Overview of Potato Supply and Demand in Russia

Report Highlights:
Russia is a huge producer of potatoes, and is typically the third largest potato producer in the world after China and India. In 2012, Russia produced 29.5 million metric tons (MMT) of potatoes. At present only 13 percent of domestic potatoes are produced by agricultural enterprises, with 8 percent produced by private farms, and the other 79 percent produced by households (backyard production). Potato production is not concentrated in any one area in Russia, although during the past few years commercial production of potatoes at large agricultural enterprises and private farms in Moscow and in some Western provinces of the Central Federal District has increased. The potato crop in 2013 is expected to be down as a result of excessively rainy weather, especially at harvest.
**General Information:**
Russia is a huge producer of potatoes, and is typically the third largest potato producer in the world after China and India. In 2012, Russia produced 29.5 million metric tons (MMT) of potatoes. At present only 13 percent of domestic potatoes are produced by agricultural enterprises, with 8 percent produced by private farms, and the other 79 percent produced by households (backyard production). Potato production is not concentrated in any one area in Russia, although during the past few years commercial production of potatoes at large agricultural enterprises and private farms in Moscow and in some Western provinces of the Central Federal District has increased. The potato crop in 2013 is expected to be down as a result of excessively rainy weather, especially at harvest.

Russia is largely self-sufficient in potato production, and imports of potatoes remain relatively small, and in 2000-2010 never exceeded 0.6 MMT a year. The highest year of imports was in 2011, when 1.4 MMT were imported after the severe drought of 2010 which decimated Russia’s potato crop. Potato importers are usually larger retail companies that focus on serving customers in large metropolitan areas such as Moscow and St. Petersburg.

**Potato Production**

*History*
Since the beginning of 1990s, production of potatoes in Russia has been gradually decreasing (with significant fluctuations depending on weather). During the Soviet Union, 34 percent of Russia’s potatoes were produced in specialized state and collective farms. After the breakup of the Soviet Union and collapse of these specialized state and collective farms in 1991-1992, potato production in Russia dropped\(^1\). However, an expansion in household (backyard) production in the early 1990s was able to compensate for this decline and was able to meet domestic demand and return production to levels of before the breakup of the Soviet Union. Although potato yields in these household farms were lower than in the former state and collective farms, storage was much better and as a result crop losses decreased significantly\(^2\).

In the latter half of the 1990s, production began to fall again as a result of falling consumption of potatoes in Russia, but since the late 1990s, potato production in Russia has been relatively stable at between 27 and 30 MMT per year.

Production in Russia remains dominated by household (backyard) production, which in 2012 still provided nearly 80 percent of all production. The source of production, though, has shifted gradually towards more production in large agricultural enterprises and private farms. For instance, the share of agricultural enterprises and private farms in the total production of potatoes increased from 8.4 and 2.8 percent in 2005, to 13.1 and 8 percent respectively in 2012 (Chart 2). Increased production at larger scale farms has been driven by growing demand from producers of snacks (chips), other value added potato products, and large retail companies focused on selling high-quality potatoes in urban markets.

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\(^1\) Reliable statistical data for this period is largely unavailable.

\(^2\) Some industry analysts report that in the Soviet times up to 40 percent of potato crop was lost due to poor logistics (transportation and storage).
such as Moscow and St. Petersburg. These agricultural enterprises are the ones that are increasingly purchasing modern equipment, using improved seed potatoes, and are able to invest in more modern storage facilities. Agricultural enterprises produce potatoes for processing and for retail sale and some of these enterprises have constructed their own processing facilities, while others sell potatoes to large food (snack) companies. The information on the major potato producing companies can be found on the site of the Russian Potato Union: [www.WeLikePotato.ru](http://www.WeLikePotato.ru).

**Chart 1**

![Russia: Potato Production in different types of organizations, 1,000 MT](chart1.png)

**Source:** Russian State Statistical Service (Rosstat)

**Yields of potato**

Potato yields in Russia have been increasing since the early 2000s as a result of the increased production in larger agricultural enterprises. Despite this, average yields still remain below those of developed countries. Even among agricultural enterprises yields can vary significantly, as some have invested in modern equipment and agro-economic practices, while others save on inputs and are more content with modest yields.

