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# Oil Crops Outlook: March 2022

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Aaron M. Ates Maria Bukowski

## Global Oilseed Prices Soar as South American Soybean Supply Decreases

Based on shrinking prospects for South American crops, USDA's forecast of the average soybean price received by U.S. farmers in 2021/22 increases to \$13.25 per bushel from \$13.00 last month. Similarly, USDA raises its forecast of the season-average price for soybean meal to \$420.00 per short ton from \$410.00 last month. Soybean oil prices are strong as well and its forecast has been raised by 2.0 cents to 68.0 cents this month.

Global soybean production for 2021/22 decreased by 10 million metric tons this month to 353.8 million. Deteriorating conditions for the soybean crops in Southern Brazil prompted a lower production estimate of 127 million metric tons from 134 million last month. Likewise, the soybean production estimate for Paraguay was reduced to 5.3 million tons from 6.3 million. For Argentina, earlier damage to the first crop of soybeans in February lowered the 2021/22 production forecast by 1.5 million metric tons, resulting in a total of 43.5 million. Consequently, global trade and ending stocks have been reduced.

#### Domestic Outlook

### U.S. Soybean and Product Prices Continue To Climb as Foreign Supply Deteriorates

Global oilseed complex prices rallied during February due to the dry weather in South America and further reductions in soybean crops. In Brazil, Paranaguá freight on board (FOB) soybean prices increased by more than 13 percent since the beginning of February, reaching an average of \$678.00 per metric ton in the first week of March (figure 1). At the same time, U.S. 2 yellow soybean prices in the Gulf rose 6 percent to \$651.00 per metric ton. Therefore, U.S. soybeans are currently the most competitively priced in the world market, which is unusual for this point in the year.

Dollars per metric ton Argentina, Up River Brazil, Paranaguá United States, Gulf 700 600 500 400 Date

Source: USDA, Economic Research Service using data from International Grains Council.

Figure 1 Daily soybean prices for major exporters in 2022

285 million bushels this month.

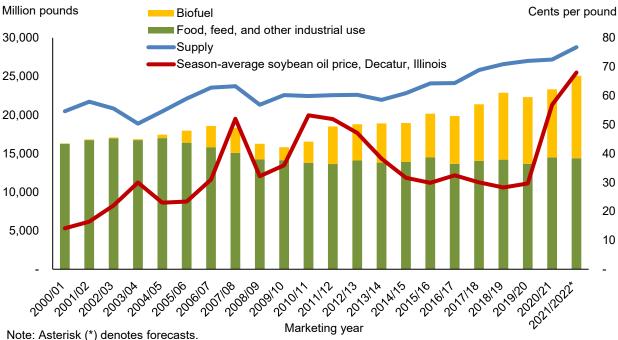
Export inspections for September 2021–March 3, 2022, totaled 1,519 million bushels—down over 400 million from a year earlier. Cumulative U.S. export inspections for China this season have declined significantly whereas inspections for the European Union and Mexico are slightly above last year. Nevertheless, U.S. export shipments of soybeans should benefit from competitive prices and lower South American soybean supply later this season. Hence, USDA's forecast of 2021/22 soybean exports has increased by 40 million bushels this month to 2,090 million. With crush unchanged, the 2021/22 U.S. soybean ending stocks forecast is reduced to

The shrinking prospects for South American soybean crops have increased the value of U.S. soybean stocks. For instance, February cash soybean prices at country elevators in Central Illinois increased by \$1.80 per bushel to \$15.80. Throughout the country, cash prices rallied toward \$16.00 per bushel by the end of February. Those gains are sufficient to boost the USDA's forecast of the 2021/22 average soybean price received by farmers to \$13.25 per bushel, up from \$13.00 last month. Aligning with the soybean price rallies, Central Illinois soybean meal prices rose in February to an average of \$460.00 per short ton—up from \$421.00 in January. As a result, the 2021/22 season-average soybean meal price was increased to \$420.00 per short ton from \$410.00 last month.

