

Developmet of fruits production in Thailand

Nguyen Thi Phuong

Center for Applied Economic Research, Kasetsart University Thailand

Introduction

Thailand is an agricultural country with the total area of about 51.31 million hectares. More than 21.06 million hectares are used for agricultural production equivalent with 41.22% (World Bank, 2011). Besides Thailand has the appropriate climate to develop tropical fruits. Therefore, Thailand is one of the most abundant sources of tropical fruits in the world. It has high diversification in tropical fruits. Thai fruits are popular among consumers throughout the world with more than 1,000 varieties of tropical and sub-tropical fruit were reported in Thailand and 57 kinds of fruit are produced commercially.

Currently, the six major economic fruit crops in Thailand are longan, durian, mangosteen, rambutan, mango and longkong covering the area around 0.9 million hectare and producing 4.45 million tons of fruit annually and leading exported of tropical fruits in the over time.

In recently, development of fruit in Thailand had a new trend, Thai Government and farmers' focused on improving safety and quality of fruit product to reach the minimum requirement of the buyers and high standard market.

Fruit production

Harvested area of Fruits

From figure 1, it can be seen clearly that, there was fluctuating slightly trend of area harvested from 1995 to 1999 but there was increasing strongly from 1999 to 2008 and it also was insignificant decreasing since 2009. In 2013 total area harvested of Fruit in Thailand was 45, 167 hecta.

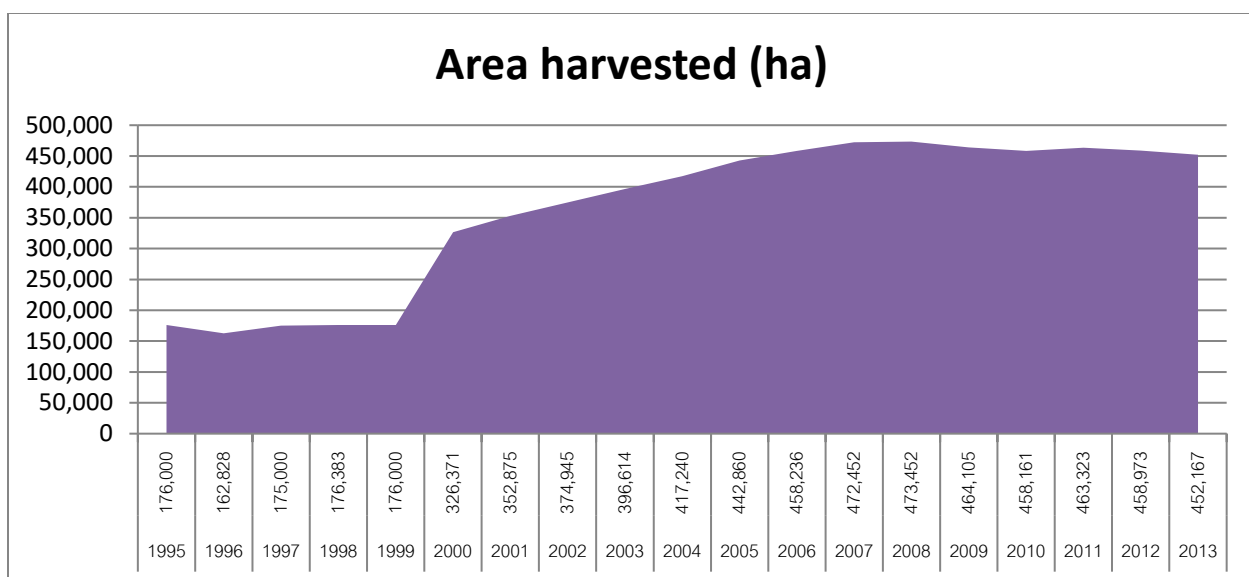


Figure 1. Area harvested of Fruits in Thailand

Source: FAOSTAT (2016)

Among the six major fruit crops in Thailand, mango had the largest production area with 305, 114 hectares in 2008 and its harvested area still increased in 2008 to 2013 to reach 334,029 hectares in 2013. Longan ranked second in harvested area after mango with harvested area of over 150,000 hectares followed by durian, mangosteen, rambutan, and longkong. From 2008 and 2013, harvested area of mangosteen and longkong increased while that of durian and rambutan decreased (Table 1).

