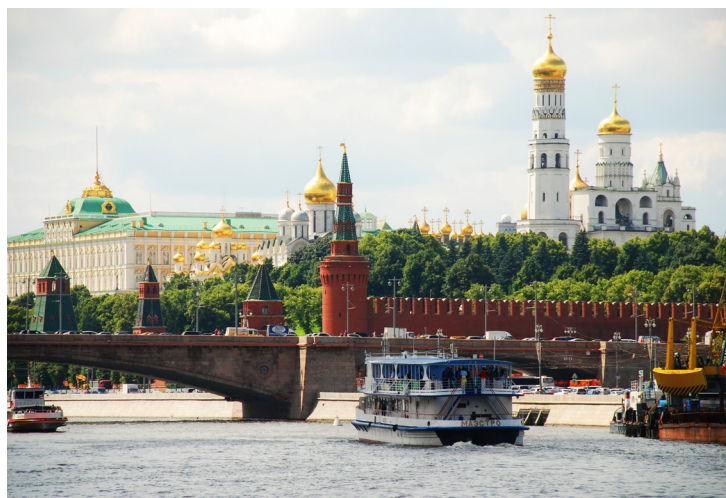
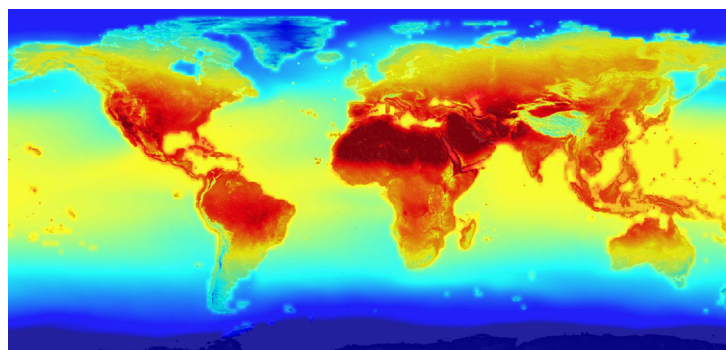


The Weaponization of Wheat

Climate Change and Russian Agricultural Power

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The Weaponization of Wheat Climate Change and Russian Agricultural Power

APRIL 2018

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The Weaponization of Wheat

Climate Change and Russian Agricultural Power

Climate change is often considered universally harmful. However, recent studies indicate that climate change is increasing Russia's wheat production, while reducing its competitors' relative share of the global market. At the same time, the demand for wheat in Asia, the Middle East, and North Africa is expected to rise significantly in response to demographic changes. The Middle East and North Africa, in particular, are already unable to meet their demand for wheat due to a lack of arable land. These regions will be increasingly reliant on the world's future breadbasket: Russia. The United States should expect Moscow to exploit this agricultural leverage to influence vulnerable countries.

Introduction

Climate change will significantly impact wheat production over the next 30 years. Not all countries, however, will be affected equally. Drought and severe weather will hurt low-latitude producers, while better growing conditions and expanded arable land will benefit high-latitude states.

Due in large part to climate change, Russian wheat production will increase substantially. This expansion, when combined with lower yields from traditional suppliers and Russia's proximity to major markets, will turn Moscow into one of the world's largest global exporters of wheat. Meanwhile, the importance of wheat as a global staple crop will grow as regions increase in population, urbanize, and adopt a western diet, further increasing wheat imports.¹

The United States should expect Russia to capitalize on its future wheat dominance to increase its global influence and undermine U.S. interests. While Moscow's focus will center on fostering cooperation with new trading partners, it will likely also use wheat as a coercive tool. Asia and the Middle East and North Africa (MENA) are most vulnerable to growing Russian wheat influence due to their rising wheat consumption and insufficient domestic production.

