

Malaysia as an International Halal Food Hub: Analysis of Its Competitiveness and Potential for
Meat-Based Industries

Malaysia as an International Halal Food Hub: Analysis of Its Competitiveness and Potential for Meat-Based Industries

by

Pazim Othman and Irfan Sungkar

University of Malaya

Abstract

As outlined in the Third National Agricultural Policy (NAP3), 1998-2010, there is a need to enhance the competitiveness and to increase value-added to the whole supply chain as well as to position Malaysia as an International Halal Food Hub. Its effectiveness as the Halal Food Hub is based on the expectation and beliefs that: (i) Malaysia is recognized as a truly Islamic country; (ii) Malaysia has the raw materials and supporting infrastructure as well as the processing technologies to produce and market the Halal food products; (iii) Halal certification issued by the Department of Islamic Development Malaysia (JAKIM) is recognized world-wide due to its stringent criteria employed and also much sought after by other countries; and (iv) There is a strong commitment from the Government. This seems to be a noble idea but its implementation as a national policy, however, has to be critically assessed and evaluated as it has far-reaching implications for the economy. A study was conducted to assess the market potentials for Malaysian differentiated meat and meat-based products in several markets, viz., Malaysia, Saudi Arabia, United Arab Emirates (UAE) and Europe. The results showed very interesting results, especially in terms of the differences in consumers' perspectives and demand patterns towards Halal food products across nations, and government policies towards Halal products. As the study showed, the major obstacle to Malaysia in achieving the International Halal Food Hub status has been the continuous and extremely low level of self-sufficiency in the domestic production of meat, although facing surplus in the domestic production of poultry, but with a relatively higher cost of production compared to the other ASEAN member countries, such as Thailand. Hence, it would obviously not be cost-effective and competitive for Malaysia to realize the prospects of the Halal food hub by relying on the high-cost domestic products of meat as the raw materials for further processing to the high-end and high value-added Halal meat and meat-based products. Based on the present cost structure, Malaysia would not be able to ensure its competitive edge in the meat and meat-based industries. Nevertheless, Malaysia could still enjoy its competitiveness in this industry by undertaking several strategies such as (i) Outsourcing of raw materials from the most competitive foreign suppliers such as Brazil, Thailand, Australia and New Zealand; (ii) Establishing strategic network alliance such as contract farming activities in other countries with relatively lower production cost / higher competitiveness, and; (iii) Establishing effective cooperation with the other ASEAN countries, especially Thailand, Vietnam or Indonesia within the whole supply chain as fulfilling part of the ASEAN's economic, social and political agenda, most notably the ASEAN Free Trade Area (AFTA).

Keywords: Halal, Halal Food Hub, meat-based, and supply-chain.

1. Introduction

Recognizing the need to diversify the economy, the Malaysian government has initiated a policy to make agriculture sector as the third engine of growth. An adjustment to the agriculture and agro-based industry has to be made in order to make this sector remain relevant and competitive. The Third National Agricultural Policy (NAP3), 1998-2010, was built upon the strategic directions towards a product-based approach with more emphasis on market demand and consumer preferences.

The aim of NAP3 was to overcome the issues and challenges that constrained the progress of the agriculture and food sub-sector, especially since the food import bills and trade deficits continuously increased over the years. The product-based approach will enable a more effective formulation of policy thrust to meet the challenges of increasing competitiveness and enhancing profitability in the agriculture sector (Rahimah, 2000). Through this approach, agriculture and food production will be more specialized to meet the needs of various domestic and global market segments. This will stimulate the production of high quality and high value-added products and facilitates towards product differentiation.

Among the important strategies launched in the NAP3 is the development of Halal food products and other livestock based and input industries. Malaysia is now developing and exploiting the country's potential as an international Halal Food Hub. Capability for inspection, monitoring, standardization and certification for Malaysia Halal standard will be strengthened and this standard will be internationally promoted.

There are various reasons given by the government to position Malaysia as an International Halal Food Hub (MoA, 2004). This includes:

- a. The beliefs that Malaysia is recognized as a truly Islamic country;
- b. Malaysia has the raw materials and supporting infrastructure as well as the processing technologies to produce and market the Halal products;
- c. The beliefs that Halal certification issued by the Department of Islamic Development Malaysia (JAKIM) is recognized world-wide due to its

stringent criteria employed and also much sought after by other countries;
and

d. Strong commitment from the government.

The strategic thrust to become an International Halal Food Hub has been reiterated in every Budget speeches for the last few years. However, the practices and the implementation of various new policies for the Halal food industry, especially for the meat-based processing industry, did not appear to give the right signal and the industry's response has not been encouraging. As an example, since the early 2000's Malaysia still has only one company approved by the European Commission to export processed poultry meat products for EU countries whereas Thailand has 46 companies and even a small country like Singapore has already secured 6 approved companies.

The issues behind that are quite fundamental. As Ariff (2004) stated, it is hard to imagine a competitive agriculture/ food industry in Malaysia as the land and labor, the key factors of production in agriculture/ food industry, are more costly than in the neighboring countries. Under the framework of AFTA and AIA, it will be profitable for Malaysia to concentrate on food manufacturing, importing raw materials from regional sources at lower costs instead of producing them all or parts at home. There is a lot to gain by focusing on high value-added downstream food production and processing rather than on the primary production.

The above argument shows that there is no clear consensus as to what Malaysia actually aimed to achieve. This is a classic example where the ambiguity about the meaning of 'Hub' exists. As there are various concepts of 'Hub', each carries its own impacts and consequences on the government agencies, infrastructures and policy changes. Hence, the analysis of the 'Hub' concept becomes more imperative. Interviews with several meat processing companies reveal that the present understanding of the 'Hub' seems to be a physical domestic production center, aimed to export using local raw materials as much as possible while protecting the domestic market as far a possible from imported processed meat products (Nadzer & Peng, 2005).

Within the context of ASEAN cooperation, the concept of 'Hub' can be extended to incorporate the objective of ASEAN cooperation in trade and investment, particularly with the implementation of ASEAN Free Trade Areas (AFTA) scheme.

2. The Importance of Clear Policy Concept

It seems logical that Malaysia aimed to become an international Halal Food Hub. This is due to lucrative market potentials that it offers, while on the other hand, the country needs to find ways to reinvent its domestic food industry in the competitive age of globalization, especially given the limitation of resources that Malaysia possesses as well as the need to diversify sources of domestic economic growth. Furthermore, the belief as a very good Islamic country means that it has an important intangible asset that should be fully capitalized.

On the question of 'Hub', there seems to be a variety of opinions and sometimes carry huge differences. The important thing is that the concept should be interpreted within the context of the whole food supply chain activities. Otherwise the 'Hub' concept can have broad meanings. This was already shown by Hobday & Lee (2002) in the discussion of the 'Hub' that South Korea could have at present:

- A hub for foreign direct investment;
- A hub for regional headquarters;
- A financial hub;
- A commercial, trading, transshipment and or logistics hub;
- A high technology manufacturing hub;
- A technical support/R&D hub for foreign multi-national companies;
and
- A combination of all or some of the above.

It ought to be stressed again that the different definitions of the 'Hub' concept obviously have a strong bearing on Malaysia's competitiveness towards becoming an international Halal Food Hub. It will have major impacts and consequences for the strategy implementation that the country should adopt, the functions and works of the related government's agencies, the incentives needed and other changes which may occur.

Therefore, the concept of 'Hub' that Malaysia should embark has to be related and consistent with the concept of the food supply chain, in conformity with the current and future trends on global food production and consumption and confirm to the best available accreditation on the food safety and traceability,

adherence to the highest standard of product's quality and match the need of the customer in very export market the country aimed to penetrate. These will have close relations in ensuring the export sustainability of the Malaysian meat products.

This paper will initially discuss the latest and modern concept of supply chain and then relate the concept of supply chain with the several possible 'Hub' concepts that suited the country's policy to become an international Halal Food Hub. It will proceed with an overview of the domestic Halal meat industry, including the industry's present structure, major companies, achievement of food safety, quality and Halal certification and major issues faced by the industry. It will be followed by the overview of the potentials of global meat products. Towards the end, analysis on the ASEAN cooperation and the opportunities for Malaysian Halal meat companies will be presented.

