

# **Analysis of Tropical Fruits in Thailand**

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## **INTRODUCTION**

Thailand has a favorable weather condition and productive land for the cultivation of tropical and sub-tropical fruits (Zang, 2017). Therefore, it is famous for its tropical fruits that are tasty, flavorful and of good quality such as durian, mangosteen and rambutan (Anupunt, 2017). In Asia, Thailand is the main supplier and exporter of various fresh fruits, especially tropical fruits such as durian, guavas, mangoes, mangosteens, bananas, oranges, rambutans, coconuts, and lychee. The major exporting countries for tropical fruits are China and neighboring Asian countries. The cooler climate fresh fruits are imported from China, New Zealand, the United States, Australia, Japan, South Korea, Chile, and South Africa (IAT, 2017).

There are many kinds of high quality fruits in Thailand. Moreover, the fruit markets are strong and there are high demands in the international markets. It can generate high export incomes which accounts for over 301.75 million US\$ per year. Therefore, the Ministry of Commerce set up the plan to invest a large amount of capital in the growing fruit export market. Besides, this plan also intends to find a broader market before the fruit supply increases. The ministry collaborated with many agencies and consultants to set up the policy to promote the export of high demand fruits (Arunmas, 2017).

Many farmers have shifted to growing durian and longan fruits instead of growing rubber because of the higher prices of those fruits. Therefore, fruit supply may increase into the markets during the coming few years. The increase of fruit supply in the market can contribute to the decline of fruit prices. The government implements good supply management to avoid the drop of fruit prices during the harvesting period. For instance, the price of durian was still high although there is increased supply in the market. This is because the government implemented durian buffet campaigns in the major tourist places of Thailand to attract tourists to try Thai fruits. Moreover, the government and the private sector made a promotion of durian in major department stores to increase the market channels. According to the Ministry of Commerce, Thailand can generate the export value of fresh and processed fruits which account for US\$360.89 million in 2016 (Arunmas, 2017).

According to the Department of Agricultural Extension (DOAE, 2017), there were 11 fruits such as pineapple, longan, durian, mangosteen, mango, orange, apple, tamarine, rambutan, lychee and grape which were exported to the international market from 2012-2016 (Figure 1). As shown in Figure 2, pineapple, longan, durian, mangosteen and mango are produced in large quantities among exported fruits in 2012-2016. As well, the export values of those fruits were the highest among exported fruits.

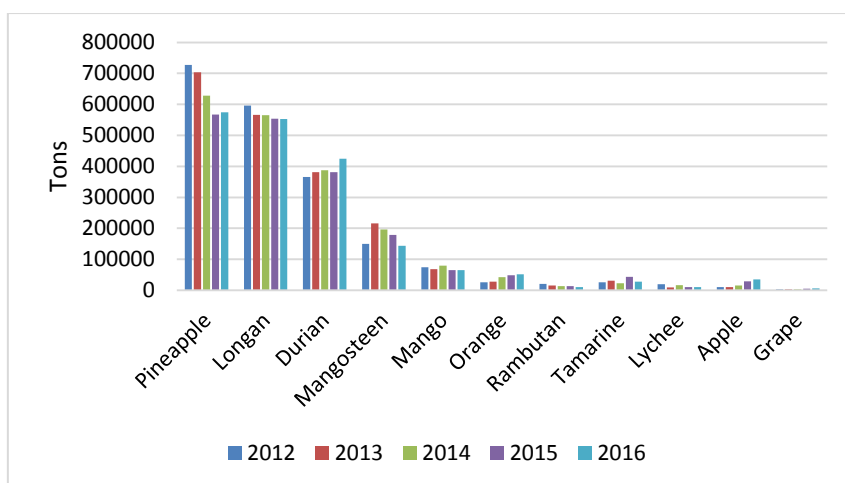


Fig. 1. Export volume of fruits from Thailand (2012-2016)

