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Feed Outlook: December 2021

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U.S. Feed Grain Market Prices Remain Firm Through Fall Harvest Season

The USDA's December *World Agricultural Supply and Demand Estimates (WASDE)* report has no changes in the corn supply and use projections, compared with the November report. The season-average farm price also remained at \$5.45 per bushel. Projected U.S. oat imports are increased for 2021/22 and the oats season-average price is raised \$0.05 to \$3.70, based on continued tightness in supplies and strong cash prices. Projections for U.S. sorghum and barley markets remain unchanged from the November *WASDE* report, as well.

Corn trade is boosted, and both barley and oats trade are also projected higher. **Ukrainian** corn production and exports are projected at a new record-high. **Brazilian** corn exports are also up, reflecting an unusually high pace for the tail end of its crop season. **China's** sorghum imports are projected higher, an all-time record. U.S. corn exports are unchanged.

Domestic Outlook

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Corn Supply Projections Unchanged in December

The USDA released its latest *World Agricultural Supply and Demand Estimates (WASDE)* report on December 9, 2021. The updated report did not change the U.S. corn supply and use projections for 2021/22, from the November *WASDE* report. There are no updated production, area, or yield forecasts for feed grains released by the USDA's National Agricultural Statistics Service (NASS) report in December. The agency will release updated production figures in its *Crop Production Annual Summary*, scheduled for release on January 12, 2022.

Total corn supplies for 2021/22 are projected at 16,323 million bushels, including 15,062 million bushels of domestic production. This number represents an increase from supplies compared with 2019/20 and 2020/21, but is still below the peak years of 2016/17 and 2017/18 that saw supplies nearly reach 17,000 million bushels.

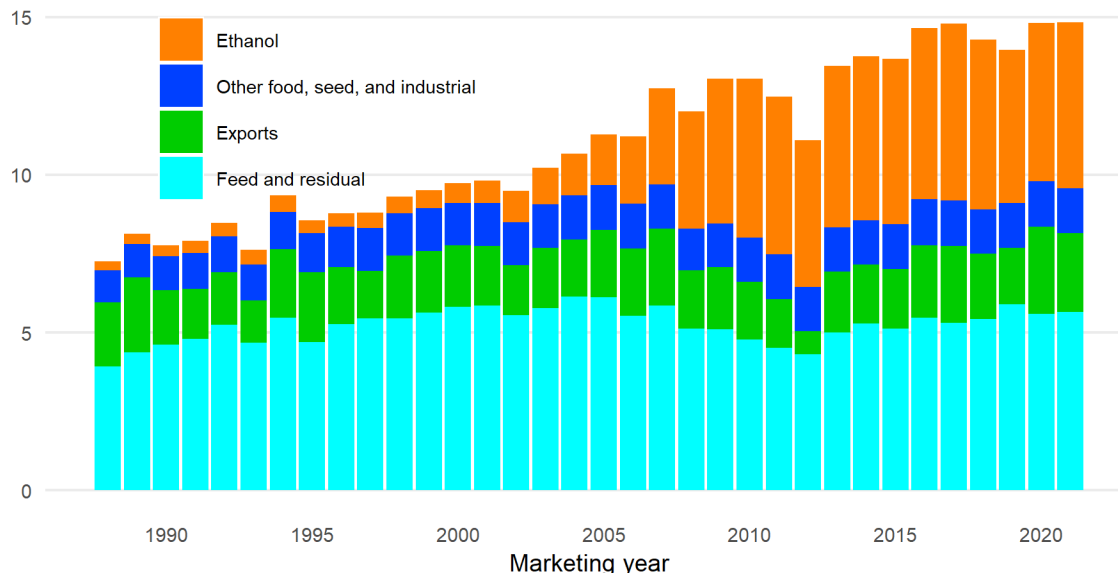
Corn Use Projected Slightly Higher than 2020/21 Record

Total corn use for 2021/22 is projected at 14,830 million bushels. This number is slightly larger than the 2020/21 record amount of 14,818 million bushels. Domestic corn use is projected to total 12,330 million bushels, while exports are projected to reach 2,500 million bushels for the year. The current corn export projection is below the 2020/21 record amount of 2,753 million bushels.

Figure 1

U.S. corn utilization

Billion bushels



Note: 2020/21 is estimated, 2021/22 is projected.
Source: USDA, Economic Research Service.

Corn Used for Fuel Ethanol Strong in October 2021

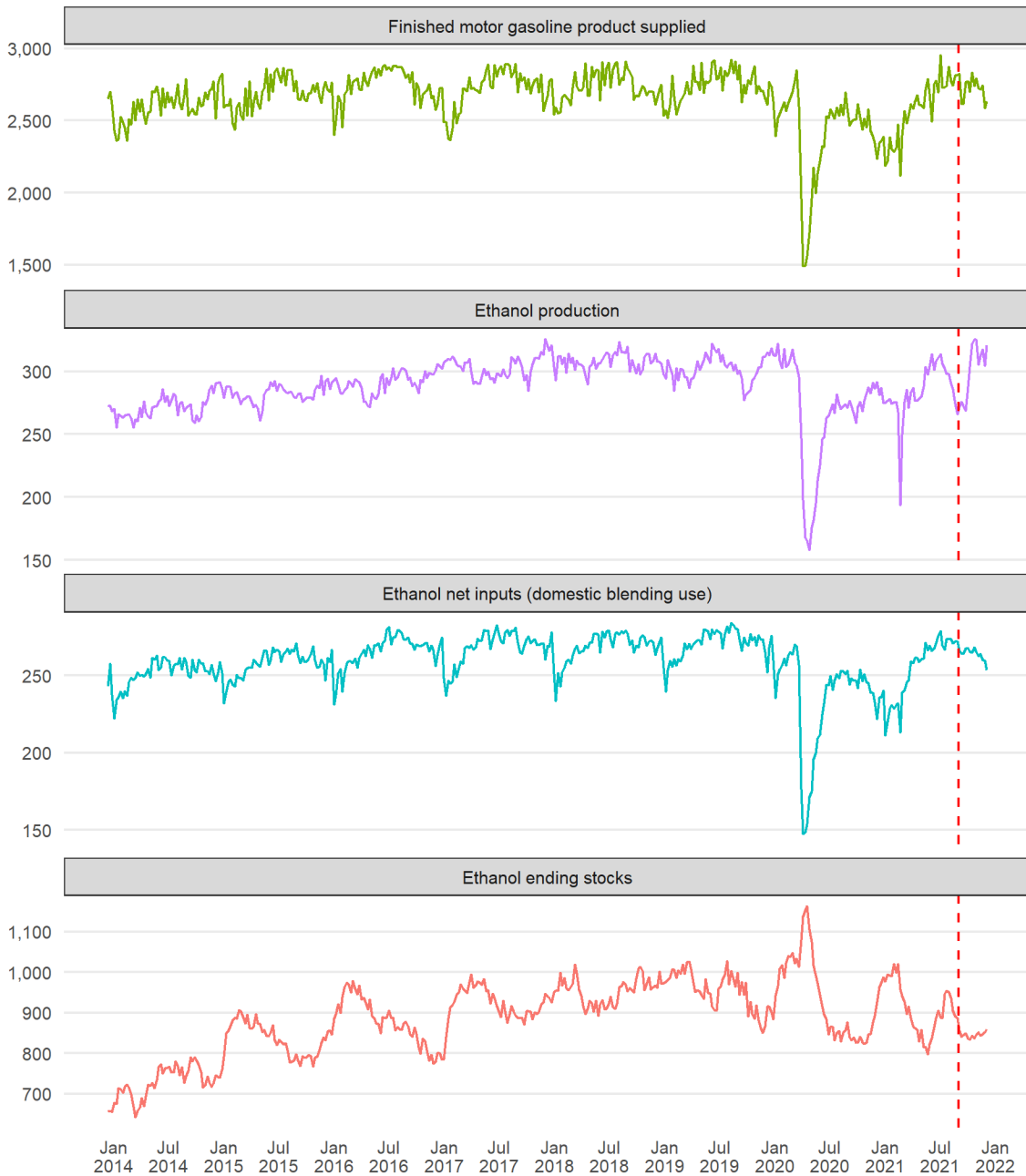
Domestic corn use for food, seed, and industrial (FSI) use is projected at 6,680 million bushels for 2021/22. The total FSI number includes a projected 5,250 million bushels to be used for fuel ethanol. Corn mill's margins for ethanol production have been strong since the harvest season began in September. The margins are due to relatively high oil and gasoline prices, as well as improved market availability of corn, compared with the summer of 2021. Through the first 2 months of the marketing year, corn crushed for fuel ethanol was significantly higher in 2021/22 than either 2019/20 or 2020/21—mostly led by a very strong October 2021 figure. The corn crush still lagged behind the pace set between 2016/17 and 2018/19, which saw the highest amounts of U.S. fuel ethanol production. It is still early in the year to make strong inferences from the current data, however, coupled by much tighter beginning stocks for 2021/22 compared with those years.