Despite these high soybean prices, soybean crush margins remain profitable for U.S. soybean crushers who processed 194.30 million bushels of soybeans in January, marginally below December levels. Unchanged expectations in 2021/22 soybean crush volume also leaves soybean meal supply and use unchanged this month. Moreover, the domestic production of soybean oil is unchanged this month at 26.2 billion pounds. Imports of canola, sunflowerseed, and palm oil supplement the U.S. supply of vegetable oils. U.S. canola oil imports are expected to reach 3.98 billion pounds in 2021/22—reducing U.S. supplies of the commodity by 421 million pounds from last year. Sunflowerseed oil imports are also reduced by 50 million pounds this month to 275 million as Ukraine is one of major suppliers of U.S. sunflowerseed oil.

With a lower supply of global sunflowerseed oil, a modest increase in U.S. soybean oil export sales is anticipated, hence the 2021/22 forecast is revised up this month by 200 million pounds to 1.63 billion. In contrast, increases in soybean oil prices is expected to limit the 2021/22 domestic use of soybean oil for biofuel production. Hence the soybean oil for biofuel production forecast is reduced from 11 billion pounds to 10.7 billion. The use of soybean oil in food, feed, and other industrial use categories increases this month by 100 million pounds as soybean oil is the most competitive oil. As a result of these market dynamics, season-ending stocks of soybean oil are expected to be just over 2.08 billion pounds, or 55 million pounds below last year's level.

Figure 2 **U.S domestic soybean oil supply and disappearance** 



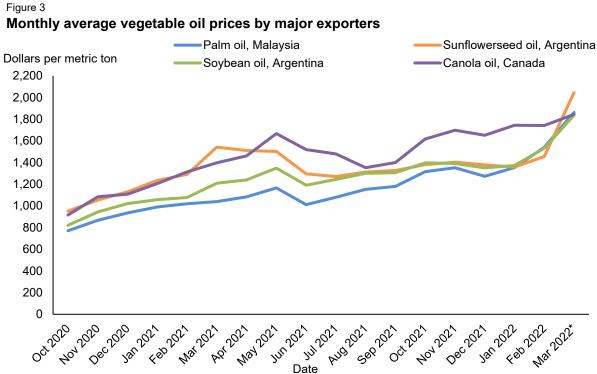
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

In response to tighter global vegetable oil markets, U.S. soybean oil prices rallied in February—Central Illinois prices reached 70.91 cents per pound. Consequently, the 2021/22 season-average soybean oil price forecast increases to 68.0 cents per pound from 66.0 cents last month, which is 20 percent higher than the season-average price in 2020/21. In addition to vegetable oil prices that have been elevated since early 2021, volatility caused by the current interruption of sunflowerseed oil supply in the Black Sea region may further ration demand of vegetable oils—particularly in the industrial sector.

#### International Outlook

#### Vegetable Oil Market Impacted by Black Sea Conflict

In 2021/22, global stocks of the four major vegetable oils (palm, soybean, canola, and sunflowerseed) are expected to decline to the lowest level of 21.94 million metric tons since 2016/17 as global oilseed crush has been reduced by 7 million metric tons. These tight vegetable oil stocks are the result of disappointing oilseed crops production between 2019 and 2021 in Canada, Europe, Russia, and Ukraine. Poor crops in South America have further extended run-ups in global vegetable oil prices. Volatility in vegetable oil prices has been expounded by the war in the Black Sea.



Note: Asterisk (\*) denotes forecast. March 2022 prices are from March 1–March 8, 2022. Source: USDA, Economic Research Service using data from International Grains Council.

Figure 3 depicts vegetable oil prices by major exporters. In the past 20 days, Malaysian freight on board (FOB) palm oil prices rose roughly over 20 percent per metric ton to a record high average price of \$1,863.00 per metric ton. Argentina Up River FOB soybean oil prices followed suit, eclipsing \$1,800.00 per metric ton in March—or \$300.00 higher than February.

Global soybean oil production is reduced this month by 903,000 metric tons as the global crush volume was lowered by 4.98 million metric tons. China is responsible for the majority of the

global crush reduction, with the 2021/22 estimate drawn down by 2 million metric tons to 92 million due to unfavorable crush margins. Global production of sunflowerseed oil was reduced by 954,000 metric tons to 21.1 million as Ukrainian crush has been interrupted by the war.