The Impact of Climate Change on Russia's Wheat Competitors

Increasingly arid and severe weather at lower latitudes will hurt wheat cultivation for the majority of current producers.² Inversely, warmer temperatures will aid northern producers—namely Russia and Canada—by causing greater rainfall and longer growing seasons. Previously barren or cost-ineffective land in northern latitudes will become arable and profitable for wheat production.³ Increasing temperatures also will melt permafrost, releasing carbon dioxide that directly benefits crop growth at all latitudes, while raising temperatures in the northern regions of Russia, Ukraine, China, and Canada.⁴

Rising temperatures in lower latitudes will impede crop yields by exceeding optimal growing conditions and increasing the occurrence of extreme weather events, such as seasonal drought and flooding. Three of the world's five largest wheat exporters—the United States, Europe, and Australia—will experience these climate trends, increasing the cost of their wheat production and lowering yield growth.⁵ China is the world's largest wheat producer, but it is a net importer due to its large population. Lingering questions about whether technological advances will enable China to adapt to climate change make the future of Chinese exports uncertain.⁶

- *The United States.* In 2015, the U.S. Department of Agriculture (USDA) predicted that the United States will face crop damage from climate change. Under scenarios of limited carbon emissions over the next 40 years, the United States will warm 1 to 2 °C. This is substantially faster than temperature increases over the past century, which were under 1° C.⁷ Rising temperatures will have major effects on agriculture, as crops are sensitive to small changes in temperature and precipitation.⁸ Temperatures that exceed optimum growing conditions put stress on resources, in particular water and soil, and increase incidences of natural disaster, including drought, flooding, and disease.⁹ Rising sea levels will disrupt agricultural transportation at ports, raising the price of U.S. wheat. From 2016 to 2017, the U.S. global wheat market share decreased from 15.4 percent to 14.2 percent. The U.S. share is further expected to decrease to 13 percent by 2027.¹⁰ Lower global prices caused by Russia's large wheat production also discourage U.S. farmers from growing wheat.¹¹ The price of U.S. wheat was \$60/ton higher than Russian wheat last year, which has caused traditional wheat producing states, like Kansas and Oklahoma, to shift toward crops where U.S. prices are higher, yet still competitive, such as corn.¹² Climate change is both reducing U.S. wheat production and creating economic incentives that further undermine the ability of the United States to challenge Russian exports.
- *Europe.* The USDA and European Commission (EC) predict that European wheat production will be strong, but limited in the future. Exports are expected to stay near current levels, decreasing from 20 percent in 2016 to 18.7 percent of the global market by 2027.¹³ However, Europe's potential for greater agricultural production will be limited. Yield growth will be difficult because of the higher occurrence of extreme weather events and limits on the productivity of existing land.¹⁴ Increasing the amount of land under cultivation also will be difficult due to urbanization, infrastructure growth, and afforestation initiatives that convert agricultural land to forests. As a result of these factors, utilized agricultural area in the EU decreased by 0.7 percent from 2011 to 2016.¹⁵ Agricultural land in the EU currently covers 45 percent of European territory, but arable land is expected to further shrink 3 percent by 2030.¹⁶ Crop yields between 2016 and 2027 will remain relatively constant. While northern production will increase due to better growing conditions, southern production will shrink due to water shortages and extreme weather events.¹⁷ These limitations mean that Europe is unlikely to challenge Russian wheat exports in the future.
- *Australia.* Australian wheat exports are projected to decline by 10 percent from 2016 to 2027.¹⁸ Australia's market share is expected to be undermined by Russia in regions like Southeast Asia due to climate change and high costs. After warming 1 °C from 1910 until

2005, Australia's temperature is expected to increase by more than 1.2 °C between 2005 and 2030.¹⁹ Increased overall temperature, extreme temperatures, and especially loss of rain will decrease the potential of Australian wheat yield.²⁰ Wheat yield will decline an average of .53 percent for every 1 percent decrease in rainfall.²¹ The Australian Export Grains Innovation Centre (AEGIC) reported that Australian production costs are much higher than Russia's.²² These costs are largely locked in by strong regulations on wages, working conditions, and standard of living.²³ Further, trade and infrastructure projects, such as China's Belt Road Initiative (BRI), will connect Russia to Southeast Asian markets.²⁴ Transportation was previously Australia's main advantage over Russia in Southeast Asia. Now, Australian exports will be increasingly threatened by Russia's larger wheat production, lower cost structures, and improving transportation infrastructure.²⁵

