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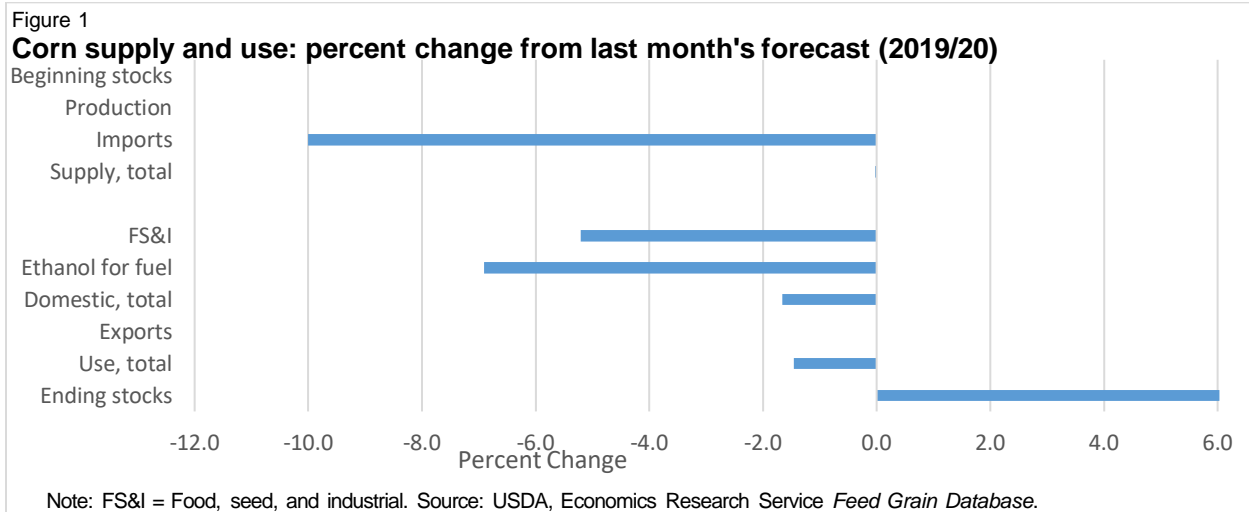
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Seismic Drop In Gasoline Consumption Slashes Corn For Ethanol Forecast

Projected corn disappearance for 2019/20 is reduced 205 million bushels to 13,865 million on lower food, seed, and industrial (FSI) use as gasoline consumption declines. Feed and residual use and ending stocks are raised 150 and 200 million bushels respectively. The season average price of corn received by farmers is lowered \$0.20 per bushel to \$3.60.

As larger-than-expected sales to China advance sorghum global trade, U.S. sorghum exports in 2019/20 are projected to reach 4.7 million tons, up 1.3 million (185 million bushels, up 50 million for the local September-August marketing year) this month.

In recent weeks, U.S. corn sales and shipments have accelerated. The level of outstanding sales at the beginning of April reached 14.2 million tons, the highest since May 2019. Despite a pickup in recent sales and shipments, reflecting increasingly competitive U.S. corn export prices, the export projection is unchanged this month at 47.0 million tons (1,725 million bushels), as the current projection for the United States has enough built-in room for growth.

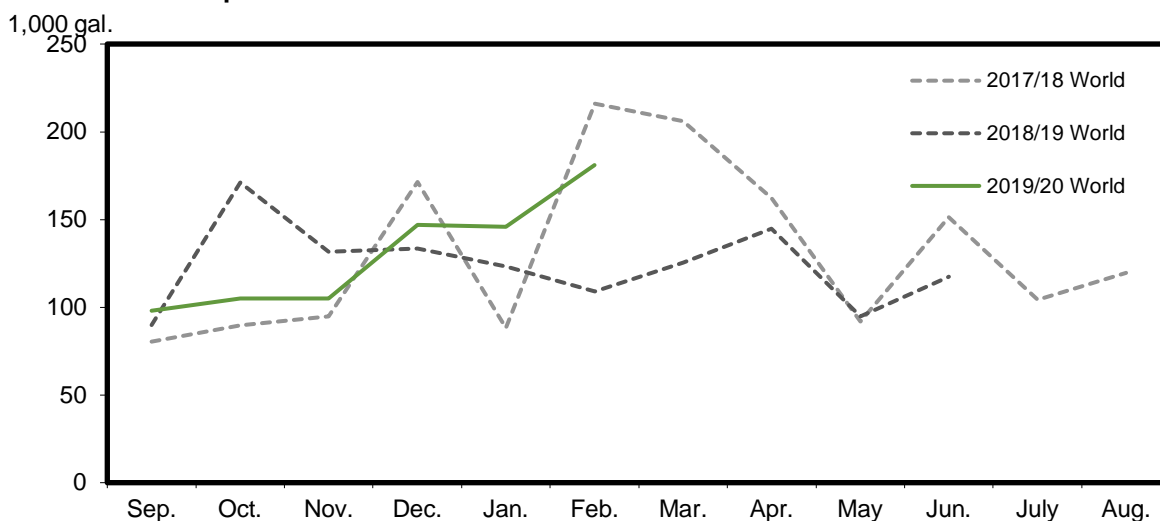


Domestic Outlook

Huge Decline in Gasoline Consumption Slashes Corn for Ethanol Use

Corn use for ethanol in 2019/20 is slashed 375 million bushels to 5,050 million on an unprecedented decline in gasoline consumption caused by social distancing measures restricting people's movements to stem the spread of COVID-19. Energy Information Administration data for the week ending April 3 reported motor gasoline product supplied dropped 48 percent relative to a year ago, and a 33-percent drop in fuel ethanol production. As a result of the collapse in demand, numerous ethanol refineries have shuttered or curtailed production.

