

Global Economic Policy Lab

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# Return to Agrarianism: Russian Agriculture in the 21<sup>st</sup> Century

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- The 2014 devaluation of the rouble and imposition of sanctions spurred domestic production, and in 2016 Russia exceeded Soviet grain production levels – becoming the world's largest exporter of wheat for the first time since the Soviet era
- Russia's agricultural industry looks well poised to benefit from climate change in the coming decades as the country's arability increases - particularly in Siberia
- Politically, a potential 'Peronist' turn in Russian politics in the coming years should not be discounted, given the domestic tensions a rising agricultural export sector may create, as in the case of Argentina.
- As global land availability declines – particularly in arid regions such as the Middle East and North Africa – and Russia's increases, and as China continues to grow as a key export market, agricultural exports can play an important role in Russia's future
- GEPL forecasts a short-term (1-3 years) 5% reduction of wheat production due to the recent export tax, as well as a long-term (3-10 years) 6% yearly increase in production owing to climate change creating favourable cultivation conditions in northern Russia

## Overview

### Climate Change, Agricultural Exports, and New Duties

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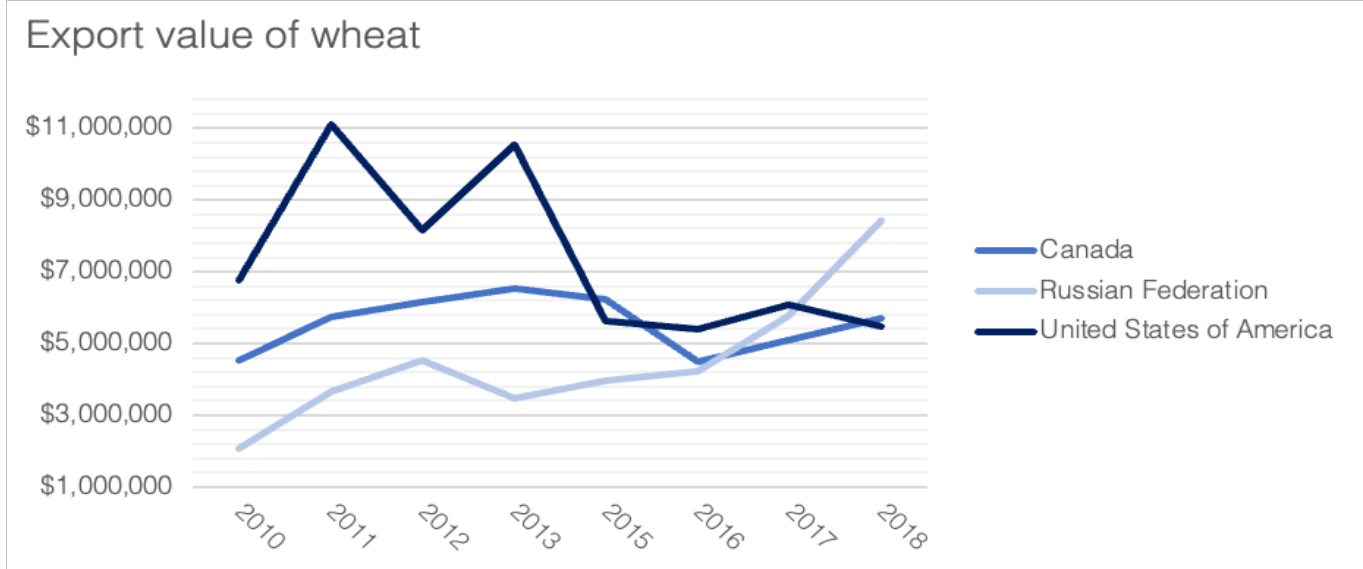
Russia is the second largest exporter of crude oil in the world after Saudi Arabia. The country also boasts the world's largest natural gas [reserves](#) (24% of the world's total). In [2019](#), the Kremlin exported USD 121 billion worth of oil, which is equal to 12% of the world's total oil exports. Given that the oil and gas sectors make up over one third of total government revenue, Russia is often depicted as a petrostate and an energy powerhouse. Only a few would call Russia an agricultural powerhouse. However, as illustrated by Table 1, Russia is a major global exporter and producer of agricultural products, especially within the field of grains.

