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## **China - Peoples Republic of**

### **Potatoes and Potato Products Annual**

#### **China To Boost Potato Production and Transform Potato Into Its Fourth Major Grain**

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**Report Highlights:**

In January 2015, the government announced efforts to boost potato production and transform the crop into the country's fourth major "grain" after rice, wheat and corn. Post forecasts China's MY2015/16 (July-June) fresh potato production at 93 million metric tons, a 3 percent decrease from MY2014/15. This decrease is largely attributed to a declining crop area due to low potato prices in MY2014/15. Post forecasts MY2015/16 potato starch production at 550,000 MT, up 22 percent from 450,000 MT in MY2014/15. Post forecasts China's MY2015/16 frozen French fries imports at 130,000 MT, largely unchanged from MY2014/15.

## **Policy**

In January 2015 MOA announced that China was boosting its potato production and consumption to transform the crop into the country's fourth major "grain: after rice, wheat and corn. MOA is planning to expand potato acreage to 150 million mu (10 million hectares) by 2020 from the current 80 million mu (5.3 million hectares) without using land currently utilized for rice, wheat and corn production. However, many obstacles remain to achieve these ambitious goals. For example the potato is not yet consumed widely as a food. The government has provided some financial resources for research and development to identify new food uses for the potato to make it more widely utilized in the local diet.

As of date, no major financial commitment from the government has been identified to make this policy a reality.

Also, industry has expressed concern that the lack of the processing potato varieties has been one of the major bottlenecks for China's potato processing sector. Shepody and Atlantic have been major processing potato varieties for many years, while no new varieties are introduced. However, the government is revising the Seed Law that may result in seed potatoes being excluded from seed registration. This would accelerate potato variety development since it normally takes 3-5 years to complete seed registration in China.

## **Production:**

China is the largest potato producer in the world despite its relatively low potato yields. According to Ministry of Agriculture, China's average potato yield in MY2014/15 was 17MT/ha, about 1/3 of the U.S. yield. Reasons for the low yields are the use of low-quality seed potatoes and incidence of disease. Industry sources note that virus free seed potatoes only account for 20 percent of total seed potato used in China.

### *Fresh potatoes*

Post forecasts China's fresh potato production for MY2015/16 will reach 98 million metric tons (MMT), a 3 percent increase from the 95 MMT in MY2014/15 due to an expansion of the potato crop area. China's potato crop area is estimated at 5.8 million hectares in MY2015/16, about 3 percent increase from the previous year. MOA announced on January 2015 that China was boosting potato production and consumption to transform the crop into the country's fourth major grain after rice, wheat and corn (see more details in Policy section). Industry sources indicated that potato acreage did not expand as much as expected due to the relatively low potato prices in MY2014/15.

Potato production is generally found in four growing zones in China:

1) The northern single crop zone - This area accounts for 50 percent of China's total potato acreage. The potatoes produced in this area are mainly used for seed potatoes, direct consumption and processing. Potatoes in this zone are usually planted in late April to early May and harvested from September through to October. This zone includes Heilongjiang, Jilin, Liaoning, Inner Mongolia, Gansu, Xinjiang, Qinghai, Ningxia, Shanxi and Shaanxi provinces.

2) The southwestern mixed crop zone - This area accounts for 35 percent of China's total potato acreage. The potatoes produced in this area are mainly used for processing and direct consumption. Potatoes in this zone are usually planted in September through November and harvested from February through April. This zone includes Sichuan, Guizhou, Yunnan, Tibet, Chongqing, and part of Hunan and Hubei provinces.

3) The central double crop zone - This area accounts for 10 percent of total acreage. Spring potatoes are planted in February through March and harvested during May or June. Autumn potatoes are planted in July-August and harvested in October-November. The potatoes produced in this area are mainly for export and direct consumption. This zone includes Jiangxi, Jiangsu, Zhejiang, Anhui, Shandong and Henan provinces.

4) The winter crop zone - This area accounts for 5 percent of total acreage. Potatoes are in this zone are planted in October–November and harvested in February-March. The potatoes produced in this area are mainly for export and direct consumption. This zone includes Guangdong, Fujian, Guangxi, and Hainan provinces.