Figure 2
U.S. fuel ethanol exports

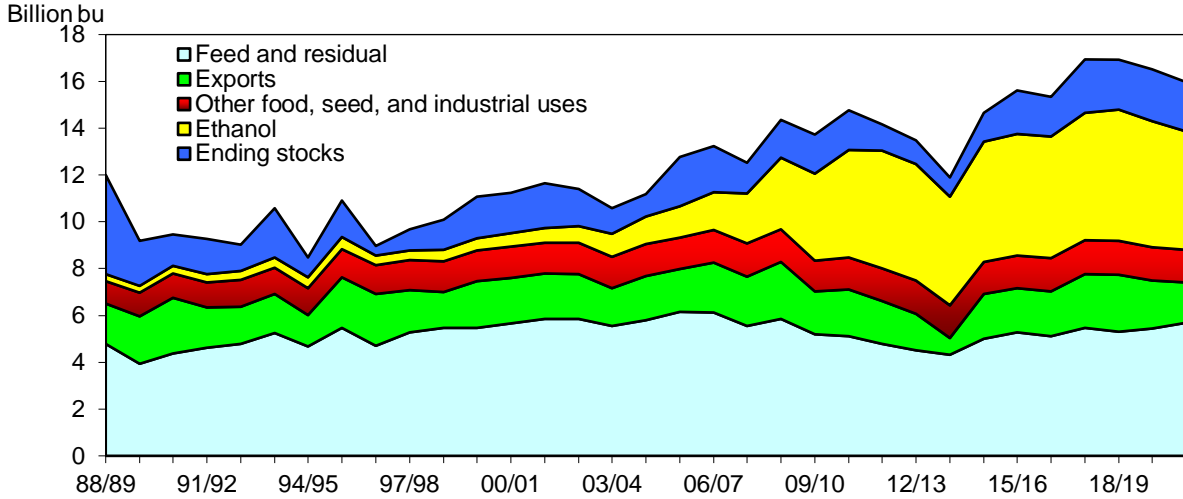


Source: USDA, Economic Research Service with data from U.S. Department of Commerce, Bureau of the Census.

FSI use is projected at 6,465 million bushels, 355 million below last month. Feed and residual use is projected 150 million bushels higher as demand for animal feed increases. Reduced dried distillers grains (DDGs) production due to lower ethanol output is expected to increase demand for substitutes such as corn grain and soybean meal.

Projected 2019/20 exports are unchanged at 1,725 million bushels.

Figure 3
U.S. corn utilization

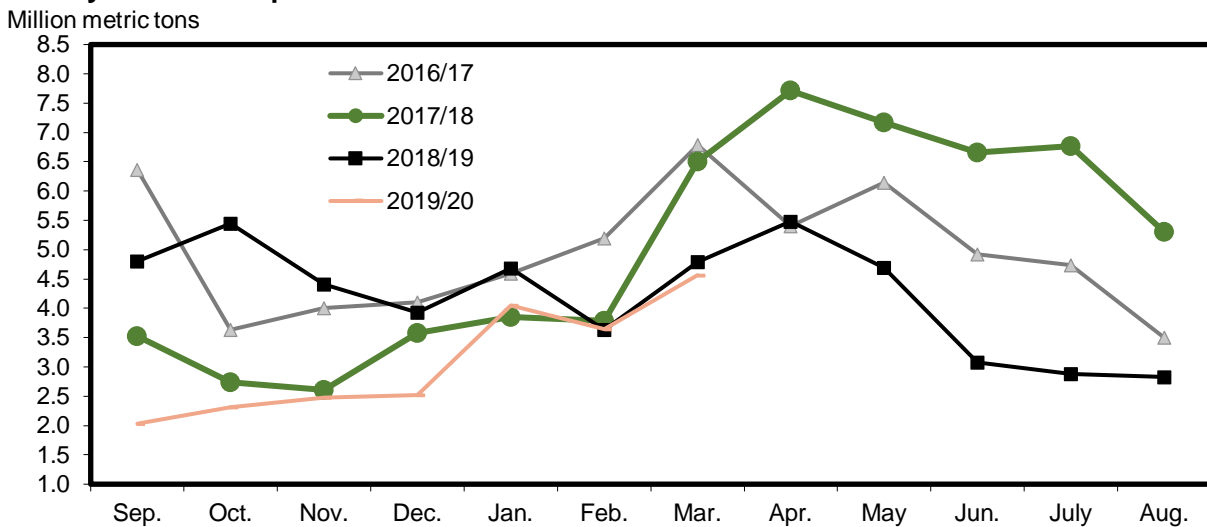


Note: Marketing year 2018/19 and 2019/20 are projected.
 Source: USDA, World Agricultural Outlook Board, WASDE.

Corn Stocks Point to Higher Second Quarter Disappearance

March 1 corn stocks reported by the National Agricultural Statistics Service (NASS)' *Grain Stocks* are 7,953 million bushels and indicate December-February disappearance of 3,617 million bushels compared with 3,332 million for the same period last year. For the first half of the marketing year (September-February) disappearance is 7,978 million bushels compared with 7,874 million last year. Feed and residual accounted for most of the increase.

Figure 4
Monthly U.S. corn exports

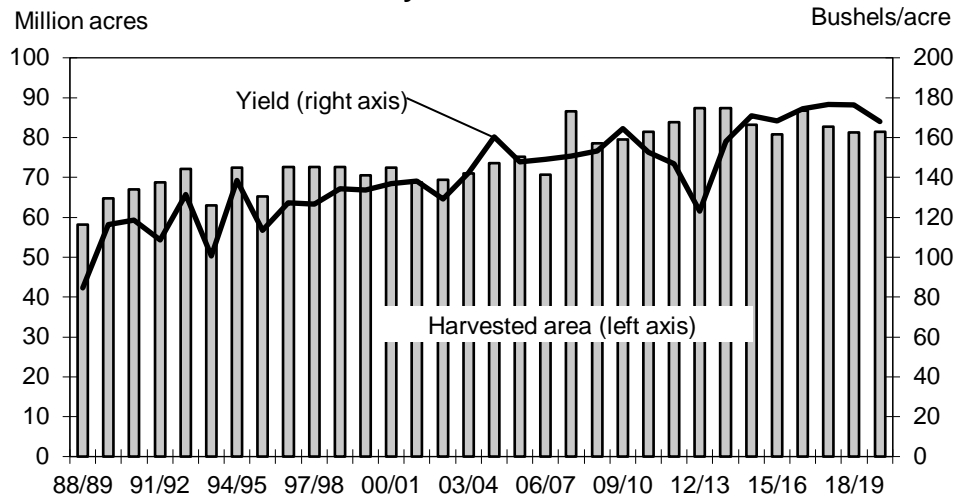


Source: USDA, Economic Research Service with data U.S. Department of Commerce, Bureau of the Census, January 2020 Grain Inspections.

