# THE **RUSSIA-UKRAINE** CONFLICT

# AND WHAT IT MEANS FOR AGRICULTURE



A SPECIAL REPORT COMPILED BY



#### **MARCH 2022**

stratégiegrains *FEEDINFO* 







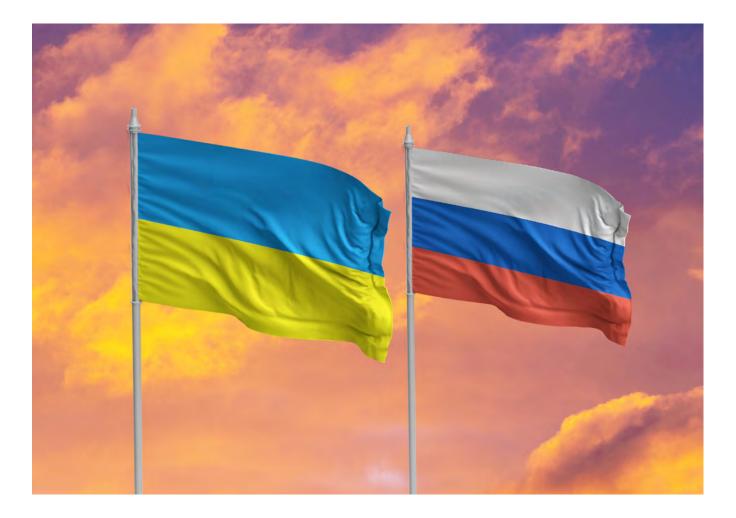
On February 24, 2022, Vladimir Putin ordered the Russian invasion of Ukraine, garnering denunciation from countries and leaders around the world—while sending shock waves throughout global markets.

President Biden, along with other NATO nations, announced "severe and immediate economic costs on Russia," which included financial sanctions and export controls. The ruble is now worth less than one U.S. cent, while a growing list of companies have shuttered operations in Russia.

"Food and agricultural markets are particularly impacted by the ripple effects of the current situation," says Jamie Chadwick, Editorial Director for Urner Barry, the leading price reporting agency for the protein industry. "The entire supply chain is, in one way or another, feeling the effects."

As the premier provider of pricing, analysis and news intelligence for agricultural commodities markets, AgriBriefing has prepared this special report with contributions from its intelligence services Stratégie Grains, Feedinfo and Urner Barry, to provide insight into how this conflict is impacting the entire food supply chain.

This report features perspective on the grains, oilseeds and biofuels markets via Stratégie Grains, the feed additives and animal nutrition sector via Feedinfo, and the protein industry via Urner Barry.





# **AGRICULTURAL INPUTS**

On March 7, Texas Intermediate crude prices surged to a near 14-year high of \$130.50 a barrel while Brent crude hit \$139.13, its highest since 2008, on concerns over the global oil supply as talk of banning Russian oil, natural gas, and coal shipments began—a promise fulfilled the following day by the Biden Administration.

Since then, oil prices have fallen back below \$100 per barrel as the supply outlook has improved and traders eye potentially lower Chinese demand following new coronavirus outbreaks. China is the world's largest oil importer.

The threat of higher fuel costs is adding to the already tight transportation scenario as existing logistical complications result in mounting costs for perishable goods shipped and trucked around the globe.

### **Fertilizer and Feed Additives**

Along with commodities such as crude oil and metals, Russia is a major supplier of fertilizer. Russia produces and exports large quantities of potash, phosphate, and nitrogen-containing fertilizers, all of which are used to grow crops including coffee and soybeans.

Prior to the Russia-Ukraine war, Russia had already banned the export of ammonium nitrate from February 2 to April 1, 2022, due to concerns of a shortage amid spiking global fertilizer prices. Fertilizer prices were already escalating prior to the conflict in Ukraine as a result of pandemic-related supply chain disruptions and higher costs of natural gas, which is used to produce fertilizer.

