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Outlook

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Feed Outlook: November 2021

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Record Corn Yield Forecast for 2021/22 Crop

U.S. corn production is projected to be 15,062 million bushels in 2021/22, based on the USDA's National Agricultural Statistics Service's (NASS) latest *Crop Production* report. The forecast raises corn production by 43 million bushels from the October figure. If realized, the current forecast would result in a record national corn yield of 177.0 bushels per acre. Projected total corn use is raised 50-million-bushels to 14,830 million bushels, based on a recent strong pace of ethanol production. The projected season-average farm price for corn is unchanged at \$5.45 per bushel.

Corn exports from Argentina got a boost with both increased supplies and competitiveness, supported by the larger shipments through October. Brazilian exports are projected lower based on low October shipments. China's coarse grain import projections continue to grow, and a raising of Chinese imports for barley and sorghum is expected to provide a bridge to satisfy demand in coarse grain feeding. The U.S. corn export forecast is unchanged at about a 33-percent share of global corn trade and 5.6 million tons lower than a year ago, as all major U.S. corn export competitors have the potential (under normal weather conditions) for bumper harvests and high exports later in the year.

Domestic Outlook

Michael McConnell
Angelica Williams

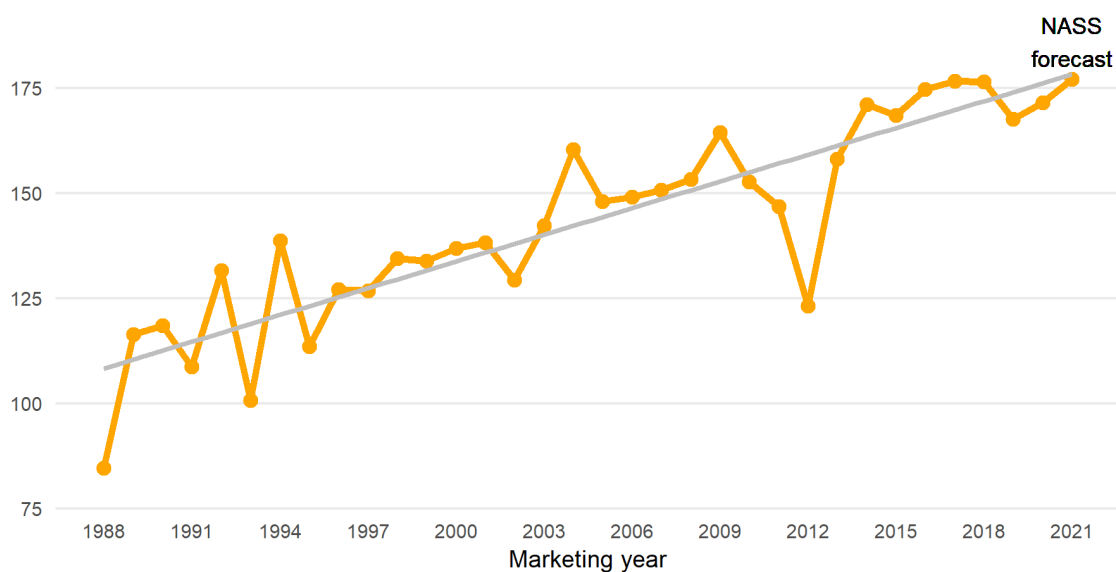
Corn Production Raised, Record Yield Forecast for 2021/22

The USDA's November *World Agricultural Supply and Demand Estimates (WASDE)* report projects higher corn supplies in the United States for 2021/22, due to higher expected production. The U.S. corn crop for 2021/22 is forecast at 15,062 million bushels—a 43-million-bushel increase from October. The latest forecast comes from the National Agricultural Statistics Service's (NASS) *Crop Production* report published on November 9, 2021. The raised production forecast is the result of higher projected yields, now forecast at 177.0 bushels per acre—up 0.5 bushels from the October forecast. Planted and harvested area are unchanged from October. The yield forecast would be a national record, if realized. The current record is 176.6 bushels per acre, set in 2017/18.

Figure 1

Corn yields, United States, 1988 to 2021 forecast

Bushels per acre



Note: NASS= National Agricultural Statistics Service.
Source: USDA, National Agricultural Statistics Service.

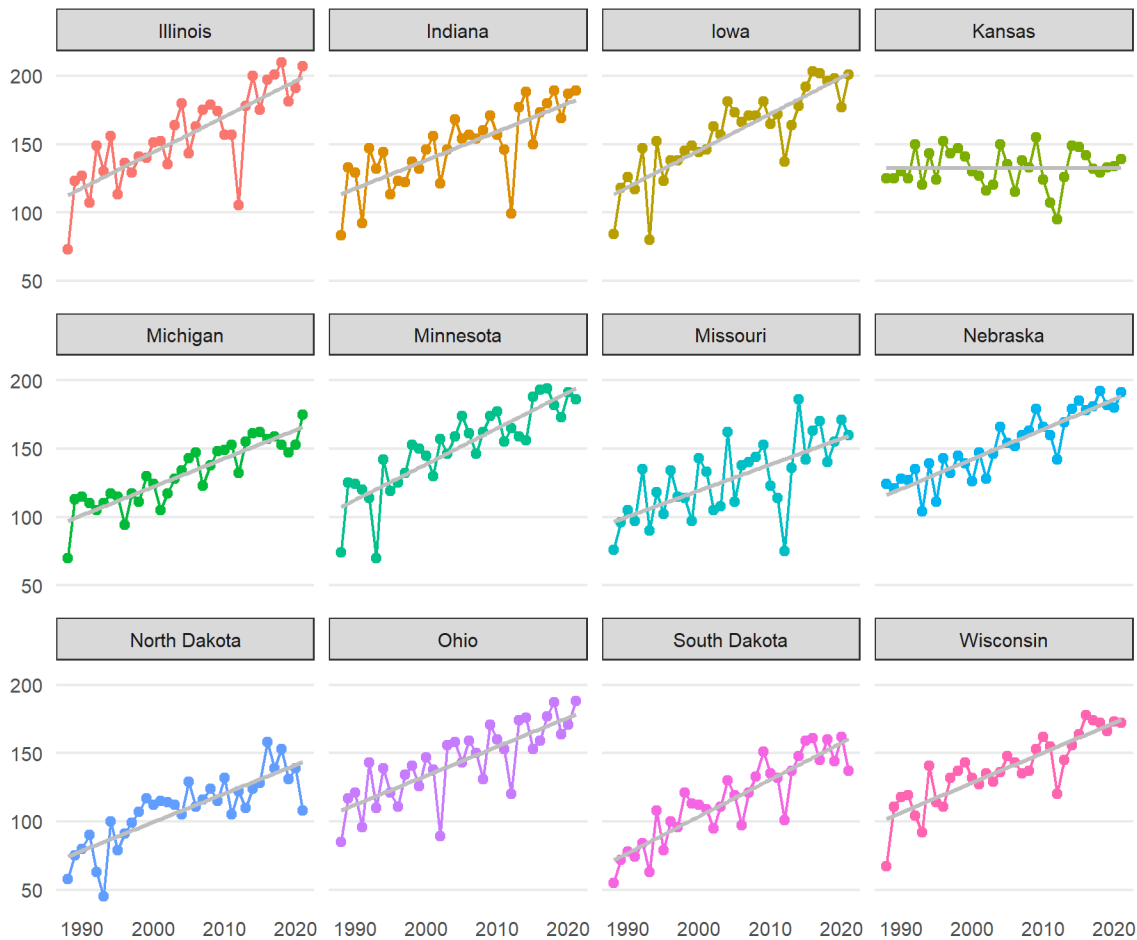
The November forecast comes in at a record-high, despite disparities in the crop performance at local levels. Drought conditions in the Western Corn Belt during the growing season had a negative impact on overall corn production for 2021/22; in particular—North Dakota, South Dakota, and Minnesota—are forecast to have yields lower than their respective trend yields.

This impact has been offset, however, by above-trend yields in the Eastern Corn Belt—particularly in Illinois, Indiana, Ohio, and Michigan. The Eastern Corn Belt experienced ample rainfall and better overall growing conditions during the summer.

