	US $/ton
1985	2,988
1986	4,155
1987	4,544
1988	3,249
1989	2,346
1990	1,529
1991	1,199
1992	984
1993	1,471
1994	2,105
1995	2,876
1996	1,771

Source: Ministry of Primary Industries, Malaysia, Statistics on Commodities: various issues.

Table 14 World price (WP) and world price at border of pepper, Malaysia, 1985-1996.

Year	US $/ton (WP)	US $/ton (WP at border)
1985	4,037	4,041
1986	5,899	5,901
1987	5,803	5,801
1988	4,602	4,598
1989	2,851	2,859
1990	1,792	1,796
1991	1,418	1,419
1992	1,470	1,469
1993	2,313	2,316
1994	3,073	3,079
1995	3,789	3,614
1996	3,491	3,485

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 15 Wholesale price (WPPCM) of pepper, Malaysia, 1985-1996.

Year	US $/ton
1985	2,712.90
1986	3,766.67
1987	3,762.30
1988	2,637.40
1989	1,851.85
1990	1,266.67
1991	918.91
1992	758.82
1993	1,005.84
1994	1,741.98
1995	2,356.97
1996	n.a.

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Appendix 2. Prices of Import Commodities

Table 1 C.i.f. price of rice, Malaysia, 1985-1996.

Year	US $/ton
1985	241.98
1986	239.43
1987	210.42
1988	285.03
1989	345.36
1990	302.50
1991	318.72
1992	298.89
1993	282.93
1994	335.23
1995	333.67
1996	369.38

Source: Paddy Statistics, Ministry of Agriculture, Malaysia: various issues.

Table 2 World price of rice, 1985-1996.

Year	US $/ton (WP)
1985	217.74
1986	210.08
1987	229.76
1988	301.15
1989	321.11
1990	287.78
1991	312.73
1992	267.45
1993	237.74
1994	269.84
1995	319.92
1996	337.70

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia

Table 3 Wholesale price (WPPCM) of rice, Malaysia, 1985-1996.

Year	US $/ton
1985	306.45
1986	296.36
1987	299.93
1988	295.80
1989	286.04
1990	292.90
1991	283.64
1992	308.39
1993	450.28
1994	466.30
1995	562.87
1996	547.66

Source: Paddy Statistics, Malaysia, Ministry of Agriculture, Malaysia: various issues.

Appendix 2

Table 4 C.i.f. price of tobacco, Malaysia, 1985-1996.

Year	US $/ton
1985	15,481.73
1986	15,143.00
1987	15,366.64
1988	7,159.67
1989	7,102.39
1990	6,529.56
1991	7,399.81
1992	5,882.02
1993	6,069.26
1994	5,725.00
1995	5,098.67
1996	5,605.40

Source: Statistics on Commodities Ministry of Primary Industries Malaysia, various issues.

Table 5 World price of tobacco, 1985-1996.

Year	US $/ton (WP)
1985	2,614.52
1986	2,659.69
1987	2,744.84
1988	2,466.03
1989	3,175.93
1990	3,398.15
1991	3,500.00
1992	3,436.47
1993	2,699.22
1994	2,929.77
1995	2,637.05
1996	3,047.22

Source: Database, Economic Planning Unit, Prime Minister's Department, Malaysia.

Table 6 Wholesale price (WPPCM) of tobacco, Malaysia, 1985-1995.

Year	US $/ton
1985	5,383.06
1986	5,034.88
1987	4,928.57
1988	4,980.92
1989	5,085.19
1990	5,007.41
1991	4,592.73
1992	5,223.53
1993	5,210.12
1994	5,068.70
1995	5,410.36

Source: National Tobacco Board, Tobacco Statistics: various issues.

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