Russia's trade and industry ministry recommended the country's fertilizer producers to temporarily halt exports. International shipping groups including Danish-based container shipping line and vessel operator Maersk have temporarily suspended deliveries to and from Russia due to the Western sanctions.

"Halted fertilizer shipments from Russia, which are mainly transported via trains and ships, could have direct impacts on farmers and consumers worldwide by disrupting food production and intensifying inflationary pressures," says Urner Barry analyst, Courtney Shum. According to Feedinfo, a price reporting and news agency for the animal nutrition sector, the biggest issue in terms of feed additives lies with phosphates.

"Russia is the world's second largest phosphate exporter," according to Sam Weatherlake, Principal Analyst at Feedinfo.

EuroChem and PhosAgro operate feed phosphate plants in Russia. Production of MCP and DFP at these facilities represents about 7% of global feed phosphate supply. Russia is also a significant producer of phosphate rock and sulphur, important feedstocks for feed phosphate production. Many buyers of Russian-origin feed phosphate have begun to shop for product of alternative origin.

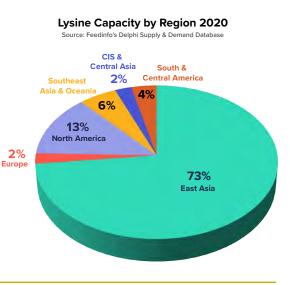
The European feed phosphate market has been snug for several months as demand for phosphoric acid is directed to fertilizer production and amid consolidation in the feed phosphates market over the last 2-3 years.



"Russia's invasion of Ukraine threatens a significant portion of global feed mineral supply and has buyers searching for alternative sourcing, and in some cases, alternative materials," says Feedinfo Senior Analyst, Heather McGuire Doyle.

Russia also exported 52,000 tonnes of copper sulphate in 2021. Top export destinations by volume were Canada, Germany, Kazakhstan, the Netherlands, Australia, and the United States. Feed buyers have expressed additional concern about several other minerals, including urea, manganese oxide and manganese sulphate.

"Amino acids, vitamins, and minerals are essential inputs in animal feed," said Weatherlake. "China is the largest global producer of amino acids and vitamins, and corn is the main raw material for the fermentation of amino acids there. Ukraine is one of China's main sources of corn, and according to China customs data, Ukraine accounted for 29% of its corn imports in 2021.



There is also concern about China's supply capabilities due to a recent spike in COVID-19 cases."

Weatherlake added that inclusion rates for some products have fallen during the pandemic because of a lack of supply. Some operations may cut back on more specialist products and/or more niche amino acids due to high prices.

### **Grains and Oilseeds**

Ukraine is referred to as the "breadbasket of Europe," and sends a large portion of its wheat and corn supplies to the Middle East and Africa. Combined, Russia and Ukraine account for nearly 30% of global wheat exports.

(Without Ukraine-Russa)

760

750

740

730

720

710

700

2018/19

2019/20

Production (Million tonnes)

"That scramble for replacements is made even harder by the drought in North America, meaning alternative supply from Canada or the US will be unavailable," says Andrée Defois, Managing Director of Stratégie Grains, an agro-economic research and analysis bureau offering supply and demand forecasts for major food commodities.

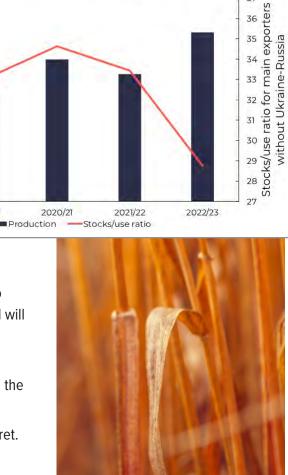
"Consumers will have to switch, reduce consumption,

or maybe wait for the next season. Effects will be widespread, given the extensive reach of Black Sea wheat, which is shipped to destinations around the globe. I would say nearly the entire world will be concerned."

