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**Exporting fruits and vegetables from Vietnam to Japan**

Current state and suggestions for improvement

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## Thesis abstract

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The main objective of this thesis is to examine the most recent overall picture of the fruits and vegetables export sector in Vietnam as well as to evaluate its performance in a more specific target market, Japan. Given the detailed analysis of all the achievements and drawbacks existing in the sector, the thesis then attempts to propose solutions to enhance the efficiency in the operation of the sector.

This study is carried out using quantitative research method. The quantitative data are gathered from the official statistic sources including Ministry of Industry and Trade, Vietnam; General Department of Vietnam Customs; Ministry of Finance and the Customs, Japan; IndexMundi and figures from previous studies on relevant subjects that are mentioned in the thesis.

The result of the research confirms Japan as one of the three biggest importers of Vietnamese fruits and vegetables. Under the enforcement of ASEAN - Japan Comprehensive Economic Partnership Agreement that partly eliminated the tariff barriers combined with Vietnam's potential in agriculture, the nation stands a huge opportunity to expand its exporting scale of greenery products. However, the obsolete and unplanned production and exporting chain has so far gained Vietnam only a minor proportion of Japanese market shares. Improvement on the current situation of the sector requires more involvement from the government along with a close connection formed between producers and enterprises.

Keywords: export, Vietnam, Japan, fruits, vegetables

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## Abbreviations

<b>AJCEP</b>	ASEAN - Japan Comprehensive Economic Partnership Agreement
<b>F&amp;V</b>	Fruits and vegetables
<b>FDI</b>	Foreign Direct Investment
<b>GAP</b>	Good Agriculture Practices
<b>GDP</b>	Gross Domestic Products
<b>HCMC</b>	Ho Chi Minh City
<b>JAS</b>	Japanese Agricultural Standards
<b>ODA</b>	Official development assistant
<b>SWOT</b>	strength, weakness, opportunities, threats
<b>TRQ</b>	Tariff rate quotas
<b>USA</b>	The United States of America
<b>VND</b>	Vietnam dong (the official currency used in Vietnam)

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# 1 INTRODUCTION

## 1.1 The significance of topic

By years of studying and observation, the researchers have asserted that Vietnam is one country with powerful potential of natural, human and historic resources to promote agricultural production. This has been proven by Vietnam's reputedly international leading position in exporting rice (rank 2<sup>nd</sup> to Thailand), coffee beans (rank 2<sup>nd</sup> to Brazil) and pepper (rank 1<sup>st</sup>) (Source: <http://www.vietnam-express.com/VietnamExports.html>). Agriculture itself occupies a momentous proportion in Vietnamese GDP structure as well as gathers the majority of national labor forces. Therefore, in order to attain the objective of becoming a modernized industrial country by 2020, focused investment and strategically planning to direct agriculture development should be stressed as vital. In recent years, the fact that farming products including fruits and vegetables (F&V) are an important sector contributed to Vietnamese export scale and income values has successfully verified exporting as the main motivated and promoted route for agriculture.

While there have been several lines of agricultural products from Vietnam that are warmly welcome in other markets, products like fruits and vegetables have not fully exploited their available resources. Vietnamese greenery is widely accepted with many specialties but the export value is limited to a lower level than in regional and intercontinental countries sharing the similar conditions. Upon studying the facts of Vietnamese fruits and vegetables export, these are detected problems that the researcher would like to explain further in the following section.

Exported fruits and vegetables from Vietnam are mainly shipped to China, Japan, Russia and the USA. Whereas, positive signals from Japanese market, especially after the enforcement of ASEAN-Japan Comprehensive Economic Partnership Agreement (AJCEP), which was enforced on December 1st, 2008, are quite re-



markable. Japan, in general view, is a potential exporting market of Vietnam due to certain differences in climate zones between two nations, high demands together with high income level. Despite all mentioned advantages, the export volume of Vietnamese fruits and vegetables to Japan takes up only a fairly small share in Japanese import volume. Some would rationally wonder what the reasons behind the disintegration between expectations and practices could be and how to solve the problems. Being intrigued by the idea, the researcher decided to choose the topic “Exporting fruits and vegetables from Vietnam to Japan” for the graduation research thesis with the purposes of seeking for facts and giving some suggestions to improve the current situation.

## **1.2 Thesis information**

Under the scope of this thesis, the main objectives are to deliver to the audiences an overview sight of the fruits and vegetables export sector from Vietnam to Japan in recent history, the pros and cons. Furthermore, based on the previous detailed analysis, the latter half of the research will proceed to give suggestions that hopefully consolidate Vietnamese greenery export sector to Japan as well as build up a firm image and position in the international markets.

### **1.2.1 Research question**

During the process working with the thesis, the researcher concentrates on seeking for reasonable answers to address the question below.

- Which feasible solutions can be found to enhance Vietnamese fruits and vegetables exported to Japan?

For the reason that the question above is possibly too vague, the researcher would like to support it with the following step by step guideline.

- What is the background knowledge that one should know about Japan? Fruits and vegetables demand? Import scale? Regulations regarding the sector?

- Is Vietnam a competent candidate to become a leading provider of fruits and vegetables to Japan? What are the actual situations of Vietnamese production and exporting fruits and vegetables? Why is exporting fruits and vegetables important to Vietnamese economy?
- How is the recent performance of Vietnamese fruits and vegetables export to Japan? What are those achievements and drawbacks in the sector so far? What are the causes of the deficiency?
- Who are responsible for making changes in the sector? What can each individual group of participants improve their contribution to the sector?

### **1.2.2 Research subjects**

The thesis involves researching Vietnamese fruits and vegetables divided into sub categories: fresh edible vegetables, bulbs, roots; dried or frozen vegetables; edible fruits and drupes (fresh, dried or preliminarily processed) and greenery products. The research topic revolves around the period subsequent to the execution of AJ-CEP to examine the changes and effects that it has on exporting fruits and vegetables in Vietnam.

### **1.3 Thesis layout**

Regarding that market understanding and self evaluation are the keys to successful market penetration, the researcher attempts to give the readers a brief but comprehensive foreword about Japanese fruits and vegetables market as well as the production and exporting procedures in Vietnam. These titles will be presented in the “*Theoretical narration*” part. Next, the “*Practical analysis*” will follow with the concrete picture of fruits and vegetables exporting from Vietnam to Japan, from which draws a further evaluation of strengths, weaknesses and reasons of failures. Referring to the earlier analysis, the “*Recommendations*” part points out and describes resolutions that may enhance the situation. At last, the “*Conclusion*” will be

dedicated to discuss about the key research results and the final output of the thesis.

#### **1.4 Analysis methods**

The result of this thesis is mostly wrapped up from the process of a formal, objective, systematic quantitative research. Quantitative method is applied in collecting secondary data from official and reliable statistical sources. The descriptive design of quantitative method then is implemented with the aims of developing theories, identifying problems, justifying current conditions, drawing conclusion and feasible actions that can be used to address existing issues (*Source: 'Ways of approaching research : Quantitative Designs', <http://www.fortunecity.com/>*). Additionally, calculation is sometimes necessary to further assess the data in a new aspect that is suitable in accordance with related thesis section. The details of quantitative research process is clearly demonstrated throughout the structure of the thesis but centered in the theoretical and practical parts.

- **SWOT analysis**

SWOT analysis is an overall evaluation of strengths, weaknesses, opportunities, and threats of the business in question. Every business operation is affected by two environments regarding their inner and outer effects. External environment includes "key macroenvironment forces" (political, economic, social-cultural and technological) and "microenvironment actors" (distributors, suppliers, customers and competitors). Added into the mix, constantly variable trends and developments bring up both opportunities and threats. Marketing opportunities is the factors that have high possibilities to offer high profitability to the business. On the other hand, threats are unfavorable situation in which the business can potentially be vulnerable to changing environments. In the field of exporting, SWOT analysis can be viewed as in the following example. (*Kotler P. 'Marketing Management, Millenium Edition', 46*)

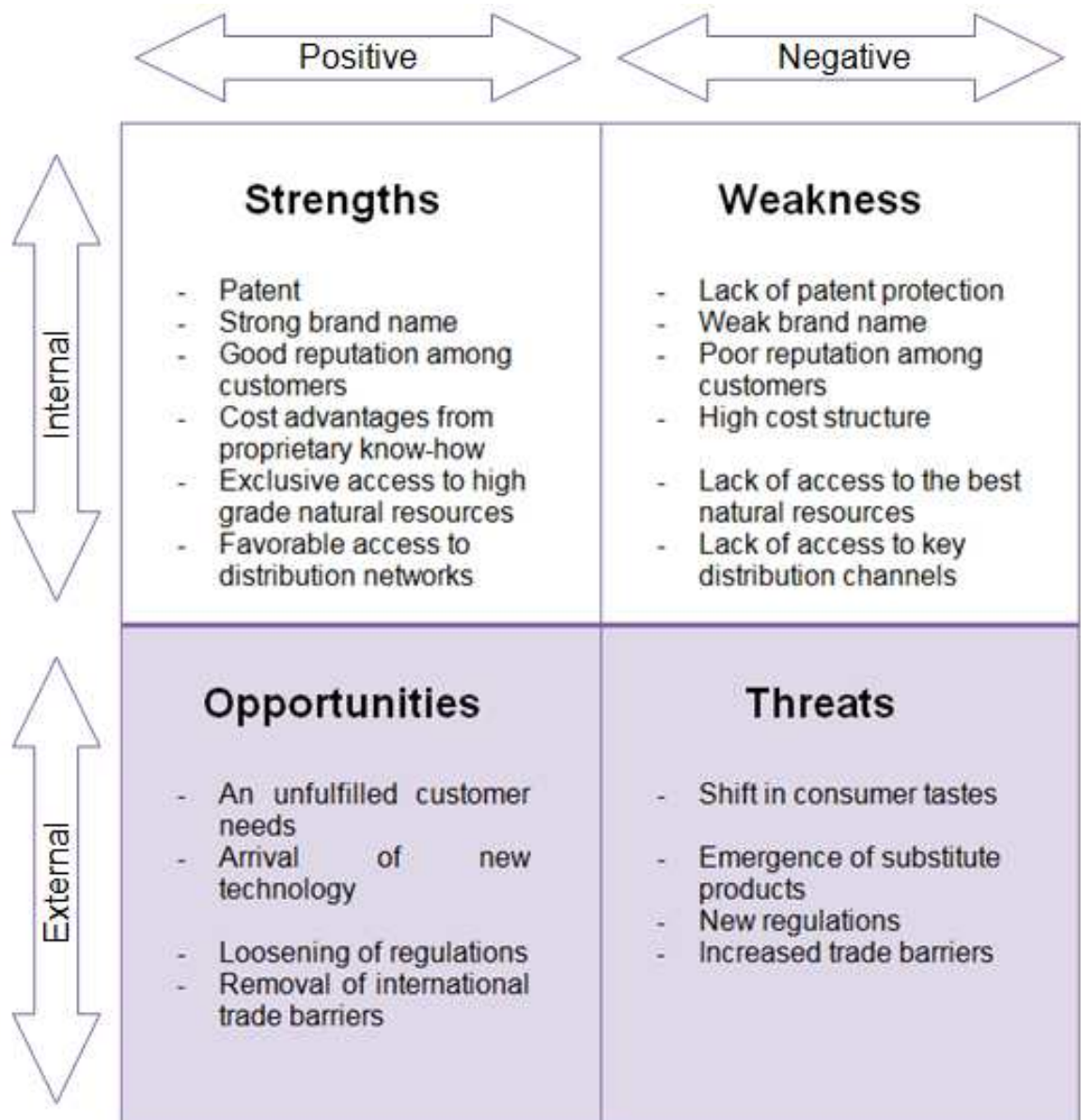


Figure 1. Example of SWOT analysis in exporting  
(Source: SWOT analysis, <http://www.eximguru.com/>)

Likewise, SWOT analysis creates an overall outlook of the core advantages and disadvantages of Vietnamese F&V sector. Furthermore, it also examines the opportunities and threats that await the business in the target market. By assessing its own strengths and weaknesses, Vietnamese F&V sector can have the dynamic to capture opportunities and wipe out threats.

- **Marketing Mix**

Marketing mix (also known as the 4Ps of marketing) is the set of analyzing tools that serves the purpose to cover information of four most basic elements in marketing. The 4P formulation which stands for Product, Price, Place and Promotion, will be explained as below.

- **Product:** Products are tangible or intangible commodities and services provided with defined characteristics and utilities that meet up with customers' needs. Products or services in marketing mix are the core element which interacts and influences marketing decisions on other elements. While the main purpose of marketing is to convince customers of the values which come hand in hand with the products, all the aspects including the quality, design, functions need to be considered in the light of customers' best interest and satisfaction.

Customers regard brand names as a part of the products or services. Deciding to brand a product or service can benefit with higher values from the buyers' point of view. Packaging is another important marketing tool that attracts customers, helps them to identify the companies or products, describes the utility and creates positive impression and credibility for the products.

- **Price:** As the second element in marketing mix, price is the only one that generates sales revenue. The value of sales made entirely depends on the pricing policy set for the item on sale. Meanwhile, pricing is based on various internal and external factors. Internal factors are marketing objectives (maximizing profitability, becoming market leader, competing on price, increasing customer loyalty), promotion strategy and expenses. External factors are market and demands, competition, economic situation. Theoretically, researching on consumers' evaluation of the marketed products' values is required so that prediction and adjustment on pricing can be made.

- **Place:** The concept of 'Place' involves all logistic processes needed to deliver products to end customers. Transporting, storing and placement are often ma-

naged systematically through a distribution channel. Depending on various situations, this can be done in numerous of option (selling to wholesalers, retailers or directly to customers).

- **Promotion:** Any means of communicating with customers like advertising via television, newspapers, magazines or the internet, public relations, point-of-sale displays and word-of-mouth is a way of promotion. Promotion provides customers with information that initiates their needs for the products and leads them to purchasing decisions. Promotion can be costly but the effectiveness of such a campaign promises to cover both the initial investment and profitability.

*(Kotler P. 'Marketing Essentials', chapter IX-XII)*

Marketing Mix usually represents the seller's mind-set and is widely applied in the field of marketing management. As in the scope of this thesis, the concept of 4Ps is used to identify the problems existing in the F&V export sector of Vietnam. By analyzing the whole production and exporting chain as well as the performance in recent history, the researcher not only gains a better access to the source of hindrance but can also point out the changes that are necessary to be made in the sector.

As suggested by the research question above, this research does not aim to prepare a detailed marketing plan for the penetration of Vietnamese F&V into Japanese market. Instead, the goals of this thesis are detecting and seeking out solutions to relevant matters that have been holding back F&V exported from Vietnam to Japan. Thus, employing SWOT and Marketing Mix analyses takes all the aspects that have the power to impact on the capability of Vietnamese F&V sector along with Japanese market into consideration as seen in the following illustration.

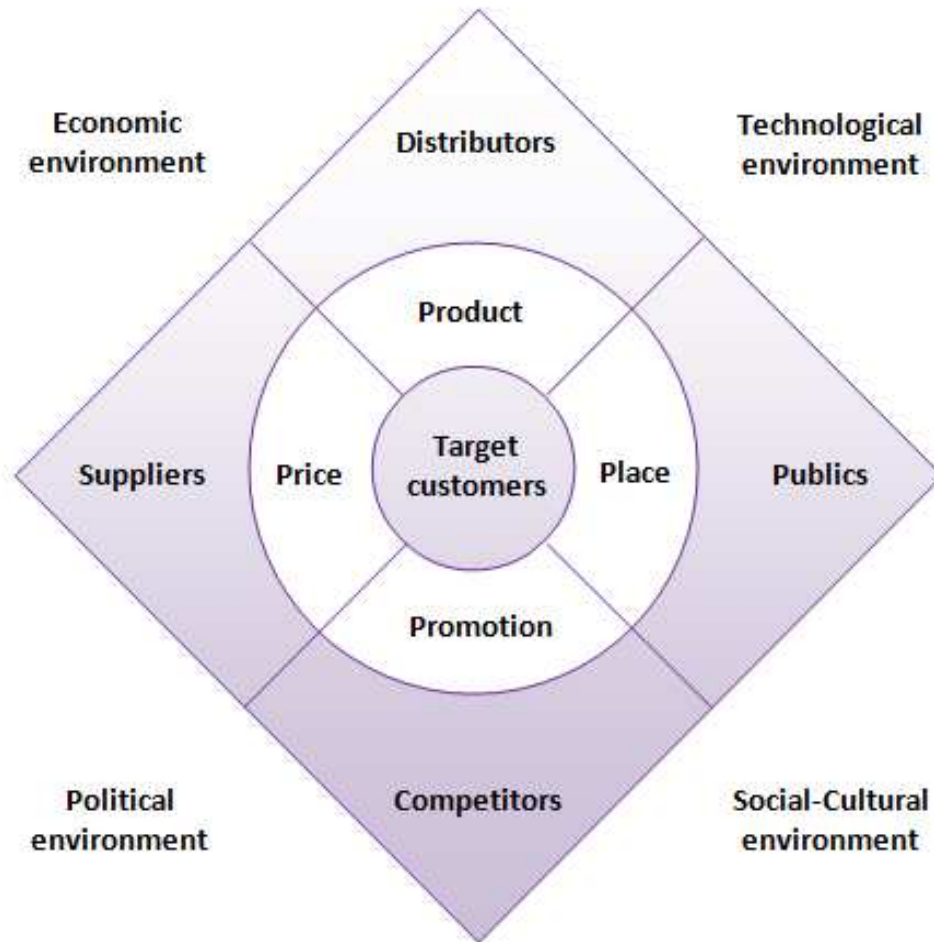


Figure 2. Factors influencing marketing strategy  
 (Source: Kotler P. *Marketing Management, Millenium Edition*, 51)

## 1.5 Research resources

With the goals of the thesis stated earlier, most statistical figures and data are gathered from the official open source researches on the internet and previous studies of the General Statistics Office of Vietnam and Trade Statistics, Japanese Customs. The proper links to these sources can be found in the Bibliography (see page 52).

## **2 THEORETICAL NARRATION**

### **2.1 General information about Japanese market**

#### **2.1.1 Background information**

Japan, known as an Eastern Asia country with the approximate land area of 377.915km<sup>2</sup>, is made up of by over 6800 islands in relatively close proximity, most of which are small islands. The population of Japan is estimated to be around 126.5 million in 2010 (*Source: CIA World Fact book*).

Japan inherits a valuable and rich in diversity culture with unique features such as conventional Kimono outfit, tea ceremony, Sumo. Japan also possesses imposing natural landscapes and unusual architectural constructions namely Fuji mountain, Kenrokuen garden, Nagoya castle. The discrepancies in provincial natural conditions contribute to diverge the weather in Japan. Japan enjoys 4 whole seasons spring, summer, autumn and winter but due to the complexity in terrain, exist the differences in local weather. Japan is believed to be scarce of natural resources. The Japanese territory is mostly mountainous and contains only narrow deltas, unfertile soil which is a great disadvantage for agriculture to flourish.

In the economic sectors, thanks to the surprising development during 1950s' and 1960s', Japan had grown to become the second biggest economy in the world. Japanese economy is also considered one of the most modern industrial economies. This nation always takes the lead in technology advances as well as in the field of modern industries. Though Japan is recently coping with some obstacles caused by the prolonged economic crisis and regression, it still maintains as a well-respected economy with the GDP (official exchange rate) in 2010 exceeded \$5.400 trillion.



As mentioned above, while the population is nearly over 126.5 million people, the annual income per capital was \$32,600 in 2009 and \$34,000 in 2010 (*Source: <http://www.indexmundi.com/>*). Japan always ranks as a country with high consumption power and high import scale, especially in agricultural products and clothing sectors. As a result, Japanese market is undoubtedly to be a promising destination for developing countries like Vietnam to aim at.

Speaking of the relationship between Vietnam and Japan, Japan has currently been an important business partner of Vietnam. It is a considerably large exporting market for certain kinds of major products from Vietnam such as maritime products, textiles, fruits and vegetables, rice, oil, coal. Meanwhile, Japan is a source from which Vietnam imports up-to-date equipment, appliances and techniques. The foreign direct investment (FDI) from Japan has been rapidly accelerating in recent years as the sum from 1990 to 2010 is registered to be 10.8% (*Source: Foreign investment, Vietpartners*). Besides, Japan is a top ODA (official development assistant) supporter of Vietnam at all time. Many of infrastructure constructions in Vietnam have been aided with financial capitals and technical assistance from Japan. The AJCEP has opened up new opportunities for two nations to enhance their commercial cooperation, developing specific advantages and common benefits.