Figure 2

Corn yields, by State, 1988 to 2021 forecast

Bushels per acre



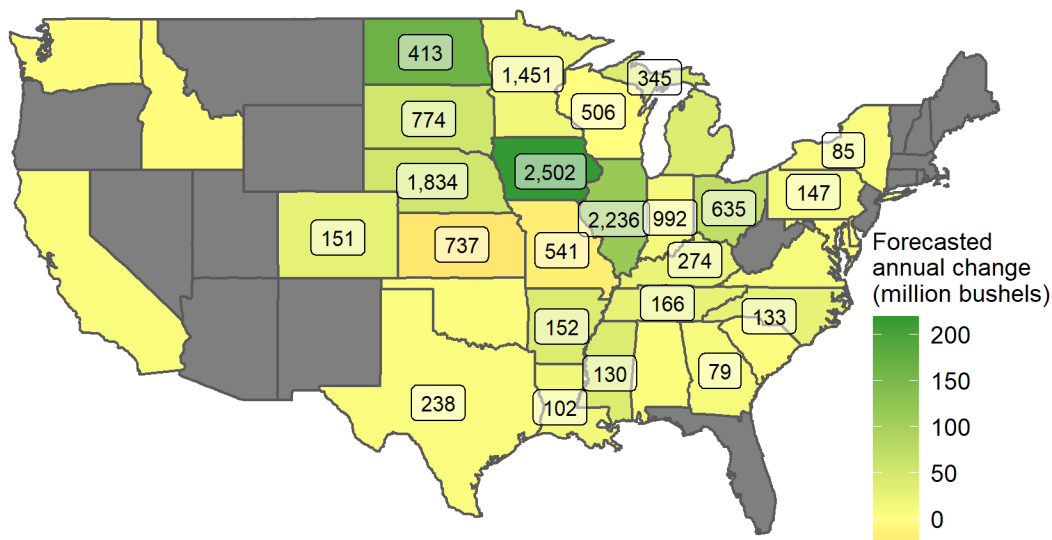
Note: 2021 data are latest National Agricultural Statistics Service (NASS) forecasts.
Source: USDA, National Agricultural Statistics Service.

Despite the lower yields in the Western Corn Belt—higher planted area in North Dakota, South Dakota, and Minnesota have offset the lower yields—resulting in higher corn production relative to last year. In Iowa, less area is being offset by improved yields, relative to the drought and the derecho-impacted 2020/21 crop. While supplies in the Western Corn Belt are relatively tighter than would have been expected in the spring when the crop was planted, the supply shortfall is not as severe as the State-level yield trends alone would suggest. Additionally, NASS yield forecasts have improved in several Western Corn Belt States from the initial forecasts published in August. This improvement has also eased some of the regional supply concerns, notably in:

Minnesota (currently at 186 bushels per acre, compared with 166 bushels in August), Nebraska (191 bushels per acre versus 186), and South Dakota (137 bushels per acre versus 133).

Figure 3

U.S. corn production 2021, current forecast and annual change, million bushels



Note: Labels included only for States forecast to produce more than 75 million bushels in 2021.
Source: USDA, National Agricultural Statistics Service.

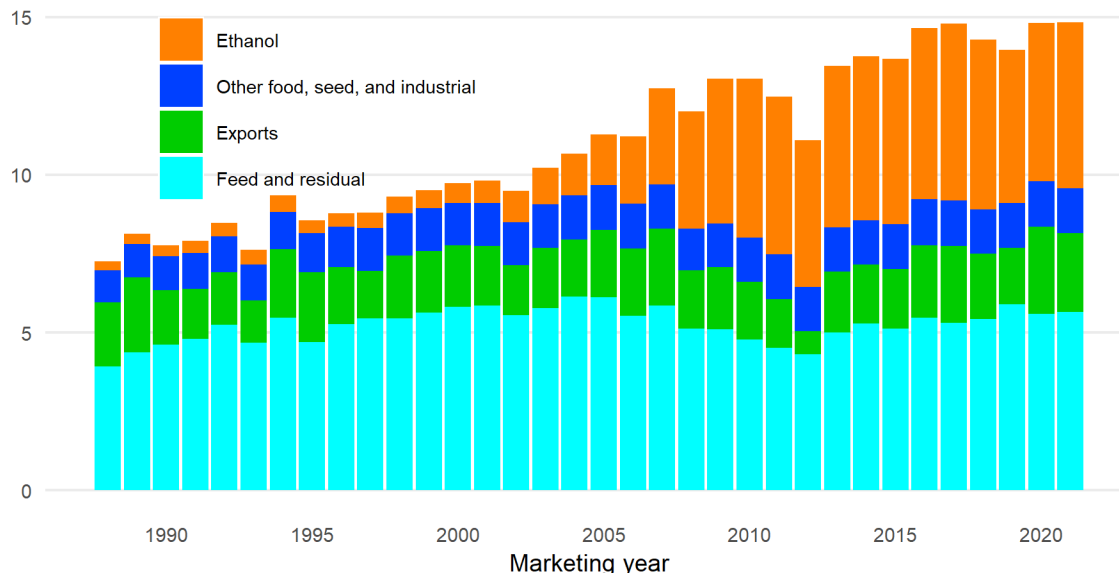
Post-Harvest Ethanol Production Rebounds, Raising Projections for Corn Used for Ethanol

Total corn use for 2021/22 is projected to total 14,830 million bushels, a 50-million-bushel increase from the October report. Year-over-year total-use projections are only slightly higher. A greater proportion of use for 2021/22 is projected to be domestic use, however, compared with the previous year that saw record exports.

Figure 4

U.S. corn utilization

Billion bushels



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

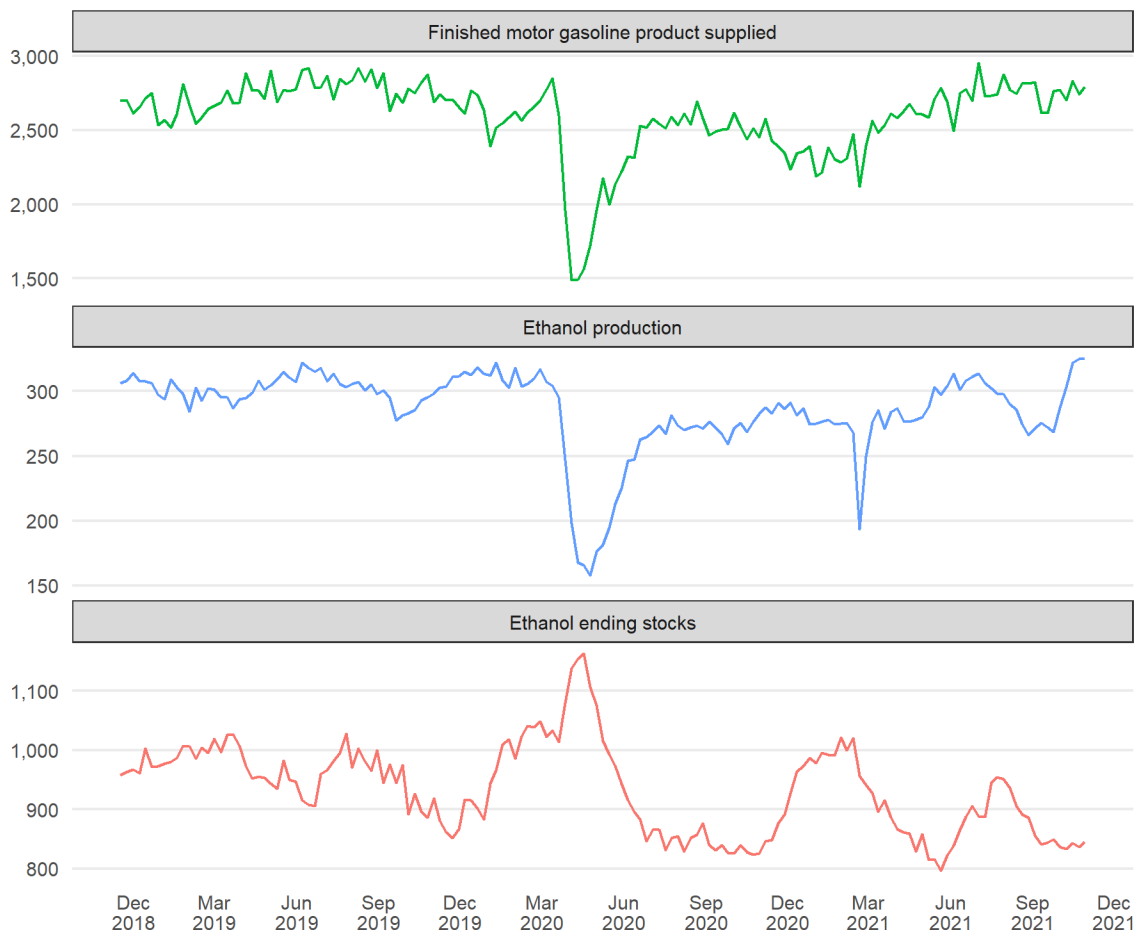
Food, seed, and industrial use of corn is projected to be 6,680 million bushels, a 50-million-bushel increase from the October *WASDE* report. The increase is entirely due to higher corn use for fuel ethanol, projected at 5,250 million bushels.

Ethanol production increased substantially during October, according to weekly data reported by the Department of Energy’s Energy Information Administration (EIA). Weekly totals during October nearly exceeded record-setting totals set in 2017. This increase is partially due to the strong margins seen for ethanol producers, as corn prices have fallen with the 2021/22 corn crop coming to market, and gasoline prices have remained strong.

Figure 5

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

Million gallons



Source: U.S. Department of Energy, Energy Information Administration.