Weekly ethanol and gasoline market data, reported by the U.S. Department of Energy's Energy Information Administration (EIA), show that ethanol production declined during the summer when corn supplies were tight and cash prices were high. Likewise, the data also show the strong increase in ethanol production at the beginning of the 2021/22 marketing year—including the consecutive weeks ending October 22nd and October 29th that approached record production totals last set in December 2017.

Figure 2

Weekly totals of U.S. gasoline product supplied, ethanol production, net inputs, and ending stocks

Million gallons



Note: Red line notes start of 2021/22 marketing year.
Source: U.S. Department of Energy, Energy Information Administration.

Domestic gasoline supplies, ethanol net inputs, and ethanol stocks have all been relatively stable during the fluctuations in ethanol production, however. The recent growing differentials between ethanol production and net inputs may suggest higher ethanol exports, which would likely be reflected in U.S. Census export data for November 2021, released in January 2022.

The difference reported in ethanol production and net inputs could also be indicative of logistical issues in moving ethanol from production facilities to storage facilities. The transportation fuel market would likely need to see higher domestic gasoline use or higher ethanol exports for the recent ethanol production rates to be sustained through the duration of the marketing year.

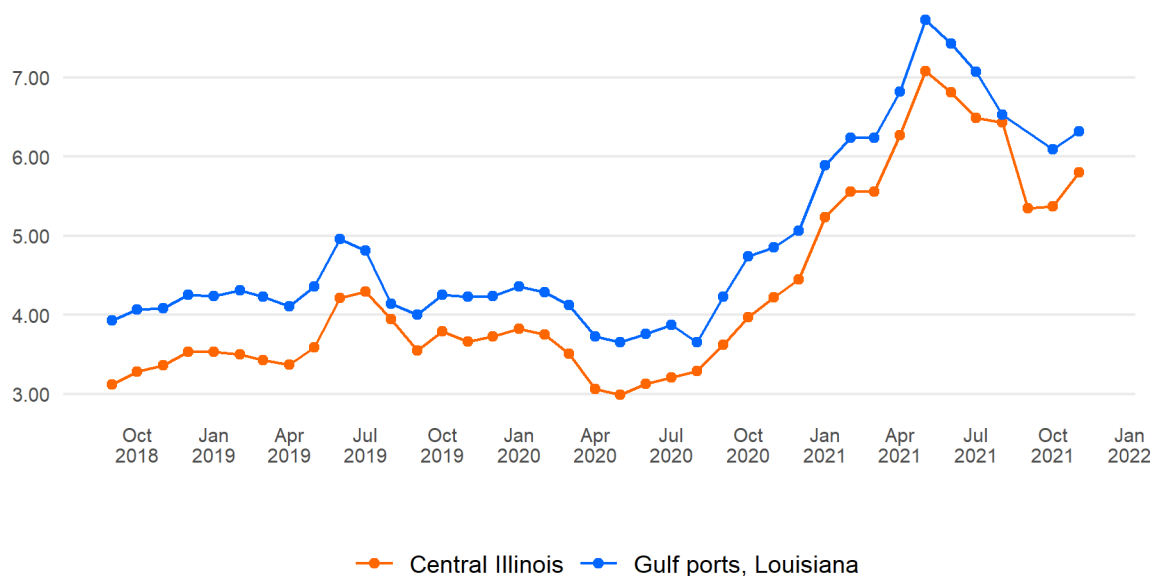
Corn Prices Strengthen as Harvest Season Concludes

According to the last NASS *Crop Production* report covering corn harvest progress for 2021, 95 percent of the corn crop was harvested by November 21. That percentage would put the harvest ahead of 2020 and longer-term averages, but well within the range for a normal year. Generally, cash markets across the country have steadily strengthened since September. For example, the Central Illinois average cash price for November 2021 was \$5.80 per bushel, compared with \$5.35 in September 2021 and \$4.22 in November 2020. High cash prices, coupled with relatively strong basis levels (the difference between futures market prices and local cash prices), indicate strong market signals for supplies to move from producers to users and off-farm storage facilities. It is important to keep in mind that some of these price movements may be driven by factors beyond corn market fundamentals, such as global macroeconomic inflation concerns and supply chain issues. Nonetheless, cash-market prices have remained firm during the harvest season, which typically sees seasonal lows.

Figure 3

U.S. cash-market prices for corn, monthly average

U.S. Dollars per bushel



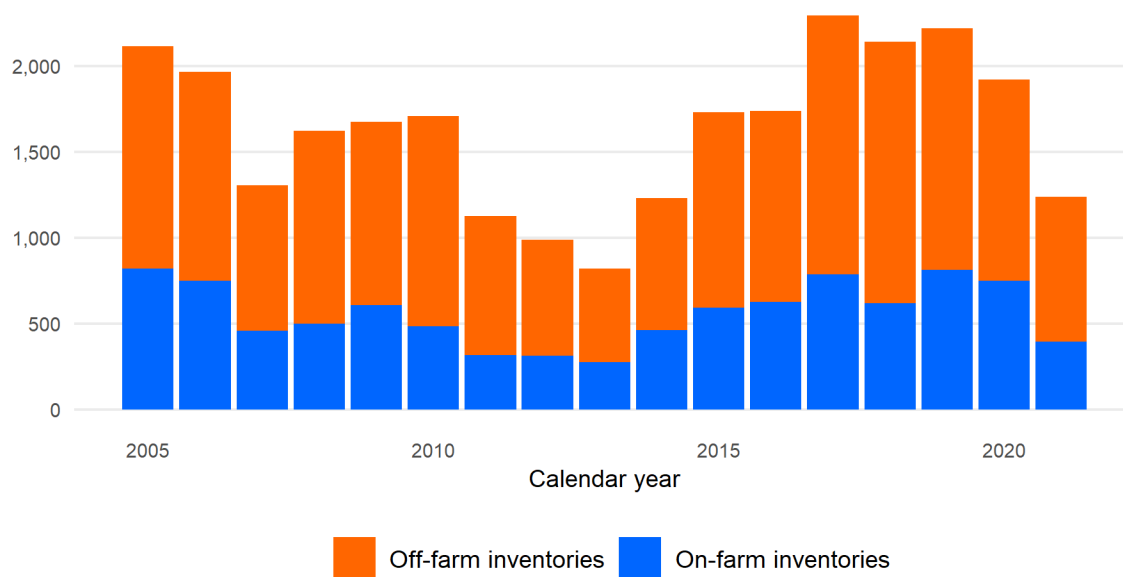
Source: USDA, Agricultural Marketing Service.

