

# Updates on Oils and Fats Scenario in China

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## INTRODUCTION

In the late 1970s, China started to move from a closed and centrally planned economy system to a price-driven and market-oriented economy system. As a result, China became the world's major trader in goods in 2014. The reforms brought huge development in the industrialisation and the modernisation of the country. Modernisation also brought in modern concepts and technologies to the people in the country. Issues such as *trans*-fat free, low saturated fat and low contaminants in food processing have become new challenges for the oils and fats market in China. In brief, the people in China today are not only getting food to satisfy hunger, but they are also looking at quality food for a healthier life.

China is the world's most populous country with more than 1.38 billion people in 2014 according to the *World Fact Book*. Based on the *Oil World* statistics, China produced 26.6 million tonnes of oils and fats in 2014. However, local production was unable to meet the demand for oils and fats which amounted to 36.2 million tonnes in the same year. The excess in demand resulted in a shortfall which

had to be covered by importing oils and fats. Thus, China has become one of the leading importers of oils and fats in the world market, accounting for about 14% of the oils and fats traded in 2014 (*Table 1*). Palm oil is one of the major oils and fats imported by China. It accounted for about 61% of the oils and fats imported by China in 2014.

## CURRENT OILS AND FATS SITUATION IN CHINA

China's oils and fats production has been increasing steadily for the last 10 years with an average annual growth rate of 4.7%. Production increased from 18.8 million tonnes in 2005 to 26.6 million tonnes in 2014, mainly contributed by soyabean oil (*Table 2*). The

increase in production of soyabean oil was mainly due to the crushing of imported soyabean which had increased rapidly from 26.6 million tonnes in 2005 to 71.4 million tonnes in 2014. Production of other oils such as rapeseed and groundnut oil has remained stagnant.

Production of the major local oilseed crops such as soyabean, rapeseed, groundnut, sunflower and cottonseed has remained stagnant for the last few years. This is due to the decreasing amount of land available for such crops, and the competition for land between grains and oilseeds. The growth potential for local oilseeds production is thus limited.

The consumption of oils and fats in China has increased over the years (2005 to 2014) with an average annual growth rate of 4.6% from 25.7 million tonnes in 2005 to 36.2 million tonnes in 2013. The increase in consumption was due to a number of factors which include high economic growth, increase in disposable income and migration of the rural population to the cities. These created a huge demand for processed food and increased food

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**TABLE 1. CHINA IMPORT OF OILS AND FATS (million tonnes)**

| Year                             | 2005 | 2006 | 2007 | 2008 | 2009  | 2010 | 2011 | 2012  | 2013  | 2014 |
|----------------------------------|------|------|------|------|-------|------|------|-------|-------|------|
| Import of oils and fats by China | 6.94 | 8.01 | 9.80 | 9.50 | 10.81 | 9.75 | 9.17 | 10.93 | 10.52 | 9.27 |
| Import of palm oil by China      | 4.32 | 5.46 | 5.50 | 5.59 | 6.56  | 5.80 | 6.17 | 6.45  | 6.07  | 5.63 |
| * Demand for oils and fats       | 25.7 | 27.0 | 28.4 | 29.3 | 31.0  | 32.3 | 33.3 | 34.5  | 35.3  | 36.2 |

Source: *Oil World Annual (2005-2015)*.

\*Note: Demand consists of soyabean oil, rapeseed oil, palm oil, palm kernel oil, lard, groundnut oil, cottonseed oil and others.

**TABLE 2. CHINA PRODUCTION OF MAJOR OILS AND FATS (million tonnes)**

| Year          | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Soyabean oil  | 5.50  | 5.97  | 6.20  | 6.71  | 7.46  | 8.63  | 9.39  | 10.24 | 10.59 | 11.55 |
| Rapeseed oil  | 4.61  | 4.75  | 4.36  | 4.53  | 5.28  | 5.32  | 4.79  | 5.45  | 5.60  | 5.85  |
| Lard          | 3.34  | 3.37  | 3.13  | 3.20  | 3.31  | 3.43  | 3.53  | 3.59  | 3.65  | 3.73  |
| Groundnut oil | 2.06  | 2.00  | 1.86  | 1.80  | 1.90  | 1.94  | 1.87  | 2.30  | 1.96  | 1.82  |
| Total         | 18.76 | 19.49 | 19.12 | 19.91 | 21.58 | 22.85 | 23.13 | 24.89 | 25.35 | 26.55 |

Source: *Oil World Yearly (2006-2015)*.