**Chart 2**
The location of potato production in Russia is spread out throughout Russia. Russia’s major potato producing provinces (regions of the Russian Federation) are located in the Central and Volga Valley federal districts close to urban consumers in these federal districts. The population in these federal districts accounts for 47.8 percent of the total Russian population, and the share of the Central and Volga Valley federal districts in potato production (2011 and 2012 average data) is 56.4 percent. Producers in the Central Federal District (FD) also supply potatoes to the North of European Russia (North-West FD), which produces only 4.9 percent of all potatoes but has more than 9.5 percent of Russian population living there. The Ural FD (8.5 percent of Russian population) is supplied with potatoes primarily from its own provinces (8.1 percent of Russia’s potato production is located there) and the population in the Siberia (13.5 percent of Russia’s total population) is also supplied by local producers that produce 16.6 percent of Russia’s potato production.

Although potato production is spread throughout Russia, production by large agricultural enterprises tends to be more concentrated in the Central and Volga Valley federal districts. This is primarily due to the location of potato processing companies in these areas, as well as their proximity to major urban centers with high levels of food retail outlets.
Russia’s top 11 provinces in terms of potatoes produced in agricultural enterprises, together account for half of Russia’s potato production in agricultural enterprises, and are the following (with production in 2011 and 2012 averaged):

- Moscow Oblast (330,000 MT) in the Central FD;
- Bryansk Oblast (269,000 MT) in the Central FD;
- Nizhniy Novgorod oblast (223,000 MT) in the Volga Valley FD;
- Tula Oblast (189,000 MT) in the Central FD;
- Tumen Oblast (167,000 MT) in Siberian FD;
- Chuvashia Republic (154,000 MT) in the Volga Valley FD;
- Sverdlovsk (141,000 MT) in the Ural FD;
- Samara Oblast (136,000 MT) in the Volga Valley FD;
- Tatarstan Republic (126,000 MT) in the Volga Valley FD;
- Leningrad Oblast (112,000 MT) in the North-West FD;
- Lipetsk Oblast (106,000 MT) in the Central FD

Russia’s top 10 potato producing provinces for total production, which together account for one third of Russia’s potato production, are the following (with production in 2011 and 2012 averaged):
• Tatarstan Republic (1.39 MMT) in the Volga Valley FD;
• Voronezh oblast (1.34 MMT) in the Central FD;
• Krasnoyarsk kray (south) (1.18 MMT) in the Siberia FD;
• Bryansk oblast (1.09 MMT) in the Central FD;
• Kursk oblast (1.01 MMT) in the Central FD;
• Bashkortostan Republic (0.94 MMT) in the Volga Valley FD;
• Moscow oblast (0.89 MMT) in the Central FD;
• Nizhniy Novgorod oblast (0.87 MMT) in the Volga Valley FD;
• Chuvashia Republic (0.86 MMT) in the Volga Valley FD;
• Altay kray (0.79 MMT) in the Siberia FD.

Crop 2013 Estimate
There is no official estimate of Russia’s potato crop in 2013 and the Russian Ministry of Agriculture follows the potato harvest progress in agricultural enterprises only. In 2013, the weather was not favorable for the potato crop as a cold and rainy spring in Central European Russia delayed potato planting, impacting yields. Also, very heavy rains in September all over European Russia postponed harvesting, and in some provinces even made machine harvesting impossible (i.e. harvesters could not move in the fields). While the potato harvest is typically over by the end of September, this year it has continued through mid-October. As of October 28th, 2013, agricultural enterprises harvested 3.4 MMT of potato from 178,600 hectares (which is 93 percent of planted area). This is 17 percent lower than potato production in agricultural enterprises in 2012 (4.1 MMT), and 19 percent lower than in 2011 (4.2 MMT). There are no estimates of potato production in household backyards and in private farms, and it is possible these smaller farms were not as impacted by the rainy weather at harvest. Assuming this, FAS/Moscow estimates Russia’s total potato production in 2013 at 28.3 MMT, which will be close to the last 5-year average of 28.7 MMT (the average includes the low 2010 crop of 21.1 MMT).

Potato marketing
Official Russian statistics (Rosstat) provide data on so called “realization” or marketing data by agricultural enterprises. This data shows what percentage of production by enterprises is marketed, and this includes the following channels of distribution: sales to processors, to wholesalers, to the state (federal and municipal) reserves, to farmers’ markets, through their own retail outlets, and distribution as “in-kind” payment to workers. These marketing statistics show a steady increase in the percentage of production of these modern agricultural enterprises that enter marketing channels.

