

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Required Report - public distribution

Date: 4/14/2017 GAIN Report Number: RS1724

Russian Federation

Sugar Annual

Sugar Update 2017

Approved By: Robin Gray

Prepared By: Staff

Report Highlights:

FAS/Moscow estimates record high levels of sugar beet and refined sugar production in 2016/17 due to favorable weather conditions, high yields and improved processing and storage technologies. Post forecasts Russia's sugar beet production in 2017/18 at 48.6 million metric tons (MMT), more than a five percent decrease from the historically record high production in 2016/17. The area planted to sugar beets is forecast to increase slightly more than one percent from the 1.11 million hectares planted to sugar beets in 2016, to 1.12 million hectares in 2017. Sugar production in MY 2017/18 is forecasted at 5.75 MMT, compared with 6.1 MMT in MY 2016/17. Domestic sugar consumption in 2016/17 is estimated at 6.3 MMT. FAS/Moscow forecasts that imports of sugar, in raw equivalent, will continue to decrease to 550,000 MT in MY 2017/18 as a result of the record high prices for imported raw sugar. Industry sources contend that the main constraint for increasing exports is the lack of infrastructure in Russian ports and insufficient production of high value sugar which foreign markets demand.

Executive Summary:

FAS/Moscow forecasts Russian sugar beet production in 2017 will decrease to 48.6 million metric tons (MMT), or by more than five percent compared to 51.3 MMT in 2016. This decrease in production is forecasted based on an expected decline in yields in MY2017/18, while the sowing area for sugar beets is forecasted slightly up. FAS/Moscow revised its estimates for beet production to 51.3 MMT for MY2016/17. Post estimate for MY2016/17 production is almost 18 percent higher than we previously forecasted. This significant increase in production in MY 2016/17 is attributable to an expansion in sown area and record high yields primarily because of unusually favorable weather. Post increased sugar beet area in MY2016/17 to 1.11 million hectares, nearly six percent higher than USDA official data, to reflect the latest official data. FAS/Moscow forecasts that the 2017 sugar beet area will slightly increase to 1.12 million hectares (about 1 percent) from the 1.11 million hectares sown to sugar beets in 2016.

FAS/Moscow expects the domestic demand for sugar beets to remain high and stable during MY 2016/17. However, lower domestic prices for sugar beets in the fourth quarter of 2016, compared to the same period of 2015 (see Chart 6) and January-February 2017, are likely to have a negative impact on sugar beet planting decisions in 2017.

FAS/Moscow forecasts sugar beet yields at 44.0 MT/HA for MY 2017/18. While this is a seven percent decrease from the yields experienced in the 2016/17 season, it is still higher than the average yield over the last 5 years (2011-2015). FAS/Moscow updated the MY 2016/17 sugar beet yield estimate to the record high 47.0 MT/HA. This is a 20 percent increase over Post's estimate in the 2016 GAIN Annual. This significant increase in yield is mainly attributable to abnormally favorable weather conditions in major production areas during both the growing season and harvest, coupled with improved production technologies.

FAS/Moscow forecasts that given the 48.6 MMT sugar beet crop projected for MY 2017/18, 48.0 MMT of this crop will be processed into 5.75 MMT of sugar. This production would meet approximately 93 percent of the domestic raw sugar consumption forecast for 2017/18. If this production materializes it would exceed the 80 percent self-sufficiency goal set in Russia's Food Security Doctrine.

In early 2000, the Government of Russia (GOR) set goals to build new sugar processing facilities. To date, none of these facilities have been constructed, however many processing facilities were modernized between 2011/12 and 2013/14. Some vertically integrated sugar plants continue to upgrade despite the current economic situation in Russia and the soft ruble. Many plants have been successful in decreasing sugar losses during processing and storage. Industry analysts estimate that, given the good quality crop and the expected average high sugar content in the beets, some modern plants will be able to realize a sugar recovery rate of 15 percent. However, given the unpredictable weather conditions and the variance in sugar beet size, Post forecasts that the average sugar recovery rate will vary from 12 to 14 percent. Sugar beet production is concentrated among agricultural enterprises, which account for more than 88.1 percent of the 2016 sugar beet crop. Nearly the same agricultural enterprise concentration level occurred in 2015. Analysts suggest that in five years the sector will be totally consolidated into just a few, large organizations, and individual farmers will not be able to compete.

FAS/Moscow estimates that in MY 2016/17, nearly 49.8 MMT of beets from the 51.3 MMT beet crop were processed into 6.1 MMT of raw sugar.

Post increased estimates for domestic consumption of sugar in MY2015/16 by almost seven percent to 6.3 MMT compared to forecasted 5.88 MMT in 2016. The domestic consumption of raw sugar increased in MYs 2015/16 and 2016/17 from 5.88 to 6.3 MMT. Domestic production of raw sugar from sugar beets comprised approximately 80 to 85 percent of this consumption. Per capita consumption has been gradually increasing since 2011. According to the Russian Union of Sugar Producers (SoyuzRosSakhar), Russian per capita consumption of sugar from 2011 to 2015 was approximately 38 kg per capita per year and is estimated about the same in 2017, compared with the world average of 22 kg. Given increased stocks in MY2016/17 as a result of record high sugar beet and sugar production, coupled with lack of proper infrastructure for exports in the Russian ports, consumption is likely to increase two to three percent in the next several years. FAS/Moscow expects that in MY 2016/17, the economic crisis and declining incomes in Russia will stimulate people to return to home-made jams, sweeteners and alcohol, increasing consumption of confectionary products will increase consumption of sugar. In addition, increasing domestic tourism in the next years will also contribute to growing consumption of sugar.

Russia's imports of raw cane sugar is estimated to decrease drastically to 253,556 MT in MY 2015/16 and continue downtrend in MY 2017/18 because of the record high domestic sugar beet crop in MY2016/17, high stocks and a higher than average crop forecasted for 2017. FAS/Moscow forecasts Russia's imports of refined sugar in MY 2017/18 at 350,000 MT (raw equivalent), and estimates imports of refined sugar in MY 2016/17 at 400,000 MT.

