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Feed Outlook

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Corn Prices Lower on Higher Production Outlook

The USDA's September *World Agricultural Supply and Demand Estimates (WASDE)* raised projected U.S. corn ending stocks in 2021/22, primarily due to higher forecast corn production from the National Agricultural Statistics Service's (NASS) September *Crop Production* report. As a result, the outlook for the U.S. corn market in 2021/22 is for higher supplies, raised use, and lower prices—although projected prices remain high by recent-historical standards.

U.S. export projections got a sizeable boost this month with higher corn output, despite damages caused by Hurricane Ida to the U.S. exports infrastructure. The United States is expected to export more corn to Canada and Mexico, two destinations where grain can be transported via rail and trucks, thereby avoiding the current problems with the Gulf. For the 2020/21 trade year, U.S. corn exports are reduced 3 million tons, as declining price-competitiveness and a subsequent lower export pace in August were exacerbated by Hurricane Ida at the end of that month and the low pace is expected to last through September, the end of the 2020/21 international trade year. The revised downward though still record 2020/21 exports are 22.5 million higher than in 2019/20. A projected hefty boost in corn supplies this month makes **Argentina** a formidable competitor, expected to capture more than a 20 percent share of the record global corn trade. **China's** coarse grain feed and residual use and stocks for 2021/22 are projected higher.

Domestic Outlook

Michael McConnell Angelica Williams

Higher Area and Yield Forecasts Raise 2021/22 Corn Supply Projections

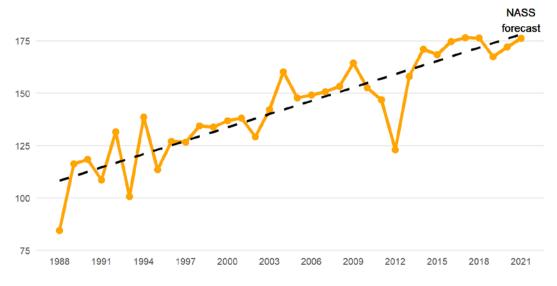
The USDA's September *World Agricultural Supply and Demand Estimates (WASDE)* report raised projected U.S. corn supplies for 2021/22 compared with August, due to an increased production forecast from the National Agricultural Statistics Service's (NASS) September *Crop Production* report. In its report, NASS forecasts U.S. corn production to be 14,996 million bushels for 2021/22, a 246-million-bushel increase from its August forecast. If realized, this increase would be the second-largest corn crop on record, behind the 2016/17 crop that totaled 15,148 million bushels.

The increase in production is due to raised area and yield forecasts in the latest *Crop Production* report. Corn harvested area is forecast at 85.1 million acres, a 0.6 million acre increase from the previous month. Planted area is also raised 0.6 million acres from August to 93.3 million acres. The national-yield forecast is raised from 174.6 bushels per acre in the August report to 176.3 bushels per acre in September.

Figure 1

Corn yields, United States, 1988 to 2021 projection

Bushels per acre

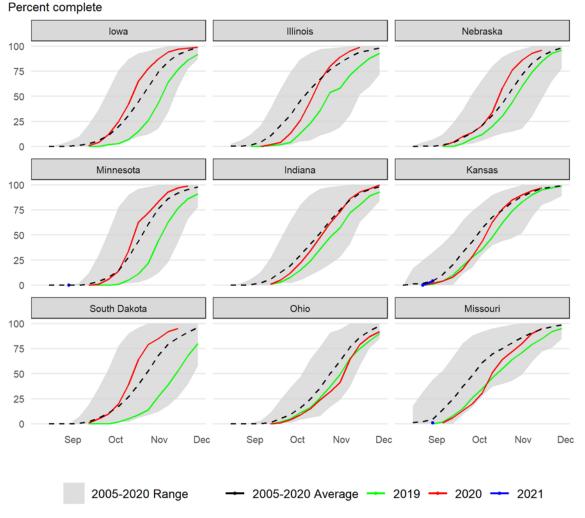


Source: USDA, National Agricultural Statistics Service.

The corn harvest has begun, primarily in the Southern-growing States. Of the major cornproducing States, NASS *Crop Progress* reports only show small amounts of harvesting activity in Kansas and Missouri through September 5. At the national level, the harvest gets fully underway in mid-to-late September, with most of the crop harvested by the end of October.