Farmer Corn-Planting Intentions Up 8 Percent From 2019

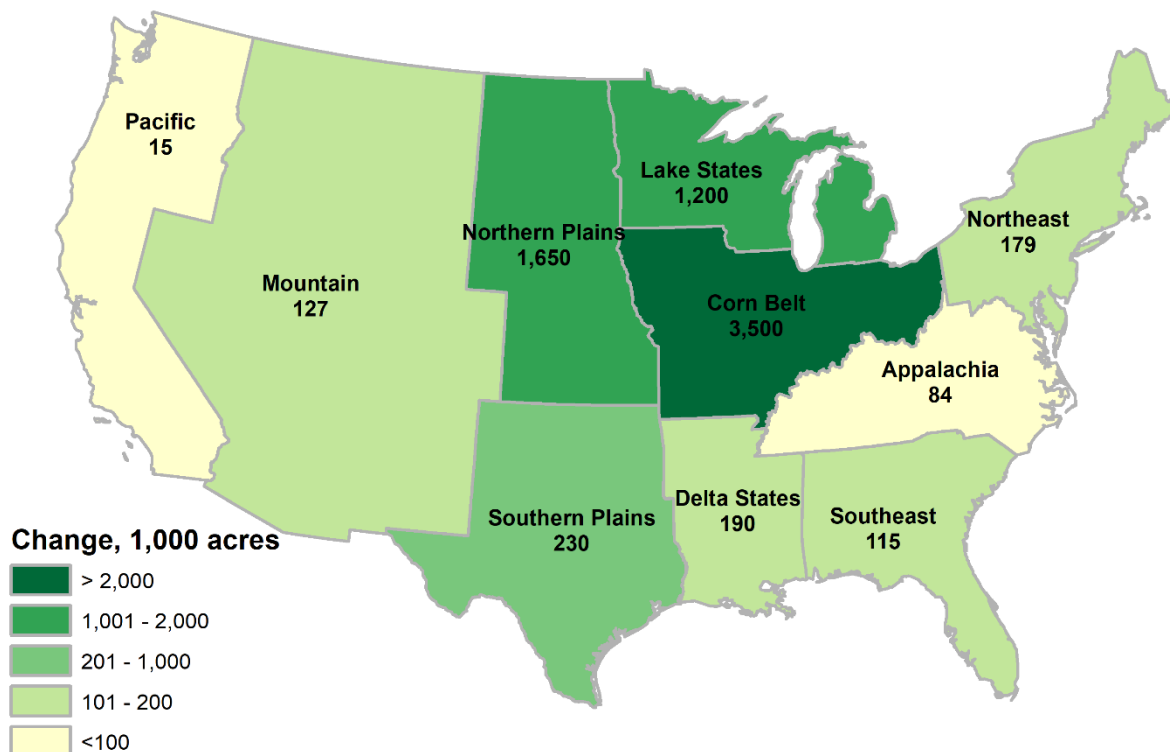
The NASS Prospective Plantings indicated farmers intend to plant 97.0 million acres of corn for the 2020/21 marketing year, 8 percent or 7.3 million acres over last year’s plantings of 89.7 million acres. This is the largest acreage intention since 2013’s 97.3 million acres. The largest increases were in the Corn Belt and the Northern Plains with gains of 3.5 million and 1.6 million acres respectively. The amount of corn actually planted depends on how market and weather conditions evolve during the planting season.

Figure 5
U.S. corn harvested area and yield



Sources: USDA, Economic Research Service with data from National Agricultural Statistics Service, QuickStats, and USDA, World Agricultural Outlook Board, Crop Projections, 2020.