The increase in the weekly data is also potentially related to the slowdown in ethanol production that occurred during the summer, when corn prices were high and availability limited. EIA reported that finished gasoline supplied continued its steady recovery through the summer, despite less ethanol being produced. As a result, ethanol stocks were drawn down. The post-harvest surge in ethanol production is, at least partially, catching up with the sector’s previous period of low capacity utilization. According to the EIA annual capacity data, the weekly fuel ethanol production capacity is about 330 million gallons per week—well above the utilization rates seen during the 2021 summer, but in recent weeks has been approaching that level. Corresponding ethanol stocks have not seen a substantial increase, though. The lack of higher stocks could potentially be due to the uptick in ethanol production going directly to the domestic gasoline supply, an increase in ethanol exports (which wouldn’t be fully accounted for until U.S.

Census trade data for October is released in December), product in transit from production centers to storage facilities, or some combination of factors. Going forward, gasoline consumption and consumer miles driven are expected to be the main factors affecting ethanol production and demand. Stock-building and potential exports may provide additional, though more marginal, opportunities for growth.

Projected Corn Ending Stocks for 2021/22 Tighten Slightly, Average Farm-Price Projections Unchanged

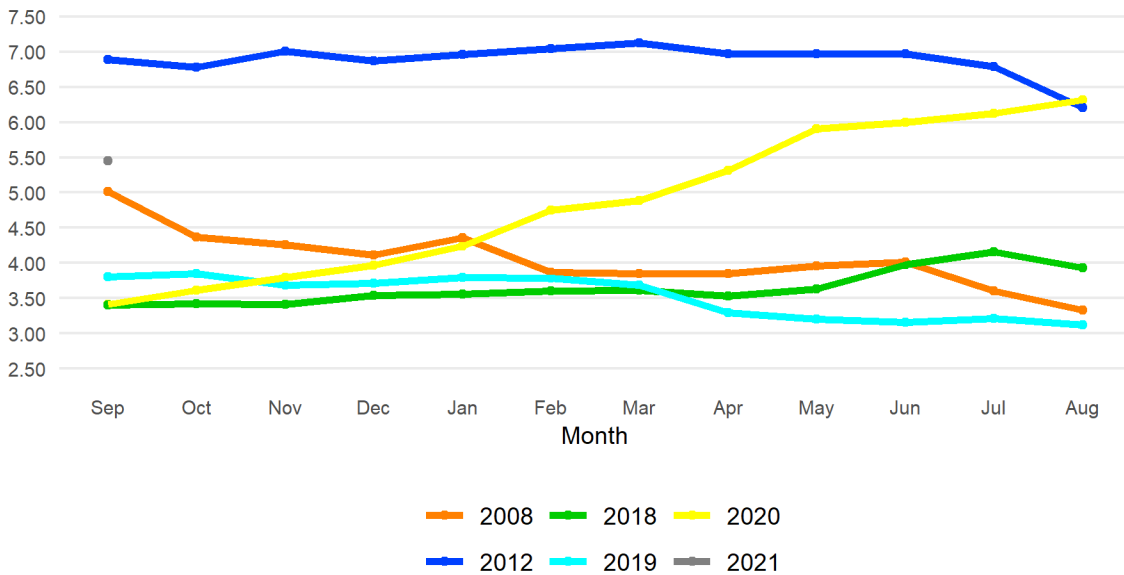
With the increase in use projections exceeding the higher production forecast, projected ending stocks for corn are 1,493 million bushels for 2021/22, a 7-million-bushel decline from the October report.

The season-average farm price for corn is projected to be \$5.45 per bushel for 2021/22, unchanged from October. The current projection would be a significant increase from the 2020/21 average farm price of \$4.52 per bushel. In its most recent *Agricultural Prices* report published on October 29, NASS reported that the national average for September corn prices received by farmers was \$5.45 per bushel. The September data point marks the first month of reporting for the 2021/2 marketing year; although October, November, and January historically carry the most significant weights in the season-average price, when producers market most of their corn production. The September price provides the first indication of how forward contracted bids during the growing season will translate into realized revenues for corn producers.

Figure 6

Price received for corn, monthly

U.S. Dollars per bushel

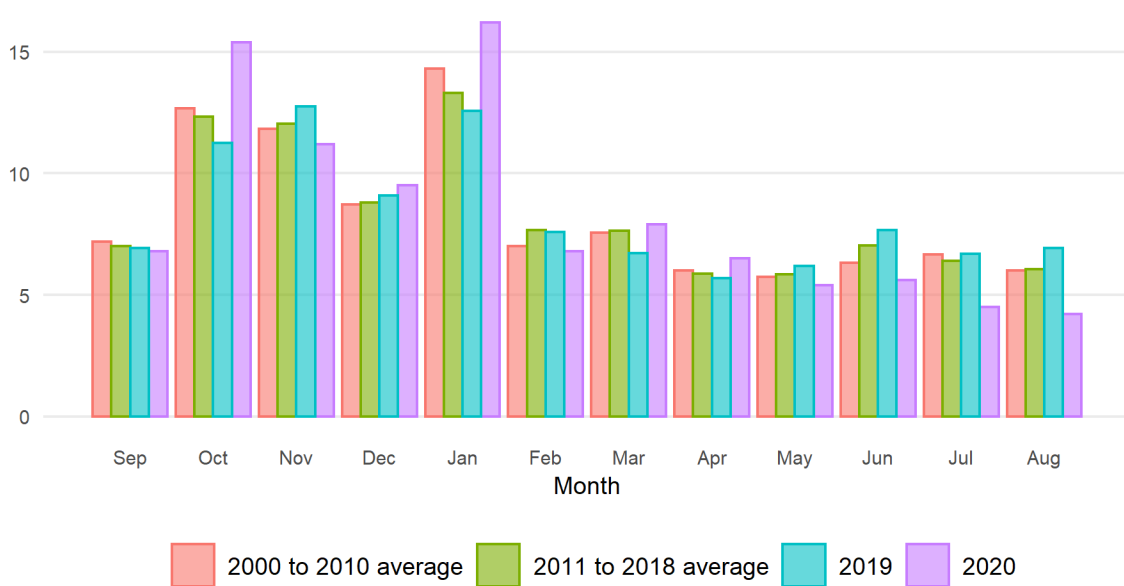


Source: USDA, National Agricultural Statistics Service.

Figure 7

Corn season-average marketing weights, marketing years 2000 to 2020

Percent



Source: USDA, National Agricultural Statistics Service.

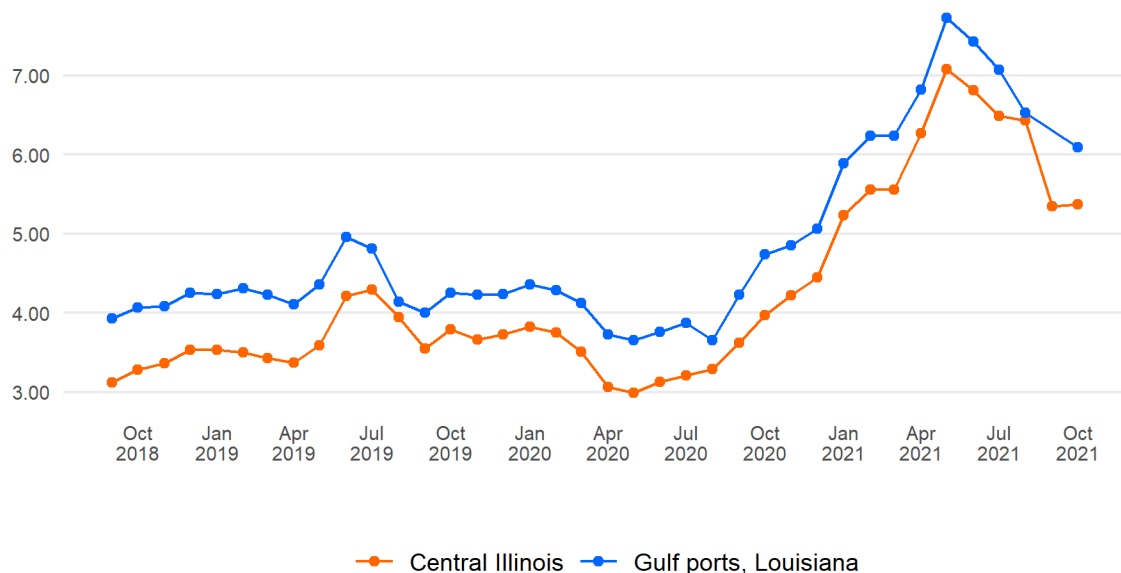
Cash prices for corn have fallen from the elevated levels seen during the summer months. This decrease was widely anticipated, given the impact of the 2021/22 production coming to market with ending stocks being run down to very tight levels throughout the United States by the end

of the summer. Although down from the summer, prices remain higher than last year, signifying robust demand remains in the market. The Central Illinois cash-market corn price averaged \$5.37 per bushel in October, compared with \$3.97 in October 2020 and a recent monthly peak of \$7.08 in May 2021. Cash prices for export markets are showing a similar pattern, with the Gulf price averaging \$6.09 per bushel in October compared with \$4.74 during October 2020.

Figure 8

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

U.S. Dollars per bushel



Source: USDA, Agricultural Marketing Service.