Figure 2

Corn harvest progress by State, 2005 to 2021



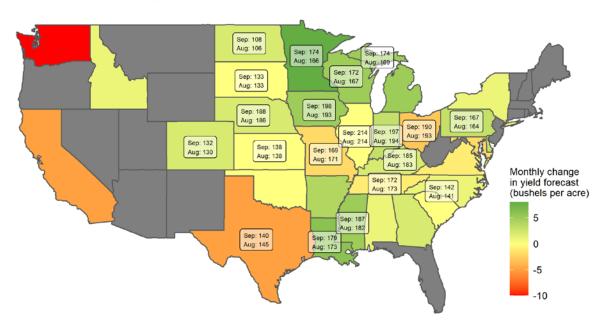
Source: National Agricultural Statistics Service, USDA.

On an annual basis, the State-level production narrative remains relatively unchanged from August. Corn yields in Minnesota, North Dakota, and South Dakota remain relatively low—due to drought conditions that have affected the Western Corn Belt for much of the growing season. In contrast, the Eastern Corn Belt areas of Illinois, Indiana, and Ohio experienced better growing conditions and are forecast to have better yields and production prospects.

On a month-to-month basis, the 246-million-bushel increase in the U.S. corn production forecast is due to a combination of adjustments to State-level area harvested and yield forecasts. This

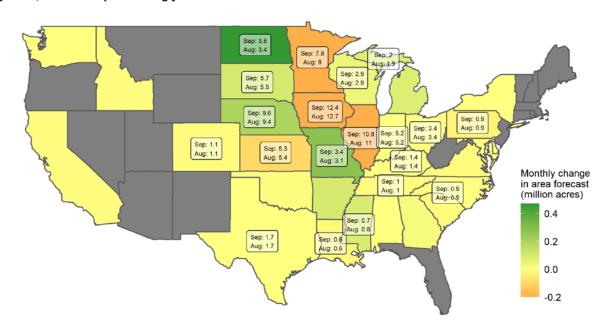
month's yield forecast is based on farmer and objective yield-survey results, as well as satellite imagery. This is the first month of the 2021 forecast cycle that objective yield-survey data is available. Compared with the August forecast, NASS reported yield increases for several keyproducing States, including: Minnesota (up 8 bushels per acre), lowa (up 5 bushels per acre), and Nebraska (up 2 bushels per acre). The most significant State-level reductions were Ohio (down 3 bushels per acre) and Missouri (down 2 bushels per acre). Significant State-level harvested area-forecast adjustments include increases in North Dakota (up 400,000 acres), Missouri (up 300,000 acres), and Nebraska (up 200,000 acres)—being offset by declines in lowa (down 300,000 acres), Minnesota and Illinois (both down 200,000 acres). The biggest overall shifts in month-to-month production are for North Dakota (up 57 million bushels) and Nebraska (up 56 million bushels), partially offsetting less production expected in Illinois (down 43 million bushels).

Figure 3a
U.S. corn forecast yield and month-to-month change, bushels per acre, by State, 2021/22 crop marketing year



Source: National Agricultural Statistics Service, USDA.

Figure 3b
U.S. corn harvested area forecast and month-to-month change, million acres, by State, 2021/22 crop marketing year



Source: USDA, National Agricultural Statistics Service.

Tight Supplies, High Prices Curtail Rates of Corn Use in Final Weeks of 2020/21

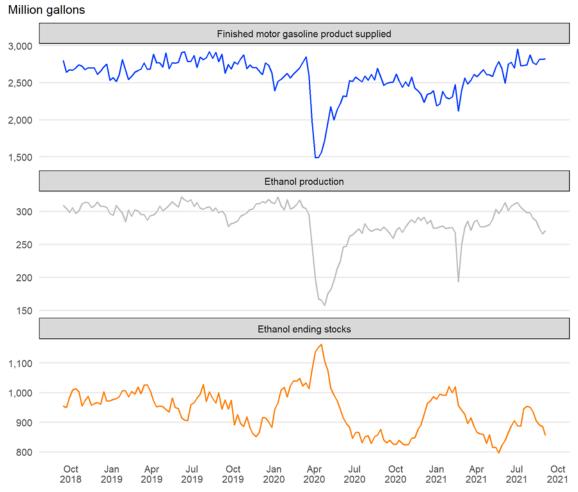
Beginning stocks for 2021/22 are raised 70-million-bushels from the August *WASDE*, projected at 1,187 million bushels, further increasing the supply outlook for the marketing year. The increased inventories are due to a lower pace of corn use in the final weeks of the 2020/21 marketing year, which concluded on August 31. NASS will report its survey-based estimate of corn stocks on September 1, in the September 30th *Grain Stocks* report. Higher prices and limited availability likely impacted the usage rate—both domestically and exported—toward the end of the summer as the market awaits the arrival of the 2021/22 crop.

