

Competitiveness in Global Trade in Edible Oil: Emerging Trends and Pivotal Drivers

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ABSTRACT

Away from classical theories of absolute and relative comparative advantage, modern agricultural industries are also experiencing a new paradigm for competitiveness. As producer countries attempt to appropriate more and more of added values, the framework for competitiveness shifts to newer grounds more in sync with the agricultural policies of the developed importing western world. Interventions through government policies, notwithstanding supposedly a multilateral trade regime, distort competitiveness in the market place. This is done by limiting market access through innovative non-tariff trade barriers and levying discriminatory tariffs mainly to protect and promote increased growth of domestic industries at the cost of the home consumers. This paper attempts to overview some of these developments affecting competitiveness of global trade in edible oils, in particular with respect to palm oil.

INTRODUCTION

Adam Smith commended not to produce at home what can be procured cheaper from outside. The underlying premise is the comparison of absolute efficiencies among producers and the resulting specialization that would increase output of commodities leading to maximization of social welfare. However, labour is neither homogenous in skills nor in productivity. Therefore, efficiency comparison alone may not be sufficient. David Ricardo subsequently argued that it is not so much the superiority of a

country over the other in producing a given commodity but what matters is the degree of superiority. This forms the gist of theory of comparative advantage which is based on resource endowments and have long guided analysis of the industries that trade globally¹. Now competition is the buzzword and competitiveness the bottom-line.

Several basic elements govern a country's trading competitiveness. The principle of the comparative advantage and subsequent neo-classical theories of Heckscher and Ohlin are now considered inadequate to explain compe-

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¹Chigacholiades, M (1990). *The law of Comparative Advantage*. International Economics. McGraw Hill. p. 11-29.

titiveness paradigm. In international economics, a nation is competitive if both its firms and its macro-economy are competitive. The major variables considered in competitiveness rankings include openness, government finance, infrastructure, technology, management, institutions, labour and human capital. These conditions enable the country to maintain superiority over other countries in accessing international markets and attracting capital. Away from this conceptual framework, in reality a country can never be competitive in all industries. Companies trade and so they compete, and not the countries. The companies, and not the governments, ultimately set the level of national productivity. Therefore, the focus has to be on the industries and companies in the industries. Making a clear distinction between comparative advantage and competitive advantage, it is argued that the factor endowment approach can enable only a limited understanding of a nation-state's competitive advantage. Michael Porter has argued that "international success in a particular industry is determined by four broad mutually reinforcing factors which create an environment which enables the

firms to compete. The four include factor conditions, demand conditions, related and supporting industries and firm structure, strategy and rivalry. These determinants also being influenced by the nation's government and by chance events." This argument is explained using by now a well familiar diagram popularly known as Porter's diamond that depicts linkage between and across these factors².

For a firm, competitive advantage can be calculated as the difference in the cost of all inputs and the price of all outputs. The difference represents the value that had been added to the inputs³. While in accounting term, such added values are measured precisely and reflected in the cash flow statements. It is also the immeasurable value of intangibles that link company's outputs to the consumers. The companies have to compete with each other to maximize and increase these values on an ongoing and sustainable basis so as to successfully compete in the market place. Since competitive advantage is comparative, these values have to be compared across the firms. Quantitatively that is rather difficult but subjective measures do exist. The shareholder's value is one such measure.

DEVELOPMENT APPROACH

All economic activities finance development but Malaysia and Indonesia are good examples of promoting development by building globally competitive commodity trade. However, they followed different approaches according to their situation. These have profoundly affected their plantation industry particularly the oil palm. In Indonesia, the focus has been on generating employment for the surplus labour from less developed areas. The availability of labour particularly from the densely populated Java provided labour to oil palm plantations in new areas through transmigration policy.

