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China - Peoples Republic of

Sugar Annual

China Sugar Production to Rise, But Uncertainty Remains

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Report Highlights:
China's sugar production in marketing year (MY) 2017/18 is forecast to expand as high prices and favorable returns are encouraging farmers to plant more sugar cane and sugar beets. As a result, sugar imports are expected to fall for the second year in a row. However, a great deal of uncertainty remains over Chinese government policy, and its impact on the market. China's Ministry of Commerce has indicated it will announce the result of its safeguard investigation into sugar imports on May 22, 2017, and this could have a major impact on the supply and demand situation.

Executive Summary:

China's MY 2017/18 total sugar production is forecast to rise 1 million metric tons (MMT) from MY 2016/17, as high sugar prices are encouraging farmers to plant more sugar cane and sugar beets. These high prices have also allowed sugar mills to return to profitability, and this has slowed industry consolidation. Increased domestic sugar production and an expected easing of prices next year are forecast to result in steady growth in sugar consumption, as well as a decrease in imports.

There is, however, a great deal of uncertainty in the market because of a safeguard investigation into sugar imports being conducted by China's Ministry of Commerce (MOFCOM). This investigation was announced in late September, 2016. The results of this investigation were originally to be announced on March 22nd, but it was delayed by two months and the new announcement date is set at May 22, 2017. As China is a huge sugar importer, the results of this investigation, and any possible resulting changes in import policy, could have a major impact not just on imports but also on prices, production, and stock policies.

Sugar Cane

China's cane sugar production is expected to increase for the second year in a row in MY 2017/18, with production forecast at 9.2 MMT, up 800,000 MT from the revised MY 2016/17 estimate. This increase is due to a significant expansion in acreage, as higher prices have increased farmer returns and encouraged them to plant more cane.

Purchase Price of Sugar Cane in Major Producing Provinces				
RMB per MT (USD $1.00 = RMB 6.9)				
	Guangxi	Yunnan	Guangdong	Hainan
MY 2010/11	492	375	540-550	525
MY 2011/12	500	420	510	550
MY 2012/13	475	420	500	500
MY 2013/14	440	400	385-420	450
MY 2014/15	390-410	390-410	380-405	400
MY 2015/16	430-440	430	440-450	440-450
MY 2016/17	480-500	460	480	520

Source: ATO Guangzhou interviews with industry contacts

Sugar cane minimum purchase prices (floor prices) are set by local sugar industry associations and sugar cane processors, in consultation with local governments. In Guangxi province, the purchase price has climbed to 500 RMB ($72) per metric ton of sugar cane, up from 440 RMB in 2015/16 and a low of 400 RMB in 2014/15. After many years of declining returns, sugar cane production has become more profitable, and farmers are consequently planting more (the planting season is typically February and March). Sugar mill contacts have also confirmed that farmers are keeping more of their cane for seed,

highlighting this expected increase in area. These increases are anticipated to be greatest in Guangxi province, which accounts for over 60 percent of the nation's total sugar cane production.

China's Major Sugar Cane Production Areas

Source: China Ministry of Agriculture 2015, blank map from http://www.d-maps.com/carte.php?num_car=11570&lang=en

Legend:

= 63% or more of total Chinese production (Guangxi)

= 10 to 20% (Yunnan, Guangdong)

= 2% to 3% (Hainan)

Despite this increase in area, there are a number of obstacles to continued future acreage expansion. For instance:

1) Although a few years ago sugar cane area in China was much higher than it is currently, when this land was taken out of sugar production much of it was converted to products with a very long production cycle such as fruit trees and eucalyptus trees. As a result, even with higher prices it will not be possible to easily bring this land back into cane production.

2) Mechanization levels are still low in China for sugar cane, and the hilly terrain in much of the production area makes mechanization adoption for harvesting difficult.
3) Production costs continue to be very high. In fact, the price of labor for harvesting the crop can make up more than a third of the total cane purchase price. Among major sugar producing countries, China has the highest production costs, with these as much as double those in neighboring Thailand.

High production costs and inefficiencies have made Chinese sugar production uncompetitive with other countries, and is one of the reasons why the sugar industry approached the Chinese government to request a safeguard investigation into sugar imports.