FAS/Moscow revised its projection of exports of refined sugar (in raw value) from 20,000 MT forecasted for MY2016/17 to 200,000 MT. Such a significant increase in exports is attributable to a record high sugar beet crop, very high yields, and high sugar production in the 2016 season. From October 2016 to January 2017, Russia exported 96,860 MT of refined sugar, compared to 4,308 MT in the same period last year. This significant increase in exports is attributed to the record high sugar beet and sugar production during the 2016 season. Russia's exports of sugar will remain lower than its potential, despite the soft ruble. There are a number of factors depressing Russia's exports of sugar. First, although Russia was once a major exporter of sugar to the CIS countries, these countries have since developed their own sugar production capacity. As a result, Russia's exports to these countries have been decreasing. Second, experts note that another main constraint for increasing exports is a lack of infrastructure in Russian ports. Finally, Russia historically has not had sufficient production of high value sugar (only eight percent of the total Russia's production) that is in higher demand in foreign markets.

^[1] The increased use of sugar for domestic production of alcohol has been stimulated and will likely be further stimulated by increased excise taxes on alcohol products in Russia: <u>Vodka Excise Tax and Minimum Set Price Rates for 2015 Moscow</u> <u>ATO Russian Federation 2-3-2015.pdf</u>

Commodities:

Sugar Beets

Production, Supply and Demand Data Statistics:

Sugar Beets

Table 1: Production, Supply and Distribution for Sugar Beets, 1,000 HA, 1,000 MT

Sugar Beets	2015/20	016	2016/2	017	2017/2	018
Market Begin Year	Oct 20	Oct 2015		16	Oct 20	18
Russia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	1020	0	1050	1110	0	1120
Area Harvested	1005	0	1040	1092	0	1105
Production	39000	0	42000	51300	0	48600
Total Supply	39000	0	42000	51300	0	48600
Utilization for Sugar	39000	0	42000	51300	0	48600
Utilization for Alcohol	0	0	0	0	0	0
Total Distribution	39000	0	42000	51300	0	48600
(1000 HA),(1000 MT)						

Note: In the PSD table for Sugar Beets the category "Utilization for Sugar" equals "Production" and includes losses of harvested sugar beets, both at farms and during transport from farm to processing enterprises.

Sugar, Centrifugal

Table 2: Production, Supply and Distribution for Centrifugal Sugar, 1,000 MT Raw Value

Sugar, Centrifugal	2015/2016 Oct 2015		2016/2	017	2017/2	018
Market Begin Year			Oct 20	16	Oct 2017	
Russia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	100	100	150	150	0	380
Beet Sugar Production	5200	5200	5600	6100	0	5750
Cane Sugar Production	0	0	0	0	0	0
Total Sugar Production	5200	5200	5600	6100	0	5750
Raw Imports	250	250	250	250	0	200
Refined Imp.(Raw Val)	500	500	450	400	0	350
Total Imports	750	750	700	650	0	550
Total Supply	6050	6050	6450	6900	0	6680
Raw Exports	0	0	0	0	0	0
Refined Exp.(Raw Val)	10	10	20	200	0	250
Total Exports	10	10	20	200	0	250
Human Dom. Consumption	5880	5880	6100	6300	0	6200
Other Disappearance	10	10	10	20	0	20
Total Use	5890	5890	6110	6320	0	6220
Ending Stocks	150	150	320	380	0	210
Total Distribution	6050	6050	6450	6900	0	6680
			1			
(1000 MT)						

Commodities:

- Sugar Beets

Production:

FAS/Moscow forecasts Russia's sugar beet production in 2017 to decrease to 48.6 million metric tons (MMT), or by more than five percent compared to the estimated 2016 production of 51.3 MMT. A decline in yields in MY2017/18 will result in decreased production, while the sowing area for sugar beets is forecasted slightly up. Based on the latest official data, FAS/Moscow revised its MY2016/17 beet production estimate to 51.3 MMT. This is almost 18 percent more than was forecasted in the 2016 Sugar Annual. This significant increase is due to unusually favorable weather conditions during both the growing season and the harvest, an expansion in sown area and record high yields. Post increased the MY2016/17 sugar beet sown area to 1.11 million hectares, nearly six percent more than USDA official data. Post's estimate reflects the latest Russian official data. FAS/Moscow forecasts that the area sown to sugar beets in 2017 will increase slightly to 1.12 million hectares (about 1 percent), from 1.11 million hectares in 2016. The demand for sugar beets from processors is expected to remain strong due to further investments in upgrading current facilities and improved processing and storage practices. However, lower domestic prices for sugar beets in the fourth quarter of 2016, compared to the same period of 2015 (see Chart 6) and January-February 2017, will unlikely create incentives for a substantial increase in sown area for sugar beets in 2017. Also, cane sugar continues to be expensive for the domestic market. As a result, imports are estimated to decrease, and will further stimulate demand for domestic sugar beets.

FAS/Moscow forecasts sugar beet yields at 44.0 MT/HA for MY 2017/18, a seven percent decrease from the 2016/17 season, but still at a higher than average level. FAS/Moscow updated its estimate for the MY 2016/17 sugar beet yield to the record high of 47.0 MT/HA. This yield is a 20 percent increase over Post's estimate in the 2016 GAIN Annual. This significant yield increase is mainly attributable to unusually favorable weather conditions in major production areas during both the growing season and the harvest, coupled with improved production technologies.

On average, yields in 2016 increased by 19 percent over 2015 average yields (average of 38.0 MT/HA), and 11 percent over average yields in 2013 which were the highest since 2007. In addition, in 2016 some Russian territories reported yields as high as 25 to 40 percent. For example, in Rostov Oblast yields were 53.5 MT/HA, Belgorod Oblast yields were 53.0 MT/HA, Nizhniy Novgorod Oblast yields were 26.7 MT/HA (up 40 percent over the previous year), and in Stavropol Kray yields were 71.6 MT/HA (up 29 percent over the previous year). However, the Chechen Republic reported a 26 percent drop in yields to 28.9 MT/HA. But this appears to be more of a statistical adjustment rather than an actual decline in yields. The overall increase in yields is largely attributable to relatively favorable weather conditions during sowing and harvesting, but experts believe that yields higher than 45 MT/HA are unlikely to be sustained in the near future due to the following factors:

• Strong competition with grains and oilseeds for the best land. In many places, farmers' financial returns from 2015/16 grains and oilseeds production were still higher than returns from sugar beet production;

- The sugar beet industry in Russia has reached its market capacity, and overproduction may depress domestic prices versus world prices;
- The majority of successful sugar beet growers are vertically integrated with large processing • companies either through ownership or contractual arrangements. These processing companies typically supply farmers with imported planting seeds, chemicals, and even provide foreign equipment and harvesters. According to industry sources, these expenses for imported inputs comprise about 60 percent of the cost of sugar beet production. With the strong depreciation of the ruble since the beginning of 2014, inputs will continue to be expensive through 2018, and may cause farmers to replace the more expensive and more efficient seeds, fertilizers and chemicals with less expensive, but also less effective, inputs. However, industry analysts believe that this will be a challenge only for individual farmers. Moreover, large players in the sugar market such as "RusAgro," "Prodimpex" and "Sucden" continue to invest in storage facilities, processing infrastructure and technologies, gradually ousting smaller producers and leading to consolidation of the sector. For example, reportedly, RusAgro's 2016 annual revenue from the sugar business increased 13 percent, to 37 billion rubles. According to "Agrosila," another large sugar beet producer and sugar processor from Tatarstan, as a result of investments in their processing facilities and improved technologies in harvesting, handling and storing of sugar beets, the pace of harvesting increased 25 percent and losses during storage and transportation dropped to a minimum of 0.7 percent.
- The overall tight economic situation in Russia, with high interest rates and a shortage of financing, coupled with high indebtedness for many large-scale agricultural enterprises and agro-holding companies in the sugar industry, will curb new investments and limit operating capital for these companies.

The Russian Ministry of Agriculture forecasts that planting area for sugar beets will vary from 1.11-1.15 MMT as projected in 2016. However, these are only projections, and farmers will sow based on their own estimates of cost of production, expected returns from production, and weather during sowing. As of April 3rd, the Ministry of Agriculture provided the latest data on 2017 sugar beet sown area and progress by Federal District and province. A total of 107,000 hectares were sown to sugar beets, which is a 42 percent increase over the sown area at the same time in 2016. The better pace of sowing is attributable to warmer weather and preparedness of farmers for sowing season this year.

T-11. 2 D	C	f f	D 4 . !	2017 1 000 TTA
Table 3. Russia:	Sowing Progress	lor Sugar	Beets in	2017, 1,000 HA

			Sown, in	1,000 HA	
Federal Districts	Total sowing area for 2017 (forecast)	2017	% to forecasted	2016	2017 +/- to 2016
Russian Federation	1129.0	107.0	9.5	64.8	42.2

Central FD	620.1	1.4	0.23	0.1	1.3
Kursk oblast	105.0	1.4	1.3	0.1	1.3
Southern FD	202.5	97.0	47.9	62.3	34.7
Krasnodar kray	185.0	97.0	52.4	62.2	34.8
North Caucuses FD	52.8	8.6	16.29	2.4	6.2
Chechen Republic	6.0	0.1	1.7	1.1	-1.0
Stavropol kray	37.6	8.5	22.61	1.3	7.2

Source: Ministry of Agriculture

Industry analysts are more pessimistic than the Ministry of Agriculture in estimating the sown area and forecasting sugar beet area in 2017 at 1,060 thousand hectares. This industry estimate represents a 4.5 percent decrease from the area sown to sugar beets in 2016.

	2009/1 0	2010/1 1	2011/1 2	2012/1 3	2013/1 4	2014/1 5	2015/201 6	2016/1 7
Area Planted, 1,000 HA	819	1,160	1,292	1,143	904	919	1,020	1,108
Area Harvested, 1,000 HA*	771	923	1,215	1,102	889	906	1,005	1,092
Production, 1,000 MT	24,89 2	22,25 6	47,64 3	45,05 7	39,32 1	33,51 3	39,030	51,30 0
Yields (MT per harvested Area)	32.3	24.1	39.2	40.89	44.21	37.01	38.9	47.0
Sugar Beet Marketed, 1,000 MT	20,90 0	19,10 0	34,80 0	34,70 0	30,85 2	32,00 0	34,300	47,50 0
Sugar Beet Marketed, %	84.0	85.8	73.0	77.0	78.5	95.5	87.8	92.0
Sugar Beet Prices, Rub/MT	1,476	1,795	1,559	1,414	1,547	1,971	2,861	2,919

Table 4. Russia: Sugar Beet Area, Production, and Marketing, MYs 2009/10 – 2016/17.

Source: Rosstat, marketing of sugar beet in marketing years are FAS/Moscow estimates.

FAS/Moscow calculated marketed beets, based on Rosstat's monthly and calendar year data for sugar beets sold by agricultural enterprises, adjusted by industry data for processed sugar beets as of January each year. Rosstat data for the 2016 sugar beet crop marketed by agricultural enterprises is only 38.4 MMT. However, a significant portion of sugar beets are produced by enterprises and private farms that are vertically integrated with processing companies and the transfer of beets from these farms and enterprises to processors is not always registered in official statistics. Thus, the Russian Union of Sugar Producers (SoyuzRosSakhar) reported that as of the beginning of March 2017, processors already processed over 47.5 MMT of sugar beets, 26 percent more than in the same period in 2016. SoyuzRosSakhar also reported that five sugar facilities continued processing beets as of the end of February 2017, compared with only two facilities in 2016.

Chart 1. Russia: Sugar Beet Production, Marketing and Average Prices



Source: Russian State Statistical Service (Rosstat) and FAS/Moscow calculations of marketed beets.



Source: Rosstat

2016 Crop

According to official data, the area in Russia sown to sugar beets in 2016 is 8.6 percent higher than the previous year, or 1,108 thousand hectares. Relatively favorable weather during harvest, a larger sown area, record high yields, and improved technologies for storage and transportation, resulted in almost a 24 percent increase in production volume compared to the 2014/15 crop.

Sugar beet production is concentrated among agricultural enterprises, which account for more than 88.1 percent of the 2016 sugar beet crop, which is about the same as in 2015. Further consolidation is likely to continue over the next five years. The share of sugar beet production on private farms has stabilized since 2014, and is estimated at 10 percent of the total sugar beet crop. The share of production among private back-yard households in the last nine years never exceeded 0.5 percent of total production. Industry reports that some farmers, specifically those located near processing factories, may increase area sown to sugar beets due to a stable demand for sugar beets, improved yields and production technologies. However, such expansion will not be significant.



