

## **MALAYSIAN TROPICAL FRUITS EXPORT: EXPECTATIONS OF EUROPEAN IMPORTERS AND DISTRIBUTORS**

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### **ABSTRACT**

*The purpose of this study is to examine the expectations of European importers and distributors, namely large scale importers, importers/wholesalers and large scale retailers in identifying the potential of Malaysian tropical fruits export. The European market is the focus of this study because it is recorded that European Union is one of the top importing nations of tropical fruits. An industry study which included 11 large scale importers, 35 importers/wholesalers and 12 large scale retailers was conducted to understand the expectations of these foreign tropical fruits importers and distributors. This includes integrating previous research findings related to fruit and vegetable studies in the European market to have an in-depth understanding of the supply chain of fruits market in European countries. Unlike branded consumer products that use pull strategy, tropical fruits export depends on push strategy, and the key channel members in distributing tropical fruits are large scale importer, importers/wholesalers and large scale retailers. These channel members might deal directly or indirectly with Malaysian tropical fruits exporters. Thus, it is critical to understand the distribution structures and expectations of these key channel members. This paper focuses on elaboration of the key players (large scale importers, importers/wholesalers and large scale retailers) in international distribution network of tropical fruits in European market, in particular the Netherlands market which serves as a gateway for tropical fruit distribution. Findings from this study also serve as useful guidelines for tropical fruits producers and exporters who aim at penetrating European markets.*

**Keywords:** Tropical fruits, international distribution, importers, retailers

### **INTRODUCTION**

In recent years, consumption of fresh produce is increasing due to consumer concerns for health, nutrition and physical fitness (Reid & Buisson, 2001; Sabbe, Verbeke, & van Damme, 2008). Unlike consumer durable goods, fresh produce requires efficient and effective distribution management because the shelf-life of fresh produce is short. With regards to Malaysian tropical fruits export, it is important to develop and coordinate at

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the international level to ensure tropical fruits that reach the final European consumers remain fresh with high quality. Malaysian producers and exporters are targeting the European market because in terms of market demand, United Kingdom is the largest followed by France and Germany (Medium-term Prospects, 2003). Malaysian fresh produce is also distributed to European market via the Netherlands which is the major European transshipment point or gateway for various fruits and vegetables categorised under perishable fresh produce.

Therefore, it is important to understand the channel members in the Netherlands such as the large scale importers', distributors' and large scale retailers' expectations and fresh produce chain to gather useful information to develop appropriate strategies to penetrate the European Union (EU) markets. Tropical fruits suppliers and exporters need to be well connected to large scale importers and retailers in Europe who play a key role in distributing and pushing the fresh produce to markets. Thus, one of the immediate issues that require attention is the expectations of these European importers and distributors. In addition, they are also the key informants that provide information with regard to market demand and customer feedback. As a case, this study attempts to explore the distribution structure and expectations of large scale importers, importers/wholesalers and large scale retailers.

## **LITERATURE REVIEW**

This section provides a review of the literature on a few key areas related to distribution of fresh produce. Firstly, the international marketing distribution channel concept is presented, and then the fresh produce distribution structure is illustrated. Further discussions are related to the development of supply chain as well as price and non-price factors related to fresh produce.

### **International Marketing Distribution Channel**

In international markets, very few producers sell their products directly to the final users; international intermediaries are needed to bring the products to the market at the right time and right place. Intermediaries or channel members work together to deliver superior value for the final customers (Hannon, 2005; Liker & Choi, 2004). Marketing channel or distribution channel is defined as a set of interdependent organisations involved in the process of making a product available for final consumption (Kotler et al., 2009; Stern & El Ansary, 1995). 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). Channel members in international marketing are more complex. They usually involve longer distribution channels, starting from local producers to exporters, foreign importers, distributors/wholesalers, retailers and finally to end consumers. 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; Kotler et al., 2009).

A key goal of distribution channel management 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, a deformation in information (Baganha & Cohen, 1998). Thus, Kulp, Ofek and Whitaker (2003) highlighted the need for better coordination of members in order to enhance better information flow and generate value in the distribution channel. In particular, fresh produce with its perishable nature, the distribution structure, logistics management and cold chain establishment are critical factors to ensure the end consumers would enjoy fresh products.