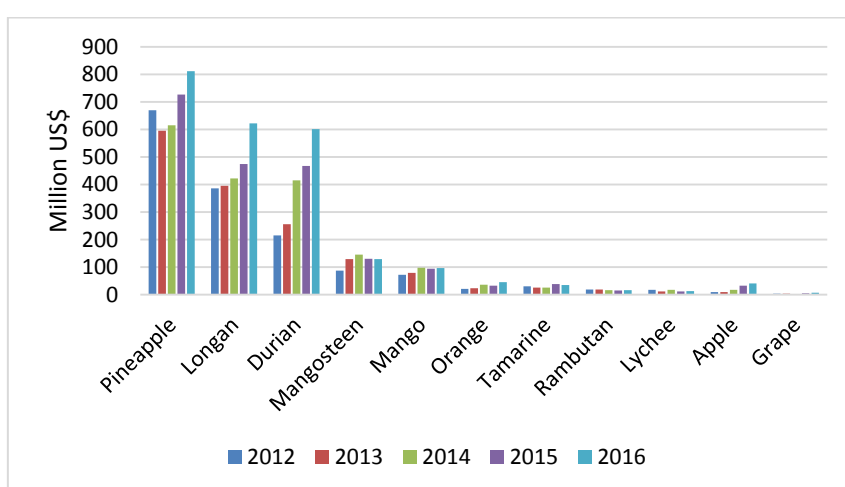


Fig. 2. Export value of fruits from Thailand (2012-2016)

## Pineapple

According to TPIA (2017), at present, Thailand ranks first place in the production and export of pineapple with about 50% share in the global market. In Thailand, pineapple is mainly grown in the Southern part of the country (Kodanmal Group, 2008). Pineapple is also exported in various forms in the international market. Canned pineapple ranks first among the many pineapple by-product exported in the international market like juice, frozen and dried. The export amounts of canned pineapple were 482,640 tons worth of US\$615.10 million in 2016 (DOAE, 2017) (Table 1).

Table 1. Export amount and export value of canned pineapple (2012-2016)  
(1 THB = 0.030USD)

| Year | Export Volume (Tons) | Export Value (Million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 574,920              | 499.15                      |
| 2013 | 555,300              | 456.28                      |
| 2014 | 518,570              | 484.66                      |
| 2015 | 476,990              | 563.89                      |
| 2016 | 482,640              | 615.10                      |

Source: Department of Agricultural Extension, 2017

## Longan

Longan is mainly grown in China, Thailand, Vietnam, and Laos. The demands for longan have also been increasing in the recent years (Qiu, 2014). Longan is an economic crop for the growers especially if there is a suitable harvesting method and postharvest management (Chen *et al.*, 2011). It can be used in various preserved forms such as frozen, canned, dried etc. (Xu, 2004).

In Thailand, longan is mainly grown in the northern region. Longan is the second largest exported crop in terms of value after pineapple and the third largest in terms of fruit values after durian and pineapple: 13.9 %, 34.49 %, and 28.89 % respectively (Hasachoo and Kalaya, 2013). The harvested areas dramatically increased from 139.2 to 169.6 hectares during 2006-2015 (Office of Agricultural Economics, 2016). In 2016, all kinds of longan were exported to the international markets which accounted for 552,460 tons valued at US\$625.65 million per year (DOAE, 2017). According to the Office of Agricultural Economics, longans from Thailand were exported to China which is the main international market and accounts for 80.86% of dried longans and 42.71% of fresh longans in 2010 (Hasachoo and Kalaya, 2013).

Although there is the world economic crisis, the exportation of Thai longan fruit to China is still in very high demand. Longan can be produced the whole year in Thailand. However, the export prices are also high which accounts for 40-50% over the past 5-6 years as the demand of Thai longan from China is high. This is because of the low consumption in the domestic markets (Chavanchankij, 2015). Longans are exported either fresh, dried, canned or frozen. The export volume and value of fresh longan from 2012 to 2016 are shown in Table 2 (DOAE, 2017).

Table 2. Export volume and export value for fresh longan (2012-2016) (1 THB = 0.030USD)

| Year | Export volume (Tons) | Export value (million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 129,255              | 114.22                      |
| 2013 | 140,232              | 121.56                      |
| 2014 | 196,666              | 166.36                      |
| 2015 | 110,729              | 163.83                      |
| 2016 | 125,518              | 254.83                      |

Source: Department of Agricultural Extension, 2017

## Durian

According to National Statistical Office of Thailand, the durian plantation areas covered more than 0.1 million hectares and the total harvested area has increased continuously. Durian is mainly grown in the eastern and southern regions of Thailand (OAE, 2016). Durian production accounted for 600,000 tons annually and the export values accounted for over US\$ 301.75 million yearly (Bangkok Post, 2017). Across the world, durian production is the largest in Thailand accounting for 656,777 tons in 2016 based on the information from the Office of Agricultural Economics (OAE). Over 63% of its total production are exported to the international markets while about 37% go to the domestic markets (Bangkok Post, 2017).

