THE FAMOUS TRANSPORTATION OF THAILAND AND JAPAN LOGISTICS

Nollaphan FOONGKIATCHAROEN (a), Fumio AKAGI (b)

Wajiro 3-30-1, Higashi-ku, Fukuoka, 811-0295 Japan

(a) bluekiwi_toey@hotmail.com, (b) Akagi@fit.ac.jp

ABSTRACT

Transportation is firstly considered to support a variety of trade activity. Moreover, it can measure economic growth rate of each country. Hence, transportation is not only about the development of specific automobiles but it also thinks over the process of systematic management of transportation. For instance, in terms of personal transportation it needs to have public transportation or a shared passenger transport service i.e. buses, trams, rapid transit and trolleybuses. On the other hand, in terms of transporting goods, logistic methodologies are also important to be used in managing transportation system.

Japan is one of the potential export markets that related to Thailand. At the same time, Thailand's Small and Medium Enterprises are an important part being developed in order to support ASEAN Economic Community: (AEC) in 2015. The development plan will build a stronger future economy, especially in terms of investment. Therefore, if we get some knowledge and experiences about business strategies, it will help increase the chance for my own business.

This paper will present about my own export business or Small and Medium Enterprise (SME) in the coming future. For example, if we actually have our own business, we will export those stuffs to a target market such as, Thai fruits, clothes (from Thailand to Japan). In order to understand the types of transportation in the correct category, so they are determined into 5 transportation modes such as Water/Ship, Air, Truck, Rail, and Pipeline Transportation.

Keywords: Thai fruits, transportation, logistics, export, import, send abroad, distribution management, supply chain management, intermarket segmentation, attitude toward foreign products, value chain, target cost

1. INTRODUCTION

Everyone who comes to Thailand, however, will find that domestic fruits are so plentiful, so diversified, so inexpensive and so delicious. These advantages lead to an unexpected reward.

Factors that help to increase productivity advantage that is geographical position. Due to Thailand is a tropical climate country [1]. Hence, Thailand can produce so many different kinds of high quality fruits. The tropical climate is certainly effect on the growth of vegetation. However, there are other factors that have contributed to product benefits – the fertile soil,

continuous efforts to improve fruit quality by scientific methods, and the comparative length of Thai territory, which extends right into the subtropical zone, making it possible to grow native fruits in higher latitudes [2].

Thailand has a better chance for exporting fruits into Asian countries due to most Asian countries's potential is much more than other continents. Japan is considered to have a potential market for Thailand because Japanese people have the same way of eating fruits as Thai people. In addition, the main issues of distance and logistic system are also suitable for exporting Thai fruit. Seven countries such as Japan, South Korea, Singapore, Indonesia, Hong Kong, Taiwan and India, will be the most important exporters in the near future [3].

However, exporters and government need to cooperate in order to improve the quality of Thai fruit. The Ministry of Agriculture has launched the future direction for fruit quality improvement into 4 issues [4].

- (1) Supporting the whole farmers in the country by making agriculture, harvesting and packing products. Moreover, they (exporters and government) should focus on environmentally friendly manufacturing as well.
- (2) Supporting the research and fruit production to meet people's needs.
- (3) Developing and using logistic system that suitable for Thai fruit export.
- (4) Advertising and suggesting Thai fruit into oversea market.

Nowadays, Thailand's logistics problem is a high cost because there is no freight to other modes that has a low cost [5]. Moreover, there have some problems regarding government regulations throughout the year. In the past, the submitted documentation would be transmitted through various procedures. As a result, all steps spent a lot of time sending documentation from one place to another. In the present time, state agency has tried to gather all steps into one point that can be called "single window" or "one stop service: oss".

