

POTENTIAL OF SELECTED MALAYSIAN TROPICAL FRUITS IN EUROPE: STRATEGIC FRAMEWORK TO PENETRATE EU MARKET

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ABSTRACT

The purpose of this study is to examine the potential of selected Malaysian tropical fruits in Europe and to suggest a strategic framework to penetrate European markets. An industry survey which included one hundred respondents was used to explore the market structure and tropical fruits positioning. This includes integrating previous research findings related to fruits studies in European market to develop a strategic framework to serve as a guideline for marketing of tropical fruits in European markets. Data analysis consisted of descriptive analyses. It was indicated that world import of tropical fruit was projected to reach 4,300,000 tons in 2010 and this mainly comes from developed countries, and European Union is one of the top importing nations. In terms of tropical fruit export, Malaysia has been the major exporter of fresh star fruit and dragon fruit category. In European market structure, the key channel members active in distributing tropical fruits are large scale importers/wholesalers, importers and large scale retailers. These channel members might deal directly or indirectly with Malaysian tropical fruits exporters. From consumer market segmentation, there are three key segments: supermarket or supermarket chain, European local retailers and open market. This paper covers a previously rather unexplored fresh tropical fruits potential in European markets. It also provides a tropical fruit positioning map. This information can serve as useful guidelines for tropical fruits producers and exporters to support their decision making.

Keywords: Tropical fruits, market structure, fruit positioning, European

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INTRODUCTION

In general, fresh produce will continue to be a key sector for food industry growth due to the increasing consumer concerns for health, nutrition and physical fitness (Reid & Buisson, 2001; Sabbe et al., 2008). It was reported that European consumers' general attitude towards tropical fruit consumption was positive. They believe that tropical fruits are nutritious, healthy, good in taste, attractive and special (Sabbe et al., 2008). The European Commission (EC) is the biggest market for tropical fruit import, followed by the United States. In terms of market demand, United Kingdom is the largest followed by France and Germany (FAO, 2003). It was estimated that the world import of tropical fruits would reach 4.3 million tons by 2010 of which 87% of this demand would come from developed country markets. EC and US markets totalled up to 70% of the import demand (FAO, 2003).

For the European markets, the Netherlands is the major European transshipment point or gateway for imported tropical fruits. Therefore, it is important to understand the tropical fruit demand and market structure via examining the tropical fruit distribution networks of the Netherlands. This information is useful to develop appropriate strategic framework to penetrate the European Union (EU) markets. One of the immediate issues that requires attention is understanding the flow of tropical fruits in EU markets and the tropical fruit market positioning in order to form appropriate strategies in tropical fruit marketing.

Thus, an in-depth understanding of the European market structure and tropical fruit positioning would definitely enable Malaysian growers and exporters better access to the EU markets. This research focuses on achieving the following objectives:

- (i) to explore the market structure of tropical fruits in the Netherlands market;
- (ii) to develop tropical fruit positioning map based on market information; and
- (iii) to recommend a strategic framework to penetrate EU market with regards to selected Malaysian tropical fruits.

LITERATURE REVIEW

This section provides a review of the literature on market structure of fruits in Europe. In this aspect, the demand and supply of fresh fruits in Europe is presented and the distribution channel of fresh produce is illustrated. The second discussion is on fruit marketing and positioning and the final part is on strategic framework of fruit marketing.

Market Structure

Demand for Major Fresh Tropical Fruits in Selected Developed Markets

The Food and Agriculture Organisation of the United Nations (FAO) provides projected data of international demand for tropical fruits in the major developed markets (i.e.

EC, US, Japan, Hong Kong). The forecast assumes that all fresh fruit imports are for consumption purposes since the fresh product is perishable and cannot be stored over time. The projected import volume only reflects on the imports and potential consumption in developed countries. This volume is much lower than the world production of tropical fruits because most consumption of tropical fresh fruits occurs in those developing countries such as in Asia, Pacific and Latin American countries that produce them.

Furthermore, the demand for fresh tropical fruits also depends on a few factors such as availability of supply, seasonal marketing activities and retail prices. Analysis of world tropical fruit production indicates that generally, a producing country tends to specialise in one or few demand segments. For example, India focuses on marketing mango and papaya and Thailand on pineapple. It is revealed that price and quality are the main factors that influence demand for major tropical fruits (mango, papaya, pineapple). Recently, there is a downward trend of pricing as supplies expanded, diversity of sources and competition increases. Prices vary widely by variety and season. During off-peak seasons such as winter, fruit prices are usually higher. In terms of marketing strategies, there is an effort to improve the regularity in supply flows. For instance, papaya import is also triggered by a larger and more constant availability of supplies from exporting nations in Latin America and the Far East.

On the other hand, novelty purchasing tends to influence consumer demand for minor tropical fruits such as durian, rambutan and mangosteen. In addition, factors such as income and population growth as well as consumer trends also have an impact on the import demand for tropical fruits.

Table 1 summarises the projected world import of major fresh tropical fruits. It is forecasted that the world major import/demand of fresh tropical fruits in major developed countries will reach 4.3 million tons by 2010. European markets remain as the top importing nations of tropical fruits, followed by the United States. These two main regions accounted for 70% of import demand of fresh tropical fruits. Nonetheless, the Netherlands is the main European transshipment point or import gateway for imported tropical fruits.

In terms of percentage of increase, it is forecasted that mango will enjoy the highest increase of 9.7% compound growth rate over the projection period of 1998-2000. In terms of volume, pineapple import is projected to reach nearly 1.7 million tons by 2010. The top importing nation of fresh pineapple is the United States. Mango import is forecasted at 1.5 million tons by 2010 with US and EU being the top importing nations. Import of mango in European markets is of seasonal larger quantity of import which is between April and June (2nd quarter) and between October and December (4th quarter) of the year.

Table 1: Projected World Import of Major Fresh Tropical Fruits

	Forecast 2010 (000 tons)	Percentage increase*	Top importing nations
World Imports	4,300	8%	
Developed countries	3,800		EU, US, Japan, Canada, Hong Kong
Pineapple	1,752	6%	US
Mango	1,500	9.7%	US, EU (excluding intra-EU trade): France, the Netherlands, UK, Spain
Avocado	712	8%	US, France
Papaya	336	8.3%	US

Note: Forecast compound growth rate at about 8% over the projections period for major tropical fruits. *Base period for forecast: 1998-2000

Source: Medium-term Prospects for Agricultural Commodities: Projections to the Year 2010, Food and Agriculture Organisation of the United Nations, Rome, 2003, (<http://www.fao.org/docrep/006/y5143e/y5143ela.htm>, accessed date 24 April 2007).

Asian Supply of Tropical Fruits to EU

Tropical fruit exports to EU markets are still subject to a few market accepted fruits such as banana, guava, mango, papaya, watermelon, pineapple and starfruit. These fruits are exported to EU either in fresh or dried form. In Asia, the major tropical fruit exporters include the Philippines, Vietnam, Thailand, India, Indonesia and Malaysia. Each country might have their own strengths and they dominate certain tropical fruits as shown in Table 2. The table only shows the relative selected tropical fruit exports of Asian countries to EU not including South America and other non-Asian exporters. This is to provide some comparative indicators between Malaysian exports and its neighbours' performance.