Corn ending stocks in 2021/22 are projected at 1,493 million bushels, compared with the 2020/21 estimate of 1,236 million bushels. There is one important distinction for 2021/22 beginning stocks relative to other years: A smaller number of inventories coming into the year were held by farmers. Only 395 million bushels of September 1, 2021 stocks were held on farms (representing about 32 percent of total stocks), the rest of the stocks were being stored in off-farm facilities. By comparison, in 2019 (prior to COVID-19), those totals were 814 million bushels and 37 percent of all stocks. The last time September 1 on-farm inventories were at comparable levels was in 2013, as the market was still responding to widespread U.S. drought conditions in the summer of 2012.

Figure 4

U.S. corn September 1 inventories, on-farm versus off-farm

Million bushels



Source: USDA, National Agricultural Statistics Service.

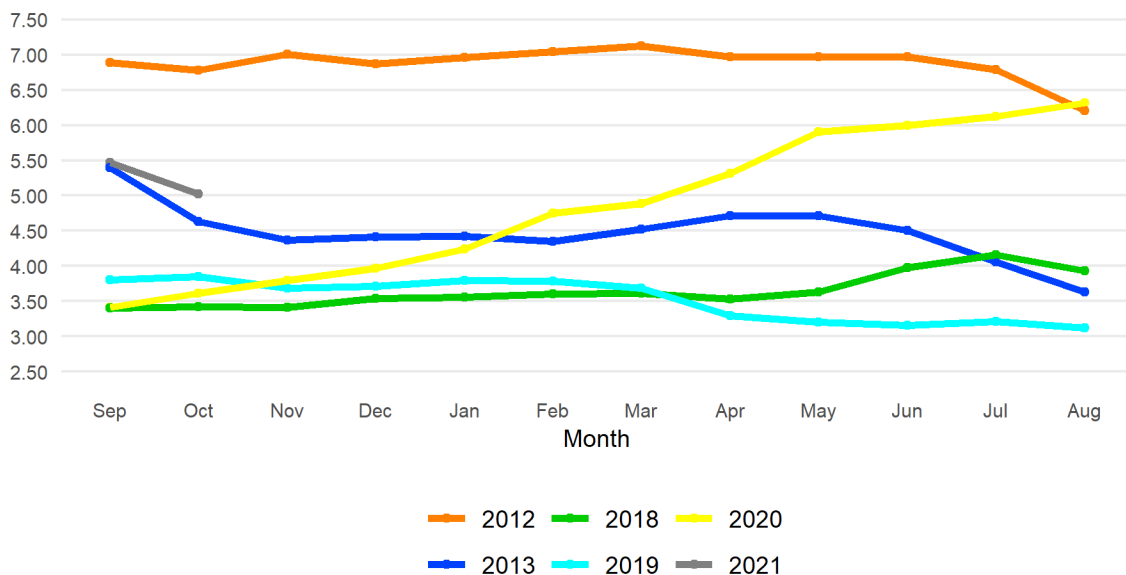
Two market implications of the relatively low on-farm inventories are: First, there is less corn from previous production years competing with 2021/22 production; and second, there was potentially more unused storage capacity available on farms coming into the 2021/22 harvest season. To keep these implications in perspective however, the 300 million to 400 million fewer bushels (relative to 2019 and 2020) of on-farm inventories reported in September 2021 compare with December 1 on-farm inventories, typically ranging between 6 to 8 billion bushels. The updated NASS *Grain Stocks* report will be released on January 12, 2022, providing an update on the size and structure of corn inventories after the 2021/22 marketing year harvest.

The projected season-average farm price for corn in 2021/22 is \$5.45 per bushel. This number is a large increase from the 2020/21 price of \$4.53 per bushel. If realized, the current projection would be the highest annual price received since 2012/13. Monthly prices received reported in NASS's *Agricultural Prices* report show that early 2021/22 prices have been stronger than 2020/21, which was characterized by steadily increasing prices throughout the year. The national average price received in October 2021 was \$5.02 per bushel. As mentioned above though, cash prices have firmed as the harvest season has progressed. Additionally, futures and forward contract prices with delivery during the 2021/22 marketing year indicate that prices will remain at elevated levels through the marketing year. Historically, most of the corn crop is marketed between October and January, however, meaning that the prices received in the through the end of January will have a stronger influence on the annual season-average price than subsequent months.

Figure 5

Price received for corn, monthly

U.S. Dollars per bushel



Source: USDA, National Agricultural Statistics Service.

Cattle, Hog Inventories Reduce Grain Consuming Animal Units Year Over Year

Total Grain Consuming Animal Units (GCAUs) are projected to be 100.5 million units for 2021/22. This number is down from the revised estimate for 2020/21 of 101.3 million units. The decline in animal units is primarily due to fewer hogs and cattle; dairy cattle units are down

about 0.1 million units to 10.6 million, cattle on feed down 0.4 million units to 22.1 million, and hogs down 0.6 million units to 30.7 million. Poultry GCAUs are projected to increase 0.4 units in 2021/22 to 33.0 million units, offsetting some of the year-over-year declines. Total feed and residual for feed grains and wheat is projected at 150.5 million metric tons (MT) for 2021/22, up from 2020/21 estimates of 149.3 million MT.

Sorghum Balance Sheet Remains Unchanged from November *WASDE*

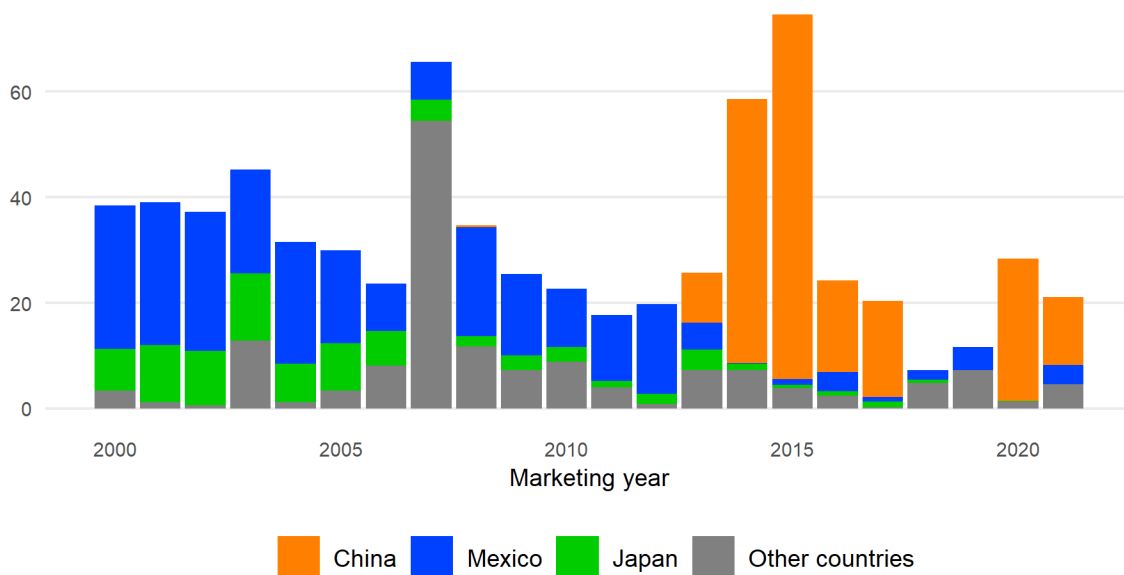
Projected sorghum production for 2021/22 is reported unchanged at 471 million bushels, in the December *WASDE* report. Sorghum demand also remains steady from the November *WASDE* report, with sorghum exports projected at 320 million bushels and ending stocks at 37 million bushels.