- *China.* China is the world's largest wheat producer, but it is a net wheat importer because of its growing population.²⁶ Due to climate change, more frequent extreme weather events, heat stress, and loss of arable land will hurt wheat production.²⁷ Beijing will likely be able to meet internal demand in the future due to technological innovations that will improve crop yield, although this outcome remains uncertain because of questions concerning the full effect of climate change on China's wheat production.²⁸

European, Australian, and U.S. wheat market shares are expected to fall by 2.4 percent, 1.3 percent, and 2.8 percent respectively between 2016 and 2027, due to declining production growth, cost structures, and the re-emergence of the Black Sea as a major player in the global wheat market. The United States and Australia have traditionally supplied regions like the Middle East and Asia. Because of the decline in U.S and Australian shares, these regions need a new export partner to satisfy their growing wheat consumption.²⁹ Additionally, China's recent surge in imports also creates a new market for wheat. Russia will enlarge its share of the market in these regions as its competitors lose their advantages in wheat production.

Russia as Tomorrow's Bread Basket

Russian production will benefit the most from climate change. Its large reserves of newly arable land will give it significant advantages over other northern producers, such as Ukraine and Canada. Russia's large harvests and proximity to major markets gives the country a decisive cost advantage that will result in Russia gaining a large share of the global wheat market.

Benefits of Climate Change for Russian Wheat

Climate change will be a net benefit for Russian wheat production. In all states, southern regions will face challenges to agricultural production, while northern regions will benefit.³⁰ Thus, even Russia's southern wheat production will likely suffer to an extent from climate change. However, rising temperatures will melt permafrost and lengthen growing seasons, increasing

arable land and crop yields in Russia's northern territories. Russia's reserves of dormant agricultural land outnumber those of any wheat producer on Earth. Winter and spring wheat production, improved by a favorable climate, will more than offset losses in southern production.³¹ Questions remain about Russia's ability to reduce predicted decline in its main wheat growing regions in southern Europe, but regardless, Russia will meet a substantial share of the world's increasing wheat demand because of increased productivity in northern land for all seasons and increased arable land.³²

- *Longer growing seasons.* Temperatures in Russia's wheat production regions are expected to increase by 1.8 °C by the 2020s and up to 3.9 °C by the 2050s.³³ Higher temperatures, especially during the winter, will result in longer growing seasons as agricultural areas are exposed to ideal temperature and moisture levels for longer periods of time.³⁴ Growing seasons and frost-free days may increase by 10 to 20 days per year.³⁵ Increased duration of optimal growing conditions leads to a higher quality product and larger output. The longer growing season is in part due to permafrost melting, which releases carbon dioxide into the atmosphere. Carbon dioxide directly aids plant growth and creates higher long-term temperatures.³⁶ Lioubimtseva, et al. (2015) credit greater Russian production to higher winter temperatures, longer growing seasons, and increased carbon dioxide levels.³⁷
- *More arable land.* Climate change also will expand the amount of profitable arable land in Russia. Previously, some land was too far north for efficient production. From 1987 to 2000, 32 percent of grain producing areas fell into disuse in Russia, Ukraine, and Kazakhstan, because the land required too much investment to grow crops and yields generated too little revenue.³⁸

Technological and climatic improvements, however, will increase the profitability of some of Russia's past agricultural land. Compared to Russia's 79 million acres of current wheat acreage, putting it among the top five largest producers globally, potentially 50 million more acres of land could return to production.³⁹ Russian grain production has been projected to increase by 40 Mt from the growth in arable land alone.⁴⁰ The growth in land under cultivation will take place especially in Siberia, making the region essential to Russia's future wheat production.⁴¹ Climate change reduces arable land in most of the world and expands this key resource in Russia, increasing Russian control over the wheat market.⁴²

Russia's recent agricultural production gives us a glimpse of Moscow's increasing wheat power. Russia emerged as the world's largest wheat exporter in 2017.⁴³ Production rose by 11 percent to 134.1 million tons, outperforming USDA predictions.⁴⁴ Russia's wheat production exceeded its record of 127 million tons from 1978.⁴⁵

In 2016, the USDA announced that the former Soviet Union, led by Russia, is the fastest growing wheat exporting region. Global wheat market shares, 12 percent in the 1990s, are predicted to reach 31 percent by 2027.⁴⁶ Depressed U.S. and Australian harvests contributed to the expansion of Russian wheat exports. Russia sold wheat to half the world, including Turkey,

Indonesia, and Egypt.⁴⁷ In December of 2017, the U.S. Wheat Associates Egyptian office closed due to Russian dominance of the Egyptian wheat market.⁴⁸

Compounded by production losses for its competitors, Russia is poised to seize control of the wheat market over the next decade.