3. The Supply Chain Concept

The rapid economic transformation and company's restructuring has led big companies to appear like a loose alliance, a confederation of small entities, held and bound together through knowledge and competencies, shared values and integrated missions, yet their control, although sometime invisible, seems likely to grow (Fearne, Hughs & Duffy, 2004).

Within the food processing industry, for example, the market share of the top 20 food processing companies in the United States rose from only 24 percent in 1967 to 52 percent in 1997. The same pattern also exists in the case of food retailing which has been happening in almost every country in the world (Baker, 2003).

The modern supply chain concept is not about inter-company competition but collaborative relationship management, procurement and logistical effectiveness and efficiency along the whole supply chain (Christopher, 1996; Moore, 1997; Toma, 1999). The concept has been changing from the first appearance in the 1980's, emanating from the Japanese motor industry based on 'Kaizen' (continual improvement) philosophy. The initial supply chain concept lied on the beliefs of working together with suppliers based on a shared strategic vision to increase the customer satisfaction and hence, performance of Japanese motor industry (Womack, Jones & Ross, 1990).

However, present trend on the supply chain concept is changing, as argued by many scholars (Porter, 1995; Christopher, 1996; Schary in Waters et al., 1999; Toma, 1999). These are:

- a. The most important is that **supply chains compete, not the companies**. This fact has deep and broad consequences on the strategic choices and planning formulation by any organization. Most opportunities for cost reduction, process efficiency and value added enhancement lie at the interface between the whole supply chain players;
- b. The business network, or network alliance, is becoming the new reality of industry. Individual firms are interlinked for supply, services and technical support through chains of connections to other organization. Performance by one unit affects the performance of all units and hence, determines the ultimate performance of such business network as a whole, which itself is a sequence of value adding activities;
- c. The efficient and effective process on the exchange of information (such as, but not limited to the findings of targeted market research, product development, preferences, level of market fragmentation, distribution channel and marketing system, etc) is the core of supply chain competitiveness;
- d. The globalization and interlinked in global economy in terms of the process of procurement of raw materials and other product component with production and market across national boundaries, invoking problems of time, distance, culture and diverse market preferences;
- e. The global openness and trade liberalization intensifies rivalries for global market share, which manifested in product development and price competition. It increases the complexity of supply by expanding product variety, searching for higher efficiency while responding to the rapidly changing consumer demands towards a more convenient product;
- f. The concept of corporation is also changing. Organizations are able to concentrate on a specific activity, or a few activities within the whole supply chain that offer the highest value for them. In some cases, the shift towards the core has led to virtual organizations, where the majority of business operations are conducted through external parties;

g. The role of government is also changing. Government policies can create problems for the effective agricultural and industrial development. Nonetheless, it also can create opportunities and harness the whole supply chain performance. Although the vision may be right, the implementation can create different impacts. There are two (2) examples given as to indicate the importance of government decision whether to do something and intervene, or just do nothing but ensuring a level playing field:

- i. In the case of Danish pork exports, it has been shown that the private sector can offer a flexible, efficient and credible alternative to legislative control on food safety, traceability, quality assurance and product differentiation, which explain the competitiveness and exporting success of the Danish pork cooperatives (Hobbs, 2002; Baker, 2003); and
- ii. On the other hand, direct intervention by the Indonesian government through the creation of new legislation and marketing infrastructure in the middle 1990's for the marketing and distribution of oranges in Kalimantan areas ("Tata Niaga Jeruk") proved to be a failure as it led to abuses and corruptions, lack of coordination and poor market information, etc.

Based on the above analysis on the trends and inherent characteristics of the supply chain, the recent meaning of the supply chain concept gradually shifts towards the source of competitive advantage and the growing emphasis on the development of strategic supply chain partnership within the other global food companies.

Business success will be derived from companies that manage and control the supply chain process to deliver enhanced products that offer high value-added to customers. All companies within the whole supply chain need to be highly responsive and has an efficient operation as the competition nowadays is not between the company vis-à-vis other company, but the company's whole supply chain vis-à-vis other company's whole supply chain.

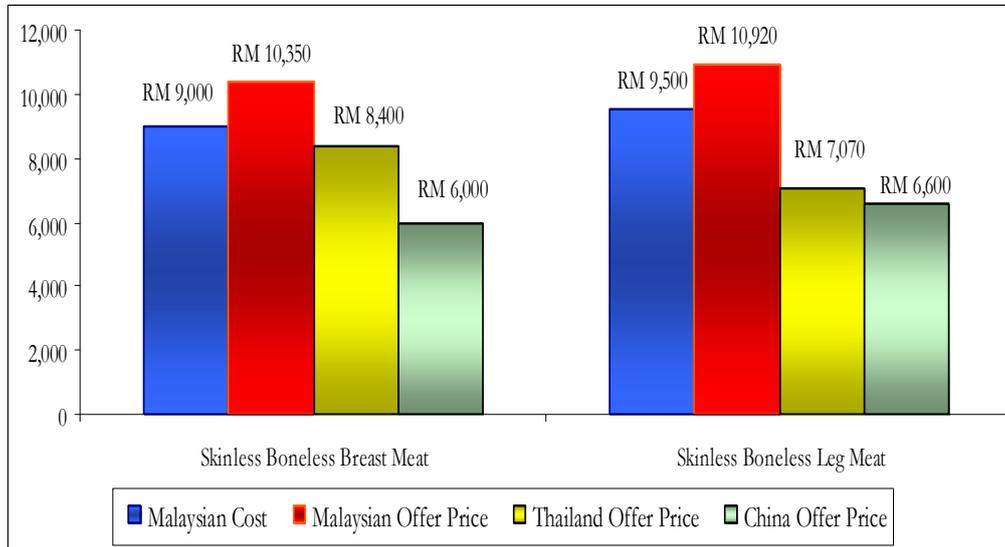
3.1. Trends on the Meat Processing Industry Supply Chain

In view of the present trend and future direction of supply chain within the meat processing industry, several key issues have been identified, where most of them already experienced by the meat producers in the world, including

those in Malaysia. Based on the general trends as discussed by some scholars and professional organization (Council of Logistic Management, 1993; Waters et al., 1999 & interview with Nadzer, Parriera and Peng, 2004), the current and future trends on meat industry supply chain at least should include the following:

- i. Rising awareness and concerns on environmental issues, food safety, traceability, product's quality as well as the issue of animal welfare. In addition to that, there are rising concerns of Muslim on the Halal status and its assurance systems;
- ii. An increase in the importance of logistic management as an important part of the whole supply chain;
- iii. Continuous upgrading of new meat processing technology to substitute and reduce the labor intensity in the meat processing companies. Although certain activities has to be done manually, such as the de-boning and de-skinning of chicken meat parts, some can be substituted with the introduction of new technology/ equipment, such as the MDCM (Mechanically De-boned Chicken Meat);
- iv. The ability to source raw materials and other components from the most competitive sources in the world should be conducted freely but in conformity with the SPS and TBT Agreement of the WTO. The government should not intervene and restrict this ability, especially if the local products are not competitive. For Malaysia, locally produced raw materials e.g. primary meat products such as raw boneless chicken meat is highly priced than the imported products and this is a reflection of its low competitiveness level (Figure 1).