There is no data on marketing of potatoes by households or private farmers, which still produce the bulk of the potato crop in Russia. Depending on the region, potatoes produced by private households is either sold through farmers’ markets (if production is close to metropolitan areas), or consumed at home (households in rural territories).
The Russian State Statistical Service (Rosstat) calculates annual balances (PSDs) for potatoes (Table 1). The total consumption of potatoes in Russia has been decreasing in the past two decades, not only due to lower food use, but even more so due to decreasing industrial consumption. (Note: industrial consumption is a term used by Rosstat, and includes non-food use, as well as potatoes that are further processed). Industrial consumption/use of potatoes in Russia reached a maximum of 18.0 MMT in 1996, and the dropped to 11.2 MMT in 2006 and 2007, before recovering somewhat and by 2012 reaching 12.6 MMT annually. While in the first half of 1990s the bulk of industrial consumption of potato was in the form of non-food alcohol, this has shifted dramatically and now more of the industrial use is in value-added food products, mostly snacks (chips). Food consumption of potatoes reached a maximum of 18.8 MMT in 1993 as the collapse of the Soviet Union, and the severe economic crisis, resulted in higher consumption of a lower-cost source of calories, and one that could be produced by household/backyard farms. After this period, and with the opening up of the Russian economy, greater access to a variety of foods and higher incomes, potato food consumption fell. Since the beginning of the 2000s, potato consumption has largely stabilized at 15.0 – 16.0 MMT.

The Russian Food Security Doctrine has set a target of 95 percent self-sufficiency in potato production in Russian. In 2012, domestic production minus losses accounted for 97 percent of both domestic industrial and food consumption, surpassing this goal.

Table 1. PSD for potato

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<td>48,13 5</td>
<td>50,99 0</td>
<td>42,63 2</td>
<td>48,91 1</td>
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Source: Rosstat. 5-year averages are calculated based on Rosstat annual data.

**Chart 5.**

![Industrial and Food Consumption of Potato in Russia](image-url)

Source: Rosstat

Although food consumption has remained steady in recent years, there has been a marked shift away from so-called “home-use” of potatoes (i.e. direct consumption by households for their own use) and a greater increase in use by restaurant and catering and other outlets. Rosstat publishes a per capita...
“home-use” domestic consumption number and it shows dramatic declines during Soviet times, and a more gradual decline in recent years. For example, in metropolitan areas this home-use per capita number has fallen from 109 kg per year in 1980 to only 60 kg in 2012. In rural areas the decline is even sharper and the per capita potato consumption there has decreased from 161 kg in 1980 to 75 kg in 2012. This is primarily due to the availability of a greater range of foods available, and a shift towards more eating outside of the home.

Chart 6.

![Per Capita "Home Use" Consumption of Potato, Kilograms](image)

Source: Rosstat

**Prices**

Average prices of potatoes have steadily been increasing, and at the end of 2010 potato prices spiked at 28.94 rubles per kilogram (the year of severe drought and low potato crop). However, by the end of 2011, the retail price of potatoes dropped to 14.26 rubles per MT. In 2013, retail prices began increasing on expectations of a poor potato crop in Russia. Thus, as of mid-September 2013, the prevailing retail prices by federal districts varied from 15.24 rubles ($0.47) per kilogram in the Volga Valley Federal District to 34.50 rubles ($1.06) per kilogram in the Far Eastern Federal District (Table 2).

| Table 2. Potato Retail Prices by Federal Districts, Rubles per Kilogram |
|---------------------------------|-----------------|-----------------|-----------------|
| Central FD                      | 12.61           | 16.88           | 133.9           |
| North Western FD                | 14.03           | 16.72           | 119.2           |
| Southern FD                     | 13.64           | 21.66           | 158.8           |
| North Caucasus FD               | 13.98           | 23.13           | 165.5           |
| Volga Valley FD                 | 11.29           | 15.24           | 135.0           |
| Ural FD                         | 18              | 21.15           | 117.5           |
| Siberia FD                      | 19.82           | 27.88           | 140.7           |
| Far Eastern FD                  | 27.1            | 34.5            | 127.3           |

Source: Ministry of Agriculture
Trade in Potatoes
According to Rosstat balances, since 1990 the share of imports in the total supply of domestic potatoes varied from 0.1 percent in 1995 (domestic production was 39.9 MMT) to 2.63 percent and 3.15 percent in 2010 and 2011 respectively (domestic production in 2010 was the lowest since Russia’s independence).