#### *Processed potatoes*

Processing potatoes account for 10-15 percent of total production, and include such products as starch, frozen French fries, chips, and dehydrated potatoes. The production rate for processing potatoes has remained the same for the last several years because of the lack of processing potato varieties and a shortage of modern potato storage facilities.

#### *Potato starch*

China's MY2015/16 potato starch production is forecast at 550,000 MT, a 22 percent increase from 450,000 MT in MY2014/15, based on the aforementioned government efforts to increase potato starch consumption. Industry sources indicate approximately 7-8 tons of fresh potatoes can produce 1 ton of starch.

China's potato starch production capacity exceeds one million metric tons but inadequate storage facilities, and outdated technology, keep production between 350,000-500,000 metric tons. China's starch manufactures are also highly fragmented with production split between thousands of producers and only a few firms have production that exceeds over 8,000 MT.

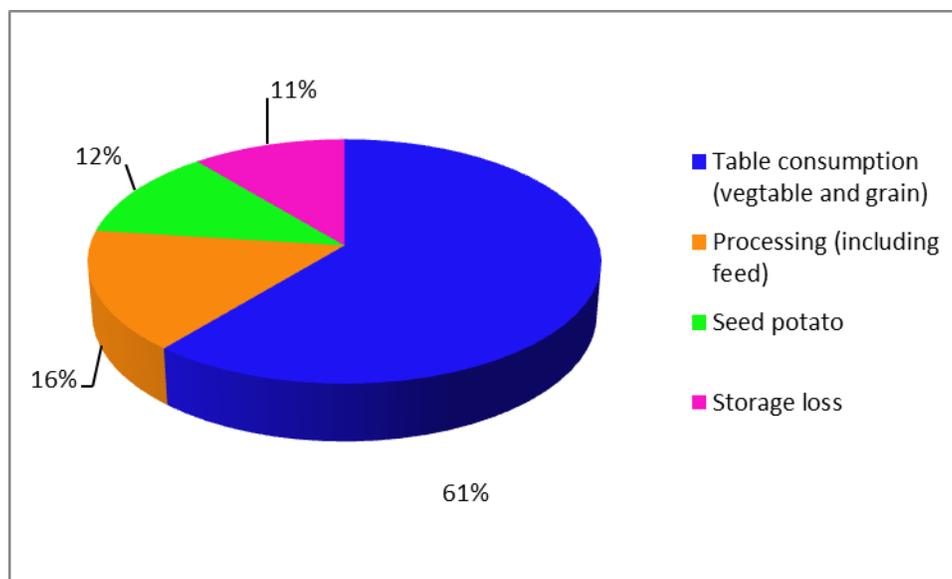
### Frozen French Fries (FFF)

China's MY2015/16 FFF production is forecast at 210,000 MT, a 17 percent increase from the estimated 180,000 MT in MY2014/15 because new production capacity is expected to run in the new marketing season. FFF production has strict fresh potato requirements, such as shape, starch content, sugar content, and color. Therefore, some processors usually contract with farmers to produce potatoes that can meet certain quality conditions.

### Consumption:

The majority of fresh potatoes are used for direct consumption. No reliable data for potato currently exists. Post believes the structure of China's potato consumption remains stable.

**Figure 1. China's Potato Consumption Structure in 2009-2011**



Source: Vegetable and Flower Research Institute, China Academy of Agricultural Science

China's FFF consumption will continue to increase in the coming years. Continued urbanization and resulting increasing number of fast food restaurants, the major market channel for FFF, will underpin consumption growth.

Potato starch is widely used in food products and is also consumed by other industrial sectors such as textile, paper mill, chemical, and pharmaceutical industries. Potato starch consumption fluctuates with price as other starch inputs, such as corn and bean, are easily substituted for potato starch.