Source: Rosstat

The Central Federal District of the Russian Federation remains the major producer of sugar beets, followed by the Volga Valley Federal District and the Southern Federal District. Heavy precipitation during the vegetation phase for the beet root, together with relatively stable weather in the Central and Volga Valley Federal Districts, resulted in increased yields for the beet crop from 39.1 MT/HA and 31.05 MT/HA in 2015 to 46.99 MT/HA and 35.52 MT/HA in 2016, respectively. Bad weather and heavy rains in the Southern and North Caucasus Federal Districts during beet harvesting and processing from September through October 2016, did not affect yields and they were reported at higher levels than in 2015, or at 55.49 MT/HA versus 44.91 MT/HA and 66.28 MT versus 49.09 MT/HA, respectively. In addition, an increase in sugar beet area allowed farmers in the Southern Federal District to increase production of sugar beets to 11.3 MMT in 2016 compared to 7.76 MMT in 2015 and 7.30 MMT in 2014. Farmers in the North Caucasus Federal District also increased production from 2.08 MMT in 2015 to 2.92 MMT in 2016.



Source: Rosstat

Tweleve Russian provinces produce 91 percent of the sugar beet crop. All of these provinces are located in European Russia. The major sugar beet processing facilities are also located in these provinces: 70 out of 85 Russian sugar plants are located in these provinces. According to SoyuzRosSakhar, the Russian Association of Sugar Processors and Traders, 75 processing plants have been operating in MY2016/2017.

Chart 5. Sugar Beet Production by Province, 2016



Source: FAS/Moscow based on Rosstat data

Input supply

Light purple2.0% - 5.0% of total productionPurple5.0% - 10.0%Dark purple>10%

Highest Sugar Beet Production in 2016:

- 1. Krasnodar kray 19.5 percent (16 plants)
- 2. Voronezh oblast 11.4 percent (9 plants)
- 3. Kursk oblast 10.9 percent (11 plants)
- 4. Tambov oblast 8.8 percent(5 plants)
- 5. Belgorod oblast 8.0 percent (10 plants)
- 6. Lipetsk oblast 8.08 percent (6 plants)
- 7. Orel oblast 4.34 percent (4 plants)
- 8. Tatarstan Republic 4.53 percent (3 plants)
- 9. Penza oblast 3.9 percent (3 plants)
- 10. Bashkortostan Republic 2.65 percent (4 plants)
- 11. Mordovia Republic 2.09 percent (1 plant)
- 12. Stavropol kray 1.62 percent (1 plant)

Industry analysts estimate that due to the soft ruble, the cost of imported inputs, especially seeds have increased significantly. The major expenses for sugar beet production are planting seed, fertilizer and agrochemicals. These inputs account for over 50 percent of the cost of production of sugar beets. However, industry analysts report that farmers who are vertically integrated with sugar processors will have adequate access to seeds, chemicals and fertilizer because most of these inputs were purchased in fall 2016 when prices were not as high. However, even with a decrease in fertilizer prices (see below), most small, private farmers are still unable to afford fertilizer.

- **SEED:** Imported seed accounts for almost 90 percent of total sugar beet seed used for sowing, and therefore represents a significant share of the cost of sugar beet production in Russia.
- **FERTILIZER:** Prices for the most popular types of mineral fertilizers decreased on average 10 percent, as of March 14, 2017. Compared to mid-March 2016, prices for some fertilizers are down as much as 15 percent. The Minister of Agriculture, Alexander Tkachyov, reported in late March that agricultural producers purchased 939,000 MT of fertilizers which is 29 percent higher than at the same period in 2016. Until 2016, prices for most domestically-produced mineral fertilizers were linked to the dollar rate and world prices, as fertilizers produced in Russia are largely exported. However, this situation with fertilizer prices changed during the 2016/17 season due to the implementation of a mechanism developed by the Russian Ministry of Agriculture, Ministry of Industry and Trade and the Russian Association of Fertilizer Producers (RAFP) to curb fertilizer prices in the domestic market. Through this mechanism, RAFP and the Russian Agro Industrial Union signed a cooperation agreement that set the highest possible

prices for various types of mineral fertilizers. This measure provided availability of fertilizers for agricultural producers. According to the Ministry of Agriculture, prices of the most popular fertilizers (including VAT, packaging, transportation and delivery to farms) mostly decreased. As of March 14, 2017, prices compared with the same date last year are as follows:

- Carbamide decreased by 11 percent to 18,285 rubles per 1 MT;
- Ammonia nitrate decreased by 13 percent to 13,887 rubles per 1 MT:
- Potassium chloride decreased by 2 percent to 15,269 rubles per 1 MT;
- Azophoska (nitrogen, phosphorus, potassium compound fertilizer) decreased by 15 percent to 20,336 rubles per 1 MT; and
- Ammophos (compound fertilizer) decreased by 11 percent to 28,079 rubles per 1 MT.
- AGROCHEMICALS: Use of agrochemicals is likely to decrease in 2017, possibly leading to the deterioration of the overall Russian phytosanitary situation. In 2014, farmers had already begun to feel a budgetary pinch and as a result had cut back on purchases of adequate, quality agrochemicals. Most agrochemicals are imported, and given the softening of the ruble compared to the U.S. dollar and the Euro, prices of imported chemicals have risen significantly since 2014. According to the Ministry of Agriculture, prices for all types of pesticides increased significantly in CY2016 compared to CY2015. For example, the cost for pesticides applied by agricultural producers increased by 28 percent during the period. At these prices, farmers will not be able to purchase the necessary chemicals, which may result in a real threat to all crops, including the sugar beet crop, in 2017. The total use of agrochemicals in Russia is reported at 121,648 MT. Imported pesticides account for more than 60 of the total agrochemicals use.

Consumption:

FAS/Moscow estimates that in MY 2016/17, nearly 49.8 MMT of sugar beets will be processed from the 51.3 MMT beet crop and will produce 6.1 MMT of raw sugar. FAS/Moscow forecasts that given the 48.6 MMT sugar beet crop projected for MY 2017/18, 48.0 MMT of this crop will be processed.