Corn-basis levels (the difference in price of the futures-market contract price and the cash price at a local delivery market) indicate that there is a stronger pull for corn to be marketed to areas of domestic use—such as ethanol-producing dry mills, wet mills, and livestock feed markets. This basis pattern is in subtle contrast to the previous marketing year, which saw prices primarily led by strong price and basis levels at port markets, driven by strong foreign demand.

Feed and Residual for All Feed Grains and Wheat Projected Higher for 2021/22, GCAUs Lower

Feed and residual use for total feed grains and wheat is projected at 150.4 million metric tons (MT), up from the 2020/21 estimate of 149.3 million MT. Additional supplies available for feed and residual in corn, sorghum, and barley are projected to more than offset the year-over-year declines in wheat and oats.

Grain-consuming animal units (GCAU) for 2021/22 are projected to be 100.5 million units—a nearly 0.8-million-unit decline from the updated 2020/21 estimate of 101.3 million units. The year-over-year declines are largely due to lower inventories of hogs (down 0.6 million units from 2020/21), cattle on feed (down 0.4 million), and dairy (down 0.1 million). Poultry GCAUs are projected to increase—0.3 million units, slightly offsetting some of the declines in the other species.

U.S. Sorghum Production Projections Remain Unchanged for 2021/22

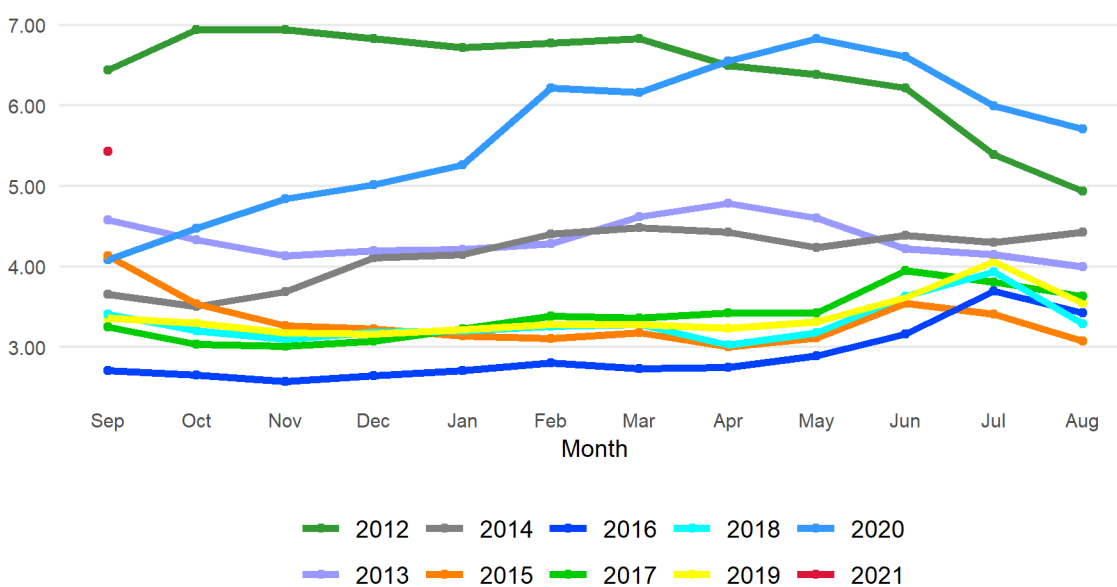
November’s sorghum balance sheet for the 2021/22 crop made no changes from the October release. The forecast-national yield remains steady from October at 72.3 bushels per acre. Sorghum-harvested area forecast remains constant at 6.5 million acres. Sorghum production for the 2021/22 crop was largely unchanged from the October projection, totaling 471 million bushels for the year.

The projected season-average farm price of sorghum remains at \$5.45 per bushel in 2021/22 and is consistent with NASS’s reported season-average farm price for September of \$5.43 per bushel; the highest farm price observed since 2012/13.

Figure 9

Price received for sorghum, monthly

U.S. Dollars per bushel



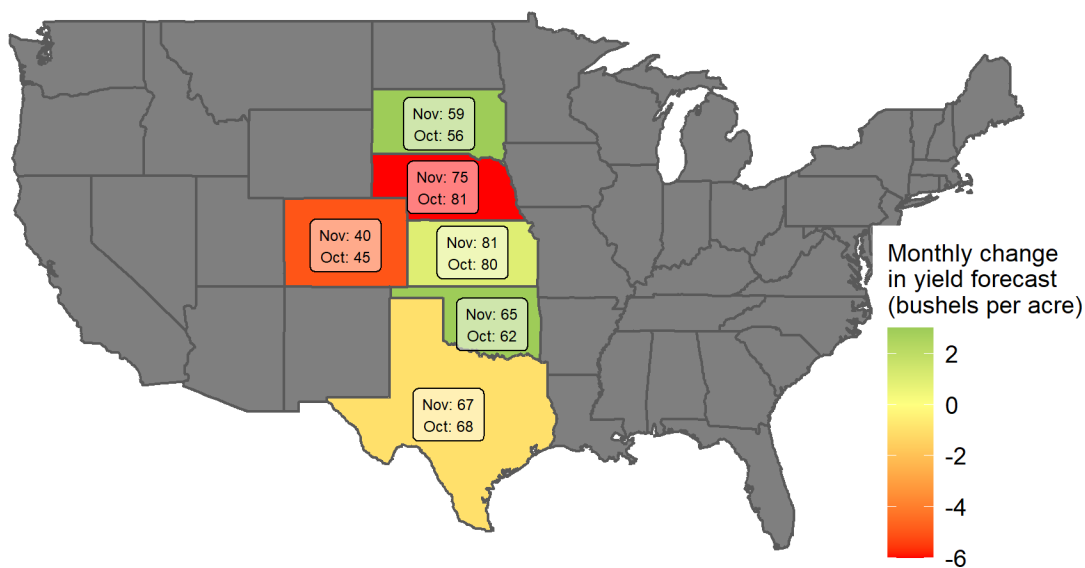
Source: USDA, National Agricultural Statistics Service.

No changes are made to 2021/22 exports or domestic use in the November *WASDE* report.

According to NASS's November *Crop Production* report, sorghum forecast yields of major sorghum producing states were revised from the October report. Yields for Colorado, Nebraska, and Texas are projected lower with 5-bushel, 4-bushel, and 1-bushel-per acre reductions, respectively. Decreases in projected yields in Colorado, Nebraska and Texas are offset by increases of 3 bushel, 1 bushel, and 3 bushel per acre in Oklahoma, Kansas, and South Dakota, respectively; leaving national yield unchanged.

Figure 10

U.S. Sorghum forecast yield and month-to-month change, bushels per acre, by State, 2021/22 crop marketing year



Source: USDA, National Agricultural Statistics Service.

Barley Supply and Use Unchanged, Prices Reduced but Still Elevated by Historical Standards for 2021/22

There are no changes made to the supply and use levels of the U.S. barley balance table. Production remains projected at 118 million bushels for 2021/22, based on NASS's September 30 *Small Grains Summary* report. The current supply outlook for U.S. barley markets is sharply lower for 2021/22, with dry and hot growing conditions affecting the main Northern Plains production regions in the United States and reducing production 31 percent from last year. Lower supplies are projected to translate into lower use for U.S. barley. Food, seed, and industrial use of barley for 2021/22 is projected to total 115 million bushels—a 22-percent decrease from 2020/21.

The season-average farm price for barley is projected at \$5.15 per bushel, a \$0.15 reduction from October. The current projection still reflects the highest farm price for barley since 2015/16. The monthly reduction is primarily due to lower reported malting barley prices reported by NASS through September in its monthly *Agricultural Prices* report.

Oat Price Projections Raised for 2021/22

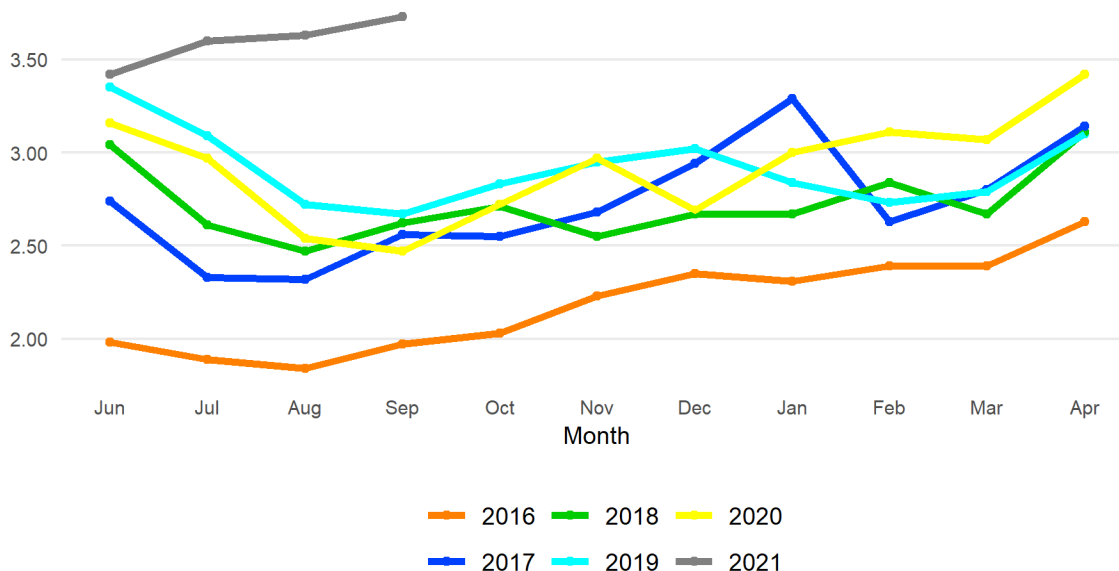
No changes are made to the U.S. oat supply and use figures in the November *WASDE* report. Oat production for 2021/22 remains at 40 million bushels and total supplies are projected at 147 million bushels; both down substantially from the current 2020/21 estimates of 66 million and 188 million bushels, respectively. Dry growing conditions and poor production in Canada are also contributing to the tight supplies in the U.S. market, through sharply lower imports.

