



The Competitiveness of Thai Durian Export to China's Market

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ABSTRACT

This research has the objective to study for the revealed comparative advantage index including of the market share of Thai durians in China's market, Market Share comparing to the competing countries in export, such as Vietnam and Malaysia by gathering with statistical information of durian export according to the data base of international trade from United Nations with the tariff system, Harmonized System Code 081060 due to the limited information for the competing countries after the researcher have been studied for ten years beginning from 2011 – 2020.

According to the result of the revealed comparative advantage index: RCA, it was found that Thailand still has the advantages in this subject for more than one period while Vietnam and Malaysia also have the advantages for more than one period for some time referring to Thailand has the competition ability in durian export to China's market for the study. Besides, according to the result of the market share it was found that Thailand can occupy the market share as the most level following by Vietnam and Malaysia, respectively.

1. INTRODUCTION

Trade is one factors of growth and national economic development while each country has different natural resource, manufacturing factors, expertness, preference, and manufacturing costs. Then, this action creates foreign trade. Moreover, exports are considered as the main economic drivers of Thailand because Thailand has agricultural commodities exceeded the supply of the domestic market. Thus, exporting was like reducing the quantity of commodities that exceeded the market demand. The important and potential trading partner of Thailand is China, where trade between Thailand and China arises from the exchange of leaders and important figures from both countries. It can visit to each other for making the relationships and cooperation in various fields between the two countries which has developed rapidly including of the location for the two countries not far from each other. There is a cultural exchange because Chinese consumers are familiar with Thai food and Thai fruits while the products that China imports from Thailand the most are fruits [1]. In this case, it is manufactured because the climate of Thailand is suitable for cultivation, and some fruits can be produced all year round, giving Thailand an advantage in fruit production. According to data, in 2020, the largest agricultural export to China was durian, amounting to 444,444 tons, valued at 1,508 million US dollars [2] and in

2021, the demand for durian in the Chinese market will increase. As a result, the export of Thai durian increased by 35-40 %, with a value of 2.811 million US dollars [3].

China is an important trading partner with other countries, and china is not the only agricultural product from Thailand, but it has imported durian from three main countries: namely, Thailand, Vietnam, and Malaysia. Moreover, when comparing durian planting areas with competitor countries it was found that Thailand has 150.87 million hectares of agricultural land compared to competitors, such as Vietnam and Malaysia. There are agricultural areas of 60 and 47.23 million hectares, which are considered with more agricultural land than competitors, such as Vietnam and Malaysia [4]-[6] compared to statistics of Thailand's agricultural exports to the world during 2018-2020 with 22.82, 21.72 and 21.81 billion US dollars, respectively. Similarly, the competitor country or Vietnam has exported global agricultural products with 23.62, 22.31 and 21.82 billion US dollars, respectively, and Malaysia has exported agricultural products with 14.64, 14.17 and 16.23 billion US dollars, respectively [2]. It has seen that most of them have a tendency to export less due to neighboring exports like us, and it makes the competitor countries to come in and take more market share. In this case, the values of Thai durian exports to China in 2018-2020 were 0.41, 0.84 and 1.50 billion US dollars. Besides, while the competitor country as Vietnam has exported durian to China with 0.266, 0.15 and

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0.001 billion US dollars, Malaysia had the values of durian exports to China with 2,340,107, 286,641 and 293,159 US dollars [2]. It can be seen that in the past ten years, Vietnam and Malaysia have begun to produce and export more durians to be considered as important competitors that will be able to compete. Similarly, Thailand's market share in the future. Kasikorn Research Center, [3] is compared with competitor countries, and it was found that Vietnam has an advantage in exporting to China because of the faster time to export than Thailand. Additionally, in Malaysia Musang King durian is grown, which is in demand in the Chinese market, and more expensive than Thai durian in the future and Malaysia tends to take more market share of Thailand [7].

