2.0 LITERATURE REVIEW

The word "competitiveness" per se is defined by Oxford dictionary as a noun which involves competition or one which compares favorably with those of rivals (Oxford, 1984). In its tenth edition, it further fine tune the definition as was defined as, relating to or characterized by competition' strong desiring to be more successful than others. A second definition was, as good as of better than others of a comparable nature (Oxford, 1999)

A comprehensive business definition of "competitive" is explained by Michael Porter with the five basic forces, which is used as framed worked in this study, will be explained in detail of the concept in later part of this section.

2,1 MALAYSIA PALM OIL INDUSTRY

The oil palm in Malaysia, originated from West Africa, was first introduced to Malaysia in 1870 as an ornamental plant. The economic used of the plant was developed only in 1917 (MPOPC, 1996)

The modern expansion of the industry can be traced back to the 1960's when the Malaysian Government embarked on a massive program of agricultural diversification. Malaysian government introduction of several schemes such as the Federal Land Development Authority (FELDA), Federal Land Consolidation and Rehabilitation Authority (FELCRA) to ensure more equitable distribution of the nation's wealth to the less privileged member of the society. During the same period, Malaysian

plantation industry recognized the potential of replanting rubber with oil palms. The conversion from rubber to oil palm cultivation proved to be so successful that in 1998 approximately 43% or 3.2 million hectares of the total cultivated area in 1999 compared with 3 million hectares in 1998 (Bek Nielson, 2000)

The various scheme initiated by the government, which includes FELDA, FELCRA, RISDA managed to captured 43% share of the total oil palm cultivation area. Table below show the distribution of oil palm planted area by category.

Table 1: Distribution of oil palm planted area by Category (1998)

CATEGORY	HECTARES	%
Private Estates	1,751,370	56.90
Government scheme		
FELDA	672,142	21.84
FELCRA	130,651	4.24
RISDA	37,863	1.23
States scheme	221,729	7.20
Smallholder	264,361	8.59

(Source: Statistics Department, 1999)

As mention in introduction, the oil palm planted has increased by 5.5 times the size within 24 years. Based on Appendix A, the increased in oil palm

planted area in Peninsular Malaysia grew by 60% from 1975 to 1980. From 1981 to 1985, the growth had dropped to 31% while the subsequent period of 1986 to 1990 was at 20%. It was only 14% growth in planted area for the balance 8 years i.e. 1991 to 1998. This indicates the planting area in Peninsular Malaysia is almost max out at about 2 million hectares.

The expansion of planting new oil palms areas are now mainly concentrated in Sabah and Sarawak where there is little replanting activity going on (Bek Nielson, 2000)

The palm species in Malaysia is Elaeis guineensis mainly of the hybrid Tenera that yields about 4 ton of palm oil, 0.5 ton palm kernel oil and 0.6 ton of palm kernel meal in per hectare of palm cultivation. The production of crude palm oil has increased from a mere 90 thousand tons in 1960 to above 10 million in 2000 (Pantzaris, 1997)

In the last 40 years there has been record production except for 1983 due to the weevil aftermath and 1998 due the Elnino effect (Bek Nielson, 2000).

Out of the 32 million tons of oils and fats were traded in the export market in 1997, palm oil constituted 37% of the total export trade.

2.2 WORLD PALM OIL INDUSTRY

The projected crude palm oil production in the world was at 17.8 million mt in year 1997 and projected to grow to 21.2 million mt in year 2000. Malaysia is projected to lead the market again with 50% share of world

production, followed by Indonesia with 32% share. Other countries, which include Nigeria, Ivory Coast, Cameroon, Ghana, Zaire, Thailand, Colombia, Brazil, Ecuador, Honduras, and other smaller producing countries only generate 18% production (Mielke, Thomas, 2000).

This production figure is a 0.9 million mt increased from earlier projection done by Chow Chee Seng presented at 22nd World Congress and Exhibition for fats research in Kula Lumpur, September 1997. Whereby he projected in year 2000 the total world production was at 20.3 million mt. Breakdown of countries is shown in table below.

Table 2: World Production of Palm Oil by Main Countries/ Regions in thousand tons

	P1997	F2000	F2005
Malaysia	8828	9430	11073
Indonesia	5066	7009	10354
Ivory Coast	305	366	449
Nigeria	675	758	824
Other Africa countries	360	387	428
Colombia	418	441	494
Central & South America	400	450	554
Thailand	418	478	590
Papua New Guinea	244	275	324
Other countries	646	731	856
TOTAL	17375	20339	25963

(Source: Statistic Department, 1997)

The main variance Chow Chee Seng forecast for year 2000 versus Thomas Mielke projection for year 2000 is Malaysia and Indonesia.