Hémeline Macret, Oilseed Analyst for Stratégie Grains, noted that Ukraine may lose around 12 MT of corn exports between now and the end of September.

"This is a colossal fall in an already tight global market," said Macret.

Macret expects grain stocks to remain at low levels in all major exporting countries outside the Black Sea due to the disruptions in Ukraine and Russia. Low availability from the Black Sea can have long-





36

35

34

33

32

31

30

29

28

without Ukraine-Russia

(%)



term consequences for months to come since other major exporters (U.S., Brazil, and Europe) will have to export more to replace grain from the Black Sea.

Macret noted that crop margins may be impacted a little bit, but not by much. Crop prices rose a lot, but inputs as well. Nevertheless, depending on when farmers ordered nitrogen and pesticides, crop margins have been more or less impacted.

"Farmers outside the Black Sea will try to maximize their sowings in the months to come to supply the world with grains and oilseeds."

According to Defois, the market braced for the biggest disruption is certainly sunflower oil.

"Ukraine alone is responsible for about 50% of global exports," she says. "Together with Russia, the two countries currently at war account for 80% of global exports. There is, therefore, literally no other country in a position to step up and replace anything close to the volumes being produced around the Black Sea."

# **AGRICULTURAL OUTPUTS**

Many countries rely on Russia to fill a portion of their protein demand, so implications stemming from the sanctions on Russia could be far-reaching.

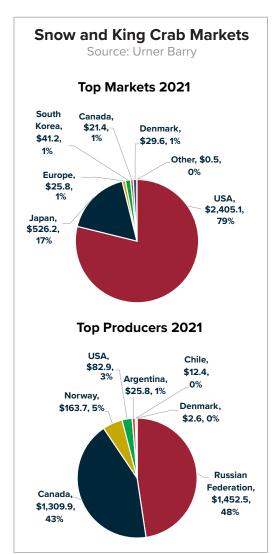
On March 11, President Biden declared an Executive Order prohibiting the importation of "fish, seafood and preparations thereof" from the Russian Federation. Upon the announcement, the National Fisheries Institute commented:

"In response to the Ukraine crisis, the National Fisheries Institute appreciates the need for reciprocal treatment of seafood. We will work with the Administration on implementation of this embargo."

According to the National Oceanic and Atmospheric Administration (NOAA), the U.S. imported 48,867 tons of seafood from Russia in 2021. Those imports were worth approximately \$1.2 billion.

According to Urner Barry Consulting, Russia remains a major player in the snow and king crab market. In 2021, the global economy imported roughly 94 million pounds of frozen snow and king crab from Russia—of which the U.S took nearly 70 million pounds. From 2017 to 2021, the U.S. represented roughly 61 percent of global imports from Russia—equating to nearly \$3.4 billion.

The current market already prices these commodities near recordhighs. The February 2022, Urner Barry Snow crab 5-8 oz cluster quote for Russian crab sat roughly 76 percent above the previous 3-year average at \$16.34 per pound.

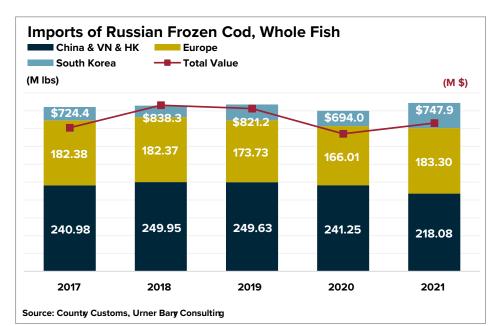


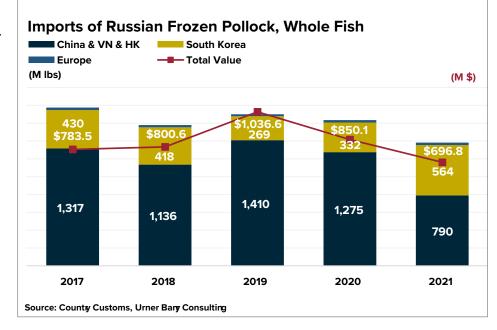
"With prices already near all-time highs, the new government sanction could cause a significant shock to the supply side, ultimately making it a difficult task for producers to obtain additional quantities, as we already take in a significant portion of Canadian product," says Urner Barry lead Economist, Angel Rubio.