Export pace during the first 2 months of market year 2021/22 have shown a change in the destination of sorghum exported, compared to the same period last year. After sorghum shipments predominantly went to China in 2020/21, Mexico has returned as a significant destination for U.S. sorghum. Mexico comprised 17 percent of exports in September and October, compared to just 0.2 percent during the same period in market year 2020/21. Overall, while lower than 2020/21, sorghum exports early in 2021/22 have been more diverse in their destinations. Over the past month, however, the USDA's Foreign Agricultural Service's (FAS) Export Sales Reports have shown increased sorghum sales destined for China.

Figure 6

U.S. sorghum exports, September through October marketing years 2000 to 2021

Million bushels



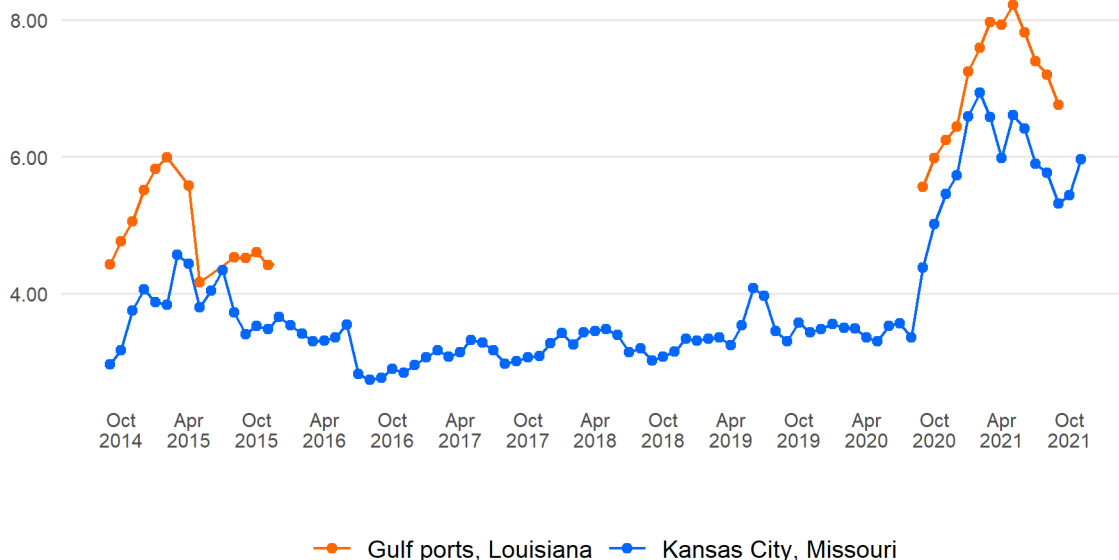
Source: U.S. Department of Commerce, Bureau of the Census.

The latest reported average U.S. sorghum cash-market price for the Gulf was \$6.76 per bushel during September 2021 and \$5.44 for Kansas City, Missouri in October 2021, continuing a downward trend compared to price peaks observed during the summer months. Sorghum cash-market prices remain higher than a year ago and are more than 50 percent higher than prices observed between 2014/15 and 2019/20, however.

Figure 7

U.S. cash-market prices for sorghum, monthly average

U.S. Dollars per bushel



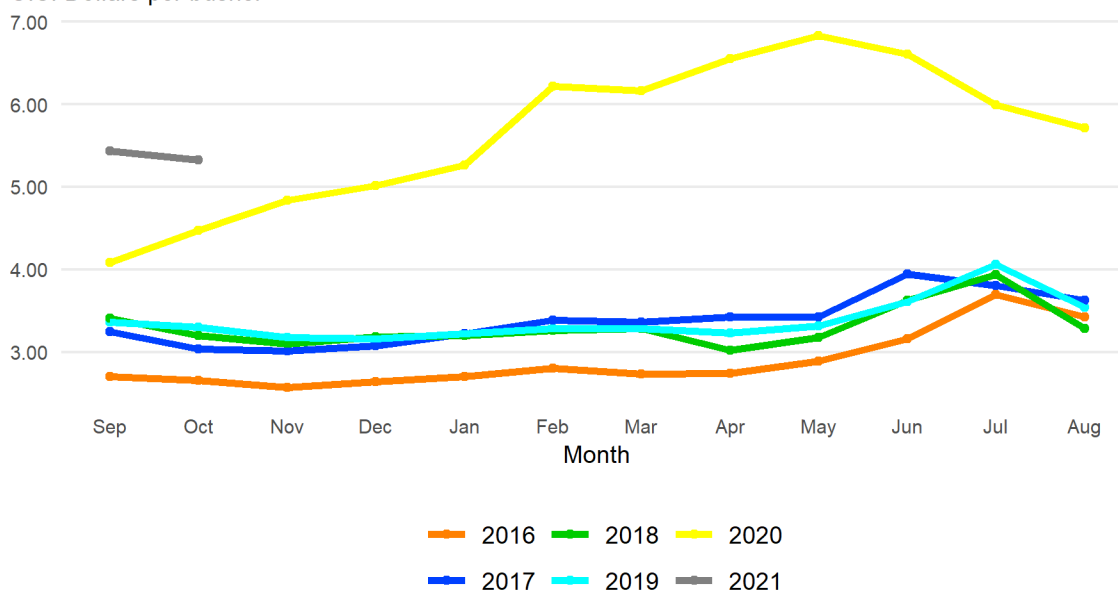
Source: USDA, Agricultural Marketing Service.

Along with the trend seen in the current cash market and according to the November 30th Agricultural Prices Report published by NASS, sorghum prices received by farmers between September 2021 and October 2021 are down from \$5.43 to \$5.33 per bushel, but remain much higher than 2020/21 levels and recent historical levels. The season-average farm price on the balance sheet for sorghum remains unchanged from the November *WASDE* report, projected at \$5.45 per bushel in 2021/22.

Figure 8

Price received for sorghum, monthly

U.S. Dollars per bushel



Source: USDA, National Agricultural Statistics Service.

Record-Low Barley Production Keeps U.S. Barley Supplies Tight for 2021/22

There are no changes to the U.S. barley supply and use projections for 2021/22, nor to the projected season-average farm price. U.S. barley production is projected at 118 million bushels for 2021/22—making it the smallest U.S. barley crop since 1934. Total supplies are also down significantly, projected at 196 million bushels, versus an estimated 258 million bushels in 2020/21. Poor weather also affected Canada’s barley production, which is the top foreign supplier of barley to the United States.

Total barley use for 2021/22 is projected at 136 million bushels, including 125 million bushels for domestic use and 11 million bushels of exports. By comparison, barley for domestic use in 2020/21 is estimated at 172 million bushels and exports at 14 million. Ending stocks are unchanged from the November *WASDE* report, at 60 million bushels. Current ending stock projections still represent 44 percent of projected use, however, keeping the stocks-to-use ratio in line with historical levels. The projected national season-average price for barley in 2021/22 is \$5.15 per bushel, compared with \$4.75 in 2020/21.

