

## Chapter 2

# Analysis and Outlook of China's Sugar Industry Development

Xue Xu and Hailong Xia

**Abstract** In this paper, sugar's production, consumption and trade status in China are reviewed systematically, and the background and reasons for the substantial increase in sugar import are analyzed. We found that the main reasons for China sugar industry's weakness and low international competitiveness include inefficient production technology, low level of domestic support and protection, and high production cost. And now it is difficult to resist the dumping of foreign sugar with lower price, and China sugar industrial's safety issue therefore has been highlighted. Based on the analysis and forecast of the gap between domestic sugar production and demand in 2020, we put forward policy options for further developing china's sugar industry.

**Keywords** China's Sugar Industry • Industry Safety • Policy options

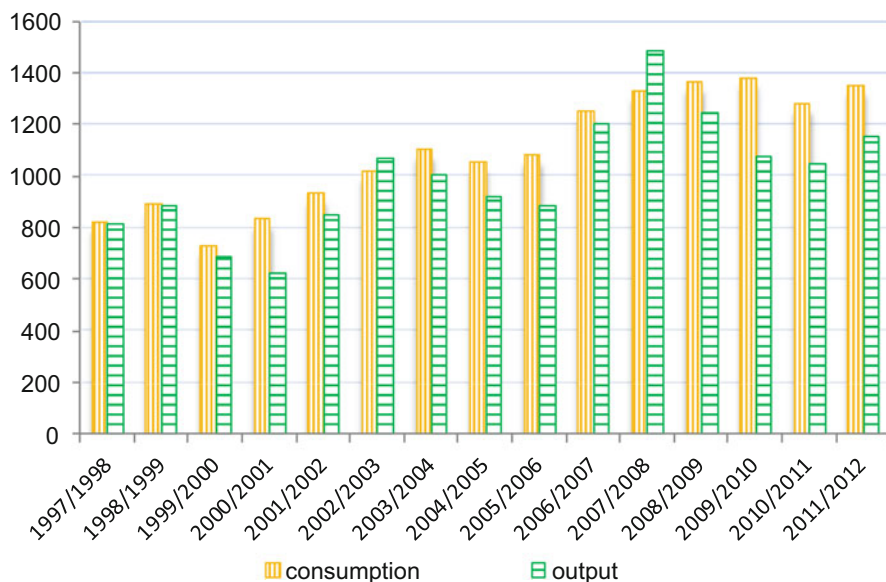
Sugar is one of the four important agricultural products in China. As a strategic industry, it is of vital importance to the nation's economy and the people's livelihood. After more 60 years rapid development since the founding of new China, now the total domestic sugar yield has reached approximately 12–15 million tons, over 50 times of 260 thousand tons in 1949, and the yield per unit area of sugar material has tripled over the period. We make it real that 80 % national sugar consumption is based on domestic production. At present, China is the fourth largest sugar producing country in the world after Brazil, India and European Union, and the third largest sugar consuming country after India and European Union. Along with the rapid growth of production and consumption in the decades, China's sugar industry is encountering a development bottleneck in terms of its backward productivity and low international competitiveness.

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**Fig. 2.1** China's sugar output and consumption (Unit: 10,000 ton). (Data source: China Sugar Association)

