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Feed Outlook

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2019/20 Projected Corn Crop Smaller; Price Gets 20-cent Boost

The third survey-based estimate for the 2019/20 corn crop lowered harvested acres by 200,000 and raised yield 0.2-bushel per acre, lowering the crop projection by 19.8 million bushels this month. However, supplies declined 350.8 million bushels due to lower carryin, reaching 15,944 million bushels. On the demand side, an increase in feed and residual partially offsets decreases in exports and food, seed and industrial (FSI) use, for a net 90-million-bushel decline in total use to 14,015 million bushels. Tightening supplies and observed prices to date caused the projected average for the season average price received by farmers to gain $0.20 per bushel to $3.80.

The slow pace of U.S. corn sales and shipments in recent months reveal the country's weak price competitiveness relative to other major corn exporters. U.S. corn exports for the October-September international trade year are projected 3.5 million tons lower. With reduced supplies and high corn output by competitors this year, the United States is expected to lose its export market share. This month, corn exports are projected higher for Brazil and Russia.

Domestic Outlook

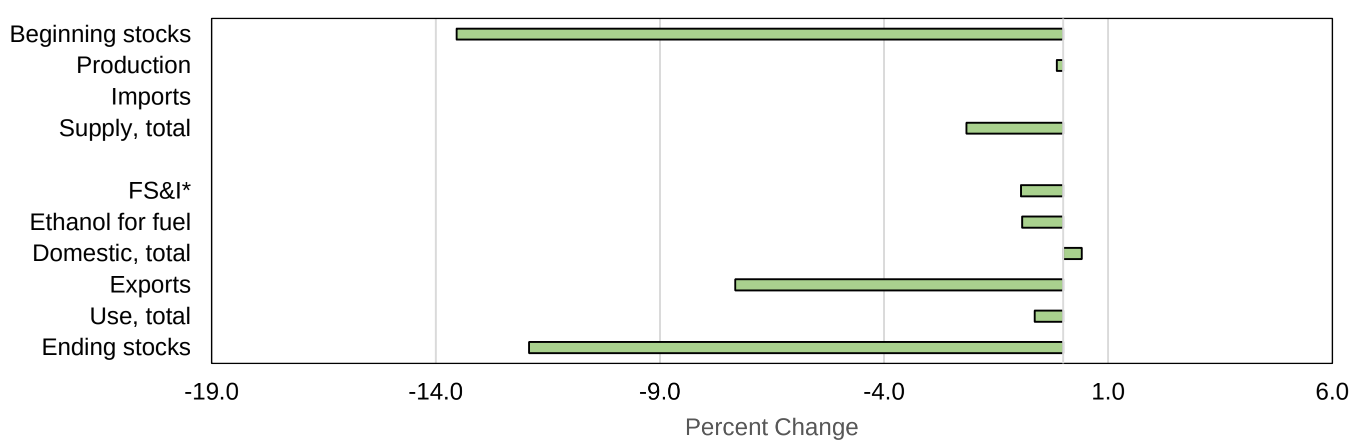
2019/20 Supplies Down on Lower Carryin and Production

The USDA, National Agricultural Statistics Service (NASS) *Grain Stocks* report indicates lower than expected corn ending stocks for 2018/19. As a result, carryin for 2019/20 is reduced 331 million bushels. In addition, NASS *Crop Production's* report estimate pegs the corn crop 19.8 million bushels lower this month on reduced harvested acreage, moderated by an increase of 0.2-bushel per acre in yield. The October 1 objective yield survey indicates the lowest ear count since 2012 for the combined 10 States in the survey. Total supply is lowered 350.8 million bushels from last month's projection to 15,944 million bushels.

As of October 6, only 15 percent of the corn crop had been harvested, compared with an average of 27 percent during the previous 5 years. The percent of the crop harvested was particularly low in major corn-producing States such as Iowa (3 percent), Illinois (13 percent), and Indiana (15 percent). States further south had higher harvest rates. For the top 18 corn-producing States, corn in good to excellent condition reached 56 percent, compared to 68 percent in 2017/18.

Figure 1

Corn supply and use: percent change from last month's forecast (2019/20)



Source: Economic Research Service Feed Grain Database, U.S. Dept. of Agricutlure.