Corn used for food, seed, and industrial use in 2020/21 is lowered 40-million-bushels in the September *WASDE*, now estimated at 6,470 million bushels. This includes corn used for fuel ethanol estimated at 5,035 million bushels, accounting for the entirety of the reduction. According to the Department of Energy's Energy Information Administration (EIA), weekly ethanol production rates began declining in July and continued into August. Overall finished

motor gasoline product supplied, however, maintained a steady rate of recovery that began at the beginning of the calendar year. As a result, ethanol inventories were drawn down to keep up with gasoline use. This reduction likely suggests that ethanol plants temporarily reduced their operating capacities during higher corn prices and a tighter availability at the end the marketing year. Ethanol production should return to rates that are in line with the gasoline market once the 2021/22 corn production arrives to the market.

Figure 4

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



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

Exports in 2020/21 are estimated at 2,745 million bushels in the September report, a 30-million-bushel decline from August. Official U.S. Census trade data through July peg corn exports at 2,617 million bushels. Grain export inspections data show a substantial reduction in the pace beginning in July, though. Hurricane Ida's impact on key Gulf region export terminals and markets leading up to, and subsequently through, the storm's August 29 landfall may have had

some impact on shipments. The pace of shipments had declined substantially prior to the storm's impact, however. The current estimate is based on August inspections data and will be updated when the Census releases August trade data in October. For additional discussion on corn exports and the international corn market, see the International Section of this report.

Corn Use Projections Raised on Higher Supplies in 2021/22

Higher projected corn production and supplies for 2021/22 result in more supplies available for the market. Projected corn use for 2021/22 is also raised in the September *WASDE*, totaling 14,800 million bushels—raised 150 million bushels from the previous month. Domestic corn use is raised 75 million bushels, totaling 12,325 million bushels. Higher domestic use is projected to come in the form of higher feed and residual use—raised to 5,700 million bushels. Food, seed, and industrial use remains unchanged at 6,625 million bushels—including 5,200 million bushels used for fuel ethanol.

U.S. corn exports in 2021/22 are projected to be 2,475 million bushels—a 75-million-bushel increase from the previous month's forecast. For more discussion on U.S. corn exports and global trade, see the International Section of this report

Higher Projected Ending Stocks Lower Farm Price Outlook for 2021/22

Even with the increase in projected use, higher supplies for 2021/22 are projected to increase ending stocks compared with August. Corn ending stocks for 2021/22 are projected to total 1,408 million bushels—up from August's projection of 1,242 million. The stocks-to-use ratio is currently projected at 9.5 percent. This increase is still tight by historical standards, but higher than August's projection of 8.5 percent.

Higher stocks result in a lower price outlook for the new marketing year. The season-average farm price for corn in 2021/22 is projected to be \$5.45 per bushel, a reduction from the previous month's projection of \$5.75. If realized, this reduction would still be the highest farm price since 2012/13.

Cash Prices Decline in August, Remain Strong Historically

Cash prices for corn have generally declined in August and early September. The average monthly-spot price for corn in Central Illinois was \$6.43 per bushel in August. That price

compares with \$6.49 in July, although it is still substantially higher than the August 2020 average of \$3.29. Spot prices at the Gulf also fell in August 2021, from \$6.53 per bushel compared with \$7.07 per bushel in July, reflecting the slower pace of export shipments and potential competition from other origins like Argentina. Prices were still strong by historical standards, however.

Figure 5 U.S. cash-market prices for corn, monthly average U.S. dollars per bushel 7.00 6.00 5.00 4.00 3.00 Jan Jul Oct Jan Jul Oct Jan Oct Apr 2019 2019 2019 2019 2020 2020 2021 Central Illinois - Gulf ports, Louisiana

Source: USDA, Agricultural Marketing Service.