## **2.1.2 Japanese fruits and vegetables market**

### **2.1.2.1 Demands**

F&V together with maritime products are two in Japanese traditional familiar and favorite serving food. Apparently, wise food choice could be a decisive factor to expand Japanese record of average life expectancy to 81 years old. In survey research by Vietnamese Youth Union in Japan, Japanese citizens consume about 17 million tons all kinds of vegetables per year, which means over 100kg per person annually (*Mr. Nguyen Xuan Phuc, 2008, 8*). Hence, it can be affirmed that

F&V solely reserves an irreplaceable place in the Japanese daily menu and are in certainly high demand.

As in common belief, the magnitude of quality standards regarding aliment products, F&V included, is always highlighted as a priority that holds public attention. Today, Japanese people show their immeasurable interest in healthy, nutritious fruits that fit their safety codes for food products. Furthermore, the Japanese are also famous for being sophisticated and having good sense in aesthetics. It proves to be another critical criterion in customers' judgment that F&V to come into view fresh with appealing color and taste.

Adding to the needs of traditional F&V types, arising demands become increasingly rife while more lifestyles have been incessantly changing. Japan is well-known for its brisk and busy pace of life. Convenient, constantly usable or less time-consuming prepared food, therefore, is more widely used. Besides, an upsurge in altering tradition and disfavor of F&V among a number of young individuals is another justification for the need of broadening the fruit and vegetable options as well as combining new balanced mixture. As for women who desire to go on diet or use natural cosmetics, their concerns create supplementary possibilities to welcome processed plant products in Japan.

Japan, in general, has a fast aging population with 23% of which is over 65 (*Source: Nation Master*). Consequently, the demand of healthy food for elder people on Japanese market is relatively high. F&V as an ideal selection with distinguished characteristics including a high level of vitamin, much cellulose, and little fat have the power to reduce the vulnerability to aging-associated diseases. It may be an additional proof of saying the market for F&V in Japan will continue expanding ceaselessly in the future.

### **2.1.2.2 Japanese preference for imported fruits and vegetables**

Having been stated in the previous section, the seasonal weather in Japan is tremendously affected by the immense divergences in topography among separate regions along the country. The weather, as generous as it grants Japan with the ability to grow an affluent range of F&V, has its own downside on being time-dependent all year around. Crude land resource, added in the middle of this unconstructiveness, further extends the shortage of supplying on the domestic market. Japan market, as expected, is a remarkably large F&V importing nation.

In the fresh vegetables sector, Nguyen (2008, 8) asserts that 18% of marketed vegetables in Japan are imported. The market shares gained by imported vegetables are gradually expanding, particularly when aliment suppliers enthusiastically seek for unseasonable options or uncommon, rare substitutes to keep up with the varying spending trends. However, the types and volumes of imported vegetables change corresponding with seasons of domestic planted ones. During the main harvesting season, the amount of imported products will dramatically decrease. In contrast, the table turns around for both the volume and price to level up when harvesting season has passed. Additionally, consumer taste is another significant factor concerning the structure of imported items. A while back, Japan used to be habituated in importing a set of chronic products like most kinds of cabbages, eggplants, bulbs. In the face of an arising need in dieting, some more fashionable items, lettuce, leek, chive, salad, and plants with long roots or bulbs used as vegetables have prevalently invaded in Japanese market. Vegetables from new origins also succeed in calling for attention from the buyers as they provide an impeccable supplement to national production.

Japan is a country in which the living cost is moderately expensive and for that reason, the pricing of greenery products is a prominent factor in the making of housewives' shopping decisions. That one single fact triggers the increasing need of frozen vegetables as replacement. Frozen vegetables is favored as it can be preserved in a long time without losing nutrition and stable at a price level, regardless of being seasonable or unseasonable. Meanwhile, the pressure of time in the

modern lifestyle stimulates the demand for prepared food. Both these factors are assumed to be encouraging imported vegetables from outside Japan.

In the fruits sector, there is a wide variety in the origins and types of imported items. Japanese buyers show intensive interest in healthy and vitamin sufficient fruits. Being acknowledged by the Vietnamese Trade Representation in Japan, 5 kinds of fruits including bananas, pineapples, papayas, mangos and avocados are the most popular ones since Japanese citizens think of them as notably beneficial to human well-being. Tropical origins of imported fruits are also highly appreciated by the Japanese, which explains the formidable amount of products imported from tropical regions.

### **2.1.2.3 Import scale**

Japan is proven to be a massive F&V importing country. High demand and sophisticated taste of the Japanese are two major reasons that explain the constant increase in the imported greenery proportion. This is confirmed by the figures of import volumes in the said sector in 6 recent years.

The graph below demonstrates the high volumes of imported vegetables throughout the whole period. In spite of the slight fluctuation in between, all of these figures remain to be above ¥650 billion (\$8.49 billion). In 2007, the import proportion of vegetables reached a peak at ¥844.8 billion (\$10.88 billion) but was followed by a downward trend and leveled off in 2009. It can be referred to the event of the economic crisis occurred in the end of 2007 in the USA and widespread globally that soon affected Japan.

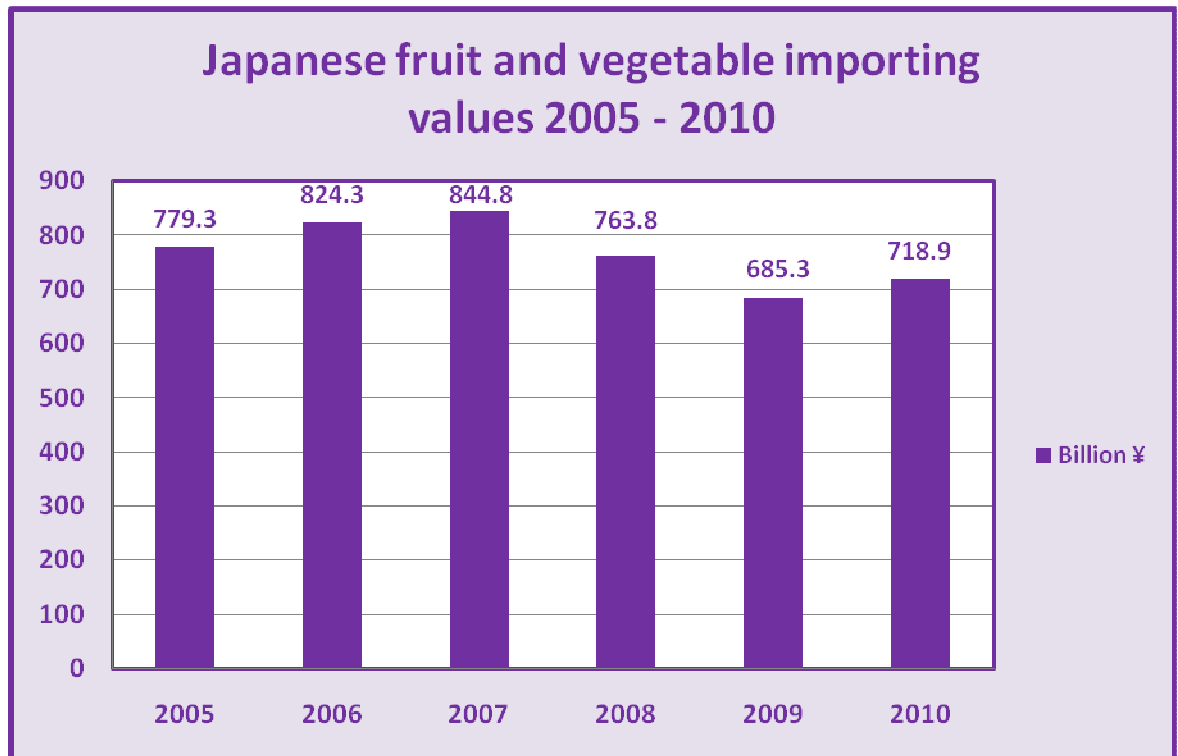


Figure 3. Fruits and vegetables importing volumes 2005 – 2010  
(Source: *Trade Statistics of Japan, Values by Principal Commodity*)

In 2009, Japan imported about 5.06 million tons all kinds of vegetables with the total value of over ¥685.3 billion. Proceeding to 2010, Japan still maintains the high volume of import with the total value exceeding 5.3 million tons of fruits, which rose by 4.95% in comparison with the previous year. On the import scale, Japan achieved the accelerating rate at approximately 4.9% with the total amount of ¥718.9 billion in 2010 (Source: *Trade Statistics of Japan*). The accelerating rate, though cannot be viewed as outstanding, still marked the stable and improving pattern of development in this certain sector. This truly is a safe bet for potential importers like Vietnam to continue pursuing Japanese market.

As already mentioned above, Japanese greenery production is noted as seasonal which results in the monthly changes in demands. While the volume of imported vegetables often slightly falls in the middle of harvesting seasons, it usually increases greatly in the last few months of one year. As winter time in Japan is often cold and unsuitable for cultivation, it more or less influences the output. The sur-

passing spending power in the last months compared with other months helps boosting the demand. It seems coherent when observing the monthly import scale, there are 2 centric periods, one from March to June, another from October to December, in which the import volumes are vastly larger. It is advisable that traders take notice of this detail to be more initiative in selecting items and appropriate timing.

#### 2.1.2.4 Market shares

Japanese market of imported F&V contains a number of products coming from various sources but revolves around 3 main importers known as China, the USA and Thailand. The picture of Japanese imported F&V market shares in 2 first quarters of 2009 and 2010 is comparably illustrated by the table below.

Importer	Jan-Jun 2010		Jan-Jun 2009	
	Volume (kg)	Value (¥)	Volume (kg)	Value (¥)
<b>China</b>	841,915,090	112,889,390	739,668,527	96,579,163
<b>USA</b>	547,125,814	90,112,565	493,601,170	80,768,748
<b>Thailand</b>	96,733,012	13,651,355	86,658,048	12,612,516
<b>Korea</b>	34,536,881	11,030,602	34,915,537	10,789,823
<b>Taiwan</b>	33,628,947	5,616,771	32,542,870	5,516,286
<b>Vietnam</b>	8,276,652	1,651,771	8,219,078	1,540,039
<b>Indonesia</b>	1,518,019	291,309	10,556,071	1,295,786

Table 1. Japanese imported fruits and vegetables during Jan-Jun of 2009/10

(Source: <http://rauhoaquavietnam.vn/>)

China is regarded as the number one partner of Japan, which exported 814.000 tons of greenery products solely during the first half of 2010, counted as ¥112 billion (€1.08 billion) in total. Compared to the same period in 2009, it rose by 13.8% in volumes and 16.8% in value. Taking the second place, the USA managed to export 547.000 tons to Japan within 6 first months of 2010, gained 10.8% more than in 2009 and reached ¥90 billion (€0.87 billion) of value. Beside three importers above, the gate into Japanese market is also open to many other nations but with a very limited scale, only 5% of market share.

The distinct sense of the Japanese together with their seasonal production has an evident impact on the purchasing power of imported vegetables. Many kinds of conventional vegetables which include cabbage, lettuce, collard, egg-plants, different kinds of bulbs (potatoes, taros), peas, remain steady. Apart from traditional vegetables, odoriferous herbs are constantly increasing in quantity. The entry of fruits, similarly, also has a wide variety that differs from mangos, avocados, papayas, dragon fruits to citrus fruits. Characterized by all modes of climate and originating from distant regions, imported fruits surely enrich the range of items available on market.

Other than fresh greenery, the third form of plant products that appear to be marketable in Japan, for example, are dried F&V, frozen vegetables, fruits juice. These varied forms as processed products hold a large segment in the structure of Japanese vegetables import scale, which can be proven by the ratios shown in the following chart.

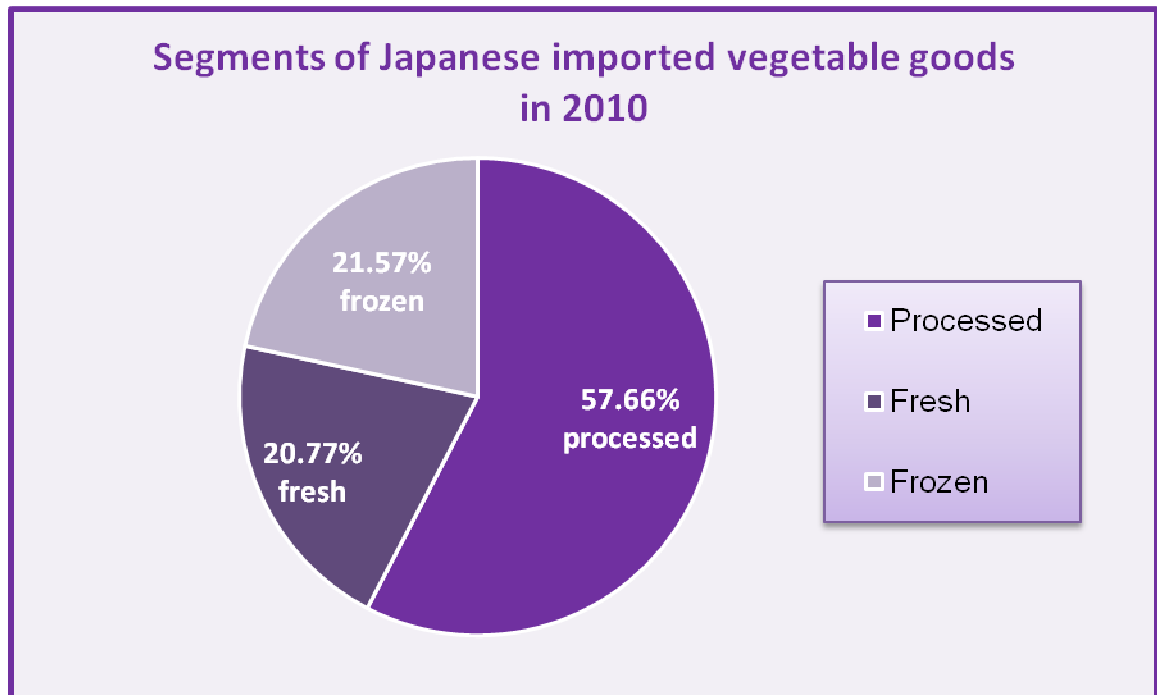


Figure 4. Structure of Japanese imported vegetable goods in 2010  
(Source: *Trade Statistics of Japan, Values by Principal Commodity*)

The segment of processed products alone (57.66%) outweighs the sum of fresh and frozen vegetable segments (42.34%). Vietnamese suppliers, in brief, should take this into account while planning the strategy of producing and processing greenery so that they can maximize profitability.

### 2.1.3 Some principles applied to imported fruits and vegetables

#### 2.1.3.1 Quality control and food safety codes

In order to protect consumers' benefits and well-being, Japanese government establishes a corresponding set of principles which the aliment sector is bound to comply with. When studying the standards of quality and safety applied for food, it is necessary that one notices the directly related regulations, for instance, the Codes of Safety for Food, the Acts of Plant Preservation, and the Sanitation Prin-



principles for Food. Besides, imported vegetables are governed by Japanese Agricultural Standards (JAS), proposed by the Japanese Ministry of Agriculture, Forestry and Fishing. Both domestic and exotic products are subjected to be under control of these standards. Japanese citizens, in general, rely on JAS to justify all kinds of agricultural and forestal products. Therefore, as a crucial part in the positioning mission on Japanese market, F&V are required to fulfill the foremost standards, JAS. The systematic operation of JAS in practice divides into a number of standard criteria to classify items according to their compositions, characteristics or production methods.

According to Tran (*Article: 'Technical standards for preferential products', 2009*), imported products need to be kept in a fresh, unperished condition, in proper size and color. Insects or parasites on fruits like beetles, worms and pests are strictly forbidden, even in suspicion. Vietnamese dragon fruits were one among other samples that experienced the loss in opportunity and reliability of the importer. Quality control, as expected, plays an essential role in the process prior to transporting goods to Japan.

As for frozen items, the Japanese Frozen Food Association set up official instructions for almost all the imported products to guarantee their quality until the expiration date. Taken as an example, mentioned in the "Japanese Market Profile" (2006), asparagus must last 12 months, while 20 months and 24 months are required periods for carrots and pumpkins respectively. To reduce the amount of enzyme and extend the usability time, it is suggested that frozen vegetables be initially blanched.

All the imported products' quality has to be certified by JAS and proven to be environmentally friendly. These copies of certificates are issued by Japanese laboratories or other national organizations that followed closely the checking process given by Japan. This prerequisite partly emphasizes the magnitude of quality control, which certainly is highlighted in Japan. Fresh F&V need to qualify the pesticide content, disease risk factors, radioactive substance tests. Frozen greenery is obliged to pass an extra bacteria test. In the perspective view of numerous experts,

Japan has an extremely high level of standard when evaluating plant products, even higher than that of the USA, EU or other international standards. In practice, according to Japanese standard, the extra amount of Orysastrobin, named as one among other kinds of chemical compounds, is not allowed. Meanwhile, other fungicides like Pyraclostrobin are restricted to the minimum amount depending on each kind of fruits as in the table below.

Items	Expected accrual content (ppm)	Practical accrual content (ppm)
Sugar beet	0.2	0.2
Japanese radish (roots included)	0.4	0.4
Japanese radish (leaves included)	16	20
Round radish (roots included)	0.4	0.4
Round radish (leaves included)	16	20
Lettuce	3	5
Cabbage	5	5
Brussels sprouts	5	5
Borecole	16	20

Table 2. Maximum stagnant amount of Pyraclostrobin allowed in vegetables  
(Source: Notice no.3363 'Changes in Japanese safety codes for food products')

Pyraclostrobin ( $C_{19}H_{18}ClN_3O_4$ ) is a chemical substance which is specifically used to exterminate fungus on plants but also causes deteriorating side-effects to respiratory and peptic organs. The table indicates that the stagnant amount of Pyraclostrobin acceptable in plant products is quite low, as 0.2 ppm in sugar beet. The figure represents that in 100g of sugar beet should merely  $0.2 \times 10^{-6}$ g of Pyraclostrobin exists. This actually is an absolute proportion of chemicals that is efficiently safe for human well-being. For that reason, in order to qualify JAS, the producers have to pay close attention to growing techniques, regularly supervise and restrain from using pesticides.

### **2.1.3.2 Principles on packaging and branding**

The principles on packaging and branding depend upon the Codes of standards and branding agricultural products. Regarding fresh vegetables, the suppliers are liable to aid the buyers' selection with full information on name and type of product, country of origin, producer's name, importer's name, transporter's name, quantity, size and characteristics of product. On the frozen types, it is necessary to be labeled with the information on item name, expiration date, producer's name or address, importer's name or address, list of additives (if any), instructions for use and preservation condition.

Japan applies specific regulations of packaging procedure to certain kinds of imported F&V and expects the importers to comply with this guideline. All sorts of greenery products are defined by carton or container size and the net weight per container. For example, imported bananas, as stated in the regulations, need to be unripe while being transported to Japan. Bananas then are left in the storage before being offered for sale. Imported bananas are kept in the cartons with the capacity of 12-13kg. Pineapples are peeled off, with core being got rid of and mixed with other ingredients in low temperature, finally hits the market as one type of frozen products. Imported pineapples are kept in the cartons with the capacity of 10kg or 15-20kg. Papayas are imported the whole year in cartons with the capacity of 4kg (*Source: 'Japanese Market Profile', 2006*). Each type of products is de-

manded to fulfill all the prerequisites of packaging, otherwise can be returned back for unsuitable package mistakes.

Besides being attached with regular labels, imported greenery items are necessitated to be issued a JAS certificate as a sign of reliability to consumers. The packages, in addition, should be durable during the transporting process, convenient, informative and environmentally friendly.

### **2.1.3.3 Tariffs and trading barriers**

Customs procedures and import duties are two among other concerns that are noteworthy to importers as a trend in guarding domestic production and internal customers is universally rising. The regulations of import duties and the rights of security mentioned in the Agricultural Convention have been approved by Japan and have effects on trading business involved many nations. The set of import duties is quite complicated in practice as many different tax rate is applied, depending upon the country of origin. Nowadays, AJCEP in execution has eliminated partly the tariff barriers on imported F&V from Asia, including Vietnam. This indubitably is a big advantage for Asian countries to capitalize on in order to deprive market shares from other competitors.

Apart from the customs duties, technical barriers and trading limit are marked as parts of the trading barrier against the F&V importers. Tariff rate quotas (TRQs), when implemented, has profoundly limited the import volume of several goods such as dried green beans.

In conclusion, Japanese market has a considerably high demand for imported F&V products. The range of imported items and their volumes are believed to be quantitatively abundant. However, the penetration into Japanese market is not necessarily smooth when they pose such a high standard of technical requirements on aliment products that needs to be fulfilled. Vietnamese importers are suggested to

broaden their knowledge of Japanese market as well as the governmental regulations to pave their path into the said market.