The projected season-average farm price is raised \$0.05 per bushel from the October *WASDE* report to \$3.65 per bushel. The increase is based on data through September, reported by NASS in its most recent *Agricultural Prices* report. If realized, the price would be the highest average annual farm-gate price since 2013/14.

Figure 11

Price received for oats, monthly

U.S. Dollars per bushel



Source: USDA, National Agricultural Statistics Service.

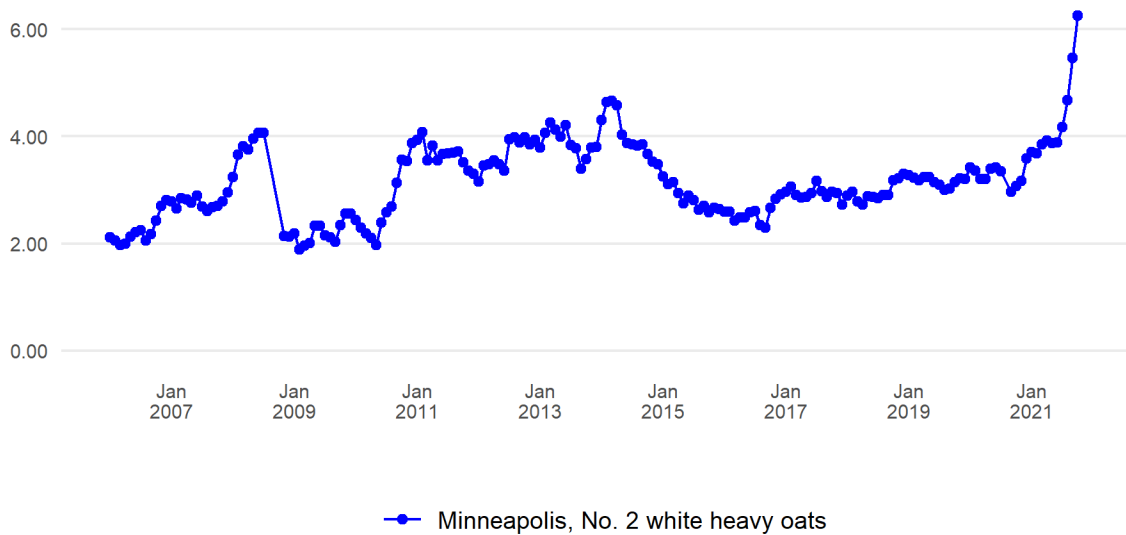
Longer-term Fundamentals Contribute to Higher Oat Prices

U.S. oat markets have witnessed strong price increases in the cash and futures markets since the summer. According to the USDA’s Agricultural Marketing Service (AMS), the cash price for oats in Minneapolis exceeded \$6.00 per bushel in October 2021, topping the monthly highs set in 2008 and 2014. The price increase is primarily due to the poor production conditions in the United States and Canada for the 2021/22 crop, tightening supplies in the U.S. market.

Figure 12

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

U.S. Dollars per bushel



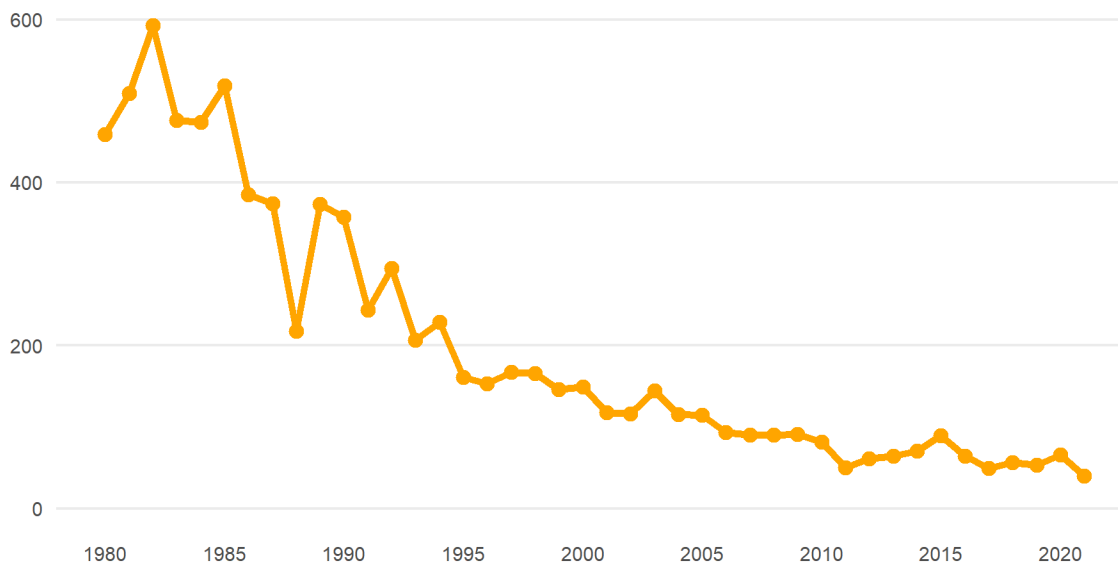
Source: USDA, Agricultural Marketing Service.

Oat production in the United States has been steadily declining since the 1980s. During 1980/81 and 1985/86, the United States produced between 450 million and 600 million bushels. In the last 10 years, the largest oat crop total was slightly below 90 million bushels. This decline has primarily been the result of reduced area of oats harvested for grain, with yields steadily increasing as area consolidated.

Figure 13

Oat production, United States, 1980 to 2021

Million bushels



Source: USDA, National Agricultural Statistics Service.

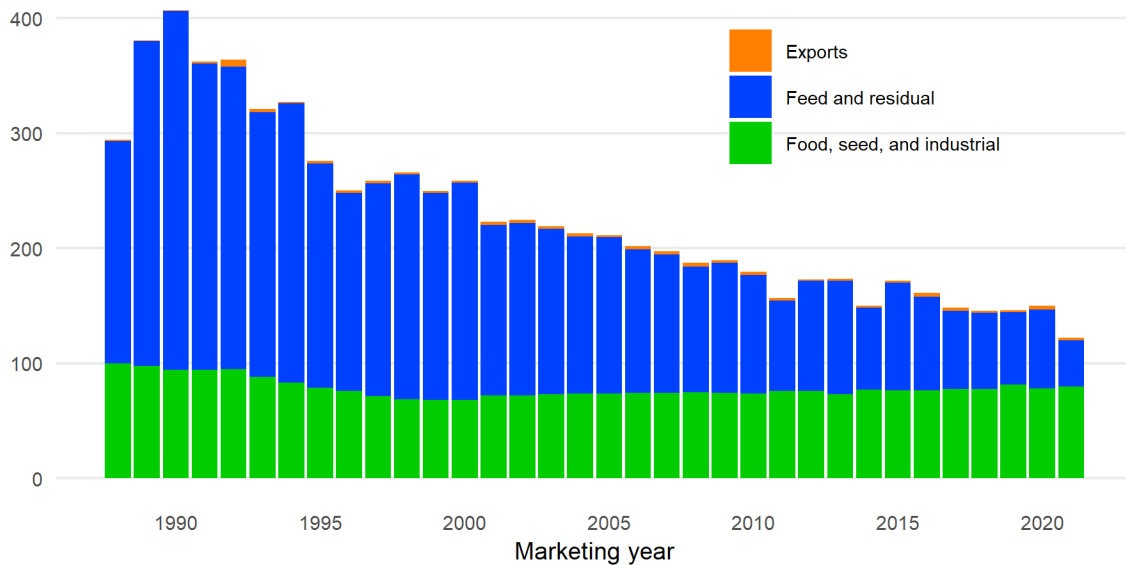
Oats are grown broadly throughout the United States, but the majority of oat production is concentrated in the Northern Plains and Great Lakes States of Minnesota, South Dakota, North Dakota, and Wisconsin. As domestic production has steadily fallen, U.S. oat supplies became more reliant upon imports—with Canada being the dominant supplier. Between 1990/91 and 1995/96, the United States imported about 17 percent of its total oat supplies. That total grew to about 45 percent by 2015/16 and 2020/21.

projected available oat supplies in 2021/22, the demand side of the market is likely less price elastic and oat crop marketing is more reliant on contract arrangements for producers than it was 10 and 20 years ago. As a result, when dry conditions in the northern United States and Prairie Region of Canada substantially reduced production in North America, U.S. oat prices began increasing substantially.