### **Fresh Produce Distribution Structure**

Distribution channels are influenced by type of product, type of consumer, and size of business. It is 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 (Grant, 1995; Wilson, 1996). 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, and 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 the most risk as the supply chain shortens and becomes increasingly competitive.

The forces of large scale retailers gain extra bargaining power. For example, in UK, larger retailers with centralised purchase system enjoy higher margins and they control the sophisticated supply chain organisation for fresh produce. Thus, they are powerful commercial partners (Wilson, 1996). To meet the expectations of these large scale retailers is an essential act because these supermarket chains play major role in retail marketing of fresh produce.

In the Netherlands, qualified fruits are supplied to the large scale retailers such as Albert Heijn (Ahold). Moreover, larger retailers also attempt to establish link with growers. The second-grade produce are distributed via the smaller chains. These smaller chains and outlets might encounter quality issue, price fluctuations and the irregularity of supplies (Wilson, 1996).

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 the 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 for specialist importers

since these players are equipped to handle incoming fresh produce in a very efficient manner, with temperature controlled storage, logistics, and transportation (<http://www.austrade.gov.au>). 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 Practices, called EUREPGAP, later GLOBALGAP (EUREPGAP homepage, European Food Safety Authority homepage, GLOBALGAP homepage).

### **Development of Supply Chain for Fresh Produce**

In the fresh produce industry, due to several factors such as market saturation, concentration of market players, reduction of trade and entry barriers, the industry was facing intense competition and squeezed margin. As a result, there was an effort to develop direct relationship between suppliers and buyers in the supply chain system. This is reflected in the UK and Australia context. The motivation for fresh produce suppliers and buyers to form direct trade relationship is to minimise risks by having long-term supply contract that results in better profit margin and product quality. This symmetry and reciprocity measures are important in sustaining a good and long-term relationship (Hingley, 2001; Hughes & Merton, 1996; Parker et al., 2006; Reid & Buisson, 2001).

In terms of supply chain complexity, the UK fresh produce supply chain is the most sophisticated, followed by the Netherlands, France, Belgium and Germany. With the advent of ICT and supply chain management mechanism, the members in the supply chain have become more inter-dependent to ensure a smooth flow and value added supply of fresh produce. In certain cases, the traditional fragmented supply chain has shifted toward well connected structured system. Buyers and suppliers in the supply chain were building long-term relationships. This structural change also enhanced the bargaining power of buyers, especially larger retailers, that have an impact on supplies and growers of fresh fruits and vegetables (Hughes & Merton, 1996; Parker, Bridson, & Evans, 2006; Wilson, 1996).

A few examples illustrate the changes in the supply chain for fresh produce. For example, in Germany, although still purchasing from the wholesale market, supermarkets were developing their own central purchasing systems aiming at direct sourcing (Wilson, 1996). The orange supply chain in Europe, for instance, has changed due to the consumers' needs and desire and the increasing number of innovative products launched by the food industry. Hence, channel members should identify specific needs of retailers, customers and others (Neves & Neves, 1999).

Similarly, in recognition of market segments and their respective needs, the organisation of vertical coordinated chains was developed. 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, specialized fruit trading houses import most of the fresh produce into European countries (Hughes & Merton, 1996; Zylbersztajn & Farina, 1998).

Hingley's (2001) study on retailer-supplier relationships in the UK fruit and vegetables fresh produce market found that there was a trend towards well-developed, closer and long-term relationships with a reduced number of suppliers. In the case of apple fruit production and distribution in the Netherlands, marketing cooperatives was the new trend and producer organisations were formed with regard to particular products. This means a more organised institution is needed to pull produce from smaller growers/producers. The producer organisations invested in fruit sorting and packaging that enabled direct trade with wholesalers or retailers (Trienekens et al., 2008).

In summary, the supply chain for fresh produce is moving towards close cooperation, long-term relationships, connected via ICT innovation and direct to the source if possible. These mean that the channel members need to understand each other to establish long-term relationships, sustainable supply and coordinated demand forecast. With reference to the development of an international supply chain for fresh produce, Malaysian tropical fruits suppliers should take more effort to understand their foreign partners' expectations and requirements. Thus, this paper is in the initial stage to provide this valuable information for Malaysian tropical fruits producers and exporters.