## **2.2 The picture of Vietnamese fruits and vegetables production and exporting**

### **2.2.1 Advantages in producing exported fruits and vegetables**

#### **2.2.1.1 Natural resources**

Vietnam is naturally endowed with advantageous characteristics of nature in land, climate and water sources. Vietnam has two biggest deltas, named as the Red River Delta located in the North, Cuu Long Delta in the South, and lastly a rich but narrow range of delta along the Central of Vietnam. The large diversity of land resource in Vietnam is categorized into different groups such as alluvial soil in the deltas, basaltic soil in Tay Nguyen, sandy soil along the coastal regions, grey soil in low mountainous regions. Each has its own positive and negative aspects, and especially beneficial to a specific number of plants that create the affluence and typicality for Vietnamese agricultural products.

The rivers and streams network is dense and flush with Red River, Ma River, Dong Nai River and Mekong River. The opulent network of water resources provides a sufficient irrigational system, which technically diminishes a source of extravagant and unnecessary investment.

Commenting on the weather conditions, it can be spotted that the long-spread narrow land area in the Central of Vietnam prominently inflicts the variation in Vietnamese climate, distinguishes region from region. The Northern area enjoys all four seasonal weather in spring, summer, autumn and winter with distinct features and clear dissimilarities among seasons. The Northern climate gives the producers

a chance to independently grow a copious number of crops and the fruits grown in winter time, therefore, may originate from the subtropical zone and temperate zone. The Southern area differs from the Northern with the climate characterized by only two seasons, the dry season and rainy season. The Southern provinces, as predictable, are well-known for being an ideal region to grow the tropical fruits like mangos, coconuts, avocados, rambutans.

To summarize, the wide diversity of land sorts, the diversified weather conditions combined with Vietnam topography give the nation the opportunity to deepen and widen the range of F&V production, in turn transform these premises into the next level of development.

#### **2.2.1.2 Human resources**

The total population counted was around 87.375 million people (2011), in which the estimate group of productive farmers, who gather in the agriculture sector, outnumbers others with 63% of total labor (*Source: Nation Master*). Possessing a young population, Vietnam has plentiful of human resources which are presumably stable in the coming period of time. Furthermore, Vietnam specializes as an agriculture-focused nation, the labor force in general is experienced, has a good understanding of climate and regional attributes. Unfortunately, this is not always counted as a benefit for agricultural production. As a matter of fact, being dependent on long-lasting individual experiences, the products cannot reach the desired level of homogeneity but vary extensively. Upfront the chance of entering greatly potential markets, taking as an example as the Japanese, this situation somehow restricts the possibilities of importers.

In common belief, Vietnamese people are famous for being hard-working and take a resolute interest in learning. However, the approach to new technology in the countryside area is delayed unwillingly, which leads to a low specialization level in producing. Today as the importance of altering the producing methods has been realized, the labor source located in the agricultural-focused region is attentively

trained to improve their degree of specialization. It seems promising they are the ones who will handle and modernize the future business models.

### **2.2.1.3 Conveniences**

In addition to major positive factors that influence the F&V production like natural conditions and human resources as mentioned in the previous section, Vietnam benefits from an asset of convenient fairways and airlines. As F&V are shortly perishable goods, this is primarily a good sign for Vietnamese products easily to be shipped to Japan due to the short distance by both sea traffic and aviation.

The endeavor spent on advancing the F&V sector as one of the most fundamental businesses is also advantageous. Progress has been made dedicated to basic infrastructure construction, planning and planting techniques studies. However, these are only initial steps that, in fact, call for more efforts from the government and producers to install more modernized facilities, give more assistance and apply new technology.

## **2.2.2 The situation of fruits and vegetables production in Vietnam**

### **2.2.2.1 Production modes and technology application**

Vietnamese production of F&V is conventionally obsolete, impulsively stimulated by individuals and limited in access to technology. The most direct reason for this mainly based on the experiences gained by the single predecessors, soon be passed down to their next generations over thousands of years. Up to now, the similar mode of production know-how has become an irreversible tradition in Vietnamese culture. The second cause is likely to come from the division of land into small pieces for each household, which puts obstacles on the way of operating

monotonous and sizeable machines, raises the costs of inputs and affects the quality as well as the productivity.

In recent years, all kinds of mechanic equipments, new seedlings, fertilizers have been widely used. Unfortunately, due to the lack of knowledge, producers intensively overuse an enormous amount of chemical compounds that later destroy the environment and directly reduces the quality of crops. Hence, enhancing the perceptive level of farmers, creating seedling breakthroughs, safe and ubiquitous production methods are few suggestions to minimize the adverse impacts.

Planning zones for growing F&V in Vietnam is practically taken at a low speed when specialized zone is insufficient. Generally speaking, most of the divided zones concentrate on its everlasting reputed products, attached to the geographical names when being referred to by consumers as Luc Ngan – Bac Giang Litchi, Lo Ren – Tien Giang Cainito, Da Lat Vegetables. Regarding the rest of cultivated areas, it is estimated that less than 10% is assigned with new techniques like glass house, green house, or applying Global GAP (Good Agriculture Practices) – standard process of making agricultural products. Planned zones that have not been completely facilitated, fail shortly to attain the desired efficiency. Despite all the restrictions on planning, management and execution, this is the right and auspicious direction to focus and intensify in order that Vietnamese F&V can use the available resources more effectively.

#### **2.2.2.2 Cultivated area, capacity and yields**

Stated in “Report of fruits and vegetables exporting in Vietnam 2009” by Vietnamese Fruit & Vegetable Association, the total cultivated area dedicated to grow F&V up to 2009 is more than 1.5 million hectares (ha), 774.000 ha of which is for fruit trees and 700.000 ha is for vegetables.

Do (2010) points out that the area of grown vegetables continuously increases since 2000. In 2000, the whole area of vegetables was 464.000 ha, which later



had escalated 38.8 % to 644.000 ha by 2005. However, there has been a gradual slump down in the land expansion while urbanization proceeds forwards. A remarkable land area has been switched for other purposes. In the period between 2005 and 2009, the area of vegetables-focused only rose by 8.6%, much less than from 2000 to 2005. As the research of the cultivated areas showed, Red River Delta, followed by Cuu Long Delta, is currently the biggest farming area which yields 37.4% of Vietnamese vegetables. Therefore, it can be said that the vegetables growing land is centered in two biggest deltas in Vietnam, which is accommodatingly fit for investment and planning focus contemporarily.

The fruit land area, as in ‘Annual Agriculture report 2010 and prospects of 2011’ by the Ministry of Agriculture and Rural Development of Vietnam (2009), approximately reaches 800.000 ha by 2010, meaning 10.000 ha larger than in 2009. The area of grown fruit trees is also interminably expanding. In 2009, the land area rose by 15.000 ha and nearly 30.000 ha in comparison to that of 2008 and 2007. Thus, the average rate of growth through 4 recent years is estimated at about 2% per year. Besides, the fruits zone areas are unequal among different regions.

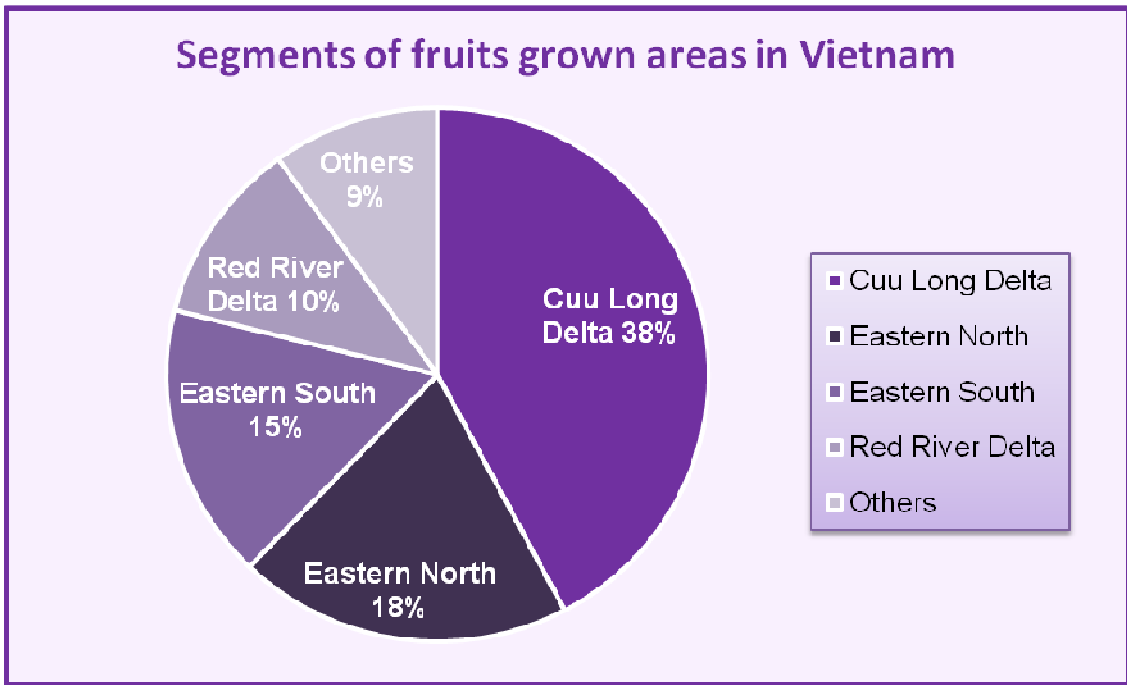


Figure 5. Segments of fruits grown areas in Vietnam  
 (Source: Vietnam – Japan Gate Way)

The graph indicates that Cuu Long Delta is the region where most fruits trees are grown, 38% of land of fruits trees in Vietnam. Next come the Eastern North and Eastern South with 18% and 15% of land used for fruits trees. Some other areas that only represent 9% in the graph still need expansion and further development since there apparently is a big gap among these areas.

Vietnamese F&V productivity is appreciably on large-scale. Each year Vietnams is reported to produce about 17 million tons of F&V, in which the total fruits yield is 6.5 million tons and vegetables yield is more than 10 million tons. The area which has the biggest capacity to produce vegetables is Red River Delta, where 41.6% of Vietnamese vegetables are harvested. On the other hand, Cuu Long Delta is the region with the highest fruits productivity, around 46% output of the nation which equals 3 million tons of fruits. (*Source: Annual Agriculture report 2010 and prospects of 2011*).

As mentioned earlier, Red River Delta is the region which has the largest area aimed for vegetables planting, 37.4% but generates more than 41.6% output of Vietnam annually. Similarly, 38% of land where Vietnamese fruits is grown is Cuu Long Delta but that region produces above 46% of the total. It seems obvious in both cases that the focused areas have been more productive than others. The delivery rate of F&V in Vietnam is estimated to run shortly after the world's average output 5%. Vietnam, for that reason, still needs to work on the expansion of production and the capacity and yields of greenery products.

### **2.2.2.3 Products**

Vietnam is capable of offering a wide assortment of F&V featured in the subtropical and tropical zone. The availability of products swiftly changes seasonally, particularly the ones which are grown in Northern and Northern Central. The subtropical climate in Northern allows it to grow subtropical F&V such as cabbage, kohlrabi, cauliflower, peach and plum in the winter. Aside from the North, starting from the Southern Central, the rest of the country land is referred to as the land of tropi-

cal fruits. As a typical example, Cuu Long Delta generates a variety of economically valuable fruits on a big scale.

Vietnam has plentiful of fruits which have been successfully branded and adhered to separate regions along the country. Some of the most universal brand names included the names of the regions that produce the most quality fruits like Luc Ngan Litchi, Hung Yen Longan, Binh Thuan Dragon Fruit, Hoa Loc – Dong Thap Mango, Phu Trach Pomelo, Ben Tre Green Pomelo and so on. Some production areas with favorable climate and terrain characteristics, additionally, can rotationally grow a copious number of high-priced fruit in one year. This factor appears to aid Vietnam in developing F&V sector, amplifying the total value of exported greenery.

#### **2.2.2.4 Harvesting and processing**

F&V in Vietnam are harvested utilizing manual labors, mostly making use of liberal family members to reduce costs. Harvesting methods are also neglected, especially technical measures of preservation is taken lightly. In the production zones, nowadays, F&V are harvested by farmers in their own methods, which later will be traded to vendors so the lack of classification and safe shipment techniques tend to cause damages to the products. In fact, many local regions do not own sufficient facilities to ensure the flow of process from harvesting to marketing. Products preservation unprofessionally bases on experiences of the producers instead of modern standards. Greenery goods face the risk of being preserved by toxic chemical compounds, which inflicts negative effects on not only the quality but also consumers' health. Missing the right harvesting time, another common mistake that is prompted by spontaneous manual labor and unknowledgeable farmers, can result in fruits being overripe and vegetables being on the wane.

The volume of agricultural products to be processed in Vietnam is low, most of which is fruits products. In 1999, the capacity of fruits processing was only 150.000 tons per year but 4 years later, with heavier investment in constructing

small and medium factories, the capacity increasingly grew to almost 300.000 tons annually, which was 44.6% of the forecasted capacity to be achieved by 2010. In calculation, the amount of processed fruits is still not satisfactory in comparison with the yearly yield of fruits, 17 million tons (*Source: Fresh and processed Fruit and Vegetable sector*). Obsolete and non-monotonous technology is likely the main reason that causes the low productivity. Vietnamese items have multiple forms, which can be categorized into frozen, dried, canned, pressed or condensed groups. The market position of processed food has been positively incrementing when the demands show signs of an unwavering growth as customers favor the conveniences and new tastes. Moreover, processing helps fruits no longer have to compromise with seasonal factors and deliver more values. Fruits processing, hence, should be further invested in so that it can address the issue of excessive amount of products generated and lift the burden for farmers.

### **2.2.3 The situation of Vietnamese fruits and vegetables export**

#### **2.2.3.1 Volume and export scale**

Vietnamese export scale of F&V is comparatively remarkable with about 450.5 million USD (*Source: International Merchandise Trade Statistics 2010, Vietnam Customs*). The majority of F&V provision is for domestic consumption. The volume of exported section is calculated only 15% of total national outputs. Whereas, 2.5 million tons of exported greenery currently is assumed to only meet with 40-50% of Vietnam's trading partners as the number of deals foreign traders are willing to make is growing. This is one opportunity for Vietnam to give both the production capacity and export scale extension in the next few years.

F&V export scale is in the middle of a continual upward trend though the years. Research has indicated that the accumulated value primarily comes from the rise in the price of exported goods instead of production, which barely has a fluctuation. It is perceptible that Vietnamese F&V is reaching the state of being saturated.

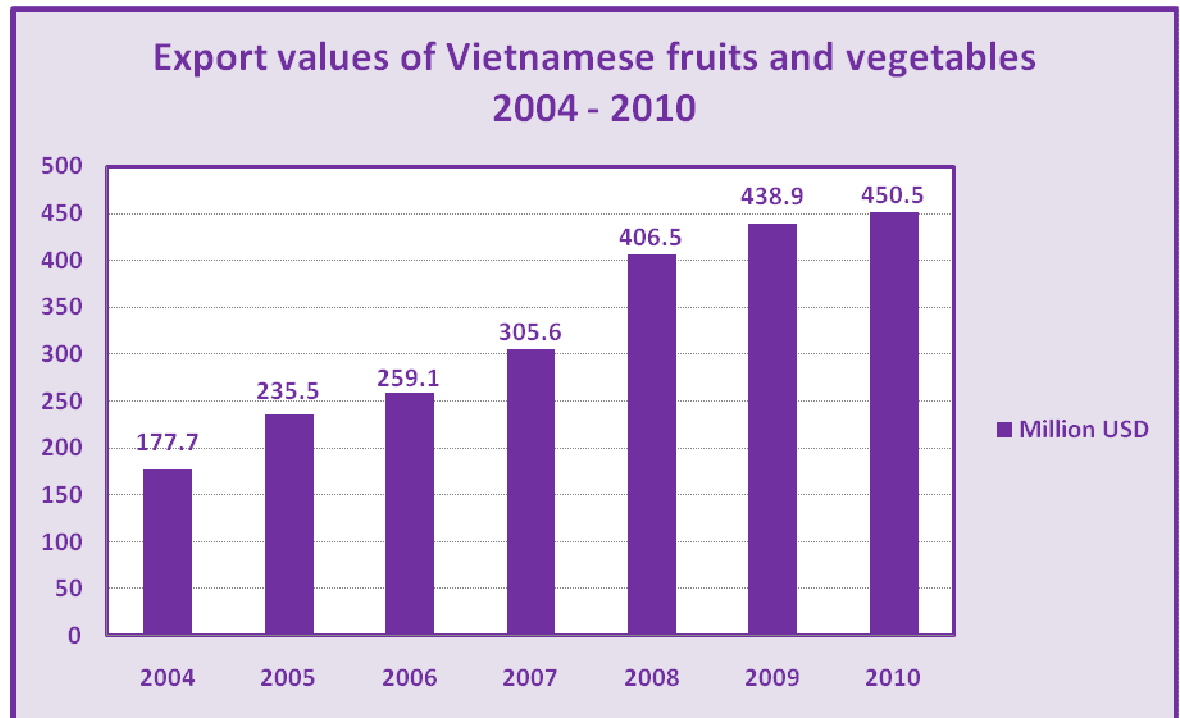


Figure 6. Export values of Vietnamese fruits and vegetables 2004 – 2010  
(Source: *Some principal commodities, Ministry of Industry and Trade, Vietnam*)

Being demonstrated in the graph above, the export values uninterruptedly increase throughout the period but the accelerating rate is not truly high. In 2008, the recorded highest jump in the export value was from 305.6 to 406.5 million USD, increased 33% compared to the previous year. It was followed by a downward trend in recent years, rising only 8% in 2009 and 2.6% in 2010. As the export value is heading into a regression recently, it signals the sector shrink which provokes Vietnam to seek for a suitable solution to boost the import value again.

### 2.2.3.2 Markets

Vietnam has clients in the F&V sectors from more than 50 countries and territories at present but the volume of export is somewhat modest. There are about 26 markets located in different areas to which the export value exceeds 1 million USD. China has always been the most important F&V importer of Vietnam in recent years. In 2006, the export value to China was above 79 million USD, gradually

increasing through the years. In 2008 and 2009, the value rose to 94 and 123 million USD respectively.

Country	2006	2007	2008
<b>China</b>	79.058	94.269	123.415
<b>Japan</b>	30.336	31.651	32.848
<b>Russia</b>	16.648	18.512	33.292
<b>Taiwan</b>	26.025	28.276	28.135
<b>USA</b>	18.922	27.989	20.619
<b>Netherlands</b>	12.497	14.473	16.323
<b>Korea</b>	5.723	9.383	10.659
<b>Singapore</b>	5.493	7.673	9.108
<b>Thailand</b>	8.965	7.385	9.848
<b>Hong Kong</b>	9.061	7.675	8.631

Table 3. Vietnamese fruit and vegetable export values by their main partners  
(Source: Ministry of Industry and Trade)

In the period before 1991, Soviet Union and other socialist countries were the main importers of F&V from Vietnam. The circumstance, however, changed swiftly after Vietnam started to eliminate trading restrictions to EU and USA in the first few years of the 1990s'. Asian countries including China, Japan, Taiwan, Korea, Singapore, Thailand and Hong Kong are now the biggest trading partners of Vietnam. China, as the predominant destination which used to be the importing market of 60% Vietnamese F&V, dropped to 41%, followed by Japan (13%), Russia (12%) and the USA (8%) in 2008 (Source: 'Fruits production will accelerate', 2010). This

may act as a factor to urge Vietnam to take incentives to penetrate further in potential markets such as Japan and the USA.

The F&V export scale is also volatile among countries and alters time to time. Compared with 2008, the number of markets that own the export value from Vietnam over 10 million USD drops but the prices of products are picking up. While the demands of leading countries, China and Japan, Russia are rather optimistic, there are some markets such as Thailand, Netherland or the USA slowly withdrawing with the export scale increase just slightly over years. In brief, Vietnam's positioning and export value are not supposedly stable. Solutions should be made by Vietnam to keep a stronger market position and push up export values of Vietnamese greenery sector.

### **2.2.3.3 Exported products**

Vietnamese F&V variety of products are categorized into two main groups which are fresh items and processed items. The fresh category plays the majority part while the part of processed category is minor, ranging 5-7% of the export scale.

A study by Nguyen and Mai (2009, 11–12) suggests some of the most trending exported products as below.