In terms of fruits, fresh and dried banana export to EU is dominated by the Philippines (52.8%) and Vietnam (34%). The major exporters of fresh or dried guava, mango and mangosteen are India (58%) and Thailand (28%). Similarly, papaya export is also dominated by India (64%) and Thailand (31%). Malaysian export of papaya to EU is about 4.7%. Fresh tamarind, cashew apples, jackfruit, lychee and sapodillo plum are fruits exports of Thailand (70.8%) and India (24%). With regard to Asian countries, Thailand is the sole main export of fresh or dried pineapple (97.7%) and fresh watermelon (92%) to EU markets. Malaysian export of pineapple is only 0.3%, similar to India.

Fresh starfruit and dragon fruit export to EU are the major export earning of Malaysia (89.8%). However, through industry survey and market observation, it is believed that out

of this proportion the major export of Malaysia is starfruit. Dragon fruit export is more reflected in Vietnam's export (7%).

The analysis indicated that Malaysia has successfully dominated starfruit export to EU. In addition, there are opportunities for papaya export, fresh or dried guava, mango and mangosteen exports. Malaysia's export of papaya is of small percentage and should be explored further since the market is not currently dominated by any single player. Similarly, the export of fresh or dried guava, mango and mangosteen are yet to be dominated and Malaysia only exports about 1% of these fruits. It is observed that seasonal fruits' demand in EU has yet to be filled.

Table 2: Exports of Tropical Fruits from Asia to EU (2001-2005)

	Philippines	Vietnam	Thailand	India	Indonesia	Malaysia
Fresh & Dried Banana	2,441,300 (52.8%)	1,556,700 (34%)	578,100 (12%)	49,300 (1%)	5,200 (0.17%)	140 (0.03%)
Fresh/ Dried Guava, Mango & Mangosteen	1,173,300 (9%)	291,000 (2%)	3,627,700 (28%)	7,271,600 (58%)	249,400 (2%)	123,300 (1%)
Fresh Tamarind, Cashew Apples, Jackfruit, Lychee & Sapodillo Plum	NA	198,300 (2%)	7,657,700 (70.8%)	2,646,300 (24%)	18,000 (0.2%)	325,000 (3%)
Fresh Papaya	6,800 (0.1%)	24,700 (0.2%)	2,961,700 (31%)	6,103,000 (64%)	NA	511,700 (4.7%)
Fresh/ Dried Pineapple	66,300 (0.6%)	130,400 (1%)	11,296,900 (97.7%)	51,500 (0.3%)	21,300 (0.1%)	46,100 (0.3%)
Fresh Starfruit and Dragon fruit	NA	1,348,300 (7%)	516,600 (3%)	20,500 (0.1%)	19,800 (0.1%)	16,771,100 (89.8%)
Fresh Watermelon	NA	NA	335,500 (92%)	24,700 (7%)	NA	4,500 (1%)

Source: Adapted from series of tables (from 2.1.0 to 2.1.38), Market Access Database, DG Trade European Commission, http://mkaccdb.eu.int/mkaccdb2/statistical_form.htm, Accessed date 28/8/2006

*The data is in quantity of kilogramme (kg) and percentage.

NA = Not Available

Marketing Distribution Channel

Marketers have realised that a good product alone does not suffice to motivate customers to purchase unless they could buy the product when and where they want it. Since few producers sell their products directly to the final users, companies use intermediaries to bring the products to the market. Intermediaries or channel members work together to deliver superior value for the final customers (Hannon, 2005; Liker & Choi, 2004). Consequently, the company's distribution strategy affects other marketing decisions such as company's price objective, sales force and promotion.

Stern and El Ansary (1995) defined marketing or distribution channels as a set of interdependent organisations involved in the process of making a product available for consumption. To deliver superior products to the consumers, channel members must have good relationships with each other to optimise the performance of the entire system (Porter, 1996). For instance, Coca-Cola dedication of working closely with channel members has earned Coca-Cola a 68 percent share of the U.S. soft drink market (Lorge, 1998).

Channel members may include retailers, wholesalers, agents and direct distributors through the internet and mail order. Since marketing is defined as an exchange process (Jain, 2004), a company must determine the type of channel which best meets the seller's objectives and distribution needs of customers. Short distribution channels involve few intermediaries while long channels have many intermediaries working to move goods from producers to customers. For consumer goods, the channels typically have two levels, leading from producers to wholesalers and retailers. Regardless of the differences in distribution channels, marketers must convince their members that they can succeed better by working together as part of a cohesive value delivery system (Grossman, 2005).

A key goal of distribution channel is to develop deep, enduring relationships with all channel members that affect the success of the firms' marketing activities (Liker & Choi, 2004). The relationship aims at building mutually satisfying long-term relationship with key parties – customers, suppliers, distributors and other marketing partners. Many managers realise that the action taken by one channel member can influence the performance of others (Johnson & Pyke, 2000). The costs of poor coordination can be extremely high since inefficient use of warehouse resources, high transportation costs and high inventory are examples of variables that can impede company's distribution channel. The variability increases as the product moves from consumer to grocery store to distribution centre to factory, a phenomenon that is called bullwhip effect (Baganha & Cohen, 1998). Thus, Kulp et al. (2003) highlighted the need for better coordination of members in order to enhance better information flow and generate value in the distribution channel.

Changes in information technology have set the stage for distribution strategy. For instance, Wal-Mart has forced many manufacturers to improve their management of inventories through technology and the internet. Innovation such as electronic data interchange (EDI) makes information easily available to marketing partners and the speed with which it is

available has radically reduced inventories and increased customer service (Moinzadeh & Aggarwal, 1997; Lee & Whang, 1999). Companies see themselves as part of a chain to gain competitive edge by improving the long-term performance of the individual companies and channel as a whole. The strategic competitive advantages to be gained by adopting effective approach to distribution strategy is widely recognised (Mentzer et al., 2001).

Fresh Produce Distribution Channel

Distribution channels are influenced by type of product, type of consumer, and size of business. Several studies were conducted to analyse the distribution channels in Europe. Grant (1995) noticed that the supply industry of European fresh produce is highly fragmented with three common channel members operating at the primary supply and distribution levels. First, marketing boards such as Pear Marketing Board constitute an important part of EU fresh produce import trade. Second, integrated fruit companies such as Fyffes, Chiquita and Dole are large international suppliers that emphasise on added-value, branded products with high degree of vertical integration. Meanwhile, specialist importers make up the largest share of fresh produce supply operators in Europe. These players have strong presence in wholesale markets and take most risk as the supply chain shortens and becomes increasingly competitive.

Neves and Neves (1999) found that changes in the orange distribution channels in Europe are threatening and also bringing opportunities to companies. The study shows that the orange supply chains have changed due to the consumers' needs and desire and the increasing number of innovative products launched by the food industry. Hence, channel members should be segmented to satisfy very specific needs of retailers, customers and others. Similarly, Zylbersztajn and Farina (1998) proposed the recognition of market segments and their respective needs and the organisation of vertical coordinated chains. In Europe, 80 percent of all fresh produce is sold via supermarket chain and discounters. These products are pre-packed and ready for retail outlet shelves and cooling counters. Since these retailers do not get the fruits themselves, specialised fruit trading houses import most of the fresh produce into European countries.