### **Price and Non-Price Factors Related to Fresh Produce**

Price is an important factor in consumer food choice (van der Pol & Ryan, 1996; Murphy et al., 2000). Van der Pol and Ryan's (1996) study indicated that consumption of fruit and vegetable was influenced by price, quality, packaging and availability at the supermarket. It was identified that consumers who consume more fruit and vegetable were sensitive to the price element. Moreover, pricing and promotional adjustment would increase market share. For example, lower price encourages more consumption, thus increases market share (Murphy et al., 2000).

For example, in a ZESPRI kiwi study, it was found that consumers were not particularly concerned about the origin of kiwi and the method of production. Instead, consumers were relatively price sensitive, and they also judged the freshness/quality (Beverland, 2001). In the minced beef study, it was found that some consumers were sensitive towards price (Walley, Parsons, & Bland, 1999). Rolfe et al. (2006) suggested that different markets (capital city vs regional city) have an impact on the launch price of fresh fruit and customers' willingness to pay was different. In addition to price, several factors are related to fresh produce marketing. There are product development, quality, branding and international buyer-supplier relationship (Chernatony, 1991; Beverland, 2001; Reid & Buisson, 2001; Iop, Teixeira, & Deliza, 2006; Trienekens et al., 2008; Gyau & Spiller, 2009).

Product development and research is also important in the fresh produce industry. The speed of research and development in fresh produce has increased dramatically; in particular, the international produce markets become more hostile with emerging low cost competitors. Thus, improving product quality, variety and innovation is critical (Reid & Buisson, 2001). For example, Reid and Buisson (2001) investigated UK and European wholesale and retail fruit buyers, and 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. In

terms of fruit innovation, due to the shift towards the consumer-driven produce, emphasis was on long shelf-life, taste and high quality fruits (Trienekens et al., 2008). Product development also involves 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, Teixeira, & Deliza, 2006).

Consumers' evaluation of quality is subjective and might be based on several features such as freshness, season, appearance and nutritional value. In a conjoint analysis, it was indicated that quality is an important attribute, the higher the quality perception of fruits and vegetables the higher the consumer preference (van der Pol & Ryan, 1996). Another study found that quality is the most important factor influencing consumer purchase of minced beef. There might be an association between price and quality, where higher price was perceived as higher quality (Walley, Parsons, & Bland, 1999). In addition to price, brand name has been recognised as a very important quality cue. Brand assists consumers in their decision making and speeds-up the buying process (Chernatony, 1991; Iop, Teixeira, & Deliza, 2006).

Branding for fresh fruit is not new. For example, Beverland's (2001) study on the ZESPRI kiwi fruit'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. Branding of fresh produce is still in its infancy stage of world markets. It was indicated that consumers were unlikely to pay premium price for brand alone. They may pay premium price for quality, freshness, and in-season fruit. Thus, it is important that brand must reflect on high quality, freshness, health and nutritional benefits, and unique good taste as well as convenience (Beverland, 2001). Brand marketing 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 (Gronroos, 1995; Aaker & Joachimsthaler, 2000; Beverland, 2001).

In the aspect of international buyer-supplier relationship, Gyau and Spiller's (2009) study of 101 Ghana exporters to European markets indicated that exporters have a lower perception of quality on 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 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. For exporting activities, management's perceptions, qualities and attitudes as well as firm characteristics and experiences are also important factors (Aksoy & Kaynak, 1994).



Reflecting on the literature review, Malaysian tropical fruit producers and exporters who are interested to expand their export activities in competitive European markets would have to understand the expectations of foreign importers and distributors. Malaysian tropical fruits exporters are in a disadvantaged position because marketing and distribution costs are higher due to physical distances between Malaysia and European markets. Thus, to build more sustainable long-term relationships with foreign buyers is key to successful exporting. Therefore, in addition to identifying distribution structure, this study also aims at closing the gaps by providing key foreign buyers' expectations with regards to price and few non-price factors. This information is useful for Malaysian tropical fruits industry players.

## **METHODOLOGY**

Industry interviews were used to gather data for this study. Researchers suggested that a study on the fresh produce export required a framework towards understanding rather than verification of phenomenon. The understanding of the process such as the distribution process is important in order to achieve export success, thus exploratory and descriptive research design would be appropriate (Aksoy & Kaynak, 1994).