- Fresh fruit products: Dragon fruit (pitaya), water melon, litchi, longan, mango, mangosteen, rambutan and banana;
- Fresh vegetables: onion, garlic, potatoes, cabbages, cucumber, taro, pumpkin, long bean;
- Drying/desiccated: coconut, mushroom, bamboo shoot, and litchi, long an, jackfruit, banana, taro;
- Pickled /in brine: cucumber (gherkin), mushroom, baby corn;
- In syrup: pineapple, litchi, longan, mangoes;

- Fruit juices: pineapple, mangoes, Guava, litchi, yellow pumpkin, tomatoes;
- Frozen: spinach, pineapple, rambutan, litchi, and watermelon.

Providing the customers with excellent taste and positive effects in health improvement, these kinds of fruits have so far been on top of the sector's imported list. The demands, however, varies among regions due to distinguishable tastes and likings of the population. Consequently, the varied demands lead to the varying exported items in different regions. Market researches and other forms of surveys done separately in each region are valuable materials for Vietnamese exporters to study the real demands as well as required standards. In addition, it is urgent to develop the F&V processing industry to raise the quality of fruits, diversify the available product range in order to keep up with new arising needs from foreign buyers.

## **2.3 The necessity to promote Vietnamese fruits and vegetables in Japan**

### **2.3.1 Improving the status of fruits and vegetables products**

From all the points that have been made, Japan is clearly one of the most potential export markets of Vietnam. Vietnam's greenery export value, 471 million USD, lately met with the expected goals in 2010 as stated in "Ratification of fruits and vegetables planning – Vision of 2020". Nevertheless, the export value of F&V still remains modest in comparison with that of other agricultural products. For instance, the export value of F&V in 2010 only obtained 24% of the export value of coffee (1.8 billion USD) and 14% of rice (3.2 billion USD). Vietnam has been proven to be exclusively advantageous in producing exported F&V but the export value has not met up with all the potentials and resources the nation possessed. In pursuance of achieving the record of 1.2 billion USD by 2020, the government is entailed to put more effort in designing an expedient and efficient strategy to promote F&V sector, turning the said sector into an essential part of export planning.



### **2.3.2 Improving the living standard, promoting the mechanization of agriculture and modernization of rural areas**

Vietnam currently has over 63% of labors working in agricultural sector. Most of the population located in these areas is living in poverty and old fashion. Vietnam is wrapped up in promising natural conditions and human resources, which are possibly beneficial to agriculture promotion in general and F&V as a part of it. Finding the output markets for agricultural products, understandably, is one of the foremost priorities in the authorities' minds. F&V export is considered to be a huge opportunity to pull the farmers out of the impoverished state and considerably improve their living standard. This is also the foundation not only to actuate other agriculture-supporting businesses but also to elevate the expenditure power in the countryside. Likewise, the short production time of vegetables and the high prices of fruits are two justifications to back up the plan of expanding the cultivated areas and allocating more financial sources. Lifestyle alteration and higher education level are two undeniably factors in the implementing process of mechanizing agriculture and modernizing rural areas, lessening the gap between urban and rural areas.

### **2.3.3 Enhancing the relationship between Vietnam and Japan**

Preceded by the ASEAN – Japan Comprehensive Economic Partnership Agreement (AJCEP) being enforced since December 2008, the Vietnam – Japan Economic Partnership Agreement (VJEPA) was also put in force since October 2009 has created a big opportunity to promote bilateral trading between two nations. Japan has always been an important importer of Vietnam in many major sectors. Japan is also a nation with great demand for F&V products while Vietnam has the ability to address this issue. Export values yet have shown that much potential is still left unexploited to the extent Vietnamese F&V production can achieve. The promoted F&V sector more or less without uncertainty will contribute to build a stronger bond in commerce between Vietnam and Japan. Moreover, Japan exhibits a high level of scientific and technical progress, which always ranks in the top

of the most developed countries, simultaneously has high required standards. Through cooperation, Vietnam can learn from Japanese experiences in production, processing, wherefore Vietnamese labors can accumulate knowledge and apply in agriculture. Thus working with Japan, Vietnam is inclined to not only enhance their commercial situation but also gain access to modern technology, building up a healthy all-sided Japan – Vietnam cooperating relationship.

### 3 PRACTICAL ANALYSIS

#### 3.1 Brief summarized performance of Vietnamese exported fruits and vegetables to Japanese market prior to AJCEP (December 1, 2008)

During the period between 2000 and 2008, exporting F&V from Vietnam to Japan has showed a huge breakthrough which in turn made Japanese market one of the exporters in the forefront with high export value. There was also a sharp upsurge in the F&V exporting sector, adding a perceptibly substantial amount in the total value of exported agricultural products. The instability of the pricing and markets, however, discourages the improvement in one way or another by bringing up definite challenges. In 2000, the export value of F&V reached 104 million USD, doubled that of 1999. It provided a propitious prospect for the sector from the very beginning of the century. Next, the peak at 230 million USD in 2001 stressed the confirmation of the perspective with much potential in which F&V becomes one principal category in Vietnamese agriculture. The inconstancy of the goods sources and the changing quality of the products themselves led to a serious drop in two following years, 2002 and 2003. The export value hit the bottom at 95 million USD in 2003. Since 2004, export value of F&V has been in a recovery and is constantly increasing. In 2005, the accelerating rate was 32.5%, meaning the export value was 235.5 million USD. The accelerating rate from 10% in 2006 rose back to 33% in 2008, generating 450.5 million USD of the export value (*Source: Some principal export commodities*). This is an evidence of the great endeavor Vietnam has been dedicating to F&V and the possibility of further devotion in this sector.

Japanese market is one conventional market of Vietnam with a high export scale indicated by Vietnamese export volume in the said sector. In 2000, 9% of the total value of exported F&V from Vietnam (around 9.4 million USD) was directed to Japanese market. The proportion, nevertheless, ceaselessly augments through

the years with only an exception in 2003. In 2004, 14.7% in the structure of Vietnamese exported F&V was to Japanese market (26.1 million USD), second to Chinese market. From 2005 to 2008, the export value to Japan was always over 30 million USD but volatile in between.

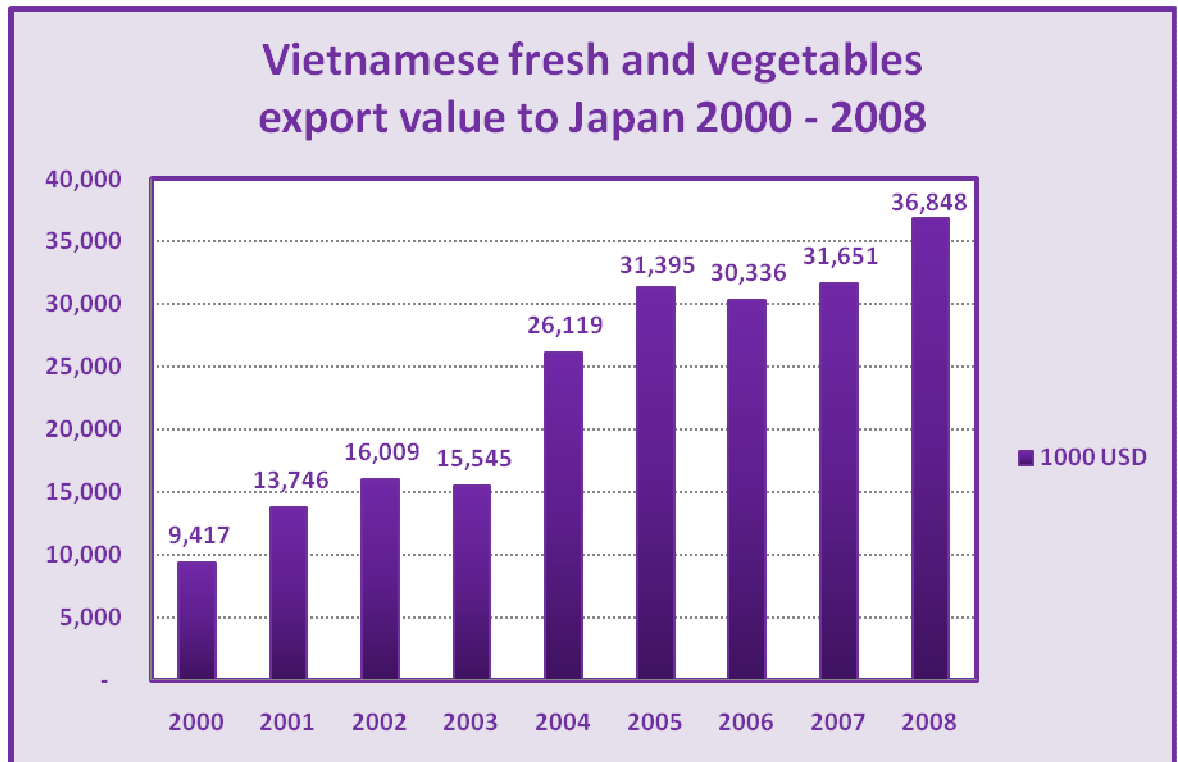


Figure 7. Vietnamese fruit and vegetables export value to Japan 2000 - 2008  
(Source: Ministry of Industry and Trade, Vietnam)

The fluctuation is spotted between 2005 and 2008 when the export value declined in 2006 and 2007 but escalated to nearly 37 million USD in 2008. It is a conspicuous sign of the instability of the F&V trading sector between Vietnam and Japan. This could also present a great confrontation against Vietnam's long-term strategy and simultaneously causes domestic producers and exporters a sense of apprehension.

In 2006, despite of the decrease in the import value from Vietnam, it was a turning marked with Japan surpassing Taiwan to become the second leading importer of Vietnamese F&V. Since then, Japan remains in the second place, only after China

but with the import scale considerably higher than other nations. In 2008, the modest proportion of export value to Japan was merely 30% of that to China. Granting that Japan is a big market with high demand for exported F&V, ¥763.8 billion (€7.45 billion) in the same year, the export value of Vietnamese greenery in Japan's import structure is still relatively low, only 0.37% of the total value.

Japan is a conceivably profitable market to F&V exporters but the market is also intensively characterized by its high quality requirements on the products. Having been mentioned in Chapter 1, Japan has a set of strict standards which regulates the ensure safety, correct branding and packaging. Since Vietnam has just started to focus on producing and exporting F&V in recent years, this could probably be an unresolved issue that impedes the exporting process to Japan greatly. Due to the weakness in lacking production experiences and market understanding, contrast with more developed countries such as China, Thailand and the USA, the ability to compete of Vietnamese F&V is questionable.

Limited access to modern technology in production and processing is another reason for Vietnam's hardship in improving the export value. One typical example of this is the article of interdiction applied to importing dragon fruits from Vietnam. Up to 2008, the prohibition against importing Vietnamese dragon fruits (pitayas) in Japanese customs had not been lifted. The failure in anti-Drosophilae (fruit flies) treatment, violating the safety codes for aliment of Japan cost Vietnamese pitayas the chance to enter Japanese market in a long period. Thus, the lesson learned from the existing weak chain of production, preliminary treatment and technology application is extremely priceless for Vietnam.

Preceding 2008, Vietnamese exported F&V to Japan had to face with varying tax rates depending on separate items, the most common ones are 3% of fresh vegetables, 6% of frozen vegetables and 9% of processed, dried vegetables. Some items were charged with separately high tax rate, for example, 8.5% of potatoes, taros, 12% of peas and frozen peas (*Source: 'Technical standards for preferential products'*).

Apart from import tax rate, some items are under the category in effect of tariff quota. Based on the Special Safeguard (SSG) article in the Agricultural Agreement, Japan applies tariff quotas on some kinds of dried peas. In 2002, fabaceae and dried pea-products except green peas and frankincense, has the tax rate of 10% if imported less than 120.000 tons per year. Supposed the limit was passed, 1kg of peas was charged ¥354 (over 3.300 USD per kilogram). This is one justified difficulty that has noted impacts on the export scale and value of Vietnamese F&V in the period between 2000 and 2008.

In short, the export scale of greenery products from Vietnam to Japan as analyzed above had been subjected to a fast growth rate in between 2001 and 2008. The instability in the growth rate of the sector, even some minor contractions in some years have exposed the weaknesses that needs to be addressed by Vietnam.

## **3.2 The performance of Vietnamese exported fruits and vegetables to Japan after AJCEP**

### **3.2.1 Export volume and scale**

Japan is one crucial export market of Vietnam with numerous heavy sectors like agricultural goods and consumer goods. Right after AJCEP was put into practice on December 1, 2008, there have been 7264 in 9111 lines of Vietnam exported products to Japan retaining 0% tax rate. Declared in AJCEP, Japan undertakes to lift tax rate for 83.8% commercial value of Vietnamese agricultural products. Some types of F&V benefit from this free tax rate including ginger, garlic, durian, asparagus, canned litchi, mushroom, potato and apricot, which undoubtedly increases the export value of these items. Hence, Vietnamese agricultural products are believed to acquire new opportunity to position properly on Japanese market.

As a matter of fact, two recent years, 2009 and 2010, are also the first two years of AJCEP implementation. Accordingly, changes in Vietnamese exporting of F&V to

Japan is an persuading evidence to examine the positive effects of AJCEP on Vietnamese exported goods.

In 2009, in the article concerning F&V export of Vietnam by Dang (2009, 5), the sector is stated to gain 438.9 million USD, rises 7.8% compared to 2008. F&V exporting to Japan alone achieved 31.88 million USD, balanced 7.2 % of total export scale in Vietnam and increased merely 3.5% of the value compared with the previous year. Apparently, based on these figures, either the AJCEP has not had much effective influence on exporting F&V to Japan or Vietnamese enterprises have not been able to take advantage of this opportunity. In the structure of Vietnamese export scale, Japan was to maintain as the second biggest market that imports F&V but it does not appear affirmable as a good signal from Japanese market nor has accomplished to satisfy the expectations of Vietnamese F&V export sector.

Matched with the export value of 31.88 million USD in 2009, Vietnam managed to supply Japan with 16.15 thousand tons of F&V, 9154 tons of which were vegetables, 1070 tons were fruits and the rest were processed F&V (*Source: Trade Statistics of Japan*). The average F&V production capacity in Vietnam annually is about 17 million tons while export volume is estimated to grasp 15% of that, accounts for 2.5 million tons. The export volume, in general, is fairly low in comparison to F&V yielded volume of the nation. While the export value to Japan in 2009 was 7.2% of the total value of Vietnam, the net weight took up less than 1% of the total volume. It seems unambiguous that F&V exported to Japan has a higher price level than other countries.

Export value and volume of F&V to Japan did not make a deserving breakthrough from the benefits of AJCEP approval which includes free tax rate. The main reason for that came from the shrinkage in F&V productivity of the same year, caused by a long drought in the North and an early rainy season in the South. Meanwhile, the Central of Vietnam suffered from a flood from August to October, severely lessened the yield of Vietnam. As the F&V production underwent a dramatic year, the cut in the total yield reasonably led to a reduction in export volume to other na-

tions, Japanese market included. Dang (2009, 5) also estimated that the export volume of Vietnamese F&V only assured 40% - 50% of the demands from their trading partners. This did not only result in the loss of the profitability in short-term but also disapprovingly reduced a certain degree of reputation and credibility of Vietnamese F&V sector as well as its prospect to expanding the market. In 2009, the number of orders stemming from Japan increased a great deal. In the segments of frozen vegetables and frozen potatoes alone, the demands were over thousands of tons monthly but the shortage in supplying source blew the whole chance. Technically, Vietnam frequently earns opportunities to fortify the said sector when the demands from foreign markets never cease to increase. Even so, the limited production capacity discourages Vietnam from covering the demands. The limited production capacity is, indeed, the core question that urges Vietnam to search for a practical resolution in the quest of exporting F&V to Japan.

Except for some drawbacks in the domestic market, helpful hints being transcended from Japanese market in the end of 2009 brought up prospect to develop Vietnamese F&V division in 2010. After a long time period of being banned from the failure of fruit fly treatment, Vietnam's dragon fruit was announced to be official accepted in Japanese import scale again on October 20<sup>th</sup>, 2009. Pitaya (dragon fruit) is one of the expertise fruits of Vietnam and favored in Japan. Since then, an estimated amount of 1-2 tons of pitaya is transported to Japan each day by aviation. Previously, pitaya imported in Japan mostly arrived from Taiwan but the elimination of prohibition on dragon fruit offers Vietnam a chance to step by step gain control over the market. According to Vietnamese Commercial Affairs in Japan, 5 healthy types of fruits most hunted by the Japanese are banana, pineapple, papaya, mango and avocado. Those are also specialties of Vietnam so it can be listed as another good sign to support Vietnamese F&V to be exported to Japan.

Accumulated export value of Vietnamese F&V to Japan in 2010 is over 35.6 million USD, increased 11.7% judged against 2009. The success may be initiated by the positive evolution from the end of 2009. In the beginning of 2010, the quantity of orders increased by 15% of that in 2009, eased the anxiety of Vietnamese importers in searching for output source.



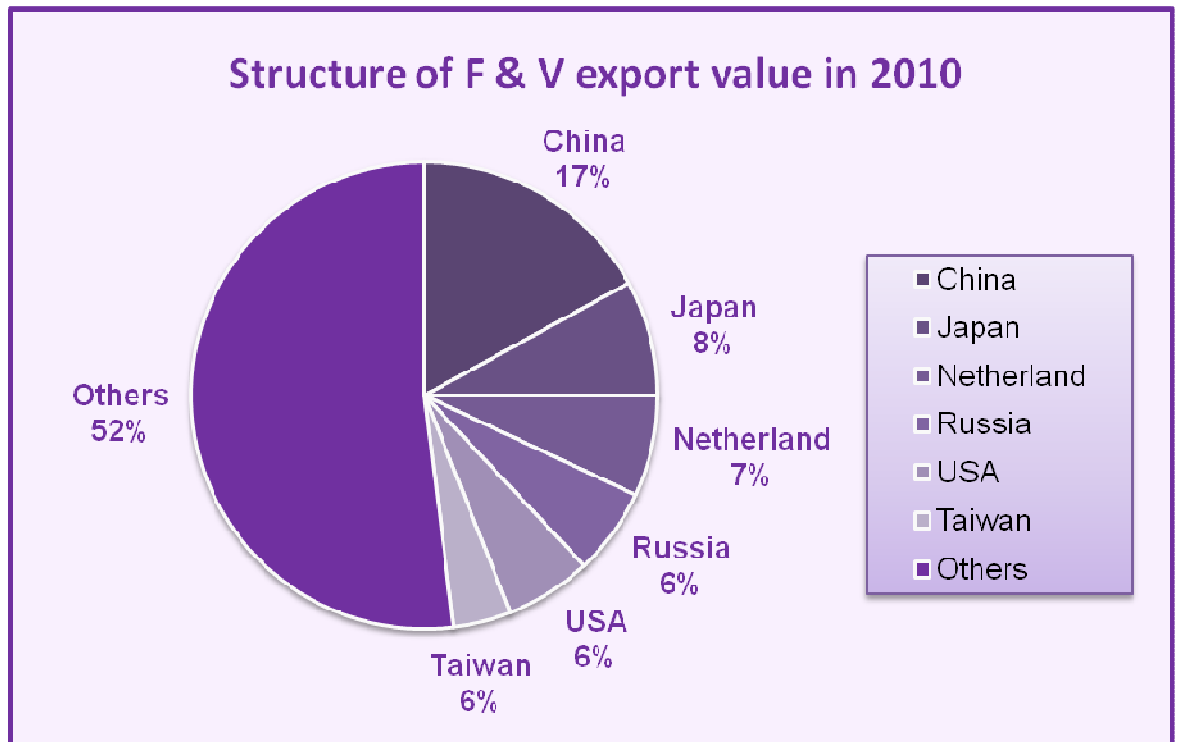


Figure 8. Structure of fruits and vegetables export value in 2010  
(Source: *International Merchandise Trade Statistics 2010, Ministry of Finance*)

As exemplified in the graph above, the percentage of Japan's contribution in Vietnamese F&V export structure is 8%, consequently making Japan the second biggest target market. Export value of Japan ascended 11% in relation to 2009, a moderately higher ratio than other markets like Russia or the USA. However, the ratio of export value to Japan was nearly half of that of China (17%), the number one importer of Vietnamese F&V. In 2009, the total value of exported F&V to China was over 55.2 million USD. In 2010, the value was recognized to grow to 74.9 million USD, doubled that of Japan (35.6 million USD) (Source: *International Merchandise Trade Statistics 2010, Ministry of Finance*). It gives the impression that there is a vast gap between two leading nations in Vietnamese F&V export sector.