Indonesia has focused on equitable distribution of income rather than overall economic growth. Equity objective has been pursued through various other government policies⁴, notably the nucleus-plasma ratio of 20:80. Small scale plantations were developed by large estates and then handed over to smallholders, the development cost paid to the estates through sale of fresh fruit bunches to their cooperatives. Smallholders are distinguished by their low productivity; with yields consistently lower than those from the PTP's and private estates⁵.

² The debate on competitiveness was initiated by Michael Porter. Subsequently, there have been several articles examining the conceptual framework of competition and competitiveness. The discussion in this section is based on Harvard Business Review paperback (1971), Michael Porter on Competition and Strategy, Cambridge, USA.

³ For a good explanation on the value-added approach, see: Kay, John (1993). *Foundations of Corporate Success*. Chapter 2 & 13, Oxford: Oxford University Press.

⁴ Mention is made of the Cooking Oil Policy of the Government of Indonesia aimed at providing adequate supply of cooking oil to the population by controlling the sale and export of palm oil. It was considered essential since Indonesia then faced a stringent foreign exchange position. The policy was deregulated in 1991.

⁵ Background information on Indonesia and Malaysia is drawn from various sources. The important sources are:

Ministry of Agriculture (2004). *Agricultural Statistics 2004*. Centre for Agricultural Data and Information, Jakarta, Indonesia.

Anne Casson (2000). *The Hesitant Boom, Indonesia's Oil Palm Sub-Sector in an Era of Economic Crisis and Political Change*. Centre for International Forestry Research, Occasional Paper 29, June 2000.

Mohd Noor Mamat (1992). Economic Competitiveness between Malaysian and Indonesian Palm Oil, PORIM, September 1992.

Gopal Jaya, Malaysia's Oil Refining Industry, PORIM, P/R 07501.

MPOB (2004). *Malaysian Oil Palm Statistics 2004*. Ministry of Primary Industries, Government of Malaysia.

Yusof Basiron and Chan Kok Weng (2003). Enhancing competitiveness in the oil palm industry. *Proc. of the International Planters Conference*. 16-18 June 2003, Kuala Lumpur.

Economic Research Services, Bumiputra-Commerce Bank Bhd, Palm Oil Industry, Vol. 4/2004, Malaysia.

In Malaysia, the main policies governing the palm oil industry have been the National Agricultural Policy and the Industrial Master Plan. Under the National Agricultural Policy, oil palm cultivation was promoted mainly through the private sector participation while economizing on scarce land resources. Under the Industrial Master Plan, a variety of incentives were offered encouraging value addition.

Factors of Production

Land and labour are two most important resources for oil palm cultivation. Presently Malaysia is stressed for both. In Malaysia, the plantation industries traditionally depended on relatively expensive migrant labour largely from Indonesia. The labour wages in Indonesia are lower by as much as 30%⁶. In the earlier years, Malaysia saw a tremendous increase in land expansion. Land is extremely limited and there are several competing uses for land. The industrialization and urbanization which has triggered demand for housing infrastructure has made land the most precious and constricting resource particularly in Peninsular Malaysia.

Indonesia's importance and competitive strength in oil palm is rooted in abundant availability of suitable land. Oil palm cultivation in Indonesia were traditionally concentrated in North Sumatra but now they have been extending to other parts of Sumatra as well as Java, Kalimantan, Sulawesi and Irian Jaya. The overbearing presence of the large Indonesian business groups and foreign investors in the oil palm sector

began in mid 1980s when the government allowed conversion of some 5.5 million hectares mainly covered forests for oil palm plantations. Reports indicated that in reality 9.13 million hectares of land were allocated for oil palm plantations in the eastern part of the country alone⁷. New areas being cleared from forest have attracted comments from western critics.

Initially, high cost of capital was a constraining factor. But, the government encouraged greater private sector involvement between 1986 and 1996. Investors were provided access to credit at concessionary rates for estate development, new crop planting and milling facilities. The area planted with oil palm in Indonesia had increased from about 600 000 ha in 1985 to 2.8 million hectares in 1998 and 4.1 million hectares in 2003. Private plantations, which covered just 145 000 ha in 1986, experienced the strongest growth during 1990s and now cover 2 million hectares.