Additional Reasons for Russian Seizure of the Wheat Market

Russia's growing share of global wheat exports is dependent on more than just climate change. Geographic, technological, and economic factors will also hasten its control of the global wheat market. Russia benefits from geographic proximity to large markets in several key regions. Further, technological and economic changes have benefitted Russian exports by increasing production and making its wheat exports competitive on the global market.

- *Lower transportation costs make Russian goods price competitive.* Russia's geographic position allows cheap and easy transportation of wheat to important regions. Russia is situated in Eastern Europe, allowing easy land transportation to Western Europe. Russia's Black Sea border gives it access to the Middle East and North Africa.⁴⁹ In Asia, trade and infrastructure projects, like China's BRI, are overcoming Russia's traditional transportation obstacles in the region. The BRI connects Moscow to China and Southeast Asia, opening Russian wheat exports to Asia.⁵⁰ Current plans for the BRI show it transiting through the heart of Russian wheat producing lands and Moscow. Additionally, Russia's increased production and low cost structures can reduce world grain prices by more than three percent. This price reduction would convince farmers in other states to reduce wheat production further and use their land to grow crops that demand a higher price.⁵¹ Russia's share of the wheat market would thus grow even larger.
- *Wheat quality makes Russian crops more desirable.* The quality of wheat is measured by protein content, which affects taste.⁵² The often low quality of Russian wheat reduces its suitability for baking and its desirability. Russian wheat is typically of lower quality due to less moisture and poorer soil quality relative to other producers.⁵³ Additionally, Russian agricultural research has traditionally focused on higher yield rather than higher quality.⁵⁴ Asia has often rejected Russian wheat in favor of higher quality imports from Australia. Climate change will improve the quality of Russian crops by providing better growing conditions.⁵⁵ More importantly, new milling techniques that blend low and high quality grains allow lower quality Russian wheat to mimic higher protein wheat in taste.⁵⁶ This development will increase the reach of Russia's wheat exports.⁵⁷
- *Economic policies improve Russia's agricultural industry.* Since the late 1990s, Russia has more than doubled its wheat production.⁵⁸ The 1998 Russian financial crisis caused Russia to cut agricultural subsidies and devalue the ruble. The Kremlin's decision to push privatization by allowing land to be bought and sold freely set off a wave of investment and farm expansion.⁵⁹ The devaluation of the ruble benefitted agriculture by making domestic products price competitive relative to imports. As a result, Russian agricultural imports fell 50 percent within a year as exports increased exponentially.⁶⁰

- *Lower oil prices depress Russian wheat prices.* Because Russia is a petro-state, low oil prices are historically met with liberal and business-friendly economic policies, like privatization.⁶¹ When the government faces a deficit, it cuts spending on farm subsidies and sells land freely to reduce the deficit. These policies cut government costs and encourage investment.⁶² Although harmful to the Russian economy as a whole, low oil prices benefit agriculture. In the past, these policies were essential to Russia's agricultural resurgence.⁶³ Low oil prices also depreciate the ruble, which increases the attractiveness of Russian wheat for outside buyers.⁶⁴ If oil prices remain low in the long run, as some predict, Russian wheat exports will rise.⁶⁵

Russia holds several advantages in wheat production. Combined with climate change, these advantages will make Russia the world wheat leader in the next decade. Moscow will use its rising wheat power to increase trade ties with states that rely on it for wheat imports, deepening Russia's relationship with these trade partners. In addition, influence over exports may provide Moscow with both a carrot and a stick to induce states to adopt policies in line with Russian interests.