**TABLE 3. CHINA IMPORT OF MAJOR PALM OIL PRODUCTS (million tonnes)**

| Year             | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------|------|------|------|------|------|------|------|------|------|------|
| RBD palm olein   | 2.66 | 3.49 | 3.94 | 4.03 | 4.51 | 4.11 | 4.91 | 5.17 | 4.76 | 3.97 |
| RBD palm stearin | 1.49 | 0.94 | 0.71 | 0.64 | 1.32 | 1.38 | 1.21 | 1.11 | 1.11 | 1.36 |
| Palm kernel oil  | 0.23 | 0.29 | 0.38 | 0.33 | 0.51 | 0.45 | 0.39 | 0.49 | 0.61 | 0.50 |

Source: China Custom (<http://www.customs.gov.cn/publish/portal0/>).

**TABLE 4. MALAYSIAN EXPORT OF MAJOR PALM OIL PRODUCTS TO CHINA (million tonnes)**

| Year              | 2014 |
|-------------------|------|
| RBD palm olein    | 2.13 |
| RBD palm stearin  | 0.48 |
| Palm oil products | 2.84 |

Source: MPOB (2014).

consumption. The local production of oils and fats is unable to meet the demand and the shortfall has to be met by imports. Oils and fats imports into China increased from 6.94 million tonnes in 2005 to 9.27 million tonnes in 2014. The major oils imported were palm oil and soyabean oil.

## OILSEEDS SITUATION IN CHINA

China imports soyabean mainly for soyameal to meet increased demand for animal feed in meat and dairy production. The meat and dairy industry is important to fulfill the protein needs of the country in

line with the increase in population. According to the Chinese Customs, China imported 71.4 million tonnes of soyabean in 2014, a 12.6% increase as compared to 2013. The extra supply of soyabean resulted in an increased production of soyabean oil, a by-product from producing soyameal in China. This has narrowed the discount of palm oil against soyabean oil.

## CURRENT PALM OIL SITUATION IN CHINA

China is currently the second largest importer of palm oil after India in the world. Palm oil accounted for about 58% of its vegetable oil

imports in 2014. Imports of palm oil have been increasing over the last 10 years. The increase in palm oil consumption in China is driven by the food processing industries as well as household consumption. The major palm oil products imported by China were refined, bleached and deodorised (RBD) palm olein, palm stearin and palm kernel oil. Chinese Customs statistics show that China imported 3.97 million tonnes of palm olein, 1.36 million tonnes of palm stearin and 0.5 million tonnes of palm kernel oil in 2014. Malaysia and Indonesia are the two major exporters of palm oil to China. Malaysia's share of the palm oil market has been around 50%-70% compared with Indonesia's 30%-50% (Figure 1).

In 2014, Malaysia exported 2.13 million tonnes of RBD palm olein and 0.48 million tonnes of RBD palm stearin to China. These products accounted for 92% of the total exports of palm oil products to China. The exports of palm oil products to China generated over RM 9 billion in revenue for Malaysia in 2014.

The oleochemical industry in China has grown rapidly in the last few years. The growth has been attributed to the increasing demand for oleochemical derivatives by the various industries in China. In 2014, Malaysia exported 434 333 t of oleochemicals to China. Exports of oleochemicals have increased by 68% from 2008 to 2014 (Figure 2).

