CHAPTER 3

THE MALAYSIAN PALM OIL INDUSTRY BACKGROUND

3.1 Industry background and phases of development

Oil palm is an indigenous plant of West Africa. It was introduced into Malaysia in 1870. However, it was not until 1960's that large scale cultivation of the palm was undertaken in this country. The large scale cultivation was due to the government's massive divesification aimed at reducing the country's dependence on rubber.

The development of the industry can be traced through a number of phases. The first phase started with the large scale cultivation of the crop in the 1960's. The result of this development is the establishment of large plantation companies and smallholding and the growth of the palm oil mills. The government, in an effort to help the rural population to improve the their income, has set up the Federal Land Development Authority (FELDA) to open new jungle land and encourage these people to grow oil palm.

This effort has made FELDA a major producer of palm oil in the country. Large rubber plantation companies have also diversified into oil palm growing during this period. The growth in planted acreage has been rapid since then. The total acreage in 1960 was only 54,634 hectares. In 1970, the total acreage increased by more than 5 times to 291,263 hectares and in 2001 the total oil palm cultivated acreage increase to 3.5 million hectares. (See Appendix 1). Likewise, the total output of crude palm oil has increased from 91,793 tonnes in 1960 to 431,069 tonnes in 1970 to more than 11.8 million tonnes in 2001. The output is 11,803,785 tonnes in the year 2001. (Appendix 1).

During the period from 1960 to early 1970's palm oil was exported in crude form. Refining began in Malaysia in early 1970's with a few plants refining some 10% of the country's total crude palm oil output. However, in 1974, a succession of refineries was set up throughout the country and this marked the beginning of the second phase of the development of the industry. The refineries were set up mainly by independent investors and only few plantation companies were involved. Due to the returns in the early years, the growth in the number of refineries was rapid. This development made Malaysia the country with the greatest concentration of edible oil refineries in the world. The number of refineries in operation (see Appendix 3) increased to 45 in 1980, but due to intense competition, some have ceased operations and in 1990 there were 37 refineries in operation, having a total capacity of about 9.31 million tonnes. The capacity of 15.41 million tonnes is currently in excess of the total crude palm oil output of 11.8 million tonnes. In 2001, 87.4 % of the palm oil exported from Malaysia were refined (See Appendix 1).

At present Malaysia is in the third phase development that is further downstreaming activities in the oleochemicals and palm kernel based processing industry. Production from oleochemicals increase from 136,000 tonnes in 1984 to 1.9 million tonnes in 2001. A number of major oleochemical companies are now actively engaged in various joint-venture projects to take advantage of the readily available raw materials.

3.2 Industry Structure

As the country moves through the various phases of development, different levels of industry players have emerged. During the first phase large plantation companies, smallholders, and independent millers have emerged. In the second phase independent refiners, trading houses and sales agents and in the third phase, oleochemicals manufacturers have emerged. A number of associations

representing the various interest groups and government agencies have also emerged during the period.

3.2.1 The industry players

In summary, the industry players can be listed as follows:

i) Smallholders

These are small estates, mostly family owned and managed. They sell their fresh fruit bunches (FFB) to independent millers.

ii) Large plantation companies

These are corporations with large acreage of oil palm plantations. They usually have their own mills and process their own FFB. They are the main sellers of crude palm oil in the market. Some of these plantation groups have their own refining facilities, however such refining capacities are normally small compared with their volume of crude oil production.

iii) Independent millers

These are the people who do not own plantations, but purchase the FFB from smallholders and process them into crude palm oil for sale to the refiners. The growers and suppliers of crude palm oil are often referred to as producers.

iv) Independent refiners

These are companies who set up refining facilities to process the crude oil into refined form for sale to the domestic or international market. They purchase their crude oil mainly from the plantation groups or independent millers. Some of the independent refiners do own some plantations. However, they still have to purchase most of their requirements.

v) Oleochemicals manufacturers

They are the manufacturers of fatty acids, fatty esters, glycerine, fatty amines, fatty alcohol and other oleochemicals, using palm oil and palm products as feedstock. Most of these companies are formed on a joint-venture basis with foreign oleochemical companies.

vi) Brokers

These are the middlemen who help to conclude sales and purchase transactions between the producers and the refiners; and between the refiners and the buyers. These brokers do not take title to the physical products but earn a commission for their services.

vi) Trading Houses/Dealers

Normally foreign owned but can be based in Malaysia or overseas. They act as intermediaries between the refiners and final buyers overseas. They take physical title to oil and resell them hoping to make a profit in between. International trading houses /dealers provide an important role as a bridge between Malaysian palm oil sellers and various importers/buyers in destinations unfamiliar to Malaysia. The trading houses/dealers often play a speculative role in the trade as they have to buy low and sell high.

vii) Selling Agents

Malaysian exporters sometimes appoint selling agents in foreign countries to sell their products. Selling agents are appointed on yearly or long-term basis and they are rewarded in terms of commission based on the quantity sold on behalf of their principals.

viii) Buyers

In the international market, the main buyers, apart from trading houses/dealers are the state trading houses, oil and fats processors.

ix) End users

These are confectioneries, food manufacturers, bakeries, restaurants and household consumers.

3.2.2 Associations representing the trade

Various groupings or associations exist within the Malaysian palm oil industry to represent the interest of the respective groups. The main groupings are:

i) Malaysian Palm Oil Growers Council (MPOGC)

The MPOGC was set up in 1978 to promote, foster and protect the interest of oil palm growers in Malaysia.

ii) Palm Oil Refiners Association Of Malaysia (PORAM)

The association was set up in 1975 to represent and protect the interest of the refiners. It is recognised as the official voices of the refiners by the government.

iii) Malaysian Edible Oil Manufacturers Association (MEOMA)

The Association set up in 1961 represents about 80% of edible oil manufactures in Malaysia. They play a prominent role for the palm kernel crushers representing their interest in the industry.