Figure 1
Comparison on the Cost/ Offer Price of Major Imported Chicken Meat
Products: Malaysia, Thailand and China, 2003

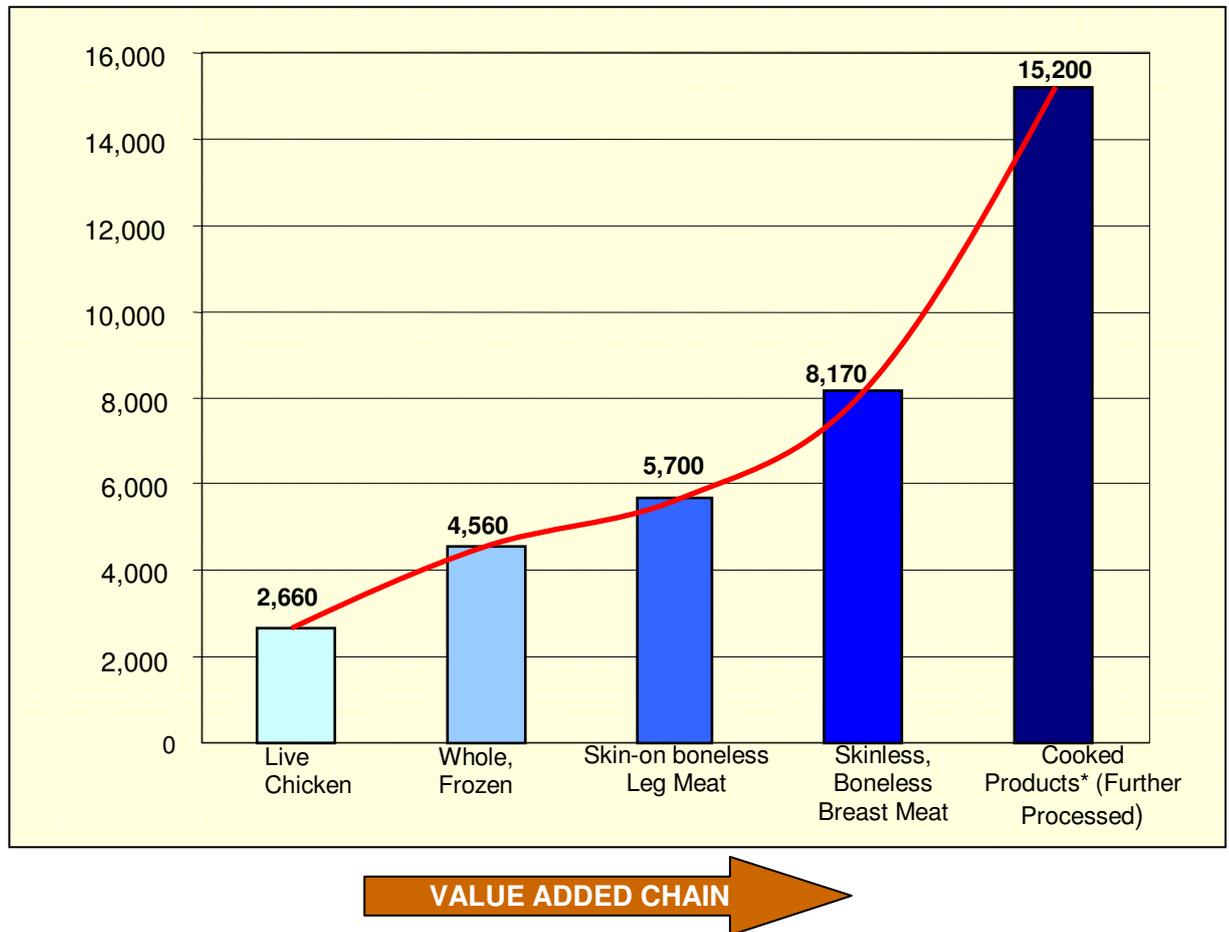


Source: Recalculated based on ‘Study on Impact of the AFTA and the AIA on the Food Industry in Malaysia’, MIDA (2002)

Note: 1. Thailand & China offer price based on C&F Port Klang;
2. Malaysian cost & price refer to typical local manufacturer; and
3. Malaysian offer price is based on the conservative assumption of 15 percent profit margin over ex-factory production cost.

- v. Given the changing situation in the global market-place, growing demand in new/ developing markets and the removal of trade barriers, government must then understand the competitiveness level and the need of the domestic meat processing companies. Competitiveness in one activity within the supply chain has an impact to the other (sequencing) activities within the value-added creation. An example of value-added creation of chicken meat products is from live broiler to the cooked/ further processed and high value-added products depicted in Figure 2.

Figure 2
The Value-Added Chain: Live Chicken to Cooked Chicken Based Products
(RM/ MT)



Source: Sungkar [2004]

- vi. As illustrated in Figure 2, there is a close relationship between raw material import policy and the ability to produce competitive finished products for export. It is possible to outsource to foreign processors, or even move the domestic plant to other countries where the costs of raw materials are much lower.
- vii. For instance, a local poultry meat processor has been forced to outsource most of the orders from an EU member country to a Thailand poultry meat processor to maintain its competitiveness level in the export market.

In practice, given the rapid changes of supply chain concept and the consequences which may create a major shift in the government policies,

implementing efficient supply chain management also requires fundamental changes in the way the meat processing company operates.

An illustration on the whole supply chain processes of the chicken meat processing industry is presented in Figure 3:

As commented by Fearne, Hughes & Duffy (1999) and Walters (2004), the fundamental change in the way of the company operates is not merely a case of doing something better. It requires the meat processing company management to have an open mind towards the alternative ways of getting things done. It also requires the company's management to re-assess their existing core competencies and competitiveness from the perspective of the whole supply chain that they have or they belong to, not merely from where they are now positioned.

4. Various 'Hub' Concepts That Relevant to Halal Food Hub Vision

Based on the earlier discussion on the supply chain, including those of meat products, it can be indicated that there are several 'Hub' concepts that Malaysia can possibly adopt.

4.1. The Definition of 'Hub'

The Longman Dictionary of Contemporary English defines 'Hub' as "The central and most important part of an area, system, activity, etc, which all the other parts are connected to". The example given is that 'Birmingham is at the hub of Britain's motorway network'.

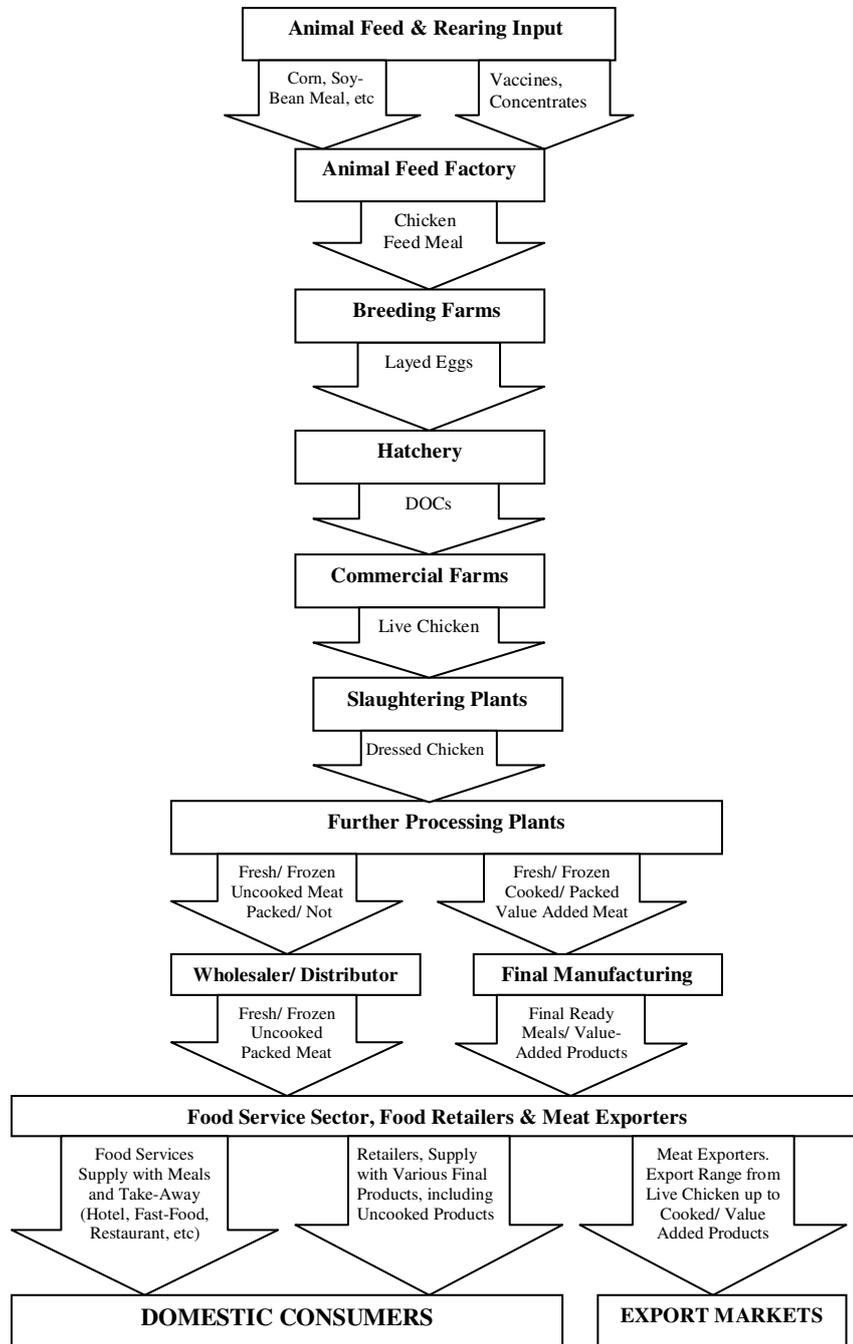
In the discussion of the international and global operations Waters et al. (1999) differentiated between national companies, international companies, multi-national (or multi-domestic) companies and global companies. The differences are as follows:

- i. **National Companies.** Only operate within home market, sending exported products to other organizations/ companies in foreign countries. Example are Dinding Poultry Processing Sdn. Bhd. of Malaysia which export frozen chicken parts to Japan and Hong Kong;

ii. **International Companies.** Located primarily in one country where they control the activities of subsidiary divisions working in one or more foreign countries. The products that they sell are typically about the same, although with some small adjustments in the packing and taste, if absolutely necessary, are undertaken in the most appropriate subsidiary location. Examples are Doux (HQ: France. Subsidiary in Brazil), Charoen Pokphand (HQ: Thailand. Subsidiaries in Malaysia, Indonesia, China, Vietnam, etc) and Grampian Food (HQ: UK. Subsidiary in some other EU countries and Thailand);

iii. **Multinational Companies.** They have loosely linked, largely independent subsidiary companies working in different geographical regions, often adjusting their products to local needs, tastes and preferences. Examples are Nestle (HQ: Switzerland. Subsidiary in most major countries in the world) and Unilever (HQ: Netherlands. Subsidiary in most major countries in the world); and

Figure 3
Illustration of Supply Chain of Chicken Meat



Source: Adjusted from the UK chicken meat supply chain, cited in Yakovleva & Flynn (2004)

iv. **Global Companies.** They see the world as a single market for the same product, and have operations in different geographical locations where they can work most effectively and efficiently. These companies operate with resolute certainty at low relative costs, as if the entire world or major regions of it were a single entity. They sell the same things in the same way everywhere. Examples are Coca Cola and Pepsi Cola of the US.

In terms of 'Hub' concept, the diverse opinions mean that the concept is very flexible depending on what products, where to sell, the resources and bargaining power that the company has, the marketing positioning strategy, brand loyalty, etc. The meaning of 'Hub' is ranging from one extreme concept of local physical production utilizing local raw materials and only exports to foreign distributors in foreign countries. The other extreme is through the flexible network alliance, having a local centralized administrative office to manage operations, either their own operations or through outsourcing with foreign companies in many countries. The local administrative office (the hub), coordinates many activities of its multiple players, facilitates new events and drives the central objective of the alliance set by them.

Some local scholars and experts like Yaakob (2001), Akil (2004) and Wahab (2004) argued that the 'Hub' concept can be elaborated in three (3) meanings, which are: (1) Production Hub; (2) Management Hub; and (3) Control Hub. Yet, there is no detailed explanation on the working mechanism of each concept of 'Hub'. Moreover, it seems that no research has been done to link various possible concepts of 'Hub' with the consequences and impacts on the tasks and works of the related government agencies, especially JAKIM, Department of Veterinary Services, MIDA, Department of Standard, SIRIM and other agencies.

In a much broader context, Waters et al. (1999) presented his view that there are five traditional ways that a manufacturer can meet foreign demand. These are:

- i. Licensing or franchising with foreign manufacturers;
- ii. Exporting finished goods to foreign distributors;
- iii. Setting up a foreign distribution network and exporting to it;

- iv. Exporting parts and using foreign assembly and finishing, often seen as ‘postponement’, usually to adjust to different tastes, preferences, etc. and;
- v. Starting full foreign production facility.

However, the above argument did not clearly describe various options of raw materials sourcing, neither the location of the production/ processing plants. In view of the supply chain context, there are several possibilities on the source of raw materials and plant’s locations:

- i. Production and exports are conducted in local/ domestic plant, utilizing locally produced raw materials;
- ii. Production and exports are conducted in local/ domestic plant, utilizing raw materials from the most competitive sources in the world;
- iii. Production and exports are conducted in the other third country where the overall production cost is lower compared to the overall production cost if it were done locally.

4.2. The Possibilities of ‘Hub’ Concept in Malaysia

Based on the above analysis on the several possible concept of ‘Hub’ and the earlier trends on the supply chain concept nowadays, it is therefore possible for a Malaysian company to embark on Halal Food Production, using the most broader concept of ‘Hub’, which is a collaboration or network alliance, led by a local company that controlled all the decentralized activities everywhere in the world. The local company leveraged on the brand name and the country’s Islamic credentials. In this ‘Hub’ concept, the ‘working’ of the company could be:

- Have corn farms in Brazil or Argentina as both countries are the lowest cost producers of corn in the world (Aho, 2004);
- Have Soybean Meal farms in Brazil as Brazil has the lowest cost to produce soybean meal (Costa, 2003 & Aho, 2004);
- Have chicken breeding farms and commercial farms in Brazil due to their lowest production cost in the world (Costa, 2003 & Aho, 2004);
- Have slaughtering plants in Brazil to produce dressed chicken due to proximity with the farms and also the cost is among the lowest in the world (Aho, 2004);

- Have further processing plants in Thailand (or Vietnam) due to their low labor cost to conduct the manual cutting and de-boning process (Costa, 2003). The further processing plants in Thailand can be utilized as a base for export cooked/ high value-added chicken meat products such as 'Ready Meals' to EU countries due to the large number of EC-approved chicken meat processing plants in Thailand;
- May also have a re-packaging plant in Dubai, UAE, to cater for Middle-eastern markets, Central Asian and North African markets, leveraging Malaysian good standing, image and leadership among the Islamic countries.

For all the above possibilities, we may also note that, not a single slaughtering plant or chicken farm will exist in Malaysia, yet the whole supply chain is controlled by the company head quarter in Malaysia and the profits from all activities are repatriated back to Malaysia. In this sense, Malaysia is an International Halal Food Hub. What the 'true' Malaysian export is the knowledge and brand name, which indirectly shows the image of the country.

Nonetheless, it is crucial that the products are in conformity and meeting consumer trends and concerns as discussed earlier. This includes having a 'world-class' product safety (such as HACCP accredited), high standard of quality (ISO 9001 certified), Halal status (JAKIM Halal-certified), concern on environmental issues (ISO 14001 certified), etc.

If that is the case, several direct consequences will arise. The first question is whether JAKIM can provide Halal certifications for such Malaysian operations overseas. The next is whether such overseas Malaysian-owned operations are entitled to receive various incentives given in various schemes related to Halal Food Production. In short, the most important issue here is that various concepts of 'Hub' have its own consequences.

Based on the above analysis, the strategy for becoming an International Halal Food Hub must be carefully designed and agreed upon by all related parties in the initial stage of the implementation process. Problems may arise in the future when one or several Malaysian companies took the above initiative and asked the government for its commitments in assisting their activities.

5. Overview of the Domestic Halal Meat Industry

This section will discuss the general market analysis for ‘Halal’ meat and meat-based products in Malaysia, including its production, consumption and trade.

5.1 Domestic Halal Meat Production

The total Halal meat production in Malaysia, consisting of poultry meat, bovine meat and ovine meat, reached 709,233.6 tons in 1999 and increased to 905,151.0 tons in 2003 (Table 1). This represented an increase of 27.6 percent during the four years of production.