Figure 16

U.S. oat utilization

Million bushels



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

International Outlook

Olga Liefert

World Coarse Grain Output Projected Higher

Global coarse grain production in 2021/22 is projected to reach 1,499 million tons, up 5.1 million this month, as an increase in foreign production is boosted by an advance in U.S. corn output. Foreign coarse grain production (global minus U.S. output) for 2021/22 is projected 4 million tons higher this month at 1,101.1 million tons, 43.5 million tons above a year ago. **U.S.** coarse grain output increased by 1.1 million tons, with an upward yield revision for corn. Changes in global, foreign, and U.S. coarse grain production (by type of grain) are shown in table A1, while by changes for countries are presented in table A2.

| Table A1 - World and U.S. coarse grain production changes (2021/22), November 2021 | | | | | |
|---|-------------------|------------|---|-------------------------|---|
| | Region or country | Production | Change from previous month ¹ | YoY Change ² | Comments |
| <i>Million tons</i> | | | | | c |
| Coarse grain production (total) | | | | | |
| ↑ | World | 1,499.0 | +5.1 | +68.6 | |
| ↑ | Foreign | 1,101.1 | +4.0 | +43.5 | Partly offsetting changes are made for a number of countries and commodities. See table A2. |
| ↑ | United States | 397.9 | +1.1 | +25.1 | See section on U.S. domestic output. |
| World production of coarse grains by type of grain | | | | | |
| CORN | | | | | |
| ↑ | World | 1,204.6 | +6.4 | +85.6 | |
| ↑ | Foreign | 822.0 | +5.3 | +61.5 | Higher corn production prospects in Argentina, EU ³ , Sub-Saharan Africa (SSA) countries, and Turkey are slightly offset by lower output in Philippines. See table A2. |
| ↑ | United States | 382.6 | +1.1 | +24.1 | See section on U.S. domestic output. |
| BARLEY | | | | | |
| ↓ | World | 146.2 | -1.7 | -14.2 | |
| ↓ | Foreign | 143.7 | -1.7 | -13.0 | Lower projected output for Turkey, the EU ³ , Russia, Ukraine, and Kyrgyzstan. See table A2. |
| | United States | 2.6 | No change | -1.2 | See section on U.S. domestic output. |
| SORGHUM | | | | | |
| ↑ | World | 66.1 | +0.4 | +3.6 | |
| ↑ | Foreign | 54.1 | +0.4 | +1.1 | Higher output for Sub-Saharan countries (mainly Burkina Faso), with a small offsetting change for Uruguay. See table A2. |
| | United States | 12.0 | Fractional | +2.5 | See section on U.S. domestic output. |
| ¹ Change from previous month. ² YoY: year-over-year changes. ³ EU: European Union. | | | | | |
| 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 changes by country for 2021/22, November 2021

| Type of crop | Crop year | Production | Change in forecast ¹ | YoY ² change | Comments |
|---------------------------------|-----------|------------|---------------------------------|-------------------------|--|
| <i>Million tons</i> | | | | | |
| SUB-SAHARAN AFRICA (SSA) | | | | | |
| ↑ Corn | Various | 84.8 | +2.2 | +1.9 | As a result of a biannual SSA review, corn output in each country of the region is revised. Corn production is projected higher for Nigeria, Ethiopia, Mozambique, Burkina Faso, Angola, and several other countries with smaller changes. |
| ↑ Sorghum | Various | 28.8 | +0.5 | +0.6 | As a result of a biannual SSA review, sorghum output in each country of the region is revised. Sorghum production is projected higher for Burkina Faso, while small adjustments are made for Rwanda and Lesotho. |
| ARGENTINA | | | | | |
| ↑ Corn | Mar-Feb | 54.5 | +1.5 | +4.0 | Corn area is projected almost 5 percent higher, with about 40 percent being planted. High corn prices outweigh elevated costs of inputs and make corn the best crop choice this year for Argentine farmers. Export taxes for corn are at about 35 percent the level of soybean taxes. Yields are slightly reduced, as the share of lower-yielding later-planted corn is higher than usual. Production is projected at a record-high. Corn production is also up 0.5 million tons for the previous 2020/21 crop year. |
| EUROPEAN UNION | | | | | |
| ↑ Corn | Oct-Sep | 67.9 | +1.6 | +3.4 | Harvest results reported by the countries' statistical offices indicate higher French, Romanian, and Polish corn production. |
| ↓ Barley | Jul-Jun | 53.9 | -0.4 | -1.5 | Lower-than-projected output in France, Spain, and Sweden (in all three, harvested area is projected lower) is partially offset by higher production in Hungary—based on local official sources. |
| TURKEY | | | | | |
| ↑ Corn | Sep-Aug | 6.5 | +0.2 | -0.6 | Corn in Turkey is fully irrigated, while yields are growing with broader use of new (non-GMO ³) hybrid seeds. Corn is currently being harvested, and the increase is based on harvest reports. |
| ↓ Barley | Jun-May | 4.5 | -0.5 | -3.6 | Large-scale drought in the central Anatolia Plateau affected yields more than expected. The decline in yields for this crop (harvested long ago) is based on new Turkish statistics. |
| UKRAINE | | | | | |
| ↓ Barley | Jul-Jun | 10.2 | -0.3 | +2.3 | Barley harvest is complete, and barley area and yield are projected to be slightly lower than expected. |
| RUSSIA | | | | | |
| ↓ Barley | Jul-Jun | 17.0 | -0.3 | -3.6 | Barley harvest is complete, with lower than expected yields. |
| PHILIPPINES | | | | | |
| ↓ Corn | Jul-Jun | 7.8 | -0.2 | -0.6 | Preliminary reports indicate lower yields for corn produced in the third quarter of the year, the most important part of the crop year. |
| KYRGYZSTAN | | | | | |
| ↓ Barley | Jul-Jun | 0.3 | -0.2 | -0.2 | Heat and dryness during the main reproductive months brought yields of barley (and wheat) to lows not seen in more than 25 years. |
| URUGUAY | | | | | |
| ↓ Sorghum | Apr-Mar | 0.1 | -0.1 | Fractional | Area planted for sorghum turned out to be lower than expected. |

¹Change from previous month. Smaller changes (of less than 0.1 million tons) are made across countries and crops.

²YoY: year-over-year changes. ³GMO: Genetically modified organism.

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

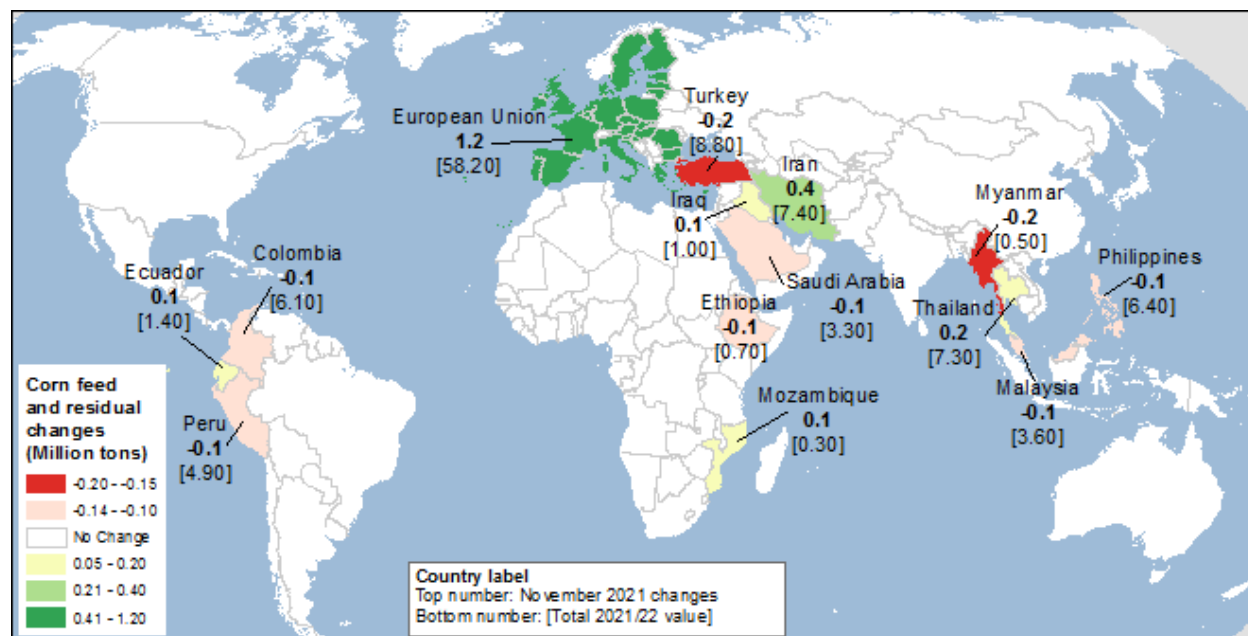
China's Feed Use of Barley and Sorghum Projected Higher

Global coarse grain consumption in 2021/22 is projected 4.5 million tons higher this month at 1,490.6 million tons, with an increase in foreign consumption adding to higher domestic use in the United States. Foreign use is up 3.3 million tons, driven mainly by upward revisions for **Sub-Saharan Africa (SSA)**, the **European Union (EU)**, and **China**. Partly offsetting is a reduction of barley feed use for **Saudi Arabia**. Consumption revisions for **Sub-Saharan Africa** and the **European Union** follow this month's coarse grain production changes. Higher output of corn and sorghum boost Food, Seed, and Industrial (FSI) in the **SSA**, while increased corn production and feed use for the **European Union** are partly offset by the reductions in barley.