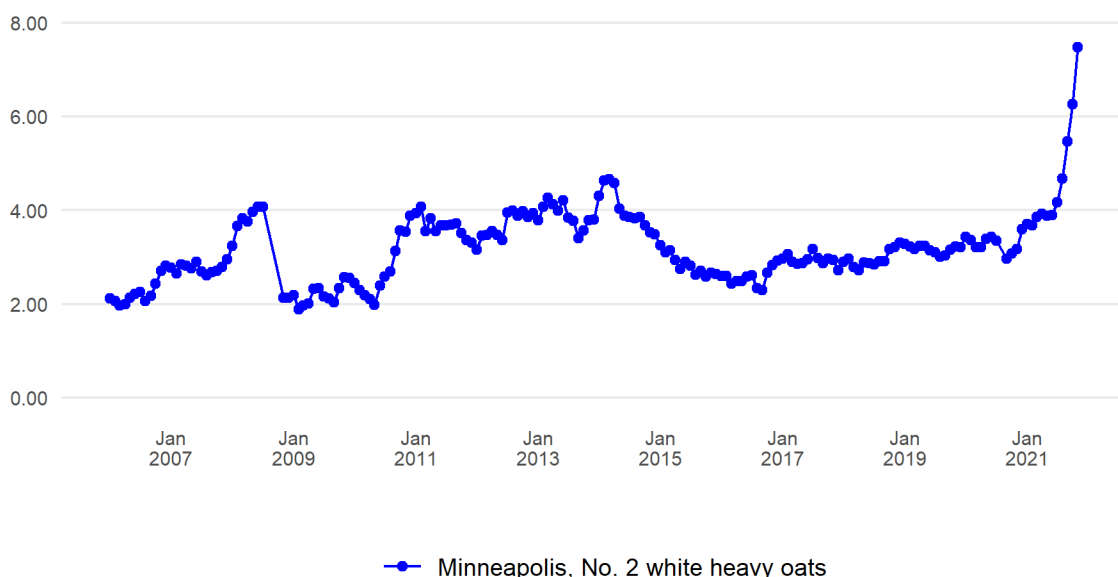
Oat Import Projections Raised, but Prices Also Higher for 2021/22

U.S. oat markets continue to see strong prices and tight supplies through 2021/22. Cash prices for oats averaged \$7.47 per bushel in the Minneapolis market for November 2021. This number is up from \$6.26 in October and continues the historically high prices seen since poor summer weather conditions reduced the oat production outlook in the United States and Canada.

Figure 9

U.S. cash-market prices for oats, monthly average

U.S. Dollars per bushel



Source: USDA, Agricultural Marketing Service.

Oat production in the United States remains unchanged at 40 million bushels for 2021/22. Projected imports are raised 8 million bushels from the November *WASDE* report to 77 million bushels. This increase is based on the pace of imports through October reported by the U.S. Census Bureau, as well as export data through November by the Canadian Grain Commission, and a slightly raised production figure in Canada for 2021/22.

The additional projected supplies are expected to result in additional feed and residual use for oats—raised 5 million bushels to 45 million— and slightly more ending stocks—up 3 million bushels to 28 million. Relative to 2020/21 estimates, however, current projections for total use and ending stocks are significantly lower.

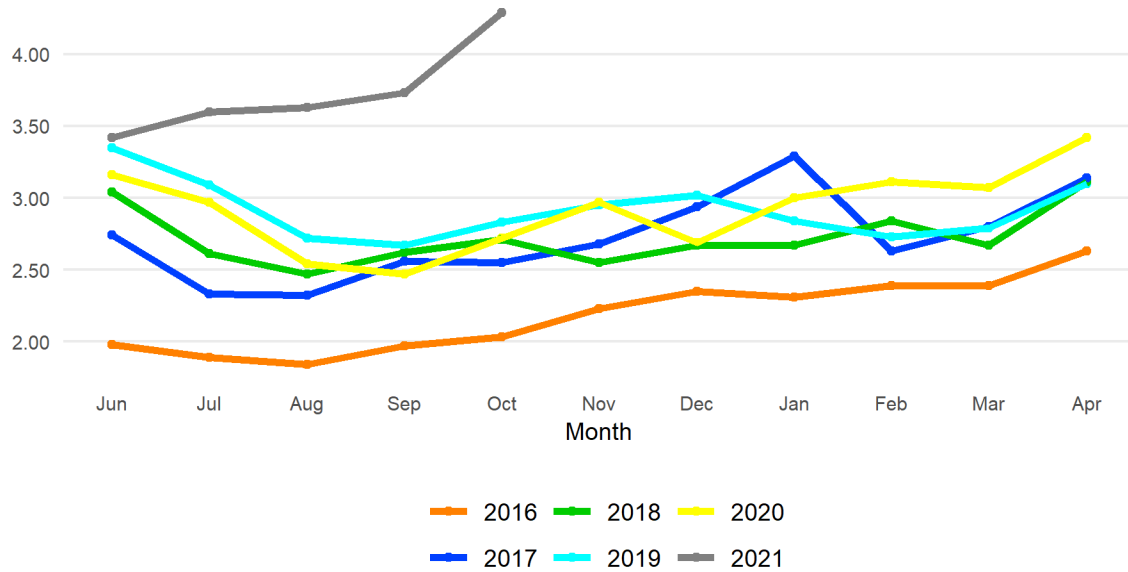
The season-average farm price for oats is projected at \$3.70 per bushel, a \$0.05-increase from the November *WASDE* report. The increase is based on the monthly price received reported by

NASS through October. The October 2021 national average price exceeded \$4.00 for the first time since March 2014. It is important to note, however, that—historically—the majority of oats are marketed between June and September. Therefore, monthly prices after October are likely to have a smaller influence on the season-average price.

Figure 10

Price received for oats, monthly

U.S. Dollars per bushel



Source: USDA, National Agricultural Statistics Service.

International Outlook

Olga Liefert

World Coarse Grain Production Projected Higher, Driven by Corn

World coarse grain production for **2021/22** is projected 2.7 million tons higher from November *WASDE* report, as higher projections for **Ukrainian** corn and **Australian** barley are partly offset by lower winter crop output in a number of countries. Although total coarse grain production for the **European Union (EU)** is marginally down, EU corn output is projected higher, while reduced output for other coarse grain is offsetting (see text below and table A2).

Corn production for 2021/22 in **Ukraine** is raised 2 million tons this month, to reach a record-high of 40 million tons, 32 percent higher than last year. Late harvest reports indicate record-high yields in the northwestern part of the country. However, the eastern part of the country did not perform as well. Growing area under corn in Ukraine has been an important factor in reaching this record, as corn yields are projected to be lower than the record-high yields of 2018/19.

Corn output for **2021/22** is boosted 2.5 million tons for the **European Union**, with higher projected area and yields. The change in the EU area is driven by the revisions for **Poland**. Based on the recently issued results of its agricultural area survey, the Polish Main Statistical Office (MSO) substantially revised area for all types of grain. The revised corn area in Poland is now projected almost 10 percent higher for 2021/22, and more than 30 percent higher for 2020/21. At the same time, barley, rye, and mixed grain area in Poland are all projected lower than before, with corresponding reductions in output for Poland and the whole European Union. Based on harvest reports for the major European corn producers—corn area and yields are projected higher for **France**, and corn yields are expected higher in **Romania**, but are reduced for **Hungary**.

Partly offsetting the above corn production increases is a reduction for **China**, down 0.4 million tons, a small fraction of a percent of its total corn output of 272.6 million tons. Following a data release by the National Bureau of Statistics of China (NBS), corn yields are projected lower—while area is boosted by more than 1 million hectares, which is consistent with a reduction in soybean area.

For the previous **2020/21** crop year, world corn production is revised higher, with 2.7 million tons of additional corn output for the **European Union** (upward Polish area data revision and higher yields in Romania), and a 1.0-million-ton increase for **Brazil**. Export data indicate that Brazilian second-crop corn production was larger-than-expected, in line with the latest report of the Government statistical agency, CONAB (Companhia Nacional de Abastecimento).