WHERE IS COMPETITION LOCATED?

The cost of production varies from area to area, estate to estate, age of plantation and management. In new areas in Indonesia, there are problems in establishment of plantations and infrastructure. Comparison across the old and new areas clearly indicates higher cost of production in new areas on account of their remoteness, poor infrastructure, weak transportation links and lower oil recoveries. The oil yield from the new areas is much less than what is achieved in North Sumatra. The yield could be

4 t/ha in North and West Sumatra while 3.5 to 3.2 t in Aceh and South Sulawesi. The low productivity means high cost of production.

By and large, Indonesia is considered a low cost producer of palm oil (around USD 165/t) reportedly well below the world average. In 1999-2000, Indonesia was able to produce palm oil at cost 30% lower than the next most competitive producer, Papua New Guinea. Indonesia is thus quite competitive as a palm oil producer. It has a high extraction rate of over 23%, larger average size of mills and low labour costs. Indonesia has made efficiency gains with total cost of production declining particularly on account of lower harvesting, transportation and milling costs.

Till now, the Malaysian costs have been also below world average. But the margins up to milling are narrowing down on account of increasing wages and other field costs. Labour is scarce and wages are rising. New plantations require additional investments. The peat soils require compaction before planting. The cost of fertilizer is comparatively higher and milling costs more. In Malaysia, the average extraction rates are reported to be around 20% as compared to over 23% in Indonesia.

Indonesia offers scope for expansion of land, technological improvements in new plantations and easy availability of labour at comparatively lower cost. In a way, it has the advantage of a new comer. But the Indonesian plantations are yet to fully mature to negatively impact the global trade and rob Malaysia of its

⁶ See Anne Casson, *op cit*.

⁷ This included 5.56 million hectares in Irian Jaya, 1.70 million hectares in East Kalimantan and 1.80 million hectares in Maluku. Reportedly in 1995 private plantation companies had applied for the conversion of an additional 20 million hectares of forest land into oil palm plantations. However, this was not considered a serious investment proposal. The feeling was that such a proposal was motivated by commercial interest in timber. See Mohd Noor Mamat, *op cit*.

established competitive advantage. While Malaysia definitely has an edge as far as infrastructure is concerned, the rest may not be wholly true. In the new areas in Indonesia, investments are coming from multinationals as well as regional companies wielding enormous financial and market clout. They would also invest directly or through the Government of Indonesia in developing the required infrastructure.

Diversification

With refining at the core of their international business, the companies differentiate their products through modernizing the refining technology, fixing commercial trademarks, and changing packages. Many claims of health benefits have now become fairly common. Big transnational companies focus attention on differentiating their products, whereas smaller companies compete on price to face regional competition.

Technology becomes the cutting-edge of competition that catalyzes changes in the products and processes. Through that, a firm tries to add more and more economic value to its products. This is equivalent to an exclusive access to a rare resource which is not available to the competitors. The company thus acquires ability to produce products either of superior value or at lower costs. It is through such a distinctive product offering that a firm can transform from comparative advantage to competitive advantage in the market place. That would also result in superior financial performance from innovation rents that the company would derive.

The firms derive significant economies of scale from processing. With technology not being a constraint any more in determining the size of the processing plants, firms will be preoccupied with ensuring round the year access to raw materials for processing and markets for selling. This is where controlling origins and destinations will become critical. In the case of soya, isolated soya proteins and lecithin are already important value-added products.