The Customs Department is an agency of the federal government that collects customs duties and performs other selected border security duties. The customs service have recently developed "ELECTRIC SINGLE WINDOW". Private sector can hand in document and contact customs department via internet system. Therefore, officers don't need to travel by themselves. Moreover, there are other types of

electronic systems i.e. e-Declaration, e-Payment, e-Manifest and e-container. However, it has to be accepted that these developments are still limited for e-logistics. The developed system is just "e-customs" which is not connected with agency that create the certificate and other licenses. To ensure that the implementation of federal government response to the needs of private sector, so government should establish an independent federal agency.

Thailand's overall exports of goods need to rely on logistic systems, which compose of 5 transportation modes such as road/water/rail/air and pipeline most popular transportations. The mode transportation is road with 87 percent of total transportation modes. Water transportation becomes the second position that has the amount of transportation about 5 percent. Meanwhile, the proportion of rail transportation is approximately 2 percent. On the other hand, the amount of air transportation is not popular modes compared to other transportation modes, with less than 0.5 percent. Apart from 5 transportation modes, there is a significant number of pipeline transportation, especially in gas or petro transport [6].

Using road transportation system has many advantages. For instance, most vehicles can easily drive into every area. At the same time, advantage of loading goods is more diverse in terms of size and vehicle types. However, there has some transport limitation. For example, the cost of road transportation appears more expensive than any other mode of transportation due to the fact that fuel shows continuously high costs while the number of trucks is going to increase. This problem can affect traffic systems, particularly in urban area, leading to the impact of high logistics costs. In terms of transporting commodities, Thailand should do strategic planning to support direct and indirect transportations, leading to the reduction of usage of road transportation. The strategic planning will be accomplished by developing the other modes of transportation and by using tax to reduce the cost of transporting goods.

2. TRANSPORTATION

The first period of trading transportation might be a cart (the wheeled vehicle). It is used to drag some objects, whereas its vehicle is also driven by some of animals i.e. elephant, horse, donkey, camel, deer and dog. Afterwards, these innovations are developed into the system of rail transport that carries (people or goods) from one place to another. In the present time, ship/water/air/truck and pipeline transportations are being extensively accepted by commercial sector.

Nevertheless, there are some kinds of high technology i.e. Internet, mobile phone, computer and etc, which have more advantage than the former transportation system. In order to understand the types of transportation in one direction, so they are determined into 5 modes [6].

2.1. Ship/Water transportation

Water transportation is like the oldest characteristic compared to the whole transportation modes. It is vastly utilized in the past, present and future. This is because water/boat transport can support large amounts of stuff, while they need only small amount of investments.

There are advantages and disadvantages between domestic and international transport. For example, even though water transportation is suitable for business types, on the contrary timing of receiving commodities still spends a lot of time as well. Therefore, people who involve with importation and exportation should carefully study and try to understand all processes before determining.

2.2. Air transportation

Due to time is a major obstacle for remote trading, especially in terms of boat and road transportation. Some goods spend time travelling from one place to another, which is necessary to be controlled. At the same time the choice of transportation mode also needs to be carefully considered particularly in fragile products or special temperature controls, i.e. flowers, fruits, etc. They have to choose time-based competition and reduce the damaged goods caused from transportation. So air transportation will be the best way compared with other types of transportation.

2.3. Truck transportation

Truck transportation is a major heart of road transport. Government has a mega plan to construct and extend the road system. These strategies are determined in order to make an international cooperation. As a result, commercial international investment would be more convenient to transporting.

2.4. Rail transportation

Rail transportation has some advantages. This mode can transport large amount of stuffs, whereas their payments is quite low compared to other modes. Most exportation used rail transportation system often have low cost and heavy weight such as coal, cement, petroleum, rice, sugar and mineral. However, rail transportation also has some drawbacks such as time because of rail transportation always stops at every rail stations.

2.5. Pipeline transportation

Pipeline transportation has a specific characteristic due to transporting goods is in the form of fluid. Therefore, the pipeline should have low slope area so that runoff will not flow back through the pipe. Popular products for pipeline transportation consist of crude oil, petroleum and natural gas.