CY 2016 is the first year of China's governmental five-year plan (2016-2020) to boost sugar production. The plan's target is to raise annual sugar production to 15 MMT by 2020, when consumption is forecast to reach 18 MMT. The plan also implies the government's intention to gradually reduce imports. Sugar production needs to increase more than ten percent annually from 2016 to 2020 in order to meet these challenging policy targets. The government has stated that it will provide subsidies and financial support to farmers to increase yields and reverse declines in sugarcane acreage. The Guangxi government has already started providing sugarcane farmers subsidies of RMB 400 per mu ($375 per acre) for seeds, farm machinery, mulching film, and fertilizer. The goal is to reach five million mu (333,300 hectares) of "double high" (high in sugar content and yield) sugar cane. "Double high" production is classified as a yield of at least 8 MT per mu (119 MT per hectare) and sugar content at 14 percent or higher. Currently in Guangxi province, sugar cane production is under 5 MT per mu (75 MT per hectare) and sugar content is 12 percent.

China's MY 2016/17 cane sugar production estimate is revised down to 8.4 MMT as a result of end-of-year harvesting data as well as information from ATO/Guangzhou meetings with producers and industry groups.

Sugar Beet

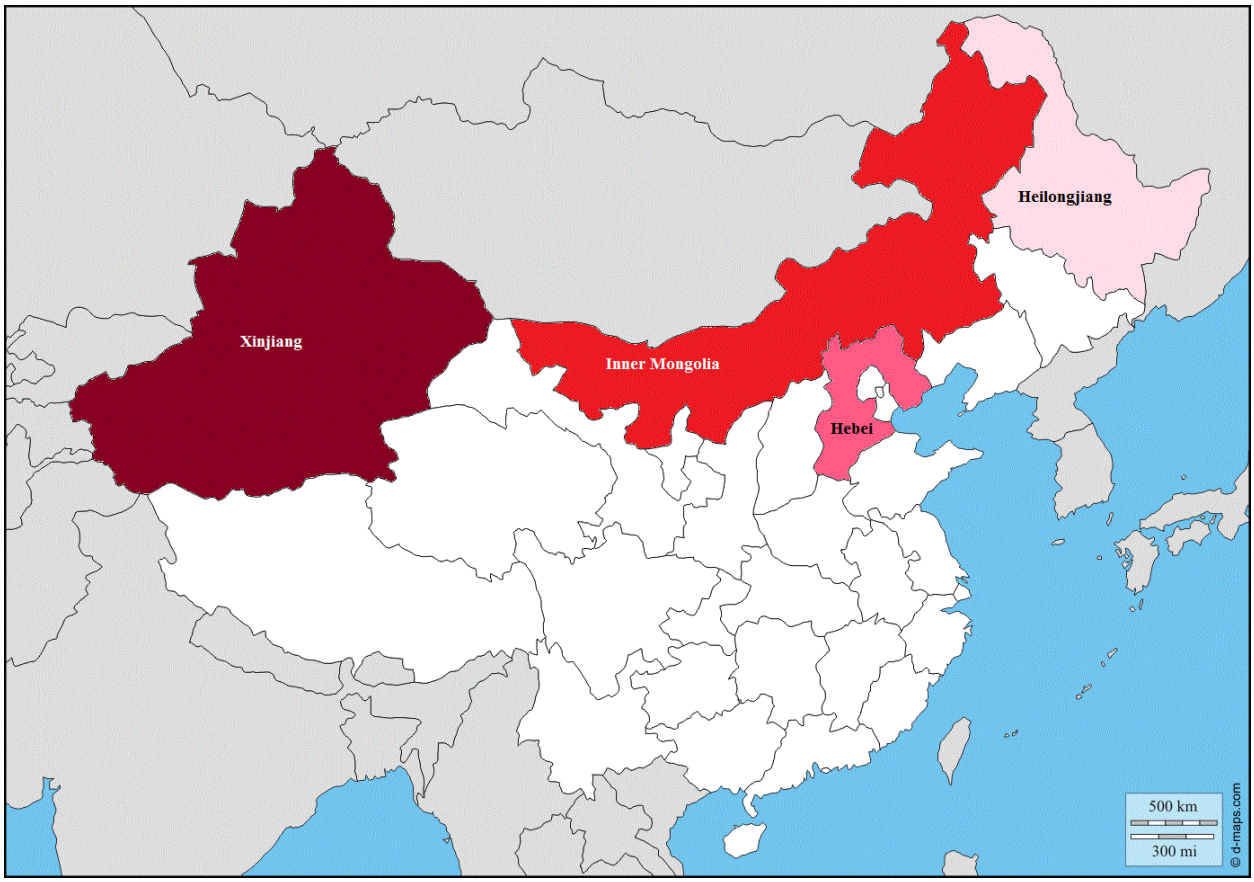
China's MY 2017/18 beet sugar production is forecast at 1.3 MMT, up 200,000 MT from the revised MY 2016/17 estimate as a result of higher planted area. Since the government ended the corn temporary reserve program in early 2016 and corn prices subsequently fell, farmers in provinces such as Inner Mongolia increasingly switched from growing corn to planting sugar beets. With prices for sugar beets currently attractive, this trend is expected to continue. In addition to acreage increases, improved mechanization, adoption of new varieties, and modernized sugar production is also expected to boost production.