Malaysia production of palm oil, in comparison, is higher than 0.96 million mt. As Mielke explained, that the higher production of Malaysia palm oil was above expectations, which partly linked to higher mature area and partly to sharper than expected growth in productivitiy per tree (Mielke, 2000).

As for Indonesia, there was a declined of 0.26 million mt versus Chow's estimation. The political and economical uncertainty, which classified as security factor, is the main reason of the decline in production. In 1998, plantation workers are reluctant to work due to unrest. This caused plantation not properly fertilized and harvesting could not be carried out normally (Derom Bangun, 2000).

a) Indonesia

Palm oil production in Indonesia has shown considerable growth in the past two decades. Total oil palm area in Indonesia increased from 0.29 million hectares in 1980 to 2.28 million hectares in 1997. Production has increased from 0.316 million mt in1971 to 5 million mt in 1997.

Given the huge land availability for cultivation of oil palm as well as suitable soil and climate, when PORIM's forecasting method, the area under oil palm in Indonesia may reach 4.3 million hectares by year 2010. The Crude Palm Oil production expected to reach 12.6 million ton, where Indonesia would exceed Malaysia production (Chow, 1997)

The basic reasons for Indonesia lesser export trade of oil palm existing are two-fold: one, Indonesia has less production and with a population about 200million, obviously it consumed more than Malaysia with population of about 20 million (Ahmad Ibrahim, 1999)

b) Other countries

Besides Malaysia and Indonesia, the rest of the world only produced 18% of the world production. The third largest single producing country is Nigeria, which stands a mere 4% of total world production. This followed closely by Thailand, Colombia and Ivory Coast with 2.4%, 2.4% and 1.8% respectively. (Chow, 1997)

Please refer to Appendix B for World Production of palm oil by Main countries and region.

2.3 WORLD OILS AND FATS DEMAND AND SUPPLY

Soybean oil and palm oil are clearly the growth leaders. Within the group of 8 major vegetable oils in the world, soybean account for 30% of world consumption while palm oil has grown in importance in recent years and its share is seen reaching 24.7% (Mielkie, Thomas, 2000)

Note worthy to mention that there are a total of 17 types of vegetable and animal oils and fats out of which the vegetable oils and fats represents 80% of the total world consumption of 106 million mt. There was a major declined in the share of animal fats. In the 1960's animal fats had an export share of 45.6% but dropped to a drastic level of 11% in 1997.

Table 3 below shows the share of world oils and fats consumption breakdown.

Table 3: Share of vegetable oils and fats in percentage

TYPE OF VEGETABLE OILS & FATS	PERCENTAGE
SOYA	30 %
PALM	24.7%
RAPE/CANOLA	17.1%
SUNFLOWER	11.5%
COTTON, GROUNDNUT, COCONUT, PALM KERNEL	16.7%

(Source: Mielke, Thomas, 2000)

It is generally recognize that most countries do not produce enough for their own consumption. In 1997 for example the world production for 17 types of major oil was 99.9 million ton versus world consumption of 100.1 million tons. On the same year, China imported 4.9 million tons, EU-15 with 4.2 million tons and India 2.3 million tons (Ahmad Ibrahim, 1999)

2.4 PORTERS FIVE FORCES MODEL

According to Michael Porter, the essence of formulating a competitive strategy is relating a company to its environment. This means the industry or industries in which the company competes. An industry is a group of

firms producing products that are close substitutes (Hitt, Ireland and Hoskisson, 1999)

The state of competition in an industry depends on five basic competitive forces, which are shown in figure 1. The collective strength of these forces determines the ultimate profit potential in the industry. Profit potential is measured in terms of long run return on invested capital (Porter, Michael, 1998)

Porter believes that not all industries offer equal opportunities for sustain profitability, and the inherent profitability of its industry is one essential ingredient in determining the profitability of the firm.