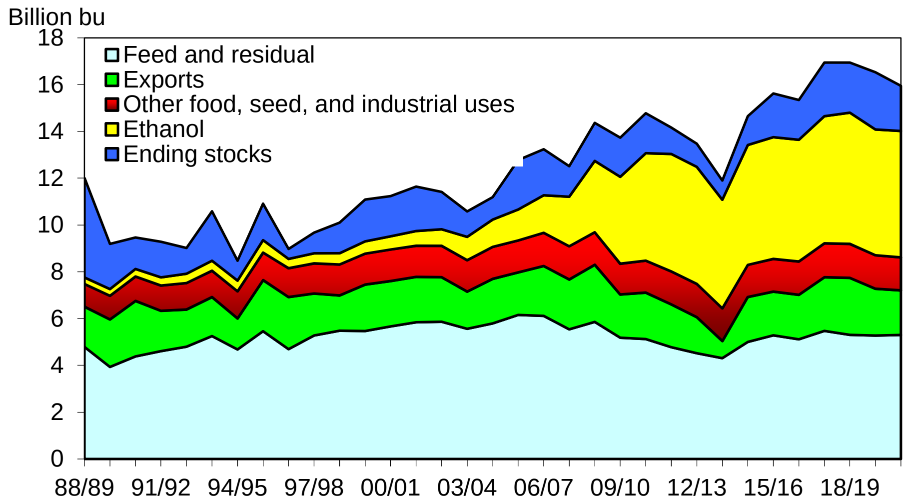
Grain Consuming Animal Units Raised

Grain-consuming animal units (GCAU) for 2019/20 are projected at 102.77 million units, up 1.6 million from the September forecast. Increases to dairy cows, beef cattle, layers, broilers, and hogs are behind the increase. GCAUs for 2018/19 are 0.2 higher this month, at 100.75.

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 144.8 million tons, a 3.7-million-ton increase over last month's forecast. Feed and residual for corn is raised, sorghum is unchanged, while barley, oats, and wheat declined. For 2018/19, feed and residual is raised by 5.4 million tons to 149.9 million, as higher ending stocks boosted corn feed and residual and other categories showed small declines.

Figure 2
U.S. corn utilization



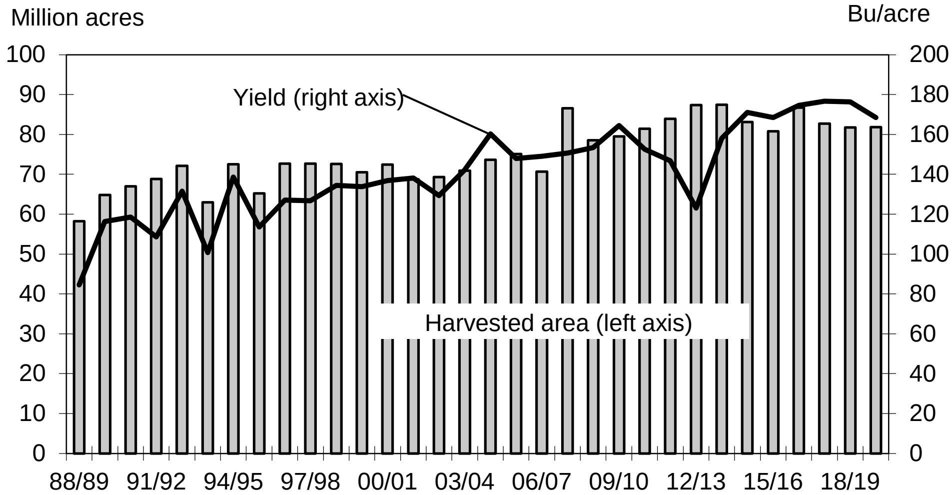
Note: Marketing year 2018/19 and 2019/20 are projected.
Source: USDA, World Agricultural Outlook Board, *WASDE.*

Projected 2019/20 Disappearance Shrinks 90 Million Bushels

For 2018/19, the large decline in carryout reported by the NASS *Grain Stocks* report resulted in a 342.8-million-bushel increase in feed and residual to 5,617.8 million (5.617 billion). Based on indicated disappearance during 2018/19, feed and residual use for 2019/20 is projected 125 million bushels higher at 5,300 million (5.3 billion) this month. The March-August disappearance was 38.8 percent of the marketing year total, compared with a 5-year average of 28.8 percent, in part because of lower-than-expected stocks on September 1.