Projected 2021/22 Sorghum Production Increases

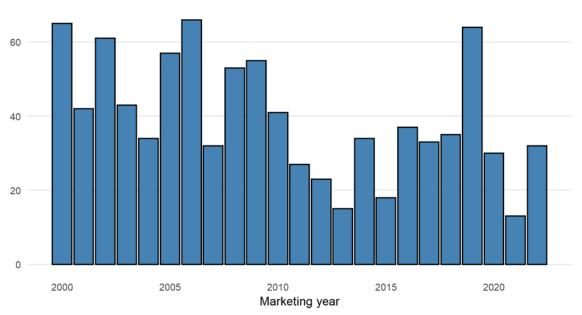
The 2021/22 U.S sorghum harvested area projection is raised 0.7 million acres from August to 6.5 million acres, while projected sorghum yields are reduced 1.1 bushels per acre to 69.7 bushels per acre. As a result, the sorghum production forecast is revised higher to 454 million bushels, up 45 million bushels compared to the August report.

The September 7, 2021, NASS Crop Progress report shows that 19 percent of the U.S. sorghum crop has been harvested by September 5, with Texas leading other States, with 66 percent of the State's sorghum crop harvested. Texas has historically been the first State to begin harvesting its sorghum crop, but is slightly behind last year's progress, when 72 percent of the crop was harvested at this time a year ago.

Due to the increase in supply, the September WASDE report raises 2021/22 projected ending stocks 15 million bushels to 32 million. Larger stocks, as well as lower projected corn prices,

result in a \$0.30 per bushel drop in the projected average-farm price to \$5.85, from August's projection of \$6.15.

Figure 6
U.S. Sorghum stocks
Million bushels



Source: USDA, National Agricultural Statistics Service; USDA, World Agricultural Outlook Board.

No changes are made to 2021/22 projected sorghum exports at 320 million bushels. Feed and residual are raised 30 million bushels to 105 million, based on the increased supply availability and lower prices expected for 2021/22.

The 2020/21 sorghum crop had no changes made to the September WASDE balance sheet. Yields and production are unchanged from last month, as were all domestic disappearance numbers. Exports are maintained at 285 million bushels, based on inspections data through the month of August, leaving ending stocks at 13 million bushels.

Barley Projected 2021/22 Farm Price Lowered

The 2021/22 average-farm price for barley is lowered \$0.30 per bushel to \$5.45. The reduction is due to both the feed barley and malting barley markets. While reduced from August, prices remain high by historical standards. If realized, the current projection would be the highest price level since 2015/16.

Barley production projections for 2021/22 remain unchanged at 106 million bushels. Barley export projections for 2021/22 are raised from 6 million bushels in the August *WASDE* to 9

million bushels in September. Drought conditions that have affected the major U.S. barley-growing regions in the Northern Plains have also affected Canadian barley production and are expected to affect global trade flows. U.S. food, seed, and industrial use is lowered 5-million bushels, as barley supplies are projected to be relatively tight for the year.

Lower Projected Oat Imports Trim Supplies and Feed and Residual Use for 2021/22

Oat imports for 2021/22 are projected to be 74 million bushels, down 3-million-bushels from the August *WASDE*, primarily due to tight supplies from Canada (the most significant foreign supplier for the United States). Projected feed and residual are reduced 5-million-bushels to offset the lower supplies. The projected season-average farm price is unchanged for 2021/22 at \$3.60 per bushel.

Total Feed and Residual Projected to be Lower in 2021/22

Total feed and residual of energy feeds (corn, sorghum, barley, oats, and wheat) are projected to be 151.5 million metric tons (MT) in 2021/22, down from the previous year (153.4 million MT) and 2019/20 (157.4 million MT). Strong export demand and pared back domestic production outlooks have steadily tightened livestock feed markets.

Grain-consuming animal units (GCAUs) are projected to be 101.1 million units for 2021/22—down incrementally from both the August projection (also 101.1 million units) and the current 2020/21 estimate (101.5 million units). While GCAUs are lower than last year and last month, they remain large by historical levels. This reduction should support the elevated prices for feed grains and other processed livestock feed in the United States that have been present since the fall of 2020. Broadly, processed feed prices—such as corn gluten feed, high protein soybean meal, and distillers dried grains—have stabilized or trended downward in recent months, but remain substantially higher than the previous year.