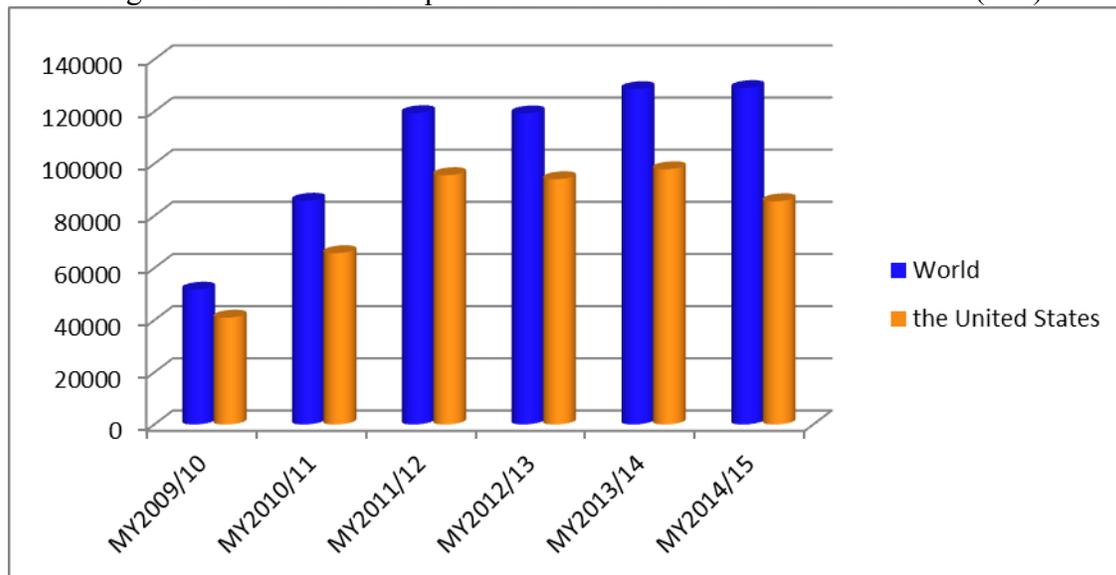
### Trade:

## Imports

### Frozen French Fries (FFF)

Post forecasts China's MY2015/16 FFF imports at 130,000 MT, similar to the 129,034 MT in MY2014/15. Industry believes FFF consumption in China would continue to remain the same with the continued urbanization; however, the increasing market demand would be mostly filled by increasing domestic production while imports would maintain current levels. FFF are traded under (HS Code: 20041000).

Figure 2. China's FFF imports from the world and the United States (MT)



Source: Global Trade Atlas

Although China's MY2014/15 FFF imports from the United States declined to 85,596 MT from the 97,877 MT in MY2013/14, the United States continues to dominate China's imported FFF market, accounting for 66 percent of total imports in MY2014/15. Other suppliers include Canada, accounting for 19 percent of total imports.

### Fresh Potatoes

China does not allow market access for fresh potato imports due to SPS concerns.

### Potato Starch

Post forecasts China's MY2015/16 potato starch (H.S. code: 11081300) imports at 36,000 MT, a 5 percent decrease from 37,947 MT in MY2014/15 due to the domestic production increase.

## Exports

Post forecasts China's MY2015/16 fresh potato (HS code: 0701) exports at 510,000 metric tons MT, similar to the 497,855 MT in MY2014/15. Malaysia, Vietnam, Russia, and Pakistan are the four largest export markets for China, accounting for 64 percent of China's total fresh potato exports in MY2013/14.

China's MY2015/16 FFF exports are forecast at 16,500 MT, a 9 percent decrease from the 18,196 MT exported in MY 2014/15. China's MY2014/15 FFF exports increased 20 percent from MY2013/14 largely as a result of a significant increase to Hong Kong. According to Chinese Customs, China's MY2014/15 FFF exports to Hong Kong amounted to 5,266 MT, 175 percent increase from previous year. Industry sources indicated that the FFF exports to Hong Kong were sourced from the United States and re-exported to Hong Kong. According to Hong Kong Customs, Hong Kong 2014/15 FFF imports from the United States declined to 15,109 MT from the 26,135 MT in MY2013/14; as comparison, imports from China increased to 5,782 MT from the 843 MT. Japan continues to be the largest buyer of China's FFF.

### **Marketing:**

Quick Service Restaurant (QSR) chains have been the largest buyers of frozen potato products in China, along with hotels, restaurants, and bars. Industry sources believe that third-tier cities represent great potential for FFF consumption because after 20 years of rapid expansion, western fast food outlets have saturated first/second-tier cities while consumers in the third-tier have less exposure to fast food outlets but are adopting similar food consumption habits as their peers in more developed cities such as Beijing and Shanghai. Currently, there is limited home consumption of frozen potato products.