Barley and sorghum feeding for **China** are projected higher this month, with expectations of higher demand for feed grain in China's South—generally the provinces south of the Yellow River—that do not produce enough grain to feed their large livestock and poultry herds, among others. This area is the most high-income prosperous part of China and is densely populated, such that demand for livestock products runs high. To fill this feed gap, the southern feed-deficit provinces have to secure feed grain (mostly corn) either from the corn-producing regions in the northeast of the country, or from imports. This year, China is projected to reap a record-high corn harvest, which is 5 percent (or 13 million tons) higher than last year. However, transportation costs from the corn-surplus northeast to the corn-deficit South surged, boosting the price competitiveness, and hence appeal, of coarse grain imports. While corn imports in China are subject to a quota, the country has not restricted imports of barley and sorghum that are largely destined for the feed market. China, which is by far the world's largest barley (as well as corn and sorghum) importer, is actively generating sales and pushing global prices up. A reduction in barley feed use in **Saudi Arabia**, the second largest (after China) barley importer, is a result of competition among major importers to secure barley supplies this year, with China having a historical tendency to bid away imported grains from other consuming countries.

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

Map A – Corn feed and residual changes for 2021/22, November 2021



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

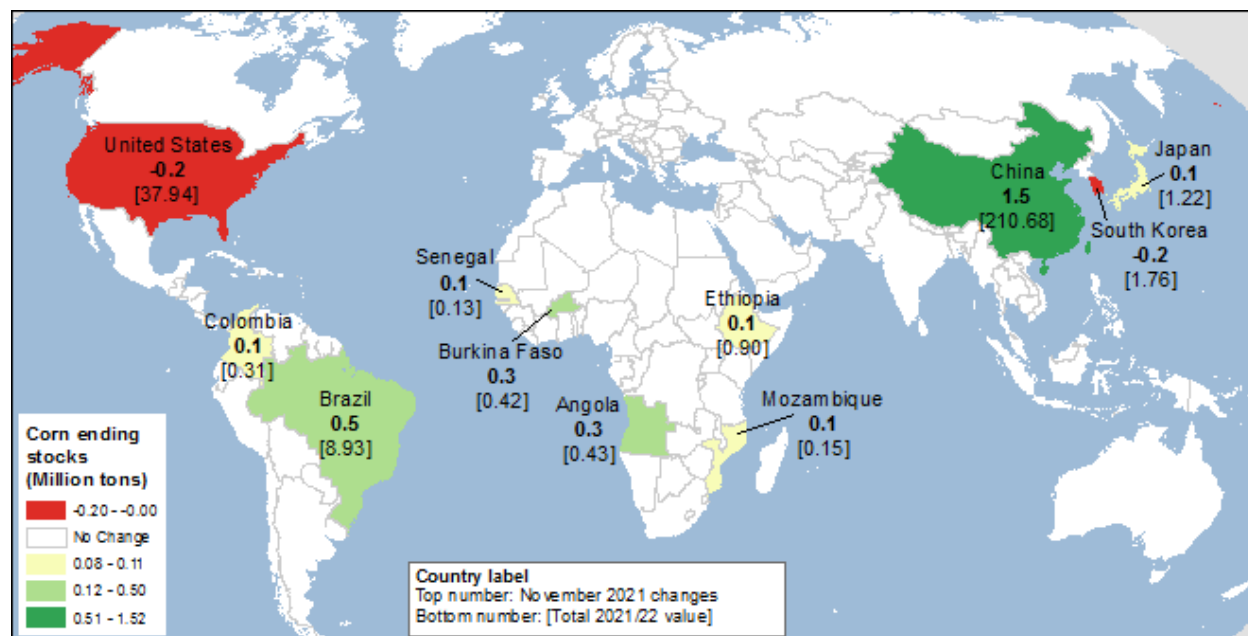
Coarse Grain Stocks Projected Higher

World 2021/22 coarse grain ending stocks are forecast to increase 2.2 million tons this month to 329.7 million, driven mainly by higher beginning stocks, that are up 1.7 million tons. Higher global 2020/21 ending stocks (and consequently 2021/22 beginning stocks) are increased largely on account of **China**, where higher projected [corn imports for 2020/21](#) pushed stocks up. Corn ending stocks are projected 2.7 million tons higher, while changes in sorghum stocks are slightly offsetting, with a reduction for **Australia** (higher projected exports to China). Barley and other coarse grain stocks are virtually unchanged.

Barley stocks are virtually unchanged this month at 16.9 million tons, the lowest barley stocks in almost 40 years, as global barley demand outstripped supplies this year—leading to a surge in prices.

For more information on this month's changes in corn stocks, see map B below.

Map B – Corn ending stocks’ changes for 2021/22, November 2021



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

Corn Exports for Argentina Got a Boost, Brazilian Exports are Down

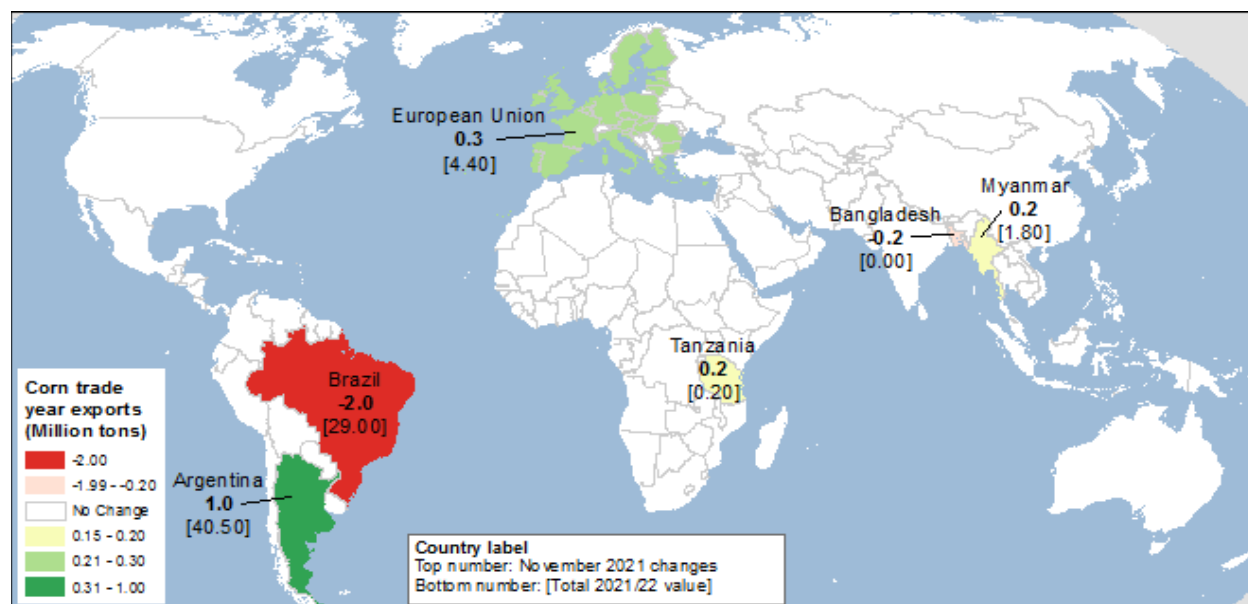
World corn trade projected for the 2021/22 October-September international trade year (TY) is projected slightly lower this month, down 0.6 million tons to still a record of 190.4 million.

Brazilian exports are reduced again this month, to 29 million tons, as export data through October was below expectations. Corn exports by Brazil are down 2 million tons for the October-September 2021/22 international trade year, as low corn supplies are expected to weigh down on Brazilian exports through February—the end of the Brazilian 2020/21 local marketing year, and 5 months into the 2021/22 October-September trade year. The current pace of corn exports from Brazil is lower than previously expected. For the 2020/21 March-February local marketing year, corn exports are down 2.5 million tons to 17.5 million, the lowest since 2015/16. However, for the local 2021/22 corn year (that starts in March 2022), exports are unchanged and still projected at the all-time-high of 43 million tons.