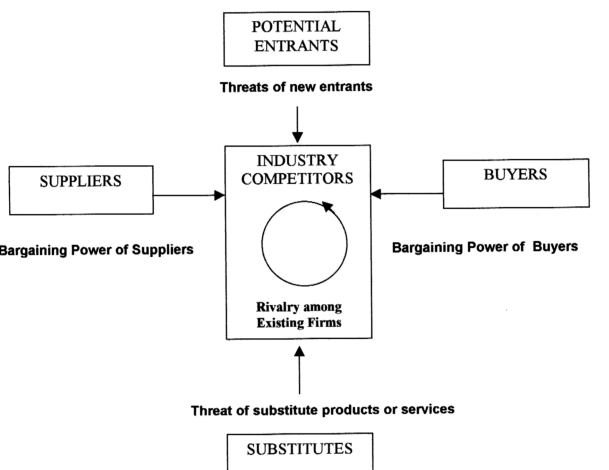
The goal of understanding the competitive forces is to formulate a competitive strategy for the firm to best defend itself against these competitive forces or can influence them in its favor. As per Porters, knowledge of these underlying sources of competitive pressure highlight the critical strengths and weaknesses of the company, animates its positioning in its industry, clarifies the areas where strategic changes may yield the greatest payoff, and highlights the areas where industry trends promise to hold the greatest significance as either opportunities or threats. The understanding of these sources will prove to be useful in considering areas of diversification, though primary focus is on strategy formulation in individual industries (Porter, 1998)

In general, the stronger the competitive forces, the lower the profit potential for firms in an industry. An unattractive industry has low entry barriers, suppliers and buyers with strong bargaining power, strong competitive threats from product substitutes, and intense rivalry among

competing firms. Vis-à-vis, an attractive industry has high entry barriers, suppliers and buyers with little bargaining power, few competitive threats from substitutes and relatively moderate rivalry. (Porters, 1998)

Graphically the Five Forces could be depicted as follows.

FIGURE 1 Forces Driving industry Competition



(Source : Porter, 1998)

The five forces would be dealt in details as follows:

a) Threat of Entry

This specifically addressed the new entrants to the market . New entrants increased the production capacity in the market, hence, holds costs down, resulting in less sales revenue and lower return for all firm in the industry. Therefore, existing firms would always deter new participants into the market. The likelihood the firm would enter into a industry lies in two factors : Barriers to entry and retaliation expected from current industry participants.

Types of barrier of entry are economies of scale, product differentiation, large capital requirements, high switching costs, assess to strategic distribution channels, cost disadvantage and government policy control entry into an industry.

The potential entrants expectations about the reaction of existing competitors also will influence the threat entry. If existing competitors are expected to respond forcefully to make the entrants stay in the industry an unpleasant one, then entry may well be deterred.

b) Intensity of Rivalry among Existing Competitors

Objective of firms are to obtain above average returns on their investment. This forces firms in a industry to compete each other in order to improve their market position. The rivalry could be based on price, product innovation, or to her actions to achieve differentiation of product.

According to Porters, the intensity of competitive rivalry is a function of numerous or equally balanced competitors, slow industry growth, high fixed or storage cost, lack differentiation or switching costs, capacity augmented in large increments, diverse competitors and high strategic stakes.

c) Threat of Substitute products

Substitute products are different goods or services that can perform similar or same functions as the focal product (Hitt, Ireland and Hoskisson, 1999). Substitute limit the potential returns of an industry by placing a ceiling on the prices firm in the industry can profitably charge. Hence, substitute products that deserve the most attention are those that are subject to trends improving their price performance tradeoff with the industry's product or are produced by industries earning high profits. In the latter case, substitute often come rapidly into play if some development increases competition in their industry and causes price reduction or performance improvement. (Porters, 1998)

d) Bargaining Power of Buyers

Buyers seek to purchase products at the lowest possible price, at which the industry earns the lowest acceptable rate of return on its invested capital. Buyers are powerful when they purchase a large portion of an industry total output or the product being purchased from an industry accounts a significant portion of the buyer's costs or switching cost is

negligible or the industry products are undifferentiated (Hitt, Ireland and Hoskisson, 1999)

e) Bargaining Power of Suppliers

Increasing prices and reduce the quality of the product are the potential means through suppliers can exert power over firms competing within an industry. A supplier group is powerful when it is dominated by a few large companies and is more concentrated than the industry to which it sells or satisfactory substitute products are not available to industry firms or industry firms are not a significant customer for the suppliers group or suppliers goods are critical to buyers marketplace success or the effectiveness of suppliers products has created high switching costs for industry firms or suppliers are a credible threat to integrate forward into buyers industry (Hitt, Ireland and Hoskisson, 1999; Porter, 1998)

The five forces tool is designed to assist with industry level analysis. Through repeated application it can assist also with evaluation of the attractiveness of segments of an industry. The tool addresses issues relating to competitive environment and does not identify general environmental factors or factors in the internal environment that may effect organizational performance or competitiveness.