From the above detail, it can be seen that the most marketable Thai agricultural product is durian from major competitor countries. The exports of durian to China are Vietnam and Malaysia, and when considering to the trend of agricultural exports of Thailand, it is found that there is a decreasing trend. The reason for the declining trend is that there is an increased competition for market share from competing countries. Therefore, the researcher has studied for the ability to export Thai durian to the Chinese market with the purpose of studying Revealed Comparative Advantage Index (RCA) including of studying the market share of Thai durian in the Chinese market, (Market Share: MS). It is comparing with export competitors, such as Vietnam and Malaysia to show with the situation of Thai durian competitiveness to the overall of Chinese market.

2. THAILAND FRUIT EXPORTS

Thailand's top five fruit exports worldwide in 2021 are durian, longan, mangosteen, coconut, and mango. These fruits have an export volume with 925.85, 801.28, 256.31, 388.3 and 149.15 thousand tons, respectively, and it had the values with 119.16, 31.37, 17.09, 9.36 and 5.99 billion baht, respectively [8]. According to the top five export markets in 2021, there are China, Hong Kong, Vietnam, the United States and Malaysia, accounting for value with 159.82, 8.65, 6.11, 3.21 and 3.01 billion baht, respectively [9]. Besides, Thai fruits that China allows are twenty-two types of imported products, such as tamarind, custard apple, papaya, apricot, guava, rambutan, jackfruit, longkong, pineapple, sapodilla, all kinds of banana, passion fruit, coconut, tangerine, orange, pomelo, longan, durian, mango, lychee, mangosteen and rose apple. In addition, according to the import 0% with the China-ASEAN FTA [10]. it showed that in 2020, Thailand's top four fruit exports to China are durian, longan, mangosteen, and coconut, with an export volume of 444.44, 373.58, 229.29 and 90.51 thousand tons, with the values with 1.50, 0.43, 0.37, 0.06 billion baht, respectively [2]. On the same way, durian is a fruit that is so popular and known all over the world with the nickname as "King of Fruits" or a nourishment with good

health, vitamin ABC, full of protein and minerals. Then, Chinese people believe that durian is especially useful than other fruits including of Cantonese people who believe that durian can be can nourish the body with the slogan as "1 durian is equal to eating 3 chickens". Therefore, some people say that durian is a nourishing fruit for people after giving birth with helping to restore energy well, and as for men, it has kidney maintenance properties that can help increase sexual performance with sweet and fragrant taste, which is a favorite of Chinese people [11, 12].

For the harvesting season, the top four Thai fruits exported to China found that durian, longan, and coconut yielded throughout the year while mangosteen has no production during January-February. For durians, the season is produced between mid-March and the end of September. The mangosteen season is in season from mid-April to the end of September. At the same time, the seasonal longan products will come out from July to September [10] shown as shown in Table 1.

Table 1. Top 4 Thai fruit harvesting seasons exported to China

| Month | Durian | Mangosteen | Longan | Coconut |
|-------|--------|------------|--------|---------|
| Jan. | ● | * | ● | ○ |
| | ● | * | ● | ○ |
| Feb. | ● | * | ● | ○ |
| | ● | * | ● | ○ |
| Mar. | ● | ● | ● | ○ |
| | ○ | ● | ● | ○ |
| Apr. | ○ | ● | ● | ○ |
| | ○ | ○ | ● | ○ |
| May | ○ | ○ | ● | ○ |
| | ○ | ○ | ● | ○ |
| Jun. | ○ | ○ | ● | ○ |
| | ○ | ○ | ● | ○ |
| Jul. | ○ | ○ | ○ | ○ |
| | ○ | ○ | ○ | ○ |
| Aug. | ○ | ○ | ○ | ○ |
| | ○ | ○ | ○ | ○ |
| Sep. | ○ | ○ | ○ | ○ |
| | ○ | ○ | ○ | ○ |
| Oct. | ● | ● | ● | ○ |
| | ● | ● | ● | ○ |
| Nov. | ● | ● | ● | ○ |
| | ● | ● | ● | ○ |
| Dec. | ● | ● | ● | ○ |
| | ● | ● | ● | ○ |

Note: ○ is in-season, ● is off-season, * is non-production.