Research on the European distribution channel reveals the need for channel members to adhere to several regulations and industry standards. For instance, since the implementation of European Union (EU) as a single market, imports from non-EU countries are permissible only at the external borders of the EU. Hence, the need of specialist importers since these players are equipped to handle incoming fresh produce in a very efficient manner, with temperature controlled storage, logistics, and transportation (Austrade, 2007). In addition, channel members that supply fresh produce in Europe must follow the main industry standards which include Hazard Analysis Critical Control Point (HACCP), EUREPGAP, and produce marketing standards. EUREPGAP refers to Euro-Retailer Produce Working Group (EUREP) and Good Agricultural Practice (GAP). EUREP represents leading European food retailers and has developed a framework for Good Agricultural Practice, called EUREPGAP, later GLOBALGAP (EUREPGAP, 2008; European Food Safety Authority, 2008; GLOBALGAP, 2008).

Distribution Networks of Fruit in the Netherlands

In the GfK Consumentenpanel Nederland, Frugi Venta Annual Report of 2005 (report on consumer panel for fruit and vegetables purchases) it is made clear that supermarket chains are the main distribution channels of fruit and vegetables. The total volume traded in 2005 was €3.7 billion (refer to Table 3). Out of this, €2 billion is traded through supermarket chains (54%), followed by the daily or flea/open market (32.5%) and green grocer or fruit and vegetables shops (13.5%). Table 4 shows the share of volume in the purchase of fresh vegetables and fruit. The distribution of fresh fruits is mainly through the supermarket chain followed by the open market. Green grocer and home delivery enjoy relatively smaller shares. Therefore, to penetrate the Netherlands market, it is crucial to access the supermarket chains.

Table 3: Value of Selected Market Segments in Year 2005

Market Segment	Euro (in Billion)	Percentage (2005)*	Percentage (Average)
Supermarkets (5000 Outlets)	2	54%	65%
Daily/ Flea Market	1.2	32.5%	20%
Greengrocer/Shops/Fruit/Vegetable Stall	0.5	13.5%	15%
TOTAL	3.7	100%	100%

*2005 percentage is calculated based on the three selected market segment volume
Source: Adapted from GfK Consumentenpanel Nederland, Frugi Venta Annual Report 2005 page 10.

Table 4: Share of Volume in Purchases of Fresh Fruit and Vegetables for Individual Sales Channels in the Netherlands

	Vegetables			Fruit		
	1999	2002	2005	1999	2002	2005
Supermarket	73%	77%	84%	63%	68%	75%
Greengrocer	11%	8%	5%	12%	9%	7%
Home delivery	1%	1%	1%	3%	2%	2%
Open-air market	11%	10%	6%	18%	16%	12%
Other	4%	4%	4%	4%	5%	4%
TOTAL	100%	100%	100%	100%	100%	100%

Source: GfK Consumentenpanel Nederland, Frugi Venta Annual Report 2005 page 10.

Fruit Marketing and Positioning

Sabbe et al. (2008) survey during an agricultural and food fair in Belgium indicated that consumers perceived tropical fruits as nutritious, healthy, good in taste, attractive and special. Consumers' familiarity with tropical fruits and their attitude and intention to purchase tropical fruits depends on socio-demographic characteristics such as gender, place of living and travel experience outside Europe. In terms of consumers' product related experiences with tropical fruits, for example, about 77.5% of the 290 respondents do not know about dragon fruit, and 13.5% know it but have not bought it, only about 10% know dragon fruit and have bought it. For starfruit, 17.5% of the 290 respondents do not know it. About 30% of the respondents know it but have not bought it. Almost 52.5% of the respondents have known it and bought it (Sabbe et al., 2008). It shows that it is important to introduce tropical fruits in European markets. Starfruit was known among European consumers, whereas dragon fruit, was considered an exotic tropical fruit and being unknown for the majority (> 60%) of the respondents. It is unlikely for tropical fruits to become part of European consumers' daily diet without properly planned successful market introduction campaign (Sabbe et al., 2008).

European consumers reported a positive intention to purchase tropical fruits. The key determinants of fresh and processed tropical fruit purchase intention is product familiarity, specialty and attractiveness (Sabbe et al., 2008). Thus it depends on how tropical fruits suppliers position the tropical fruits in the market.

Price was reported as an important variable in consumer food choice; however it was not the principal attribute. Subsequently, when perceived quality is taken into consideration, there was significant association between price and quality. For quality perception, brand name has been recognised as a very important quality cue. Brand assists consumers in their decision making and speeds up the buying process. For the non-brand categories, product labeling and packaging were used as indicators (Chernatony, 1991; Iop et al., 2006).

Branding for fresh fruit is not new. For example, Beverland's (2001) study on the ZESPRI kiwi's brand, reported that branding fresh produce was worthwhile and was an important part of guaranteeing quality and building customer loyalty. The branding must be supported by consistent all year round supply and proper marketing communication. At the beginning, consumers are new towards branded fruit, thus brands' premium cannot be too large. The sellers must make sure that consumers are familiar and recognise the brand and what is the value for brand. Sellers also need to establish relationship with distributors especially international distributors who are also interested in selling branded fresh produce in store to enjoy higher margin. In terms of ZESPRI kiwi study, it was found that consumers were not in particular concern about the origin of kiwi and the method of production. Instead, consumers were relatively price sensitive, but also judge the freshness/quality. It was indicated that consumers were unlikely to pay premium price for brand (nor were brands seen as that important). They may pay premium price for quality, freshness, and in-season fruit. The main reason for kiwi consumption is for health,

nutritional benefit and its taste. Thus, it is important that brand must reflect on high quality, freshness, health and nutritional benefits, and unique good taste as well as convenience.

Branding of fresh produce is still in its infancy stage of world markets. As stated, brand marketing is not a single step, it involves an integrated and comprehensive planning in developing brand leadership which covers the development of a range of consumers, distributors and organisations related to strategies and programmes that include marketing strategies as well as relationship building (Aaker & Joachimsthaler, 2000; Beverland, 2001; Gronroos, 1995). More researches are needed to explain this new phenomenon.

Other factors influence purchase decision and food choice including intrinsic and extrinsic variables. Intrinsic variables such as colour, aroma, flavour, and texture as well as extrinsic variables such as involvement or perceived personal relevance, context or environment, social and financial risk. In addition, consumers' concerns might include nutritional and health information, the production method, ethical, environment, social and origin/certification (Chernatony, 1991; Iop et al., 2006).