The total production of poultry meat was the largest among other types of meat in Malaysia during the above periods. Although poultry meat may also consist of duck meat, turkey and quail, chicken meat (broiler meat) still comprises the largest item as chicken is the favorite dishes among the Malaysians. Approximately 94 to 95 percent of total poultry meat production consisted of chicken meat while the rest 4 to 5 percent consisted of duck meat. The production of turkey meat and quail is virtually almost non-existent as the demand for turkey meat, for example, are mostly by Western expatriates and possibly by very few Malaysians.

Table 1

Production of ‘Halal’ Meat in Malaysia, 1999 – 2003 (metric tons)

Type of Meat	1999	2000	2001	2002	2003
Poultry Meat	690,040.0	714,320.0	766,100.0	835,660.0	882,600.0
Bovine Meat	18,300.0	17,501.0	19,159.0	21,092.0	21,546.0
Ovine Meat	893.6	888.0	976.1	984.0	1,005.0
Total	709,233.6	732,709.0	786,235.1	857,736.0	905,151.0

Source: Department of Veterinary Services Malaysia and Statistical Database, FAO

Among the various types of 'Halal' meat production, poultry remains as the most popular, followed by beef/ bovine meat. Production of lamb/ mutton/ goat meat (ovine meat) is very somehow very limited. The market share of various types of domestic 'Halal' meat production in Malaysia in 1999 and 2003 is illustrated in Figures 5 (a) and (b):

Figure 5 (a): Domestic Halal Meat Production, 1999

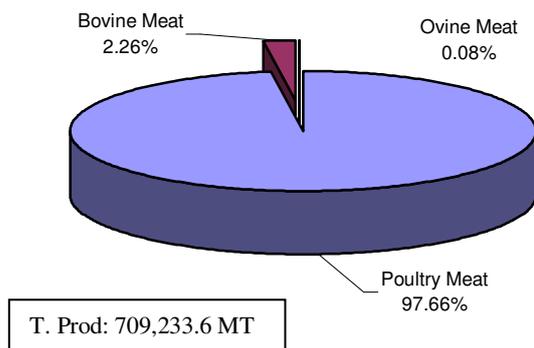
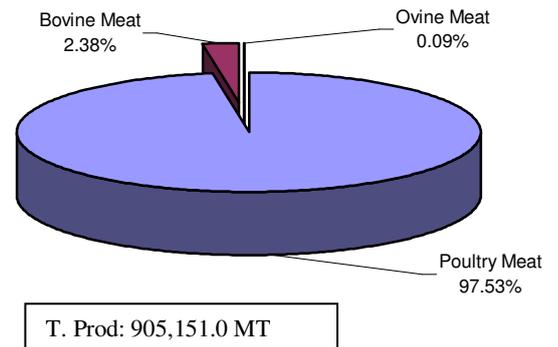


Figure 5 (b): Domestic Halal Meat Production, 2003



5.2 Domestic Halal Meat 'Balance Sheet'

Although the domestic production of (Halal) meat is growing, Malaysia has not been able to improve the level of self-sufficiency for most of its food products, with the only exception of chicken meat (poultry), pork, eggs, and fruits (2005). This generally means that Malaysia is unable to produce sufficient supply of non-poultry meat to cater its own domestic consumption. For example, the level of self-sufficiency in Peninsular Malaysia in 2003 for bovine meat (e.g. beef) was only 17.97 percent while that for ovine meat (e.g. mutton) was merely 5.92 percent. Therefore, a very significant portion of these food items has to be imported from various exporting countries (Table 2).

Table 2

Malaysia: Self-Sufficiency Levels in Food Commodities, 1990-2010 (%)

Commodity	1990	1995	2000	2005	2010*
Rice	73	76.3	70	72	90
Fruits	99	88.9	94	117	138
Vegetables	73	71.6	95	74	108
Fisheries	139	92.0	86	91	104
Beef	30	19.2	15	23	28
Mutton	10	6.0	6	8	10
Poultry	115	110.7	113	121	122
Eggs	109	110.3	116	113	115
Pork	117	104.0	100	107	132
Milk	4.3	3.5	3	5	5

Note: * Forecast

Source: Eighth Malaysian Plan, 2001; Ninth Malaysia Plan, 2006; Ministry of Agriculture, 1991.

In terms of poultry meat, the level of self-sufficiency in Peninsular Malaysia reached 124.24 percent, which means there is an excess of 24.24 percent out of total production than can be exported. But the export of poultry is almost entirely in the forms of live poultry (live chicken and ducks), where Singapore is by far the single largest export destination.

On the other hand, Malaysia has been experiencing continuous deficits in the food trade balance. Our annual food imports accounted for 4-5 percent of total national imports compared to annual food exports of only 2-3 percent. In 2007, our food imports bills soared to RM25,157 million compared to our food exports of RM16,067 million, hence registering a food trade deficit of RM9,090 million (Table 3).

In this regard, a growing portion of chicken meat *has to be imported* to fulfill the growing demand for additional processing by the domestic chicken processing plants. The imports are in the forms of *labor intensive-processed* chicken meat such as boneless and skinless chicken meat. The trade balance of meat and meat preparations is shown in Table 4.

Table 3
Malaysia: Food Industry Trade Performance, 2000-2008
(RM million)

Year	Food Import (RM million)	Food Export (RM million)	Food Trade Deficits (RM million)
2000	12,102	7,685	4,417
2001	13,201	7,889	5,312
2002	13,577	8,777	4,800
2003	13,870	9,916	3,954
2004	17,873	11,668	6,205
2005	19,316	12,444	6,872
2006	21,561	13,427	9,134
2007	25,157	16,067	9,090
2008 (Jan-July)	14,729	9,414	5,315

Source: Economic Report (various issues)

Table 4

Malaysia: Trade Balance of Meat & Meat Preparation*, 1997 – 2003 (RM Million)

	1997	1998	1999	2000	2001	2002	2003(p)
Total Exports Value	73.04	87.61	87.33	50.58	74.07	96.01	114.87
- <i>Poultry Meat</i>	50.11	58.57	56.72	34.77	61.28	79.43	95.03
- <i>Bovine Meat</i>	9.98	10.24	7.74	8.90	9.60	12.44	14.89
- <i>Ovine Meat</i>	0.24	0.11	0.03	0.04	0.20	0.21	0.22
- <i>Other Processed</i>	12.71	18.69	22.84	6.87	2.99	3.93	4.73
Total Imports Value	444.90	420.34	495.17	605.22	668.20	690.44	807.47
- <i>Poultry Meat</i>	39.58	35.45	78.12	79.18	117.43	119.17	183.08
- <i>Bovine Meat</i>	317.79	304.97	299.24	393.00	388.86	394.19	447.83
- <i>Ovine Meat</i>	66.21	69.76	68.72	72.27	91.26	102.58	97.06
- <i>Other Processed</i>	21.32	10.16	49.09	60.77	70.65	74.50	79.50
Meat Trade Deficit	- 371.86	- 332.73	- 407.84	- 554.64	- 594.13	-594.43	-692.60

Source: Department of Veterinary Services Malaysia and External Trade Statistics, Department of Statistics Malaysia