3. LITERATURE REVIEW

According to the research of Srikaew, [13] it has studied for the potential and competitiveness of Thai fresh longan exports in the Chinese market. The objective is to study the comparative advantages of fresh longan exports of Thailand with the major competitors in the Chinese market by comparing with Vietnam including of studying the market share of Thai fresh longan in the Chinese market. It is

comparing with competitor countries, and Vietnam Data was collected from The United Nations Commodity Trade Statistic Database between 2000 and 2014 for 14 years. The tools used in the analysis are Revealed Comparative Advantage Index: RCA and Market Share: MS, and the results showed that Thailand and Vietnam have a comparative advantage in exporting fresh longan to the Chinese market. The both countries had an RCA value greater than 1 over the study period. However, Thailand's RCA value is lower than Vietnam, but the RCA value tends to decline, indicating that Thailand is less competitive in exporting fresh longan in the Chinese market than its competitors. In terms of market share (MS), Thailand has a much lower MS value than Vietnam showing that Vietnam has the ability to dominate the market more than Thailand in exporting fresh longan to the Chinese market.

According to the research of Rodbut [14], it has studied with the competitiveness of Thai cassava exports to the Chinese market. It has the purpose to study the ability for exporting Thai cassava to the Chinese market, (Revealed Comparative Advantage Index: RCA) by making comparison with the export competitor as Vietnam. It can study the market share of exports Thai cassava in the Chinese market by making comparison with this country, and the data was collected from the United Nations Commodity Trade Statistic Database between 2004 to 2015 for twelve years, (Revealed Comparative Advantage Index: RCA) and Market Share: MS of cassava exports between Thailand. The results it showed that Thailand and Vietnam has an apparent comparative advantage (RCA) value during 2004-2015 more than 1 for every study year. It shows that Thailand and Vietnam have RCA in exporting cassava to the Chinese market. However, if comparing the RCA values between two countries from 2010 - 2015, Thailand has more RCA values than Vietnam. Thailand tends to increase RCA values, while Vietnam tends to decrease RCA values, indicating that between 2010-2015. Thailand is in a comparative position in exporting cassava to the Chinese market more than Vietnam, but in terms of market share Thailand has more market share in exporting cassava to China than Vietnam. As the result, in every period it shows that Thailand has more market share in exporting cassava to the Chinese market than Vietnam.

According to the research of Thaweekan, [15] it has studied for the competitive potential of Thai sugar in the ASEAN market with the purposes: 1.To analyze the potential of Thailand's sugar exports in the ASEAN market 2.To study the market share of Thailand's sugar in the ASEAN market 3.To study the competitiveness of Thailand's sugar trade in the ASEAN market by collecting information related both domestically and internationally. The analysis tools include of Revealed Competitiveness Advantage (RCA), International Market Share (MS), and Trade and Competitiveness (TC). The results showed that Thailand has a RCA of sugar exports to the ASEAN market

by continuing to be increased while Brazil has a RCA to be continued to decline. The MS it was found that Thailand has a continuous increase in sugar market share in ASEAN and is at a very high level oppositely to Brazil with the trend to be continuing to decline. The TC has the same trends as the Comparative Advantage Index (RCA) and Market Share (MS) when considering the competitiveness of Thailand in the ASEAN market. According to the Comparative advantage (RCA), market share (MS) and trade capability index (TC), it was found that Thailand is a major exporter with the highest potential in the ASEAN market because of the reduction of tax rates under the ASEAN Economic Community Agreement. Then, it can be compared as Thailand's major competitor and Brazil, which are often has a longer distance transportation problem than Thailand and is also affected by higher tax rates than Thailand.