## 2.1 The Production Is Stagnating, While the Gap Between Supply and Demand Is Widening

### 2.1.1 *Future Consumption Will Grow Persistently and Rapidly*

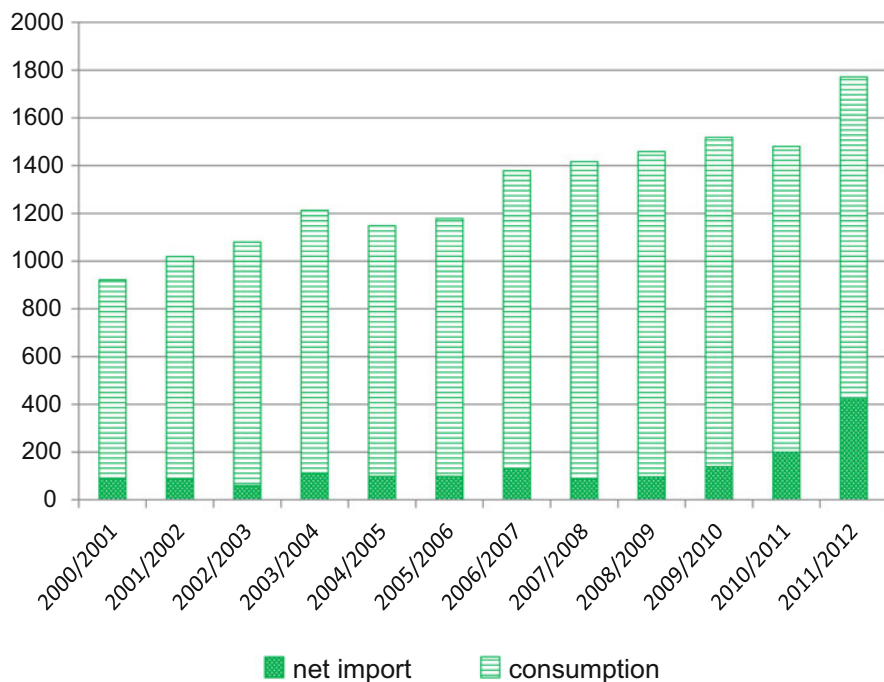
China is the third largest sugar consuming country, but the sugar consumption per capita is very low. The average level of world per capita consumption is 24 kg per annum, while that of China is only 11 kg. In East Asia countries, taking Japan and Korea as examples, the annual sugar consumption per capita is 29 kg and 36 kg respectively. In developed countries, Australian annual sugar consumption per capita is 47 kg and that of America is up to 68 kg. In the future, with the raising of China's population and upgrade of people's consumption, especially the acceleration of urbanization, sugar consumption will increase sustainably and rapidly. According to the forecast by International Sugar Organization (ISO), based on annual average growth rate of 2.02 %, the global sugar consumption of 2020 will reach 201 million tons, while in China the number will be 22.1 million tons. China will then become the second largest sugar consumption country instead of European Union (19.7 million tons) after India (32.7 million tons) (Fig. 2.1).

### ***2.1.2 Sugar Industry Development Is Impeded by Low Productivity of Sugar Materials***

China's sugar material production is mostly located in economically underdeveloped regions. Its productivity is the lowest among four chief crops (grain, cotton, oil and sugar) in China. Sugar cane is mostly planted in the dry slope land with rare irrigation condition; the sugar cane varieties are single and aging; pests; droughts; floods happens frequently; the level of mechanization and social service are seriously lagging behind. As one of the chief crops, sugar material production is given the least governmental support and protection in China. In recent years, sugar material production costs rose sharply as the rapid increase in the price of labor and production materials. The cost rise of sugar materials exceeds its purchasing price increase. Sugar farmers' income per Mu is only RMB 500–800 Yuan. Sugar material production inputs and farmers' production enthusiasm are serious insufficient. The yield per unit area of sugar materials and ingredients are stagnating or even decreasing, sugar material producing area and yield have been mired in sluggish growth. Meanwhile, sugar cane production labor shortage is an increasingly serious problem of which is a long-term development bottleneck of China's sugar industry. At present, the average age of sugar cane production labor is 45-years old; the labor shortage problem will be further worsen and thus damage the basis of industrial development.