The Geopolitics of Wheat

Russia will use its wheat exports to gain greater influence in Asia and the Middle East and North Africa (MENA). Russia can exploit its wheat dominance in these regions due to their low domestic wheat production and connection to Russia through geographic proximity or efficient trade routes. Moscow's dominance in these wheat markets will give it the ability to affect prices of the much-needed staple crop and use trade to shape regional relationships. In Asia, Russia will use wheat exports to compete with China for greater influence in Southeast Asia. In MENA, Russia will broaden its commercial ties to project Russian power at the expense of the United States.

Sources of Vulnerability to Russian Wheat Dominance

Beyond low wheat production, states that will be most vulnerable to Russian wheat dominance share a number of characteristics. They display demographic trends that favor the consumption of wheat and geographic locations that advantage Russian exports through reduced transportation costs.

- *Population growth and urbanization.* Population growth is associated with greater wheat consumption.⁶⁶ Urbanization also causes higher wheat consumption as workers have higher incomes and more limited leisure time compared to rural workers.⁶⁷ These factors cause greater consumption of wheat through wheat-based prepared and baked goods, known as the "Western diet."⁶⁸ States with population growth and urbanization increasingly require wheat, causing sharp increases in wheat imports. These demographic trends will open up new markets for Russian wheat.

- *Geographic proximity and transportation.* Regions that are geographically proximate to Russia are likely to buy from Moscow. In these regions, Russia has comparative price advantages due to the ease of transportation.⁶⁹ Russian trade also is expanding to regions where it previously was disadvantaged by a lack of proximity. In Asian markets, transportation costs historically have been the main impediment to Russian trade. Trade and infrastructure projects, like the Chinese BRI, are now decreasing those costs and will expand Russian wheat sales to the region.⁷⁰

Russia can increase its political presence in regions with these characteristics. While Europe is a region relatively secure from greater Russian wheat advantage, Asia and MENA are highly vulnerable to Russia wheat dominance.

Europe: Insulated from Russian Wheat Influence

Europe is relatively invulnerable to Russian wheat dominance. Low birth rates will decrease the European population by 3.5 percent by 2050, shrinking the number of potential wheat consumers.⁷¹ Growth in exports, not domestic consumption, drives Europe's cereal production.⁷² Europe is largely urban and has already transitioned to a Western diet.⁷³ Meanwhile, Europe will mostly sustain its levels of wheat production in spite of climate change, due to advancements in seed, breeding, and pest control technologies.⁷⁴ However, Europe, as the only region in the world expected to decline in population by 2030, is exceptional. The majority of the world will still be at risk of Russian wheat expansion.⁷⁵

Asia: Russia-China Competition

Imports of Russian wheat in China and Southeast Asian states like Indonesia will allow Moscow to challenge Chinese influence in Asia.⁷⁶ In the past, Russian has not been a major factor in Asian markets. However, population growth and urbanization, along with the decline of traditional barriers to Russian trade, are increasing Russian wheat exports in Asia.

- *Population growth and urbanization in Asia.* Asia currently holds 60 percent of the world's population.⁷⁷ From 2017 to 2050, Asia's population is expected to increase by 750 million, second only to Africa.⁷⁸ China currently has the world's largest population at 1.42 billion inhabitants.⁷⁹ Additionally, its population is expected to grow until 2030.⁸⁰ Indonesia is the fourth largest nation in the world and is predicted to have the ninth largest population growth rate between 2017 and 2050.⁸¹

Asia has traditionally consumed rice, rather than wheat, but rapid urbanization is changing Asian diets, especially in Southeast Asia.⁸² Asia has the highest rate of urbanization in the world and has increasingly adopted a Western diet.⁸³ Wheat consumption in China doubled between the 1960s and early 2000s, coinciding with its major period of urbanization.⁸⁴ In Indonesia, urbanization and income growth have increased demand for wheat byproducts, such as baked goods and prepared foods. The

USDA credits the growth of wheat imports in China and Indonesia to dietary trends.⁸⁵ By 2028, Indonesia will be the world's second largest importer, behind only Egypt, due to rising consumption and lack of domestic wheat production.⁸⁶