Policy:

Development of the sugar industry is part of the State Program on the Development of Agriculture 2013-2020 (The Program). The Program sets a target of 41 MMT for sugar beet production by 2020, in order to meet the Russia's Food Security Doctrine goal of 80 percent self-sufficiency in sugar. In 2011 and 2012, production surpassed this target, with domestic sugar beet production at 47.6 MMT and 45.1 MMT respectively. Industry analysts link the achievements of the sugar industry in exceeding this target primarily to the favorable market situation (prices) and to weather, as well as private investments rather than to government support.

In June 2013, the Russian Ministry of Agriculture adopted the Target Program "Development of Sugar Complex of the Russian Federation in 2013-2015" in implementation of The Program 2013-2020. The Sugar Complex Development Program repeats the target of the food security doctrine, envisages support of processors for procurement and processing of sugar beets, and support of investment loans through

interest rate subsidies.¹ The cost of the program is estimated at 56.7 billion rubles. However, state support of this program is small, and only seven billion rubles were specifically allocated for this program from both the federal and provincial budgets combined in 2013-2015.

Russia continues to be strongly dependent on imported planting seeds, glucose and lysine, food and feed additives. In addition, current agricultural technological development in Russia is primarily based on foreign scientific achievements. The share of imported seeds for different crops varies from 20 to 80 percent. For example, for potatoes, 80 percent of seed is imported, for sugar beets 70 percent of seed is imported, for corn 28 percent of seed is imported, for sunflowers 44 percent of seed is imported and for vegetables 23 percent of seed is imported.

In an effort to improve development of domestic selection and genetics, the Russian Ministry of Agriculture developed a draft Government Resolution "On Implementation of the Federal Scientific Technical Program of Agriculture Development for the Period from 2017-2025" that has been forwarded to the interested agencies for comments.

Given that budgets are very tight, it is unlikely that in 2017 the sugar beet complex will receive significant funds, and incentives to increase production of sugar beets will be based not on budget support but on domestic demand for beets and on prices. Chart 6 shows how the price of sugar beets changed from 2003 to 2016 in rubles and in U.S. dollars. In the fourth quarter of 2016, the price of sugar beets was 2,825 rubles per 1 MT, while in the same period in 2015 the average price of sugar beets was 3,134 rubles per 1 MT.

Meanwhile, in U.S. dollars the price in the last quarter of 2016 decreased slightly from \$45.3 per 1 MT to \$44.5 per 1 MT, due to the continued softening of the ruble and a record sugar beet crop this year. During the period January to February 2017, the remaining quantities of sugar beets were marketed, and the ruble price for these remaining sugar beets continued to decrease to 2,771 rubles per 1 MT. In March, there were almost no sugar beets in the Russian market, and Rosstat did not report any price for sugar beets. Given the declining producer prices for sugar beets in 2016/17, farmers may not have strong incentives to significantly expand area to sugar beets in the 2017/18 season.

¹ More on this Program is in FAS/Moscow Sugar Annual 4-14-2014.pdf



Note: The bulk of sugar beets in Russia are sold to processors between October and December, and data in the chart above are average sugar beet prices during the October to December period. The prices, in U.S. dollars, are calculated based on the average exchange rate in the fourth quarter of each year.

Source: Rosstat, FAS/Moscow calculations based on Russian Central Bank's exchange rate. https://www.cbr.ru/statistics/?PrtId=svs

Commodities:

- Sugar, Centrifugal

Production:

FAS/Moscow forecasts that given the 48.6 MMT sugar beet crop projected for MY 2017/18, 48.0 MMT of this crop will be processed. Weather affects not only the weight of the harvested beets, but also the sugar content. FAS/Moscow forecasts an average extraction rate of sugar from beets at the lower end, approximately 12-14 percent because of the average state of Russian processing facilities. Thus, sugar production from beets in MY 2017/18 is forecast at 5.75 MMT, 5.7 percent lower than the 2016/17 sugar production. This forecasted decrease in sugar production is attributable to lower sugar beet yields and production forecasted for MY 2017/18 compared to the unusually high crop and yields of sugar beets in the 2016/17 season.

According to Rosstat, during the period September 2016 through February 2017, Russian plants produced 6.05 MMT of white (refined) sugar. (In December 2014, Rosstat discontinued reporting separate data for sugar from beets and sugar from cane.) FAS/Moscow estimates sugar production in MY 2016/17 at 6.35 MMT, including 6.1 MMT of sugar from sugar beets and 250 TMT from raw cane sugar. The share of raw cane sugar will continue to contract as imports are estimated to decline drastically (see Chart 7). Industry analysts estimate Russia's MY 2016/17 refined sugar production from sugar beets at the same level as Post. Furthermore, these sources report that by the end of January





Source: FAS/Moscow calculations based on Rosstat data

Many industry analysts predicted that processors would not be able to manage the processing of the large sugar beet harvest in MY 2016/17. However, processors were able to pick up their pace of processing. This improvement was attributable to the following: 1) earlier start-up time for most processing facilities in the Central FD; 2) overall production capacity increased 11 percent; 3) three new processing facilities started operation (Timashevskiy and Kurganinskiy in Krasnodar Kray and the Kollektivist facility in Kursk province); and 4) continued modernization of sugar production facilities. Reportedly, losses during storage and transportation also decreased. Despite industry reports of lower than last season sugar content in beets and lower sugar recovery rate, efficiency of most facilities has improved. Total sugar loss in MY 2016/17 is estimated at 2.9 percent versus 2.7 percent in MY 2015/16, and compared to 3.3 percent during record high sugar production season in 2011/12.