- iv) Palm Oil Millers, Association Of Malaysia

 The association represents and protect the interest of the millers. It is recognised as the official voices of the refiners by the government.
- v) Malaysian Oleochemical Manufacturers Group (MOMG)

 The group represents and protects the interest of the oleochemical manufacturers.

3.2.3 Government agencies representing the trade

The government has set up a number of agencies to assist the industry and to regulate its orderly development:

i) Malaysia Palm Oil Board

Malaysia Palm Oil Board (MPOB) was set up in year 2000 by the government to merge Palm Oil Research Institute of Malaysia and the Palm Oil Registration and Licensing Authority. The institute role is to undertake all aspects of research in palm oil and to regulate the orderly development of palm oil industry in the country. The research, which the institute undertakes, ranges from breeding to selection, agronomic studies and end user research. It also ensures that the government policy with regard to the Industrial Master Plan and the National Agricultural policy are carried out accordingly.

ii) Malaysia Derivatives Exchange (MDEX)

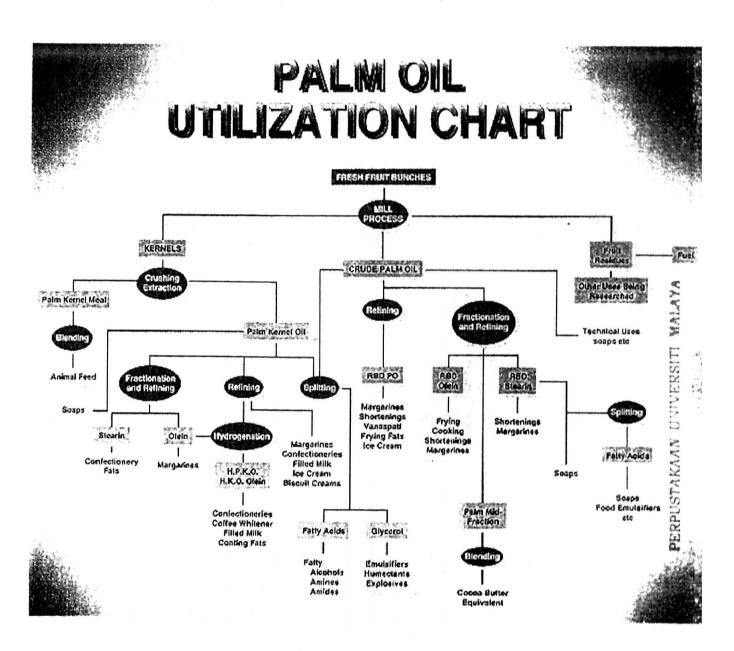
MDEX was established to facilitate trading in commodity futures. The most important function is that it provides a mechanism for pricing and hedging. This helps the industry players to reduce their risk to wide price fluctuations.

iii) The Malaysian Palm Oil Promotion Council (MPOPC)

In view of the increasing competition in the edible oil market and the need to counter adverse campaign against the Malaysian palm oil, the government has set up the MPOPC in 1990 to assist the industry in the promotion and marketing of the oil in the international market.

3.3 Palm Oil products and its uses

Palm oil is very versatile raw materials. It can be used in a wide number of applications, both in edible and non-edible products. The palm oil utilization chart below summarizes the process, products and uses of palm oil.



In food use palm oil can be used to produce frying/cooking oils, shortenings, margarine's, vanaspati, frying fats, ice cream powder, other edible fats and cocoa butter butter equivalents. In non-food applications, palm oil is used for soap making and oleochemicals. Oleochemical i.e. fatty acids and their derivatives have wide applications, they can be used for candle making, soap and detergents, shampoos, lubricants, fabric softeners, cosmetic, pharmaceutical and emulsifiers.

3.4 The Markets

Refined and processed palm oil products are sold both in the domestic and international markets. In the domestic market, palm oil is sold mainly in the form of cooking oils, margarines, shortening, vanaspati and other form of edible fats. The products are normally branded and sold in small pack sizes for both households and industrial use. Some products are sold in bulk to local industries for further processing.

In the international market, processed palm oil products are sold mainly as a commodity and are transported in bulk by tankers or are packed in drums. The quality of the oil sold is based on specification requested by buyers. There are a number of standard specification use in the trade, some of which are the PORAM specification and STC specification. For example, the existing PORAM's standard trading specification for neutralised palm oil is as follows:

FFA (as palmitic)	0.25% max
M&	0.10%max
I.V. (WIJS)	-50-55
M. Pt. degree C (AOCS Cc3-25)	-33-39
Colour (5 1/4" Lovibond cell)	-3 or 6 red max.

In the early 1960's and 1970's most of the Malaysian palm oil was exported to traditional markets like the EU, United States, Canada and Japan. In the 1980's and 1990's exports to non-traditional markets like India, Pakistan, Bangladesh, China form the major portion of Malaysian exports in addition to EU.

3.5 Economic importance

In 2001, palm oil together with other palm oil products contributed an estimated RM 14.1 billion in export earnings for the country. This makes palm oil the largest export earning commodities after petroleum and petroleum products. The industry provides the main source of livelihood to approximately 200,000 rural family in government land schemes and private smallholdings and another 90,000 agricultural workers in estates. Apart from this, employment opportunities have been created in ancillary supporting industries. The industry also played a significant role in the government's objective of eradicating rural poverty and transforming large uninhibited areas into thriving settlements and township.