In examining the fresh fruit and vegetable supply chain and buyer-supplier relationships, researchers have adopted a qualitative approach to provide in-depth understanding and development of appropriate frameworks (Hingley, 2001; Fearne, Barrow, & Schulenberg, 2006; Trienekens et al., 2008; Canavari et al., 2010). Consistent with scholars' suggestion, this study adopted field interviews to understand the distribution structure and expectations of foreign importers and distributors of tropical fruits in Europe with a focus on the Netherlands context.

Identification of respondents was based on the Holland Fresh Guide 2005/2006. There are about 400 importers of fruits and vegetables in the Netherlands (Holland Fresh Guide 2005/2006). In this study, 58 fruit distribution channel members (i.e. large scale importers, importers/wholesalers and large scale retailers) were purposively chosen as sample for the study. In addition to interviewing these business owners or managers, observations at their business premises were made to have further understanding of the distributing facilities and storage of tropical fruits.

The personal interviews and business premise observation would generate more information that is useful to draw an explanatory framework for the tropical fruit distribution structure among large scale importers, wholesalers and large scale retailers in the Netherlands market. In practice, large scale importers also perform as re-exporters, whereas importers also perform the task of wholesalers. For example, in the Netherlands, it is common for importers to perform as exporters who re-export their imported fruits and vegetables to other EU countries. The same importers also take the role of distributors and wholesalers that encompasses the distribution function within the Netherlands.

## **RESULTS AND DISCUSSION**

### **Sample Characteristics**

A total of 58 field interviews were carried out consisting of large scale importers, importers/wholesalers and large scale retailers. Large scale importers are channel players who directly import fruits and vegetables from overseas. Eleven large scale importers who operate in the Netherlands as well as Europe were interviewed. Examples of large scale importers are FTK, Nature's Pride, Hispa Fruit, Aartsenfruit, Agro Fair, Bud Holland, De Groot International B.V. and Valstar. These players usually contact foreign farmers or exporters and import substantial quantities of fruits including tropical fruits. They supply to the local Netherlands wholesalers and other European wholesalers that distribute the fruits throughout the European markets. Usually they do not directly deal with retailers except large scale retailers such as supermarket chains that order in bulk.

Importers and wholesalers are the second tier in the fruits and vegetables distribution channel. A total of 35 importers and/or wholesalers were interviewed. Examples of importers and wholesalers are AJB Fruitbox, Bel Impex, Borgers International, Centre Exotic Product C.E.P., Cosmopolitan Props and Helena B.V. These players usually play the role of importers and wholesalers. They get the products from the foreign exporters or local large scale importers, and then re-export the products to neighbouring countries such as Germany and France. Wholesalers who have established a good network with supermarket chains may also supply to the supermarket. In addition, they supply to local retailers, small retailers and open markets in the Netherlands.

Large scale retailers mainly consisting of supermarket chains and 12 large scale retailers were included in this study. Examples of supermarket chains are Albert Heijn, ALDI Supermarket, C1000 Schuitema, Lidle Supermarket and Makro. Supermarket chains have their own purchasing department and warehouse. Centralised purchasing practices tend to increase their bargaining power in the distribution. It is noted that supermarket chains only accept fruit products with EUREPGAP certification.

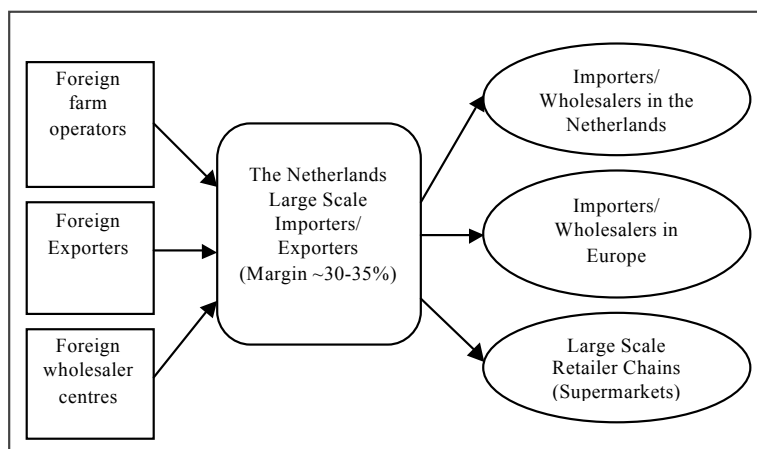
### **Large Scale Importers' Distribution Structure and Expectations**

In the group of importers and wholesale distribution, two significant segments can be identified: (i) large scale importers and (ii) importers/wholesalers group. The first group is the large scale importers. The large scale importers included in the study are Aartsenfruit, Hispa Fruit, Agro Fair, Natures Pride, Bud Holland, OTC Holland, De Groot International B.V., Stacy Food Group, FTK Holland, Valstar Group and Well Pict.