In the total of 16.620 tons of greenery exported from Vietnam to Japan in 2010, the amount of vegetables was inexact 12.000 tons and the amount of fruits was about 4.620 tons (Source: *Trade Statistics of Japan*). There was a drop of 1000 tons in vegetables volume and an equal increase in the volume of fruits compared with 2009. Vegetables exported to foreign markets, counting Japan, are centra-

lized in Red River Delta, Cuu Long Delta and some regions with suitable climate as Lam Dong, Sapa – Lao Cai. A wide variety of local fruits, on the other hand, for the most part derive from “the land of fruits”, Cuu Long Delta.

While both export value and volume of Vietnamese F&V in 2010 increased, the export value tends to be volatile and unpredictable in one year.

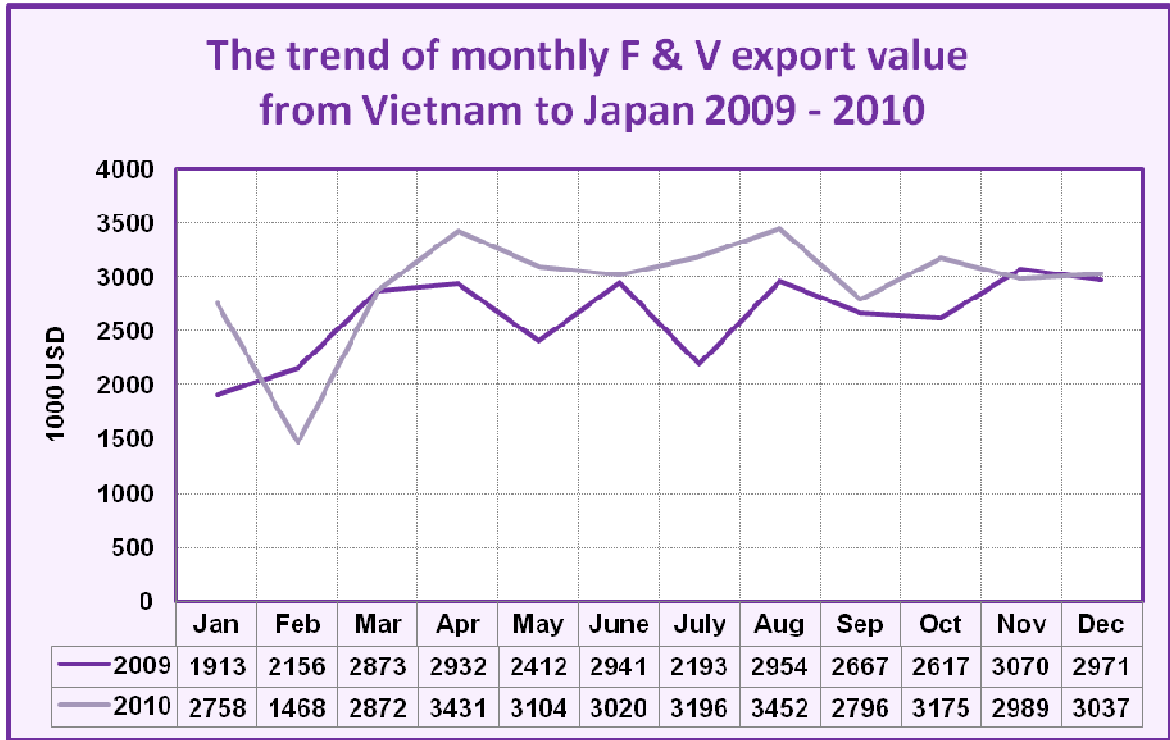


Figure 9. Monthly fruits and vegetables export value Vietnam – Japan, 2009 -2010  
(Source: *International Merchandise Trade Statistics 2010, Ministry of Finance*)

The graph shows there is a significant fluctuation of export value among 12 months in a year. The export volume has an inclination to rise to a high level during 3 periods, April, August and stable from October to December. This shares a similar pattern with the demand of export vegetables in Japan, particularly the soaring demand in the last few months of the year and season-changing months that correspond with the decline in the volume of production due to the changes of the weather. In consequence, the characteristics of Japanese market can be useful for importers to take the initiative in preparing the supplies, concentrating on selecting the right items to proffer their partner.

In conclusion, import scale of Vietnamese F&V in Japan still maintains a steady growth in the last two years. Nonetheless, the accelerating rate still has not made an expectable breakthrough and revealed inestimable discrepancies in monthly values. In the structure of F&V sector, even when Japan stays at the second place in the ranking, it is left far behind China, the largest importer of Vietnamese F&V. The increase in the value mainly is the outcome of the increase in the price while the volume is low and may even signal a contraction. This could be a skeptical outlook, requiring more consideration from producers to actively extend the production capacity and from the exporters to seek out more possible outputs in Japanese market.

### **3.2.2 The variety of exported products**

Though the assortment of vegetables products exported to Japan is not sizeable, it is becoming more abundant as there are always new additions each year. There are about 30 different types of F&V being imported by Japan. Some items including green beans, cabbages, all kinds of egg-plants, fresh fruits and canned fruits are regarded as the driving force of Vietnamese F&V export in Japan. Aside from familiarized vegetables like carrots, cabbages, rambutans, pineapples, Vietnam introduces new varieties, for example, ingredient vegetables, garlic, amaranth, mangosteens. This has 2 purposes, one of which is to diversify the structure of exported goods; the other is to level up the value of exported F&V to Japan.

In the 6 first months of 2010, the export value of vegetables went through an upsurge, gaining 10.8 million USD, which is 14.8% higher than the same period in 2009. Up to June, Vietnam had had 22 kinds of vegetables exported to Japan, in which egg plants has the highest and somewhat unwavering portion with 2.3 million USD, followed by 1.9 million USD from cabbages and lettuces. Compared with 2009, some items increased greatly in value are all kinds of peas (1.9 million USD, +49.4%), maize (1.8 million USD, +58%), pumpkin (563.200 USD, +72.6%). Some other items, however, decrease in value are bitter gourd (18.784 USD, -51.2%), cucumber (550.714 USD, -48.5%), lotus root, perilla.

Items	Jan – Jun 2010 (USD)	Jan – Jun 2009 (USD)	+/-
Total	<b>10.849.846,2</b>	<b>9.454.104,7</b>	<b>14,8%</b>
Egg-plants	2.379.074,0	2.331.587,3	2,0%
Cabbages	1.975.887,5	1.958.305,4	0,9%
Peas	1.940.726,8	1.298.943,1	49,4%
Maize	1.880.833,5	1.189.725,7	58,1%
Pumpkins	563.264,6	326.427,9	72,6%
Cucumbers	550.714,3	1.069.528,2	-48,5%
Mushrooms	439.838,3	440.623,3	-0,2%
Chilies	352.778,4	317.865,3	11,0%
Perilla	93.809,2	113.644,0	-17,5%
Cauliflower	3.816,0	3.840,0	-0,6%
Lotus root	1.136,4	1.782,0	-36,2%

Table 4. Exported vegetables to Japan 6 first months in 2010

(Source: 'Export scale of vegetables to Japan Jan-Jun 2010', [www.tinkinhte.com](http://www.tinkinhte.com))

The export values of greenery items each month also show unsteadiness. After an unflinching rise in the first six months of 2010, exported vegetables value fell to 1.3 million USD by September, 3.7% less than the same period in 2009. Only egg-plant and cucumber gained the high growth rate than the previous year but also slipped down somewhat less than in August. All kinds of other products declined in

value: cabbage (151.400 USD, - 15.2%), pumpkin (8.100 USD, -84.7%), peas (-72.8%). (Le 2010, 11).

The fluctuation in volume and export value of Vietnamese fruits was mostly caused by Vietnamese productivity and Japanese seasonal demand which is often trivial during February – March and July – September. Vietnamese productivity is also affected by climate and season factors and varies for that reason.

Japan imports a number of expertise fruits from Vietnam including pineapple, mango, papaya, rambutan fruits, pitaya, litchi and citrus fruits. Due to the discrepancy in the climatic zones, Vietnamese tropical fruits enjoy an open access to invade Japanese market. This may be verified by a great lift in the export value of fruits, 7.1 million USD, rising with the rate of 537% throughout 6 first months of 2010. Pitaya ranked in the first place as the most desired fruits, nearly exceeded 1.5 million USD. Almost all sorts of fruits ascended in value: grape (298.400 USD, +103.9%), cherry (506.700 USD, +49.8%). The only item shrank by 17.8% in value was mango (376.900 USD) (Source: *'Export scale of vegetables to Japan Jan-Jun 2010'*, [www.tinkinhthe.com](http://www.tinkinhthe.com)). The growth rate was upheld until the end of the year. Up to October, the total value of exported fruits was roughly 11 million USD, rose by 248% compared to the same time period the previous year. Pitaya remained the highest accelerating rate by achieving 2.4 million USD. Since the proscription against importing pitaya in Japan was abandoned in October 2009, the fruit had always been one of the main products of Vietnam on this market and sold at the price level from 8 to 10 USD/kg, more valuable than in other countries. In comparison with the same period of 2009, fruits persisted on their growth rate: cherry (1.3 million USD, +251%); apricot increased by 18.8% in value; the values of papaya, litchi and rambutan fruits were 10 times as much (Source: *'Exported fruits and vegetables to Japan 2010 are estimated to reach \$54.5 million'*, [www.rauhoaquavietnam.com](http://www.rauhoaquavietnam.com)). The constant rate is likely an outcome from Vietnam's effort paid in propping up supplying sources. The majority of types of fruits exported to Japan are originally from tropical zone and mainly grown in Cuu Long Delta. To conclude, exported fruits in 2009 and 2010 kept up the upward trend,

principally followed by a very high growth rate in 2010, contributed to raising Vietnamese greenery products' position on Japanese market.

Meanwhile, the category of processed F&V is fairly narrow with a limited range of products represented by fruits juice, canned or condensed F&V. Today on Japanese market, naturally processed nutritious foods are in high demand and have a grand economic value. Therefore, Vietnam should broaden the variation of processed F&V products in order to level up the full amount of turnover.

It can be assumed that the range of Vietnamese F&V in Japan is quite rich. The structure of exported items may change by month owing to the seasonal production in Vietnam. In 2009 and 2010, fruits category has the highest and most stable growth rate. Some typical items such as pitaya, avocado and cherry are making progress in improving both export volume and value. Nevertheless, it is important to pay more attention to creating seedlings as well as new production techniques to introduce new products to Japan.

### **3.2.3 Price**

One of the major factors that help boosting the value of exported F&V to Japan is price. Vietnamese F&V in Japan comprise a higher price level than in other countries, for instance China, Russia. The average price in 2010 was also higher than in 2009: the average price of spinach exported to Japan in the end of 2010 increased 41% compared to the same period of 2009, reached 2.19 USD/kg; the price at which pitaya was sold is 8-10 USD/kg.

The detailed prices of some products are as following

- Frozen pieces of mango: 3600 USD/ton (CIF)
- Thin pieces of green papaya: 2300 USD/ton
- Straw mushroom: 1650-1750 USD/ton (FOB)
- Salt-preserved chilly: 245-265 USD/ton (FOB)

- Dried coconut: 155-165 USD/ton (FOB)
- Fresh dragon fruit: 300-400 USD/ton (FOB)
- Canned cucumber (720ml): 450-550 USD/ton (FOB)
- Salt-preserved: 800 USD/ton

The average price level of products sold in Japan is usually much higher than in other nations like China, Taiwan, and Cambodia. Compared to the average export price in Vietnam, it is also 5-7% higher. For example, frozen mango is normally sold at the price of 3400 USD/ton, 200 USD/ton less than when being sold to Japan. The high price level of F&V sold to Japan makes up for the limit on the proportion of export goods. (Source: 'Pricing reference of fruits and vegetables from November 23 to December 2, 2010', [www.rauhoaquavietnam.com](http://www.rauhoaquavietnam.com))

### **3.2.4 Export procedure**

Japan has a closely coordinating immense system of distribution channels for aliment provision. Each product is subject to a particular kind of distribution channel and traditional sale mode. Vegetables are often obtainable at wholesaler market. Auction system at wholesaler markets is one typical peculiarity of vegetables supplying system in Japan. Agents and other wholesalers purchase products from daily auctions and sell them to retailers later. In "Japanese Market Profile", about 80% of sale of fresh vegetables is believed to be distributed accordingly while 15% of that is directly marketed by the wholesaler markets to food processing co-operations, agricultural co-operations, trading companies, big merchants in food industry and finally the end retailers sell processed items to end consumers.

Once vegetables products have been imported by importers, they are delivered to the wholesaler markets in the same way with the ones produced in Japan or are directly sold to merchants. The most popular channel of frozen vegetables is via a Japanese trading company which specifically operates in the said field. Fruits are supposed to be marketed via retailer channels, including fruits stores, greenery

stores, supermarkets and department stores. The key distribution channel of fruits is from importers to big local merchants, then chief wholesalers, secondary wholesalers, retailers and finally to end consumers (*Source: 'Japanese market profile'*). In order to sustain a definite position on Japanese market, Vietnamese F&V export sector should be fully informed and well aware of the flow of each product.

At the present time, Vietnamese F&V is exported to Japan in two modes, direct exporting under Vietnamese brand names or under outsourcing form and exporting under Japanese brand names. Every mode has its own strengths and weaknesses.

The first mode, under Japanese brand names like AEON, is supported by the trustworthy reputation of the company, a massive number of orders, strict supervision that complies with the standards and no concerns of marketing or promotion is needed. However, by using this mode, domestic companies must resign their brand names recognition for anonymity unwillingly in exchange of contemporary profits. The other mode, under Vietnamese brand names, customers acknowledge the brands but the cost for marketing and promotion is a trial for many corporations in Vietnam.

In practice, Vietnamese companies tend to select the first method, exporting under an existing Japanese brand name. Understandably, the lack of market experiences and obsolete processing techniques would defer Vietnamese F&V from passing Japanese quality control. Moreover, the closely coordinating system of distribution channels would pose an enormous challenge on the way of penetration for exported F&V from Vietnam. As a consequent, Vietnamese F&V is usually appointed to be traded among at least 3 partakers before reaching final customers. Circulating time of products will be prolonged, which requires sufficient preservation methods to assure F&V fresh when purchased.

Primarily exported using the outsourcing mode, Vietnamese F&V is inevitably transferred between many traders before it hits the market for end consumers to claim eventually. Retailed prices of agricultural products in Japan are high but



earnings are mostly apportioned in the agency systems. The original exporting prices, on the other hand, are low and do not generate much profitability for producers. The procedure of exported F&V distribution is illustrated in the chart below.

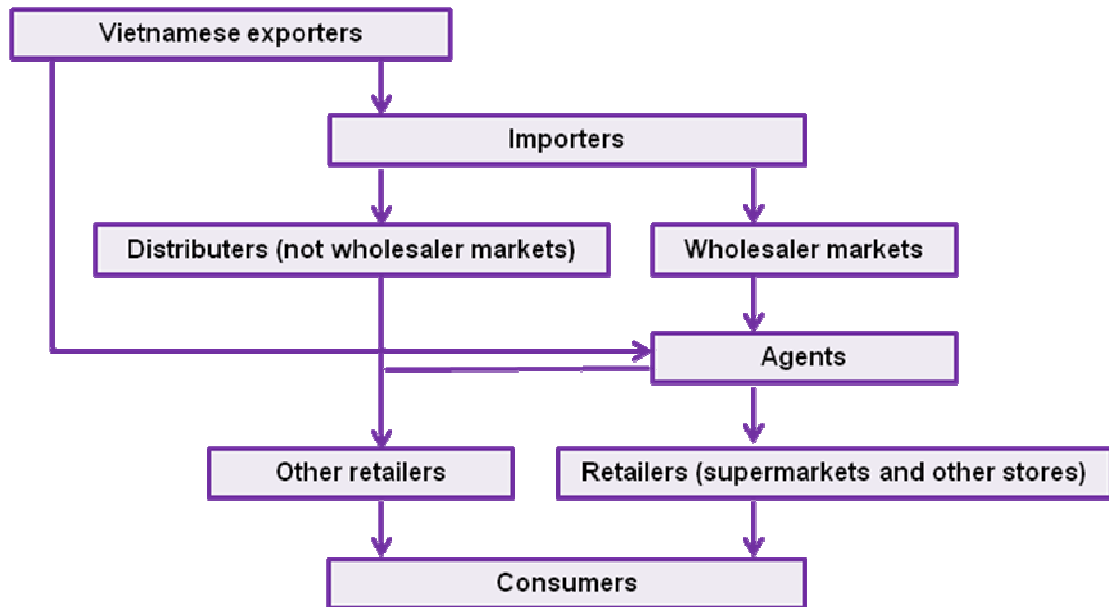


Figure 10. Supplying chain of fruits and vegetables in Japan  
(Source: 'Japanese market profile', [www.rauhoaquavietnam.com](http://www.rauhoaquavietnam.com))

### 3.2.5 Market shares of Vietnamese fruits and vegetables in Japan

Japan is one big market which has a significantly high export scale and export value in the F&V sector. For that reason alone, top F&V export nations like China, Thailand, Korea, the Philippines see Japanese market as one rich destination that is worth approaching and winning over. Just in recent years Vietnam started to pay attention to F&V sector and develop the said sector into a main category of agricultural products. Late endeavor hardly earns Vietnamese F&V good opportunities to compete against experienced nations and position itself on Japanese market. In 2009 and 2010, Vietnamese F&V export sector is expected to make a breakthrough thanks to the benefits adhering to AJCEP. In fact, the actual volume and export value in this short period was unsatisfactory when competing against big-

gest rivals. The accelerating ratio of Vietnamese export value was only above 4.8% while that of China and USA are correspondingly 21.3% and 13%.

Country	2009		2010	
	Volume (kg)	Value (1000 ¥)	Volume (kg)	Value (1000 ¥)
China	1,437,998,809	190,440,260	1,657,723,073	231,013,856
Philippines	1,327,650,948	102,444,353	1,202,892,007	82,360,903
USA	803,648,728	132,058,170	928,791,356	149,261,919
New Zealand	173,940,196	32,169,663	184,070,700	33,894,233
Thailand	169,291,113	24,000,627	169,564,684	24,835,887
Mexico	107,243,339	18,173,937	127,201,331	21,717,076
Brazil	70,445,918	10,865,012	78,403,378	11,774,213
Australia	48,038,726	9,969,595	51,689,613	10,484,488
Indonesia	20,498,271	2,485,132	21,654,822	2,566,633
Vietnam	16,153,982	3,066,398	16,614,282	3,215,479

Table 5. Japanese import values from top partners 2009 – 2010

(Source: Trade Statistics of Japan)

The volume as well as the export value, as demonstrated in the table above, of Vietnamese F&V is very small compared to other nations.

- Export volume

In 2009, the proportion of Vietnamese F&V exported to Japan was 16.620 tons, which represents only 0.34% of the total import volume of Japan (4.8 million tons). Meanwhile, market shares of 3 countries, China, the Philippines and the USA are 29%, 27% and 16.7% correspondingly. The export volume of Vietnam, therefore, is not only diminutive in range of the demand but also inferior to the top importers of Japan. In 2010, the import volume remained almost the same, increased only 0.32% of the total export volume to Japan, 5.1 million tons. The market share calculated based on volume was estimated to decline 0.02% due to the much lower rate of volume growth of Vietnam in comparison with other countries. The export volume of Vietnam to Japan in 2010 only had an increase of 460 tons while China, the USA and Mexico respectively exported 220.000 tons, 125.000 tons and 27.000 tons more. It is deemed that Vietnam's market share on Japanese vegetables market is literally small and the growth rate of export volume is also lower than that of other nations to a great extent.

- Export value

In 2010, the market share calculated based on export value was 0.45% of the total import value of Japan, over ¥718.9 billion (€7.09 billion). Thus, the market share based on export value of Vietnam in Japanese F&V sector is negligible and substandard. The export value of Vietnam in 2010 was only 1.39% that of China and 2.15% of the USA.

Put side by side with some South East Asian countries, the F&V export scale of Vietnam is still less significant. In 2010, the Philippines were persistent in being the second biggest F&V exporter to Japan. Thailand exported to Japan 169.000 tons of F&V with the total price of ¥24 billion (€240 million). As a matter of fact, Vietnam's export value was only 3.9% that of the Philippines and 12.9% of Thailand. The Philippines and Thailand, locating in the same region and sharing the same natural conditions, nevertheless have the export value comparably much more enormous than Vietnam. Vietnamese F&V sector indisputably has certain

weaknesses that may only be eliminated by learning from countries in the vicinity so that all the potential and advantages can be put in use.