### ***2.1.3 Sugar Demand Gap Will Continue to Expand***

China's sugar production change cycle is 5–6 years. China's sugar output has continuously declined since the highest historical recording of 14.83 million tons in 2007/2008 production year. In recent 3 years, the gap between supply and demand is 2–3 million tons. In 2011/2012 production year, the sugar output rose slightly to 11.52 million tons with demand gap of two million tons. It is predicted that the sugar output will reach 13.3 million tons, making demand and supply in balance. According to China's sugar industry "twelfth 5-year" development plan, annual sugar output plans to approach 16 million tons in 2015. However, the hope is rather dim under such current situation. In the long run, China's sugar production output growth will be constrained by land area and multiple adverse climate impact, and the demand gap will be widening. In 2020, the gap may reach five million tons, sugar imports will continue to increase, accounting for about 10 % of the total global trade, and trade dependence will be up to 1/3.



**Fig. 2.2** China's sugar net import and sugar consumption (Unit: 10,000 ton). (Data source: China Sugar Association, General administration of customs of People's Republic of china)

## 2.2 Sugar Import Is Surging

China's sugar imports remained at 1–2 million tons since the twenty-first century. Annual average import is 1.15 million tons during 2000–2010, import dependence (import accounted for the percentage of domestic consumption) remained below 10 %. However, in recent 2 years, because of the international sugar CIF is substantially lower than the wholesale price in China's sugar main producing areas; sugar import stays a new stage of expansion. According to Customs statistics, in 2010/2011, China's sugar imports increase to 2.06 million tons, accounting for 4.1 % of the global sugar trade (50.4 million tons, released in Dec 2012, U.S. department of agriculture), import dependence up to 15.6 %; in 2011/2012, China's sugar imports doubled over the previous year (4.26 million tons), accounting for 8.5 % of the global sugar trade (50.27 million tons), import dependency up to 31.2 %, and then China has become the world's largest sugar importer in this year. Imported sugar has occupied a large share of domestic sugar consumption leading to a high stock level of local sugar, posing threat on China's sugar industry, making huge loss to sugar farmers and sugar companies. The reasons for the rapid growth of China sugar imports recently mainly lie in two aspects (Fig. 2.2).

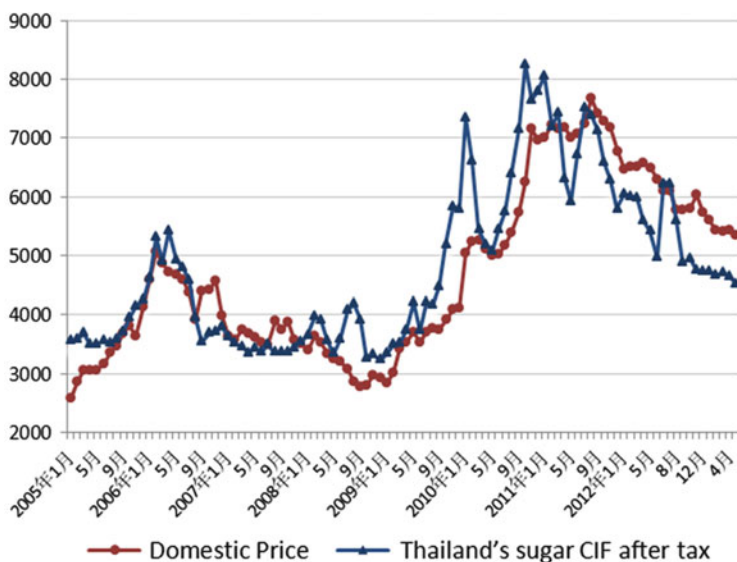
### ***2.2.1 Sugar's High Producing Cost and Lack of Price Competitiveness***

China's sugar material production condition and the level of mechanization are seriously lagging behind. Farm input material and labor costs remain high, and sugar material producing cost accounts for 70 % of the total cost of sugar making, which is twice as the world main sugar producing countries, such as Brazil, India, Thailand and Australia. Especially continuously increased labor costs are nearly 50 % of the total sugar making cost. At present, China's sugar making costs are about 5,800 Yuan per ton after tax, while in Brazil, the total sugar cost is only 18 cents per pound (about 2,500 Yuan per ton). China sugar's high making cost led to a lack of international price competitiveness and weak resistance to international low-price sugar dumping.