4. METHODS

4.1. Data Collection

The researcher has gathered data for exporting durians according to the United Nations Commodity Trade Statistic Database (UN Comtrade) with the Harmonized System Code (HS Code). It used the password for durians as HS: 081060 retrieved from website of <https://comtrade.un.org/>. This website can be used as the database for making comparison with statistical information into the variables in the study, and it consists of the title with sending durians of Thailand and the important competing countries; namely, Vietnam and Malaysia and sending all durians in the world and others. There was the rigid data base of durian export for the important competing countries to China. This research collected export data of durian within 10 years beginning from 2011 – 2020. It has gathered the information about the exporting situation, the importing, the durian market and the relevant theories including of relevant research from agencies inside and outside the country, such as Ministry of Commerce, Customs Department, Department of Foreign Trade and Department of Agricultural Extension including articles, customs department, Department of Foreign Trade, Department of Agricultural Extension including of articles, academic documents, and research.

4.2. Data Analysis

This research has analyzed the data analysis of competing ability to export the durians to China market by using of revealed comparative advantage index (RCA), Market Share (MS) with durian export between Thailand and important competing countries that are Vietnam and Malaysia. It used the United Nations Commodity Trade Statistic Database (UN Comtrade) or the secondary data with the result analysis from the formula of revealed comparative advantage index (RCA). Analyzing by comparing to the competing ability for durian export to China including of the

formula of the market share with comparing to the durian export to China market between 2011-2020 as 10 years.

4.3. Research Tool

According to the research tool with the competing ability analysis for sending durians to China classifying into two main tools that are the revealed comparative advantage index (RCA) and the market share (MS) as these details:

1. Revealed Comparative Advantage (RCA) is the tool that the economists are popular to measure with the international trade advantage by analyzing the competitiveness of international products calculated from comparing with the product proportional of export products in one country to the product proportional in the world market. It showed of the revealed comparative advantage index as the determination of export structure if RCA value is more than 1 referring that the comparative competing advantage, but if RCA value is less than 1 referring that it has none of the comparative competing advantage [16]. Therefore, it can calculate from the formula as this following:

$$RCA = \frac{\text{Thai Targeted Export Value Ratios}}{\text{World Targeted Export Value Ratios}} \quad (1)$$

It can write into mathematics calculation formula as these details:

$$RCA_{ij} = \frac{\frac{X_{ij}}{X_{tj}}}{\frac{X_{iw}}{X_{tw}}} \quad (2)$$

By RCA_{ij} = Revealed Comparative Advantage of j country with i product

X_{ij} = Export Values of i product from j country

X_{tj} = All Export Values of j country

X_{iw} = Export Values of All i Products

X_{tw} = All Export Product Values in the World

i = Targeted Product to be Considered

j = Approving Country

2. Market share (MS) arises from the ability to sell a product in a market which market share analysis has taken into account for the proportion of the product quantity. It was sold by the manufacturer in a market if the proportion of quantity of a product in that market is high, it means that the producer has a high ability to dominate that market. Then, it is caused by many factors, such as product price, product quality, delivery time and others. If the proportion of quantity of a product in the market is low, it means that the manufacturer has a low ability to dominate that market [14], by the market share, and there is a formula for calculating as follows:

$$MS_{ij} = \left(\frac{X_{ij}}{X_{iw}} \right) \times 100\% \quad (3)$$

where MS_{ij} = Market Share of Country j in products i
 X_{ij} = Value of Exports of Goods i of country j

X_{iw} = Total World Export Value of i products

Criteria for determining official share [17] are as follows:

| | | |
|------------------------|-------|--|
| $MS > 20\%$ | is | a very high level of export capability. |
| $10\% < MS \leq 20\%$ | is | a high level of export capability. |
| $0.5\% < MS \leq 10\%$ | means | the ability to export goods at a moderate level. |
| $MS \leq 0.5$ | means | less competitive |