**Table 1: Russia's global role in selected agricultural commodities (2019)**

Commodity	Rank by export	Rank by production
Wheat	1	3
Buckwheat	1	1
Rye	6	3
Sunflower seeds	3	1
Barley	2	1
Oats	4	1

Source: [FAOSTAT](#), GEPL Calculations

Russia became a net exporter of food products for the first time since the collapse of the USSR. In 2020, the country [exported](#) USD 30.7 billion and [imported](#) USD 29.7 billion worth of food products. This growth can be partially explained by the country’s booming wheat sector, whose export dollar value has tripled in the last 10 years. Rising export dollar values allowed Russia to overcome Canada and the US as the world’s leader in [wheat](#) exports, controlling over 16% of the global market in 2019.



Source: [FAOSTAT](#), GEPL Calculations

This trend is likely to continue, as demonstrated by President Putin’s ambitious goal of achieving an ambitious USD 45 billion worth of agricultural exports in just three years. However, food prices are on the rise in Russia following the COVID-19 pandemic, prompting Putin to introduce a [permanent](#) tariff on wheat exports on 15 February 2021 in order to protect domestic prices. These new [export duties](#) started with a EUR 25/t (USD 30.33/t) levy on wheat shipments, which will be raised to EUR 50/t from 1 March. Similar duties for corn and barley exports are due to follow from mid-March onwards. These fixed duties are set to be replaced by floating tariffs from 2 June that will continue into the new 2021-22 marketing year. This is a controversial move that might achieve the desired result of keeping food prices under control in the short term, though in the long-run, agricultural producers will be forced to cut their output quotas due to reduced demand and loss of access to international markets.

***How did Russia become a Global Agricultural Leader?***

Russia has experienced large gains in terms of agricultural production and trade balance since the 1990s. Even in the 2000s, Russia faced a significant [trade deficit](#) in agricultural and food products. The major shift occurred in 2005 when Moscow intensified its agriculture support programs in an effort to boost domestic agricultural production by subsidising and modernising the sector. Some of the most notable examples include: the 2006 National Priority Project; the 2008-2012 State Programme for Development of Agriculture; and the [2013-2020 State Programme for Agricultural Development and Regulation of Agricultural Products, Raw Materials and Food](#), which allocated RUB 1.5 trillion into agro-industrial and livestock support.

In 2014, Russia responded to EU sanctions after the annexation of the Crimea by implementing a [ban on imports](#) of selected agricultural products, raw materials and foodstuffs originating from EU countries that imposed sanctions on Russia. Most observers agree that this was a strategic import-substitution and protectionist move to boost domestic production of agricultural products. Of course, these measures worked to the detriment of the low-income stratum of the population, which was hit by a [consumer price index](#) increase of 15.5% and 7% in 2015 and 2016 (OECD average, for instance, was 0.7% and 1.2% in 2015 and 2016).