There are 85 sugar plants registered in Russia, and they are located in 22 provinces of the Russian Federation². However, industry analysts estimate that in 2015/16, only 75 plants were productive, and these sugar plants were also located in the major sugar beet producing areas. Most of these plants were modernized during the period 2011/12-2013/14 and some plants continue their renovation. This modernization not only increased the efficiency of processing, but also decreased sugar beet losses and deterioration of beet quality during storage and processing. Industry analysts estimate, given a good quality crop and high sugar content, sugar output from beets may reach 15 percent at some of the "modernized" facilities. This compares with a sugar output of 12-13 percent several years ago. However, the current economic problems in Russia and the soft ruble will make large scale further modernization of sugar processing facilities in 2017/2018 unlikely. Experts report that average sugar production per hectare throughout Russia for the last several years has increased by eight percent and

² <u>http://rossahar.ru/Sugar-factories-in-Russia-and-CIS/Russia/</u>

reached 5.48 MT. In some Russian provinces, such as in the Southern FD and Altay province per hectare production went up as high as 14 percent, and in Volga Valley FD by 12 percent. As a result, in the Southern FD sugar facilities produced 1.6 MMT of sugar in the 2016/17 season, or 30 percent more than in MY2015/16. In the Central FD sugar production is estimated to reach 3.7 MMT, or 13 percent higher than in MY2015/16.

The gap between domestic production of raw sugar and consumption is filled by imports of raw and white sugar (in raw equivalent). FAS/Moscow estimates imports of sugar at 650 TMT in MY 2016/17, about the same level compared to the projected 700 TMT in MY 2015/16. These imports will include 250 TMT of raw cane sugar and 400 TMT of refined sugar in raw equivalent.

Market analysts report that due to continued growth in inputs (sugar beets for sugar production), the soft ruble, increasing domestic consumption, and consolidation of the sector, prices failed to rebound after the traditional wholesale price failure period from August to November as they did in 2015. Analysts also report that the decline in wholesale prices for sugar started in late July 2016 and continued through January 2017. During this period prices declined from 40.8 rubles/kg in July 2016 to 30.0 rubles/kg in January 2017. They note that sugar prices started to recover by mid-February, reaching 30-31 rubles/kg. Traditionally, sugar prices increase between December and July; however analysts believe that this seasonal price increase for sugar will be very moderate in 2017. Thus, the Ministry of Agriculture reported that at the end of December 2016, the average retail price was reported at 52.2 rubles/kg, or seven percent lower than the average price in the same period in 2015.

The world price for white sugar 45 UCUMSA is around \$530 per MT (FOB – port of exporter). However, Russia produces only a minimal amount of sugar at this higher quality level. Most of Russia's sugar production is 104 ICUMSA. Current Russian domestic price for this sugar is \$535 per MT, but the domestic price has been declining as a result of a record high sugar beet crop in 2016. On average the Russian producers' price was 2,700 rubles/MT in MY 2016/17, and in 2015/16 the average price was around 3,000 rubles/MT. The Russian price has remained higher than the world price but import duties adopted by the GOR in 2004 smooth differences between the domestic price of sugar and the world price of sugar (see Policy section, below). Even with the declining domestic price, most industry sources report that despite the ruble devaluation and an increasing product cost, the profitability of the sugar processing business has increased slightly this year due to increases in processing volumes and improved quality of input supplies as well as better storage and transportation of sugar beets.

Stocks:

Different experts estimate that the MY 2017/18 Russian refined sugar surplus will vary from 500,000 MT to 800,000 MT. The record high production of sugar beets resulting in a surplus of white sugar on the domestic market, the lack of infrastructure to support exports, and limited export destinations for lower-quality Russian white sugar will contribute to increasing stocks. Post revised the MY2016/17 sugar stock estimate to 380,000 MT, 19 percent more than Post previously forecast. Post forecasts sugar stocks for MY 2017/18 210,000 MT based on expectations that stocks will return to relatively normal levels with a lower crop forecasted in the 2017/18 season and increasing domestic consumption.

Sugar Standards

Customs Union (CU) Resolution No. 880 of December 2011 includes a list of voluntary standards (GOSTs) to ensure compliance of sugar products with the CU Technical Regulation "On Food Safety" (for more information see FAS/Moscow GAIN report on <u>Customs Union Technical Regulation on Food Safety</u>).

Other Sweeteners

There are no official data on the production or consumption of sugar sweeteners in Russia. Industry analysts estimate that the 2016 market capacity in Russia is about 50,000 MT. The market is forecast to increase, on average, three percent annually. Consumption of artificial sweeteners is expected to increase based on changing habits and perceptions about a healthy diet. Additionally, expansions of the confectionary sector and the food and beverage industry, as well as an increase in the number of people with diabetes, are all expected to increase the demand for sweeteners. SoyuzRosSakhar called for a promotional campaign for natural sugar based products, since "consumption of artificial sweeteners may have a negative effect on human health."

Experts estimate that high fructose corn syrup accounts for approximately 10 percent of total Russian consumption of glucose syrups. Russia's domestic production of glucose-fructose syrups has also been increasing and reached (SoyuzRosSakhar estimate) over 0.5 MMT in 2016. The Central Federal District is the largest producing region for glucose fructose syrup, accounting for more than for 70 percent of total production. The second larges region is the Southern District with 25 percent. The largest producer of these products is Cargill at the Efremovsky plant in Tula Oblast in the Central FD. Industry analysts consider that Russia exports most of these products. However, the current economic situation, tight financial conditions, the soft ruble and an expected decrease in demand for food containing imported ingredients, may curb domestic consumption of artificial sweeteners and switch consumer demand to natural sugar. This tendency, however, may not affect domestic production of artificial sweeteners, like glucose-fructose syrups, for exports, because the soft ruble makes exports more attractive than sales in the domestic market.

Sugar Industry By-Products

Sugar beet pulp as a by-product of processing beets for sugar is used as feed for cattle. According to Rosstat, Russian production of beet pulp in CY 2015 (latest available) is estimated at 5.9 MMT, almost 0.25 MMT less than in 2014. The same source estimates production of beet molasses at 1.18 MMT in CY2015, an increase of 40,000 MT than in 2014. Traditionally, about 20 percent of beet pulp is exported. In CY2016, the largest importer of beet pulp was Latvia, taking 336,081 MT of Russia's exports, followed by the Netherlands with 281,638 MT and Turkey with 171,828 MT.