MNC DOMINANCE

While the producers of edible oil compete with each other at commodity level in the overall framework of comparative advantage, the global trade in edible oil is dominated by a few multinationals. Their business is rooted in matching demand with supply thereby linking production with consumption. On one hand, they promote and control production and on the other hand, they transport exports to areas having deficits. Faced with increasingly stiff competition on home territories that offered limited opportunities for market expansion, MNCs expanded their operations abroad to profitably trade in enormous surplus production on hand. Asia became the destination. The Asian economies were booming, the Asian markets had high potential and the Asian consumer was acquiring more and more purchasing power. But these markets were already dominated by local companies who yielded enormous market clout and were already growing beyond their home markets. Charoen Pokphand (CP Group) is an illustration. This

Thai conglomerate having grown from a national corporation had made the biggest single foreign investment in China till 1994.

So the competition is between global multinationals and regional corporations who are trying to be global today. There is no single Asian style of business but the regional firms do enjoy some advantages in term of speed in making decisions and familiarity with local situations. One has to closely see the competition between Cargill and Willmar to recognize their different styles of corporate management. The Asian firms who earlier were merely investors in foreign lands had already grown further by hiring professionally trained managers who had local experience. Increasingly there is more and more professionalization of management. On the other hand, the Western firms are experiencing dilution of their technological edge. They recognized that competitiveness in the market place is determined by the way trade is organized, conducted and controlled. Linking origination with consumption, efficiency in all segments of supply chain is a key driver of competitiveness. Asset acquisition through investment in related infrastructure, with an eye on controlling future gateways, has emerged as a pivotal strategy in expansion and diversification⁸.

During the last two decades, competition among agri-business firms has become fierce – each trying to garner larger and larger portion of the produce and exploit more and more potential for value-addition. Through a process of consolidation, the world trade is now dominated by ABC, for ADM, Bunge and Cargill. These companies have diversified

⁸ Observations on MNCs and Bunge are from West, Jonathan (2003). *Bunge Limited*. Harvard Case Study, January 2003. Also see Bunge (2003). *Life grows with us. Annual Report*.

business lines, enormous financial clouts and organizations that integrate at different functional levels across globe. They operate in oilseed processing, wet corn processing, wheat milling and other products and services, including grain trading, transport, financial services and risk management. They compete and simultaneously also do business with each other.

Exits, Acquisitions and Mergers⁹

In agri-business, acquisition of business enterprises and physical assets is necessary to address scale and efficiency issues, reduce logistics expenses, enhance competitiveness and facilitate expansion. MNCs have consistently followed the route of acquisitions and mergers to grow. A small number of multinational corporations now control the soya economy of Brazil and exert enormous influence on global trade. The small- and medium-sized national companies have only concentrated on crushing. Bunge became the largest soyabean processor and the second largest exporter of agricultural products in Argentina after it acquired an Argentinean agri-business firm in 2002. In the same year, the company acquired Cereol in France which give the company an enormous access to markets in Europe and Asia. Having heavily invested in supporting infrastructure, Bunge has a vast network of physical assets: grain elevators, processing plants, trucks, barges, railcars and sales offices. It operates a number of strategically located port facilities in the United States, Brazil and Argentina. Bunge source raw and

processed oilseeds and grains from the company's operations in the United States, Brazil, and Argentina and market them worldwide. The products include soya protein meal to poultry feed manufacturers in Asia; edible vegetable oil to food manufacturers in the Middle East; and corn and wheat to millers in the Mediterranean. Ocean vessels are chartered to carry the products across the globe. Bunge is also now in the business of logistics taking positions in freight futures. Their present business strategy is focused on asset acquisitions in destination countries particularly Asia.

Cargill has grown stronger through its nearly 140 years of history. It has tight control over fully dedicated or owned infrastructure and has turned its attention to managing logistics for cost leadership. Cargill first struggled to become a major international merchandiser and processor of agricultural and other commodities. Cargill focused on grain-and-oilseed exports and the development of a transportation and grain elevator system for global trading. By the end of the 20th century, Cargill was active throughout the agri-business chain but its strength continued to be in commodity processing. The consolidation and tightening commodity margins led to a shift towards logistics. Cargill aggressively leveraged its capabilities in commodity trading, supply chain logistics and processing into non-food businesses. The company continues to be trading in futures and financial instruments that include trading financial assets, risk management services and trade, and structured finance.