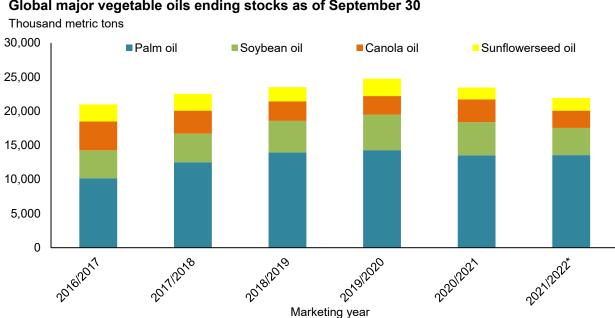


Figure 4

Global major vegetable oils ending stocks as of September 30

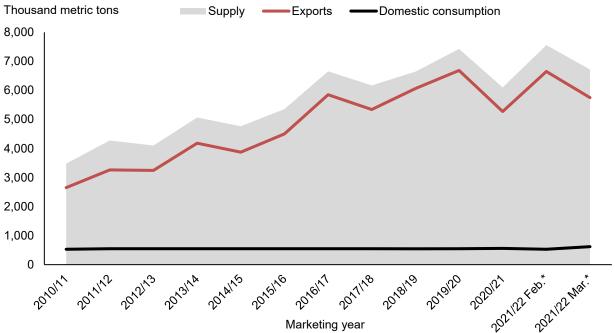
Note: Asterisk (\*) denotes forecast.

Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Ukraine and Russia are the leading global producers of sunflowerseed with an estimated production of 17.5 and 15.6 million metric tons in 2021/22, respectively. Both countries crush a significant volume of sunflowerseed and—combined—produce nearly 60 percent of global sunflowerseed oil.

Ukraine is a major producer and exporter of vegetable oil, specifically sunflowerseed oil, and is projected to account for roughly 30 percent of global sunflowerseed oil production and 47 percent of global sunflowerseed oil trade in 2021/22. Specifically, Ukraine is expected to produce 6.45 million metric tons of sunflowerseed oil in 2021/22. This estimate was lowered by nearly 840,000 metric tons from the previous forecast in light of current events and encompasses a 1.95-million-metric-ton reduction in sunflowerseed crush that now sits at 15 million metric tons. Considering reductions in sunflowerseed oil production along with the closure of major ports, the 2021/22 Ukrainian sunflowerseed oil export forecast is lowered by 900,000 metric tons to 5.75 million metric tons.

Figure 5
Ukrainian sunflowerseed oil supply and demand



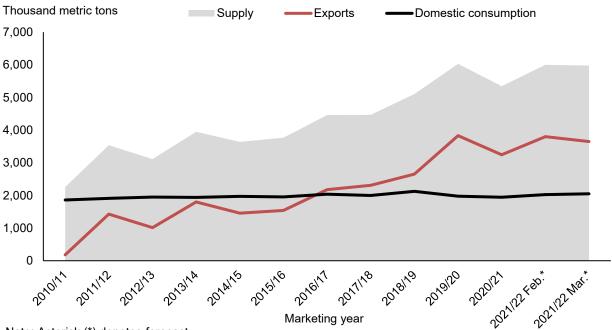
Note: Asterisk (\*) denotes forecast.

Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production,* 

Supply, and Distribution database.

As the second largest producer of sunflowerseed oil, Russia is expected to account for nearly 28 percent of global sunflowerseed oil production in 2021/22 at 5.82 million metric tons. Sunflowerseed oil is forecasted down by 150,000 metric tons from the previous estimate to 3.65 million metric tons. Russian sunflowerseed oil exports will constitute 30 percent of global sunflowerseed oil trade in 2021/22.

Figure 6 Russian sunflowerseed oil supply and demand



Note: Asterisk (\*) denotes forecast.

Source: USDA, Economic Research Service using data from USDA, Foreign Agricultural Service, *Production*,

Supply, and Distribution database.

Russia also produces rapeseed and soybeans, albeit in a smaller capacity than sunflowerseed. These crops are primarily consumed domestically and—as such—are not expected to significantly impact global supply. Nevertheless, expectations of lower Russian and Ukrainian sunflowerseed oil exports have lowered the global vegetable oil supply. Due to the lower supply of sunflowerseed oil, major trade partners—India, the European Union, and China—are expected to import 300,000, 275,000, and 210,000 metric tons less of sunflowerseed oil, respectively.