Purchase Price of Sugar Beets in Major Producing Provinces

RMB per MT (USD $1.00 = RMB 6.9)			
	Xinjiang	Heilongjiang	Inner Mongolia
MY 10/11	353	400	390
MY 11/12	450	532	480-500
MY12/13	450	560	500
MY13/14	440	NA*	520-550
MY14/15	440	550	530-550
MY15/16	448	555	540
MY16/17	443	560	530-540

Source: ATO Guangzhou interviews with industry contacts

China's Major Sugar Beet Production Areas



Source: China Ministry of Agriculture 2015, blank map from http://www.d-maps.com/carte.php?num_car=11570&lang=en

Legend:

= 56% or more of total Chinese production (Xinjiang)

= 20% or more of total Chinese production (Inner Mongolia)

= 10 to 20% (Hebei)

= 1% to 2%(Heilongjiang)

China's MY 2016/17 beet sugar production estimate is increased sharply to 1.1 MMT as government production data shows higher planted area and larger harvests. According to Chinese Government statistics, in 2016 China's beet acreage, mainly in Xinjiang and Inner Mongolia, reached 2.4 million mu (160,000 hectares), up 18 percent. Xinjiang's beet acreage was 970,000 mu (64,000 hectares), up five percent; and Inner Mongolia was 950,000 mu (63,000 hectares), up 40 percent. Part of this increased area in Inner Mongolia was previously used for corn production.

Unlike sugar cane growing areas, the sugar beet producing areas are suitable for large scale farming with a high level of mechanization and industry sources expect yields to continue to increase rapidly in the next few years. Farmers are starting to plant new beet varieties with much higher sugar content than older varieties.