Concisely, the market shares of Vietnam in Japan are minor in both export value and proportion. Compared to other important exporters, Vietnamese F&V rate of growth is clearly not on an equal level. This can also be the cause why Vietnam finds it difficult to expand their market on Japanese F&V market. Some nations with the similar conditions with Vietnam in some way have successfully positioned their products in Japan. Therefore, heartily learning from neighbor countries to create a consolidate strategy for future development is definitely advisable.

### **3.3 General analysis and evaluation of the current state of Vietnamese fruits and vegetables exported to Japan**

#### **3.3.1 Achievements**

The enforcement of AJCEP is originally expected to pave the way for Vietnamese goods, including the F&V sector to enter Japanese market easier. Indeed, Vietnamese F&V export sector has accomplished some success. Vietnamese export scale in 2009 maintained the ascending trend in 2008, gaining 32.4 million USD. In 2010, the export value rose by 11.6 million USD, contributed to level up the total export value of Vietnam to 450, 5 million USD and making F&V one of the main categories in agricultural products (see page 33).

Besides, being marketed in a huge market with standard control as Japan has enhanced the status of Vietnamese F&V. Advances made in producing and processing techniques are also proven, brings optimistic prospect to further development steps in the near future.

The variation of available items is constantly increasing by introducing new preferences such as pitaya, avocado, cherry, egg-plant, pomelo, in the same way highlights the reputation of Vietnamese agricultural products in Japan.

In 2009 and 2010, especially in 2010, there was a sudden upsurge in the number of orders from Japan. This not only emphasizes the increasing credibility of Vietnam to the Japanese but also shows more signs of attention to Vietnamese F&V from Japan. It is one opportunity for Vietnam to extent their play field and boost the total value of exported greenery items. In two recent years, Vietnam has failed to consummate a number of orders on account of inadequate size of outputs to meet with the demand in Japan. This can be viewed as a waste but it also points out deficiencies along the link between producers and importers that need revising and intensifying in width and depth. The multiplication of orders is an opening gate welcoming Vietnamese F&V to Japanese market.

### **3.3.2 Challenges**

In 2009 and 2010, export scale to Japan is still able to keep pace with an upward trend of value growth that ends up complimenting the total value of Vietnamese F&V export sector. Japan is named as the second biggest importer of F&V from Vietnam. However, in contrast to all achievements, weaknesses cannot be overlooked especially when all the advantages have not been exploited and the sector's performance has not met with expectations.

- Substandard quality and profitability

Vietnamese F&V when exported to Japan has to fulfill all the principles and regulations concerning the quality control, safety codes of food products, Japanese agricultural standard (JAS), brand name and packaging regulations. Consequently, the quality of Vietnamese goods sold to Japan is more commendable than the ones shipped to other countries. On the contrary, F&V products from Vietnam have yet been competitive enough against the ones from other importers, evident-

ly in the lack of homogeneity and poorer aesthetics. As a result of outdated methods of production and late concentration, the production experiences and investment in technical appliances are often insufficient, giving the low rate of both quality and productivity. While Vietnam's annual capacity is to generate over 17 million tons of fresh F&V, only 15% of which is counted in export scale and the average volume sold to Japan is solely 16.000 tons per year (see page 43).

Because the quality is not up to the standards in Japan, many kinds of F&V of Vietnam have no chance in entering this market. Even a recognized amount of greenery grown in the focused-zones fails to attain the goal of competent functioning. The producers, as a direct cause, is still perplexed in using technical techniques that in sequences, cuts down on the quality of the harvested F&V and hardly creates uniformity. In a straight line, this has a profound impact on export volume to Japan as well as averts Vietnam's attempt to discharge all the proposals.

Furthermore, since preservation techniques and packaging process are taken unconscientiously, F&V is exposed to be perishing or deteriorating in the course of transportation, which ultimately reduces the quality and profitability of the products. Exported items of Vietnam mostly are mostly just in preliminarily processed form like dried, frozen, salted vegetables or fruits juice, canned fruits or sugar-coated fruits. Those forms are not as profitable as the fresh or properly processed such as functional food that is naturally combined by many kinds of fruits. Several superior kinds of products with high value, for example, grape, kiwi-fruit, durian, pomelo, mushroom, cucumber have a small export proportion and unstable, affecting the economic values of Vietnamese F&V exported to Japan.

- Narrow variation and aesthetics

There are currently 30 different types of Vietnamese F&V being exported to Japan. Though the assortment has been widened occasionally, compared to over 100 exportable items of Vietnam, the number of items that are marketed in Japan is still moderately small. In addition, the varieties are not secured due to seasonal production and dependence on weather, causing the crops unpredictable.

Japan is one F&V import market that not only weights on value but also is rich in the varieties. If being confronted by the number of available items distributed by Japan's important partners (China: 110 items, the USA: 95 items), it can be said that the range of Vietnamese F&V products is quite monotonous (*Source: 'Opportunities for fruits and vegetables in Japan', 2010,12*). Prospective items like tropical fruits are still being neglected. Hence, the chance for Vietnam to continue diversifying their V & F products range is positively plentiful.

The modes of F&V products that are to arrive in Japan is also not sufficiently profuse since most are in preliminary-processed, dried or frozen state. In the meantime, the proportion of fresh F&V exported is not large due to the shortage of preservation techniques. Processed products include only salt-preserved, sugar-coated, condensed items or fruit juice, frozen canned fruits. The modes of F&V products shipped to Japan are simple and conventional, which demotes the export value in total. Demand for healthy and convenient food products these days in Japan is extremely high, particularly when all nutrients in natural fruits can be merged in one. Health is one of the foremost concerns to the Japanese so the criteria to assess products are less sugar, low calorie, no cholesterol, much polyphenol and cellulose. Many gigantic food companies in Japan and their importers have taken interest in this new arising demand and carry on with launching attracting processed F&V products. A typical example of this is Orokeru Yasai Saikatsu 100 (containing vegetables, mango and banana) owned by Kagome, TopValu Select (100% Wakayama mandarin, Fuji apple and Indian mango juice) introduced by AEON Corporation. Some Japan's importers also present some pleasing items like "Apple flavor – Red juice" (14 kinds of fruits), "Pomelo flavor – Green juice" (24 kinds of fruits), "Grape and berry flavor – Purple juice" (23 kinds of fruits), "Mango flavor – Yellow juice" (23 kinds of fruits). It appears obvious that domestic companies as well as importers always follow up market situation to propose new possibilities and widen the range of options, exerting a pull on customers' notice. Vietnam F&V sector, thereupon, is in need of new creations of F&V modes to stay aggressive and build up an appreciable image of their products on Japanese market.

- Unsustainable supplying sources

The inconsistency of goods sources for exporting had been illustrated by the performance of F&V sector in 2010. The growth rate by the end of 2009 resulted in a rise of 15% in the first months of 2010 and stayed steady the entire year. Yet only 40-50% orders are fulfilled because of the lack in goods for supplying (see page 32).

F&V production in Vietnam, generally regarded as traditional with obsolete techniques and lack of focused planning, is one reason that leads to the undersized capacity and instability through the years. Additionally, it is usually impractical to forecast the right output amount since production depends upon weather conditions. The contracts being negotiated at the beginning of each crop season has been a controversial issue. The weather then decides if satisfied yield can please importers or the loss of crops accounts for contract violation. Vietnamese F&V, for that reason, more often than not has to compromise profits with the risk of losing brand image. Each failure in fulfilling one contract will lessen the credibility of Vietnamese goods and cause severe goodwill loss the next seasons.

There are recently not so many planned zones for F&V cultivation with new technical supports in Vietnam so impulsive local production is understandably triggered by farmers. Spontaneous producers self-study different plants and promptly grow F&V on their own. The market is subsequently put in a state of unbalance with excessive or deficient supplies for both domestic and foreign demands. Shortcoming supplies of the previous season become the next overabundance once the farmers readdress their concentration, which later turns trading companies into victims of price squeezing.

Impulsive and separate production generates small volumes of F&V harvested which are problematical to be transported, preserved and planned considering infrastructure and supporting facilities. Seedling is one factor that can influence the quality of F&V. By purchasing seedlings without transparent origins, the producers bring up non-equilibrium in quality and failure of meeting standards, cutting down the supplies for exporting.



- Incomplete image and brand name building

Currently outsourcing is the most popular mode of exporting F&V from Vietnam to Japan under the well-known brand names of Japanese companies like AEON, Kagome. There are 3 common reasons why Vietnam is using this method instead of direct exporting. First of all, while Vietnamese F&V sector is still in the middle of developing, the exporters concern more about cost reduction to appear sustainable on Japanese market. Japanese customers, consequently, barely acknowledge the brands of Vietnamese F&V. Secondly; the closely coordinating network of food distribution channels gives out no space for small companies to enter without using existing Japanese brands. Thirdly, old-fashioned production and processing techniques are viewed as barriers that hinder the entrance of Vietnamese F&V in Japan. The quality standard which is strictly high as mentioned before, can only be fulfilled by using Japanese technical processing system. Prior to October 2009, pitaya from Vietnam was not allowed to be imported in Japan due to the failure of fruit fly treatment. By applying steam heat treatment method of Yasaka Co., Ltd, Vietnam is now capable of shipping 1-2 tons of fresh dragon fruits to Japan each day. Eradicating weaknesses and building a decent image, as demonstrated, requires further investment in technology.

Apart from the restriction coming from the mode of exporting, the reliability of Vietnamese F&V sector in general suffers from failures of committing to contracts. Competition against other importers seems tricky for Vietnam because of the lack in homogeneous quality. Quickly addressing these matters is the only way that Vietnamese F&V can start establishing a legitimate and ubiquitous brand in Japan.

- Uncompetitive export pricing

In addition to deficient quality of supplies, weak brand name awareness and dependability, export pricing weaken the capacity of competition of Vietnamese F&V. China, the USA and the Philippines are 3 most chief F&V suppliers of Japanese. China is referred to as the biggest importer who provides Japanese citizens with

the most inexpensive goods. The price of several products from China is only 2/3 of that from Vietnam.

Items	HS Code	Vietnam (110)	China (105)	USA (304)	Thailand (111)
Frozen beans	071022000	144.6	106.4	117.6	130.4
Preserved cucumbers	071140000	64.3	54.9		73.5
Dried sweet potatoes	071420100	140.5	100.2		
Kidney beans	071333010	1027	491	389.6	312
Other frozen fruits	081190290	318.5	217.2	236	368.3
Other dried fruits	081340029	711	338.6		682

Table 6. Export price of some fruits and vegetables to Japan

(Source: Trade Statistics of Japan, Commodity by country) (value year/quantity<sup>2</sup>)

As the average price of a number of Vietnamese F&V is higher than that of the same products from other importers, it is necessary for Vietnam to revise their strategy. Improving the quality and saving cost at the same time are 2 requisites that need serious consideration in order to lower the average pricing level of Vietnamese goods.

### 3.3.3 Reasons for limited amount of export

All the weaknesses that have been stated in the previous section are wearisome concerning F&V export sector of Vietnam in general and specifically to enter Ja-

pan. The causes that lead to restriction on the said sector are not totally from one single factor but accumulated during the whole route from processing to exporting, for which the producers, trading companies and partially governmental macro-regulation are liable. Adding up to the subjective reasons, there is also Japanese high quality control acting as a blockade that explicitly pressurized the F&V export scale of Vietnam.

- Producers

Producers are the crucial participant who makes a decision on which types of fruits or vegetables being planted, volume and quality of harvested crops. Precisely understanding the role of producers is the first recommended step in analyzing the background of F&V production. Agricultural cultivation in Vietnam is still characterized as discretely personal, independent and for the most part based on collective self-experiences. This attitude has such a deep root in farmers' minds that it commences impulsive and undersized F&V production through cultivation modes, tending process and harvesting. Each household determines their own kinds of plants on their land and carries out the production using their knowledge. As a result, the homogeneity in quality cannot be attained due to dissimilar farming methods and the small size of crops harvested does not fit purchasing for industrial purposes.

Producers' inadequate source of knowledge is another obstacle on the way of spreading scientific technology and modern method for utilization. Many farmers are yet to realize the real value of F&V which can enhance their living standard instead of being just a supporting income fund. The progress of stretching the use of new and safe technical devices is at a low pace as the producers show little interest in learning and practicing. Even in some focused zones where new technology is in use, the cultivators misunderstand and make mistakes in accordance with the process, which minimize greatly the volume and quality of crops. For example, the green vegetables (no chemical substances or toxicants) nurturing procedure following VietGAP (Vietnamese Good Agricultural Practices) standard has been in implementation since 2006 but the number of cultivation zones currently meeting

the terms of VietGAP is minority. According to 'Implementation VietGAP in cultivation' reported by Vuong, Agriculture Department (2009, 4), there are now 15 attested models executing VietGAP, gathering in provinces nearby Cuu Long Delta such as Tien Giang, Long An, Vinh Long, Ben Tre. Vietnam has 80 hectare of land for green vegetables, 50 hectares for litchi and 3000 hectares for pitaya complying with VietGap standard. Compared with 1.5 million hectares of total F&V grown area in 2009, the zone for green vegetables is rather small. Replacing the traditional techniques by up to date procedures also helps raising the productivity by 1.5 to 2 times. As estimated, a tradition vegetables field generates 8-9 tons/ha while the ones with high-tech methods generates 12-15 tons/ha. This way, if farmers can soon implement new techniques in producing safe F&V, both quality and quantity of exported goods are guaranteed to be improved.

Supplementary commodities including chemical fertilizer, pesticides are more and more common these days in F&V production. Unawareness of the downside impacts from supplements is one deplorable reason that leads to overuse and side-effects on the quality of crops. Vietnamese farmers usually trust their own experiences and instincts but dealing with new seedlings or strange diseases can cause uneasiness in bringing up the plants or finding the right healing portions. Productivity and quality is probably at stake if they are to use the wrong types or doses of fertilizers and pesticides. Pesticides, in most cases, are purchased randomly without instructions or diagnostic aid so there is a big chance where plants or tree are not cured at first attempt or not healed entirely. The compound of bug killers can sometimes speed up the healing time but may strand an extra amount of insecticides, heavy metal toxicity after harvesting which is harmful to human health. Each year Vietnam use thousands of tons of pesticides in agricultural production, in which severely detrimental toxicants to human and natural well-being such as Cypermethrin, Propiconazole, Fipronil are not excluded. These insect repellents are forbidden in developed countries and listed in PAN's (Pesticide Action Network) hazardous chemicals that can be a predisposing factor of cancers, hardly disintegrate in soil as well as last long on plants and farming products. For economic profits, many producers harvest their crops right after spraying pesticides and stimulating compounds to keep the fresh look of products while the safe pro-

cedure can only be carried out around 21 days later. However, it is observed that F&V cultivators in Vietnam often ignore the instructions and harvest the products within 3-4 days, especially the kinds of short growing and vulnerable products like lettuce, cucumber, cabbage. The most foreseen impact is a momentous stagnant amount of toxicants that not only erects a hindrance to exporting but also is set to deteriorate human lives and the eco-system.

Minor size of planting and uncoordinated production is another reason that costs the efficiency and quality of products. Cultivated land being divided into small units in Northern Delta and Central Delta is one among classic examples. A field with the total area that exceeds a hundred hectares splits into pieces, in which some pieces are averagely below 360m<sup>2</sup>. Small areas for cultivation restrict access to large technical appliances and modern irrigational system when a mutual agreement cannot be reached by households. Farmers also hesitate to invest in equipment and kits concerning the limited size of fields. Beside, new production techniques often require synchronization in applying so practical cultivation on a small field may not fulfill all the conditions. This is the ground for cost and manpower addition, capacity and homogeneity reduction in agricultural products. It is suggested that the solution only comes from cooperative communities but very few of actual communities have been literally successful in connecting, giving support to households from picking seedlings through tending to harvesting and finally seek for the end output sources. Producers are likely to join the communities as advised without learning their benefits and responsibilities, making the performances of Vietnamese agricultural communities ineffective.

Harvesting, preservation methods and the inefficiencies in production system have a profound impact on the quality of F&V. Harvesting is the last process in the chain of activities as well as the most influencing step before the goods are officially marketed. In order that each item achieves the best quality, attention needs to be paid to such details from time of harvesting, harvesting skills, containers and harvesting tools selection, preservation to transportation, otherwise, F&V can end up being damaged or losing their appealing look. Harvesting techniques, nonetheless, has not grabbed full interest from the producers as harvesting still mostly bases on

personal experiences and instincts. Deficient knowledge of planting techniques prevents the farmers from identifying the exact harvesting time, cooling down greenery products and keeping them from being annealed by heat and fermenting. The lack in production kits instigates improper replacements; for example, home knives or scissors as harvesting tools, self-made bamboo baskets as containers, F&V is subsequently chafed or perished. While the volume of exported F&V has not been sufficient to response the foreign orders, the disposed amount should unquestionably be diminished.

Preservation is an imperative process that guarantees F&V to maintain their naturally fresh looking until it hits the market. As the route from the gathering places to the places where goods are put up for sale is possibly stretched out, the value of the products and Vietnamese importers' trustworthiness depend upon the effectiveness of preservation methods. Good preservation can only be assured by a well-balanced and coordinating set of activities which starts with the role of the producers. Vietnamese vegetables products are currently not protected by techniques during the harvesting process. It is common that harvested F&V is kept in cold storages, particularly in summertime. In Vietnam, most greenery products are kept at the original state and sold to the merchants or the exporting collector. Thus, F&V usually increases in heat rate and encourages rapid bacteria multiplication. The huge financial investment in facilities for production, in this case cold storage, suspends small-sized production units from constructing a competent preservation system. The government, authorities and trading companies are demanded to assist producers in solving financial and technical issues related to preservation method enhancing.

These are some flaws in the production phase that affect the volume and quality of Vietnamese exported F&V. Stressed by the desire to promote F&V export sector, Vietnam needs to start working out the defects in production and the incompetence of producers.

- Trading companies

Trading companies are the deciding factor of target markets, the credibility and export scale of Vietnamese F&V sector. Therefore, Vietnamese trading companies is to be blamed for a part of all the existing blemishes.

F&V from Vietnam has not managed to build up a strong and dependable international image as a result from the incapability of trading companies in building their own trustworthy brands. Exporting goods shipped to Japan under Japanese companies' names, known as outsourcing mode, has proven the feeble ability in penetrating foreign markets of Vietnamese trading companies. The importers from Vietnam are still inept at market and partner research, retrench expenditure in promotion, which consequently live in the shadow of the Japanese companies and solely the Japanese customers are not aware of Vietnamese F&V.

Out of date and irregularly innovated preservation and processing techniques of Vietnamese companies are doubtfully suitable for markets with strict standards like Japan. There are now about 60 processing and preserving F&V industrial factories together with thousands of single family-sized establishments for dried litchi, longan, processed tomatoes, cucumbers, mushrooms and ingredients (chilies, garlic, ginger, and cinnamon). A majority of installed facilities and equipments have been broken, outdated and incompatible that requires an enormous amount of capitals if renewed. Appliances and machines needed to process specific kinds of fruits such as dragon fruit, king orange, rambutan are not available. As each kind of fruits has its own nutriments and tastes preservation conditions, this can negatively affect the quality of the products. The main preservation methods in Vietnamese trading companies are only packaging and stored in low temperature. With such obsolete preservation techniques likewise, the quality of Vietnam's exported F&V decreases greatly and directly weakens the credibility and the ability to compete against other importers, blocks the entrance gate to Japan.

Adding to the old-fashioned technology supports, processing techniques of Vietnamese companies also reveal a number of disadvantages when compared to their competitors. The percentage of F & V used for industrial processing is modestly 5% - 7% and only at the preliminary phase. Without up to date and compati-

ble devices, the F&V processing industry cannot be expanded. While the production capacity is small (300.000 tons/year), the perfunctory output volume takes up only 30% of capacity due to high cost and the shortfall of inputs, capitals and output sources. The range of products to be produced is also narrowly limited to fruits juice, dried fruits; meanwhile, other items like fruit powders, sugar-coated fruits, salted vegetables, are made by manual labor, not in terms of technical assistance. (Source: *'Report of inspection on producing process of fruits and vegetables'*, 2009). It can be said that F&V processing primarily supports agriculture in preserving farming products (keeping fresh or drying) but not aims at serving consumers' needs so the growth rate is not high. In comparison to some high-tech developed nations like Japan, Vietnamese trading companies' processing techniques are at elementary level. Instead of using heat techniques to preserve products like in Vietnam, Japanese ones apply long range infrared rays that can both prolong the expiration time of the products and keep their nutriments and natural tastes, enhancing the value in whole. The weak links along the chain that come from the preservation and processing phase plead for further research and development, technology importing, lessening the technical gap with other countries, improving the value of Vietnamese exported F&V.