Air Transportation

Water Transportation



Pipeline Transportation



Truck Transportation



Rail Transportation

Figure 1: The overall transport systems

Japan is the second country which has the great potential close to USA and Europe. International commercial investment between Thailand and Japan has an expansion rate approximately 11% at the end of 2011. The technological and innovative developments are growing in high level, particularly in automobile and electronic industry. Most vehicles produced in Japan are sold in overseas. There are different brand name vehicles; such as Toyota, Honda, Nissan and so on

Exportation and importation is like a breath of country. From the past year until now, the opening of trade way as well as free trade has brought about the economic development throughout the country. As a result, most countries can merchandise raw materials, together with other equipment in a proper way [7].

3. ECONOMIC, TRADE AND INVESTMENT RELATIONSHIP BETWEEN THAILAND AND JAPAN

- (1) Regarding trade between Thailand and Japan in 2007, the proportion of trade in Thailand's imports and exports was 20.5% and 12.0%, respectively. Based on the Board of Investment (BOI)'s data, Japan-Foreign direct investment accounts for approximately 49 % of the total foreign investment to Thailand. The Japanese Government's bilateral development assistance (ODA) accounts for 70 – 80% of total assistance to Thailand from the developed countries or the Development Assistance Committee (DAC) member countries.
- (2) Thailand is interested not only in trade and investment support, but also in the export. Presently, Thailand is significantly interested in the export to Japan in order to solve economic crisis.

3.1. Trade

(1) In Thai sentiment, Japan is the number one exporter to Thailand and number two import

- after the United States. Conversely, in Japanese sentiment, the proportion of Thailand's import and export to Japan was 2.9% and 3.6% respectively. Thailand is the number ten importers to Japan, and the number six exporter in 2007
- (2) Overall, Japan has continually favorable balance of trade after 1980 (1985-1989). As there are an significant increase in the recovery of Thai economy, and Japan direct investment, the import in production and semi-finished products is increased. This leads to rising trade imbalance.
- (3) Japan mostly exports machines, metal products and chemicals (the above-mentioned products account for 90% of total exports) to Thailand while Thai mainly exports foods such as frozen shrimps, boneless chicken, sugar and raw materials to Japan. However, Japan exports of the machinery products to Thailand have significantly increased.

3.2. Investment

In 2007, Japan investment in Thailand was about 3.6 % of the total Japanese foreign investment, and Japan is the number two importer in Asia after China. Conversely, Japan is the number one imports in Thailand, considering investor's request for investment support to the BOI. The percentage of Japan's imports was about 29% of the total foreign investment in Thailand ahead of the United State (20%), of Singapore (20%) and of Nederland (18%).

Table 1: Trading Value between Thailand and Japan 2010-d from 2007 starte

(Unit: Million US.Doll											
Year	Total Thailand Trade to Japan			Thailand's Exports		Thailand's 1	mports	Trade Balance			
	Value	Proportion	%∆	Value	%∆	Value	%∆				
2007	46,500.58	15.83	10.57	18,119.05	10.58	28,381.53	10.57	-10,262.48			
2008	53,627.89	15.02	15.33	20,093.64	10.90	33,534.25	18.16	-13,440.61			
2009	40,747.11	14.24	-24.02	15,723.68	-21.75	25,023.42	-25.38	- 9,300.75			
2010	58,271.84	15.43	43.01	20,415.71	29.85	37,856.13	51.28	-17,440.42			

Source: Information and Communication Technology Center, Office of Permanent Secretary ministry of commerce

3.3. Trade Balance

(1) Total trade:

Japan is the important trading partner of Thailand. In 2009, Japan became the largest trading partners of Thailand in East Asia. Both of Japan and Thailand have the average trading volumes, which were about 46,961.33 million US. Dollars in the past three years (2007-2009). After that, in 2010 (Jan - Dec) the average trading volumes of two countries was approximately 58,271.84 million US. Dollars. This amount was higher than last year (2009) that was equal to 43.01 percent.