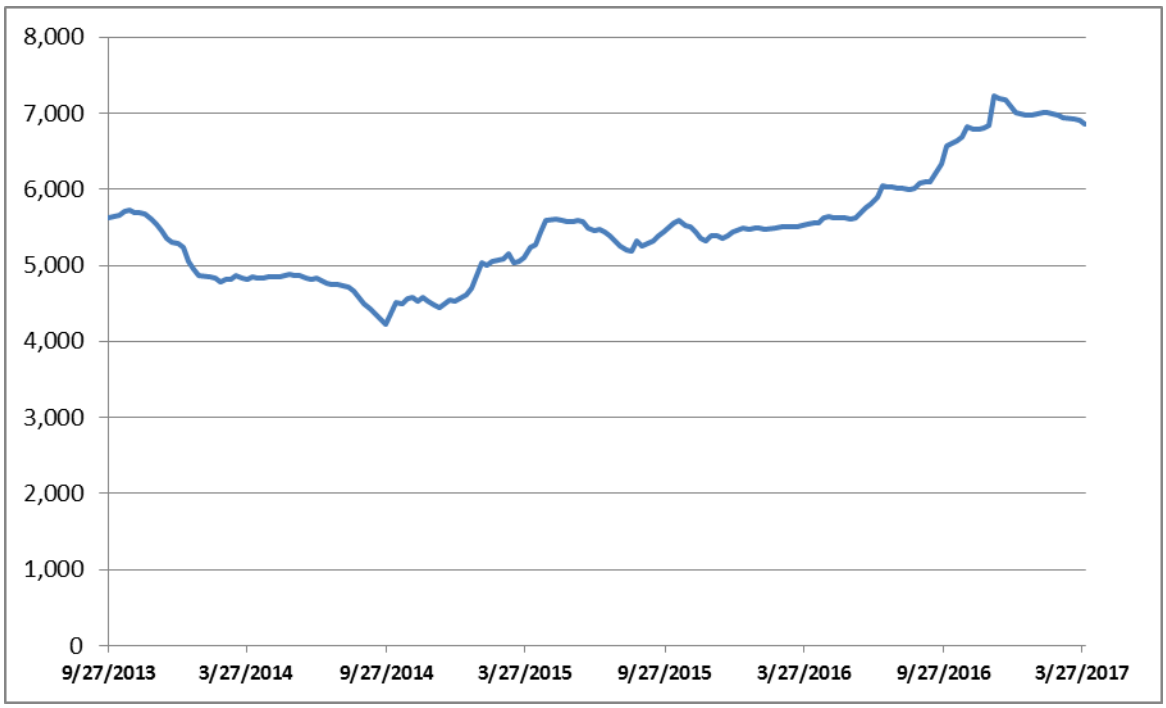
Thanks to improved efficiency in beet farming and milling, the profitability for both beet farmers and millers are higher than those for cane. Therefore, beet acreage and beet sugar production are poised to continue to grow. Chinese media has reported that two large beet sugar mills are now under construction in Inner Mongolia and each has the capacity to process 1 MMT of beet annually. Both are scheduled to start operation in MY 2017/18. According to industry insiders, there are another two mills under construction.

The Chinese livestock industry has strong demand for sugar beet pulp for use in the dairy and swine sector, and this increased sugar beet production will provide more sugar beet pulp. Additionally, U.S. sugar beet pulp has begun to be imported into China. In September 2016, U.S. sugar beet pulp was given access to the China market, and the first exports were shipped in February of 2017. For more information on this trade please see the following report:
https://www.fas.usda.gov/data/china-us-sugar-beet-pulp-has-great-potential-huge-south-china-feed-market

Centrifugal Sugar Production

MY 2017/18 total sugar production is forecast at 10.5 MMT, up 1 MMT from the 2016/17 estimate. Thanks to sugar prices as high as 7,200 RMB ($1043) per MT in late 2016, most cane mills are now highly profitable, with profit margins ranging from 300-800 RMB ($44-116) per MT. This is in stark contrast to previous years when mills were operating at significant losses. While the previous lower prices caused a process of consolidation to begin within the milling industry, the current high prices have significantly slowed this development. Industry contacts believe that consolidation is vital for China to improve its cane sugar production efficiency, but with the current high profits it is unlikely that small and inefficient mills will need to exit the market. In addition, if significant safeguard measures are implemented by the Chinese government, industry contacts think this could also support inefficient mills staying in operation.

Chart: Wholesale price (RMB) of Grade 1 Granulated Sugar in Guangxi Province



Source: ATO Guangzhou, based on price information by Guangxi Sugar Net

MY 2016/17 total sugar production is estimated at 9.5 MMT. About 85 percent of sugar production in China comes from sugar cane. Despite higher purchasing prices for sugar cane, production and yield is still limited by rising labor/land costs, low mechanization level, and competition from other crops. However, sugar beet yield is rising due to improvements in varieties and mechanization.

Consumption

MY 2017/18 sugar consumption is forecast at 15.8 MMT up 200,000 MT from MY 2016/17 as sugar prices are expected to ease next year as a result of higher production. The sugar industry expects steady consumption growth of two to three percent annually in the near future. China's annual per capita sugar consumption is 11 kilograms (KG), far below the world average of 24 KG according to the World Health Organization data. Although China has experienced a slowdown in economic growth in recent years, this has not had a significant impact on consumption. The food manufacturing industry, particularly those companies producing high sugar content processed foods such as bakery deserts and frozen pastries, are still experiencing strong growth. Also, continued urbanization and the shift from a "one-child" to a "two-child" policy in China will lead to growth in food/beverage manufacturing as well as increases in the demand for sugar.