**Change in corn planted area from 2019 to 2020 (1,000 acres)
USDA farm production regions**

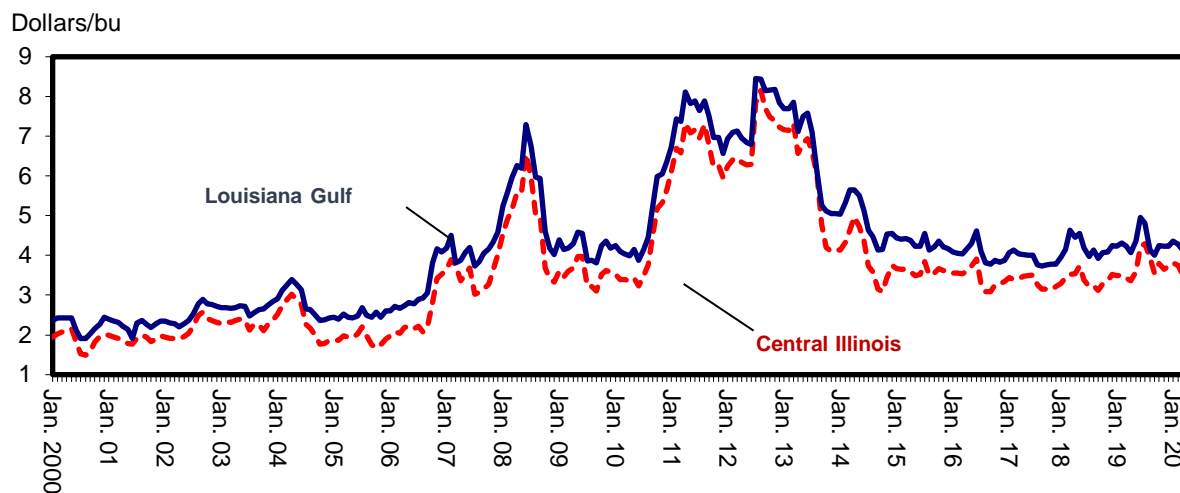


Source: USDA NASS *Prospective Plantings*, March 31, 2020

Corn Price Lowered

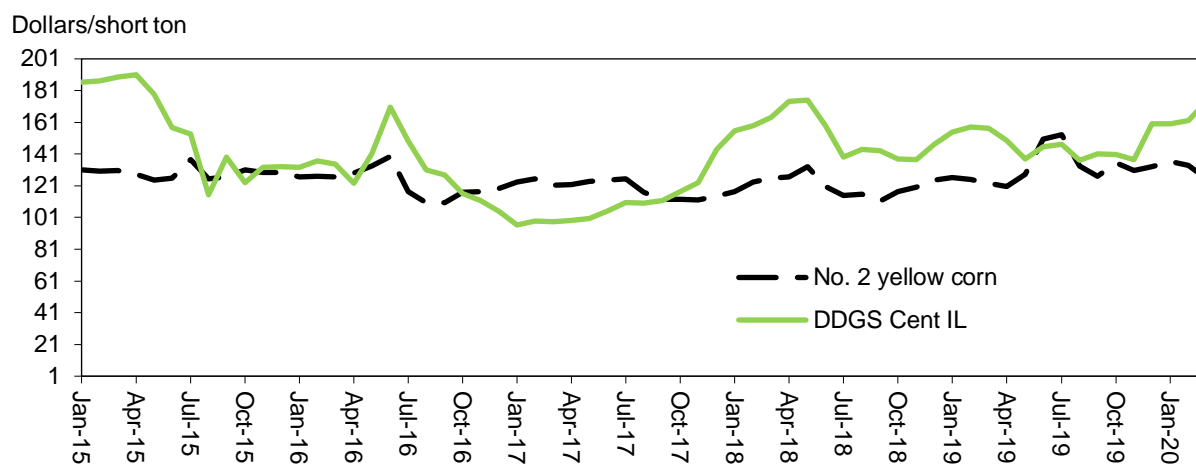
The projected season average price received by farmers for 2019/20 is lowered \$0.20 per bushel to \$3.60 reflecting decreasing demand, mostly from the ethanol sector. The stocks-to-use ratio is projected at 15.1 this month compared with last month's 13.4. Projected 2019/20 stocks are raised 200 million bushels this month to 2,092 million.

Figure 6
Monthly corn (yellow #2) prices for Central Illinois and Louisiana Gulf



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service.

Figure 7
Monthly and prices for Central Illinois no. 2 yellow corn and corn distillers dried grain



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service.

Feed and Residual Use: Four Feed Grains and Wheat

Feed and residual use for the four feed grains (corn, sorghum, barley, and oats) and wheat on a September-August marketing year basis for 2019/20 is projected at 153.4 million tons, 3.2 million higher than last month's projection. This is due to a 3.8-million bushel increase in corn feed and residual offset by a 0.6-million bushel reduction in sorghum feed and residual use.

Oats: Less Imported Oats, Decreasing Carryout in 2019/20

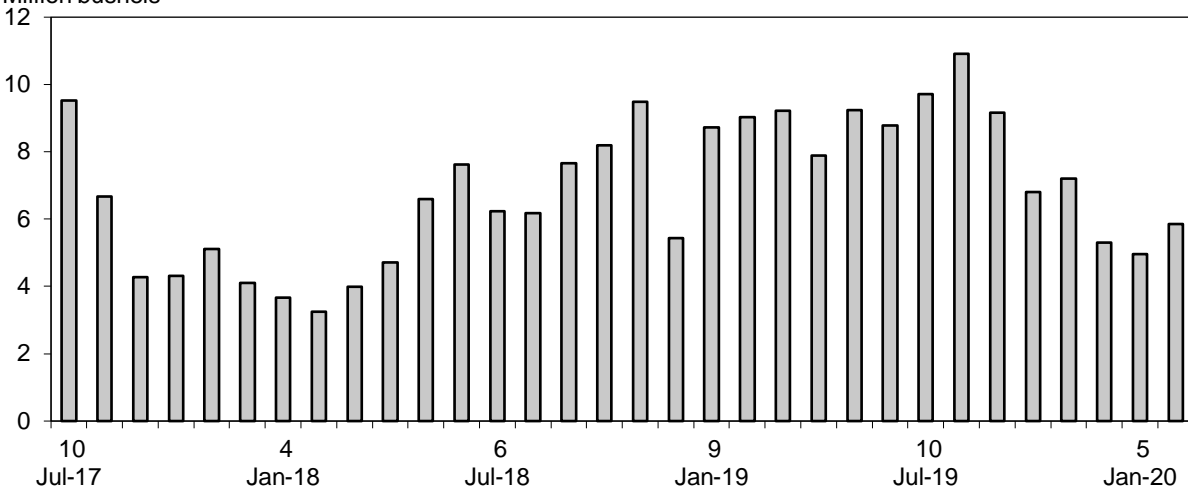
Production of oats in 2019/2020 remains constant at 53 million bushels. Imports of oats in 2019/2020 is projected down 3 million bushels to 92 million bushels based on observed trade to date. This reduction in supply is fully offset by a reduction of 3 million bushels of carryout. Carryout is now expected to be 33 million bushels down from 36 million the month prior. Season average price of oats is reduced by \$0.10 to \$2.85 per bushel.

Sorghum: Less Consumed Domestically Offset By Export Increases

Production estimations for 2019/20 remain unchanged in April, from the month prior at 341 million bushels. Area harvested and yield also remain unchanged at 4.7 million acres and 73.0 bushels per acre respectively. This level of production is down marginally from the 2018/19 production of 365 million bushels.

Feed and residual use is reduced by 25 million bushels to 105 million bushels. FSI use is reduced by 25 million bushels to 80 million bushels, mostly accounting for a reduction in ethanol production. These changes result in a total domestic use change of 50 million fewer bushels consumed. These 50 million bushels are expected to be exported leaving the ending stocks unchanged at 35 million bushels.

Figure 8
U.S. sorghum for ethanol use by month
 Million bushels

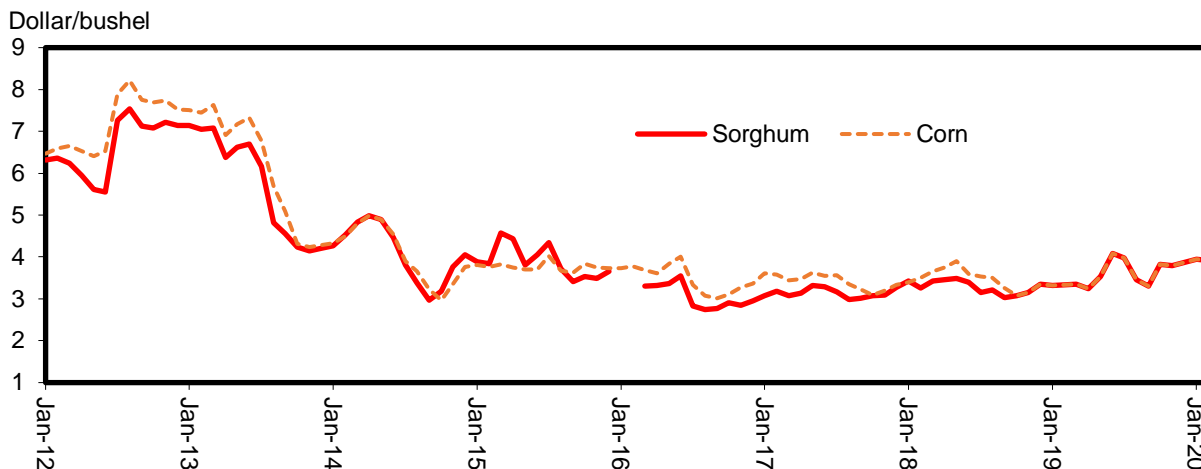


Source: USDA Economic Research Service with data from USDA, National Agricultural Statistics Service, *Grains Crushings and Co-Products*.