This group of channel members play a key role for fruit distribution throughout the Netherlands and European market. As shown in Figure 1, large importers import fruits from foreign exporters and some even directly contact the foreign farm operator and foreign wholesale centre to assure them that they enjoyed a certain targeted margin. Their main customers were big buyers such as other importers/wholesalers in the Netherlands, importers/wholesalers in Europe and large scale retailers. In general, this group of players might enjoy about 30% to 35% gross profit margin. To supply to this group of importers,



fruit products must possess the EUREPGAP certificate, especially starting 2008, where the EUREPGAP requirement becomes a must.



**Figure 1: Distribution Structure of Large Scale Importers**

The key expectations of large scale importers were consistent with high volume supplies, high quality fruits, competitive pricing, managed cold chains, standard container size and supplier support promotional campaign (Table 1). Based on the interviews conducted with the large scale importers, the first criterion that their clients looked for when purchasing fruits is EUREPGAP compliance food products, which emphasise the quality of fruits and sufficient supply all year round. Moreover, price must be competitive and based on negotiated agreed price. Large importers were usually not involved in re-packaging since all imported products were sold in containers and pallets. Mixed pallets might be supplied upon request by the customers. For Malaysian suppliers and exporters who want to deal with this group of European importers, they must be ready with substantial volumes that are rated as high quality produce. Tropical fruits producers who are interested to form strategic alliances with these foreign importers must venture into commercial farming that ensure quality fruits by applying an integrated ICT structural system.

**Table 1: Expectations of Large Scale Importers**

<b>Factors</b>	<b>Expectations</b>
Price	Supplier must provide competitive pricing; a price if not lower must be the same as other suppliers in the market, relative to high volume of purchase.
Volume of supply	This group of players expects the supplier to have a consistent source of supplies in high volume in the range of one to two containers as they cover wide markets throughout European markets. Thus supplies must be consistent and stable to be considered in the list of suppliers. Their general turnover is more than 100 million Euros.

*Table 1 (Continued)*

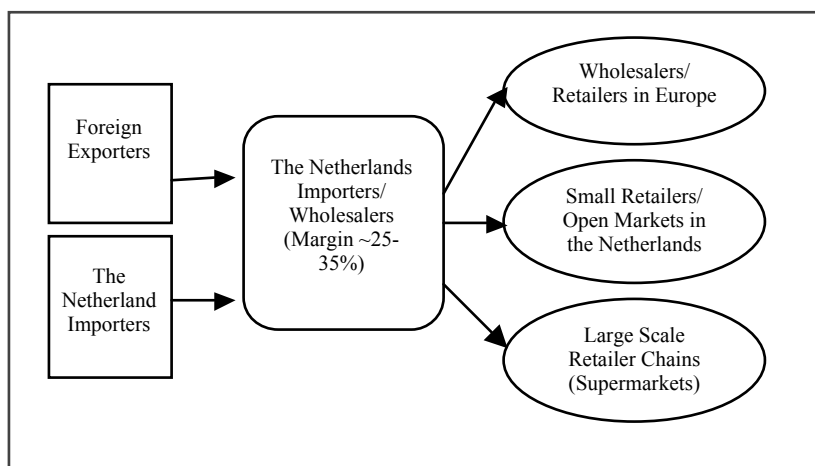
<b>Factors</b>	<b>Expectations</b>
Fruit features	High quality fruit partially judged by fruit appearance, packaging, shelf-life and sweet-taste. EUREPGAP/GLOBALGAP Certification Compliance to All EU rules and regulations Brand name is not a stringent requirement, except for well established brand names such as Chiquita Banana and Dole Pineapple.
Cold chain	The suppliers must manage a good cold chain to ensure the fruits are well-kept and delivery within the controlled cold chain. Once the fruits enter the point of these large scale importers, they have a good support of cold rooms and cold-storage vehicles to be re-distributed to European markets. They expect the suppliers to take care of the entire cold chain prior to the point of receiving.
Mode of payment	The suppliers must hold International Bank Account Number, as payment is Letter of Credit via IBAN (International Bank Account Number), which means direct bank transfer. Bank guarantee is provided for suppliers.
Recovery policy	Fruits are generally perishable. The large scale importers expect certain guarantees on fruits. If the fruits arriving at the point of receiving are not up to the expectation features (i.e. shape, colour, common appearance), photos will be taken and credit notes will be sent to the suppliers. In cases of negotiation, the fruits might be accepted at a lower price.
Packaging	Standard containers and pallet size is expected. As labour and packaging cost is high, the company would expect suppliers to follow the standard size without involving further re-packaging and pallets are ready to be transported to the customers. Mixed pallet is accepted with regard to customer's requirements or special orders. A standard wooden pallet size is four feet by four feet.