International Outlook

Olga Liefert

World Coarse Grain Production Got a Boost

Global coarse grain production for 2021/22 is up 12.5 million tons this month, as corn production is projected up 11.7 million tons to 1,197.7 million. Sorghum production is also up (solely on the account of the United States)—while the outputs of barley, oats, and mixed grains are slightly down, and rye is fractionally up. Foreign coarse grain production is projected 5.1 million tons higher this month (see table A1 below). Apart from the United States, most of the production increase is from *Chinese* and *Argentine* corn—along with *Australian* and *Ukrainian* barley, with partly offsetting reductions for *Canadian* and *Russian barley*—as well as lower projected *Serbian* corn.

For the 2020/21 projection, coarse grain production is up 1.7 million tons, mainly because of higher *Argentine* corn output—as well as higher *Indian* corn and millet totals that are partly offset by production reductions in *Brazil* and *Serbia*.

The largest expected foreign production increase is from *China's* corn, up 5 million tons to 273 million. Rainfall and weather conditions across the prime corn area of the country—the northeast of China and down to the North China Plain (the regions of Inner Mongolia, the bordering western Heilongjiang, and Jilin, among others)—dramatically improved in August, during the critical reproductive stage period. Virtually ideal weather boosted expected corn yields to a new record, up almost 2 percent to reach 6.5 tons per hectare. Although corn harvested area is unchanged this month, it is 0.7 million hectares higher year over year, as prices and returns for domestic corn are running high and farmers are eager to cash in on demand- and policy-fueled prices.

Argentina's corn production is projected higher on increased area for 2 consecutive years—2020/21 and 2021/22—and is raised 1.5 and 2 million tons this month to 50 and 53 million, respectively. All three elements of agronomy, weather, and economics have combined to boost corn plantings. Faster growing yields—supported by genetic advances in corn, lower export taxes, and relative prices—all moved in favor of corn that is enjoying higher profit margins compared to soy. Moreover, recent September rains replenished moisture in the main corn growing areas of La Pampas (Buenos Aires, Cordoba, and Entre Rios) and are expected to encourage additional corn seeding.

For more information and a visual display of this month's changes in coarse grain production, see tables A1 and A2 below.

Region or country	Production	Change from previous month ¹	YoY change ²	Comments					
		Million tons							
oarse grain pro	duction (total))							
World	1,496.9	+12.5	+69.7						
Foreign	1101.2	+5.1	+48.6	Changes are projected for major coarse grain producers. See table A2.					
United States	395.7	+7.4	+21.1	Higher projected yield. See section on U.S. domestic output.					
orld production	n of coarse gr	ains by type of gr	ain						
CORN									
World	1,197.7	+11.7	+80.7						
Foreign	816.8	+5.4	+60.0	Higher corn output in China and Argentina is partly offset by reductions in Russia and Serbia. See table A2.					
United States	380.9	+6.3	+20.7	See section on U.S. domestic output.					
. 1	•		BARLE	Y					
World	149.3	-0.2	-11.0						
Foreign	147.0	-0.2	-9.7	Lower barley production in Canada and Russia is almost fully offset by higher Australian, Ukrainian, and European Union output. See table A2.					
United States	2.3	No change	-1.3	See section on U.S. domestic output.					
			JM						
World	65.8	+1.1	+3.5						
Foreign	54.3	No change	+1.4						
United States	11.5	+1.1	+2.1	See section on U.S. domestic output.					
			OATS						
World	23.4	-0.2	-2.1						
Foreign	22.8	-0.2	-1.8	Lower oats production in Canada. See table A2.					
United States	0.6	No change	-0.3	See section on U.S. domestic output.					
RYE									
World	13.7	+0.1	-0.6						
Foreign	13.4	+0.1	-0.6	Reduced production in Belarus.					
United States	0.3	No change	Small change	See section on U.S. domestic output.					
MIXED GRAIN									
World/Foreigr	n 15.8	-0.1	-0.1	Reduced production in Canada.					