### Dryness in South America Further Reduces Soybean Production

A lack of rainfall in Rio Grande do Sul, Paraná, and Mato Grosso do Sul during February increased evaporative stress on soybean crops. These three major soybean-producing states have been experiencing severe drought conditions for the majority of the growing season. In Rio Grande do Sul, February weather is highly influential on the crop development and quality of crops. An insufficient amount of rainfall has been received by Rio Grande do Sul in February. In addition to the rainfall deficit, temperatures in Rio Grande do Sul have reached record highs for extended periods of time. A reported 18 percent of the Rio Grande do Sul soybean crop was

flowering and 56 percent filling pods as of March 3, 2022. Hence, portions of the crop may be salvaged if weather conditions improve in March. Overall, roughly 14 percent of the sown soybean acreage in Brazil is estimated to be impacted by this drought.

In contrast, much of the northern soybean-producing regions in Brazil received an abundance of rainfall during February 2022. The heavy rains—ranging from a cumulative total of 15 to 17 inches—slowed harvest. Nevertheless, the overall harvest in Brazil is reported as being 50.5 percent complete as of March 7, 2022, 9 percentage points ahead of the 5-year average. The 2021/22 soybean yield estimate for Brazil is lowered from 3.32 metric tons per hectare from last month's estimate to 3.13 metric tons. Despite a slight increase in the harvested area projection to 40.6 million hectares, the soybean production forecast is lowered by 7 million metric tons this month to 127 million.

Impacts of the decreasing Brazilian soybean supply have reverberated through the domestic and global markets. Brazil is expected to export 85.5 million metric tons this marketing year. Although this is 5 million metric tons lower than forecasted last month, they are expected to eclipse last year's exports by 3.8 million metric tons. In the first 2 months of 2022, Brazil exported 8.7 million metric tons of soybeans. For reference, this is roughly 6 million metric tons higher than the same period in 2021. As a result of lower soybean supply, USDA lowered the 2021/22 Brazilian soybean crush estimate to 46.25 million metric tons, down 650,000 metric tons from the previous forecast.

Despite plentiful rainfall and favorable temperatures in major Argentine soybean crop regions, the drought continues to linger in parts of Argentina, particularly in the northeastern portion of the country. This region includes the Paraná River—a major Argentine waterway used to transport soybean products for shipment from crushing facilities. Thus, this drought has hindered Argentine soybean production while also raising the marginal cost of crushing soybeans.

These factors have led to a reduction in the 2021/22 Argentine soybean production estimate. With soybean yield projected down from 2.78 to 2.72 metric tons per hectare on lower harvested acreage—which is down by 200,000 hectares to 16 million hectares—the 2021/22 Argentine soybean production estimate is lowered by 1.5 million metric tons to 43.5 million. The production decrease is nearly offset by a 1-million-metric-ton decrease in the soybean export forecast to 2.75 million. Argentine crushers are expected to supply soybean meal and oil to the world market, as such the 2021/22 crush estimate remains unchanged this month at 40 million metric tons.

In addition to Brazil and Argentina, the 2021/22 Paraguayan soybean production estimate was reduced by 1 million metric tons to 5.3 million. If realized, this would be the smallest Paraguayan soybean crop in the past decade. The soybean export forecast is also lowered to 3.6 million metric tons, or 550,000 metric tons lower than last month's forecast and 2.7 million metric tons smaller than their 2020/21 export program. The 2021/22 soybean crush estimate was also lowered by 350,000 to 1.85 million metric tons—or 1.45 million metric tons lower than in 2020/21.

Lower South American soybean supply has resulted in a 6.4-million-metric-ton reduction in global exports. Soybean shipments to China have been lowered by 3 million metric tons to 94 million this month. In addition, Bangladesh, Egypt, the European Union, Pakistan, and Russia are expected to import less soybeans in 2021/22. Global stocks have also been decreased by 2.9 million metric tons to 90 million; if realized, this would be the tightest volume of global soybean stocks since 2015/16.

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