(2) Export:

In 2009 Japan turned into the third exporting market of Thailand, whereasthe UnitedStatesand

China have lower exportscomparing with Japan. Thailand's exports has the total quantity of 17,981.58million US. Dollarshree for the past t Dec) Exportion -In 2010 (Jan .(2009-years (2007 between Thailand and Japan was about 20,415.71 million dollars increasing from 2009 which has the average yearly trading volume of 15,723.68million US. DollarsTherefore, the percentage difference . .een 2010 and 2009 was about 29.84betw

(3) Import:

In 2009, Japan was the number one source of merchandise imports to Thailand .In the past 3 years (2007-2009), importing goods from Japan to Thailand has the average value of total goods, with about 28,979.78 million million US. Dollars. In 2010, there was the number of importing goods from Japan to Thailand, with about 34,573.78 million US. Dollars. According to the table, the growth rate of Thailand's imports in 2009 was about 25,023 million US. Dollars, which was equal to 51.28 percent.

There were some goods exported from Japan such as, machinery, other components regarding vehicles, electrical machines and etc.

Table 2: Japan Import Statistic

(Unit: Million US.Dollar)

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Import Goods	Fiscal Year (FY)			Calendar	Year (CY)	Δ (%)	Proportion
amport coods	2007	2008	2009	2009	2010	CY 2009/10	(CY 2010)
1. Machinery and parts	5,285.5	6,565.7	4,724.0	4,257.7	7,126.2	67.4	18.8
2. Iron and steel products	3,704.1	5,377.5	2,977.0	2,601.1	5,273.8	102.8	13.9
3. Motor Vehicle Parts	2,081.8	2,429.4	2,054.9	1,786.9	3,745.5	109.6	9.9
4. Electrical Machines and parts	2,847.6	3,046.7	2,391.9	2,126.0	3,485.3	63.9	9.2
5. Integrated circuit	2,941.4	2,634.6	2,400.7	2,166.9	2,891.8	33.5	7.6
6. Chemical	2,248.4	2,771.7	1,885.7	1,679.2	2,770.7	65.0	7.3
7. other metal products	1,111.4	1,346.7	887.2	789.5	1,400.9	77.4	3.7
8. Medical Science Equipments	960.0	1,156.1	918.1	814.0	1,365.9	67.8	3.6
9. Metal products	764.2	1,000.9	763.2	653.8	1,143.0	74.8	3.0
10. Plastic products	883.5	1,007.8	843.5	758.5	1,126.9	48.6	3.0
Sub Total	22,827.9	27,337.1	19,846.2	17,633.6	30,330.0	72.0	80.1
Other	5,553.5	6,197.1	5,177.4	4,496.5	7,526.2	67.4	19.9
Grand Total	28,381.4	33,534.2	25,023.6	22,130.1	37,856.2	71.1	100.0

Source: Information and Communication Technology Center, Office of Permanent Secretary ministry of commerce.

(4) Trade deficit:

From the past 3-year of bilateral trading between Thailand and Japan, the annual trade deficit incurred for Thailand was 10,262.48 million US. Dollar by which the deficit was 9,300.75 and 17,440.42 million US. Dollars at the year-end of 2009 and 2010 respectively.

4. TRADING PROBLEMS BETWEEN THAILAND AND JAPAN

4.1. Export

(1) The regulation for agricultural products imposed by the Japan has been contributing to limitation to Thai export. For this regulation, Thai agricultural products to pass the hazardous residue testing conducted by

Department of Agriculture prior to the export. This trade barrier impacts variety of product included;