Considering the factors related to fruit consumption, fruits suppliers might need to take into account requirements of different market segments in terms of their fruit consumption lifestyle. For instance, in Japanese fruit market, there are three market segments related to fruit consumption: (i) creative/highly involved; (ii) practical/moderately involved, (iii) aesthetic/uninvolved. These segments were identified with regards to fruit shopping, fruit consumption and socio-economic factors. The first segment – creative/highly involved segment represents Japanese heavy-consumers of fruit. They are older and more traditional; direct their energy toward creative usage and patronage of fruit vendors. They enjoy shopping for fruit and possess a great deal of knowledge about it. They look at store displays and sought after other people's opinions. The second segment consumers emphasise on practical value, whereas the last segment – aesthetic/uninvolved represents younger generations, western-oriented and display individualistic characteristics. However, they also emphasise on fruit aesthetics. Although the aesthetic/uninvolved segment is not today heavy consumers, fruit exporters need to explore its potential to succeed in future (Shim et al., 2001).

Strategic Framework of Fruit Marketing

Gyau and Spiller's (2009) study of 101 Ghana exporters to European markets indicated that exporters have a lower perception of quality of their relationship with European retailers compared with the wholesalers and the food service firms. This reflects that the foreign exports from developing countries usually connect with the European importers or wholesalers rather than directly with retailers. The importers or wholesalers are the intermediary in the fresh produce. The Ghana exporters have a better perception of relationship quality for wholesalers compared to the retailers. The relationship quality has positive association with channel members' ability to establish long-term and collaborative relationship. Dealing with wholesaler relatively costs less because selling to retailers might incur higher transaction costs such as cost of preparing contracts, monitoring and

enforcement. Subsequently, established relationship with the channel members throughout the distribution chain is critical especially in fresh produce marketing.

Due to the inconsistency of supply and demand, the concept of market maker needs to absorb the oversupply and engage in product and process management for demand management. International strategic alliances are identified as one of the strategies in penetrating the international market. As the exporters are not familiar with the market conditions, functions and host countries' rules and regulations and networks, the foreign partners enhance the market offering by providing necessary and important services as well as providing relevant market information.

It was identified that there are several issues affecting the marketing of fresh fruit products. Firstly, the increasing concentration of market players have resulted in smaller number of buyers and increased the bargaining power of chain supermarkets. Secondly, reduction of trade and entry barriers means higher competitive market. Suppliers compete in terms of quality and cost when high quality suppliers enter and compete with their advantages of economies of scales. Third, the saturation of market has squeezed profits and produced intense competition (Rabobank, 1995 cited in Reid & Buisson, 2001). Thus, it is difficult for individual players to survive in international markets. Strategic alliances would bring higher chances for market access and long-term sustainability.

Marketing campaign is essential to create market awareness of specific value of fruits in particular preferences towards brands. Brands have become key identity of product so as to assure the products produced are of certain quality and results. Therefore, marketing, research and development are important mechanisms to penetrate foreign markets.

Reid and Buisson (2001) investigated UK and European wholesale and retail fruit buyers in order to identify factors that influence their adoption of apple and pear varieties. It showed the importance of new variety development in competitive markets. The study identified that adoption of new varieties required a strong product quality and ability in supplying volume. It also needs stronger buyer supplier relationships and appropriate launching strategy provided by the suppliers.

Fresh produce industry, similar to other industries requires product development-related research and the speed of research and development process has been increased dramatically. In particular, the international produce markets have become more hostile with emerging low cost competitors. Thus, improving product quality and marketing mix as well as market penetration strategies becomes a necessity (Reid & Buisson, 2001). For example, Malaysian tropical fruits confronted competition from other producing countries such as China, Thailand and Indonesia. It means Malaysian tropical fruits producers and exporters need to work hand in hand to remain competitive in international markets in general, and the European market in particular.

In addition, exporting activities depend on several factors. Factors affecting export behaviour include three main components, namely management's perceptions,

management's qualities and attitudes and firm characteristics. Firstly, management's perception of costs and risks in exporting, export barriers, necessity for external assistance and export profitability were related to firm export behaviour. Management's qualities and attitudes refer to management's awareness of government export promotion programmes, activity in seeking market opportunities and attention to research and development as well as dynamic and change-oriented behaviour. Firm characteristics are firm size, number of years in business and foreign equity participation in the firm (Aksoy & Kaynak, 1994).

Reflecting these issues, Malaysian tropical fruit producers and exporters who are significantly reliant on exporting and selling their produce in competitive European markets would have to understand European markets in further depth to enable them to develop and commercialise new products to sustain steady export growth and business viability. Especially, Malaysian tropical fruits exporters are in a disadvantaged position where marketing and distribution costs are higher due to distances to European markets. This means unique new varieties of tropical fruits are in need to offer an opportunity to stimulate consumers, retailers and wholesalers' interest in the Malaysian tropical fruit category. Therefore, this study would definitely provide some useful information for Malaysian government and tropical fruit industry players.

METHODOLOGY

Combinations of focus group and industry interviews were used to gather data for this study. Researchers suggested that the fresh produce export phenomenon required a framework towards understanding rather than verification of the phenomenon. The comprehending of the process such as distribution process is important in order to achieve export success, thus exploratory and descriptive research design would be appropriate (Aksoy & Kaynak, 1994). Consistent with scholars' suggestion, this study adopted exploratory and descriptive research designs. At the beginning, a focus group study based on purposive sampling technique was conducted among a group of Malaysian fruits suppliers and exporters who are involved in exporting fruits to EU including the Netherlands. Eight fruits suppliers and exporters and five government officials involved in tropical fruits marketing participated in this focus group on a voluntary basis. These people were invited because of their active involvement in tropical fruit marketing, distribution and export. The focus group identified problems and issues in the tropical fruits industry particularly the exportation of fruits to the European market. Findings of the focus group discussion served as a base for developing a structured questionnaire for industry interviews in the Netherlands market.

Industry interviews then were carried out among the Netherlands importers/re-exporters, distributors, wholesalers and retailers to examine the characteristics of tropical fruits distribution activities and to determine the distribution structure of the selected tropical fruits. There are about 400 importers of fruits and vegetables in the Netherlands (Holland Fresh Guide 2005/2006). In this study, 100 fruit distribution channel members (i.e. importers, exporters, distributors, wholesalers and retailers) were purposively chosen as sample for the study. It was planned to have 50 importers/exporters/distributors and 50 retailers or a few more retailers due to the nature of the environment where the number of

retailers are more than importers/exporters/distributors. Ultimately, the study successfully collected 100 samples with 47 importers/exporters/wholesalers and 53 retailers. In addition to interviewing these business owners or managers, observations were made of the distributing facilities, storage of tropical fruits and traditional open market displays of tropical markets to understand the daily function of tropical fruit distribution and market spread of tropical fruits within the local community. This research approach would generate more information that is useful to draw an explanatory framework for the tropical fruit distribution structure in the Netherlands market. The study took approximately six months to complete the secondary and primary data collection, data analysis and reporting. The research was completed in April 2007. Importers, exporters, distributors and wholesalers were grouped in one category due to their overlapping function. Usually, importers also perform as exporters that re-export their imported fruits and vegetables to other EU countries. The same importers also take the role of distributors and wholesalers that encompass the distribution function within the Netherlands.