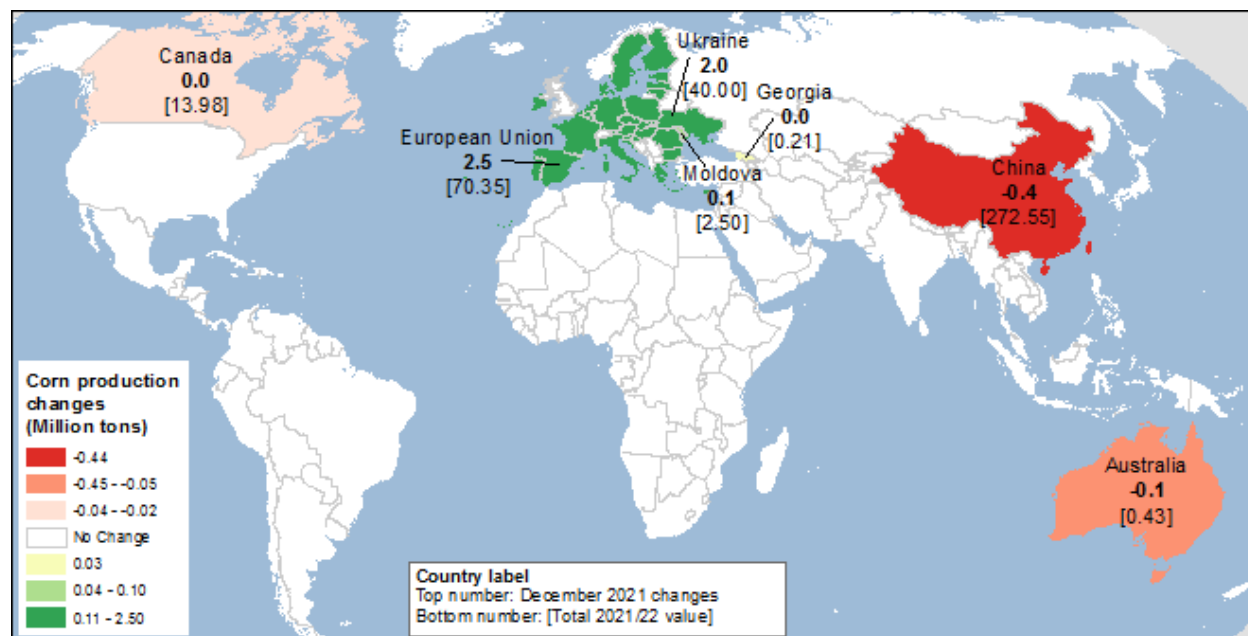
A number of production changes are made this month for 2021/22 crop year, across countries and commodities. Changes in global, foreign, and U.S. coarse grain production (by type of grain) are shown in table A1, while by country and by crop changes are presented in table A2.

Table A1 - World and U.S. coarse grain production at a glance (2021/22), December 2021				
Region or country	Production	Change from previous month ¹	YoY change ²	Comments
<i>Million tons</i>				c
Coarse grain production (total)				
↑ World	1,501.7	+2.7	+68.9	
↑ Foreign	1,103.7	+2.7	+43.8	Partly offsetting changes are made for a number of countries and commodities. See table A2.
United States	398.0	No change	+25.1	See section on U.S. domestic output.
World production of coarse grains by type of grain				
CORN				
↑ World	1,208.7	4.1	+85.9	
↑ Foreign	826.1	4.1	+61.8	Increases for Ukraine, the EU ³ , and Moldova are partly offset by a small reduction for China. See table A2.
United States	382.6	No change	+24.1	See section on U.S. domestic output.
BARLEY				
↓ World	145.5	-0.7	-13.9	
↓ Foreign	142.9	-0.7	-12.7	Lower EU ³ , Iranian, and Canadian barley output is partly offset by higher Australian production. See table A2.
United States	2.6	No change	-1.2	See section on U.S. domestic output.
SORGHUM				
↑ World	66.3	+0.3	+3.9	
↑ Foreign	54.3	+0.3	+1.4	Higher projection for sorghum output in Australia. See table A2.
United States	12.0	No change	+2.5	See section on U.S. domestic output.
OATS				
↑ World	23.0	+0.3	-2.5	
↑ Foreign	22.4	+0.3	-2.1	Higher projection for Canada is partly offset by a small reduction for the EU ³ . See table A2.
United States	0.6	No change	-0.4	See section on U.S. domestic output.
RYE				
↓ World	12.8	-0.8	-1.4	
↓ Foreign	12.6	-0.8	-1.4	Lower projection for the EU ³ is partly offset by a small increase in Canada. See table A2.
United States	0.2	No change	Small change	See section on U.S. domestic output.
MIXED GRAIN				
↓ World	15.5	-0.4	-0.5	Lower projection for the EU ³ is partly offset by an increase in Canada. See table A2.
¹ Change from previous month. ² YoY: year-over-year changes. ³ European Union. Fractional changes are also made for Canadian mixed grains.				
For changes and notes by country, see table A2.				
Source: USDA, Foreign Agricultural Service, <i>Production, Supply and Distribution</i> database.				

Table A2 - Coarse grain foreign production by country at a glance, December 2021

Type of crop	Crop year	Production	Change in forecast ¹	YoY ² change	Comments
<i>Million tons</i>					
Coarse grain production by country and by type of grain (2021/22)					
UKRAINE					
↑ Corn	Oct-Sep	40.0	+2.0	+9.7	The final weeks of corn harvest reporting give an improved outlook for crop yields, with record-high yields in the northwestern regions of the country (see report text).
EUROPEAN UNION (EU)					
↑ Corn	Oct-Sep	70.4	+2.5	+3.3	Both EU corn area and yield are projected higher this month, based on the countries' reports. Yields are projected higher and area is revised up for Poland . Area and yields are also projected higher in France . Corn yields are increased further in Romania (where northeastern areas bordering Ukraine and Moldova performed very well). Partly offsetting are yield-driven reductions for Hungary and several other EU countries (see report text).
↓ Barley	Jul-Jun	52.8	-1.2	-1.5	The production reduction comes mainly from lower projected barley area in Poland (due to area revision, see above) and lower yields for Denmark. Smaller changes are made for a number of EU countries.
↓ Rye	Jul-Jun	8.1	-0.9	-0.9	The production reduction comes mainly from lower projected rye area in Poland (due to area revision, see above) and lower yields for Germany. Smaller changes are made for a number of EU countries.
↓ Mixed grain	Jul-Jun	15.0	-0.5	-0.4	The production reduction comes mainly from lower projected area in Poland (due to area revision, see above). Smaller changes are made for a number of EU countries.
MOLDOVA					
↑ Corn	Jul-Jun	2.5	+0.1	+1.2	Corn yields are projected higher, based on information for the neighboring Ukrainian region of Odessa.
CHINA					
↓ Corn	Oct-Sep	272.6	-0.4	+11.9	A small downward adjustment, based on the official NBS (National Bureau of Statistics) release of data (see report text).
CANADA					
↓ Barley	Aug-Jul	6.9	-0.2	-3.8	Official post-harvest reports show the recently harvested crop had slightly lower yields than previously forecast.
↑ Oats	Aug-Jul	2.6	+0.3	-2.0	Official post-harvest reports show the recently harvested crop had higher area and yields than previously forecast.
↑ Mixed grain	Aug-Jul	0.2	+0.1	-0.1	Official post-harvest reports show the recently harvested crop had higher area than previously forecast.
AUSTRALIA					
↑ Barley	Nov-Oct	13.0	+1.0	-0.1	Favorable growing conditions in Western Australia and other key producing areas pushed yields to an all-time record-high. The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) reported preliminary forecasts for area and yields for 2021/22 grains are in line with projected changes.
↑ Sorghum	Mar-Feb	1.9	+0.3	+0.4	Both projected harvested area and yield for sorghum are higher, based on the December ABARES report. Sorghum - the summer crop - is still being planted in Australia, and is enjoying excellent planting and early growing conditions.
IRAN					
↓ Barley	Jul-Jun	2.7	-0.4	-0.9	A drought throughout the growing season reduced both harvested area and yields, with the latter now projected at the lowest since 2008.
¹ Change from previous month. Smaller changes are made for several countries, see map A for changes in corn production. ² YoY: year-over-year changes.					
Source: USDA, Foreign Agricultural Service, <i>Production, Supply and Distribution</i> database.					