The Elements of Industry Structure are summarized in the table follows.

Table 4: Element of Industry Structure

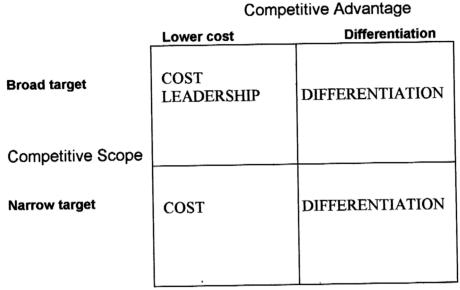
New Entrant – Entry Barriers	Economies of Scale Propriety Product Differences Brand Identity, Switching Costs Capital Requirements Access to Distribution Absolute Cost Advantage Government Policy Expected Retaliation
Rivalry Determinants	Industry Growth Fixed Cost/Value Added Intermittent overcapacity Product Differences Brand Identity, Switching Costs Concentration and Balance Informational Complexity Diversity of Competitors Corporate Stakes Exit Barriers
Determinants of Supplier Power	Differentiation of input Switching Cost of suppliers /firms Presence of Substitute inputs Suppliers concentration Importance of volume to suppliers Cost relative to total purchases Impact of input in cost or differentiation Threat of forward integration vs backward
Determinants of Buyers Power	Bargaining Leverage Buyer vs firm concentration Buyer volume Buyer vs firm switching cost Buyer information Ability to backward integrate Substitute Product Pull Through Price Sensitivity Price/ Total Purchase Product Differences Brand Identity Impact on quality / Performance Buyer Profit Decision makers incentives
Determinants of Substitution Threat	Relative price performance Switching Cost Buyers Propensity to Substitute

(Source: Porter, 1998)

2.5 Porter Competitive Advantage Strategies

The three generic strategies for achieving above average performance are cost leadership, differentiation and focus that could be illustrated as follows:

FIGURE 2. Three Generic Strategies Porter



(Source: Porter, 1998)

Cost leadership is defined as the firm setting out to become the low cost producer in its industry. Differentiation is defined as the process by which a firm seeks to add uniqueness to its product that the buyer values and could therefore charges a premium. Focus strategy rests on narrow competitive scope; tailor its strategy to serve this focus segment. It could be either cost focus or differentiation focus (Porter, 1998)

2.6 Porter Value Chain Analysis

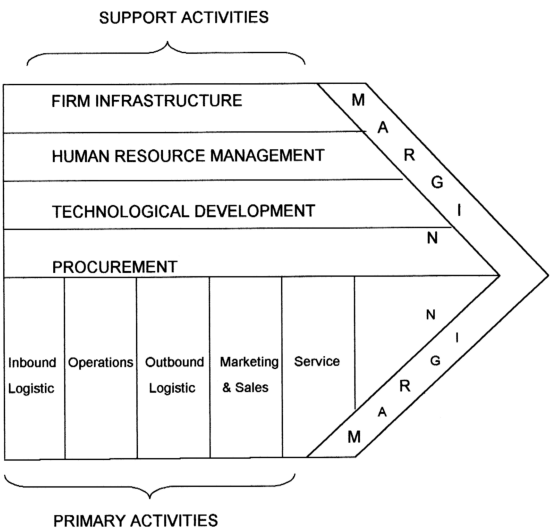
From the five forces to identify the competitive advantage, Porter identified that to stay competitive the company needed to redefine how it aims of being a low cost producer or differentiator were emerged from the work or process that product went through. This lead to the value chain concept which when used as a tool for business strategy or seeking strategic advantage, is concerned with the activities that provide a strategic competitive edge to a firm.

According to Porter, competitive advantage cannot be understood by looking at firm as a whole. It stems from the many discreet activities a firm performs in designing, producing, marketing, delivering and supporting its product. It examines organizational production and support processes for their contribution to competitive advantage.

The tool is design to assist with analysis at the functional level. It provides a framework for evaluation the contribution made by internal processes to overall customer value. Value chain analysis analyses business in terms of primary activities and support activities.

Primary activities are those activities directly involved with adding value to inputs and transforming them into goods and services desired by customers. These include inbound logistics, operation, outbound logistics, marketing and sales and service. Support activities are those activities necessary to support or enable the effective functioning of the primary activities. They include firm's infrastructure, HRM, technology development and procurement. Graphically the value chain is as follows:

FIGURE 3. The Basic Value Chain



(Source: Porter, 1998)