Thailand, the top exporter around the world, export durians to Taiwan, Hong Kong, Malaysia, China and the United States (Parichatnon *et al.*, 2017). Thai durian has got a strong place in China's market for over 30 years (Yuhuan, 2015). In the past few years, the demand of China for Thai durian has been increasing rapidly (ChinaAg, 2017). The best quality of durian is produced in Chantaburi province of Thailand. China is the major market for the

durians from that province (Xinhua, 2015). The export volume of durians from three provinces to China accounted for 75% of its total volume (Tumcharoen, 2015). As the demand from China has increased, the prices for Thai durian also increased about 10 times. As a result, the growers can make more profits by growing durians (Proqmars, 2017).

In the China market, durian is the favorite fruit among the imported fruits from Thailand. Among exported fruits, the export amount of durian accounted for 41% followed by longan (21%) and mangosteen (12%) in 2014. The fruit traders from China are directly connected to the fruit growers for the exports of Thai fruits. They rarely connect with the Thai brokers and middlemen. According to a fruit-trading source, approximately 1,000 Chinese traders are doing business in Thailand. They control the fruit exportations from Thailand to China. This direct contact with the Chinese traders and farmers is just good for the short-term. But, for long-term, this can make a negative effect on the Thai farmers and small local traders. Moreover, the involvement of Chinese traders in the Thai fruit markets makes more competition among brokers (Arunmas, 2016).

The government set up the plan for trading and implemented the following actions:

- making a registration and use of standardized purchase contracts by Chinese traders;
- management for purchase contracts to ensure fair treatment for farmers; and
- making a preparation for the database of fruit traders in each province based on the types of fruits and nationality of traders

The Office of Agricultural Economics (OAE) also stated that the demand for durian and rambutan is increasing in the international markets. The export incomes from durian and rambutan accounted for US\$ 905.25 million in 2017. Therefore, 2017 is a golden year for durian and rambutan, especially in eastern Thailand. According to Thai News Bureau, the demands in the domestic and international markets increase 30-40% for each fruit in 2017 compared with last year. The high supply also meets this growing demand (Coconuts Bangkok, 2017). According to the DOAE (2017), The export volume and value of fresh durian and rambutan for five years (2012-2016) are stated in Table 3 and 4.

Table 3. Export volume and export value for fresh Durian (2012-2016) (1 THB = 0.030USD)

| Year | Export volume (Tons) | Export value (million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 351,214              | 187.05                      |
| 2013 | 367,057              | 221.77                      |
| 2014 | 369,602              | 375.48                      |
| 2015 | 358,192              | 399.94                      |
| 2016 | 402,660              | 527.45                      |

Source: Department of Agricultural Extension, 2017

Table 4. Export volume and export value for fresh rambutan (2012-2016) (1 THB = 0.030USD)

| Year | Export volume (Tons) | Export value (million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 11,241.82            | 5.00                        |
| 2013 | 4,222.43             | 4.46                        |
| 2014 | 3,882.41             | 3.61                        |
| 2015 | 6,742.98             | 5.51                        |
| 2016 | 2,232.96             | 3.38                        |

Source: Department of Agricultural Extension, 2017

## Mangosteen

In Southeast Asia, mangosteen is known as “Queen of fruits” and also a valuable fruit (Pongvinyoo *et al.*, 2015). Mangosteen is grown on a commercial scale in Thailand, Indonesia, Vietnam, Malaysia and the Philippines while on a small scale in Sri Lanka, Australia, Hawaii, Puerto Rico, Costa Rica and Mexico. Thailand was one of the top producers around the world and is in the fourth place in terms of production in 2013 (Table 5) (Anupunt, 2017). In Thailand, mangosteen is mainly grown in the eastern and southern regions of the country (D-International Co Ltd., 2017).