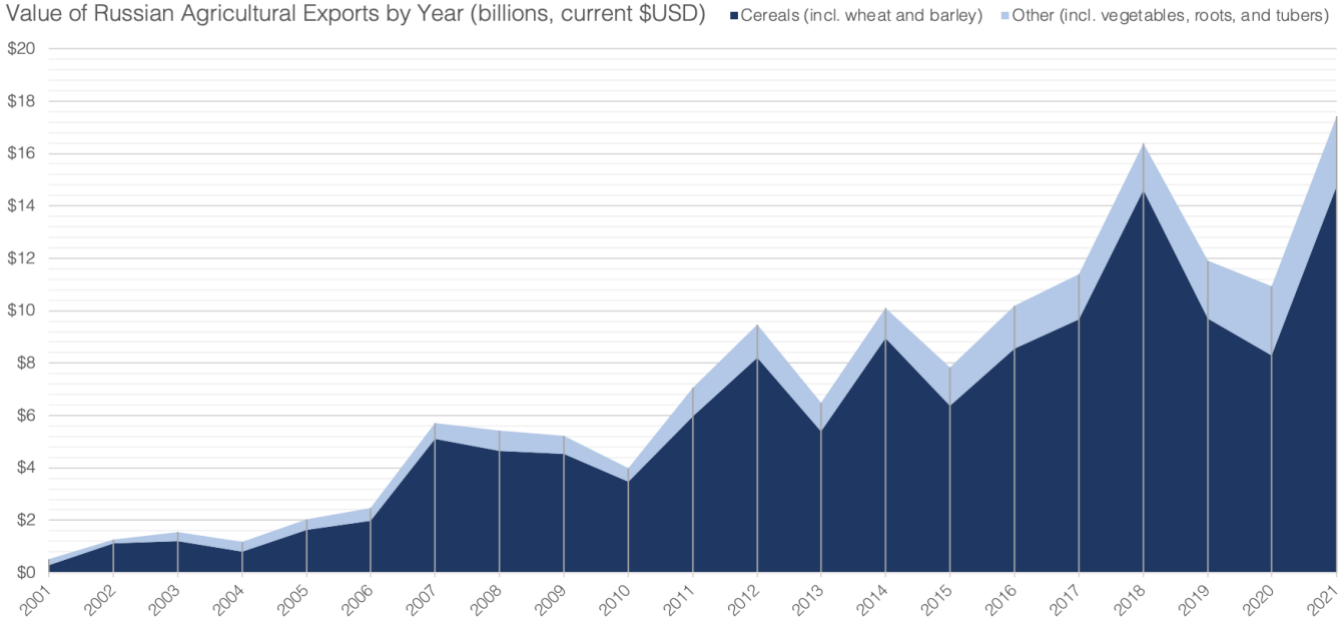
It is also worth mentioning that Russia, perhaps owing to favourable weather conditions stemming from climate change, experienced one of the greatest harvests in their modern history. This harvest coincided with a surge in global food prices due to the aggregate supply and demand shocks caused by the pandemic. Rising prices highly favoured Russian agricultural exports, which were already being boosted by a weak ruble.

## Trade Flows and Recent Developments

Russia’s agricultural exports have grown steadily over the past 20 years, both in absolute terms and as a share of the country’s GDP. Most of this growth has come after 2014 – a year which coincided with a major decline in world oil prices, a domestic financial crisis, and with a series of economic sanctions imposed on Russia for its annexation of the Crimea. Russian agricultural exports peaked at around USD 16 billion in total value in 2018 – the first year since the Soviet era in which agricultural exports accounted for over 1% of Russia’s GDP. Cereal products, such as wheat, barley, and rye, consistently make up for around 80 to 90% of all Russian agricultural exports. Recent growth, however, can also be linked to a variety of oil seeds and beans, particularly soya beans, that have become popular exports to the Chinese market. Despite setbacks caused by the COVID-19 pandemic, agricultural exports are expected to climb back up above 1% of GDP in the coming years. This recovery has the potential to increase even further in the long-term, given the rise in agricultural exports to China.