	Type of crop	Crop year	Production	Change in forecast ¹	YoY ²	Comments	
		_	1/4	illion tons	change		
		_	IVI		2024/22	Crop year	
						_ ` `	
	<u> </u>				CF	IINA	
	Corn	Oct-Sep	273.0	+5.0	+12.3	There was a considerable improvement in the VHI (Vegetation health Index) in the major corn areas over the month of July. Both weather and VHI model-based yield indicators support a higher yie forecast and are in line with CNGOIC ³ numbers.	
					ARGE	NTINA	
Î	Corn	Mar-Feb	53.0	+2.0	+3.0	Corn planting for the 2021/22 season is starting with higher expected area, as higher profit margins favor corn versus soy (see report text).	
					MOL	DOVA	
Î	Corn	July-June	2.4	+0.2	+1.1	Exceptionally good conditions push corn yields to record-high level	
					AUST	RALIA	
ĵ	Barley	Nov-Oct	12.0	+1.0	-1.0	Barley area and yields are projected higher this month. Good precipitation encouraged higher area and boosted crop health.	
UKRAINE							
	Barley	July-June	10.5	+0.5	+2.5	Yields are projected higher, based on harvest reports, with virtually all barley being harvested.	
				EU	ROPEAN	UNION (EU)	
	Barley	July-June	54.6	+0.2	-0.9	Beneficial crop conditions for barley throughout European countrie push yields even further into record area. In particular, this month, barley yields are increased for Germany.	
RUSSIA							
	Corn	Oct-Sep	15.5	-1.0	+0.6	Officially published corn area is lower than expected.	
ļ	Barley	July-June	18.0	-1.0	-2.6	The reductions are based on harvest reports, with about 90 percer of area harvested.	
SERBIA							
ļ	Corn	Oct-Sep	6.0	-0.5	-2.1	Yields are reduced, as insufficient soil moisture in the Balkans last month caused a degradation of corn crop.	
CANADA							
ļ	Barley	Aug-Jul	7.8	-1.0	-2.9	Yields are projected 11 percent lower than last month and down 32 percent from last year, based on crop reports and the model-yields results from Statistics Canada.	
	Oats	Aug-Jul	2.9	-0.2	-1.7	Yields are down, with the same general story as for barley above.	
С	hange from previ	ous month. S	maller changes	are also made	for several	countries. ² YoY: year-over-year changes.	
_	NICOIC: China N	ational Grain	& Oils Informati	on Contor			

This extension of table A2 below presents changes in coarse grain production for the crop year of 2020/21. In the countries of South America and in South Africa, the harvest for 2020/21 has just been completed.

	Type of crop	Crop year	Production	Change in forecast ¹	YoY ² change	Comments				
			М	lillion tons						
	2020/21 Crop year									
					ARGE	NTINA				
Î	Corn	Mar-Feb	50.0	+1.5	-1.0	Corn area is projected higher this month, supported by crop reports with virtually all corn already harvested.				
					BR	AZIL				
	Corn	Mar-Feb	82.0	-1.0	-16.5	Monthly government statistics once again reduced the 2020/21 corr crop, as the impact of both dry weather conditions and July freezes appeared to be stronger than expected. The reduction is supported by CONAB ³ September report, with more than 95 percent of corn already harvested.				
	SOUTH AFRICA									
	Corn	May-Apr	17.0	-0.2	+1.2	There was small downward yield revision, based on the latest CEC (Crop Estimates Committee) 7th production forecast.				
INDIA										
Î	Corn	Mar-Feb	30.0	+1.3	-1.5	A revision based on Government 4th advanced estimate.				
Î	Millet	Mar-Feb	12.8	+0.7	-0.4	A revision based on Government 4th advanced estimate.				
¹ Change from previous month. Smaller changes are made for several countries, see maps A1 and A2 for corn and barley production changes. ² YoY: year-over-year changes. ³ CONAB: Companhia Nacional de Abastecimento (National Supply Organization).										

For a visual display of this month's changes in corn and barley productions, see maps A and B below.

Belarus Russia -0.1 -1.0 [0.85] Bosnia and Herzegovina -0.1 United States [1.00] Mòldova Serbia [380.93] 0.2 5.0 -0.5 [2.40] 273.001 [6.00] Thailand -0.1 [5.30]Corn production changes (Million tons) -1.00 -0.99 - -0.50 -0.49 - -0.10 Argentin a 2.0 [53.00] 0.20 Country label Top number: September 2021 changes Bottom number: [Total 2021/22 value] 0.21 - 2.00 2.01 - 6.25

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

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

Russia Canada 0.1 -1.0[1.00] -1.0 [18.00] [7.80]European Union 0.2 Ukraine [54.60] 0.5 [10.50] Barley production changes (Million tons) 1.0 No Change 0.10 - 0.20Country label 0.21 - 0.50Top number: September 2021 changes Bottom number: [Total 2021/22 value] 0.51 - 1.00

Map B - Barley production changes for 2021/22, September 2021

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

Updates to China's Grain Use Give a Boost to Feed Use and Stocks

The changes to the global 2020/21 coarse grain supply and demand boost 2021/22 beginning stocks by 5 million tons, accounting for 40 percent of the month-to-month increase in coarse grain supplies.