RESULTS AND DISCUSSION

Sample Characteristics

A total of 100 field interviews or observations were carried out. Large scale importers are channel players that directly import fruits and vegetables from overseas. The large scale importers do not deal with retailers, they mainly supply to wholesalers. Eleven large scale importers that operate in the Netherlands as well as Europe were interviewed. Importers and wholesalers are the second tier in the fruits and vegetables distribution channel. These importers and wholesalers perform both functions of importing fruits and supplying to other retailers in the Netherlands and EU. A total of 35 importers and/or wholesalers were interviewed. Large scale retailers are retailers that operate retail chain and they purchase tropical fruits for their entire retail outlets and these retailers usually have their own private distribution centre or warehouse. Twelve large scale retailers consisting mainly of supermarket chains were included in this study. Meanwhile, retailers are private owned retail outlets or mini-markets. Since retailers are the largest group in the distribution chain, 38 retailers were interviewed based on voluntary participation during the period of data collection. Traditional open markets were also included in order to understand the entire distribution network in the Netherlands market. Four open markets were included in the field observation. Open markets refer to traditional markets that operate on the street without a permanent store. Temporary outlets are set-up on a weekly basis where retailers display fruits, food and other products such as clothing and kitchen wares along the street for sale.

Market Structure

Overall, the distribution channel in the Netherlands is well developed and connected. With reference to Figure 1, the channel members include large scale importers, wholesalers, and exporters. These channel members are the big players in fruits and vegetables distribution in the Netherlands as well as European markets. They usually hold multi-

roles from importing fruits and vegetables from various parts of the world, sourcing from South America, Asia and also local suppliers to re-exporting to European countries and redistributing them throughout the Netherlands. In their distribution network, they supply to other importers, wholesalers, exporters and sometimes retailers (especially large scale retailers like supermarkets).

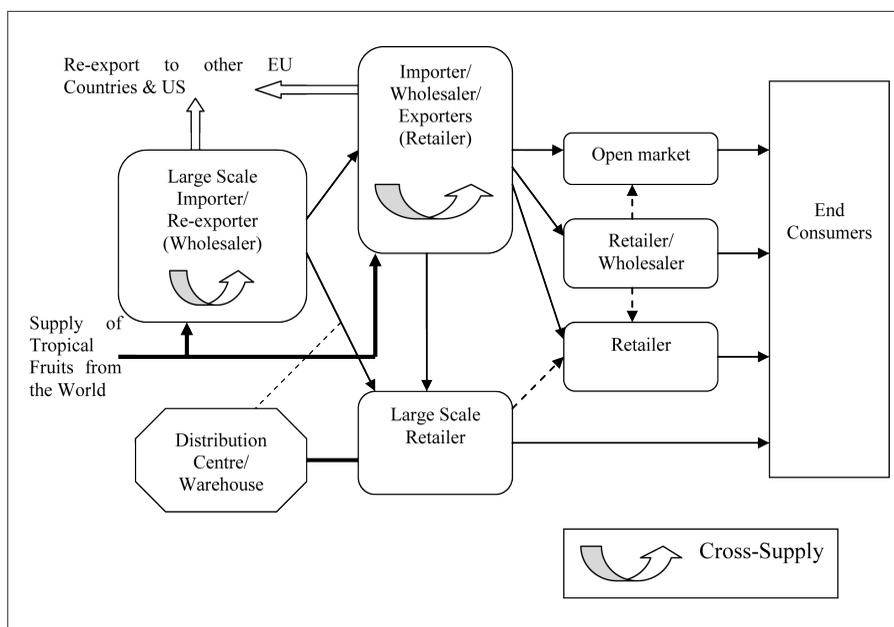


Figure 1: Overview of the Netherlands Channel of Tropical Fruit Distribution

In particular, large scale importers are channel players that directly import fruits and vegetables from overseas. The large scale importers do not deal with retailers; they mainly supply to wholesalers and re-export the imported products to other EU countries. They are also called wholesalers by buyers in EU countries. In the Netherlands, they are called exporters because they export the products to EU countries. In the Netherlands business environment, a player usually performs multiple roles in the distribution channel.

Importers and wholesalers are the second tier in the fruits and vegetables distribution channel. These importers and wholesalers perform both functions; they import fruits and act as wholesalers that supply to other retailers in the Netherlands and EU. Since they supply to other retailers in the EU, they also act as exporters. As mentioned earlier, multiple functions are common among distribution channel members. For example, in cases where individual buyers can also come to the premises of these wholesalers for substantial purchase meaning they also perform as retailers.

Large scale retailers refer to retailers that operate retail chain and they purchase tropical fruits for their entire retail outlets and usually have their private distribution centre or

warehouse. Retailers are individual retail outlets or mini-markets operated by private owners. Open markets refer to traditional markets that operate on the street without permanent store. Temporary outlets are set-up on a weekly basis where retailers display fruits, food and other products such as clothing and kitchenwares along the street for sales. Ultimately, tropical fruits are purchased by the end consumers either at open markets, retail outlets or large scale supermarket chains.

Factors Influencing Fruits Supplier’s Decision

In selecting suppliers of tropical fruits the main concerns of importers are listed in Table 5 shown below. Most of these importers are well equipped with facilities in order to maintain the freshness of tropical fruits. The most common mode of payment used by the importers is direct bank transfer. Other forms of payment are also used such as letter of credit, bank draft and cash transaction. Most of them practised a 30-day credit term.

In selecting suppliers of tropical fruits, most of the wholesalers emphasise on quality of fruits and the ability of fruit suppliers in fulfilling the quantity of orders consistently. Other factors which are also of importance are shown in Table 5. Most of the wholesalers practised a 30-day credit term and most of them use direct bank transfer as their mode of payment apart from letter of credit and bank draft. They are all equipped with facilities such as cold room and cold storage vehicles in order to maintain the freshness of tropical fruits.

Table 5: Factors Considered in Selecting Tropical Fruit Suppliers

Importers	Wholesalers	Retailers
<ul style="list-style-type: none"> • Ability to fulfill quantity of orders • Reputation • Credit facility • Country of origin • Continuous supply/ supply on-schedule • Consistent supply in large volume • Long-term relationship quality 	<ul style="list-style-type: none"> • Reliability & consistency in fulfilling orders • Quality of fruits • Reputation • Credit facility • Country of origin • Price • Certification • Fruit Safety • Price and delivery time • Consistent in supplying large volume 	<ul style="list-style-type: none"> • Ability to supply • Credit term offered • Reputation • Quality • Country of origin • Consistency of supply • Low price • Safety of fruit • Sweet taste fruits

When choosing suppliers of tropical fruits, the most important factor considered is the ability of the suppliers to supply the fruits consistently complying to the orders made by the retailers. It is very important that the retailers have sufficient stock of fruits to meet

the demands of consumers. This implies that Malaysian exporters must ensure that they are able to fulfill orders from the Netherlands fruit importers regularly who will then distribute to the wholesalers and retailers.

Retailers are also concerned about the credit term and they usually practised 30 days credit period. The normal payment procedure is through direct bank transfer, letter of credit or even on cash basis.

In order to maintain the freshness of the fruits all the retailers are equipped with facilities such as cold room, cold storage vehicles, chiller, freezer and cold places for storing the fruits. In cases when the fruits received are defective, the normal practice by the retailers is to deduct the amount from the invoice. In terms of promotion, very few retailers (6%) carry out promotional activities such as advertisement for tropical fruits. From our observation, the only promotion of tropical fruits is done through posters and brochures.