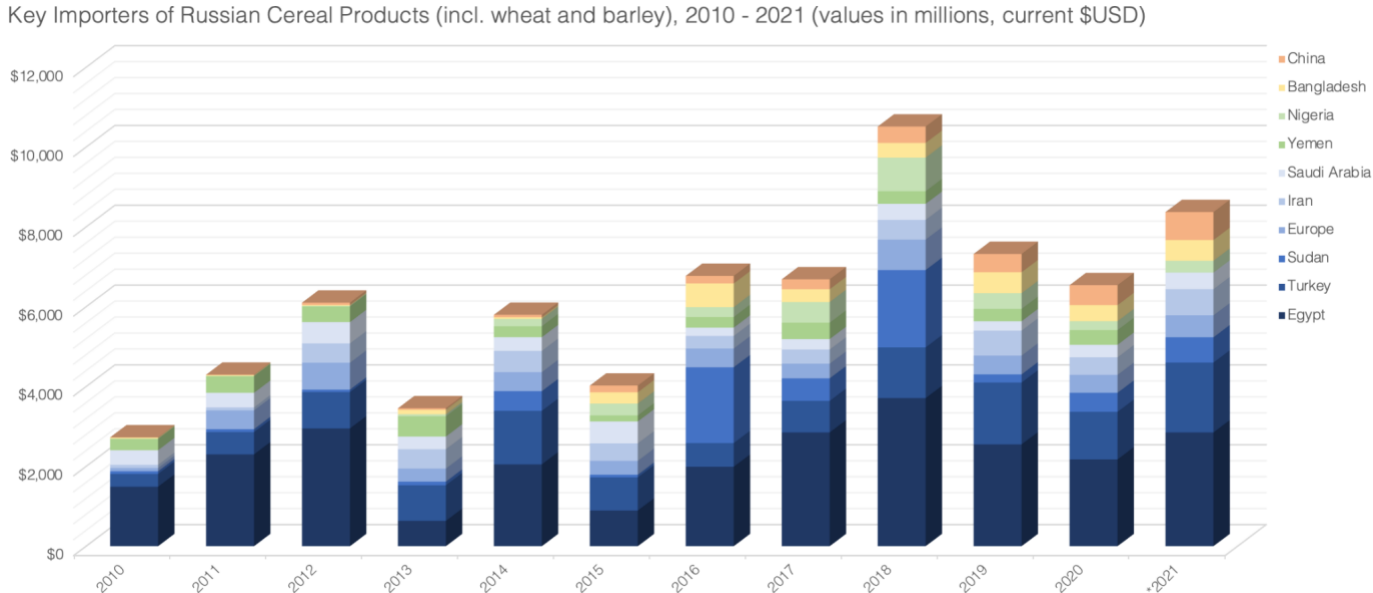


Source: IMF, OEC, GEPL Calculations



Source: OEC, GEPL Calculations

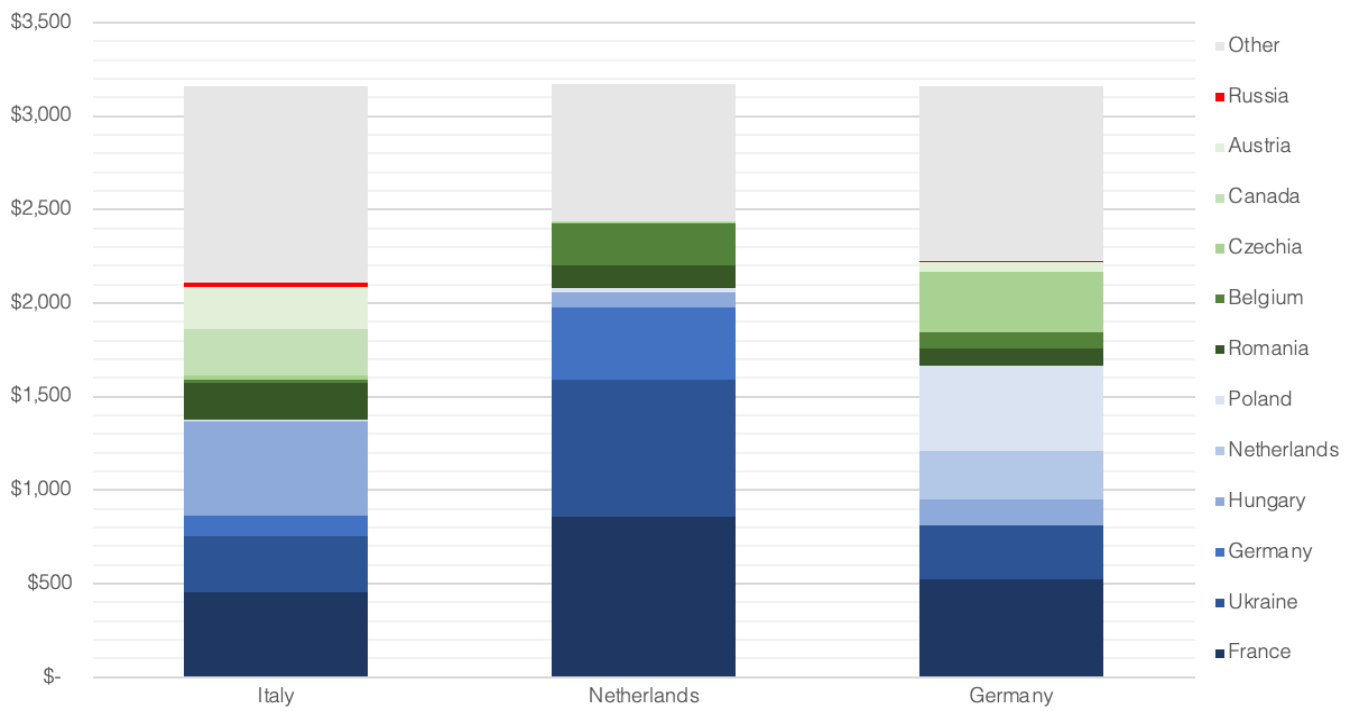
Russia’s agricultural exports are heavily concentrated in arid regions with little arable land. Approximately 80% of all Russian agricultural exports went to Africa and Asia in 2019, more than half of which was concentrated in North Africa, the Sahel Region, and the Middle East. Turkey and Egypt – both important geopolitical and strategic allies for Russia – accounted for nearly one-third of all Russian agricultural exports between 2010 and 2020. China has also grown in stature as an importer of Russian agricultural goods in recent years and is expected to be a key emerging market for Russia in the coming years as their trade relationship continues to improve.