- (a) Plantation: Mangos teen, durian, mango (varieties except Public A), grapefruit, tamarind, lychee, Longan, maize, okra, asparagus, ginger, pepper
- (b) Other vegetables including celeries, cilantros, sweet basils, basils, finger grasses, tree basils, Kitchen Mint, herbs, gotu kola, peas, cabbages, Cha Om, acacia pennata, kaffir lime leaves, water mimosa, lemongrass and okra/lady's finger.
- (2) The tariff has been imposed, as a barrier to Thai export, for such agricultural product as cassava flour, rice, and canned pineapple as well as such industrial product as synthetic rubber, silk woven-fabric, and shoes.
- (3) In the 4th phrase of GSP-tax exempt contract (from May 1st, 2001 to March 31st, 2011), Japan degrades this tax exempt for most of industrial products making many exported industrial products to bear higher GSP-tax. This includes Insulated electrical wire, jewelry, plastic, glutamic acid, leather ware, Sorbitol dextrin, Wood decoration, and synthetic fiber.
- (4) The complexity and stringency of the rule for "source of origin" under GSP regulation was not matched to the production platens this day.

5. THAILAND EXPORT/IMPORT FRUIT'S LAWS

In Thailand, law creators have got continuously developed both of form and regulation used in commerce international exportation. However, new trading system of Europe and the United States of America (USA) are now becoming the biggest market of the world. Hence, Thai exportation should rely on western market and use western market as a case study to improve the domestic economy.

Thailand is considered to be reserved supply for fruit production. Fruits, such as durian, mango and etc., provide large amount of products not only from one province but also other province in Thailand. Hence, Thai people can consume these products throughout the year. Simultaneously, there are also a number of products enough to export to abroad. However, the largest fruits consumer markets of Thailand has several countries where are located in both Asia and Southeast Asia e.g. China, Japan, Hong Kong and Taiwan. There are the most five popular fruit of Thailand consists of mango, pomelo, banana, mangosteen, and durian. These fruits are widespread accepted by international consumers [8].

Thai fresh fruits have only 6 types permitted by Japan importers such as mango, mangosteen, durian, banana, young coconut and pineapple [8]. Thailand will have a better chance of exports if Thailand signs free trade agreement. It is called "Japan-Thailand Economic Partnership Agreement (JTEPA)". As a result of

making contract, Japan consents to reduce export tax of fruits e.g. mango, mangosteen, durian and coconut. [8].

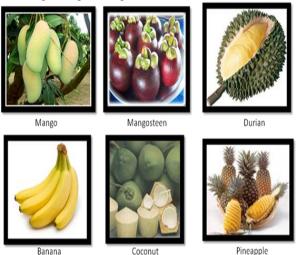


Figure 2: Six types of Thai fresh fruits are permitted by Japan importers

In recent year, Japan has imported large amount of fresh fruits from oversea market. The total amount is 200,000 million yen. More importantly, Japanese consumers have always been sensitive to the standards on food safety. Therefore, fruits should not have remaining toxicity during manufacturing process.

6. PLANNING

The most standpoints of Japanese businessman think that Thailand can be the industrial base to producing Japanese stuffs. There are some aspects of Japanese businessman, which can be used to pick up Thailand as an industrial base;

- Japan has chosen Thailand as an industrial base because Thailand is like a potential hurb of region. Moreover, efficient infrastructure of Thailand is also considered in terms of investment, whereas other countries (such as Laos, Cambodia) do not have those good characteristics.
- (2) Japan has chosen Thailand because Japan industrial base don't want to rely on the products produced from only one country (such as China, Taiwan, Hong Kong and so on).
- (3) Herb used to make medicine and raw materials used in cooking are useful things for the enrichment of human body. For example, garlic can reduce coronary heart disease.
- (4) There are some ideas about the importation of products produced from Thailand to Japan. Some Thai productions like fruits, which can be transformed into products used for different parts of the body. That is because Japan has an interest in the care of mental and physical health, by using natural products. Onsen and Spa is an obvious example in Japan tradition. It (onsen & spa), can reduce people's stress. Products that help to reduce stress is taken

from natural water. In case of Thailand, there are some products derived from nature such as the coconut. It is extracted from coconut juice in order to anoint on user's body. The advantage of coconut juice is the refreshment on skin. Moreover, it can be extracted into hair care products. Sometimes user can use natural products as diet pills (weight loss pills). Finally, products like cream and soap made from (fruit and herb) can maintain different parts of user's body as well.

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