The demand for palm oil in China remains strong because it is more competitively priced than soyabean and rapeseed oils. The strong demand is also due to the blending of palm oil with other

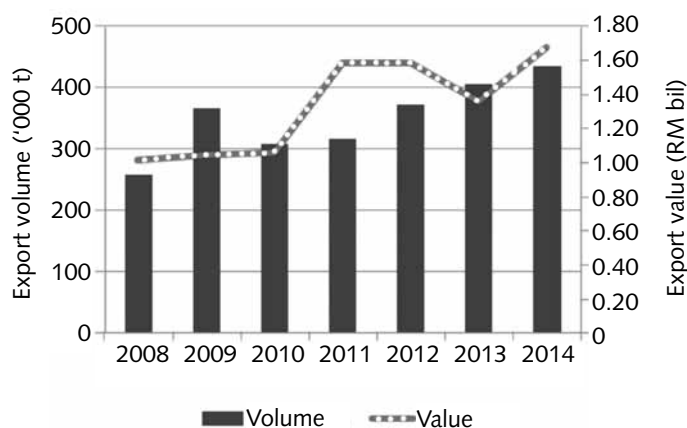
vegetable oils for sale as cooking oil. The demand for processed foods such as instant noodles, snacks and biscuits also contributes to the demand for palm oil.

### ECONOMIC AND POPULATION GROWTH IN CHINA

Food security and grains production are major concerns of the Chinese authorities. Given that the potential planting area for agriculture can hardly be increased, the potential for increase in agricultural production is limited. At the same time,

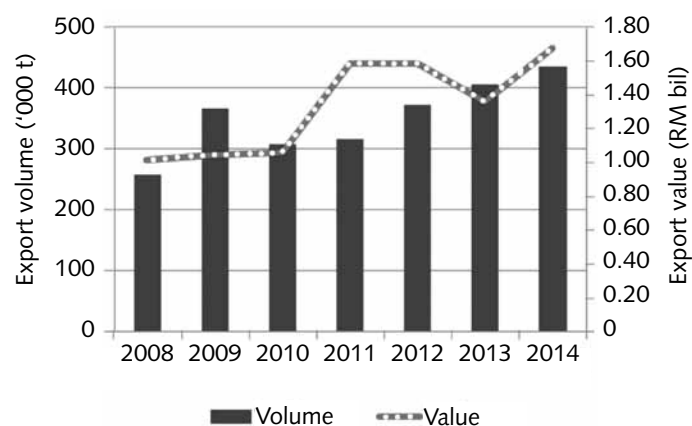
oilseeds have also to compete for planting area with grain production. Under these circumstances, the domestic production of oils and fats will not be able to meet the increasing oils and fats demand. China, therefore, will continue to depend on imported vegetable oils from other countries.

The current average annual population growth in China is 0.5%, which accounts for an annual increase of about 8.5 million people. The most recent population survey conducted in 2013 shows that China's population in-



Source: China Customs (<http://www.customs.gov.cn/publish/portal0/>).

Figure 1. China palm oil market share.



Source: MPOB (2008-2014).

Figure 2. Export of Malaysian oleochemical products to China.

creased from 1.27 billion in 2000 to 1.36 billion in 2013. Until the early 1980s, the urban population made up about 30% of the population. By 2013, the urban population had increased to about 53.7% (Figure 3). This shift in distribution of the population to the urban areas is the result of the high economic growth of the country since the opening up of China. High economic growth during the last 30 years has also steadily increased the disposable income of the population. This can be shown by the increase in per capita vegetable oil consumption from 19.7 kg in 2005 to 25.5 kg in 2013. Furthermore, per capita vegetable oil consumption of the rural population is about 2.2 kg less than that of the urban population (Figure 4). There is indication of higher potential consumption by the rural population as disposable income increases. In addition, there is a slight decrease in per capita purchase of vegetable oil by the urban population. This may be due to the increase in the practice of dining out, and the concern over health issues associated with the level of oil consumption by the urbanites. In 1990, the consumption of vegetable oils and fats by rural households was about 3.54 kg per capita while it is 6.40 kg per capita by urban households. Oil consumption increased to 6.9 kg per capita for rural households and 9.1 kg per capita for urban households by 2012 (Figure 4).