Note: Months for which data were withheld to avoid disclosure are shown as null.

Season average price of sorghum is reduced by \$0.05 per bushel to \$3.25 per bushel in 2019/20.

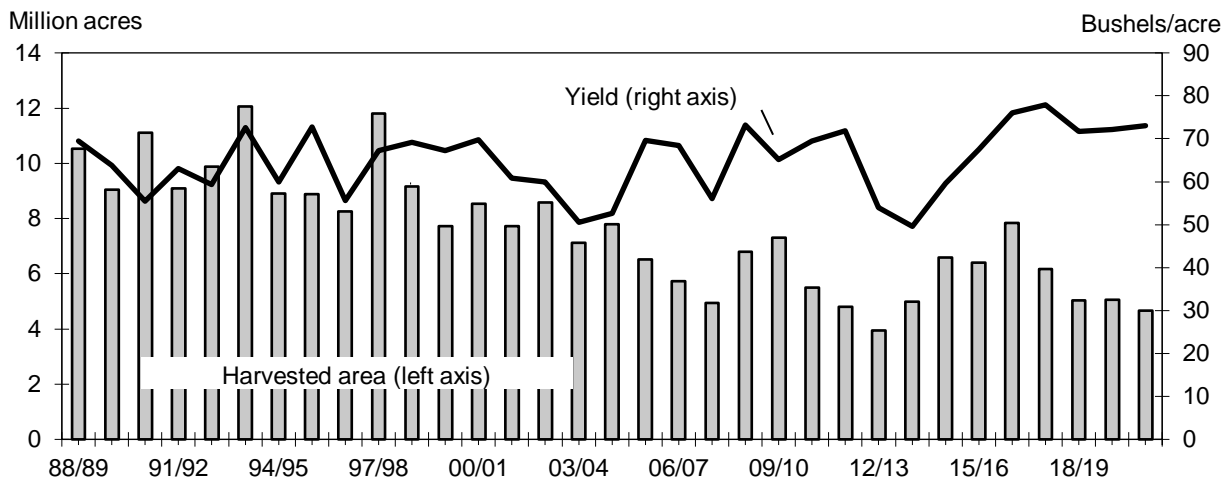
Figure 9
Monthly #2 grain sorghum and yellow corn prices for Kansas City



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service.

Sorghum planting intentions as reflected in the *Prospective Plantings* are 11 percent greater than last year at 5.8 million acres, up from 5.3 million and the largest since 2018. Final sorghum plantings can shift based on planting weather in the Southern Plains, as well as relative prices for competing crops such as cotton.

Figure 10
U.S. sorghum harvested area and yield



Sources: USDA, Economic Research Service with data from USDA, National Agricultural Statistics Service, *Quick Stats* and USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Barley: Fractionally Higher Exports and Total Use in 2019/20

Barley production in 2019/20 remains unchanged at 53 million bushels. The only change in our projections this month are an increase of 1.0 million bushels in exports fully offset by a 1.0 million bushel decrease in carryout. Exports are now estimated at 6.0 million bushels and a carryout of 87 million bushels in 2019/20.

Barley-planting intentions, as reported in *Prospective Plantings*, are for 3.012 thousand acres, 7 percent greater than last year's intentions and the highest since 2016.

International Outlook

U.S. Sorghum Export Prospects Stronger This Month

Global coarse grain trade for October-September 2019/20 is forecast 1.3 million tons higher this month to 209.0 million. Sorghum trade is increased 1.3 million tons to 5.4 million, while corn trade is up 0.6 million tons to 174.1 million. Barley trade is reduced 0.5 million to 26.8 million and oats trade is projected marginally lower.

A recent spike in sales and inspections of sorghum to China supports an increase in U.S. sorghum exports this month, up 1.3 million tons (up 50 million bushels to 185 million for the September-August local marketing year) to reach 4.7 million. Chinese sorghum imports are up by a corresponding amount of 1.4 million tons to 2.7 million, under the assumption that a small part of the import increase comes from other sources.