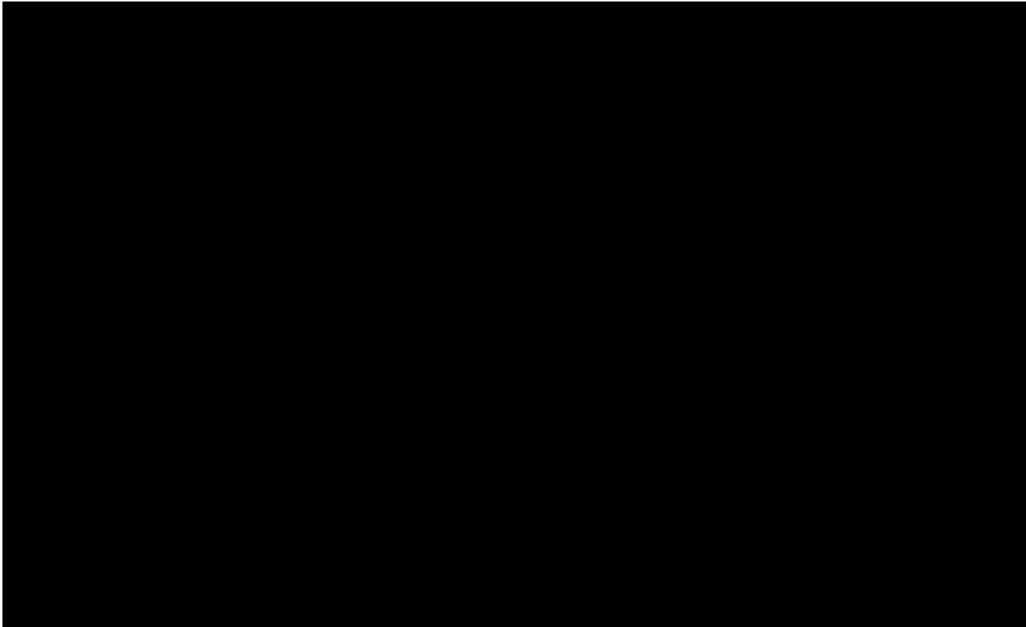
Note: * preliminary data, ** Consists of beef, buffalo meat, lamb/ mutton, processed poultry meat and meat preparations (sausages, etc)

The trade deficit for meat and meat preparations increased from only RM 371.86 million in 1997 to RM 692.60 million in 2003, representing an increase of 86.3 percent during the period (Table 4). Since 2000, the annual deficits always reached more than RM 550 million and even peaked at RM 692.6 million in 2003 (Figure 6).

Out of the total 'Halal' meat imports, bovine meat, especially imports of buffalo meat from India was the largest item, followed by (processed) poultry meat and ovine meat. On average, the import share of bovine meat imports to

total Malaysian 'Halal' meat imports was 59 percent in 2003, followed by poultry meat at 18 percent share while import share of ovine meat was only at 13 percent.

Figure 6: Trade Balance of Halal Meat and Meat Preparations, 1997–2003
(RM Million)



Source: Department of Veterinary Services Malaysia and External Trade Statistics, Department of Statistics Malaysia

5.3 Major Meat Processors/ Manufacturers

Although basically meat processors utilized mainly two different type of meat, i.e. chicken meat and/ or beef in their processing line, it is difficult to differentiate them based on the type of meat that they uses. The only exception is that there are processors/ manufacturers that processed only chicken meat products. They are also normally runs a vertically integrated operation and widely known as poultry integrators (e.g. Leong Hup, Charoen Pokphand, Sinmah, Dinding Poultry and KFC/ Ayamas Food Corp).

The other group of companies processed both type of chicken and bovine meat (beef/ buffalo meat). It is quite rare to find local processors that processed lamb/ mutton products.

Based on the database of Federation of Malaysian Manufacturers/ FMM as well as interviews with several industry players, there are at least about 15 to 20 major meat manufacturers/ processors in the Klang Valley area, involving largely in the production/ processing of chicken meat-based products.

It can be noted that it is not necessary for the vertically integrated to have the most accreditation and certification related to food safety, quality and Halal status. Out of those companies provided in the Table 3, only two (2) companies (e.g. MacFood Services Sdn Bhd and Prima Agri Products Sdn Bhd) have food safety accreditation in the forms of HACCP certificate (Hazard Analysis and Critical Control Points) from foreign certifying bodies (RWTuV of Germany) as well from the Ministry of Health Malaysia. Moreover, there is only one (1) company (Prima Agri Products Sdn Bhd) approved by the European Commission to export processed poultry meat products for the EU markets.

5.4 Major Issues of the Domestic Halal Meat Industry

There are several issues faced by the domestic Halal meat industry. These are, among others:

- **Raw Material Outsourcing for Further Processing.** As discussed earlier the highly priced locally produced raw materials are threatening the overall competitiveness of further processed/ high value-added meat products, especially in the export market. Therefore, it is important that the industry has the ability to source the raw materials from the most competitive sources in the world.

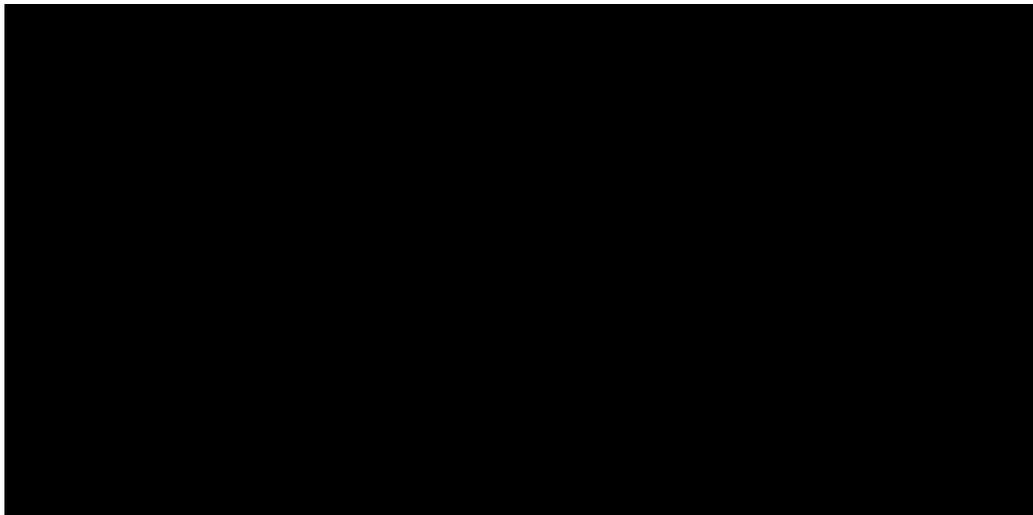
For example, the apparent production cost comparison of 'satay' and the similar product (e.g. Yakitori in Thailand) using locally produced raw materials is higher than if the raw materials are imported from the lower-cost sources. The impact on the ability to source from the most competitive/ low-cost countries is illustrated in Figure 7.

By utilizing local raw materials e.g. boneless chicken meat, the corresponding overall production cost is estimated to reach RM 16.43/ kg. On the other hand, using imported raw materials from Thailand will reduce the production cost to RM 13.27/kg while using Chinese boneless chicken meat will even lower the

overall production cost to RM 12.60/ kg. Moreover, if all the production process is outsourced to Thailand, the overall cost declines to RM 11.50/ kg, due to lower labor cost in Thailand. This shows that the ability to source raw materials for further processing from the most competitive/ lowest cost parts of the world is among the most crucial elements that determines its price competitiveness.

Figure 7

Differences on the Production Cost of 'Satay' Using Different Sources of Raw Materials (Boneless Chicken Meat) location of Production Process (RM/ Kg); 2003



Source: Recalculated from MIDA (2002) and information from leading domestic meat and meat-based manufacturers

Note: Production cost of 'Yakitori' in Thailand using Thailand's Locally Produced Raw Materials (Chicken Meat)

- **Labor Cost.** The labor cost in Malaysia is relatively higher and has the unfavorable supply situation compared to the other ASEAN countries, as shown in the case of Thailand as presented in Figure 7. Therefore, a way must be found to overcome the problem of high production cost of certain labor-intensive meat products.
- **Halal Food/ Meat Market** – What Products and Where? Although the size of global Halal food and meat based market is relatively big and untapped by Malaysian manufacturers, the main issue here is what are the products shall be developed in Malaysia and in which markets can Malaysian products be competitive

- **Harmonization of Regulation and Enforcement Activities.** There is an urgent need to harmonize the existing regulations and enforcement activities throughout the country for effective control and in ensuring the authenticity of safety, quality and Halal status in any meat-based and other food products.
- **Market Access.** Meat based products require Government-to-Government arrangements to ensure the condition and terms for market access of domestic products can be agreed;
- **Effectiveness on Standard Enforcement.** Malaysia being a respected Muslim country is in a good position to be an international Halal food hub. Nevertheless, Malaysia needs to address many technical and practical aspects on the production and distribution of safety and high quality Halal meat products. It is a challenge for Malaysia to have a comprehensive and mandatory rules and regulations, incorporating efficient monitoring system in the production of Halal meat and meat-based products. The rules and regulations not only shall incorporate Shariah law but also a 'world class' standard of quality, safety and traceability assurance system.

