

# 35 Can agricultural exports from Southern Cone countries make up for global supply disruptions arising from the Russia-Ukraine war?

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The economies of the Southern Cone (Argentina, Brazil, Chile, Paraguay, and Uruguay), major agricultural exporters still recovering from the negative impacts of the COVID-19 pandemic, have benefited from the rise in international prices accompanying the Russian invasion of Ukraine. With the war disrupting global supplies, the net exporting countries of the region have the opportunity to increase their exports. If these countries, especially Mercosur members, can boost production enough to offset the loss of Ukraine exports, it would go a long way toward stabilizing markets and world food security.

However, like the rest of the world, these countries are operating in the difficult current environment of global economic slowdown, rising energy and fertilizer prices, and rising inflation. In this post, we examine responses of Southern Cone countries to the disruptions in agricultural markets caused by the war, and their prospects going forward.

## The pre-war situation

To understand the effect of Russia's invasion on world markets, it is important to consider overall market conditions prior to the invasion.

Global stocks for principal grains and vegetable oils were at the lowest levels in years as a result of post-pandemic demand recovering much faster than anticipated, especially in China, which reached record import levels for the majority of its agricultural products. Additionally, in South America, the La Niña phenomenon led to lower-than-expected levels of production. At the same time, global inflation was rising, along with international freight rates and input prices. Lastly, supply chains – which appeared to be returning to normal – suffered greatly from recurring strict COVID-19 quarantines in China, which continue to cause significant congestion in the region's ports.

Thus, before the conflict erupted, the world needed a large global harvest during the 2022/23 season to rebuild grain and oilseed reserves. The interruption of Ukraine's exports and uncertainty over shipments drove international prices to record levels in nominal terms, disrupting trade and forcing many countries to seek alternative suppliers.

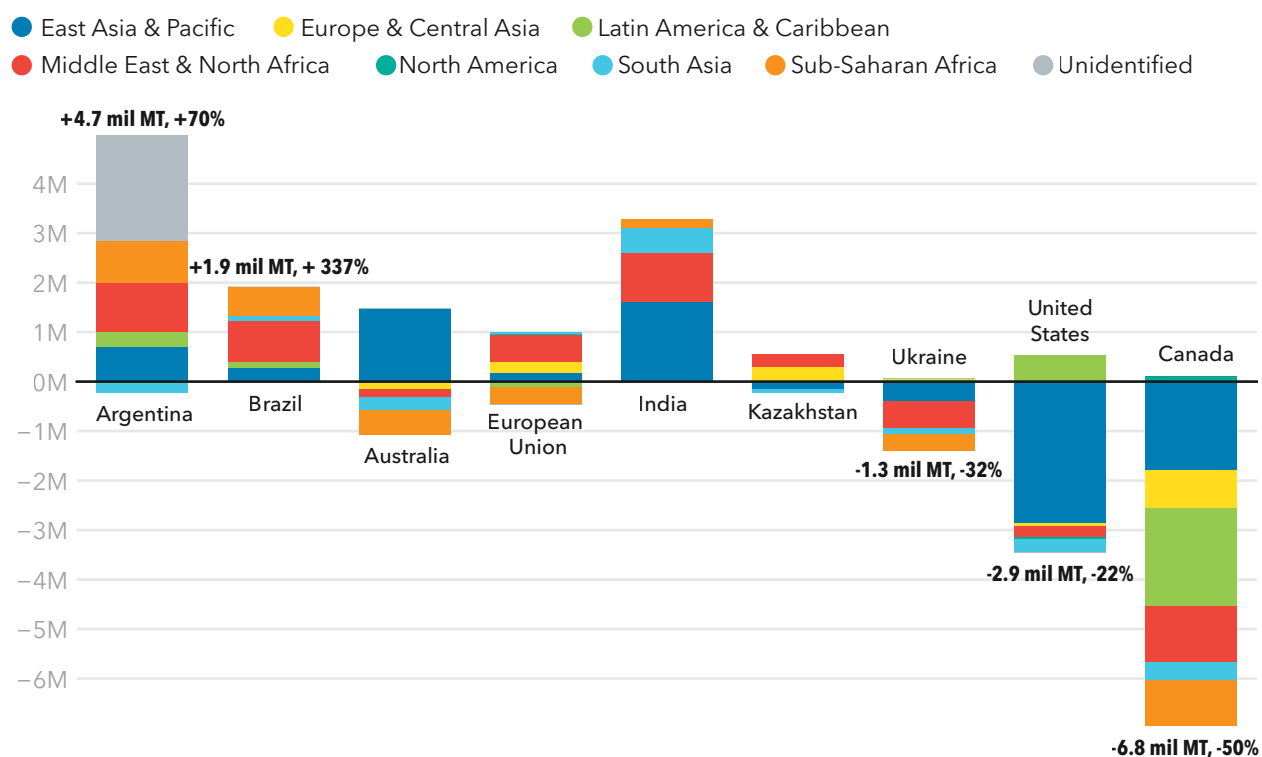
## Impact on Southern Cone agricultural exports