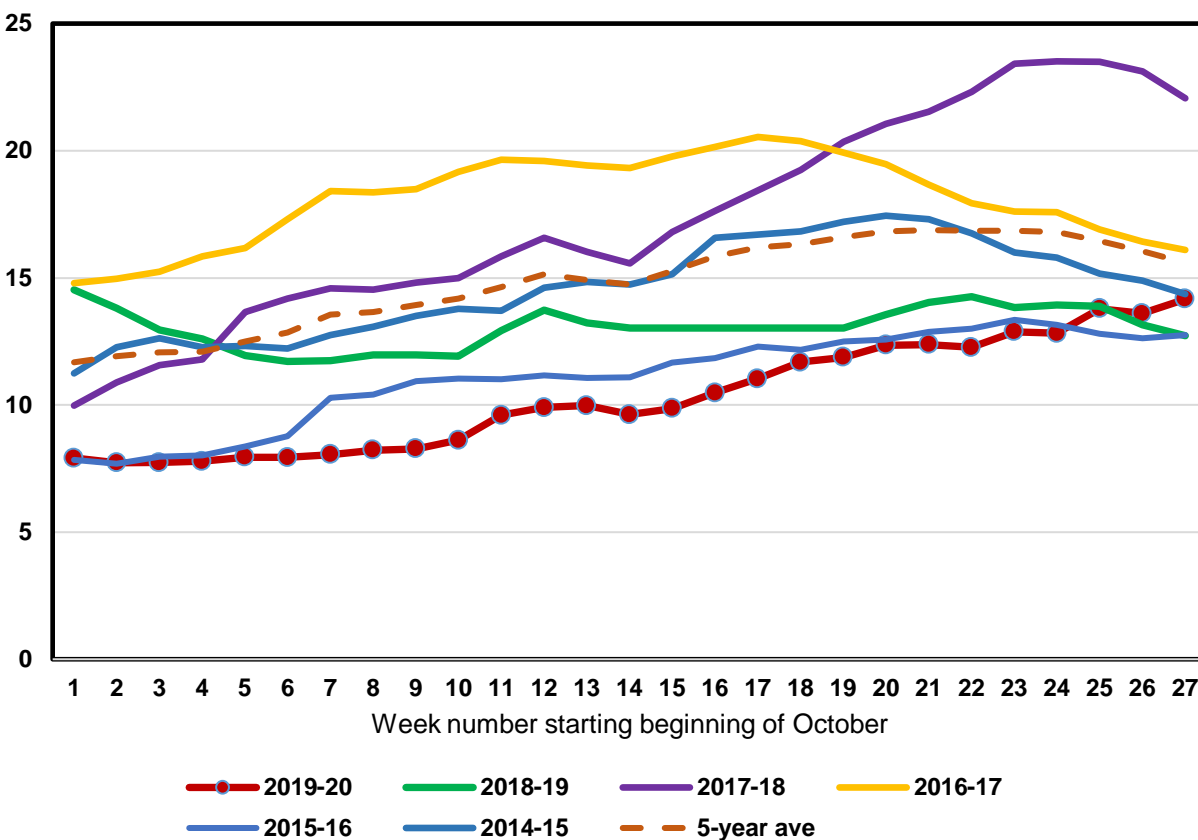
The current **corn** export projection for the **United States** has enough built-in room to remain unchanged this month at 47.0 million tons (1,725 million bushels for the September-August local marketing year). In recent weeks, there has been a pickup in sales and shipments, reflecting increasingly competitive corn export prices. Corn prices have recently been undergoing a substantial downturn adjustment in response to the general reduction in U.S. and world travel, gasoline use, and, unavoidably, ethanol consumption. The drop in ethanol consumption frees up additional corn into the market and drives down corn prices, while boosting U.S price competitiveness. This is expected to support a solid pace of corn export sales and shipments in the second half of 2019/20 (see more discussion on ethanol consumption in the earlier domestic section). Corn imports for the U.S. are slightly trimmed, down 0.1 million tons to 1.0 million (down 5 million bushels to 45 million for the September-August local marketing year).

Although U.S. corn exports for October 2019 through February 2020 (from Census data) were just 13.7 million tons, down over 40 percent from a front-loaded year earlier, March 2020 export inspections reached 4.6 million, surpassing last year's March volume. Moreover, inspections for the last two weeks, the latest one ending on April 2, reached nearly 1.3 million tons, the highest volume in nearly a year (since May 2019). Since the beginning of November, U.S. outstanding sales were lagging behind not only last year but also a 5-year average. However, by the beginning of April, outstanding export sales inched up and were finally exceeding last year's volume by 1.5 million tons at 14.2 million (fig. 11 below).

Figure 11

U.S. outstanding export sales for corn

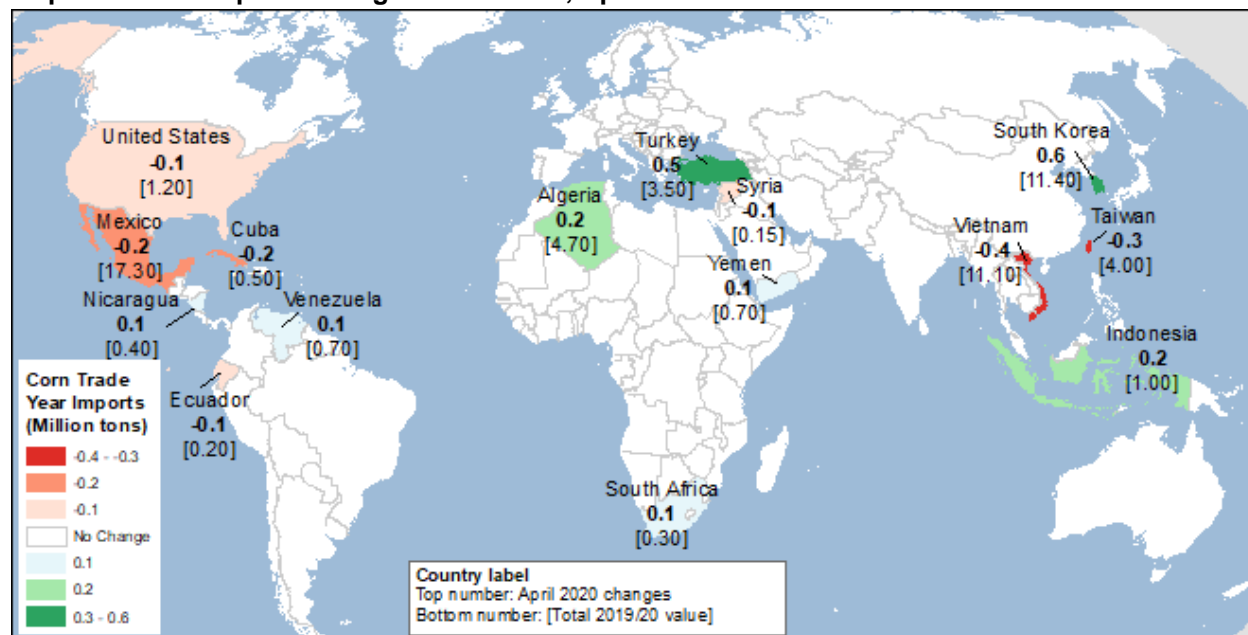
Million tons



Source: USDA, Foreign Agricultural Service, U.S. Export Sales, Weekly Sales.