Map A – Corn production changes for 2021/22, December 2021



Source: USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

Coarse Grain Use and Stocks Projected Higher

Global coarse grain consumption in 2021/22 is projected 2.7 million tons higher this month at 1,493.2 million tons. Virtually all the increase comes from foreign consumption (up 2.5 million tons), with a small addition in higher domestic use for oats and rye in the **United States** (see the domestic section of the report). Consumption revisions for many countries follow this month's production changes. Although total coarse grain consumption in the **European Union** is unchanged this month, a higher projected corn output encourages greater domestic use, while a decline in barley and other types of coarse grain production is expected to limit consumption of those grains within the region. Another production-related change in domestic consumption is projected for **Australia**, where part of increased (but low-quality) barley output is expected to boost feed use.

Sorghum feeding for **China** is projected higher this month, with expectations of even higher demand for feed grain in the country's southern provinces that do not produce nearly enough grain to feed their large livestock herds, pushing this year's record even higher. China is expected to import additional sorghum from Australia (see the trade section below).

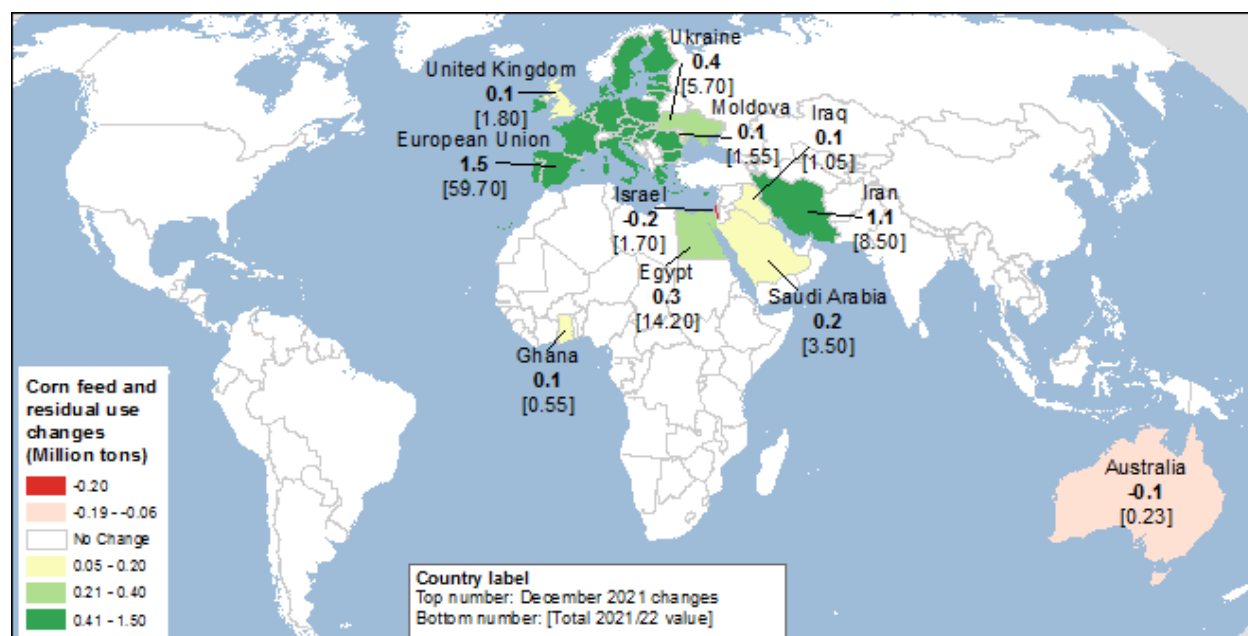
Higher coarse grain consumption is projected this month for **Iran**, on the expectation that the country will import enough grain (corn and barley) to come closer to last year's level of feed consumption, after drought sharply reduced the country's crop output.

Several smaller changes in coarse grain use are also made this month for a number of countries. For more information on this month's changes in corn feed and residual use, see map B below.

Changes in world 2021/22 coarse grain ending stocks are mostly offsetting, a mere 0.9 million higher (0.3 percent) than a month before, as larger corn stocks in Ukraine and the European Union are partly offset by a reduction for China. Corn ending stocks are projected 1.1 million tons higher, while changes in rye stocks are slightly offsetting, with a reduction for the European Union (lower projected output). Barley and other coarse grain stocks are virtually unchanged.

It is worth mentioning that world **barley** stocks (at 16.9 million tons) are the lowest in almost 40 years, as global barley demand outstripped supply this year, leading to a surge in prices.

Map B – Corn feed and residual changes for 2021/22, December 2021



Source: USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

Ukraine and Brazil Lead Rise in Corn Exports

Projected 2021/22 world coarse grain trade for the international trade year (October-September) is up 3.4 million tons to 242.0 million this month, with higher trade for all types of coarse grain.

Corn trade is projected up 2.4 million tons this month to reach 192.7 million. Corn supplies are projected higher this month in **Ukraine**, as improved corn yields expand record-high supplies in this export-oriented country. Ukrainian corn exports are projected 1.0 million tons higher to reach 32.5. Since 2010, Ukraine has almost quadrupled its corn production, by both expanding

crop area and boosting yields, as well as incorporating new technologies and improved seed. In this period, exports grew more than sixfold, with a broad expansion of Ukrainian export markets. China has become the top single-country destination for Ukrainian corn—with the European Union, Egypt, and other countries of North Africa and the Middle East becoming Ukraine's other major foreign markets. In most of these countries, consumer incomes—and therefore demand for livestock products—are growing, and the appetite for feed grains is supporting corn import growth.

In the second part of October, the pace of **Brazilian** corn exports started to accelerate, and by the end of November, shipments became stronger than previously expected. This export growth at the tail end of the crop season is not typical. Grain crop cycles in the southern and northern hemispheres differ substantially, which makes comparing annual trade volumes between the two hemispheres challenging. For this reason, USDA's Foreign Agricultural Service created the concept of an international October-September trade year (TY) that allows such comparison(s). Brazilian corn exports in the months of October through February are part of both the (March-February) local marketing year (LY) and to the (October-September) international trade year (TY). In the case of Brazil, the trade year is 1 year ahead of the local year. For example, the current month of December 2021 is part of both the LY 2020/21 and the TY 2021/22.

Consequently, the higher recent pace of Brazilian corn exports is boosting both the local 2020/21 and trade 2021/22 years by 1.0 million tons. With this increase, Brazilian TY 2021/22 corn exports are now projected to reach 30.0 million tons, while the LY 2020/21 is now projected at 18.5 million tons. The projection for the LY 2021/22 (March-February) is unchanged this month at 43.0 million tons.

EU corn exports are also projected higher this month, up 0.5 million tons to 4.9 million. The increase reflects both higher projected corn output (especially in France and Romania—leading EU exporters, but also in Poland) and the current pace of exports.