With Russia's invasion of Ukraine on February 24, 2022, grain and oilseed prices rose to new highs, building on a two-year rally. While they have returned to pre-war levels in recent months, they remain well above 2020

levels, and price volatility has been at the highest levels since the food price spikes of 2007/08 for wheat and 2012/13 for maize and soybeans.

Wheat, in particular, has suffered from the combination of war-related supply disruptions and 2021 droughts in North America, with importing countries of South Asia (for example, Bangladesh) and the Middle East and North Africa (MENA) facing problems. Wheat is a major part of their populations' diets, so these countries face the risk of political and social crises as prices rise. Thus, finding alternative suppliers was critical – sparking a redirection of trade flows with intraregional impacts (Figure 1).

**Figure 1: Change in wheat exports by exporter, Jan.-June 2022 vs. 2021, metric tons**



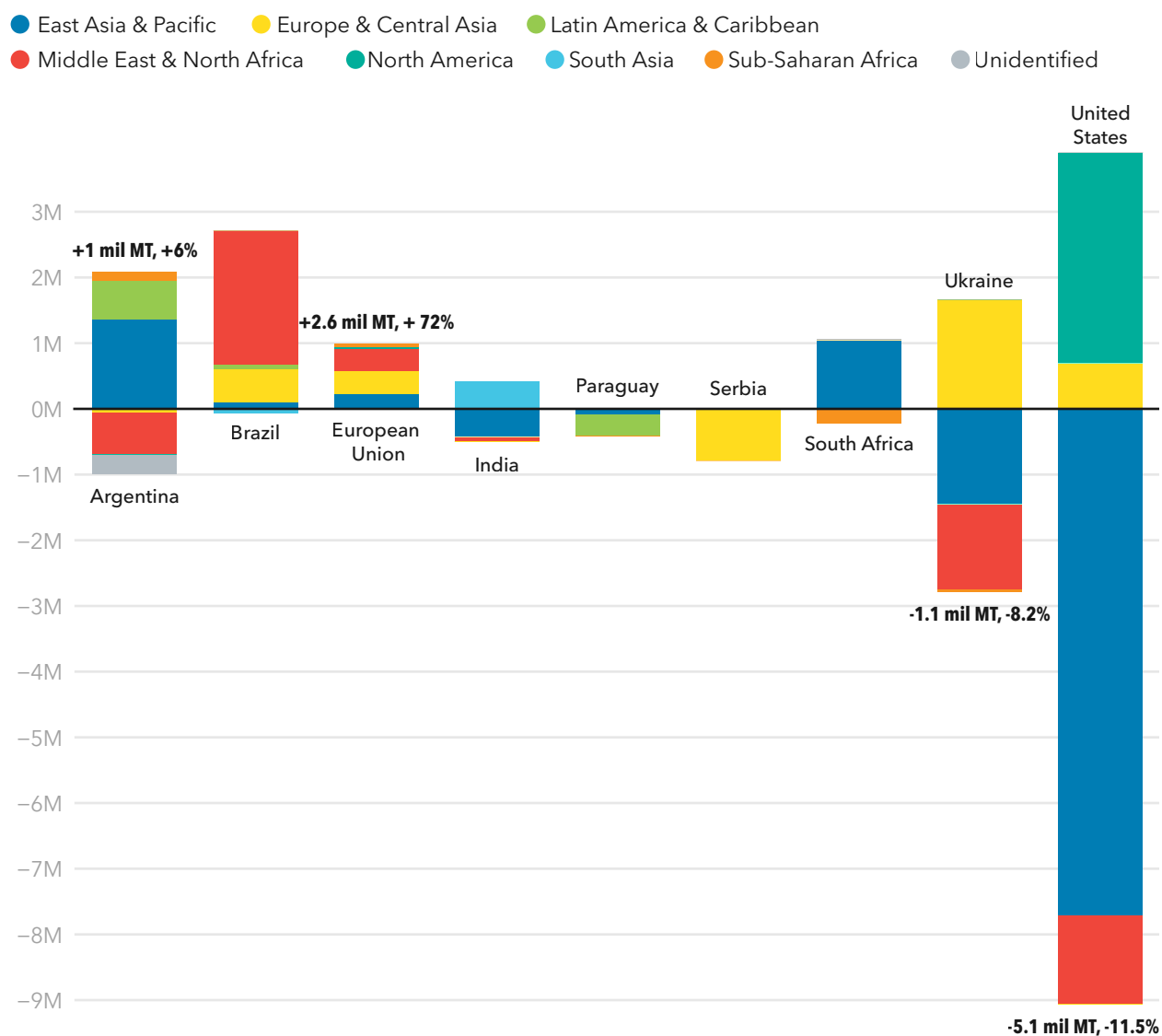
Note: MERCOSUR countries traditionally realize 2/3 of their wheat exports during the first six months of each year.  
Source: COMTRADE, TDM