In 2000, rapeseed oil was the major oil consumed while the others, namely, soyabean oil, groundnut oil, lard and palm oil, were quite equal in amount of consumption. By 2014, the major oils consumed had shifted to soyabean oil and palm oil. Soyabean oil is now the largest amount of oil consumed

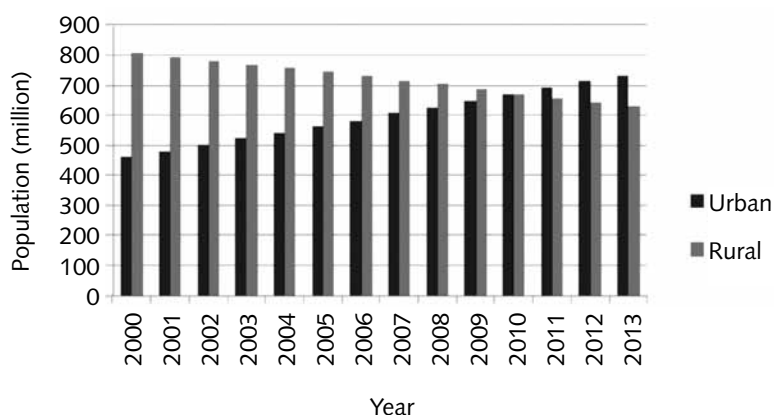
in China, followed by palm oil (Figure 5). This shift towards soyabean and palm oils is partly due to the limited production of local oilseeds, the huge demand for animal feed, the demand for processed foods and the high economic growth over the last decade. The demand for soyabean meal for animal feed has led to the huge imports of soyabean and the increase in production of soyabean oil from crushing.

The economy of China is expected to continue to grow. In 2014, China's GDP was valued at USD 10.4 trillion, with the country becoming the world's second

largest economy after the United States of America. Within the next 10 years, China could become the world's largest economy. In this connection, vegetable oil consumption in China will continue to grow in line with economic growth. The future demand for palm oil imports is also estimated to reach 10.5 million tonnes by 2020.

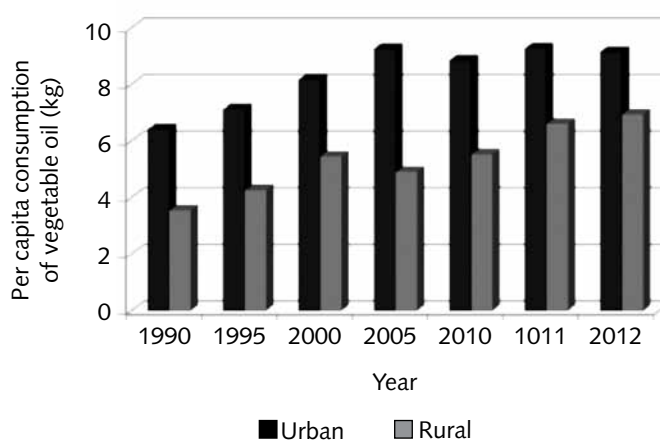
### ANTI-GRAFT CAMPAIGN IN CHINA

According to an estimate reported by the Bank of America Merrill Lynch, the anti-graft campaign in China could cost her economy more



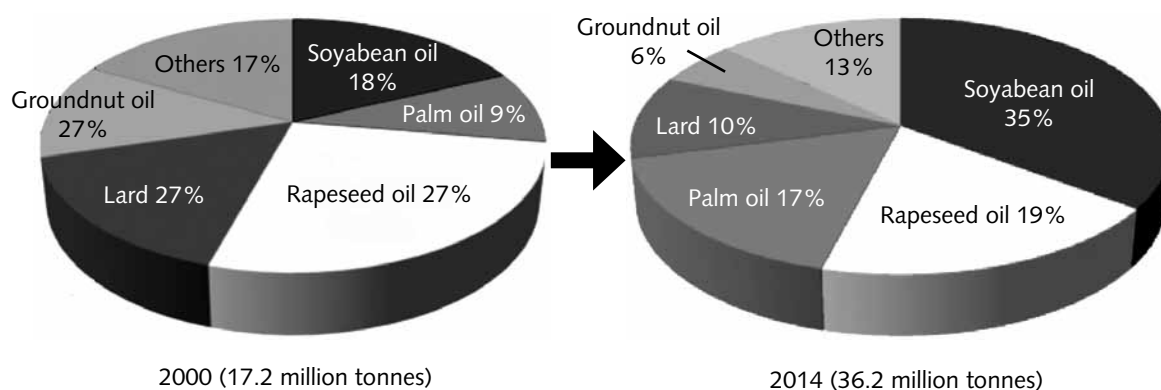
Source: China Statistical Yearbook (2014).

Figure 3. Urban rural distribution of population in China.



Source: China Statistical Yearbook (2014).