Figure 3

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, 2019.

Ethanol Prospects Dampened

The NASS *Grain Crushings and Co-Production* report identifies the final 2018/19 corn-for-ethanol use at 5,376 million (5.376 billion) bushels, 1.1 million bushels higher than last month's projection. For 2019/20, projected corn use for fuel ethanol is lowered 50 million bushels to 5,400 million (5.4 billion) based on observed data to date.

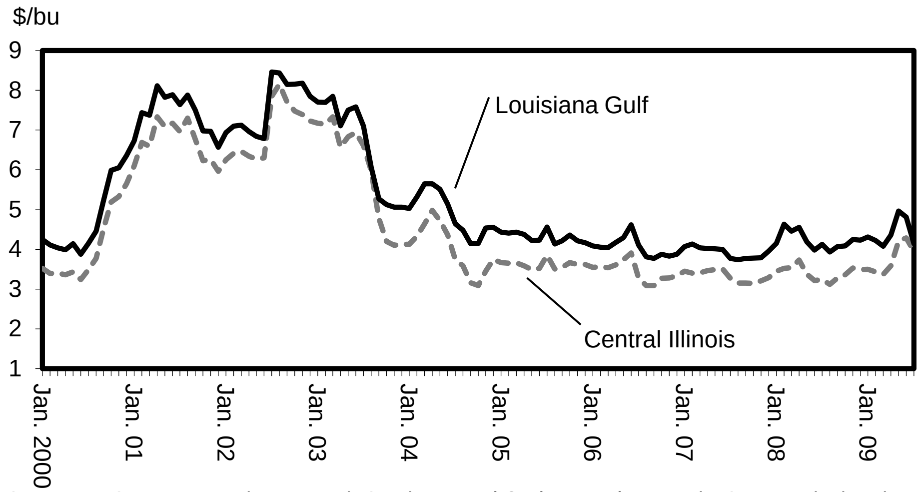
Other food, seed, and industrial (FSI) use categories are also revised. Projected corn used for high fructose corn syrup (HFCS) reached 441.4 million bushels in 2018/19. Projected corn for HFCS in 2019/20 is lowered 5 million bushels in October to 435 million based long-term on industry trends. Corn used for glucose and dextrose end the 2018/19 year at 355.1 million bushels, and the 2019/20 projection is for a 5-million bushel decline. Corn for starch ends 2018/19 at 230.5 million bushels and the use in 2019/20 is projected down 5 million at 230.0 million bushels.

The projection for 2018/19 corn exports is raised 5 million bushels over last month to 2,065 million (2.065 billion). NASS's *Grain Stocks* indicates lower-than-expected September 1 stocks of 2,114.4 million (2.144 billion) bushels which results in feed and residual of 5,617.8 million bushels. Total 2018/19 use is projected at 14,474.0 million (14.474 billion) bushels, 334.0 million below last month's forecast.

The projected season-average corn price received by farmers for 2019/20 is raised $0.20 per bushel to $3.80, reflecting tightening supplies. The stocks-to-use ratio for 2019/20 is projected at 13.8 compared to last month's 15.5. The 2018/19 average price received by farmers was adjusted up 1-cent per bushel to $3.61 based on end-of-year data.