Source: OEC, GEPL Calculations

Despite their continued importance as a trading partner for Russia, the EU makes up for a relatively small proportion of Russian agricultural exports. All of Europe (including the UK) accounted for just under 5% of all exports between 2010 and 2019 – almost 6% of all Russian agricultural exports went to Sudan alone during the same period. The vast majority of agricultural exports to Europe come from within the EU, where member states pay little to no duties and have established business and economic ties with neighbouring states. The Netherlands, for example, is more reliant on France and Ukraine for their agricultural imports, while Germany imports heavily from Poland and Czechia (in addition to France and the Netherlands). This trend is unlikely to change, especially as Russia looks to other, more lucrative markets in China and elsewhere in Eurasia.

Value of Cereal Exports to Net Agricultural Importers, 2019 (millions, current \$USD)



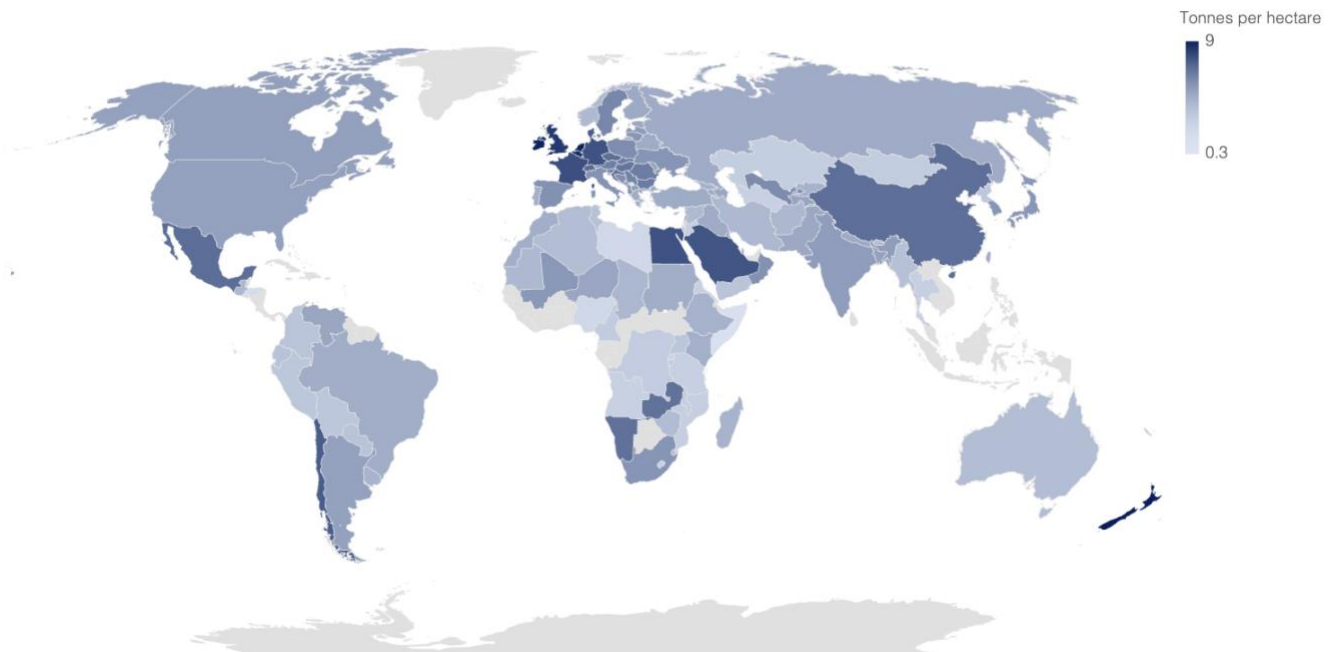
Source: [OECD](#), GEPL Calculations

## Opportunities and Negative Trends

### **Arable Land**

Russia is home to 7.46% of the world’s total [arable land](#), which is the fourth biggest share globally after the US, India, and China. Nevertheless, Russia’s average wheat [yield per hectare](#) lags well behind other major producers. The country produces only 2.7 tonnes of wheat per hectare – considerably less than the Netherlands, Argentina, or China, which produce 8.8, 6.2, and 5.4 tonnes per hectare respectively.