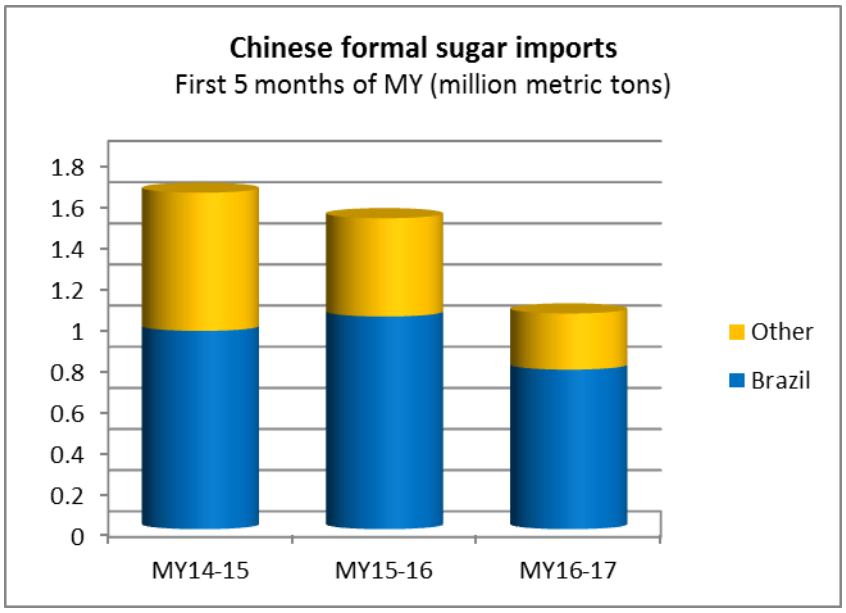
MY 2016/17 sugar consumption is estimated 15.6 MMT. This is down slightly from the previous year as high sugar prices and low corn prices have increased demand for sugar replacements. Nevertheless, the impact has been relatively limited since the food/beverage industry demand for starch-based sweeteners is largely saturated as they have already maxed out their use of sugar replacements.

Trade

MY 2017/18 sugar imports are estimated at 4.2 MMT, a decline of 1 MMT from the revised MY 2016/17 estimate. Higher domestic production and tighter expected government control over imports will likely result in a reduction in imports. On September 22, 2016, MOFCOM issued a notice announcing the initiation of a safeguard measure investigation against imported sugar, which includes raw sugar and refined sugar classified under HS codes: 17011200, 17011300, 17011400, 17019100, 17019910, 17019920 and 17019990. In March 2017, MOFCOM decided to delay announcing the result of the investigation and any safeguard measures until May 22, 2017. If safeguard measures are implemented, it would likely result in an even further decline in imports. Many industry analysts are expecting a tightening of import policies, and this has been one of the factors behind the rise in Chinese sugar prices at the end of 2016.

The MY 2016/17 sugar import estimate is revised down to 5.2 MMT. China has a 1.95 MMT annual tariff-rate quota (TRQ) with an in-quota tariff of 15 percent and an out-of-quota tariff of 50 percent. Although the TRQ is expected to be fully utilized in MY 2016/17, out-of-quota imports have fallen sharply as high international prices make these imports less feasible. In addition, the government's decision to auction off national reserve stocks has dampened import demand in China.

Chart: Chinese formal sugar imports



Source: Chinese Customs Data

Formal sugar imports in the first 5 months of the marketing year are down more than 30 percent, with imports at 1 MMT compared to 1.5 MMT during the same period the previous year. Brazil still remains by far the largest supplier, but formal imports from other sources such as Thailand and Australia have fallen. If any safeguard measures are implemented, this could also impact imports at the end of MY 2016/17.