Joint Ventures

Companies like ADM, Bunge and Cargill face strong competition from regional players. These companies stand out for their strong financial positions, sound strategies, sharp acumen for right timing and knack for understanding government and politics. Having heavily invested, throughout Southeast Asia and in mainland China, they have acquired strong competitive positions in agri-business, particularly in poultry industry, feed milling and commodity processing, including soyabean, wheat and especially palm oil. They are constantly building domestic processing capacities in China and India. Their presence in China, the world's largest meat consumer and producing nearly 40% of the world's total meat, is a force to reckon with. Thus, the international companies, such as ADM, have entered joint ventures with these regional groups to penetrate the Chinese and Indian markets. Using their regional supplies and augmenting them with purchases from ABC's grain and oilseed exports from North and South America, the regional groups are strong competitors as well as important customers.

The business models that are emerging in some of the Asian countries are founded on joint ventures with local partners. The partners being wooed have presence in local business for long time with established valuable distribution channels and in some cases even the brands. Being local they understand local business and consumers better. Whether this will be a mere entry mode or the spirit of joint venture will survive for long would largely depend on

⁹This section is based on West, Jonathan, *op cit*.

the relative business strength of the parties involved. Mixed results can be expected. The MNCs would get into food product business selectively and only where they could realize synergies in procurement and management of risk. Getting a piece of the food product business would allow them to counter-balance some of their other cyclical agri-business and risks involved.

Production Finance

In order to promote and control production, the agri-business firms are expected to provide several services including crop finances. The emerging importance of contract farming in countries like India is a notable development. With severe restrictions on direct investment in agriculture and a non-existent market for land due to prohibition on legal sale and purchase, the companies are promoting contract farming in order to garner as much produce as they can. The strategy is to create volumes to feed into processing industries that have been acquired by them. In Brazil, credit is scarce and quite expensive. MNCs like Bunge finance crop production but supply fertilizers instead of loaning cash. This ensures application of fertilizers benefiting crop production. The farmers in turn, contract to deliver their harvest of soyabean at the prevailing market price. The link between fertilizer supplies and procurement of produce enables the company to internalize and reduce credit risk. They can even assume that risk for the other input suppliers where volumes involved may be small and as such no interest in produce. Both the fertilizer and soyabean

prices are in US dollars. For the farmers, it is dollar trade all the way protecting them against depreciating value of their national currency, Real.

Managing Information

A company that has large geographical presence and covers many countries needs to link across businesses and regions. As an illustration, Bunge's global marketing model focuses on importance of information in developing competitive strategies and sustaining competition¹⁰. Information is generated from destination marketing offices as they assess the demand and import needs. The origin offices convey their expectations of exportable surpluses under the given market circumstances and price structure. In the company, some economic analysis is done and based on that a system to read global markets is established. The company prepares a customer base in the commodities that they deal with and examine costs against revenues to assess in which way they can be competitive in the market. By recognizing opportunities to boost business, Bunge is able to create value.

Logistics

Trade and transport are inextricably linked. Efficient transport services are a prerequisite to successful trading. Emergence of container technology and multimodal transport concept came from and continues to facilitate growth in international trade. International transport generally implies the use of various transport links (interfaces and

modes), each link corresponding to a transfer, storage or transport operation either in the country of origin, in a transit country, or in the country of final destination¹¹. The developments in modes of transportation, each with a higher level of speed and efficiency, have increased the scope and opportunity for suppliers to operate more and more widely across the globe. Globalization has spurred growth in trade causing changes in production and markets establishing the power of retailers and consumers. No longer are the manufacturers - distributors. Instead, in the last two decades the large retailers are in the driving seat and have brought fundamental changes to the market place. The retailers are adding value to products by placing much greater emphasis on customer service element of distribution.