The sampled retailers also mentioned the factors that are important when choosing the suppliers of tropical fruits. From Table 5, most of them agreed that “ability to supply the fruits” is the main criterion when selecting tropical fruits suppliers. Meanwhile, Table 5, last column summarises the characteristics of the selected tropical fruits supplied by the retailers.

Consumer Segments

Supermarket and Supermarket Chains

One of the most important outlets that sell fruit and fresh produce to the customers is the supermarket. In the Netherlands, supermarket chains are very popular since they are found everywhere and offer better products at a competitive price. Besides Mediterranean fruits, tropical or “exotic” fruits are also popular items found on the shelves of supermarkets. Through observation, all the premises are complete with cold rooms to store the fresh produce. Examples of large scale retailers are Albert Heijn, C1000 Schuitema, ALDI and Sligro.

Albert Heijn is considered to have the largest market share in the country. It operates the stores in several formats; everyday supermarket, the larger Albert Heijn XL, convenience store, and the Internet delivery service Albert.nl. Albert Heijn stores are full service supermarkets and are known for their focus on quality. From observations, starfruits supply came from Malaysia, whereas bananas and pineapples are from South America, mainly from the branded Dole and Chiquita. The tropical fruits on sale here include Dole’s pineapples (Costa Rica) which are priced at €5.85 each and papayas from Brazil. Interestingly, Albert Heijn makes an effort to promote these products as “exotic” fruits through brochures and advertisements.

C1000 Schuitema is part of Schuitema, a retail and wholesale company. C1000 is now part of Ahold Supermarket Group which includes Albert Heijn since it holds 73% interest

in Schuitema. Tropical fruits such as banana and pineapple are also available in these supermarkets. Besides coming up with its own brand “C1000”, branded fruits such as Dole pineapple and Chiquita banana are also available. C1000 also does its own packaging. Through technology innovation, C1000 supermarket chain is rolling out a new generation of self-scan checkouts. Customers simply place their items on the conveyor belt, which are transported through a scanner portal, where a device will read the barcodes, regardless of their position. By eliminating individual scanning, it accelerates the checkout experience. ALDI is considered as the world’s leading discount retailer. With a modified concept, ALDI has developed a hybrid that until now has been regarded as opposites: discount and convenience. With over 5000 stores all over the world, ALDI focuses on food-to-go and convenience products, including chilled drinks, sandwiches and fresh fruit - and all this without breaking the rules of efficient discounting. All products whether baked beans or fresh cut flowers, biscuits or daily delivered fresh fruit and vegetables, are sourced from the best suppliers. Tropical fruits such as bananas and pineapples are available in this outlet. Among the tropical fruits available include papaya (Brazil) which is priced at €5.95 per piece, pineapple (Costa Rica) at €5.50 per piece, mango (South Africa) at €0.95 per piece and pomelo (China) at €2.50 per piece. The fruits are sold as they are, in the original packaging. Promotion on tropical fruits is done in the store; point-of-purchase (POP).

Sligro is a wholesale outlet (entrance by registered pass only). Most of the customers are organisational consumers such as restaurants and cafeteria (39%), medium business (22%) and small retailers (6%). Currently, Sligro has 38 self-service stores and food contributes 90% of sales. Its main competitor is Makro. In Netherlands, Sligro has more sales than Makro and the average Sligro store resembles a hypermarket, whereas Makro looks more like a warehouse. Branded fruits like Dole and Chiquita are sold here. Other tropical fruits include Malaysian starfruits, Brazil’s melons, China’s pomelos and Thailand’s rambutans.

Retailers

Retailers include green grocer, fruit and vegetable shops, daily or flea or open market. Retailers in the form of mini market and grocery stores are scattered throughout the Netherlands. It serves the local communities at their convenience location and sells in smaller quantities for household consumption. A typical mini market usually carries various ranges of household items such as canned foods, vegetables, fruits and dried items. Since tropical fruits are imported items, they are considered as luxury products. Therefore, consumers’ purchases of tropical fruits are relatively in smaller amount. The retailers require fruit products that are packaged in a ready-to-sell form. As labour cost is expensive, retailers also avoid doing re-packaging activities.

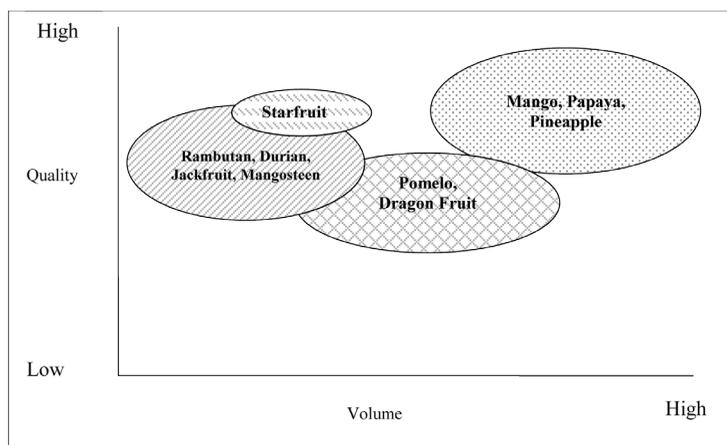
Open markets are traditional areas for selling dried and wet products. This type of open market usually operates in the morning or evening on a regular basis. For example, Afrikaaderbuurt Open Market operates twice per week. The products sold in open markets are of lower quality and price. Excess supply is usually distributed in the open markets with minimum pricing. Only few typical tropical fruits such as banana, pineapple, mango and papaya are commonly displayed and sold. Few stores sell dragon fruits. Starfruit,

pomelo, rambutan, mangosteen, durian and jackfruit are not available in the open markets. Store owners usually get the supplies from local wholesalers and sell on cash basis. No specific packaging is required.

For pineapple, a special cutting machine is required. The machine is supplied by the suppliers to the store owners. When consumers purchase the pineapple, the cutting service is provided so that the pineapple is in the ready-to-eat form.

Tropical Fruit Positioning

In order to identify the market position of Malaysian fruits, a positioning mapping has been developed. The mapping is based on two elements: quality and volume of supply (refer to Figure 2). This mapping is based on the primary data collected from the survey and market observation during the team visits to the Netherlands and Germany (end of 2006 and early 2007).



Note: Positioning map is based on researchers' observation of the market and interviews with industry players.

Figure 2: Quality and Volume Positioning Map for Selected Tropical Fruits in European Market

As shown in Figure 2, there are three clusters of different position. The first cluster is mango, papaya and pineapple. These tropical fruits are commonly available in the market and the sources of supplies from various countries include South Africa and Asian countries. Thus, its volume is high and quality demanded is also high. Only high quality produce managed to sustain and penetrate high-end outlets such as supermarket chains. Due to the disadvantage in terms of distance, Malaysian papaya and pineapple prices are not competitive against papaya and pineapple from those countries such as Brazil and Costa Rica. Besides, it was informed that Malaysian papaya is not attractive enough due to the nature of the fruit itself, too hard when it is green and too soft when it is yellow (ripe), thus weak in quality perception. In addition, the key competitive elements are

quality and price. Therefore, in order to compete, Malaysian suppliers must improve the quality of the fruits and reduce the cost of farming.