Consumption:

Domestic consumption of sugar has been influenced by the Russian economic crisis that started with a sharp depreciation of the ruble in November and December 2014, followed by high ruble volatility, accelerated inflation, and increased interest rates. Recently, some of the general economic indicators have seen improvement. According to Russia's Federal Statistics Service (Rosstat), Russia's headline consumer price index (CPI) was down to 4.3 percent in March 2017 from 5.4 percent in December 2016. Food price inflation fell to 3.5 percent in March 2017 from 4.6 percent in December 2016, driven by the stronger ruble exchange rate, positive dynamics of the food sector, and modest consumer demand. Russian agriculture grew 4.8 percent in 2016, while Russian GDP is down by 0.2 percent. At the same

time, retail turnover fell by 5.2 percent and real disposable income fell by 5.9 percent. The Russian Central Bank reduced the key refinancing rate from 10 percent to 9.75 percent in March 2017 because inflation was 'too low' in the beginning of the year. The Russian Ministry for Economic Development forecast 2 percent GDP growth in 2017.

FAS/Moscow forecasts that domestic human consumption of sugar will increase 1.6 percent in MY 2017/18 to 6.2 MMT, compared to USDA's official estimate of Russian domestic consumption of 6.1 MMT for MY 2015/16. Post increased estimates for domestic consumption of sugar in MY2016/17 by almost seven percent to 6.3 MMT compared to Post's previous forecast of 5.88 MMT in 2016. The forecasted increase in sugar consumption is due to an expected increase in homemade jams and preserves, as well as increased production of home-made alcohol. Alcohol prices increased sharply due to the GOR's excise policy, and sugar consumption for alcohol has already increased in MY 2016/17 and will likely continue to increase in MY 2017/18. Although there is no official data on the use of sugar for home-made preserves and alcohol, based on past experience, consumption of sugar is likely to increase. Reportedly, consumers may buy more sugar than they need for homemade preserves and have it stored for the next season. Another factor that will contribute to increased sugar consumption in 2017 is an increase in domestic tourism. The largest sugar consumption is likely to occur during the high-tourism period of May-September.

The Russian Association of Confectionery Producers (RACP) reports that the total market share of confectionery products in the Eurasian Economic Union (EAEU) has increased in recent years and is estimated at 4.0 MMT in CY 2016. Russia's share of the EAEU confectionary market is reported at 3.39 MMT, or about a three percent increase over CY 2015. RACP also reports that the average consumption of confectionery products in Russian has seen an upward trend. In 2010 per capita consumption was 22.1 kg and by 2014 it reached 24.1 kg. In 2015, per capita consumption initially declined to 22.6 kg in an immediate response to the economic downturn, but rebounded in 2016 to an annual per capita consumption of 23.1 kg. Industry analysts forecasted that it will continue to grow. Increasing purchases of sugar from the confectionary and food processing sectors may lead to an increase in the price of sugar. However, industry analysts do not expect a significant increase in the domestic price of sugar because of the large MY 2016/17 sugar beet crop and record stocks. It is more likely that price increases will be tied to ruble devaluation and a final increase in demand for sugar.

Trade:

The gap between domestic production of sugar from beets and domestic consumption of sugar is filled with imported raw sugar and imported refined sugar.

Imports: Raw Sugar

Russia's imports of raw cane sugar is estimated to decrease drastically to 253,556 MT in MY 2015/16 and continue a downward trend in MY 2017/18, mostly because of the large MY 2016/17 crop and the expected, larger than average crop forecasted for 2017. There are no official data yet on raw cane sugar imports in MY 2016/17, but data for the first four months (October 2016 – January 2017) show that Russia imported 40 percent less raw cane sugar than in the same period the year before. This decrease in imports may be attributable to the soft ruble, record harvest of sugar beets and improved processing.

FAS/Moscow estimates imports of raw cane sugar in MY 2015/16 at 250,000 MT, and forecasts a further decrease in MY 2017/18 to 200,000 MT. Brazil remains the major supplier of raw sugar to Russia, however, imports from Brazil have shrunk fourfold since MY 2014/2015.

	2011/1	2012/1	2013/1	2014/201	2015/201	Oct.	Oct.2016
	2	3	4	5	6	2015 -	-
						Jan.	Jan. 2017
						2016	
World	446,10	473,78	690,29	606,576	253,556	27,13	19,569
	0	4	1			6	
Brazil	313,42	345,95	500,94	436,745	100,991	0	0
	0	6	4				
Australia		0	0	0	65,835	25,02	11,117
						9	
Cuba	61,459	23,000	120,43	134,775	55,893	0	0
			8				
Thailand	43,751	32,483	21,017	22,000	3,050		
Kazakhsta			0	0	22,892	68	6,125
n							
Belarus			131	5,036	2,171	101	20
Colombia	2,465	3,149	3,795	2,410	2,401	892	871
Other	25,005	69,196	43,966	18,336	5,610	1,046	585

Table 5. Russia: Imports of Raw Cane Sugar (170111, 170113, 170114), MT in MY (Oct.-Sept.)

Note: Due to Changes in Codes Descriptions, since 2012, most imports of raw cane sugar are in code 170114, instead of 170111.

Source: Russian Customs

Imports: Refined Sugar

FAS/Moscow forecasts Russia's imports of refined sugar in MY 2017/18 at 350,000 MT (raw equivalent), and estimates imports of refined sugar in MY 2016/17 at 400,000 MT. From October 2016 through January 2017, Russia imported 98,171 MT of refined sugar (HS Numbers 170191 and 170199), a 50 percent drop compared with the same period last year. The bulk of these imports came from Belarus (about 80 percent). Other suppliers of refined sugar to Russia are Poland, Brazil and Kazakhstan.