Higher projected **Argentine** exports for 2020/21 and 2021/22 reflect both increased supplies and price-competitiveness, and are supported by higher-than-expected shipments through October 2021. Argentina has become the most price-competitive global corn exporter—currently and going forward (see figure 17 below). Smaller increases in corn exports are made for the **European Union**, as higher corn output is projected for the major corn exporters of the EU

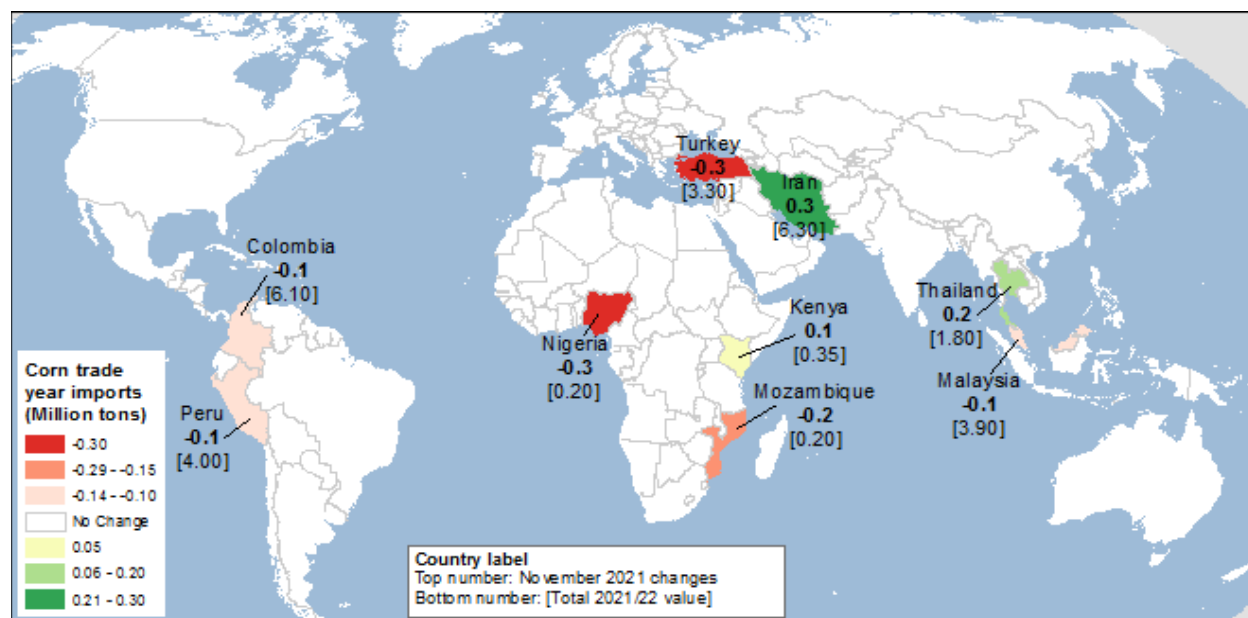
region—**France** and **Romania**. One of the important destinations for Romanian corn exports is Iran, where corn imports are projected higher this month. **Burma** is also projected to export more corn, mainly to neighboring **Thailand**. Higher corn exports are projected for **Tanzania**, based on the import data from Kenya, suggesting a higher-than-usual pace of trade between the two countries. Output-related changes reduce **Turkish** and **Nigerian** corn imports. For more information on November's changes in corn trade, see maps C and D below.

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



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

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



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

Global barley trade for the international October—September year is unchanged this month, with two offsetting imports changes—an increase for **China** and a reduction for **Saudi Arabia** ([see the section on coarse grain use above](#)).

Sorghum trade is projected 0.2 million higher this month to reach 12.1 million, with higher **Chinese** imports and increased **Australian** exports ([see below](#)).

For more information on this November's changes in corn imports, see map C below.

China's Coarse Grain Import Projections Continue to Grow

China's total **coarse grain** imports for the **2020/21** October-September trade year, which are largely used for feeding purposes, are boosted 2.3 million tons this month to reach a whopping 50.5 million—while imports of coarse grain for the current **2021/22** are projected at 46.4 million tons, 0.9 million larger relative to last month. China's **corn** imports for **2020/21** are projected 1.5 million tons higher this month to 29.5 million, as the country data appears to have caught up to U.S. export statistics, while projections for current year corn imports are unchanged. Although corn imports could conceivably plug the Chinese feed gap ([see a discussion on China's feed gap above](#)), the China's corn tariff-rate quota (TRQ) of 7.2 million tons per calendar year still exists and until last year restricted corn imports. Chinese state-owned enterprises (such as COFCO, China Oil and Foodstuffs Corporation) have what could be characterized as a virtual monopoly on a large share of corn imports, in contrast to private companies that utilize substitutes such as barley and sorghum. These private companies have been securing a large share of global supplies of barley and sorghum in response to booming feed grain demand in China and taking advantage of a large wedge between global barley and sorghum prices, and domestic Chinese corn prices in deficit regions that are near \$450 per ton.

Barley and **sorghum** imports for **China** are projected larger for both years—2020/21 and 2021/22. Raising China's imports for these two crops is expected to provide a bridge to satisfy demand in coarse grain feeding. Chinese shipment data for barley indicate higher imports, up 0.7 million tons in the 2020/21 October-September international trade year, exceeding the previous record for Chinese barley imports of 9.9 million tons in 2014/15 by more than 2 million tons. For the current year of 2021/22, barley imports for China are boosted 0.5 million tons to reach 10.1 million, as China became a top importer from both the **European Union** and **Ukraine** (more than half of Ukrainian shipments are allocated to China). In addition, China's imports of sorghum are projected 0.2 million tons higher, reaching 10 million tons and approaching the record of 2014/15. Additional sorghum is expected to come from **Australia**,

which boosted its exports to China in both 2020/21 and 2021/22, and reflects slightly higher Australian sorghum production prospects for 2020/21.

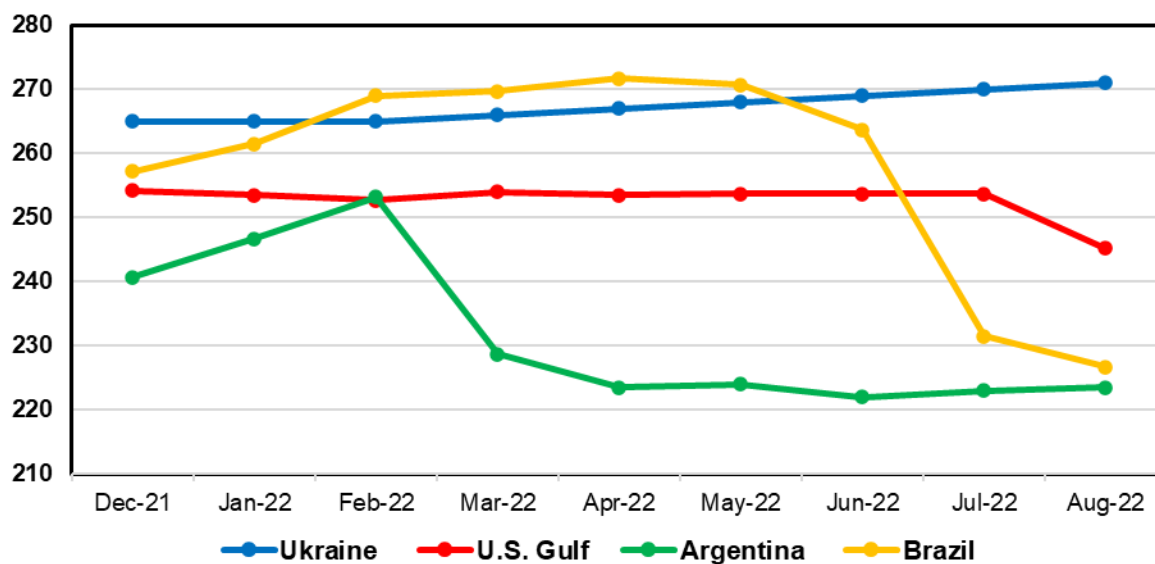
U.S. Corn Exports Unchanged at 33 Percent of Global Trade

The U.S. corn export forecast for **2021/22** is unchanged this month at 63 million tons, at about a 33 percent share of global corn trade and 5.6 million tons lower than a year ago—a record-high export year. Last year, the U.S. share of global trade went above 37 percent, boosted by **Chinese** imports and lower competition from **Brazil** and **Ukraine**. Outstanding sales at the end of October 2021 are slightly lagging behind last year, and October 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 (under normal weather conditions) and large exports. **Ukraine** is likely to expand its corn trade as its harvest progresses, while **Argentina** will boost its exports presence beginning in March 2022, followed by **Brazil**—all of which is expected to limit U.S. exports later in the year at the currently projected level.

Figure 17

Corn Free-On-Board (FOB) forward prices

U.S. Dollars per metric ton



Source: AgriCensus.

For the **2020/21** October-September trade year, U.S. corn exports are adjusted up 0.3 million tons to 68.6 million, based on published data from the September 2021 U.S. Census report. As the local marketing year ended in August, the local year exports were adjusted a month ago and are unchanged this month at 2,753 million bushels, or 69.9 million tons.

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