Industry contacts estimate that illegal sugar trade has also fallen this year. The Chinese government has reportedly increased monitoring and combating of sugar smuggling. Also, while last year both Thailand and Indian sugar was reportedly smuggled into the country in large quantities, traders explain that this year Indian sugar is absent from the market.

Stocks

MY 2017/18 ending stocks are forecast at 7.5 MMT, down 1.1 MMT from the revised MY 2016/17 estimate. The result of the safeguard investigation could have a significant impact on the stock drawdown, and any subsequent reduction in imports could be offset by continued sales of national reserve stocks.

MY 2016/17 ending stocks are estimated at 8.6 MMT, down 1 MMT from the previous year as a result of the release of sugar from national reserves. In September and December 2016, China released national reserved sugar through auctions, with combined sales of 750,000 MT. This stock drawdown policy seems to be consistent with the Chinese government trying to reducing national reserves of other agricultural products such as cotton and corn.

(**NOTE:** FAS/China has revised its estimates for China's ending stocks and consumption between MY 2013/14 to 2016/17, resulting in a significant increase in stock estimates. Industry sources estimate that Chinese government national reserves currently hold between 6-7 MMT of sugar. Industry contacts report that these stocks have been accumulated in past years through three primary sources:

1) Raw sugar imports from Cuba of approximately 400,000 MT every year. These are part of a long-standing government to government agreement.
2) Government purchases of domestic sugar (white) when market prices were low.
3) Imports by state-owned companies earlier this decade of sugar directly into the national reserves.

In addition to national reserve stocks there are also privately held sugar stocks as well as sugar reserves held by some provincial governments.)

Other Sweeteners

Government policy restricts the development of the saccharine industry in China to protect the domestic sugar market and to address environmental, food safety and consumer health concerns. The government controls the sector by restricting production and domestic sales, conducting an annual review on production plans, and standardizing its usage as an additive in food. Only four plants are licensed for saccharine production in China. These plants are monitored and inspected by the China Sugar Association (CSA) to ensure compliance with production guidelines and limits. The saccharine production quota for CY 2016 is unchanged from CY 2015 at 19,000 MT, with 3,200 MT designated for domestic sale and 15,800 MT for export. Based on CSA inspections, actual CY 2016 production was

16,892 MT while actual domestic sales and exports totaled 3,053 MT and 13,533 tons, respectively. The ending stock was 1,010 MT.

In CY 2016, the production of starch-based sweetener products such as corn syrup, fructose, and glucose reached 3.8 MMT (77% of HFCS55 and 33% of HFCS42), which replaced approximately 3.3 MMT of sugar. Rising domestic sugar prices and falling corn prices are expected to make starch-based sweeteners more competitive this year. In late March 2016, the government announced that it was ending the corn temporary reserve program, causing corn prices to fall sharply. At the same time the government is subsidizing corn processers to help consume excess government stocks. Starch-based sweeteners are a major corn industrial product. Starch-based sweetener production costs have been declining for three years and are expected to keep dropping along with corn prices. As domestic demand from the food/beverage industries is saturated, Chinese starch-based sweeteners are beginning to be exported, mainly to Asian countries such as Philippines.

2017 Sugar Annual
Trade Tables
Production, Supply, and Demand (PSD) Tables

Table1. Centrifugal Sugar (1,000 MT)

Sugar, Centrifugal	2015/2016	2016/2017	2017/2018
Market Begin Year	Oct-15	Oct-16	Oct-17

China	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	7,287	10,390	4,572	9,591		8,611
Beet Sugar Production	630	850	630	1,100		1,300
Cane Sugar Production	8,200	8,200	8,900	8,400		9,200
Total Sugar Production	8,830	9,050	9,530	9,500		10,500
Raw Imports	5,600	5,600	5,600	4,800		3,800
Refined Imp.(Raw Val)	400	516	400	400		400
Total Imports	6,000	6,116	6,000	5,200		4,200
Total Supply	22,117	25,556	20,102	24,291		23,311
Raw Exports	5	4	5	5		5
Refined Exp.(Raw Val)	40	161	40	75		40
Total Exports	45	165	45	80		45
Human Dom. Consumption	17,500	15,800	17,500	15,600		15,800
Other Disappearance	-	-	-	-	-	-
Total Use	17,500	15,800	17,500	15,600		15,800
Ending Stocks	4,572	9,591	2,557	8,611		7,466
Total Distribution	22,117	25,556	20,102	24,291		23,311