Table 1. Harvested area of important fruit crops in Thailand between 2008 and 2013

Fruit crops (hectares)	2008	2009	2010	2011	2012	2013
Mango	305,114	308,026	311,048	323,197	327,405	334,029
Longan	154,974	154,995	152,732	156,862	164,770	165,916
Durian	106,974	100,519	97,793	96,707	93,049	92,340
Mangosteen	63,412	63,910	64,900	65,549	65,045	65,448
Rambutan	63,518	57,930	54,653	53,536	50,352	47,914
Longkong	52,995	56,518	59,395	62,669	60,705	59,371

Source: Based on Phavaphutanon (2015)

And according to the report of Fact fish (2014), Top 10 countries in the world had largest fruit production including China, India, Thailand, Philippines, Indonesia, Bangladesh, Pakistan, Brazil, Madagascar, Colombia. Among these China was number 1, followed by India and Thailand, Philippines.

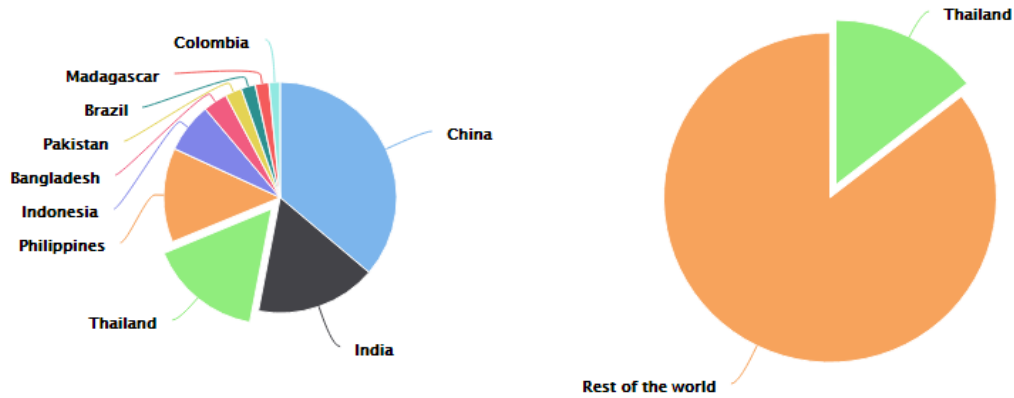


Figure 2. Top 10 countries in the world

World share for Thailand

Thailand rank was number 3 in the world about fruit production area, and accounts for area of fruits was 14.5% in the world in 2013 (Figure 2)

Production and Yield of fruit trees

According to FAOSTAT's report (2016), production and yield were fluctuating strongly in the over years. This fluctuating production area was be explaining by weather conditions and planting areas lead to yield decreased (Phavaphutanon, 2015).

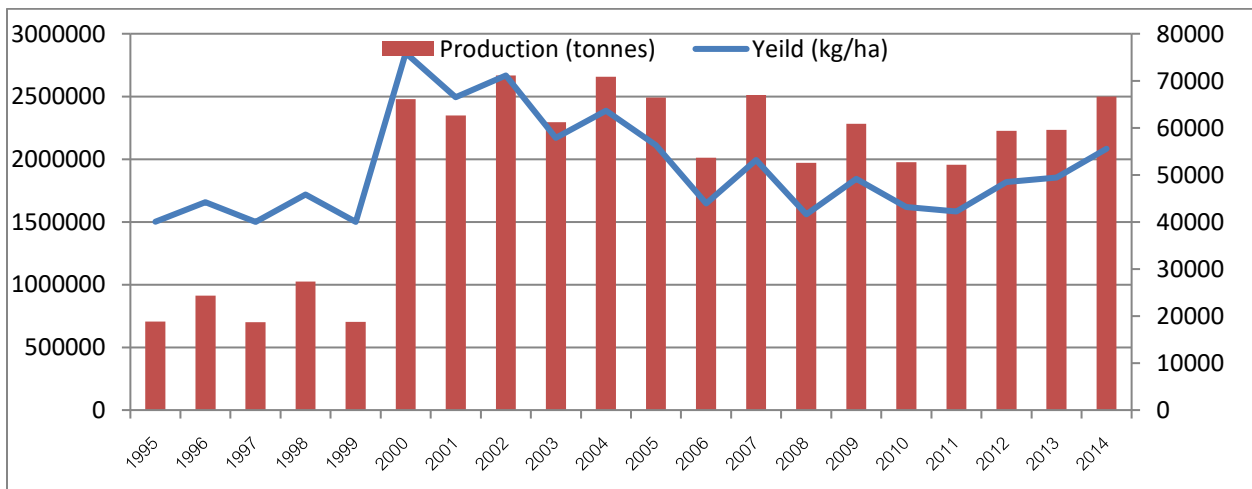


Figure 3. Yield and Production of Fruit in Thailand

Source: FAOSTAT (2016)