With higher projected Ukrainian and Brazilian corn output and exports, imports are increased for several countries. Larger demand for imported grain in drought-stricken **Iran**—one of the top export destinations for both countries—is expected to boost coarse grain imports to provide feed to Iranian growing poultry operations. Relative prices for corn and barley suggest a substantial increase in corn imports, up 1.2 million tons, while barley imports are up just 0.1 million. **Egypt** and **Saudi Arabia** are also expected to get more corn from both Brazil and Ukraine, with total imports for both countries up 0.3 million tons. In addition, the **United Kingdom** is projected to import 0.3 million tons more from Ukraine, Brazil and the European Union.

The **U.S** corn export forecast for 2021/22 is unchanged this month at 63.0 million tons, at about a 33 percent share of global corn trade and the third highest level of U.S. exports ever, following 2020/21 (record-high) and 2017/18. Last year, the U.S. share in global trade went above 37 percent, boosted by Chinese imports and lower competition from Brazil and Ukraine.

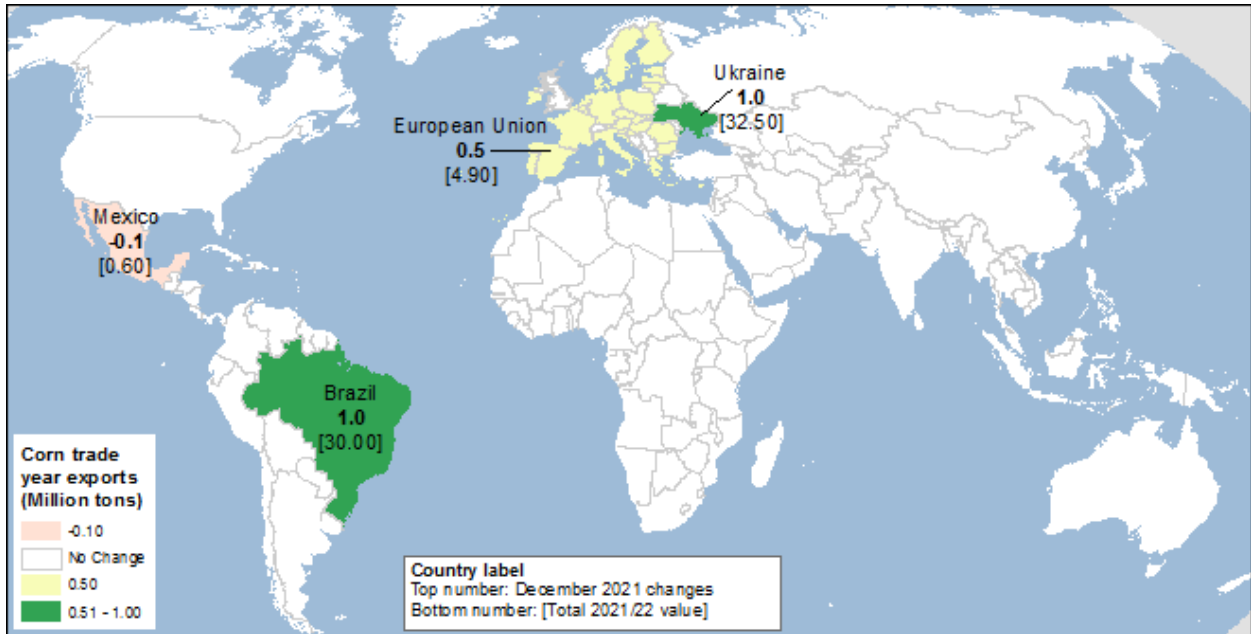
Outstanding sales at the end of November 2021 are slightly lagging behind last year, and November grain inspections are essentially on par with a year ago. However, all three major U.S. corn export competitors have the potential for bumper harvests and high exports. Ukraine has already started to expand its corn trade, as its harvest approaches its end—while Argentina and Brazil are expected to boost their export presence substantially in spring and summer 2022, which should limit U.S exports later in the year. This time, the United States is expected to have a longer-than-usual window of price-competitiveness through the spring. The reason is that Argentina has a more-than-typical amount of late planted corn this year, which—under normal weather conditions—will delay the harvest, and therefore a seasonal increase of exports.

For more information on this month's changes in corn trade, see maps C and D below.

Global **barley** trade for the international October-September year is raised 0.5 million tons this month, with higher **Australian** exports that are partly offset by a reduction for **Canada**.

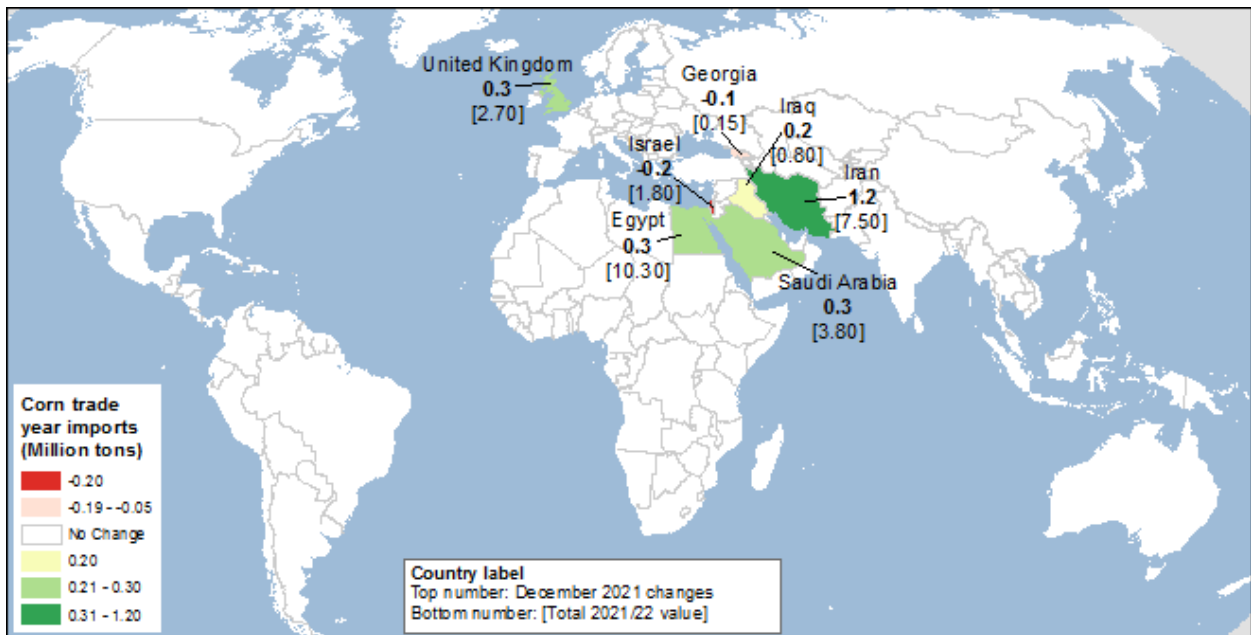
Sorghum trade is projected 0.3 million higher this month to reach 12.4 million, with higher Chinese imports and increased Australian exports. Along with higher projected **Australian** sorghum production and exports, **China** is expected to import additional sorghum from Australia, up 0.3 million tons to reach an all-time record of 10.3 million. An early onset of deep snow in the northeastern corn producing regions of China destabilized Chinese logistics. This is one of several factors triggering a surge in Chinese transportation costs between the feed-hungry south and grain-producing northeast. A growing price-split further incentivizes additional grain imports, and the extra amount of sorghum projected for Australia is expected to go to China (virtually all of Australia's sorghum exports end up in China).

Map C – Corn trade year (TY) export changes for 2021/22, December 2021



Source: USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

Map D – Corn trade year (TY) import changes for 2021/22, December 2021



Source: USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

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