The safety codes applied for food products should be the next addressed issue when the level of sanitation at processing F&V establishments is disputable. For instance, if the materials treatment is poor, metallic packages can get rusty and taint the food contained inside. Bottle filling and pasteurization is done manually so the productivity is low and labor cost is high. To enter Japan, the USA or EU, Vietnamese companies should ensure their products' sanitation to comply with all the food safety codes in these regions.

Vietnamese trading companies often passively handle the supplying sources for exporting and are insensible to new market signals. In fact, a good number of trading companies today randomly purchase F&V without safe and fixed sources for supplies, making the inputs not only unstable in quantity but also possibly low in quality. To pass the quality control in Japan, F&V in measurement is supposed to be selective and conscientious from the beginning by choosing the appropriate



seedlings, tending to the last processes which are harvesting and preserving. In contrast, the real model of trading companies whose products shipped to Japan has neither control over the quality during the production phase nor succeeded in building specialized cultivation zones. Moreover, exporting companies in Vietnam barely pay attention to the market demand in importing countries. As new expanding trends, future potential products and the customers' needs are frequently depreciated; the production planning is not oriented and suffers a loss in return.

The defects in Vietnamese trading companies' operations that have been mentioned above limit a great deal of prosperity in F&V export sector of Vietnam. Aspiring to broaden F&V export scale, trading companies are recommended to take the initiative in improving their competitive capability and advancing in market research and technical innovation.

- The government

The government's role in regulating export and import activities is to administrate large-scale trading, familiarize developing plan and assist producers together with trading companies to reach the mutual goal. However, it is believed that the gains in F&V export sector to Japan in 2009 – 2010 were short of expectations. The government's macro-administration is ill-defined and loose in term of orientation and expansion for the said sector. While F&V is directed to become one major agricultural products of Vietnam, it has just been documented, not practically been in execution. There have been a number of conferences in which the state of F&V production is evaluated; a 10-year-strategy for F&V production and its vision for the next 20 years are discussed, yet the targets are set without actual guidelines for implementation. The weakest link in the regulation of macro-administration these days is the cultivation zones arrangement project. Except for some specific regions that focus on their specialties such as Luc Ngan (Longan), Lo Ren (Caitino), Ben Tre (Pomelo), the concentration of other regions is vague and ambiguous. As a consequence, the impulsive production in these regions causes unbalance in supplies and holds back the local potentials.

The government's policies in aiding producers and trading companies from the government are still repressed. Though modern infrastructure and facilities are critical in serving agricultural purposes, they have not received a deserving portion in financial dispensing. Governmental support in promotion and output sources searching is ineffective owing to their deficient experiences and improper methods.

Assistance in research, seedling improvement and processing techniques are left infeasible in application. Many of research results are not applied in production or short of budget to maximize their efficiency. The interdependent cooperation of the government, scientists, producers and entrepreneurs has been perceived for a while but there has not been an effective and close network established. Each element is working disjointedly upon its own principles so no mutual benefits are obtained, the producing chain does not run smoothly and appears extravagant. The government, in the role of an administrator, should connect three other factors and create a work frame to straighten the information flow, empower the collaboration and avert the sector to the right path.

- Japanese market

As stated in the introduction section, Japan is one gigantic import F&V nation but with strict standard concerning food safety codes, packaging principles that ranks in top of international quality control systems. Quite the opposite, Vietnam has certain disadvantages that need covering before F&V products can completely meet with Japanese requirements.

Furthermore, Japan is very cautious in securing their domestic agricultural production by turning to the article of **SSG** in the Agricultural Agreement. Though tariffs free and tax reduction are some advantageous benefits brought by AJCEP, there are tons of other barriers including tariff quotas, antidumping goods sold, green barrier to trade.

Vietnam currently has numerous big competitors on Japanese market so the market share of Vietnamese F&V is relatively small. In this competition, Vietnam hardly stand a chance against China, the USA, Thailand and some other export nations as an effect of all the mentioned weaknesses. Besides, competing against Japanese companies is another challenge that Vietnam has to overcome. Advancing in technology, good understanding of the domestic market and buyers, quick recognition of new arising trends are some among the superior abilities that these companies have over trading companies in Vietnam. Additionally, the closely coordinating and resistant food supply chain in Japan forces Vietnamese export companies to choose outsourcing mode as the approaching method, in generates low profitability and cut down the total value of exported goods.

## **4 RECOMMENDATIONS**

### **4.1 Direction of exporting fruits and vegetables from Vietnam to Japan in the period of 2011 – 2020**

#### **4.1.1 Japanese fruits and vegetables demand during 2011 – 2020**

Environmental contamination and global climate alterations are inducing profoundly negative impacts on social well-being, reflected by the emergence of some serious, incurable diseases. The global growing tendency, not excluding Japan, is to select safe aliment items for consumption and healthy supplement food provision. Meanwhile, sudden changes in climate also bring with them severe natural catastrophes and endanger agricultural production, reduce greatly the crops volume including F&V. This could be viewed as a foundation where Vietnamese agriculture start reorganize and adapt to the worldwide trend, contribute to abolish poverty.

F&V is a traditional kind of food in Japan which drives the domestic demand in this nation extremely high. Meanwhile, Japan does not have suitable natural conditions to develop agricultural production. Like all citizens in other developed countries, the Japanese are highly concerned about physical health issues and always desire to have access to the most nutritious options, increasing the demand of F&V products. This high level of demand is mostly satisfied by exotic items. The F&V import scale of Japan always stays and grows at a constant rate annually, which can be an evidence of a steady accelerating rate devoid of much fluctuation in the next period.

The event of earthquake and tsunami happened in March, 2011 has done extensive damages to Japanese economics and the daily lives in this nation. In particu-

lar, the threats coming from radioactive pollutants keep Japanese residents from consuming a large amount of local agricultural products. While national F&V supplies suffer heavily from this loss, a vast amount of optional substitutes are imported from other countries. The destruction of a large economic zone along the Eastern North coast caused by the earthquake and tsunami also needs time to rebuild. Since the demand of F&V in Japan is likely to remain at a high and stable level, it is one absolute opportunity for Vietnam to round up both import value and volume to Japan.

#### **4.1.2 Adapting Vietnamese fruits and vegetables to Japanese demand**

In recent years, Japan has always been one of the main F&V importers of Vietnam. Because Japanese demand for F&V in the period 2011 – 2020 is believed to continue rising, increasing the import scale to this country is one pursued objective.

In the “Ratification of fruits and vegetables, floral and ornamental plants development planning until 2010, vision of 2020” approved by the Ministry of Agriculture and Rural Development (2007), the advantages in F&V production of Vietnam and the valuation of Japanese market situation are clarified. The document affirms Asian Pacific as the principal target of Vietnamese F&V, especially China, Korea and Japan in these 10 years.

Japan has a high demand of prominent tropical fruits like dragon fruit, pomelo, grape, cainito, mangosteen; which are also Vietnam’s specialties. On the other hand, although purchasing convenient and healthy processed vegetables products are a popular consumption habit in Japanese society, they are not Vietnamese expertise. Vietnamese F&V processed products are prepared unpretentiously and simply at elementary stage. The direction of improving F&V sector in Vietnam is incontrovertibly to push up exporting tropical fruits, renovate producing procedures to widen the options of processed products, build an honorably consistent brand and image.

## **4.2 Some suggested solutions to promote Vietnamese fruits and vegetables in Japan**

Judging from the results collected by dissecting the contemporary situation of F&V export sector in Vietnam (Chapter II and III), it is undeniable that transformation needs to take place so that business performance can be enhanced. As a matter of fact, advancement in four core elements of Marketing Mix (Product, Promotion, Place and Price) is practically essential for the business success. Since the answers certainly do not come from only one separate but four interdependent parties (the government, producers, enterprises and research institutions) along the chain of production and exporting, suggested solutions will be given in three sections that respectively reflect the united effort and distinctive responsibilities of each participant.

### **4.2.1 General solutions on macro-scale**

#### **4.2.1.1 Invest in R&D of modern technology**

The first solution should be more concentration on progressing scientific technology research and implementation in practice. Machinery has a fundamental role in F&V production as it increases the productivity, heightens the level of homogeneity, reduces cost of goods sold and elevates profitability. F&V which is generated with mechanical methods has its quality and quantity assured to be suitable for exporting. While the land for F&V production is shrinking because of the extending urbanization, forwarding technology development is apparently the only approach to promote agricultural production in Vietnam.

Hundreds of research institutions in Vietnam present profuse commendations but just a few of these are able to be utilized. To confine such an unnecessary waste of capitals, Minister of Agriculture needs to adjust the direction of institutional studies in provincial units. Agricultural research institution in each province usually

perceives a good source of knowledge of the current regional production state, conditions as well as its expertise in different kinds of plants or trees, which are helpful in the studying activities. Aside from orienting subsidiary institutional branches, it is essential that the Minister of Agriculture amends their research and proof sample inquisition budgets, facilitates material base for scrutiny. All the sub-branches are advisable to seek out for exterior financial supports such as cooperation with producing, exporting local enterprises to create optimal items, or associating with communities to co-run with the farmers and share profits after harvesting crops. The collaboration brings benefits to both parties, motivates and binds researching staff with responsibilities. Whereas, the extravagant expenditures on ineffectual studies are cut down, the more production instruments are applied in reality.

The starting point of researches should be elicited from the reality of production and the F&V export demands so that the new products are more pertinent. Besides, technological innovations should be activated by section or phase, for example: seedlings selection, tending techniques, supplementary products, preserving and processing techniques.

The goal of studying new seedlings is to create new species of fruits or vegetables with high productivity, good characteristics, and easy adaptability to environmental changes. Nowadays, natural producing conditions like climate, land, water are attenuating, causing plants to be susceptible to diseases, volume and value contraction. New seedling with the persistent ability to resist infectious factors and draughts are to save cost in prevention against diseases and dangerous pesticide utilization. Good seedlings with outstanding attributes also flatten the progress of improving competitive capability of Vietnamese F&V and lessen the agriculture growth gap between Vietnam and other big competitors on Japanese market like China, the USA or Thailand.

R&D on products such as fertilizers, insecticides that are meant for supplementing F&V production should reach for the quality and safety targets. These days major supplementary products used in agricultural production are chemicals compounds

in which many are harmful to human well-being and perseveres a long time in plants. Inventions of nontoxic and environmentally friendly composts and insect killers are prerequisites to establish a green agriculture.

Biotechnology R&D in forming new seedling and manufacturing fertilizer is becoming a worldwide trend thanks to their superior advantages in safety and merits. In Vietnam, the first steps in introducing biotechnology have been carried out by 4 governmental projects which are 52D program, KC-08, KHCH-02, KC-04 and one Tech-Eco program. In addition to governmental programs, specialized ministries including Ministry of Agriculture and Rural Development also partially explore some specific aspects of biotechnology studying and attain some initial achievements in inventing some valuable seedlings and innocuous chemical protectors. A typical demonstration can be found in Lam Dong province where there are 33 in vitro propagating establishments generating disease-free 12-14 million of seedling annually for local production and exporting, reviving a species of citrus by asexual reproduction during maturity to create new infection-free kinds of orange and mandarin. (*Report: 'Applying biotechnology in agricultural production'*). However, provinces which share the same model like Lam Dong's are scarce in number. It is urgent for Vietnam to actively recruit and massively train a professional team in every region to put an end to low quality seedlings. Supplementary products as organic fertilizers, microbiologic fertilizer, and biological pesticides provide farmers with efficiency. Biotechnology is technically a key to design a clean, safe and up to date agriculture model in Vietnam.

Together with advancing the production techniques, preservation and processing F&V are possibly the next critical phase that is bargaining for more focus on technological proceeding. The prerequisite in preserving F&V is to conserve the products' freshness, nutriment, colors and tastes in a long time period. Vietnam has recently applied some of their typically felicitous researches on practical preservation. A typical example given by Ho T.H (38) is the project of cleaning vegetables (cauliflower, lettuce, strawberry, carrot) by ozone devised from oxygen, boiling water, seashell (HCMC Institution of Applied Biochemistry) in Lam Dong. F&V is first cleansed by ozone to get rid of bacteria, chemicals (stagnant portions of pesti-



cides), then thoroughly purified in boiling water, sprayed with chitosan fluid (made from crab shell) and stored in cold storage. If being treated by this method, vegetables products is guaranteed to be fresh within 30 days without losing nutrients, natural colors and tastes. In another case also mentioned by Ho, the semi-permeable web BOQ-15 which is the mixture of organic solvent and anti-fungus powder (Institution of Post-harvesting Agriculture Electronic Mechanism), is used under fluid form to preserve citrus fruits (orange, lemon, mandarin, pomelo), tomato for 2 months. The rate of failure is only 2%-3%, which is much lower than noxious preservers. These procedures are not costly, volatile between 110.000 VND and 215.000 VND for one ton of vegetables using ozone, boiling water and sea-shell, approximately 200.000 VND – 300.000 VND per kilogram of orange using BOQ-15. However, these procedures have not been pervasively used and only feasible to a number of products. The rest, products which are inapplicable, is preserved using chemicals or simply kept in low temperature. Briefly, more examined preservation techniques should be put into broad service; more innovative, inexpensive techniques which are effective on a wide range of products should be studied on so that the volume of perished F&V can be limited.

#### **4.2.1.2 The association of production supports and the connection between the government, producers, enterprises and researchers**

Some supporting businesses of F&V sector are manufacture of fertilizers, pesticides, mechanism and food processing. Since these forms of production all have interdependent connection with agriculture, with the aim of promoting F&V production, the coordination of supporting businesses is essential.

F&V production is one conditional output source of supporting businesses so the basis of enhancing them is through the demand of F&V sector. This course in Vietnam, however, is in conversion when products from assistant industries are manufactured prior to actual demands from producers. The state of underdevelopment and low capacity to satisfy domestic agricultural production's needs is likely the explanation for this situation. New demands on market and innovations

are often neglected on these terms. This relationship without a doubt needs to be consolidated and deviated back to the right track. Therefore, there should be a revolution in the attitudes of related industries as well as new roles definition for two parties: goods are produced based on actual demands.

Current emergent quests are green standard types of fertilizers as microbiologic fertilizers, synthetic fertilizers, safe pesticides, contemporary machines and equipment. Supplementary products are categorized according to their functions and entities so that local cultivators can easily order from the manufacturers, enhancing the link in between different fields. Supporting businesses should animatedly continue researching market and design functional products that are to be beneficial for both sides.

Another important connection in the networking system that integrates in F&V sector is the interdependence among 4 organs: the government, producers, enterprises and researchers. The government, as an administrator, instructs and controls 3 other organs to operate properly. Institutional staffs do research on innovations and modern technology which later facilitate producers and enterprises. Producers are the ones who directly produce F&V, applying the researchers' innovations and utilizing the supplementary items manufactured by the enterprises; concurrently generate supplies or inputs for processing and exporting companies. Enterprises are in commission to provide supplementary items whose purpose is to amplify the value of processed and exported goods. Each organ has its own irreplaceable role in the affiliation so building strong and flowing relations between them is one crucial factor in modernizing F&V in the future.

#### **4.2.1.3 Investing in rural infrastructure**

Infrastructure construction is a fundamental requirement for qualified agricultural production and its new techniques to develop upon.

As Vietnamese F&V production depends entirely on the weather, it is nearly impossible to estimate the productivity and control the quality of crops. In order to contain detrimental impacts of weather, supporting rural facilities need systematic and optimum planning including irrigational system, inner side transportation, preservation system. The currently presented facilities, overall, were installed back a while ago so they are no longer in shape for large-scale and recent production. Due to the sudden changes in last few years, there has been an ongoing issue with the irrigational system: floods during rainy seasons, lack of water supply during stretched dry seasons. The foremost priority at the moment is to reconstruct irrigation structure so that agricultural production is less dependent on weather factors. Reservoirs should be built to balance water supply in rainy seasons and dry seasons. Electricity supply for agriculture is a vital part in electrifying production, drawing near to modernizing the procedures by introducing glass houses, cold storages widely.

Measured parallel with the magnitude of water field system, transportation infrastructure in the rural areas is in need of upgrading and expanding intensively to increase the chance of broadening consuming markets of local goods. Easy transport reduces costs and merits distributed to gather products of exporting companies, moderate the delivery time, lessen the risks on the way. Supplementary items, in the same way, find a straightforward way to reach producers with lower prices.

Post-harvesting F&V has no assurance of quality because of failures in conditioning heat dissipation and temporary preservation. Many local regions have insufficient financial fund to build cold storages or to aid family production unit in installing their own. Hence, to complete supporting infrastructure system for agricultural production, the project of regional cold storages construction supplicates for governmental sponsorship.

#### **4.2.1.4 Arranging specialized long-term zones for cultivation**

Planning static purposeful areas for growing F&V will immensely benefit production and exporting all at once. Arrangement of specializing production in a large-scale will encourage centralization of hi-techs; in a way abate the uneconomical fee on a widespread area. Moreover, sizeable centralized zones with some explicit products will focus on designing a reliable supplying source that simplifies the processes of preservation and collecting F&V of exporting companies. Long-term plan indubitably consoles producers' insecurity and evades impulsive production, unbalance between supply and demand.

Arrangement of specialized zones for agriculture in Vietnam is undertaken at a low pace. Fruits centralized zones are formed more rapidly than the ones for vegetables. Some mentioned famous local specialties, of which names are attached with their planting sites such as Luc Ngan Litchi, Hung Yen Longan, Binh Thuan Pitaya, offer high volume and quality. Green vegetables centralized zones mostly have just been founded in some provinces like Lam Dong, Lao Cai. By comparing the real production state, it is believed that the value of F&V generated in specialized zones is much higher than in normal ones.

Strategic planning specialized zones will not only solve the unbalance between supply and demand but also be constructive to production procedures and improve the value standard. Preparation should be arranged based on analyses of regional advantages, natural conditions (soil, climate, terrain, water supplies) and characteristics of each species. Analyzing is the initial step before determining the appropriate plants or trees for maximum productivity. Planning specialized zones also aids local regions in defining the development of processing industry and exporting agricultural products. Thus, arranging specialized long-term zones with specific principles is a pressing act that will direct and formulate details of promoting F&V sector in every region.

#### 4.2.1.5 Some suggestions to the government

There are plenty of gratifications in singular aspects that can be optimistic premises to forward F&V exporting from Vietnam to Japan but the turnovers so far has not been satisfactory. For the aim of turning F&V into one of the principal exported products not only on Japanese market but also in international level, it is suggested that the government provide much advocacy, manage both production and exporting in macro-scale. Even counting the endless efforts of producers and exporting enterprises, governmental involvement is particularly essential in addressing existing issues in the current state of Vietnamese F&V production and exporting.

- International diplomacy

In diplomacy and international relations, the government acts as a trailblazer who has the power to partly or completely eliminate the forensic barriers concerning F&V export through bilateral or multilateral economic agreements with their partners. These agreements are the legislation base to protect Vietnamese F&V on global markets as well as augment the total export value. The government as a legal national representative needs to stay assertive in negotiations, concluding international cooperation agreement, guarding the benefits of exporting companies when disputes occur.

- Producers' assistant

Governmental assistance given in production phase mostly concentrates on upgrading and innovating rural infrastructure as a collaboration involved citizens' participation; spreading new technical application, granting loans at a favor interest rate. Loans are granted in many forms: cash or objects (machines, fertilizers), supportive loans from research projects regarding new technology.

- Export enterprises' assistant

Some forms of governmental assistance dispensed to companies include granting loans at a favor interest rate, financially aiding in seeking for output sources and presenting products in foreign markets, organizing exhibitions or signing for international trade fairs, opening opportunities for partnership by political visits and hospitality, exchanging technological know-how with developed countries.

- Information conveyer

Beside material supports, governmental organs which locate abroad provide export enterprises and producers with insightful market information related to overview and F&V demands of other countries, ascendant trends of local citizens and most importantly, quality standards, regulations and conditions of exporting to help domestic companies shirk from evitable incidents.

## **4.2.2 Suggestions for producers**

### **4.2.2.1 Raising the competency, dynamically approaching and applying new techniques**

F&V production utilizing new technology will definitely generate much higher volume and quality of products than in current traditional method. In long-term, for the reason that technological applications reduce cost and manpower, boost the productivity and profitability, their usage should be universally diffused.