In today's business environment, customers continuously demand better service, efficient inventory management, lower costs and quicker response. Enterprise can no longer grow and prosper just by continually cutting cost instead they have to grow by investing in supply chains. That is the way to lower the cost, better service the customers in the shortest possible time and maximize profits. During the last 10-15 years, the retail sector in many countries has been at the forefront of logistical innovations. Like their counterparts in manufacturing sector, innovative retailers have recognized the benefits of supply chain management in being able to meet changing customer needs as quickly and efficiently as possible.

The task of building and managing a supply chain is quite

¹⁰ See West, Jonathan, *op cit*.

¹¹ UN, "Comprehensive analysis of the activities of the United Nations system in the field of transport", report of the Secretary-General (E/5947), Economic and Social Council, 2 May 1997, para 34.

complex. In the supply chain model, the key linkages are between procurement and manufacturing and between manufacturing and distribution. Each of these three activities, while part of a continuous process, has a number of critical elements. To build efficient supply chains, customer needs and actual expectation have to be assessed, appropriate value propositions established and relevant strategies formed. Logistics is a key management activity and a part of the supply chain process. It is a technique for planning, implementing and controlling the physical flow of materials and goods and related information that a firm sends, transfers and receives. It involves flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements. The levels of service create value and provide effectiveness while cost cause efficiency. Thus, the logistics management involves coordination across functional areas, synchronization of overall physical flows and permanent interaction and interfacing with all the classic functions of a firm both within and outside. The overall objective is to optimize costs and services.

Information-Based, Value-Added Activity

In the integrated supply chain, the logistics for the distribution system has now become an information-based, value-added activity, providing critical link between the market-place and the factory. Without the smooth flow and transfer of information, it is impossible for a distribution

system to function adequately and effectively. Through the planning process, requirements from the market-place are translated into production requirements and then into material requirements. The product produced from the raw materials procured has to be distributed to the consumer. Efficiently managing the logistics means extending the logic of logistics upstream to suppliers and downstream to final customers. In the framework of their business plans, the organizations need to know what information they require and how would that be generated and used. The task of getting information is now made easier by the online systems which are up to the minute, fast, accurate and quite quick in response times. The processing of information and capsulizing that for use at appropriate levels in the decision-making hierarchy is another requirement.

With strong linkages to the production and marketing functions, logistics is often critical to ensuring proper customer service. Thus, judicious management of logistics would involve integration across functions in an organization and across organizations in the value chain. While the logistics processes affect firm's costs, performance and competitiveness, it is the end-consumer who bears the cost of logistic as part of the product price. Therefore, some sensitivity to consumer expectations is paramount. Globally competitive industries think strategic logistics rather than logistics strategy. Adopting a total approach and integrating logistics into their overall strategy, they plan and manage logistics with the same expertise and professionalism as

the other major areas of commercial and industrial management¹².

Shipping and Freight Rates¹³

The palm oil industry could soon see a wave of further investments in tankers and bulking installations to help in distribution and marketing. That is an important segment of the supply chain where cost leadership and high efficiency is essential to acquire sustainable competitiveness. Many companies can be expected to follow the big multinationals and extend their business to logistics in quest of cost leadership. Already, many large countries who can afford take options on future freight. The relationship between dry bulk and tanker freight markets offers options whether to import oilseeds for processing or the oil and meal. The freight rates have been volatile over the past four years but tanker rates have somewhat lagged behind the dry bulk markets.

The shipping industry is undergoing significant structural changes. Through mergers and acquisitions, the big are growing bigger and the small are shrinking. Trend is for building large size vessels and new port terminals are creating facilities for servicing vessels of those types. The oilseed trade will have to also adapt to these changes. Within the tanker market for vegetable oils, smaller size Panamax and Hnadimax are the preferred vessels but increasingly their availability for chartering is becoming difficult. In short run, a large importer like China exerts significant influence on freight market. China's booming economy has a strong raw material demand that boosts bulk freight

¹² *The Economist*, Competing for Asia, November 26, 1994, p. 15.