Table 5. Top five mangosteen producing countries in the world in 2013

| No. | Country         | Production (MT) |
|-----|-----------------|-----------------|
| 1   | India           | 15,250,000      |
| 2   | China, Mainland | 4,400,000       |
| 3   | Kenya           | 2,781,706       |
| 4   | Thailand        | 2,650,000       |
| 5   | Indonesia       | 2,376,339       |

Source: FAOSTAT, 2014

Mangosteen from Thailand has a thinner skin, superior taste, and better freshness preservation measures. Therefore, it can be characterized as the best variety among the mangosteen producing countries. Moreover, it is very popular among Chinese consumers due to its outstanding quality and its reasonable price (Zang, 2017).

Mangosteen is produced in various forms such as mangosteen jam, sweet mangosteen paste, mangosteen sherbet, frozen mangosteen, and mangosteen wine, medicinal products for diarrhea and wound healing, and cosmetic products for acne, black scars and boils. Due to the various usefulness of mangosteen, it becomes the potential fruit to generate more income for both the growers and producers (Anupunt, 2017).

Anupunt (2017) also stated that mangosteen is becoming popular among the consumers and is becoming a potential major tropical fruit for the export markets because of the following factors:

- increasing demands not only in the producing countries but also in the international markets like in China, Hong Kong, Japan, Korea, the United States of America, and the European Union;
- useful for its nutritional and medicinal purposes; and
- the globalization and the emergence of new economic countries like China

The export value of mangosteen to China were US\$ 158 million, US\$ 238 million and US\$ 149 million in 2014, 2015 and 2016 respectively according to China Customs statistics. China imported a large amount of mangosteen from Thailand which accounts for the highest among total imports. In 2014-2016, the sharing percentage of the market was 90.97%, 92.68% and 84.66% respectively. In recent times, the total export amounts of mangosteen from Thailand exported to China accounted for about 70% and exported to Japan, Hong Kong and Taiwan with lower percentage (Zang, 2017).

Fresh mangosteen are mainly exported to Taiwan and Hong Kong while frozen mangosteen to Japan, the United States of America and Taiwan. The export of Thai mangosteen fresh accounted for 143,226 tons with the value of US\$ 130.10 million in 2016 (Table 6).

Table 6. Export volume and export value for fresh mangosteen (2012-2016)  
(1 THB = 0.030USD)

| Year | Export volume (Tons) | Export value (million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 149,398              | 88.13                       |
| 2013 | 215,865              | 129.71                      |
| 2014 | 195,838              | 145.98                      |
| 2015 | 178,689              | 131.34                      |
| 2016 | 143,226              | 130.10                      |

Source: Department of Agricultural Extension, 2017

## Mango

Mango is one of the economically important fruits in Thailand. There are over 100 mango varieties across the country with a total harvested areas accounting for 336,000 hectares and total production of 3.1 million tons in 2015. The major international markets for mango are Asian countries, especially South Korea, Vietnam and Japan (DOAE, 2015). According to DOAE (2017), the export amount of fresh mango was 33,346.99 tons with a value of US\$ 36.93 million in 2016 (Table 7).

Table 7. Export volume and export value for fresh mango (2012-2016)  
(1 THB = 0.030USD)

| Year | Export volume (Tons) | Export value (million US\$) |
|------|----------------------|-----------------------------|
| 2012 | 44,449.73            | 28.22                       |
| 2013 | 33,035.21            | 25.77                       |
| 2014 | 45,544.16            | 38.19                       |
| 2015 | 33,902.66            | 36.57                       |
| 2016 | 33,346.99            | 36.93                       |

Source: Department of Agricultural Extension, 2017

## CONCLUSION

In Thailand, there are many kinds of high quality fruits and firmed market place in the international markets. It is the major supplier and exporter of fresh fruit especially tropical fruits in Asia and the major export market is China. The highest export income generating fruits are pineapple, longan, durian, mangosteen and mango during 2012-2016. Those fruits are exported in various forms such as fresh, canned, dried, frozen, preserved and juice. Most of all, those fruits are exported in fresh form except pineapple. Pineapple are mostly exported as canned type and mangosteen as the only fresh form.

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