5. RESULTS AND DISCUSSION

5.1. Analysis Results of The Comparative Advantage shown, (Revealed Comparative Advantage : RCA).

Based on the apparent comparative advantage (RCA) calculation in durian exports to the Chinese market during 2011-2020. The results found that Thailand's RCA value was greater than 1 at all times, meaning that Thailand had a comparative advantage in every period of durian export to the Chinese market. According to the article of Thairath Online [18] it is said that the export of fresh Thai durian to China continued to expand Since 2003, especially when China began exempting import duties on fresh durian to Thailand under the ASEAN-China Free Trade Agreement (FTA). Therefore, Thai durian has competitive potential, and nowadays, it can occupy the market share as number one in China. From a study on the competitiveness of Thai durian exports to China. It was found that in 2011-2013 the RCA value of Thailand tends to increase in 2011 while the RCA value was 23.22. In 2014-2017, the RCA value of Thailand was likely to increase, but falling due to Thailand experiencing drought and red worms bore durian balls. Similarly, some days when it rains, the durian flowers that are about to bloom dry out and hiss. As a result, the output to come to the market is less than every year, and in 2017, it was the year that Thailand had the least comparative advantage in ten years, which was 14.20, indicating that Thailand had a comparative advantage. that appeared in the export of Thai durian to the Chinese market the least caused by natural disasters. Additionally, at present it shows that Thailand encounters with rain during the durian flowering period, causing the durian to burst young leaves instead of flowers while the fruit trees that bloom already, and it made the flowers to fall with the damage to farmers. resulting in less productivity and not enough to meet the needs of the Chinese people. Therefore, it is caused China to be capable to import more durian from competing countries [19]. After that, the RCA value tends to increase until 2020 that is the year with the highest RCA value over a 10 - year period, which is 38.18, indicating that Thailand has a comparative advantage shown in exporting Thai durian to the Chinese market as the most level. Unfortunately, due to the outbreak of the Coronavirus Disease (COVID - 19), imports and exports around the world have been halted. On the other hand, durians in Thailand brought fruits to the market during

China's opening of the country. In addition, the Chinese believe that durian contains sulfur, so eating and heat can help prevent corona virus disease - 19 (Covid-19), causing Chinese people to turn to consume more durian from Thailand [20], and it is in line with Kasikorn Research Center [3] to be said that in 2021 Thailand still has an apparent comparative advantage, especially for Thai durians to be marketed with growing areas and production volumes that is continuing to increase. On the contrast, the competitor countries are at a disadvantage in that durian production capacity is still small and it takes at least 4-5 years to increase yields. Therefore, Thailand should offer other varieties of durian to be diversified to expand the market as well as market through social and e-commerce.

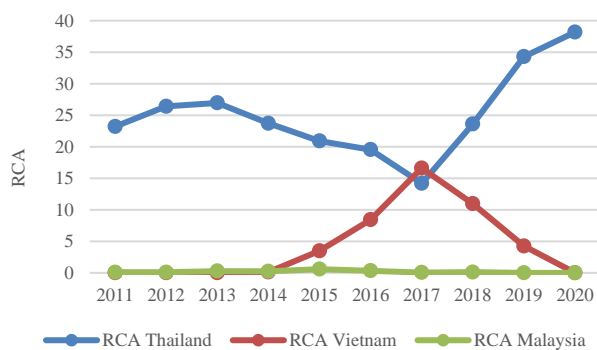
Meanwhile, Vietnam has a RCA value of more than 1 at certain times, which means that Vietnam has a comparative advantage shown in exporting durian to the Chinese market at certain times. Then, 1 indicates that Vietnam is at a comparative disadvantage in durian exports for the Chinese market until 2015-2018, Vietnam's RCA value tends to increase and is greater than 1, indicating that Vietnam has a comparative advantage in durian exports for the Chinese market due to the drought in Thailand. As a result, the export volume is insufficient to meet the needs of the Chinese people; it made China import more durians from Vietnam, so this period gives Vietnam a comparative advantage. With this case, 2017 it was the year that Vietnam had the most comparative advantage in 10 years, which was equal to 16.62. It has the comparative advantage that appears in the export of durian to the Chinese market as the most level due to Vietnam negotiating trade agreements with many countries. Therefore, it gives the Vietnamese agricultural sector have more opportunities to increase exports without the stability. After that, Vietnam's RCA value tends to be less, and in 2020 Vietnam's RCA value is less than 1, indicating a disadvantage in exporting durian to the Chinese market because Thailand has found the process of importing Vietnamese durian to wear rights. Thai durian using fake GAP and GMP certificates for export to China, and the motive is that the price of Vietnamese durian is 70 baht per kilogram. However, when it used to wear the right to be exported Thai durian it will be sold up to 160 baht per kilogram, which Thailand can arrest the said group in a timely manner by prosecuting both criminal and civil cases with the withdrawal of the GAP certificate. As the result, GMP for all those involved in wrongdoing make China have confidence in the quality of Thai durian [21].