Global **corn** trade for the 2019/20 October-September international trade year (TY) is projected up 0.6 million tons this month to 174.1 million, with a number of partly offsetting changes. Attractive corn prices are encouraging the importation and feeding of corn to replace wheat in feed rations for one of the most price-sensitive buyers, **South Korea**, where corn imports are projected 0.6 million tons higher to a record of 11.4 million. **Turkish** demand for feeding corn is also up with imports forecast to reach a record-high of 3.5 million tons, up 0.5 million, and coming mainly from the **European Union (EU)**. Based on the pace of recent purchases, **Vietnamese** corn imports are down 0.4 million tons to 11.1 million, **Taiwanese** corn imports are reduced 0.3 million tons to 4.0 million, **Mexican** imports are trimmed 0.2 million tons to 17.3 million, and **Cuba's** corn imports are reduced 0.2 million tons to 0.5 million. A number of countries had smaller changes. For a visual display of this month's changes in corn TY imports, see map A1.

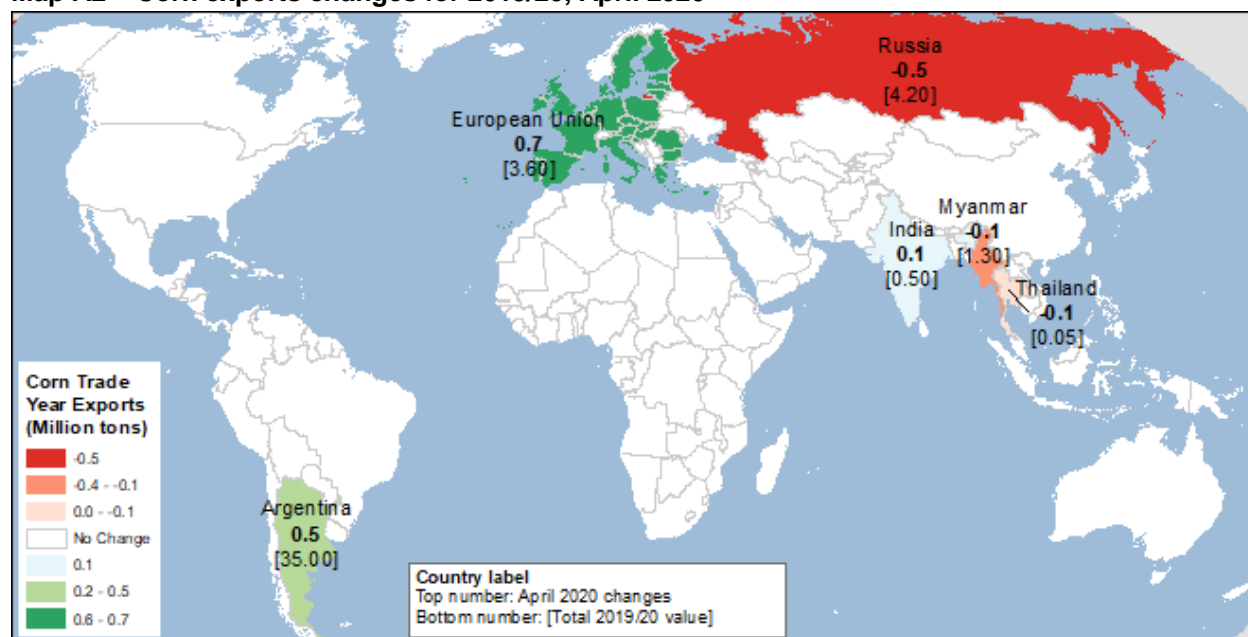
Map A1 – Corn imports changes for 2019/20, April 2020



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

With higher projected corn output and the increasing pace of sales to Turkey and some other countries, corn exports from the **EU** are up 0.7 million tons to 3.6 million, based on stronger demand and supported by the pace of export licenses. **Argentina** has been exporting at a higher pace than expected before with strong January-March sales to countries in North Africa and the Middle East, thereby boosting its corn export projection 0.6 million higher this month to reach a record of 35.0 million. A sluggish corn export pace and grain export restrictions through June in **Russia** support a 0.6-million-ton decline in projected exports to 4.2 million. For a visual display of this month's changes in corn TY exports, see map A2.

Map A2 – Corn exports changes for 2019/20, April 2020



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

Global **barley** trade for the October-September international TY is projected lower, down 0.5 million tons to 26.8 million, with a reduction for **Russian** exports that go to the **Middle East** and **North Africa (Jordan and Tunisia)**, down 0.5 million tons to 4.1 million. Barley imports are revised for Jordan, down 0.6 million tons, and for Tunisia, down 0.2 million tons. Several smaller upward revisions are partly offsetting. U.S. 2019/20 TY barley exports are up 35.0 thousand tons to 150 thousand (for the June-May local marketing year, exports are up 1.0 million bushels to 6.0 million).

World Coarse Grain Production Prospects Up Slightly

Global coarse grain production in 2019/20 is projected up 1.0 million tons this month to 1,403.8 million. Global corn production is increased 1.0 million tons to 1,113.0 million, while changes in barley and sorghum are offsetting. Changes in oats, rye, and millet are fractional.

Virtually all changes in coarse grain production this month are for countries in the northern hemisphere, and involve statistical adjustments keeping up with official country or international sources.

For more information, details, and specific causes of the revisions and details of this month's changes in coarse grain production, see tables A1, A2, and map B below. The changes in global, foreign, and the U.S. coarse grain production by type of grain are shown in table A1.

Table A1 – World and U.S. coarse grain production at a glance (2019/20), April 2020