Table 6. Russia: Imports of Refined Sugar (HS numbers 170191 and 170199), MT

	2011/12	2012/13	2013/14	2014/15	2015/16	Oct. 15 – Jan. 16	Oct.16- Jan.17
World	56,053	76,397	283,489	427,224	371,269	190,484	98,171
Belarus	6,341	11,605	180,581	368,564	316,076	168,523	78,975
Kazakhstan	0	0	0	37	1,882	3,121	5,806
Poland	30,325	26,166	19,856	18,446	25,718	7,759	6,576
Brazil	4,251	8,370	16,036	14,588	13,109	8,735	2,160
Lithuania	14,636	18,014	11,803	19,263	11,032	3,632	3,172

Finland	415	497	515	486	334	145	146
Mauritius	931	816	496	110	68	3	11
Denmark	492	448	420	140	232	158	44
Germany	362	316	221	147	258	54	77
France	80	56	340	1627	199	76	619
United States		394	511	304		98	196

Source: Russian Customs

Exports: Refined Sugar

FAS/Moscow revised numbers for exports of refined sugar (in raw value) from 20,000 MT forecasted for MY2016/17 to 200,000 MT. Such a significant increase in exports is attributed to the record high sugar beet and sugar production during the 2016 season. From October 2016 to January 2017, Russia exported 96,860 MT of refined sugar, compared to 4,308 MT in the same period last year. Kazakhstan is the largest export destination with 36,035 MT of refined sugar, followed by Tajikistan (24,116 MT) and Ukraine (7,487 MT) during the aforementioned four month period. In past years Russia's major export markets were CIS countries. However, currently most of the CIS countries, such as Kazakhstan, have developed their own processing facilities and produce sugar domestically. In addition, Russia faces strong competition from other suppliers in Ukraine, Belarus and Azerbaijan. Many of the CIS countries have state programs to support their sugar industry. The quality of Russian sugar is not very attractive to foreign markets. Moreover, and perhaps most importantly, sugar produced in Russia production does not meet the quality standards demanded by many markets. Only eight percent of the sugar produced in Russia meets the highest quality standard, ECUMSA 104, while 35 percent of sugar produced in Ukrainian is high quality sugar. Experts state that the main constraint for increasing exports is lack of infrastructure in Russian ports: to date Russia does not have capacity to ship sugar either by container or by vessel.

	2011/12	2012/13	2013/14	2014/15	2015/16	Oct. 2015-	Oct. 2016-
						Jan. 2016	Jan. 2017
World	78,058	6,140	3,013	8,395	21,045	4,308	96,860
Tajikistan	0	30	32	34	5,509	51	24,116
Kazakhstan	0	0	471	3,858	3,762	218	36,035
Ukraine	0	0	25	1,028	3,122	79	7,487
Abkhazia	1,914	1,133	831	458	1,106	397	311
Mongolia	600	844	792	702	850	351	1,090
South Ossetia	0	174	466	519	620	241	326
United States	269	335	155	143	71	25	18
Uzbekistan	6,553	54	87	106	92	29	0
Belarus	0	49	62	333	578	435	2,072
Turkmenistan	1,031		14	11	9	3	2,158
Kyrgyzstan	4,246		6	18	1686	15	7,203
Other	63,445	3,521	72	1,185	3640	2,464	1404

Table 7. Russia: Exports of Refined Sugar (170199)

Source: Russian Customs

Policy

The variable scale of import duties was adopted by the GOR in 2004 and is a unique tool which allows for smoothing sharp fluctuations in the price of sugar in the world market. In April 2016, the average price of raw sugar on the New York Mercantile Exchange ICE was \$449.87/MT. In accordance with the current procedures, the import duty on raw sugar in the countries of the Customs Union in February 2017 was \$250/MT. The rate of import duties on raw sugar varies in the range of \$140-260 per 1 MT.³

In accordance with the Agreement on the Free Trade Zone (which includes nine Former Soviet Union countries except Georgia, Azerbaijan, Turkmenistan, and the Baltic Republics) of October 18, 2011, (article 2), Russia can import sugar, duty-free, from all of these countries except Ukraine. Imports of white sugar from Ukraine (HS Code 1701 99 100) to the Republic of Belarus, Republic of Kazakhstan and Russian Federation is subject to an import duty of \$340 per 1,000 kg. This import duty will be in effect until some date in the future that will be "agreed upon on by mutual consent." In turn, Ukraine will apply a 50 percent import tariff on white sugar (code 1701 99 1000) imported from Belarus, Kazakhstan and Russia for the period "agreed upon on mutual consent." So far no agreement on this issue has been reached.

Marketing:

Russia's domestic price of white sugar (both wholesale and retail) reached the highest point in January 2015. The worldwide drop in the price of sugar is attributable to the strengthening dollar. In addition, analysts report that for the last five seasons, worldwide production of sugar has been above total consumption and inventories are at high level in Russia, Belarus, Ukraine and Moldova. Starting in February 2016, prices in Russia began to reflect the world downward trend in prices. The normal Russian sugar price cycle sees a drop to the lowest point in July, with traditional failure in prices in the period September to November. However, in 2016 the Russian/ruble price for sugar did not rebound as expected in November, but rather continued the downward trend. During this same period, the world/dollar price for sugar stabilized. (See Charts 8 and 9.)

Starting in April 2017 the Moscow Stock Market together with SoyuzRosSakhar Union launched trade in sugar. Trading participants have access to sugar trade with a delivery period of 90 days. The organizer of the trade is the National Trade Stock (NTS) which is a member of the "Moscow Stock Trade." Market participants are able to trade directly or through a broker. According to SoyuzRosSakhar, in the near future trade in sugar forwards is expected to reach between 1.0 MMT to 1.5 MMT annually (about 20 percent of the total sugar production in Russia). In value terms, this volume is estimated between 40 billion to 60 billion rubles (\$680 million to \$1.1 billion) based on the current average price of sugar.

Deliveries on stock transactions will take place at certified warehouses within the territories of the Southern, Central and Volga Valley Federal Districts. Traders can purchase forward contracts either based on a specific warehouse or on the best supply price.

³ On August 22, 2012, Russia acceded to the WTO. In accordance with the commitments made customs duties on raw sugar during the period from September 2013 to September 2014 were adjusted from \$270 to \$250 per 1 MT. Currently within the Common Customs Tariff of the Eurasian Economic Union (ETT EAEC), a variable scale of import duties in the range of \$140-\$250 per MT is applied to raw sugar. Detailed text ETT EAEC can be found here: http://www.eurasiancommission.org/ru/act/trade/catr/ett/Pages/default.aspx



Source: Russian Ministry of Agriculture, Price in U.S. Dollars is calculated based on the Central Bank's exchange rate. <u>https://www.cbr.ru/statistics/?PrtId=svs</u>



Source: Russian Ministry of Agriculture, Price in U.S. Dollars is calculated based on the Central Bank's exchange rate.

https://www.cbr.ru/statistics/?PrtId=svs