**Table 1 (Continued)**

<b>Factors</b>	<b>Expectations</b>
Promotion	<p>The fruit exporting country or the exporters are expected to carry out the promotion activities and supply promotional materials. As the push strategy is adopted, the large scale importers do not absorb the promotional cost and will only assist to distribute the received promotional materials down the chain for the wholesalers or large retailers.</p> <p>For example, the Thailand government and exporters support with poster and various promotional materials. The promotion effort must come from the exporting country.</p> <p>In this aspect, the interviewed large scale importers indicated that they hardly receive any promotional materials about Malaysian tropical fruits/ products. The only exception is starfruits, which they import from Malaysia.</p>

**Importers/ Wholesalers Distribution Structure and Expectations**

The second group in the tropical fruit network is importers/wholesalers. This group of channel members distributes fruits and vegetables within the Netherlands markets as well as neighbouring European countries such as Germany, Belgium and France. They imported fruits from foreign exporters or the Netherlands importers. Their main customers were retailers in the Netherlands and European countries. As depicted in Figure 2, generally this group of players might enjoy about 25% to 35% gross profit margin. To supply to this group of importers, fruit products must possess minimum EU requirements. EUREPGAP certificate is an added advantage but not compulsory, however, it may be the basic requirement in the near future since there is stringent food safety concern.



**Figure 2: Distribution Structure of Importers/Wholesalers**

The key expectations of this group of importers/wholesalers were relational supplies (established relationships), quality fruits, competitive pricing, retail-ready packaging and supplier support promotional campaign (Table 2).

According to the companies interviewed, their clients' first criterion in fruits' purchasing decision was price and quality. Usually wholesalers tried to avoid any re-packaging work as labour cost was extremely expensive in Europe. However, minor re-packaging was sometimes performed to meet their clients' packaging requirements. Some customers require the packaging in the form of ready-to-sell. Small mixed-packaged fruits were also provided for specific customers such as hospital fruit stores. Malaysian tropical fruit suppliers might deal with this group of importers/wholesalers when their volumes of supplies are not sufficient to supply to the large scale importers. This buyer-supplier relationship was based on trust and networking. However, it was harder to channel to the high-end consumer group via this link.

**Table 2: Expectations of Importers/ Wholesalers**

<b>Factors</b>	<b>Expectations</b>
Price	Supplier must provide competitive pricing with the agreed volume of purchase.
Volume of supply	<p>This group of players expects the supplier to have a consistent source of supplies (trusted source). In case of shortage of supplies, they would source from smaller suppliers.</p> <p>They actively involve in distributing fruits to the local retailers as well as to the neighboring European countries especially Germany, Belgium and France.</p> <p>The excess fruits may be supplied to open markets with minimum price or at cost.</p> <p>Their general turnover is below 100 million Euro.</p>
Fruit features	<p>Quality fruit partially judged by fruit appearance, packaging, shelf-life and sweet-taste.</p> <p>*EUREPGAP/GLOBALGAP Certification is a plus, however not compulsory at the moment.</p> <p>Compliance to All EU basic rules and regulations.</p> <p>Brand name is not a stringent requirement except for well established brand names such as Chiquita Banana and Dole Pineapple.</p>