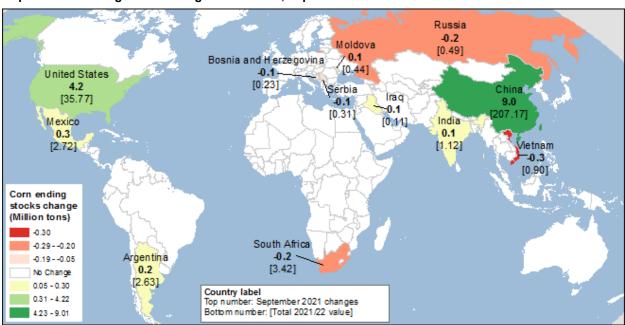
Global coarse grain use is projected 4.7 million tons higher this month to 1,489.6 million, with foreign use up 2.3 million tons. Apart from the changes in U.S. feed grain use (for the discussion on the United States, see the domestic section of the report), the changes in corn use this month, for both 2020/21 and 2021/22, are largely dominated by the changes for *China*. The use of corn in milling and ethanol production has been reportedly lower than expected. It appears that a much cheaper cassava has been increasingly replacing corn, and a twofold increase of cassava imports into China supports this evidence. Consequently, food, seed and industrial (FSI) use of corn is reduced for both 2020/21 and 2021/22 by 1 and 3 million tons, respectively. Unlike the changes in FSI use, changes in feed and residual use for 2020/21 and 2021/22 go in different directions for each year. Record-high corn prices in 2020/21 encouraged higher imports and the use of alternative grains—barley and sorghum—for feeding, thereby reducing corn use. Both barley and sorghum imports and feed use for China were increased this month for 2020/21. Moreover, soybean meal protein consumption—that is a reasonable but imperfect

proxy that provides an indication of corn feed and residual use—is pointing to lower use of corn. As a result, for 2020/21, corn feed use in China is projected down 3 million tons. For the 2021/22 projection, a large increase in corn production is expected to give a boost to feed and residual use, up 3 million tons.

The above revisions of China's corn balance boosted its corn stocks for both years, up 4 and 9 million tons, respectively. Recently published estimates by the CGNOIC (China National Grain & Oils Information Center) that suggested higher year-over-year corn stocks support this change. Higher corn stocks can turn out to be a useful tool in dampening inflation in China, as has been the case in the past, as consumer price inflation remains one of the major concerns of the Chinese Government.

Global coarse grain ending stocks are expected to rise 12.8 million tons in 2021/22 compared to the August forecast, which is 7.2 million higher from the year before, but are forecast to be virtually unchanged relative to global consumption year over year. China and the United States lead the increase, while stocks for foreign countries (excluding China) are projected lower.

For a visual display of this month's changes in corn stocks, see map C below.



Map C - Corn ending stocks changes for 2021/22, September 2021

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

U.S. Corn Export Prospects Improved for 2021/22 but are Reduced for 2020/21

The September forecast for the already record-high world **corn** trade for the international October-September trade year 2021/22 is increased compared to the August forecast, up 1 million tons to 192.4 million. Compared to last year, the September forecast is higher by 8.6 million tons, or 4.7 percent. U.S. corn exports are now projected up 1.5 million tons at 62.5 million, compared to last month and 7 million tons lower over the last year of 2020/21. Foreign corn exports are projected slightly lower, down 0.5 million tons this month. However, there were several largely offsetting changes for other exporters.

This month, a shift from *Brazil* to *Argentina* is projected for these countries' world export shares. Since the beginning of February 2021, *Argentina* has been the most price-competitive corn exporter in the world. A projected hefty boost in corn supplies this month makes the country an even more formidable competitor, expected to capture a larger (above 20 percent) share of the record global corn trade. The country is expanding corn exports to South Korea and Japan, North Africa and the Middle East (Saudi Arabia, Tunisia), the African continent (Senegal, Angola, Ghana, among others), and South America (Colombia, Dominican Republic, and Uruguay)—often supplanting reduced Brazilian exports. Argentine corn exports are projected 1 million tons higher this month for both the 2020/21 trade year (that ends in September 2021) and for the next 2021/22 October-September international trade year. Argentine corn exports are projected to reach 38.5 million tons in 2021/22, 3 million tons higher than in 2020/21.