Among these, mango had the highest total yield of over two million tons each year and its production still increased between 2008 and 2013. Longan was in the second rank after mango and its production increased significantly from around 400,000 metric tons in 2008 to more than 800,000 million tons in 2013. For the rest of the major fruit crops, durian ranks third followed by rambutan, mangosteen, and longkong, respectively. Their production went up and down between 2008 and 2013. Beside the minor fruit crops, yield had a significant decrease in total yield from like tangerine. Total yield of pomelo and baby banana also decreased between 2008 and 2013 while that of lychee went up and down and that of banana was relatively stable during the same period (Ministry of Agriculture and Cooperatives, 2014)

Harvesting season

Normally, more than 90% of tropical fruit in Thailand are in the market between April and September, especially in May and August causing a continuous problem of over supply lead to low price.

Table 2. Harvesting season of major fruit crops in Thailand

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Nov	Dec.
Longan											
Durian											
Mangosteen											
Rambutan											
Mango											
Longkong											

Source: office of Agricultural Economics, Ministry of Agriculture and Cooperatives

Durian season is starting from mid-April to September, because the durian is planted across the whole country. However, different geographical weather had fluctuation and the various cultivars planted lead to delay as well as influence the spread of the fruiting period. For example the eastern provinces produce fruit from middle April to June-July, the northern provinces in June-July, and the southern provinces in July-September. Longan season starts from

July to August every year while mango and magosteen usually start early from March to Jun every year.

As mention above, because of different geographical areas of Thailand influence flowering, fruit development and harvesting season of fruit crops. Therefore, harvesting season of kind of fruit in Thailand may start early or later than generally season. Beside thank to high technology production, nowadays, almost of fruit in Thailand had available all-year round.

Exported Quantity and value of Thai Fruit

During the last years, both exported value and exported volume of Thai fruit increased. Especially, there was increased significantly from 2009 to 2012. In 2013, exported value was a decreasing strongly causing a reduced production and yield of fruits (figure 4).

The main exported fruits of Thailand were Durian with 386,746 tons, Mango with 73,167 tons , Mangosteen with 215,865 tons, Longan with 413,440 tons, Rambutan with 14,049 tons , Pomelo with 14,338 tons, Baby Banana with 16,936 tons (Ministry of Agriculture and Cooperatives, Thailand, 2013).

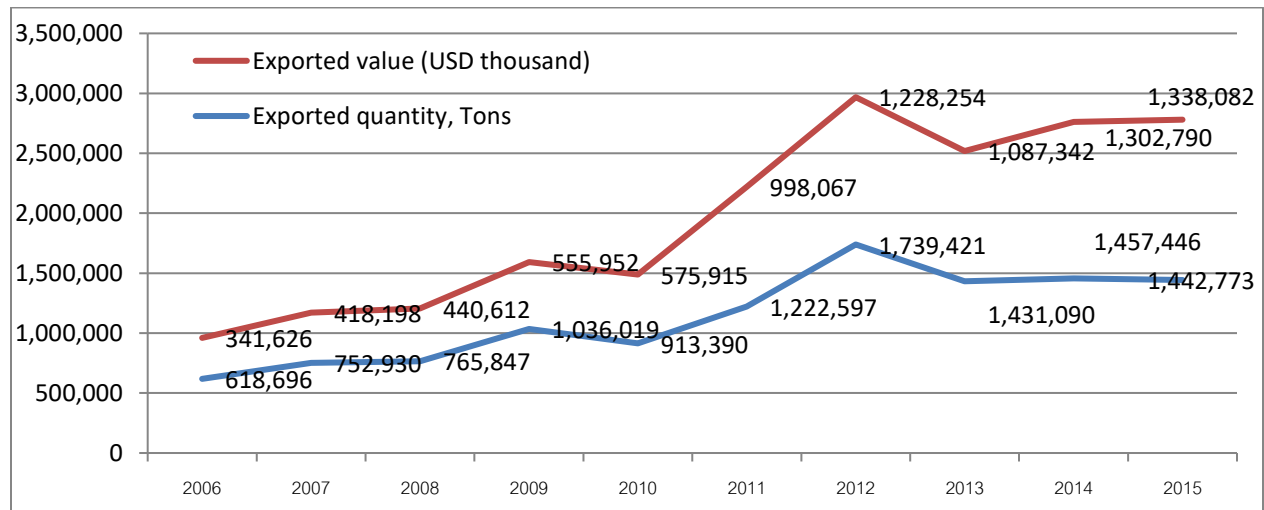


Figure 4. Exported Quantity and value of Thai Fruit from 2006 to 2015

Source: TRADEMAP (2016)

The main exported markets of Thailand are China, Vietnam, and Hong kong. Among these, China is the largest global market for Thai fruit exports, mainly exporting durian and

longan and many kind of other Thai fruit. Thai fruit exports to China have grown significantly from 2000 to 2011 and reached 46.4% in 2011 in total exported fruit value of Thailand.