**Table 2 (Continued)**

<b>Factors</b>	<b>Expectations</b>
Cold chain	<p>The suppliers must manage a good cold chain to ensure the fruits are well kept and delivery within the controlled cold chain.</p> <p>Majority of them have their own cold rooms and cold-storage vehicles.</p> <p>In case of a break in the cold chain that affects the quality of fruits, the fruits must be sold at lower a price and channelled to the local groceries or open markets.</p>
Mode of payment	<p>Payment can be via direct bank transfer (International Bank Account Number-IBAN) or cheque or cash.</p> <p>Bank guarantee is provided only for direct sources from foreign exporters.</p>
Recovery policy	<p>If the fruits arriving at the point of receiving are not up to the expectation features (i.e. shape, colour, common appearance), photos will be taken as proof:</p> <ul style="list-style-type: none"> <li>• Issue a credit note</li> <li>• Return to the suppliers</li> <li>• Write off</li> <li>• Sell at a lower price</li> </ul>
Packaging	<p>They prefer suppliers to provide retail-ready packaging because they will supply to retailers.</p> <p>The company may do simple re-packaging and bulk breaking to supply to small retailers.</p>
Promotion	<p>The fruits exporting country or the exporters are expected to carry out the promotion activities and supply promotional materials.</p> <p>They do not invest in promotion activities; they depend on the established network of distribution and relationships. They will push fruits down the chain from suppliers they know and trust.</p> <p>The interviewed respondents indicated that they hardly receive any promotional materials about Malaysian tropical fruits/ products. The only exception is starfruits.</p>

### Retail Price Comparison

In the retail environment, consumers from middle to high income groups who visit the large scale retailers (high end supermarket chains) are less sensitive towards the price element. Therefore, in general, the price of the fruit items sold in the large scale retail stores might be higher than those in the smaller retail outlets. However, there are cases where the prices in smaller stores are also high due to its convenient location. Tables 3 and 4 show the lower and higher prices of tropical fruits at different retail outlets.

In large scale retail outlets or supermarket chains such as Albert Heijn, C1000 Schuitema, Sligro, Makro and ALDI, tropical fruits were available for consumers. The common tropical fruits were papaya, pineapple and mango. Seasonal tropical fruits such as mangosteen and durian were not always available. Jackfruits were also hardly available in the large scale retail outlets. During the field observation on December 2007, only a few mangosteens were available in the Albert Heijn supermarket chain and they were in small size sold at €5.99 per pack with about 6 pieces in the pack or €1.25 per 100g. In Chinese supermarkets like Wah Nam Hong Superstore, durians were packed in 400g package and sold at €4.95 per pack. Similarly jackfruits were pre-packed and sold at €3.8 per 500g pack. In general, the prices of fresh tropical fruits were not fixed, depending on the supply. If there is a shortage of supply such as during the winter season, prices are higher. Information from the retailers indicated that tropical fruits were considered as luxury fruits items in European markets because these fruits were imported, therefore unless they were confident of the taste of the fruits, the consumption rate was not very high. Therefore, introductory promotion was needed in order to increase consumers' awareness and confidence in tropical fruits and their nutritional value. Table 3 shows the minimum and maximum prices of the selected tropical fruits available at the large scale retail stores in the Netherlands.

**Table 3: Price Comparison of Selected Tropical Fruits among Large Scale Retailers in The Netherlands**

Types of Fruits	Minimum Price (Euro □)	Maximum Price (Euro □)	Remarks (Euro □)
Starfruit	1.00/pc	1.50/pc	
Dragon Fruit	2.69/pc	3.95/pc	
Papaya	1.25/pc 2.40/kg	5.95/pc 5.00/kg	4.95/kg (Green papaya)
Pineapple	1.99/pc	2.69/pc	5.50/kg
Mango	0.79/pc	1.50/pc	5.95/kg
Pomelo	2.50/pc	2.95/pc	
Rambutan	0.78/100g	1.25/100g	3.95/tray 1.95/box of 10pcs 2.95/pack of 8 pcs
Mangosteen	NA	NA	1.25/100g 5.99/pc / 6pcs
Durian	NA	NA	4.95/400g 5.25/pack
Jackfruit	NA	NA	3.8/500g

NA= Not Available



Table 4 shows the retail prices of smaller retail outlets usually owned by individual shop owners and mini markets. Starfruit and dragon fruits were not commonly available in these small retail outlets. Other tropical fruits such as papaya, pineapple and mango were usually available. Seasonal fruits such as rambutan and durian might be available during the season. Jackfruits were available in pre-packaged form. When comparing prices between Table 3 and Table 4, it was found that in most of the items, prices in large scale retail outlets were higher than prices in small retail outlets. This is perhaps related to the quality requirement. The large scale retail outlet requires high quality fruits with EUREPGAP compliance, whereas smaller retail outlet might compromise on this strict requirement.