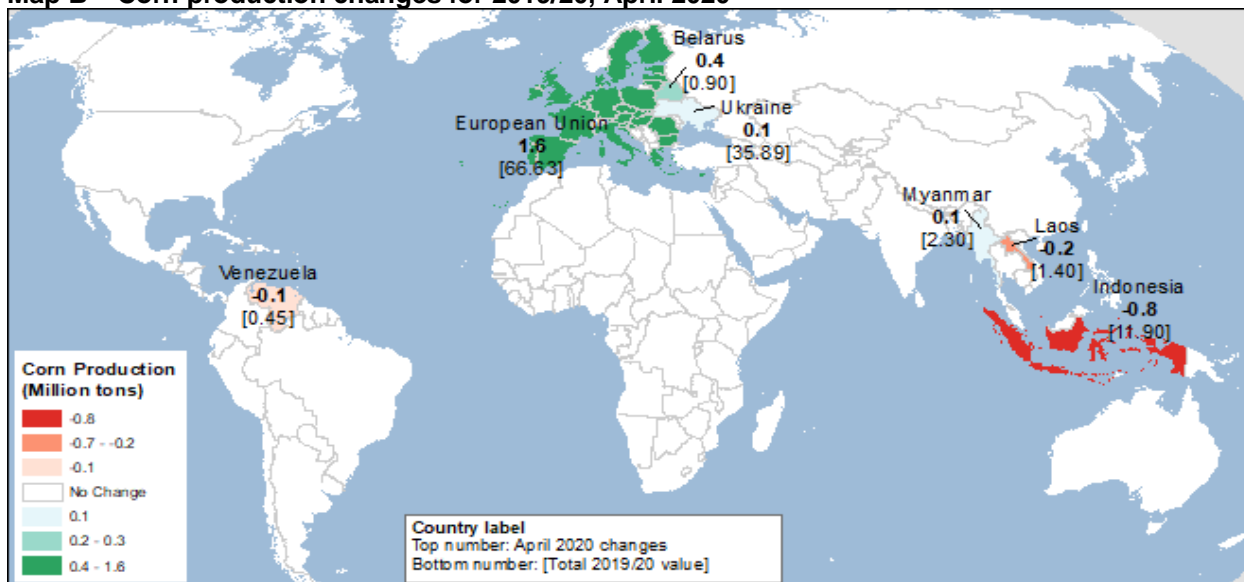
	Region or country	Production	Change from previous month	YoY change ¹	Comments
<i>Million tons</i>					
Coarse grain production (total)					
↑	World	1,403.8	+1.0	+7.4	
↑	Foreign	1,042.6	+1.0	+24.1	Changes are made for a number of countries and commodities. See table A2.
	United States	361.2	No change	-16.7	See section on U.S. domestic output.
World production of coarse grains by type of grain					
CORN					
↑	World	1,113.0	+1.0	-10.6	
↑	Foreign	765.2	+1.0	+5.9	Higher corn production is projected for both the European Union (EU) and Belarus, which is partly offset by reductions for Indonesia and Laos. See table A2 and map A.
	United States	347.8	No change	-16.5	See section on U.S. domestic output.
BARLEY					
↑	World	155.9	+0.2	+17.1	
↑	Foreign	137.3	+0.2	+16.8	Higher output projected for Tunisia. See table A2.
	United States	3.3	No change	+0.3	See section on U.S. domestic output.
SORGHUM					
↓	World	57.3	-0.2	-2.3	
↓	Foreign	48.6	-0.2	-1.7	Lower projected output for Mexico. See table A2.
	United States	8.7	No change	-0.6	See section on U.S. domestic output.
¹ YoY: year-over-year changes.					
Fractional changes are made for rye, oats, and millet. For changes and country notes, see table A2.					
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.					

The changes in coarse grain production by country and type of grain are presented in table A2 and map B below.

Table A2 – Coarse grain foreign production by country at a glance, April 2020

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 (2020)					
EUROPEAN UNION (EU)					
↑ Corn	Oct–Sep	66.6	+1.6	+2.3	Although at this point, the changes are supposed to be a fine-tuning of European crop area and output, this month brings substantial revisions for European (mainly French, Bulgarian, and Croatian) corn, mainly involving area, but also some small changes for yield.
BELARUS					
↑ Corn	Oct–Sep	0.9	+0.4	-0.2	The increase is based on official Government data for both 2018/19 and 2019/20. Corn output for 2018/19 is also up 0.4 million tons.
INDONESIA					
↓ Corn	Oct–Sep	11.9	-0.8	-0.1	Supported by Government subsidies aimed to achieve self-sufficiency in corn production, corn area is projected still higher than last year, but is reduced this month, as well as corn yields. Delayed start to the rainy season compelled farmers to harvest the crop with still high moisture content and is expected to lower yields.
LAOS					
↓ Corn	Jul–Jun	1.4	-0.2	+0.4	Insufficient precipitation affected both corn-planted area and expected yields.
MEXICO					
↓ Sorghum	Oct–Sep	4.3	-0.2	-0.4	A downtrend in sorghum area and output continues. Reduction of government support and a threat of sugar cane aphid limit planted area, while yields are projected lower because of adverse weather conditions.
TUNISIA					
↑ Barley	Jul–Jun	0.9	+0.3	+0.6	The increase is based on the Government data.
¹ Change from previous month. Smaller changes for coarse grain output are made for several countries, see map A for changes in corn. ² YoY: year-over-year changes.					
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.					

Map B – Corn production changes for 2019/20, April 2020



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

Coarse Grain Feed and Residual Use Projection Up

Global use of coarse grain in 2019/20 is projected down 4.9 million tons this month to 1,418.5 million, mainly because of reduced use of corn and sorghum for ethanol production in the United States (where coarse grain domestic use is projected down 6.5 million tons). At the same time, world feed and residual use is projected 3.7 million tons higher this month (with the United States accounting for 3.2 million tons of the increase). Foreign use of coarse grain is up 1.6 million, while foreign feed and residual use is up by merely 0.5 million, with mostly offsetting changes as U.S. feeding is projected 3.2 million tons higher (for a discussion of U.S. grain consumption, see domestic section).

Several changes reflecting production revisions, shifts in feeding among grains, the macroeconomic situation, and trade changes across importing and exporting countries motivated this month's revisions. The largest increase in corn use is projected for the **EU**, up 1.0 million tons this month, as a reflection of a crop forecast increase and recent export data. In most countries, relative prices favor corn over wheat for feeding, and reduced wheat feeding is boosting the use of coarse grains. A shift in feeding from wheat to corn is projected for **South Korea**, as its corn feeding is projected 0.5 million tons higher this month, supported by information on its grain imports. Coarse grain feeding is projected up 0.7 million tons for **Russia**, with this increase incorporating both corn and barley feeding, and is justified by reduced exports. Sorghum feeding is raised for **China**, up 0.7 million tons to 2.7 million, with the change supported by increased projected sorghum imports from the United States. Corn feeding is reduced for **Vietnam**, down 0.6 million tons, reflecting lower corn imports. With beneficial precipitation and improved pasture conditions, **Jordan** is expected to use less barley for feeding, down 0.5 million tons to just 0.5 million. Other changes made for specific countries' use are smaller.

World coarse grain ending stocks for 2019/20 are projected up 6.1 million tons to 333.4 million. The lion's share of the increase is projected for the United States, up 5.0 million tons. Changes in coarse grain stocks in the countries other than the United States are all under 0.4 million tons and reflect changes in production, consumption, and trade in each individual country.

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