Table 2. Sugar Cane

Sugar Cane for Centrifugal	2015/2016		2016/2017		2017/2018	
Market Begin Year	Oct-15		Oct-16		Oct-17	
China	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	1,344	1,370	1,440	1,400		1,520
Area Harvested	1,257	1,300	1,370	1,330		1,440
Production	73,000	76,000	83,700	77,300		83,700
Total Supply	73,000	76,000	83,700	77,300		83,700
Utilization for Sugar	73,000	76,000	83,700	77,300		83,700
Utilization for Alcohol	-	-	-	-	-	-

Total Utilization	73,000	76,000	83,700	77,300		77,300

1000 MT; 1,000 Ha

Table 3. Sugar Beet

Sugar Beets	**2015/2016**		**2016/2017**		**2017/2018**	
Market Begin Year	**Oct-15**		**Oct-16**		**Oct-16**	
China	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Area Planted	145	145	145	180		205
Area Harvested	140	140	140	175		200
Production	7,000	7,000	7,000	9,300		11,000
Total Supply	7,000	7,000	7,000	9,300		11,000
Utilization for Sugar	7,000	7,000	7,000	9,300		11,000
Utilization for Alcohol	-	-	-	-	-	-
Total Distribution	7,000	7,000	7,000	9,300		11,000

1000 MT; 1000 Ha

Table 4. China's Sugar Imports by Origin – MY2015/16 (MY-Market Year, Metric tons)

	Oct.-Dec./15	**Jan.-Mar./16**	**Apr.-Jun./16**	**Jul.-Sep./16**	**MY Total**
World	**1,116,413**	**605,365**	**729,918**	**1,277,061**	**2,451,696**
Brazil	744,126	381,966	371,788	1,024,993	1,497,880
Cuba	64,300	67,000	233,700	106,809	365,000
Thailand	105,005	55,485	53,919	27,410	214,409
Australia	134,967	54,098	560	45,933	189,625
Korea, South	60,771	26,084	53,565	58,732	140,420
Guatemala	0	7,889	6,666	5,787	14,555
Malaysia	4,398	2,550	5,489	2,725	12,437
Others	2,846	10,293	4,231	4,672	17,370

Source: China Customs data

Table 5. China's Sugar Imports by Origin – MY2016/17 (MY-Market Year, Metric tons)
Note: March 2017 data is not yet available;

	Oct.-Dec./16	**Jan.-Feb./17**			**MY Total**
World	**456,650**	**592,273**			**1,048,923**

Brazil	217,187	559,497			776,684
Cuba	29,000	0			29,000
Thailand	42,740	12,786			55,526
Australia	96,682	0			96,682
Korea, South	58,052	12,213			70,265
Guatemala	1,459	3,009			4,468
Malaysia	5,250	0			5,250
Others	6,280	4,768			11,048

Source: China Customs data

Table 6. China's Sugar Exports by Destination – MY2015/16 (MY-Market Year, Metric ton)

	Oct.-Dec./15	**Jan.-Mar./16**	**Apr.-Jun./16**	**Jul.-Sep./16**	**MY Total**
World	**26,427**	**44,846**	**55,007**	**27,993**	**154,273**
Philippines	15,495	28,703	33,438	309	77,945
Mongolia	1,120	5,388	9,724	7,779	24,011
Hong Kong	4,419	5,916	5,700	6,988	23,023
Others	5393	4839	6145	12,917	29,294

Source: China Customs data

Table 7. China's Sugar Exports by Destination – MY2016/17 (MY-Market Year, Metric ton)
Note: March 2017 data is not yet available;

	Oct.-Dec./16	**Jan.-Feb./17**			**MY Total**
World	**21,207**	**10,644**			**31,851**
Philippines	620	380			1,000
Mongolia	10,136	4,338			14,474
Hong Kong	5,736	3,692			9,428
Others	4,715	2,234			6,949

Source: China Customs data