Russia also remains a significant player in the cod and pollock markets. China, Vietnam, and Hong Kong imported the most frozen whole fish product from Russia. Much of this frozen whole fish purchased by China is further processed, filleted, repackaged, and sent to other countries.

From 2017 to 2021, nearly 80 percent of all U.S. imports for frozen cod and pollock fillets come from China.

"Although unclear, if the U.S. were to implement sanctions on these commodities, it is not unreasonable to see a domino

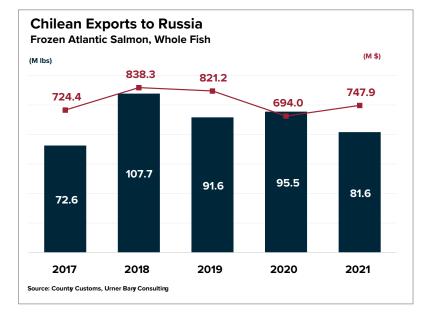


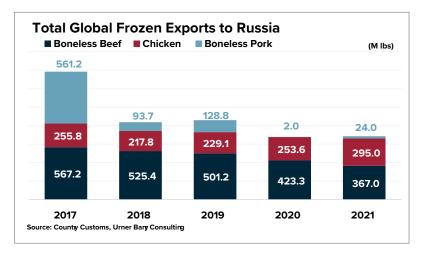


effect in seafood prices in the U.S. market," says Rubio.

According to the Urner Barry double frozen quotes from China, cod and pollock fillets are already at record highs. Any further pressure on supply could drive prices even higher.

Many countries also import Russian poultry. From 2018 to 2021, global imports of Russian poultry increased by 143 percent. Within the past three full years, China represented nearly 68 percent of global imports from Russia, equating to nearly 673 million pounds, followed by Saudi Arabia and Kyrgyzstan. Any unlikely sanctions from China could disrupt the global poultry trade.





Regarding exports to Russia, South America has played an essential role in the red meat, poultry, and seafood markets. Chile exported the most frozen whole fish Atlantic salmon to Russia. From 2017 to 2021, nearly 456 million pounds were shipped—a value of approximately \$1.26 billion.

Rubio added, "Any potential sanctions made by Chile or Russia could divert this trade to other countries. If market conditions were attractive enough, countries like the U.S., China, Brazil, among others, would be destinations for such surplus."

For countries that have not interrupted trade with Russia, doing business with Russia may become a difficult task. Since the war began, sanctions have led to the ruble's devaluation, leading to uncertainty on whether or not Russian goods could even be supplied to destined markets.

"Global agricultural markets are deeply intertwined, and any sanctions implemented can create significant supply shocks to the global economy," says Rubio.

On the other end of the spectrum, foodservice and retail businesses have responded to the ongoing Russian invasion with punitive measures of their own.

Amazon has suspended shipments to retail customers in Russia. Burger King has suspended its corporate support, including operations, marketing, and supply chain, from its Russian-franchised locations. McDonald's has temporarily closed 850 restaurant locations in Russia, which the company says will cost \$50 million per month. Papa John's, Starbucks, and YUM! Brands are all taking similar measures, halting restaurant operations and development in Russia; while many of these big players opt to donate to humanitarian efforts that support the Ukrainian people.

From fuel and fertilizer, to feed and foodservice—there is scarcely a point in the supply chain that is untouched by what's happening around the world. As global markets continue to react on uncertainties of supply and demand, the food and agriculture industry continues to pivot in the face of extreme adversity. We salute and stand with those who continue their work to feed the world.



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