It is noticeable that the competency level of farmers in Vietnam has not been adequate to be immediately assigned to unfamiliar production techniques. The end consequences could be unimproved quality and capacity of F&V, a loss in unre-

turnable capitals. For instance, once VietGAP is set as the principle in practice for the vegetables zone in Dong Anh (Hanoi) where producers have been accustomed to producing green vegetables, 18.33% of the families here are inspected to fail comprehending and following the procedure. Some criteria in reality are not up to VietGAP standards: 100% of households fail to discard pathogens on seedlings; only 3.33% manage to comply with the instructions on label; 100% post-harvesting products are kept on the ground and there are no compulsory records of production progress. All of this explains how producers are the key players who decide the functions of techniques not in theory but practical situations. (*Article: 'VietGAP procedure: Rocky road'*)

Intermediate educational level of farmers today is probably one big challenge on the way to modernize Vietnamese agriculture. With the desire of making real breakthroughs in production, changing the attitudes, perceptions and working manners of the farmers should be put in the forefront priorities. The obsolete idea of individual and free working style in agriculture has entrenched in Vietnamese producers' minds for centuries while new production techniques require accuracy, prudence and dissimilar practices in each phase of vegetative lives. Incapability of full cognition together with the lack of basic technical knowledge and experiences disables farmers to define precisely the changes that plants undergo in different phases and brings about wrong, inappropriate execution. Sometimes one or two steps are promptly skipped in the middle of processes, which later results in unchanged productivity. This has illustrated why the attitudes of users should be altered before new techniques become prevalent in a wide range. The best alternative way is likely to begin with the changing nature of their needs and self-consciousness. Farmers are suggested to be actively cooperative, enthusiastic in learning and attending training courses held by the governmental associations. Successions of this attempt will set up the foundation for new techniques to develop upon, speed up the progress of projects and give assurance of success.

Vietnam has had many new proper production techniques that fit with international standards like VietGAP, Growing green vegetables in glasshouses but the pace of spreading these models are deliberate. VietGAP, based on Global GAP (Good

Agricultural Practices), is regarded as an international entrance permit granted to Vietnamese F&V. Nevertheless, after 4 years since being introduced in 2005, Plant Protection Department (Ministry of Agriculture and Rural Development) claimed that only 5% of total national F&V cultivation area abides by VietGAP. Unsystematic understanding of procedures, failure in actions, substandard outcomes discourage farmer to carry forward. Training courses with proficient tutors are reasonably expected to guarantee reliable source of information conveyed to producers.

Technology should be flatly explored and applied in all stages of production: seedling selection, seed sowing, tending, harvesting and preservation. These stages are consecutive links in a complete chain that with correct execution will pledge the consummation. While selecting seedlings, producers are advised to refer to their training, experience and existing effectual models. The same with selecting techniques for tending, harvesting and preservation, producers should be spontaneous, attentive in learning and relate to their own circumstances to choose the most effective and economic methods.

Besides, all the technical procedures should be respected and followed carefully by the producers. For instance, each kind of fruit has their own characteristics so farmers should pay attention to identify the right harvesting time, prepare the harvesting tools, select safe containers and lastly implement precisely.

Vietnamese have a sense of creativity that should be encouraged in agricultural production. In fact, some of creations of tools and products have grown expansively used, such as multifunctional machine (hoeing, ploughing and sowing) by Dinh Cong Vien, Ha Nam; ploughing and fertilizing machine by Pham Van Hung, Tay Ninh; finished product grinder by Vu Dinh Phuc, Lam Dong. All these inventions are not created by engineering-trained farmers but prompted from the real demands in production.



#### **4.2.2.2 Establishing associations, communities to connect, exchange information and experience, protect benefits**

In Vietnam, agricultural community has been a familiar term but the performance of which has so far lacked of good organization. A minority of farmers' communities and unions of cultivators are operating effectively in supporting and coordinating local producers. There are several reasons for this but the key issue also lays in the attitude of the farmers. Despite their presence, the farmers tend to presume that the liability of running these models belongs to the government. Due to the misinterpretation of benefits and responsibilities, producers either are inclined to abandon the enlargement of communities or fall short in exploiting all positive aspects. Hence, the producers need to be bold in actions as well as better the understanding of their parts in the organizations.

In order to function smoothly, associations and unions should imitate and flexibly adapt successful models in developed countries. The model of agricultural cooperation in Japan is one typically effective community. Japanese agricultural communities are responsible for all the services that maintain production and life activities, maximizing the use of human resources and land. Beside, these communities are built using an agricultural formula of 3H: Healthy – High quality – High Technology and closely follow this principle (Ph.D Duong M.T., 'Vietnam learning from the development of Japanese Agricultural Communities', 22). The high efficiency which comes from the clear definition and serious attitudes of Japanese producers reflects a valuable lesson Vietnam can learn from. Established associations and communities are necessarily capable of connecting participants and acting as an organizational representative to link with researchers and entrepreneurs. Each organization is supposed to become a collective production group, of which members share equivalent size of production and common goals.

Members of each community are supposed to frequently convene conferences to transfer experiences, together build up typical production models. Both geographical and cultural boundaries should be lifted so that knowledge can be transmitted more rapidly between provinces. Plus, updating market situation is one major ob-

jective of communities to orient the direction of local F&V sector. Orientation depends on conduct of official superior organizations together with the exchanged results among institutions to achieve an ideal answer.

In addition to supporting members, agricultural communities are also responsible for representing the producers to contact with other organs, concluding the benefits of producers and essential conditions for local F&V production to select the most suitable suppliers of seedlings, fertilizers, pesticides. Staffs and members need to be qualified in F&V production so the acts of improving the competency and training in communities are in front position.

Other responsibilities of agricultural associations are to seek for points of sale, ease the unnecessary trepidation in the communities and to supervise producing process, control products' quality. Once the disproportion in supplies and demands on market seems to cease, the farmers are less worried about unsold bumper crops. Associations act as the leaders who bridge producers with entrepreneurs. Therefore, communities also need to discern legislation and comprehend business rules to avoid being deceived or violating contracts. Mutually beneficial relationship between producers and companies should be propagated by associations.

Communities are suggested to concentrate on promising studies in local institutions and assist researchers who instruct and proof test products. They also play the role protecting farmers against low quality products or unreasonable contract violations of some companies. Meanwhile, harvested crops are bound to be managed by communities as the third party. In case there is scarcity of goods, the level price will remain the same so that enterprises do not have to cope with losses.

#### **4.2.2.3 Effectively cooperating with exporting enterprises**

Producing and selling goods are two successive processes that are both elemental keys in valuing F&V products. Smooth producing phase assures the quality of

goods and successful trading will level up the value of goods sold. The real efficiency of modern agriculture is identified by measuring the value that products can generate on consumption market. Processed and exported F&V products usually have much higher value than the raw ones. Already being speculated in the previous chapter, the value of processed products by Vietnam is 1.5 higher while that in developed countries can reach 2 – 3 times higher. Hence, cooperating with processing industry is a correct direction to enhance the profitability of agricultural products in general and particularly, F&V products.

However, it should be noticed that not every item of F&V can be utilized as materials for exporting companies. These companies serve and provide mostly foreign customers so the demands on alien markets are the references for them to seek for supplying sources. As Japan is one critical market judging quality standards, exported items cannot afford failures and each phase has to be closely supervised by two parties, producers and companies. Producers are obliged to follow all the technical processes to achieve the best quality products; enterprises are obliged to aid producers in production and purchase products. This partnership is conducive to both parties in trading, gives a push for both F&V sector and processing industry.

The longing for exporting of Vietnamese export companies never ceases to increase. For that reason, one of the benefits producers get from combining forces with enterprises is a stable output source with high volume. Moreover, the price level of V & F sold to export enterprises is steadily high, less consuming cost and energy. Such collaboration will certainly be a premise for agriculture and supporting industries in Vietnam, improving the living standard in rural areas.

### **4.2.3 Suggestions for exporting enterprises**

#### **4.2.3.1 Effectively cooperating with producers**

Producers are one decisive factor that directly affects the types and quality of exported F&V. For the meantime, the quality standard and food safety codes for exported F&V items are very strict and differ on each market, which requires collaboration between producers and enterprises to produce qualified products.

Exporting enterprises should actively seek for suitable input sources that correspond with export orders and aid farmers with financial or technical problems. It is probably advisable that exporting enterprises incessantly exchange information related to production, the different life phases of vegetables with producers. If the plants are infected or not growing healthily, the cooperation between two parties might help recover the plants. Frequent supervising will be essential in forecasting the volume of crops to be generated and have substitutes in case of shortage. Any companies with excellent implementation of this strategy will earn the initiative in productions, assuring both eligible volume and quality of products; proving to be credible to producers and exporting partners.

#### **4.2.3.2 Seeking for partners, promoting and changing the supplying mode**

Searching for exporting partners is a valid way for Vietnamese goods to penetrate in import markets. In Japan, the distribution channels were established a while ago that there are now a close coordinating system and a sharp market share division among competitors. Thus, the possibility of entering this market for new processing and supplying aliment products is easier said than done. Those companies which have been operating for a long time in Japan, have managed to built firm relationships with top exporting enterprises from exporting nations with high production capacity of F&V like China, the Philippines, the USA. Vietnamese enterprises, due to their late entry, has not gained enough customers' trust while Vi-

etnamese F&V products' quality has not proven to be better than that of other countries. Vietnamese export enterprises mostly receive orders from medium and small-sized distributors, competing with some nations in the rest 5% of market shares taken after 3 main exporters (see page 23). The chance of promotion of Vietnamese vegetable products on the Japanese market decreases as well as its expected export value. It seems reasonable for each export company to be pushed to seek out their own partners. Partner investigations can be done through national information channels, open display of exporting demands on global information channels and national and international exhibitions. In conjunction with partner seeking, exporting companies need to increase their prestige and quality standard to strengthen their bonds with contemporary partners, maintain and improve their position on the Japanese market.

Promotion and image building are suggestible methods to allure partners to exporting enterprises. At the moment, Vietnamese F&V products are barely acknowledged by Japanese consumers. Therefore, to catch the attention of importing companies, it is urgent to provoke Japanese buyers' recognition, reliance and demands of such products from Vietnam. Creating an image does not only lay in propaganda or presentations but also requires locating the products in the awareness of consumers which can only be accomplished by good quality, exclusiveness and appeal of goods. Vietnamese exporters can gain access to Japanese customers during trade fairs combined with other forms of promotion such as advertising on television broadcasting, health magazines. The time span and expenditure spent on promotion can be huge but in the long term it will create such a positive impression for Vietnamese F&V products and attract more large Japanese F&V importers.

Recently, most products directly exported by Vietnamese enterprises are fresh F&V while most types of processed products are exported under Japanese brand names, using outsourcing mode. Outsourcing export mode reduces the economic value of each processed product. The reason that has been pointed out before comes from the weak link in processing techniques of Vietnamese companies. Besides, with a relatively modest financial capability, exporting enterprises in Viet-

nam will find it hard to sustain at the beginning of penetration process. However, it is time these companies step up to concurrently practice enhancing their economic potential by embarking on Japanese partners and learn how the market functions to start plotting an entrance. Making plans and schemes may be a long-term activity that insists on being cautiously shaped up in the future.

#### **4.2.3.3 Doing research on processing and preserving techniques, creating new seedlings**

Contemporary processing techniques in Vietnamese exporting enterprises have grown exceedingly obsolete in comparison with regional and international ones. Therefore, it appears that alterations need to take place immediately and flatly in all processes: collecting, transporting, preserving and innovating production machineries. Initial expenditures may be costly and excessive for some companies but once in practice, it will level up the value of products and rapidly compensate the investment.

In addition to purchasing foreign production technological inventions, exporting companies can straightforwardly order from domestic technical institutions. There are hundreds of quality but infeasible inventions created in national institutions annually because of inadequate financial funds. By exploiting this situation, both parties can conciliate to reach mutual benefits. Exporting enterprises acquire private laboratories which can function in supervising production process and controlling the quality of raw F&V before purchasing, undertaking proper subsequent execution. These laboratories provide the companies with a dynamic to study and create a new range of appealing, diversified and faultless products. Overseas market trends are a good reference source for pleasing and valuable creations regarding foreign customers' tastes.

Similarly, large exporting enterprises in Vietnam are suggested to consociate with specialized institutions to generate appropriate and eminent seedlings. Creating new seedlings is often accompanied by spreading cultivation techniques and su-

pervision. This procedure assures supplying sources, increases the initiatives taken during producing and exporting processes of enterprises.

#### **4.2.3.4 Providing producers with packaged services (seedlings, tending, harvesting and harvesting techniques)**

It is believed that assisting farmers with full services from seedlings, supporting products, techniques will fix high quality supplying sources. Companies can sign requested contracts with farmers by loaning cultivation areas, hiring direct labors and supervising the production procedure. After the crops are harvested, qualified products in question will be bought at the promised level price excluding production costs. This method can receive enthusiasm from producers without compromising the quality of products.

To be more specific, two parties enjoy certain benefits from this cooperation. Producers are contented about available output sources and not bothered with selecting seedlings or supplementary products like fertilizers, pesticides or preservative products. This releases the burden on producers and lessens the chance of buying low quality items. Whereas, using full services method will help enterprises in establishing large and stable input sources, easily allocate capitals on facilities such as cold storage, automatic irrigational system, glass or fabric house for new planting techniques. Transporting costs, input sources searching and the use of supervising staffs will also be more lucrative.

To practically maximize the effectiveness of packaged supplies, companies should first be concerned with producers' eagerness to adopt the method and persuade them to participate wholeheartedly. Only when the method is appreciated, will it reinforce its efficiency and advantages. The promotion should be carried out by integrating with communities and associations to utterly convince the farmers as well as point out possible remuneration of this project.

Combined with locating the suitable land for cultivation, processing enterprises are supposed to actively hunt for admissible suppliers of seedlings, supporting products and germane production procedures that work for current nature of the company. The supplying sources can be freely chosen from foreign or domestic providers. Samples and producing assistance are further options to solve the difficulties in searching for suppliers in the beginning.

The second step in the procedure is to apply and expand the sowing and tending techniques by frequently assigning supervisors to examine the process and support the producers in time. Harvesting process is executed following the instructions given by exporting companies concerning the time of harvesting, methods and harvesting kits. Enterprises gather products right from the cultivation zones and preserve the products in required standards. The closure structure of this project allows F&V to not only achieve approval from importers but also restrict the perished volume and unnecessary costs.

#### **4.2.3.5 Building image in Japan**

One of the existing weaknesses that distress Vietnamese F&V exporting to Japan is its incomplete image building. There are several reasons for this failure including the major mode of exporting (outsourcing), small market share, negative competitive capability, Japanese closely coordinating distribution channel and such. Nevertheless, the main explanation for this situation is the lack of brand recognition of Vietnamese F&V exporting companies in Japan.

There are about 60 establishments which involve in processing industry but only at fairly small size (see page 71). Technological equipment in these entities is mostly out of date and incompatible, which diminishes the quality and volume of capacity. Vietnam National Vegetable, Fruit and Agricultural Product Corporation (Vegetexco Vietnam) is known as the biggest firm which operates in the field of producing, processing and trading F&V, agricultural products with an estimated yearly yield of 30% of total Vietnamese export scale according to the firm's annual report. It is



one in a few F&V companies that are facilitated with modern technology and an accepted international brand name, Vegetexco Vietnam. Weak financial prospect, technical basis as well as uncompetitive capability are additional reasons that impede the expansion of Vietnamese F&V image. For that reason, before attempting to brood over building such an image in Japan or any foreign country, all the exporting enterprises should consolidate their capital sources and enhance their ability to compete.

Medium and small enterprises often encounter an obstacle of limited capital source in pursuit of latest technological innovations or forming a brand name in long-term. Collaboration is seen as an answer to tackle financial pressure and, boost the morale in competition of Vietnamese goods, take advantage of governmental aids. Seeking for external capital sources from securities market, issuing shares or bonds are also recommendable.

Building a decent image for F&V sector also demands a higher technological system utilized in production and processing. Dr. Le Viet Nga, chief of Food Safety Office, Science and Technology Department in Ministry of Industry and Trade, comments: "Exported goods are subjected to complaints on quality, violated safety regulations (stagnant amount of pesticides, metals or substandard packaging) and most are exported under foreign brands. Exported products with Vietnamese brand names like Vinamit are very scarce." (Source: *Report of inspection on producing process of fruits and vegetables*) This raises a concern about the lack of considerations towards food safety that disgraces the trustworthiness of enterprises. Infringement of food safety regulations in some markets including Japan either exasperates consumers to boycott the products in question or have them banned by the government. Vietnamese companies, in endeavor to strive for a standing position on Japanese market, need to take care of their consistency and promotion strategy.

#### **4.2.3.6 Competing on price**

The solution to compete on price for Vietnamese F&V appears to be the combination of all mentioned suggestions. In order that exporting price of F&V from Vietnam can compete with other competitors while also give profitability assurance, there have to be breakthroughs occurring in both quality and quantity. Lower export price will reduce the gained profits on 1 unit of exported weight. On the other hand, if the price reduction results in higher exported volume then the post-harvesting earnings are more profitable.

It should be emphasized that when reducing exporting price, Vietnamese enterprises need to found a solid and synchronous alliance to keep market situation at balance state. Once an alliance is shaped, the pricing level is defined upon average producing conditions, partly eases the tension in small enterprises and eludes the possibility of being cornered by Japanese companies. Impeccable execution in coordinating companies eliminates unfair competing strategies and improves the positioning of Vietnamese F&V.

It is essential for Vietnamese companies to compare their exporting price with that of other exporters in Japan to have right adjustments. Enterprises themselves should save production costs, plan a convenient production procedure, raise the productivity in specialized cultivation zones by applying new techniques, minimize the damaged volume during transporting and preserving. Searching for direct exporting partners from Japan, avoiding intermediate spans will decrease profit shares.

Another noteworthy aspect in competing on price is classifying products in accordance with different pricing levels. High-grade goods must have actual deserving value to convince consumers into purchasing luxurious products. Low pricing level set on regular products will give an impression of being competitive to similar products which originate from other nations.

#### **4.2.3.7 Researching market and keeping up with recent trends**

Entering an alien market requires a good understanding of the new environment and customers' perspective. Catching up and predicting rising demands will improve the position of Vietnamese exporting companies and their market shares on Japanese market. In the subdivision of conventional F&V products, late arrival prevents exporting companies from obtaining a great degree of market shares by competing with experienced exporters. On the contrary, in new opening subdivisions, chances are equal to every competitor. Advantageous products will significantly attain larger portion of market shares in shorter time.

Japan is a nation of which quality standard, packaging regulations and importing procedures are strict and complicated, legislation system is firm and intolerant to offenders. Prior to market penetration, it is important for enterprises to learn all related regulations through attending seminars for exporters, Vietnamese representatives in Japan or lawful consultants.

When dealing with Japanese partners, knowing Japanese culture and special traits will avoid inappropriate behaviors and taboos. This will also prove to be helpful in designing packages so that any unnecessary protocol mistakes can be annihilated.

## 5 CONCLUSION

By describing, analyzing and evaluating the situation of F&V export sector from Vietnam to Japan before and after the enforcement of AJCEP on December 1<sup>st</sup>, 2008, particularly during the period between 2009 and 2010, achievements and deficiencies have been systematically recognized.

On the plus side, the export scale maintains the accelerating rate in both value and volume, guiding the way for Japan to become one of the three biggest foreign markets of Vietnamese F&V. Besides, a greater variety of products is being offered with the intrusion of new commodities at high export values. In two recent years, never ceasing to be a huge target market of Vietnamese exported F&V, Japan has affirmed its prospective profitability in the face of other target markets under the same measurement.

Apart from all the achievements that have been mentioned above, there are also some flaws that directly impede the advancement of the sector. Due to the incompetence of F&V production and exporting, Vietnam has such a minor proportion of market share in Japan. F&V producing system is old-fashioned, unplanned and severely lacks modern technology, which results in low quality and quantity in outputs. In addition, the range of processed products from F&V in Vietnam is quite simple and limited, which appears to be uncompetitive to strong opponents on Japanese market including the USA, China and Thailand.

These shortcomings in F&V production and exporting are caused by the most deciding elements known as producers together with processing and exporting enterprises. The governmental policies and trading barriers, in addition, adds up to the objective forces that influence the development of Vietnamese F&V export to Japan.

Therefore, enhancing the export scale of F&V from Vietnam to Japan requires these existing issues to be addressed. Solutions to improve export scale of Vietnamese F&V should be triggered from the willingness to fight against weaknesses. Each party has its own role in the production and exporting chain. For that reason, the level of proficiency and effectiveness should be increased in individual efforts as well as generated from the close cooperation among parties to create consistency and boost the quality and quantity of the exported products.

Some recommendations presented in the thesis when applied are expected to accomplish the mission to diminish the weak points in both Vietnamese F&V production and exporting to Japan. Together with the advantages in terms of AJCEP and the continuously growing demand on Japanese market, a chance for F&V export breakthrough is indeed waiting to be seized by Vietnam in the coming years.

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