The second cluster is pomelo and dragon fruit. The volumes of supply of these fruits are yet in large quantity. Pomelo supply is on seasonal basis and the perceived quality is of acceptable level where no significant high-quality perception among the fruits suppliers. Although tropical fruits are accepted in the market, the quantity of demand and numbers of suppliers are not significant. Pomelo, for instance has its own strengths such as longer shelf life and sweet, therefore this fruit is well accepted in the European market. The potential of this fruit, however, is much subject to the early arrival of the fruit in the European market. Pomelo should arrive prior to the month of June before China's pomelo floods the market with lower price. The Malaysian pomelo itself must also be adapted to suit the preference of local market by promoting smaller size pomelo (half kg each) and yellowish in colour. Meanwhile, dragon fruit has a great potential to be exported to the European market due to the low market competitiveness. Other countries that have marketed dragon fruit to the European market are Vietnam and Thailand. However, European consumers are more aware of Vietnamese dragon fruit as compared to Malaysian dragon fruit. Subsequently, the white colour dragon fruits are more received than the purple colour ones. Through aggressive promotion, the European consumer can be educated to understand the nutritional value of dragon fruits.

The third cluster is starfruit, rambutan, durian, jackfruit and mangosteen. This cluster is more on novelty purchase. Due to its smaller quantity of availability, consumers are looking for high quality for consumption purposes. However, none of the suppliers position themselves with significant high quality branding. These fruits are not commonly available in the market. The demand is seasonal, thus the market competitiveness is relatively low compared to other tropical fruits. Starfruit is highlighted because Malaysia is the leading supplier of starfruits. In addition, the awareness of Malaysian brand starfruit is high. The majority of importers, wholesalers, traders and retailers mainly recognise starfruits from Malaysia and import starfruits from Malaysia. Only a small amount of market needs is contributed by Israel and Taiwan suppliers. A few retailers such as Albert Hiejn also do some promotion to support tropical fruits acceptance among European consumers. Despite low competition, durian and rambutan have less potential since market demand is low and the fruits are less attractive especially among the Europeans. At this moment, these two fruits are only sold through oriental supermarkets where the target market is more towards the Asians who live in Europe. The nature of durian for example is not suitable for the European consumers due to its strong smell.

Mangosteen and jackfruit are very low in demand, but have strength in terms of shelf life as compared to other tropical fruits. Currently, the potential of these tropical fruits are low, but with proper promotion the market demand might increase. For instance, jackfruit is not a seasonal fruit, thus with proper marketing strategies, this fruit can be further developed and marketed into the European market. In fact, some pre-packaged jackfruits are already available in the market and the taste of jackfruits is easily accepted by European consumers provided fruit awareness campaign has been organised.

It is suggested that Malaysian tropical fruit suppliers should aim at this cluster and position specific brand names of starfruit, rambutan, jackfruit and mangosteen to enjoy market leadership, high quality positioning and high margin with controlled volume of supply.

Strategic Framework to Penetrate EU Markets

This section will synthesise the secondary and primary research finding of the selected tropical fruits in the Netherlands and potentially European markets. The overall results will be integrated to develop a strategic action plan that would enhance Malaysian tropical fruits competitiveness in the international market. Subsequently, specific strategies are proposed with regard to each selected tropical fruits.

There are a number of strategic actions that need to be done to enhance Malaysian competitiveness of tropical fruits export for the Netherlands and European markets. This study on the Netherlands market serves as a good platform to understand the overall channel of distribution. In terms of supply, value chain and market access there are six components that require special attention:

- A. Supply chain management system in the local Malaysian market;
- B. Effectiveness of the Malaysian market makers;
- C. Enhancement of strategic alliances with key foreign channel members;
- D. Implementation of large scale consumer awareness marketing campaign;
- E. Brand Management; and
- F. Coordinated Research, Development and Market Access

These six strategic actions are proposed due to its significant impact on the Malaysian tropical fruits sales in the Netherlands and European markets. Figure 3 shows the components of the strategic action plan.

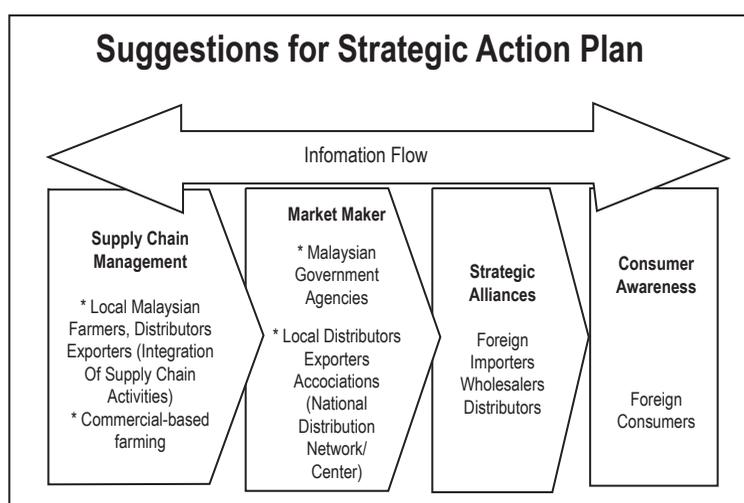


Figure 3: Components of Strategic Action Plan

A. Supply Chain Management System in the Local Malaysian Market

In the exploratory study of the local exporters and interviews with the industry experts, it is indicated that the supply chain of fresh fruits is very critical. The post harvest handling procedure is important to keep the fruits fresh and speed-up the delivery process since exporting activities usually take longer time. The longer the delivery time means the shorter the shelf-life. The Netherlands importers and wholesalers are concerned about the supply chain of tropical fruits starting from the local farms and finally arriving at the Netherlands ports. The supply and delivery chains in the Netherlands are well equipped with its cold chain support. However, ineffective handling in the post-harvest processes, packaging and delivery in the supplying countries might reduce the shelf-life and quality of the fresh fruits, thus, when arriving at the Netherlands there is a certain degree of damage and waste. In addition, the Netherlands importers and wholesalers require good agriculture practices and handling of tropical fruits, i.e., the EUREPGAP certification. The interviewed experts consistently highlighted the issue of Malaysian suppliers ensuring effective and efficient supply chain of tropical fruits in order to compete in the European markets. The results from the interview indicated several issues related to the Malaysian local supply chain and logistic. For example, uncertainty of supply chain handling; inconsistency in supply; inadequate supply; insufficient international certification compliance from fruits suppliers; and transportation cost is increasing.

To solve supply side issues, the suggested strategic action plan includes the setting up of farmers, distributors and exporters alliances with the leading exporters serving as key management center. Secondly, a EUREPGAP compliance working team should be formed that covers small and medium scale farmer groups. Commercial-based farming and infrastructure can also be planned to capture the increasing market demand. Transportation cost is also a critical issue, it is hoped that there will be certain forms of subsidization to reduce transportation cost such as double tax deduction to provide incentive for international logistic service providers in transporting tropical fruits. In summary, the solutions include enhanced vertical cooperation: Farmers, Distributors and Exporters Alliances; enhanced horizontal cooperation between industry players; further development of international certification compliance working team, farmer groups; encourage more Commercial-based farming and infrastructure; transportation cost subsidization - double tax deduction for carriers (e.g. airline service providers).