At the same time, *Brazilian* corn exports are reduced, reaching 33 million tons. Corn exports by *Brazil* are down 1 million tons this month for the 2021/22 international trade year, as lower corn supplies for 2020/21 are expected to weigh down on Brazilian exports through February, almost 6 months into the October-September trade year. This reduction comes despite record-high projected corn output and exports from Brazil in its local 2021/22 marketing year (March 2022-February 2023).

With lower output, *Serbian* and *Russian* corn exports are projected down (see map D). Although corn production in Russia is reduced 1 million tons, its exports are down only 0.2 million tons. It appears that Russian corn exports have not been seriously affected by the recently introduced tax regime as the country continues to vigorously export corn and other grains despite new export levies.

Corn import prospects are increased for *Canada* and *Mexico* this month (see map E). Smaller Canadian wheat and barley crop is expected to make the livestock industry in the Prairies—where most wheat and barley are grown—hungry for additional feed and rely more on corn imports this year. In years of poor Canadian wheat and barley harvests, the country routinely imports higher volumes of corn from the United States.

With higher projected corn supplies this month, *U.S.* corn exports for 2021/22 are projected larger, up 1.5 million tons to 62.5 million. The United States is currently (seasonally) the least price-competitive global corn exporter. Moreover, its ability to ship grain was affected by Hurricane Ida (at the very end of August) that damaged key export terminals around the Gulf Coast, although port disruptions caused by Hurricane Ida are presumed to be temporary (based on all available information). The increase in corn exports assumes larger shipments to *Canada* and *Mexico*, the two destinations where grain can be transported via rail and trucks, thereby avoiding the current disruptions with the Gulf.

For the 2020/21 trade year, *U.S.* corn exports are reduced by 3 million tons, to a still recordhigh of 69.5 million. Declining price competitiveness and a subsequent lower export pace in August were likely exacerbated by Hurricane Ida at the end of that month. The hurricane's negative effects are expected to affect September shipments (which is the end of the 2020/21 international trade year). The (downwardly revised) record exports are 22.5 million higher than in 2019/20. At the same time, U.S. barley exports (to Canada) are projected 0.1 million tons higher, based on the current pace of exports, despite historically low U.S. barley supplies and stocks.

Barley global trade for the 2021/22 international trade year is projected 0.4 million tons higher this month, though 1.5 million tons lower compared to the previous year of 2020/21. The adjustments mainly reflect this month's changes in barley production: Higher exports are projected for Australia, Ukraine, and the European Union, while reductions are expected for barley exports by Canada.

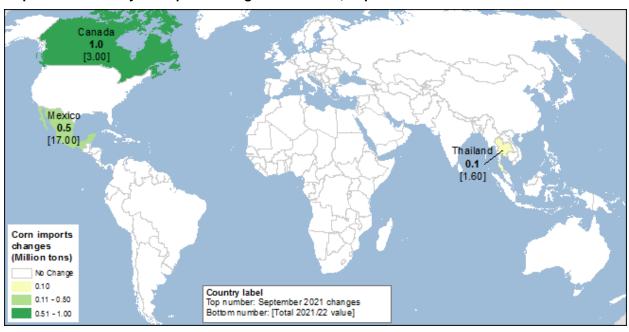
For an overview of changes in specific countries' imports, see "Grain: World Markets and Trade," issued by USDA's Foreign Agricultural Service.

For a visual display of the changes in corn trade-year exports, see maps D and E below.

Russia -0.2 [4.80] Serbia 0.1 United States 0.4 [0.65] [2.00] [62.50] Corn exports Brazil changes -1.0 (Million tons) -1.00 -0.99 - -0.40 -0.39 - -0.20 Argentina^{*} No Change 1.0 0.10 Country label Top number: September 2021 changes [39.50] 0.11 - 1.00 Bottom number: [Total 2021/22 value] 1.01 - 1.50

Map D - Corn trade year exports changes for 2021/22, September 2021

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



Map E - Corn trade year imports changes for 2021/22, September 2021

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

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