In the first six months of 2022, Argentina and Brazil increased their wheat exports by 6.6 million metric tons compared to the same period the previous year – that figure now amounts to two-thirds of total wheat exports from the two countries. Brazilian wheat is being exported to markets in the MENA region (for example, Sudan, Saudi Arabia) at levels not seen in the last decade. Together, Brazil and Argentina have managed to compensate for the decline in exports from Ukraine, Canada, and the United States to the MENA countries, playing an important role in stabilizing these markets. A similar shift took place in markets in sub-Saharan Africa (SSA), where Southern Cone countries have partially compensated for reduced exports from Australia, the EU, Canada, and Ukraine.

Overall, the share of wheat exported from Mercosur countries to SSA jumped from 4% to 12% in the first six months of 2022 compared to the same period in 2021, and MENA's share doubled from 9% to 17%. At the same time, total Mercosur wheat exports to Latin America and the Caribbean (LAC) also rose, from 4 million metric tons to 4.5 million tons, while the share of LAC in total exports fell from 51% to 31%. Within these shifting trade flows, some traditional neighboring importers have lost some of their share – for example Argentine wheat exports to Chile fell almost one-third from 2021 levels. Nevertheless, the robust expansion in production and exports shows how the Southern Cone can address both regional and global demand.

Maize is a similar story. Exports from Argentina and Brazil rose 6% and 72%, respectively, between January-August 2021 and the same period in 2022 (Figure 2).

**Figure 2: Change in corn exports by exporter, Jan.-Aug. 2022 vs. 2021, metric tons**



Source: COMTRADE, TDM

Will these trends continue? Unfortunately, drought driven by the La Niña phenomenon is now a serious problem affecting both wheat and maize.

Drought conditions in Argentina, coupled with increased export restrictions, could limit wheat exports in 2022/23. Corn plantings are also affected, and total production is projected to fall by 7.7% (to 48 million tons) in 2022/23 compared to the previous year, according to the Buenos Aires Grain Exchange.

Drought has had some impact on Brazilian maize as well, but so far not affected the country's total corn production, which will likely reach a record figure of 126 million tons according to CONAB data, due to a higher second-crop corn production compensating for losses in the first crop.