¹³ From discussions with shipping managers in Noble Grains and Cargill in Singapore.

rates. However in the long run it would be the supply side availability of suitable vessels that would determine the direction in which the freight rates would move.

There are new regulations to contend with. From 2007, new shipping regulations could reduce the availability of suitable chemical vessels. Two new requirements that would restrict vessel types or discharge of vegetable oils will be in place. One, the soft vegetable oils will have to be carried in double hulled chemical tankers. However, oils such as palm oil, palm kernel oil and palm stearin that are solid at 20°C would be allowed to be carried in single hulled chemical carriers. Second, unlike now, the chemical carriers will not be permitted to pump into the sea unlimited amount of vegetable oil residue. Both the new requirements are aimed at checking sea pollution particularly when oil spills. However, there may not be enough eligible chemical tankers meeting the new requirements to handle the volumes of oil and fats that will be traded. The limited availability of suitable vessels in the face of increasing demand will drive the freight rates higher.

Food Safety

Which oil is safe for human consumption is a question that defies an honest answer. Of different edible oils, by and large coconut oil is considered best but it has been shunned for its fat content. In reality, coconut oil helps the body to metabolize fatty acids better than any other oil, it is an excellent frying medium for certain types of foods and does not become rancid quickly even when

tightly sealed. Coconut oil was the oil of choice in Indonesia until its prices shot very high and it could not compete with the cheaper palm oil. Both were home produced. The coconut oil was becoming increasingly short in supply and so more and more expensive. On the other hand, palm oil was available easily and more cheaply.

The nutritionists say that oils that are loaded with *trans*-isomers and contain mono-diglycerides are bad for human health. The hydrogenation of oil produces *trans*-fatty acids. The *trans*-fatty acids are implicated in large number of ailments including various cancers. For a healthier diet make-up, the medical fraternity has said to have set the upper tolerable limit for *trans*-fatty acid consumption in the human diet at zero. Denmark has banned hydrogenated oils for over four decades and many countries in Europe allow only 4% *trans*-fatty acids in food.

Palm oil has been battling soya oil for long to increase its acceptability and respectability. In the US, a major producer of soyabean, most campaigns against palm oil have focused on the ill effects of palmitic acid as an isolated saturated fatty acid that increases blood cholesterol levels. Palm lobby contends that US consumers source their palmitic acid from red meat, pork, poultry, dairy fat and processed foods that mainly constitute their diet. Palm oil is not the culprit. On the contrary, palm oil has a proven record of neutrality towards plasma lipids and CHD risk¹⁴. While soya lobby has been on the offensive, palm oil lobby has largely concentrated on highlighting the nutritional value and health benefits. But soya is well

entrenched in the world edible oil markets. They too had laboured hard on the nutritional benefits of soya oil.

In the US, the soya industry was faced with large surpluses of soya protein left over from soya oil production. Soya protein was positioned initially as food for the affluent and later focused on health benefits that were vouch safed by sponsored medical research. The Americans loathed the beany taste and gas producing effects of soya. The soya foods were considered neither respectable nor desirable. They were the *hippy foods*, *poverty foods* or *specialty foods for vegetarians*. This limited the market for soya foods. The task on hand was to change this image of soya as a *people feed*. The cash rich soya industry spent vast sums in order to improve the image of soya proteins. With prices low and familiar flavour and texture, soya was positioned as healthy food. Overtime, the soya market in the US developed into two segments. In the upscale segment, the health conscious consumers pay dearly for the supposedly beneficial soya products in the health food gourmet stores. The masses are in the other segment and buy soya oil as hydrogenated oil that has a very deep market penetration. In order to deflect attention from the fact that soya oil contains harmful fatty acids produced on hydrogenation, the soya industry has been using words like *bouillon*, *natural flavour* and *textured plant protein* all meaning soya. In contrast, palm oil was projected as unhealthy and unsafe to consume. Even then, palm oil use in the US has been increasing and is expected to take a quantum jump. This would of course depend on how the US industry reformulates soya

¹⁴ Several easily accessible Internet sites debate the harmful effects of *trans*-fats. The arguments and counter arguments do not settle the issue. Several NGOs in Europe and USA have been vociferously raising contentious issues regarding *trans*-fats produced during hydrogenation. The main thrust of their argument is on food safety and transparency in consumer information.

products to meet the new labelling requirements.