**Table 4: Price Comparison of Selected Tropical Fruits among Retailers in The Netherlands**

<b>Types of Fruits</b>	<b>Minimum Price (Euro □)</b>	<b>Maximum Price (Euro □)</b>	<b>Remarks (Euro □)</b>
Starfruit	NA	NA	
Dragon Fruit	NA	NA	3.95/pc
Papaya	0.80/pc 1.80/kg	7-8.00/pc 6.50/kg	
Pineapple	1.50/pc	4.95/pc	1-1.50/kg
Mango	0.70/pc 2.00/kg	3.05/pc 5.50/kg	4.95/3 pcs
Pomelo	1.95/pc	3.95/pc	
Rambutan	4.14/500g	4.80/500g	5.00/kg 0.99/box of 3 pcs
Mangosteen	2.50/500g	4.56/500g	2.12/box of 7 pcs
Durian	5.50/kg	6.00/kg	
Jackfruit	2.00/500g	2.50/500g	1.54/pack

NA=Not Available

Comparing the retail prices would indicate the potential margin. Thus, supply to the large scale retailers will not only gain in terms of quantity, but also sufficient margin to cover international distribution cost. This implies that Malaysian suppliers and exporters should form a certain level of vertical integration in order to gain bargaining power to negotiate with European large scale importers to penetrate supermarket chain stores.

## CONCLUSION

The distribution structure of tropical fruits in the European market is complex. It involves different intermediaries such as large scale importers (at first layer); importers and wholesalers (at second layer) and large scale 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 chains) play a major role.

This study indicates that large scale importers are the key players in European markets. They look for potential foreign suppliers to develop direct long-term relationships. As their customers buy in bulk, there are concerns about quality compliance and quantity of year round supply with competitive pricing. The second layer players i.e., importers and wholesalers mainly distribute fruits and vegetables within the Netherlands market as well as neighbouring European countries such as Germany, Belgium and France. As reflected in the interviews, they are concerned about price and quality and perform minor bulk-breaking to meet their clients' requirements.

In terms of retail pricing, it is found that in most of the items, prices in large scale retail outlets are higher than prices in small retail outlets. Thus, supplying fresh produce via large scale importers might enjoy targeted margin. For international supply, it is critical to access to high-end large retail outlets as the margin would cover the higher transportation cost incurred in international shipping.

The implications of this study are that relevant authorities in Malaysia such as Ministry of Agriculture and Agro-based Industry as well as Malaysian Agricultural Research and Development Institute might consider providing more assistance for export-based large-scale commercial farming operators and assist local farmers to enhance the quality of produce and explore the potential of organic farming that not only preserves the sustainability of farm lands but also brings long-term benefits to farmers and communities. This is in reference to the increasing demand towards organic agricultural products. In terms of marketing, the Federal Agricultural Marketing Authority (FAMA) could consider further assisting smaller growers by linking them to leading export-based growers to benchmark the successful practices. In addition, FAMA could assist more in designing, producing and distributing marketing materials (i.e. CDs, brochures, booklets) to promote Malaysian tropical fruits. As indicated in the study, the large-scale importers, wholesalers and large-scale retailers expect that marketing activities should be performed by suppliers.

Undoubtedly, the Malaysian authorities are very supportive in relation to tropical fruit exports; to bring our tropical fruit export to the next step requires more interactive communication and closer cooperation from all parties involved. Local growers should also take substantial initiatives (i.e. actively communicate with research institutions, participate in government programmes and improve productivity) and involve in exploring innovative farming. For example, graduate farming should be encouraged and this forms the new segment of knowledge and export-based farming aiming at bigger foreign markets such as European markets.

### **Acknowledgement**

The authors gratefully acknowledge the financial support from the Federal Agricultural Marketing Authority (FAMA). We also would like to thank the participating organisations and individuals for their support.

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