## Export benefits

Overall, all the Southern Cone countries are net food exporters, so their economies stand to benefit in the aggregate from currently high global prices. Record food exports are estimated for Argentina and Brazil, which would have positive impacts on foreign exchange income.

In the case of Argentina, tax collection via export duties should also increase significantly, bringing the country closer to meeting the goals of its IMF agreement on external debt. The U.S. Federal Reserve's recent series of interest rate hikes has important consequences for emerging economies, driving up the value of the dollar and global commodity prices and increasing the size of debt payments. Southern Cone countries are exposed, given their high debt-to-GDP ratios and dependence on foreign currency provided by primary exports. These conditions are also affecting investment; for example, the Central Banks of Argentina and Brazil have increased interest rates to strengthen their currencies and prevent import prices from skyrocketing.

## Production costs for Southern Cone countries: The issue of fertilizers

Despite high global prices, the production and export gap for grains and other products created by the Russia-Ukraine war is substantial. The rest of the world's exporters, including those in the Southern Cone, are not expected to generate enough output growth to fill the whole gap in the coming months.

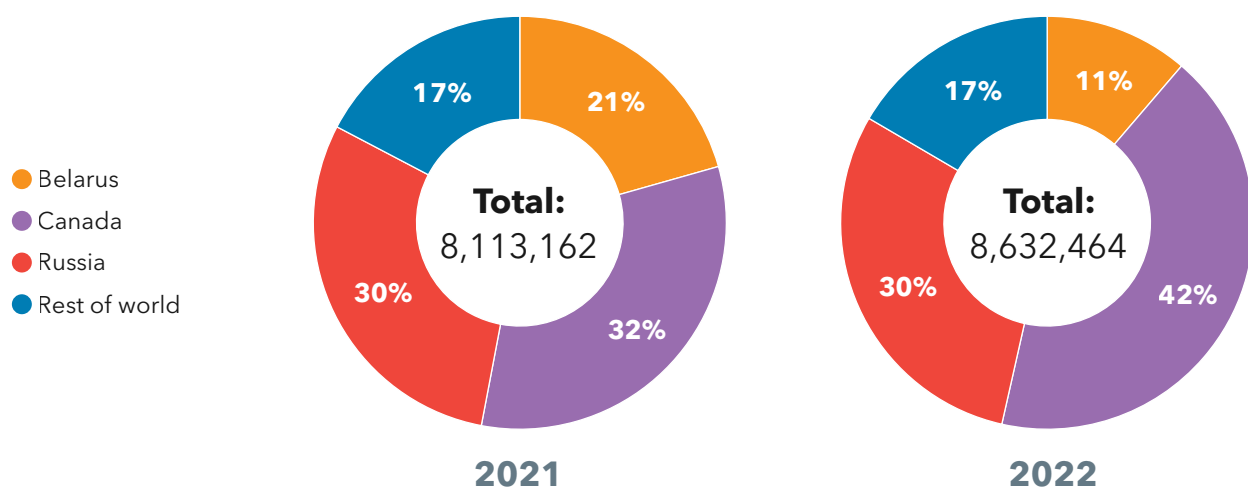
In addition to drought, increased production costs have put pressure on producers. With global markets disrupted by the war (Russia and neighboring Belarus are large fertilizer suppliers), global fertilizer and energy prices have been at record-high levels.

Among the Southern Cone countries, Brazil has the largest dependence on imported fertilizer, ranging from 71% for phosphates to 99% and 97% for nitrogenous and potash products, respectively.

Argentina, by contrast, despite having higher in-country fertilizer production providing for 35% of domestic nitrogen and 25% of phosphate use, has relatively lower levels of fertilizer application, which translates in some cases to a deficit in nutrient replenishment. Although the country remains 100% dependent on imported potash, its overall relatively lower rate of application gives Argentina a relative economic advantage in dealing with high prices and supply disruptions. But it is at risk of soil nutrient depletion, endangering soil health.