In compliance with FDA ruling and the Food Allergen and Labelling and Consumer Protection Act, effective 1 January 2006, the nutrition label of conventional foods and dietary supplements must declare the amount of *trans*-fat in the product. Simultaneously, the label must also indicate whether the product contains any of the top eight allergens – milk, eggs, peanuts, tree nuts, fish, shell fish, wheat or soya. This law owes its enactment to the effects of food allergy initiative; a New York-based non-profit organization. Trust the NGOs. Armed with new medical research, the NGOs had battled hard for such transparency. The new law is going to directly affect the consumption of soya oil in the US to the delight of the palm oil lobby. However, their gains may not be so quick. Conscious of the fact that it is pitted against a well entrenched and cash rich soya lobby, the palm oil lobby is seeking only a small increase in blending proportions pleading that the oil has a functionality task, to provide the solid fat content in most of the solid fats that the Americans consume. Even that appears difficult¹⁵.

Edible oil is an item of mass consumption. If the oil carries harmful elements and has lost some of its nutritive value, then it should be a matter of public concern. Perhaps the governments in the importing countries should look at import of edible oil from health and food safety points of view. The customs duty could be based on the level of *trans*-fatty

acids or the actual nutrients and then calculated for the quantity imported. That would be an innovative way of earning revenue for the government while simultaneously promoting the cause of the consumers. A Ralph Nader leading a strong consumer movement would definitely push the governments in this direction.

CONCLUSION

The producers of palm oil in Indonesia and Malaysia enjoy a resource-based comparative advantage in production but beyond that they have to compete for markets. They altogether compete with soya oil as well. A host of external factors affect this competitiveness. In this context, the focus is on the industry and the firms in the industry. In their pursuit for creating wealth and enhancing the shareholder value, companies will be pushed into competitive mode. They have not much choice given the pace at which technological developments are taking place particularly in information technology and transportation. The competitiveness in the market place would continue to be determined in a large measure by the way trade is organized, conducted and controlled. Linking origination with consumption, efficiency in all segments of the total supply chain would be a key driver of competitiveness. Access acquisition through investment in related infrastructure, with an eye on controlling future gateways, has already emerged as a pivotal strategy in expansion and diversification. Over time,

transportation would become a key link leading to improvements and higher efficiencies in logistics. Companies will attempt to control as many of the external variables as possible in order to acquire cost leadership while simultaneously offering higher level of service to the consumers. The wide scale adoption of the supply chain models facilitate this and help in establishing cost leadership. The goal would be on increasing productivity.

The firm level strategies will revolve around the key drivers of competition such as control over origins and destinations, value-addition, diversification and management of logistics and risk. Information will be pivotal and a key link. At the originations, MNCs would compete with each other as well as the local and regional players. Those who have strong financial positions, sound strategies, sharp acumen for the right timing and knack for understanding government and politics will have significant advantage over the smaller players. Those who can acquire strong competitive position in the user industries such as poultry, feed milling and processing will also be in strong positions. The competition in future would be fierce and the industries may be restructured with few small firms independently operating at only the local levels. In the emerging model of competition, the companies will compete on the strength of their supply chains. Those who can acquire cost-effective and reliable supply chain will compete better and survive longer.

¹⁵ Kalyana Sundram and Yusof Basiron, Replacement of *trans*-fatty acids (TFA): the use of palm oil as one of the alternate fats in the United States of America, an open letter to US senators, posted on MPOB website.