Similarly, Malaysia always has an RCA value of less than 1, meaning Malaysia is always at a comparative disadvantage in exporting durian to the Chinese market. Then, it is because China is allowed to import only frozen durian meat from Malaysia differently from Thailand that can export fresh durian frozen durian and dried durian. As a result, Malaysia is at a disadvantage by comparison, and

2019, China is allowed to be the import of frozen whole durian from Malaysia to be sold in China. Moreover, this makes Malaysia to be the second country, so Thailand can export whole frozen durians to China. In addition, the Malaysian government has announced a policy to promote for durian cultivation instead of traditional economic crops with the aim of increasing durian yield amounting of 443,000 tons per year by 2030. However, durian production in Malaysia, which is increasing rapidly in the future, will become an important factor affecting Thailand's exports as well as buying for market share of frozen durian and fresh durian of Thailand in the Chinese market [22]. Therefore, it is in line with the research of Rod Yu, [23] to study about Competitiveness of Thai Mangosteen Exports to the Chinese Market, and the results of the study found that Thailand had an advantage in mangosteen exports over Indonesia during all periods. Besides, 2011-2014, Thailand had an RCA value of 14.83, 12.65, 14.70 and 21.57 because mangosteen is a fruit that cannot be produced in China, and it is also popular with Chinese people because Thai mangosteen is fresh, high quality and has a unique taste. Similarly, the location of Thailand is close to China, making it convenient for transportation. Unlike Indonesia, which cannot produce good quality mangosteen, and the quantity is insufficient to meet the demand of the international market. Then, it makes Indonesia at a disadvantage in comparison as it appears [24], and consistent with the research of Srikaew [13]. Additionally, it can study on the potential and competitiveness of Thai fresh longan exports in the Chinese market. According to the results of the study found that Thailand has a disadvantage in exporting longan more than Vietnam during all periods. Thailand had RCA value in 2011-2014 with 13.78, 15.32, 16.47 and 10.69, respectively, because the quantity of longan from Thailand each year is uncertain. In addition, China detected chemical residues that exceeded the standard. As a result, China imported less longans from Thailand. However, Chinese people like to eat more longan, causing China to import more longan from Vietnam while Vietnam has an advantage over Thailand in that the price of Vietnamese longan is cheaper than the price of Thai longan. Therefore, it makes Vietnam have a comparative advantage that appears, in line with GRT CARGO and the international freight forwarding agency [25], has ranked Thailand's most exported fruit in 2020. Additionally, it was found that it exports the most durian followed by longans and mangosteen, amounting to 620, 464 and 291 million kilograms, respectively by making comparison. With this case, Thailand had an advantage over durian over the general fruit level which confirms that Thailand is dominant in durian by RCA in exporting durian to the Chinese market when compared to competitor countries, namely Vietnam and Malaysia, during the year 2011-2020 as shown in Table 2 and Graph 1.

Table 2. Revealed Comparative Advantage (RCA) of Thailand, Vietnam, and Malaysia during 2011-2020

| Years | Revealed Comparative Advantage (RCA) | | |
|-------|--------------------------------------|---------|----------|
| | Thailand | Vietnam | Malaysia |
| 2011 | 23.22 | 0.01 | 0.09 |
| 2012 | 26.41 | 0.01 | 0.10 |
| 2013 | 26.96 | 0.02 | 0.29 |
| 2014 | 23.72 | 0.13 | 0.25 |
| 2015 | 20.92 | 3.49 | 0.58 |
| 2016 | 19.55 | 8.43 | 0.33 |
| 2017 | 14.20 | 16.62 | 0.06 |
| 2018 | 23.61 | 10.96 | 0.12 |
| 2019 | 34.29 | 4.26 | 0.01 |
| 2020 | 38.18 | 0.02 | 0.01 |



Graph 1. Revealed Comparative Advantage (RCA) of Thailand, Vietnam, and Malaysia during 2011-2020.