Global Wheat Yields, 2018



Source: [UN Food and Agriculture Organization](#), GEPL Calculations

This discrepancy is further aggravated by the fact that Russia loses up to two million hectares of soil due to [degradation](#) and lack of nutrients each year. Russia has, in recent years, implemented a large scale [reclamation program](#) to restore soil fertility. Each project (193 completed by 2020), however, only reclaims 200 to 7000 hectares of land back into economic circulation. Given that an estimated 15% of [Russian soil](#) has been degraded, it will take decades before the full impact of these projects will be felt in the economy.

### ***Risk of a Peronist Turn?***

Consequently, despite recent strides Russia is not expected to become an agricultural power for quite some time, given its reliance on food imports and its [underdeveloped](#) food processing industry. However, recent attempts at stabilising food prices through [taxes](#) and [export quotas](#) – with Russian inflation reaching 5.8% as of March 2021 – nevertheless bear more than a passing resemblance to recent developments in Argentina, which, in January 2021, has seemingly reverted to earlier policies of [food protectionism](#) by restricting exports. These measures, targeting food items such as corn, were enacted so as to bring down livestock feed costs and the prices of other food items and improve domestic production. This has come following projections that inflation will reach 50% this year, as the government tries to decouple domestic food prices from soaring export prices. While past administrations have interfered similarly – and often in a far more heavy-handed fashion – numerous times in the past, doing so now is likely to foment social unrest due to the formidable nature of Argentina’s agricultural sector and its centrality to currency stability.

In Argentina’s case, this economic dynamic has been due to the historical [incompatibility](#) of agricultural and industrial interests in the country. The former is dominated by a small segment of the population due to it not being particularly labor-intensive, benefits from being a competitive advantage and is Argentina’s

main source of USD, whereas the latter has historically been characterized by protectionism and suffers from considerable inefficiencies as a result of its legacy of import-substitution. Thus, when taxes or quotas are imposed on the agricultural sector – given that the urban constituency is often favored by politicians – the economy begins to underperform as inflation rises and food production diminishes.

Russia's political economy is not directly comparable to the Argentinian case for several reasons. While [agriculture](#) constitutes 10% of Argentina's GDP, it employs 14% of the working population and accounts for 70% of foreign currency obtained through exports. [Russian agriculture](#), on the other hand, accounted for only 3% of GDP (value added) in 2019, and it remains primarily reliant on energy exports for its foreign reserves. Yet, if "Peronist" policies – designed to curb inflation and improve domestic production at the expense of exporting sectors – can be expected to become increasingly common policy measures, then Russia's economic and social stability in the near future can no longer be taken for granted given the immense political implications this would have on the purchasing power of societal elites. While a somewhat remote risk, this could become especially salient if, for example, restrictions on the import of luxury goods (as Argentina has done with regard to [car and liquor imports](#)) are enacted so as to prevent the depletion of Russia's foreign currency reserves, as this would likely lead to much discontent with the current regime.

### ***Potential for Growth***

Despite these concerns, Russia still has great potential. It was estimated in 2017 that around 100 million hectares of farmland (40% of total arable land) was being [left idle](#) or abandoned in the country. A combination of corruption and inefficient farming methods in the post-Soviet era has led to a 30% and 20% decline in the [respective amount of land](#) used for orchards and pastures. Tens of millions of acres traditionally used for small-scale or subsistence farming are left [neglected](#), with even their ownership under question according to the Russian Academy of Sciences. Meaningful land reform enacted by the Kremlin could lead to rapid growth in agriculture. This reform, owing to Russia's immense landmass, could also offset the effects of soil degradation as reclamation programs continue.