For the first eight months of 2022, potash imports were up for many Southern Cone countries, including Brazil, relative to the same period in 2021 (Figure 3), while the mix of suppliers has changed, reflecting the decline in Russian and Belarusian exports. In 2021, for example, about 51% of the region's potash imports from January through August came from Russia (30%) and Belarus (21%). For the same period in 2022, imports from Russia were roughly the same as in 2021 (30%), but imports from Belarus accounted for just 11%. Countries made up for this deficit by importing more potash from Canada (42% in 2022 vs. 32% in 2021).

**Figure 3: Southern Cone potash exports, Jan.-Aug. 2021 and 2022, metric tons**



Source: COMTRADE

In addition to affecting total production, increased fertilizer prices encourage producers to choose crops less dependent on input use and with less investment per hectare, such as soybeans.

Moreover, Southern Cone countries, with the exception of Paraguay, which has a surplus from hydroelectric power generation, are paying much higher prices for fuel imports, which represent 15–20% of all merchandise imports of the region. In macroeconomic terms, the increase in the imported value of fertilizers and energy offsets the net gains from rising grain exports in the trade balance and dollar income of the Southern Cone economies. Argentina has responded with greater restrictions on fertilizer imports to prevent foreign exchange outflow.

Increasing the region's fertilizer production in the short term is a major challenge; it might be feasible with investments in the medium term. In the meantime, farmers are likely to continue increasing the use of management technologies such as the variable application of inputs in order to optimize the use of inputs and resources. There is also a greater use of fertilizers of biological origin.

### **The risk of food inflation, export restrictions**

As in previous episodes of high food prices, concern about shortages and inflation creates incentives for governments to implement export restrictions. Such measures disrupt global trade flows, increase market tension, and raise prices. During 2022, food export restrictions were imposed by India, Indonesia, Russia, Ukraine, some Eastern European countries, and Argentina, among others (some have since been rescinded; currently 17 countries maintain some kind of food export ban).

Argentina, in particular, has a long history of applying export duties and restrictions, which resulted in a significant tax on the agriculture sector (representing 19% of farm receipts, according to the OECD PSE indicator). In response to accelerating inflation in August 2021, the Argentine government restricted beef exports, and since December has imposed quotas on wheat and maize exports (though they have not been significantly binding to date).

These measures have little impact on consumer food prices (Calvo 2014), but have had negative effects on producer incentives by reducing domestic producer prices, eroding transparency, and affecting the functioning of markets. These policies not only limit the aggregate response of the agriculture sector, but distort relative prices and influence the selection of crops.

The expectation of greater restrictions may push producers in Argentina to shift toward crops which they see as having a lower probability of intervention, such as soybeans and barley. This is another reason why, despite high prices, Argentina is planting less wheat and maize this summer and fall.

## Conclusion

The world faces a continuing food security crisis. The effects the Russia-Ukraine war suggest that it will be difficult for grain, meal, and vegetable oil markets to return to equilibrium in the short term. Current estimates show a further drop in global stocks for the 2022/23 season.

Southern Cone countries have the potential to replace those lost exports from Ukraine and Russia. The region, especially the Mercosur countries, has natural resources, technology, and a dynamic and innovative business model – all of which have increased its resilience in the face of disruptions in fertilizer markets. The region now has the opportunity to cement itself as a reliable global supplier of food, in the face of instability in its main competitors. Taking that opportunity and boosting production and exports would have positive impacts on the economies of the Southern Cone.

Actually doing so will be hard. It will depend on the development of a common agenda of policies favorable to investment and exports. Avoiding export restrictions should be the priority. But that alone is not sufficient; it must be complemented by renewed negotiations to discipline such actions in international forums such as the WTO. As we've seen in 2022, weather shocks continue to pose a major threat to production systems, and investing in resilience strategies is more urgent than ever. The development and adoption of technologies that allow for more efficient use of resources, better environmental performance, and improving soil health is also necessary to protect the long-term capacity of the Southern Cone food system to contribute to regional and global food security.