5.2. Analysis Results Market Share (Market Share : MS)

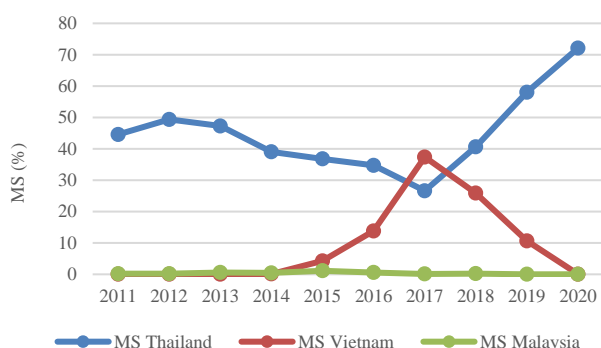
According to the calculation of market share in exporting durian to the Chinese market during 2011-2020, it was found that Thailand has a very high on the market share every year. For the most part, Thailand has a market share in exporting durian to the Chinese market than Vietnam and Malaysia, which the year with the highest market share is 72.09% in 2020, followed by 2019 and 2012 with equal to 58.05% and 49.36% respectively. In 2017, Thailand had the lowest market share in 10 years, meaning that Thailand has low market dominance. In contrast, Vietnam has the highest market share in 10 years with a market share of 37.39%. It is consistent with a research by Rod Yu in [23] to study about Competitiveness of Thai Mangosteen Exports to the Chinese Market, and the study found that in 2013, Thailand exported Thai mangosteen to the Chinese market with a market share of 20.54%. However, it is less than Thailand exporting durian to the Chinese market. That has a market share of 47.28% meaning that Durian has more market share than all fruits of Thailand.

Most of Vietnam and Malaysia have a small market share, and in 2015, Vietnam's market share was moderate, which was 4.29% in 2016 and 2019. Moreover, Vietnam has a high market share which is equal to 13.82% and 10.65%, respectively. In addition, it is in the year that Vietnam was able to hold a very high market share in 2017 and 2018, which the market share was 37.39% and 25.88%, respectively. Meanwhile, Malaysia's market share was moderate, and in 2013, 2015 and 2016, the market share was 0.57%, 1.13% and 0.59% respectively. It is consistent with the research of Srikaew [13] to study about the potential and competitiveness of Thai fresh longan exports in the Chinese market. In this study, it was found that in 2013, Vietnam exported longans to the Chinese market, which has a market share of 19.93% or more than Thailand exporting longans to the Chinese market. It has a market share of 16.47% and according to the research of Sukloet in [17], it was found that in 2018, the rate of change decreased from 2017 due to the changing competitive environment. Considering the transport potential, it was found that Thailand continue to expand but Viet Nam comes to the force in the short run [26].

According to the related research, it shows that Thailand has the ability to occupy more market share in durian than any other fruit. Moreover, this corresponds to the Kasikorn Research Center [3] said that China is the most populous country in the world, and China is the world's number 1 durian consumer country, making it the only Chinese market to dominate almost all of the durian market. When looking at the market share of durian exports, it was found that Thailand was able to occupy the world's number 1 market share in both quantity and value in 2019-2020 with a market share of 65.9% and 75.9% accordingly. China can connect itself to Southeast Asia [27]. Besides, it was observed that the world market share of durian tends to increase continuously. In the present, Thai durian can occupy 99% of the Chinese market combined with Hong Kong because of the limited supply of Thai products making it insufficient for Chinese consumers. As a result, China imports durian from competitor countries, such as Vietnam and Malaysia. Therefore, Thailand should increase durian production capacity including marketing through Chinese e-commerce platforms and elevating the Thai durian to be premium since planting including of transportation for consumers to eat durian that tastes like eating in Thailand. It showed that the market share value in exporting durian to the Chinese market when compared to competitors, such as Vietnam and Malaysia during the year 2011-2020 as shown in Table 3 and Graph 2.