B. The Effectiveness of Market Makers in the Malaysia Market

With regards to tropical fruits demand, the supply does not match demand in terms of timing. In terms of supply, as farm products are subjected to natural disaster and pesticide attack, the production is sometimes affected and quantity of supply is not consistent. On the other hand, the demand is seasonal and depends on the supplies of similar fruits from other countries. As there is no evidence that supply and demand is perfectly matched, the role of a market maker is very important. The market maker refers to a local-based agency or institution that is able to absorb the fruits supply and offers the market according to the stipulated demand.

In brief, a market maker is an entity that has the ability (i) to absorb fruits supply and create new markets when there is an over-supply; and (ii) to outsource when there is shortage of supply/excess demand.

The market maker institution must invest in fruit handling facilities that include cold chain, efficient distribution network and also processed fruit manufacturing. Therefore, excessive supplies of fruits would be processed into fruit puree, canned fruits, fruit jelly and other forms of fruit products. Since an individual farm or exporter in Malaysia would not likely perform this function, it must be a commercial entity initially supported by the Malaysian government and the association of local farmers and suppliers. This integrated effort and support would be made possible by establishing an Integrated Fruits-based Central-Kitchen (IFCK). With regard to the issues of inadequate supply, seasonal demand, implementation weakness of uncoordinated activities and efficiency of implementation institution; it is suggested to set up an independent (non-profit) research unit at IPTA¹ to develop market intelligence and coordinate the European market activities. This entity has no conflict of interests and has the ability to create networks with expertise in market research, supply chain, sales forecasting, promotion, yield management and farm production scheduling. In addition, an Integrated Fruits-based Central-Kitchen (IFCK) is suggested where this Central-Kitchen acts as a planning and processing centre of fresh fruits to reduce fruit wastage, produce high value-added processed fruits and overcomes the short shelf-life of fresh fruits.

C. Enhancement of Strategic Alliances with Key Foreign Channel Members

Although the Netherlands and European markets provide substantial opportunities for Malaysian farmers, suppliers and exporters, it is a highly competitive market. In general, the research findings indicated that there is a lack of market access among the local players. It is very difficult and costly for local players to establish the link and contact before they get the trust and mature relationship with the foreign buyers to secure long-term seller-buyer relationship. Furthermore, the demand from foreign buyers is uncertain and there is a tendency of switching fruit suppliers. To counter this challenge, the strategic action would suggest strategic alliances with foreign importers, wholesalers or even large-scale retailers to gain their special interest and loyalty of fruit supply. For instance, in setting up the Integrated Fruits-based Central-Kitchen, strategic partnership is formed between local players and foreign channel members. The foreign channel members that are also shareholders or partners of the entity would secure a certain level of market share and provide alternative linkages in the market development. To solve the demand uncertainty and lack of market access, the key players in Malaysia must enhance the existing strategic alliances with foreign importers and wholesalers as well as form new strategic partnership with importers because importers are the first-tier market player that control the distribution network and market creator that pushes the demand down the channels to end users via retailers.

¹IPTA is Institut Pengajian Tinggi Awam or Public University under Ministry of Higher Education.

D. Large Scale Consumer Awareness Marketing Campaign

The research findings indicated that in general, consumer awareness on tropical fruits is minimum. Tropical fruits are sometimes used in food decoration rather than consumption. For example, starfruits are used for garnishing purposes, only a small amount is for consumption. With regard to the Netherlands channel members, (wholesalers and retailers) consumer awareness and knowledge about tropical fruits is minimum. There is no marketing promotion and no specific large-scale promotion on tropical fruits. Generally, European consumers are only aware of a few tropical fruits such as mango, papaya and pineapple. In the interviews with foreign experts, it is suggested that Malaysia might want to conduct large scale consumer marketing campaign that not only promotes tropical fruits, but also Malaysian brand name of tropical fruits. For instance, based on the interview and discussion with a university in the Netherlands, UKM is welcomed to have alliances with foreign university to promote Malaysian tropical fruits through collaboration between researchers and students of both universities. Promotion in schools and universities that are targeted at younger generation would increase their perception and brand loyalty towards Malaysian tropical fruits. Therefore, it is possible to change the mind-set of younger and older groups as they would be more willing to adapt and adopt new ideas and products.

E. Brand Management

Brand management issue is another area of concern. It is found that there is lack of brand recognition in the market. In addition, European channel members and consumers are unaware of tropical fruits' nutritional value. This is the result of insufficient long-term brand development planning and marketing strategies. In order to have better brand perception, it is proposed that the basic elements such as fruit quality, packaging and cold-chain facilities need to be strengthened. Then, it is followed by the development of a strong brand in terms of brand awareness, perceived quality, brand loyalty and brand association. To achieve this, brand surveys and consumer education campaigns are needed to create brand equity.

F. Coordinated Research, Development and Market Access

There are research and development activities carried out by various parties and agencies. However, a closer coordination is needed to link and share the outcome of the research and development. Subsequently, research and development must be fully utilized to gain market access. Some new research findings or information might not be well disseminated due to government regulations on information dissemination. The issue of market information and networking is also critical to gain first-hand information on changes of import requirements and local regulations. Thus, it is suggested that the review on existing rule and regulations on information dissemination is needed to improve the pace of information dissemination in creating competitive advantage. Furthermore, a special Task-Force Committee might enhance the effectiveness and efficiency in gathering market information and building up good international networking in order to gain access to various countries.

CONCLUSIONS

To conclude, it is identified that the market structure of tropical fruits in the European market is complex. It involves different intermediaries such as importers, wholesalers and retailers that perform multiple functions. For example, importers also play the roles of wholesalers by distributing the fruits to the retailers in the Netherlands market and also as exporter of the fruits to other EU wholesalers. In order to access the high-end consumer market, large scale importers and large scale retailers (i.e. the supermarket chain) play a major role. For Malaysian exporters that are targeting at high-end market segment and aiming at higher margins, they should actively approach large scale importers because this channel member is the key supplier to supermarket chain, not only in the Netherlands, but also to EU markets. In addition, they are the agents that introduce new fruit products to the supermarket chains.

In terms of tropical fruit marketing and positioning, it was observed that exotic tropical fruits such as starfruit, rambutan, jackfruit, mangosteen, dragon fruit and pomelo possess high potential. However, to market it to European markets, it needs an integrated marketing plan that covers appropriate pricing, branding and positioning of fruit image with high quality, freshness, nutritional value and exotic taste following European consumers' preferences and consumption pattern.

For Malaysian tropical fruit producers and exporters competing in the international market particularly in Europe, a strategic plan should be implemented. The framework covers supply chain system, centralised market intermediaries, strategic alliances, consumer marketing, brand management and research and development. This is to enhance product quality and price competitiveness in the international markets.

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