China's sugar production has declined dramatically over three consecutive years since 2008/2009. The supply and demand gap reaches three million tons, resulting in domestic sugar price climbing up to 8,000 Yuan per ton in 2011, which is twice as 2001. In 2011/2012, China's sugar got into an output rise cycle, the domestic sugar price gradually fell. The average price is 5,356 Yuan per ton in May 2013, which has fallen far below the average sugar making costs. Nevertheless, international sugar price is still substantially lower than China's sugar price. From April 2011, the dutiable price (quota tariff) of Thailand sugar arriving in our shores is significantly lower than domestic sugar price, even 1,300 Yuan lower per ton than the wholesale price of China's sugar cane. In May 2013, sugar average international price is 17.1 cents per pound, Thailand's sugar CIF after tax is 4,534 Yuan per ton, which is 882 Yuan per ton cheaper than China's sugar price. Therefore, local companies are importing large quantities of sugar in order to achieve great profits and sugar smuggling is being repeated. Domestic sugar market turns to oversupply from the original inadequate production, leading to a constantly falling of domestic sugar price. The central government has to continuously purchase excessive sugar brought by imported as national sugar reserve. Currently, national sugar reserve has reached the highest level in history, which is a tremendous pressure on domestic market (Fig. 2.3).

### ***2.2.2 Low Tariff Protection***

Sugar is one of the highly protected agricultural products in most countries. In developed countries, the average imported tariff rate is 122 %, while China's sugar tariff rate is 15 % within quota, 50 % out of quota (China's sugar import quota is 1.945 million tons after 2004). China's sugar protection level is the lowest in the world. After joining WTO, the linkage between China's sugar market and international market is significantly enhanced. From the twenty-first century, China's sugar imported quota utilization rate is below 70 %. After 2010/2011, international



**Fig. 2.3** Comparison of China's sugar price and Thailand's sugar CIF after tax (Unit: RMB Yuan/ton). (Data source: Sugar Network in Guangxi, [www.gsmn.com.cn](http://www.gsmn.com.cn))

sugar price fell sharply. China sugar's low tariff was difficult to resist the invasion of international low-price sugar. Therefore, a large number of ultra-quota sugars were imported, which brought an enormous strike on domestic sugar industry.

### 2.3 Outlook: China's Sugar Imports Will Continue to Expand

In recent 5 years, the increase of world sugar production is greater than the increase of consumption, leading to an increasing world sugar stock. At the end of 2012/2013, sugar stock will reach 38.3 million tons. The huge inventory is unable to push international sugar price rising up. In the next 5 years, the international sugar price is expected between 16 and 25 cents per pound. Imported sugar is more likely significantly outnumber the gap between domestic supply and demand in China. The foundation of China's sugar industry will be severely impacted and the industry safety is therefore threatened.

## 2.4 Policy Suggestions

1. Formulate a national sugar industry's development strategy, and definite the production distribution of sugar crops and its development goals.
2. Transform traditional sugar production pattern, and comprehensively promote the "4-modernization" simultaneous development in sugar crops plantation, i.e. seed variety improving, mechanization, irrigation and scale production, to improve per unit yield and sugar degree. The ultimate goal is to finish the transition of sugar industry from traditional to modern one, and maintain the Self-sufficiency rate above 70 %.
3. Encourage the transfer of sugarcane field, and develop appropriately scaled operations; provide socialized services during the process of seeding, plowing, transporting, selling, to reduce costs and enhance efficiency.
4. Provide subsidies to sugar cane and beet producing farmers to stabilize the interest of farmers, and increase the security of sugar industry.
5. Establish early warning mechanism of China's sugar supply and demand. Based on the forecast of the domestic and international sugar production, demand, stock and prices, we could optimize the government's macroscopic regulation and control of sugar, and ensure smooth running of domestic sugar market.

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