6. Overview of Global Demand For Halal Meat Products

The total global demand/ consumption of all types of non-pork meat (poultry, bovine and ovine) had reached 135.58 million tones in 1999 and increased to 150.08 million tones in 2003, accounting for an average annual growth rate of 2.6 percent (Table 5).

Table 5
Global Meat Consumption 1999 – 2003 ('000 Tones – Carcass Weight Equivalent)

Type of Meat	1999	2000	2001	2002	2003	% Increase	Avg. Annual
						1999-2003	Growth Rate
Poultry Meat	65,524	68,934	71,311	74,473	76,106	16.1%	3.8%
Beef/ Veal (Bovine Meat)	59,158	59,975	58,903	61,201	61,913	4.7%	1.2%
Lamb/ Mutton (Ovine Meat)	10,895	11,263	11,427	11,754	12,057	10.7%	2.6%
Total	135,577	140,172	141,641	147,428	150,076	10.7%	2.6%

Source: Statistical Database, FAO

Among the three types of meat, the demand for poultry meat was the largest, accounting for about 50.7 percent of total meat demand in 2003. This was followed by the demand for bovine meat (41.3 percent) share and ovine meat (8.0 percent) share of total meat demand in 2003. In addition, the demand for poultry meat has also increased at the highest rate with an average growth rate between 1999 and 2003 of 3.8 percent annually, followed by ovine meat (2.6 percent) and bovine meat (1.2 percent).

The forecast of total and Halal meat demand in the world is computed by multiplying the population projection for every country with the poultry, bovine and ovine meat consumption per-capita for every country in the world. Then an average annual growth rate for every type of meat in every region for 2005 – 2020 will be used, which is based on past growth rate and average demand trend to determine the future demand growth rate.

6.1 The Importance of 'Cross-Over Markets'

Based on the conventional understanding of the concept of Halal food, the size of the total global Halal food market was normally calculated by multiplying the number of Muslim with their annual per-capita consumption of food or

with an estimated annual expenditure for food. This method is frequently used to determine the total size of the market, which is normally cited to be around USD 150 billion per year. However, the more appropriate method is to use the total global population as a base in determining market potentials.

Halal meat is a universal product which should not only be targeted for the Muslims, but also for the non-Muslims. This is consistent with the basic principal stand of Islamic teachings, which is directed **for the benefits of all the living-kinds** in every corner of the world (*Rahmatan Lil-Aalamin*). Hence, it is not quite right to argue that Halal meat is only for the Muslims. Halal meat should be viewed as a 'universal food', which is suitable for consumption by everybody in every corner of the world.

This is particularly relevant for manufacturers of high value added meat-based products. As explained earlier, any Halal meat-based products which incorporate high or '*world-class*' standard of hygienic, sanitation, food quality and safety requirements should also be targeted for non-Muslims at which **their total number** and **total purchasing power** are practically much larger. The advantage of Halal meat is that almost entire populations in the world are able to consume it, while the non-Halal meat cannot be consumed by the Muslims. Therefore, Halal meat products, theoretically have larger market potentials.

6.2 Cooperation Among the ASEAN Member Countries

There are numerous cooperation existed among the ASEAN member countries. However, this paper will discuss mainly the trade cooperation between the ASEAN member countries. However, it should be noted that other forms of cooperation, such as in the investment area (ASEAN Investment Area/ AIA) could also be an important mean in attracting foreign direct investment to ASEAN countries, especially within the context of intense competition from China as one of the most important destination for foreign investment in the world.

The ASEAN Free Trade Area/ AFTA launched in January 1992 with the following objective:

- To liberalize trading in ASEAN by progressively removing intra-regional tariff and ultimately, non-tariff barriers;

- To attract foreign investors to the region by presenting a larger coordinated market; and,
- To enable ASEAN to adapt to the changing international economic conditions, in particular to the rise of regional trading arrangements amongst the developed countries.

The Common Effective Preferential Tariff (CEPT) scheme is the main mechanism to achieve a free trade area in ASEAN. The scheme sets out comprehensive timetables for the gradual reduction of intra-ASEAN tariffs on nominated goods to 0 - 5 percent over a ten years period.

While the CEPT is intended to apply to all manufactured goods, member countries are allowed to exclude sensitive products such as unprocessed agricultural products. These products are to be phased in at applied rate in 2001 and not later than 2003.

The list showing the product inclusion list, temporary exclusion, sensitive list and general exception lists is depicted in Table 6.

Table 6
CEPT Package Showing the Inclusion, Temporary Exclusion, Sensitive and General Exception Lists by Tariff Lines and Country

Country	Inclusion List	Temporary Exclusion	Sensitive List	General Exception	Total	%
Brunei	6,276	-	14	202	6,492	10.10
Cambodia	3,115	3,523	50	134	6,822	10.61
Indonesia	7,158	25	4	65	7,252	11.28
Lao PDR	1,247	2,142	88	74	3,551	5.52
Myanmar	2,386	3,016	51	49	5,472	8.51
Malaysia	8,859	218	83	53	9,213	14.33
Philippines	5,571	35	62	27	5,695	8.86

Singapore	5,739	11	-	109	5,859	9.11
Thailand	9,103	-	7	-	9,110	14.17
Vietnam	3,573	1,007	51	196	4,827	7.51
ASEAN	53,026	10,003	370	908	64,293	100.0
Percentage (%)	82.46	15.56	0.58	1.41	100.00	-

Source: ASEAN Secretariat, Jakarta

6.3 Gradual Elimination of Non-Tariff Barriers

In addition to the existence of tariff rates, there are also non-tariff barriers among the ASEAN countries. Article 5 of the Agreement on the CEPT Scheme requires that each member country in ASEAN shall eliminate the Non-tariff barriers on products within a period of five years after those products have begun to enjoy the CEPT concessions.

Non-tariff barriers, by the definition as given by the ASEAN Interim Technical Working Group on CEPT for AFTA include the following:

- i. Para tariff barriers that can be distinguished as customs surcharges, import surcharges, additional charges and decreed customs valuation; and
- ii. Price control measures such as administrative price fixing of import prices, voluntary export price restraint and variable charges measure.

In terms of quantitative restrictions and custom barriers, for the case of Malaysia, the import permit from the Department of Veterinary Services (DVS) is necessary for the importation of chicken meat and other meat products.

In the case of Indonesia, importers of food products, including meat products must be registered with the Ministry of Health. Certain products could be imported only by registered importers designated by the Minister of Trade and Industry.

As for the technical measures and other custom formalities, almost all the non-tariff barriers applicable for the poultry and poultry products in the five selected ASEAN countries fall under the heading of 'Technical Measures'. These are mainly the common and standard requirement imposed largely for health reason including product marking, labelling and packaging requirement. They are not a non-tariff barrier as such and are expected to remain in force, in line with Sanitary and Phyto-Sanitary (SPS) as well as Technical Barriers to Trade (TBT) agreement under the World Trade Organization (WTO).

6.4 Impacts and Potentials of AFTA for Malaysian Manufacturers

From the recent development in the regional Halal food market, it can be seen that the awareness to penetrate Halal food market is growing especially in non-Muslim ASEAN countries such as Thailand and the Philippines. In the BIMP-EAGA cooperation, plan is reportedly underway to develop an integrated chicken meat production line for export purposes, especially to the Middle-East countries.

AFTA will definitely bring in greater number of food and meat products from the ASEAN countries to Malaysia and vice versa. Malaysia in the context of Halal food will not have major problems in accrediting Halal status on its food products since it has already adopted a policy of Halal status on its food production. Thus, its credibility is high among the Muslims in the region. Furthermore, Malaysia has been exercising it for quite some time.