Chart 8.
In CY 2012 Russia imported 452,748 MT of potatoes, including 22,095 MT of seed potatoes and 430,652 MT of table potatoes. In the first 8 months of 2013, Russia imported 421,945 MT of potatoes, which is 4 percent less than in the same period last year. However, imports of seed potatoes actually increased by 12 percent to 23,165 MT, compared to the same period last year.

In 2012 the major suppliers of table potatoes to Russia were Egypt (81,308 MT), Azerbaijan (58,609 MT), China (51,547 MT), France (42,092 MT), Netherlands (40,425 MT), Saudi Arabia (38,403 MT), Israel (26,490 MT), Pakistan (21,253 MT), Germany (20,242 MT), and Finland (18,810 MT). These countries accounted for almost 93 percent of total imports. Imports of table potatoes from the United States in 2012 were only 2,251 MT, or 0.5 percent of the total.

Chart 9.

__3__ Imports do not include shipments of potatoes from Belarus, one of the largest potato producers among the former Soviet Union republics. Before the creation of the Customs Union (Russia, Belarus, Kazakhstan), most trade in potatoes between Russia and Belarus was not registered because of the free trade zone between the two countries. After the creation of the Customs Union, Russian Customs Service stopped publishing all data on trade between the two countries. Belarus export data however, shows shipments of nearly 50,000 MT each year.
The major suppliers of seed potato to Russia in 2012 were Netherlands (12,059 MT), Germany (4,012 MT), Finland (2,971 MT), United Kingdom (2,025 MT), Poland (700 MT), and Czech Republic (200 MT).

Source: GTA
Import Requirements

Import Tariffs
Imports of seed potatoes (HS code is 0701 100) is duty free. Import of all other potatoes, including potato for starch production (HS code 0701 901), “new” potatoes imported from January 1st through June 30th (HS code 0701 905) and other table potato (HS code 0701 909) are subject to 13.3 percent import duty. The basic VAT for potatoes is 10 percent, applied at retail.

Variety Registration
In order to import planting seeds, varieties/hybrids of planting seeds shall be registered in the Russian Register of Planting Seeds after tests in the specialized experimental stations on the territory of the Russian Federation. These tests may take up to 3 years, and shall be conducted in zones for which the seeds are recommended, since there are many very different climate and soil zones in Russia. The application for registration and the examination and registration of new planting seeds is under the authority of the Commission on Examination and Protection of Selection Achievements at the Ministry of Agriculture of the Russian Federation [http://www.gossort.com/]. The State Register of varieties allowed for use on the territory of the Russian Federation is on the site of the Commission: [http://www.gossort.com/ree_cont.html].

SPS Requirements
After a potato variety is registered in Russia, imported potatoes shall meet all Russian phytosanitary requirements. Russian requirements for imports of commodities of plant origin are stipulated in the Order of the Ministry of Agriculture #456: “On the approval of quarantine requirements for imports of quarantine products to the territory of the Russian Federation, their storage, transportation, processing and use”, issued December 29, 2010 (FAS/Moscow GAIN report [Russia Updates Quarantine Regulations of Imported Products_1-18-2011.pdf]). For every country these requirements specify the list of diseases and pests that shall not be present in the plant products that are imported from the country to the Russian Federation. Russia does not require import quarantine permits, but all imported potatoes (both table and planting seeds) are subject to a 100 percent phytosanitary check at the customs border of the Russian Federation by specialists of the Russian Federal Service for Veterinary and Phytosanitary Surveillance at the Ministry of Agriculture (VPSS) (FAS/Moscow GAIN report: [VPSS Strengthens Border Quarantine Check_8-22-2011.pdf]).

As far as planting seeds and planting materials are concerned, the Russian plant and animal health authorities require that these imports shall “originate from zones free from quarantine pests dangerous for the importing country”, i.e. Russian Federation. The confirmation that a zone of production is free from quarantine pests shall be proved by documents sent officially to the Russian plant and animal health authorities, and the terms of imports of planting seeds from these “quarantine free zones”, according to these authorities, shall be agreed upon by the technical phytosanitary specialists of the country-exporter and Russia.