Russia also stands to gain from climate change. Longer warm seasons and higher temperatures could open up new – albeit less fertile – farmland in the country's northern federal subjects. This projected boost in crop production lies in contrast with the general trend in the EU, US, and India, whose arable land is [declining](#) as a result of intensifying urbanisation and [rising temperatures](#) over the past years. That said, if climate change could benefit Russia's northern regions, it will certainly affect the country's southern ones. It is estimated that Russia is warming [2.5 times faster](#) than the rest of the world. The possibility of a drier climate in Russia's Southern and North Caucasian Federal Districts will have a [negative impact](#) on crop yields and livestock productivity. Climate change is expected to increase the scarcity of water resources and other risks associated with extreme weather events. This will indirectly affect the availability and prices of food domestically and in international markets, which will detract from Russia's export revenue.

### ***Agriculture as a Means of Leverage***

Finally, it is worth noting the role of agriculture as a policy mechanism in Russia. The country's leadership has already displayed an understanding of how to leverage its increasingly strong position in agricultural exports to achieve short-term aims. In 2010, following a series of wildfires and droughts that nearly ruined



Russia's grain harvests, Putin banned [wheat exports](#) to safeguard the domestic food supply. Global wheat prices more than doubled as a result. High prices shook the fragile political balances in Syria, Morocco and Egypt, whose populaces all rely on bread for their daily caloric intake. These shortages helped fuel the [Arab Spring uprisings](#), which eventually pushed millions of migrants toward Europe – much to the Kremlin's delight.



Source: [Fred Economic Data](#), GEPL Calculations

Even though the ban on exports ultimately hurt the incomes of domestic producers, the notion that Russia will again leverage its agricultural exports to achieve political and economic aims should not be overlooked. On 15 February 2021, Russia launched a new wave of [export duties](#) in the grains sector in order to protect domestic supply and stabilise food prices following the COVID-10 pandemic. Whether or not these measures will restrict Russia's export potential and impact global wheat prices, however, remains to be seen.

## Measuring Growth

According to the [latest projections](#) from the US Department of Agriculture, Russia is expected to export about 39 million metric tons of wheat during the 2020-21 marketing year. This number is up from 34.5 million in 2019-20 and 35.9 million in 2018-19. This projection also comes after the country's production in 2020-21 is estimated to have turned out 85.3 million metric tons, Russia's second-highest level on record. The International Grain Council (IGC) [expects](#) that all-wheat harvested areas will decrease by 1% YOY in 2021-22 due to higher risks of winterkill in southern Russia; this, along with high domestic food prices as mentioned previously, means that there are clear incentives for the Russian government to invest in improving production. It has been reported, for example, that Russia is currently exploring measures for doubling its production of [durum wheat](#) by 2025 – a type of wheat that only constituted [5-8%](#) of world production in 2018, but is nevertheless an important input for other food items (e.g., pasta).

At present, wheat represents the 5<sup>th</sup> most profitable [commodity](#) export for Russia, earning Moscow USD 11 billion in 2018. As noted previously, the sector has been growing rapidly, and the dollar value of wheat export has [doubled](#) in the last 10 years. Furthermore, the [global price of wheat](#) has appreciated by almost 100% since the end of 2016, and climate change will favour agricultural production in northern Russia while at the same time affecting the arid lands of Middle-eastern and North African countries, both of which are reliant on Russian imports. As such, based on GEPL calculations, Russia's average production of 78 million tons of wheat per year in 2015-2020 suggests a forecasted short-term (1-3 years) 5% reduction of wheat production due to the recent export tax, as well as a long-term (3-10 years) 6% yearly increase in production owing to climate change creating favourable cultivation conditions in northern Russia. GEPL therefore expects that Russia's wheat production will reach 132 million tonnes by 2030. If Russia exports 80 million tonnes of wheat by 2030, which is equal to 60% of domestic production, the country could earn USD 16.5 billion a year by 2030, assuming a global wheat price of \$207 per tonne (average of last ten years).

This is a conservative estimate as demand and global wheat prices are likely to rise because of population growth. As such, in the long-run, agricultural exports could start competing with fossil fuel exports as a primary revenue earner. Oil and gas currently dominate the share of government export revenue; however, this sector has suffered a major hit during the COVID-19 pandemic and will likely experience more losses by the end of the 2030s when demand for oil is expected to decline.

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