- *Potential for Russian market expansion in Asia.* Barriers to Russian trade in Southeast Asia have recently declined. Australia, which is currently the largest wheat exporter to Southeast Asia, is gradually losing its wheat market share in the region to Russia and Ukraine because of high production costs.⁸⁷ Australian wheat production costs are 68 percent higher than those of Russia.⁸⁸ As a result of lower costs, Russian wheat exports to Indonesia “exceeded 330,000 tons in the first quarter of 2017, up from just 991 tons for all of 2016.”⁸⁹ The United States, the primary exporter of wheat to China, will also lose some of its wheat market share due to costs imposed by climate change.⁹⁰ Alongside decreases in American global wheat shares, China lifted quarantine restrictions on wheat from six Russian regions in 2018.⁹¹

China became a net importer of wheat in 2007 due to the loss of millions of hectares of arable land due to urbanization, desertification, and soil degradation.⁹² China also faces production constraints due to climate change, like increased heat stress on crops.⁹³ However, according to the U.S Wheat Associates, China will be able to reach wheat self-sufficiency due to increasing production and population decline predicted after 2032.⁹⁴ Moscow will have increased bargaining power over China if they are reliant on Russian wheat exports.

Russia and China will compete for influence in Asia as Russian involvement in the region grows. China's BRI project expands Russia's opportunities to influence Asia through trade routes for wheat and other goods.⁹⁵ Russia and China have cooperated to achieve their respective goals in Central Asia, including Russian support for the BRI. Their interests in the region, however, are likely to diverge and will be a source of instability.⁹⁶ China seeks free trade and greater economic ties with Asia to enhance its regional and global reputation.⁹⁷ Therefore, the BRI is a major component of Chinese foreign policy. Russia is interested in using the BRI to draw neighboring states' economies closer and enhance its regional and global power. Wheat will increase Russia's expansion of economic power and may shift the balance of power with China as the two pursue disparate aims in Asia.⁹⁸

Russian wheat exports will particularly impact Sino-Russian relations in Southeast Asia because China is far more established in the region than Russia.⁹⁹ Russia will use agricultural trade to increase its influence and undermine Chinese power in the region. President Putin has thus declared his wish to organize cooperation between the Eurasian Economic Union (EEU), Shanghai Cooperation Organization (SCO), and Association of Southeast Asian Nations (ASEAN).¹⁰⁰ Russia's current strategy in Southeast Asia, consisting mainly of arms sales, is not enough to foster a deep relationship.¹⁰¹ Russia must develop stronger economic ties with Southeast Asia, whose states are open to a closer relationship with Russia.¹⁰² Diversifying ties with Southeast Asia through agricultural products will help Russia create stronger links with ASEAN. While many analysts focus on the potential uses of Russian military might, Russia will compete with China in Asia through economic influence and cooperation.¹⁰³

Russia's expansion into Asia is part of a larger strategy to adapt to its isolation from the West and strengthen its status as a global power.¹⁰⁴ Wheat and other trade will be an important part of Russia's pivot to Asia, a vital aspect of Russia's foreign policy and competition with the West.

Middle East and North Africa: Expansion of Russian Presence

Russia is involved in the Middle East and North Africa through arms sales and military intervention, but seeks to further increase its economic influence in the region. In MENA, Russian wheat exports will create deeper economic cooperation with Russia, as MENA states import the most wheat in the world.¹⁰⁵ Population growth and urbanization, as well as the importance of food subsidies in MENA states, are increasing reliance on Russian wheat exports.

- *Population growth and urbanization in MENA.* MENA, alongside Asia, is one of two regions with significant expected population growth in the next 50 years. North Africa's population growth rate will likely remain over 1 percent through 2050 and then decline, but remain positive, through 2100.¹⁰⁶ For example, Egypt will move from the 14th to 12th most populous nation by 2050.¹⁰⁷ MENA is also urbanizing at a rate second only to Asia.¹⁰⁸ Urbanization is expected to increase further as climate change drives affected populations to cities and away from increasingly barren rural areas.¹⁰⁹ North Africa and the Middle East respectively have the first and second highest wheat consumption per capita rates in the world, due to urbanization and population growth.¹¹⁰
- *Low wheat production.* Wheat imports in North Africa and the Middle East will increase 130 percent and 104 percent respectively by 2050 because of domestic production constraints. Increasing extreme heat, drought, and arid conditions in MENA's few areas suitable for large-scale wheat production, such as Iran and Turkey, will cause water scarcity and decrease wheat production.¹¹¹ As MENA warms between 2 °C and 4 °C, annual water discharge may decrease by as much as 75 percent.¹¹² In 2016, Saudi Arabia ended domestic wheat production, despite its high consumption, due to water scarcity.¹¹³
- *State food subsidies.* In MENA, state food subsidies are important for domestic stability.¹¹⁴ In 2008, a global food crisis, caused in part by failures in the Russian harvest, politically destabilized the Middle East.¹¹⁵ Rising grain prices caused MENA governments to reduce subsidies in 2010, which led to the Arab Spring revolts.¹¹⁶ In Algeria, for example, only the return of cheap bread quieted revolts threatening the regime.¹¹⁷