Figure 4. Comparison of rural and urban per capita consumption of vegetable oil in 1990 to 2013.



Source: *Oil World Annual (2001-2015)*.

Figure 5. China major oil consumption pattern.

than USD 100 billion in 2014. This accounts for about 1% of China's GDP (GDP of China in 2014 was USD 10.4 trillion). The anti-graft campaign has also affected the catering industry. In China, business discussions over lunch or dinner often trigger the business of high-end restaurants and exclusive clubs. Most of this expenditure is subsequently billed to the government. As the Chinese central government is insistent on tackling corruption, especially in local government and state-owned enterprises (SOE), the catering business has inevitably experienced a drastic dip in income. According to the China's Central Television, catering sales in China for the first four months of 2014 dropped by 37.6% as compared to 2013. Economic slowdown and the downshift of the catering industry in China have caused a lower consumption of palm oil in 2014, as most of the cooking oil used in the catering industry is palm olein.

### NUTRITION ISSUE IN CHINA

In general, the perception of palm oil among consumers in China is poor. This is due to the belief that palm oil is the culprit that causes

cardiovascular disease as it contains saturated fatty acids. In order to rectify this misconception, in 2014, MPOB conducted a clinical trial in collaboration with the Chinese Nutrition Society and the Southeast University on the effects of palm olein and olive oil on blood lipid profile. The study yielded positive results which show that palm olein behaves like olive oil, in the way it affects blood lipid profile. The study which involved 100 healthy Chinese subjects carried a positive impact on palm oil.

In addition to the clinical trial, MPOB has initiated and co-organised with MPOC and nutrition societies in China a series of nutrition seminars on palm oil to disseminate information on the nutritional attributes of palm oil in China every year since 2013. These seminars have played an important role in debunking the misconceptions on palm oil in China.

### DEVELOPMENT IN THE WESTERN REGIONS OF CHINA

China's economic reformation to a market-oriented economy began in 1978. The coastal regions

of eastern China benefited greatly from the reforms, and their economies developed rapidly. The western regions of China, however, lagged behind in economic growth. In order to develop the western region, China established the China Western Development Programme which covers six provinces (Gansu, Guizhou, Qinghai, Shaanxi, Sichuan and Yunnan), five autonomous regions (Guangxi, Inner Mongolia, Ningxia, Tibet and Xinjiang) and one municipality (Chongqing). The national policy was officially launched by the former Premier Zhu Rongji in January 2000. The policy is aimed at developing infrastructure, promoting foreign investment and promoting education in the western regions. According to the National Statistics Bureau of China, the western region's gross domestic production (GDP) grew by an average of 12% annually from 2000 to 2012. GDP of the western region of China in 2012 was recorded at RMB 11.4 trillion, an increase of 12.5% in comparison with GDP in 2011.

The urbanisation in the Western Regions of China is projected to create an increased demand for food and a potential market for

palm oil in this region. The development in the Western Regions of China will be a potential market opportunity for Malaysian palm oil.

### **PROSPECTS FOR PALM OIL IN CHINA**

Despite the nutrition issue and the anti-graft campaign in China, palm oil still remains one of the best ingredients for various food applications in the China market due to the fact that palm oil is natural, non-GMO and free from *trans*-fatty acids. China will continue to import palm oil, and this dependency on imports will continue to increase in the near future to meet the needs of the population. Palm oil which can be fractionated into both liquid and solid fractions to increase its versatility in food application is therefore well placed in the food industry. With its advantages, palm oil plays a greater role in providing sufficient food with a variety of applications in fulfilling China's oils and fats market demand.

### **CONCLUSION**

The Chinese economy will continue to grow although at a more moderate rate than previously. The increasing number of food processing and chemical industries will require more palm oil products. The huge population with increasing disposable income and higher quality of life will lead to a demand for more finished products and processed foods. The increase in innovative products and technology in the oils and fats industry, increased fractionation capacity and increased blending of palm oil with other vegetable oils in China will stimulate palm oil consumption. Palm oil with its competitive pricing compared with other vegetable oils, its versatility, various applications in the processed food industry as well as in the non-food industries, and its easy availability in large quantities are all very attractive to China. The demand for palm oil in China will continue to grow in the future.

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