Therefore, Halal meat products from Malaysia will not face much problem in penetrating the ASEAN's Muslim market and also to export markets beyond ASEAN given the right products produced through the most competitive supply chain. Malaysia appeared to have much better position compared to most ASEAN countries, except Thailand in the context of leading the production and distribution network.

A good example is the case of a subsidiary of one of the largest vertically integrated poultry companies in Malaysia (Leong Hup Holding Berhad), which operates in Indonesia (PT. Leong Ayamsatu Primadona). The Indonesian subsidiary is progressing well and currently ranked among the top five producers of Day-Old-Chicks (DOC) in the country.

7. Conclusion

This paper discussed that various concept of Hub should be analyzed within the context of the whole supply chain in producing Halal meat-based products. Globalization and openness in almost every part of the world means that competition exists not only between company vis-à-vis other companies, but between supply chain vis-à-vis other supply chain. It is therefore imperative for Malaysian Halal meat companies to develop a network of strategic alliances with the most competitive companies to conduct certain specific or combination of specific activities, wherever they may be. Malaysian companies must find a way to find their niche products and markets.

For export market penetration in Muslim countries, leveraging on the good image as Islamic countries can be a good option, although this may neither be sustainable nor appropriate for the cross-over (non-Muslim) countries, which already showed to having relatively larger market potentials, such as in the case of the European Union countries.

The Malaysian Halal meat product's competitiveness vis-à-vis products from the other countries appeared to be in the high value-added, high quality, differentiated or niche product using Malaysian own brand name with 'world class' accreditation of food safety and quality.

Under the context of ASEAN Free Trade Area (AFTA) cooperation, as well as the ASEAN Investment Area (AIA) scheme, there are also opportunities to conduct such strategic alliances with other companies in the ASEAN region. Based on the possibility of having a Halal meat production through the broad concept of 'Hub', Malaysian companies should actively take the active leading role in fostering the network alliances, particularly with Thailand due to their much lower labor cost, longer experiences in production, distribution and penetration of export market.

The output from such reverse investment projects can be devoted for the domestic market, to be exported back to Malaysia/ host country or for export to third countries. In terms of meat and meat-based products, among the other ASEAN countries next to Thailand, Indonesia appears to be one of the best possibilities given their huge populations or Vietnam given their much lower labor cost and attractive labor market structure.

Last but not least, Malaysia must strengthen the domestic market infrastructure and government policies. Issues such as raw material sourcing,

effective monitoring of slaughtering and meat processing plants, increasing capacity for inspection, a more targeted and focused product approach, a more active government-to-government approach in opening new market or enlarging market access might need to be exercised in the first place. In addition to that, an overall improvement in product safety, quality, traceability and Halal assurance system must be in place and tested to work well in the domestic market before any meaningful export market penetration can be achieved with great success.

References

- Aho, Paul. [2004]. *Global Outlook for Poultry Products*. Working Paper presented in BASF Conference, USA.
- Ariff, Mohammed. [2004]. *The Drivers of Competitiveness in Malaysia*. Malaysian Institute of Economic Research/ MIER, Kuala Lumpur, Malaysia.
- ASEAN Secretariat. [2005]. Various publications, documents related to ASEAN Free Trade Area (AFTA) and ASEAN Investment Area (AIA). Jakarta, Indonesia.
- Christopher, M. [1996]. *Emerging Issues in Supply Chain Management. Proceedings of the Logistics Academic Network Inaugural Workshop*, Logistic Research Network, Warwick University, Warwick, UK.
- Council of Logistics Management. [1992]. *Future Logistics Directions Questionnaire*, CLM, Oak Brook, USA.
- Costa, Fabiano. [2003]. *The Competitiveness of the Mercosur Meat Industry*. Industry Note: Food & Agribusiness Research, Issue No: 084-2003, Rabobank International, The Netherlands.
- Department of Veterinary Services, Ministry of Agriculture and Agro-Based Malaysia. [2005]. *Import and Export Statistics*, Import Control and Quarantine Section, Putrajaya, Malaysia.
- Department of Standard Malaysia. [2005]. Various Malaysian guidelines and standards related to food safety, quality and halal food product, Putrajaya, Malaysia.
- Fearne, Andrew., Hughes, David., and Duffy, Rachel. [1999]. *Concepts of Collaboration-Supply Chain Management in a Global Food Industry*. Imperial College at Wye, University of London, UK.
- Food Directory [2003]. Federation of Malaysian Manufacturers, Kuala Lumpur,, Malaysia.
- Hobday, Mike. and Lee, You-ill. [2002]. *Korea's Globalization: Can Korea Become a Business Hub in Northeast Asia?* Edith Cowan University, Australia.
- Hobbs, Jill, E. [2001]. *Against All Odds: Explaining the Exporting Success of the Danish Pork Co-operatives*. Centre for the Study of Co-operatives, Department of Agricultural Economics, University of Saskatchewan, Saskatoon SK, Canada.
- Malaysian Industrial Development Authority/ MIDA [2002]. *Impacts of ASEAN Free Trade Area/AFTA and ASEAN Investment Area/ AIA to the Food*

Industry in Selected ASEAN Countries. Unpublished Consultancy Report, Kuala Lumpur, Malaysia.

Ministerial Speech, Minister of Agriculture and Agro-Based Industry. Tan Sri Muhyiddin Yassin [2004]. *Halal Food Concept: Definition and Capacity Building*. Opening Speech at the Malaysian International Halal Food Conference, 15-17 July, Putra World Trade Centre, Kuala Lumpur, Malaysia.

Moor, J.F. [1997]. *The Death of Competition*. HarperBusiness Co, New York, USA.

Porter, Michael, E. [2003]. *Malaysia's Competitiveness: Moving to the Next Stage*. Institute for Strategy and Competitiveness, Harvard Business School. Paper Presented in Conference on Competitiveness, 6th May, Kuala Lumpur, Malaysia.

Porter, Michael, E. [1995]. *Competitive Advantage*. The Free Press, New York, USA.

Rahimah Md Said. [2000]. *NAP3 – A Comprehensive Approach Towards Agricultural Development in Malaysia*. Paper Presented in MANCID Conference, 23-24 November, Malaysia.

Schary, Phillip, B. [1999]. Changing Scope and Direction: Managing the Supply Chain. In: Waters, Donald. [et al.]. *Global Logistics and Distribution Planning: Strategies for Management*. 3rd Edition, Kogan Page Limited, London, UK.

Sungkar, Irfan. [2004]. *Beyond Our Borders: Export Opportunities in the Middle East, Japan and Hong Kong*. Paper Presented in the MEATEC Forum, Livestock Asia Exhibition, 23-24 November, Serdang, Malaysia.

Toma, Darrel. [1999]. *Agri-Food Alliances Which Work: Cooperating to Compete*. Paper Presented in BeefNet Conference, Meat and Livestock Australia, 18 June, Sydney, Australia.

Walters, David. [2004]. New Economy – New Business Models – New Approaches. *International Journal of Physical Distribution & Logistic Management*, Vol. 34 No. 3/4, Emerald Group of Publishing, Bradford, UK.

Womack, J., Jones, D., and Roos, D. [1990]. *The Machine That Changed the World*. Macmillan, New York, USA.

Yakovleva, Natalia. and Flynn, Andrew. [2004]. *Innovation and the Food Supply Chain: a Case Study of Chicken*. The Centre for Business Relationships, Accountability, Sustainability and Society, Working Paper Series No. 20, Cardiff University, UK.

(We would like to express our sincere thanks to the following individuals for their willingness to participate in the interview)

Malaysia as an International Halal Food Hub: Analysis of Its Competitiveness and Potential for Meat-Based Industries

1. Mr. A. Nadzer Idris, General Manager; Prima Agri Products Sdn Bhd, Malaysia.
2. Ms. Foo Peng Peng, Managing Director; Ayamas Food Corporation Sdn Bhd, Malaysia.
3. Ms. Conny Parriera, Group Editor; Asian Agribusiness Network, Singapore/ Malaysia.
4. Mr. Aboobacker A.M, General Manager; EMKE General Trading, Dubai, UAE.
5. Dr. Thani A. Al-Muhairy, College of Food System, UAE University, Al-Ain, UAE.