Russia will use wheat exports to increase its influence in MENA. Currently, Russia is involved in MENA through arm sales, involvement in the Syrian Civil War, and anti-terrorism operations.¹¹⁸ Going forward, Russia aims to limit U.S. power and augment its status as a great power by gaining greater influence in the Mediterranean region.¹¹⁹ Russia has already courted Egypt, formerly a U.S. ally, through bilateral trade and closer military cooperation.¹²⁰ Russian wheat exports to Egypt are so large that Russia and Egypt are discussing the building of grain storage facilities for Russian wheat in Egypt. These talks also include a general free trade

agreement to increase broader cooperation between Russian and Egyptian industries.¹²¹ In Saudi Arabia, a state with no domestic wheat production, Moscow and Riyadh are discussing making Saudi Arabia a Russian grain hub. Saudi Arabia would buy and resell Russian wheat throughout the Middle East and Africa and store Russian wheat.¹²² Russia and Saudi Arabia are using cooperation in energy and increasingly agriculture to improve their economic cooperation and broader relationship.¹²³

Like Egypt and Saudi Arabia, we can expect wheat sales to be an important tool for expanding Russian influence to other Middle Eastern and North African states. Russia will use wheat to build trade relationships and supplement their arms sales and military involvement.¹²⁴ Russia seeks to use commercial and military ties to bolster political relations in MENA and gain access to a warm water port in the Mediterranean. Access to these ports will allow Russia to project its military power across Europe's southern flank.¹²⁵ Russia will also use its increased power in the region to strengthen its allies, like Assad, continuing to challenge regional stability.

Wheat exports will strengthen Russia's involvement in states like Egypt and Saudi Arabia, challenging regional and even European security. Gaining political power in MENA will also serve Russia's overarching goal of challenging the West and disrupting the current world order.

Rising Recognition of Wheat's Importance in Moscow

The extraordinary gains in Russian wheat production have not gone unnoticed by its leadership. In his 'State of the Address' on March 1, 2018, President Putin touted Russia's growth in agricultural production. In this speech, he emphasized a need to improve Russian transportation and grain storage to strengthen agricultural trade and become a world food leader.¹²⁶ Putin subsequently reiterated these sentiments when reporting that revenue from agricultural exports had recently surpassed arms sales, and he emphasized the need to distributing agricultural products throughout Asia.¹²⁷ Further, Russia has actively sought to build wheat trade agreements with countries ranging from Thailand and Egypt to Iran and Saudi Arabia.¹²⁸ Moscow is aware of its growing wheat production and is planning to bolster this growth and use it for international gains. Russia is certain to attempt to turn its agricultural advantage into a geopolitical advantage.

Conclusion

Russian control of the wheat market in Asia, the Middle East, and North Africa will strengthen Russia's global impact and reduce U.S. influence. Russia will use wheat to encourage greater cooperation with states to enhance its image as a regional and world power. Russia is also likely to attempt to use this power coercively. Washington is primarily focused on how Moscow's military campaigns in Syria and Ukraine and its interference in U.S. elections are affecting its interests. U.S. policies thus underestimate how Russia can challenge the United States, not through force, but by influencing states reliant on Russia for one of the world's most important commodities, food. Going forward, U.S. strategy should reflect the changing nature of Russian foreign policy and mitigate the benefits that our competitors receive from issues that U.S. policy cannot fully address, namely climate change.

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