However, in recent years, exported value to China decreased whereas Vietnam, United States of America, Indonesia, Hông kông, Korea, Japan had increasing trend. Comparing exported markets in 2011 and 2015, we can see clearly that exported market of Thai fruit had changed. Exported value to China decreased and Vietnam market go up strongly. Some high requirement market like United States of America, Korea, Japan was increasing but also slow growth and insignificant. But it shown that Thai Government has focused on developing quality and safety of fruit products to reach the minimum requirement of the buyers and high required markets.

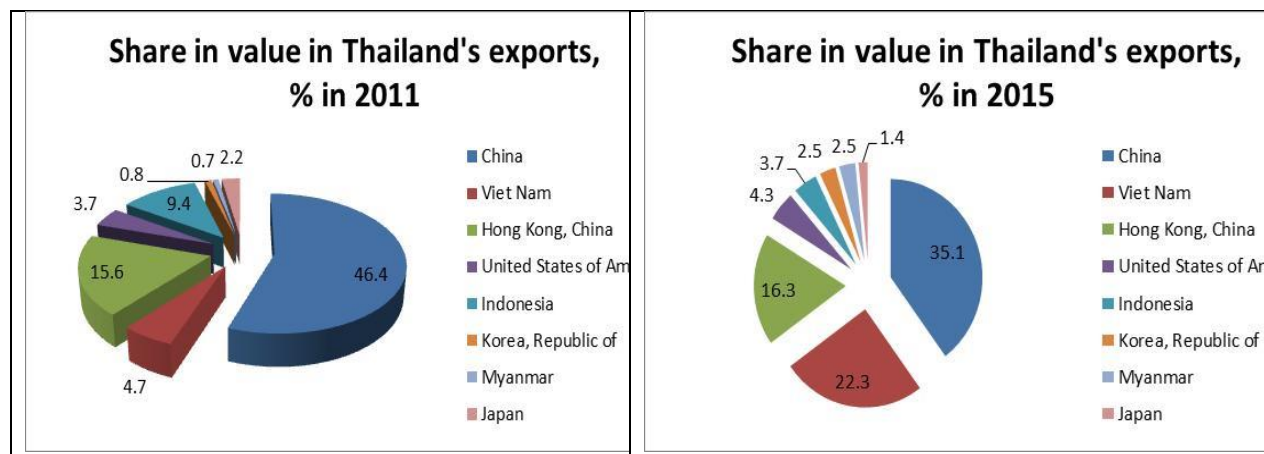


Figure 5. Share in value in Thailand's export (%) in 2011 and 2015

Source: TRADEMAP (2016)

For example, according to report in 2006, 29 kinds of fruits were produced under QGAP standard at Thailand. As of July 2006, 501,663 farms had registered for Q GAP certification, 407,034 had been inspected and 204,559 farms with the area of 2,110,341.9 rai (200,860 ha) had obtained Q GAP for 29 fruit or vegetable crops. Almost of the certifications for fruits were longan with 531,559.6 rai , durian with 167,342 rai, mangosteen with 109,893.5 rai, mango with 1,691 rai and so on (Pitsawat Buara .*et al.* 2007).

Conclusion

Recently, although harvested area of fruit in Thailand decreased slightly but Thai fruits' yield and production had increasing trends. Plus, Thailand's exported value also increased in the

over years. Fruit production in Thailand was development both the quality and safety of products, partially met the high requirements of the markets like the US, Japan, Korea.

However, a major challenge of the development of Thai fruits is affected by climate change that was be reduced about yield and production of fruits. Besides, demand for quality fruit products was increasing. Therefore, Thailand need efforts to improve product quality like ThaiGAP applications or organic fruits, high-technology applications in the preservation of fruits after harvesting to increase quality and value of fruit. At the same time, Thai government should give instructions about climate change and make farmers aware that they will face a warm season and drought so that they can plan accordingly, adapt with climate change and to minimize the consequences.

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