Table 3. Market Share (MS) of Thailand, Vietnam, and Malaysia during 2011-2020

| Years | Market Share: MS (%) | | |
|-------|----------------------|---------|----------|
| | Thailand | Vietnam | Malaysia |
| 2011 | 44.56 | 0.01 | 0.19 |
| 2012 | 49.36 | 0.01 | 0.20 |
| 2013 | 47.28 | 0.01 | 0.57 |
| 2014 | 39.02 | 0.12 | 0.46 |
| 2015 | 36.79 | 4.29 | 1.13 |
| 2016 | 34.73 | 13.82 | 0.59 |
| 2017 | 26.63 | 37.39 | 0.11 |
| 2018 | 40.65 | 25.88 | 0.23 |
| 2019 | 58.05 | 10.65 | 0.02 |
| 2020 | 72.09 | 0.05 | 0.01 |



Graph 2. Market Share (MS) of Thailand, Vietnam, and Malaysia during 2011-2020.

6. CONCLUSIONS

When making comparison to the revealed comparative advantage index for three countries between 2011-2020, it was found that Thailand had RCA value with the most level following by Vietnam and Malaysia. It shows that Thailand has the good ability to send durians to China market more than the competing countries, and when considering to the changing trend of RCA value for three countries, such as in 2017, it was found with the reducing trend for Thailand while Vietnam had the increasing values as the important competing country. Unfortunately, our Thailand products have been suffered with the insufficiency problem to the Chinese customers, so China must receive durians from Vietnam increasingly. When considering RCA between Vietnam and Malaysia, it was found that between 2011-2014 there were RCA values of Vietnam in the less level oppositely to the RCA values of Malaysia. On the contrast, since 2015 it was found that Vietnam had the more increasing of RCA value more than the past because Vietnam has exported Monthong and Kan Yao durians

increasingly until gaining more advantages than Malaysia. On the other hand, recently RCA value of Malaysia was in the less level when comparing to the share market (MS) of three countries, but fortunately between 2011-2020 Thailand still occupied the market share (MS) for exporting durians to China market more than Vietnam and Malaysia in most years referring that Thailand still has been grabbed the market share (MS) for exporting durians to China market more than Vietnam and Malaysia.

RECOMMENDATION

1. The government should promote the development of durian transportation routes to the Chinese market by taking into account the duration Convenience in transportation to increase export potential as well as to promote knowledge and understanding of durian production processes. It is enable for the farmers to produce durian with quality and meet the standards required by the Chinese market.
2. Thailand exports durian to China Noi in some years due to inclement weather conditions, so the farmers should regularly observe and record changes in weather conditions every year as well as taking note of climate factors, such as hot temperatures, cold temperatures, heavy rainfall, low rainfall, relative humidity. Besides, it is wondering whether it affects to the durian production. Then, the farmers must use the data in planning to adjust or manage orchards to minimize the impact including of planning to deal with changes in the weather in the future with care.
3. Department of International Trade and related agencies should deal with neighboring countries by wearing Thai durian rights exported to China which affects the image of Thai durian. Therefore, the department and related agencies should be strict in considering issuing all types of certificates related to durian. Besides, the applicant for the certificate must specify a statement confirming the origin of the durian in the country into the application for product qualification by preventing to wear Thai durian rights to the Chinese market.
4. To prevent the rapid increase of Malaysian durian production in the future. Therefore, Thailand should closely monitor the Malaysian durian production situation and deal with the situations from the study. It was found that most of Thailand exports durian to China. Therefore, Thailand should look for other potential export markets, such as the Middle East market and Indian market due to the large population and popularly consumed durians including of reducing on applying of only a single Chinese market.

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