Figure 4

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



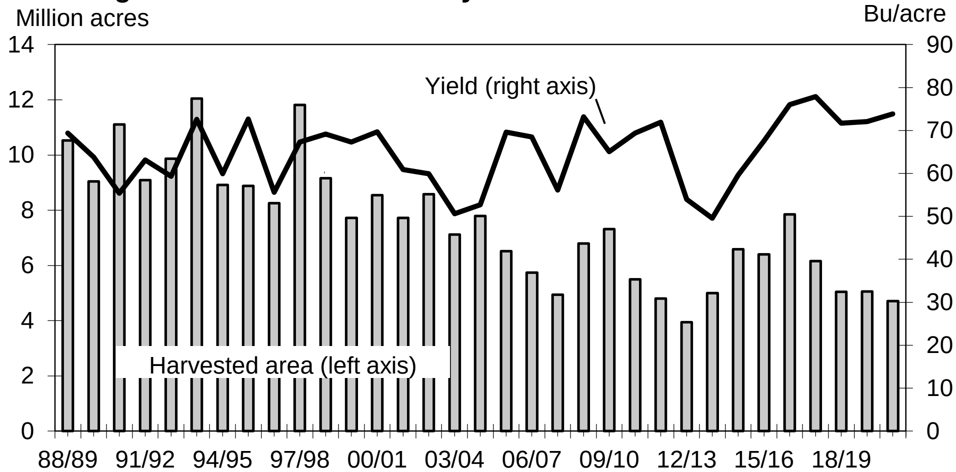
Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service.

Sorghum 2018/19 Feed and Residual Higher, 2019/20 Supply Down

Increased carryin is the main factor in larger 2019/20 sorghum supplies projected this month. The NASS *Crop Production* report indicated lower acreage and yield for sorghum resulting in a 3.0 million bushel decline in production to 349.0 million. The NASS *Grain Stocks* report identified 2018/19 ending stocks 8.8 million bushels higher, at 63.7 million bushels resulting, in a decline in feed and residual of 16.9 million bushels to 138.1 million bushels. Otherwise, all use categories increased for total use of 336.2 million bushels, 8.8 million bushels lower than last month's estimate. The projected season-average price for 2018/19 is steady at $3.25 per bushel, while the 2019/20 price is raised 10-cents per bushel to maintain historical relationships to the corn price.

Figure 5

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*, WASDE.*

Barley Supply Up

The NASS *Small Grains Summary* estimated 2018/19 barley production up 445,000 bushels to 153.5 million on small increases in harvested area and yield. Thus, supply is 445,000 bushels higher at 253.9 million. 2019/20 barley production is projected at 171.3 million bushels, up 12 percent from the revised 2018/19 total of 154 million bushels. The average yield per acre, at 77.4 bushels, is up 3.5 bushels from last month. Producers seeded 2.72 million acres in 2019, up 7 percent from last year. Harvested area, at 2.21 million acres, was up 12 percent from 2018. Feed and residual is lowered 5 million bushels to 15 million bushels and total disappearance is lowered the same amount to 171 million. Price is unchanged.

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2019/20: Oat Production Lowered

The NASS *Small Grains Summary* estimates 2019/20 oat production at 54.2 million bushels, 6.2 below last month's for comparable States. Yield is estimated at 64.4 bushels per acre, down 2.0 bushels from last month's forecast for comparable States. Harvested area, at 842,000 acres, is projected 67,000 acres lower. Stocks are lowered 305,000 bushels to 37.0 million. Anticipated season-average price is unchanged at $2.95 per bushel for 2019/20, based on observed prices through September.

International Outlook

U.S. Corn Export Prospects Reduced Sharply

Projected 2019/20 world coarse grain trade for the October-September international trade year is down 2.3 million tons, with the decrease largely driven by corn. The forecast for world corn exports is reduced 2.0 million tons this month to 170.8 million, as a reduction in U.S. corn exports pushes down global trade.

U.S. corn export prospects for the 2019/20 October-September trade year are reduced this month by 3.5 million tons to 51.5, as the pace of U.S. corn shipments and sales continues to disappoint. (For the U.S. September-August 2019/20 local marketing year, exports are reduced 150 million bushels to 1,900 million this month, and a small adjustment is made for the 2018/19 local marketing year based on final data).

This month's reduced supplies in the U.S. (both beginning stocks and output are projected lower), combined with strong domestic demand and slow harvest progress, are contributing to higher current U.S. corn export prices at a premium to competitors, while exports from the Southern Hemisphere and from Ukraine surge. A faster-than-expected pace of shipments from these countries, and a gap in prices between South American/Ukrainian and U.S. corn, are expected to further limit U.S. exports during the latter part of the 2019 calendar year. Moreover, in early 2019/20, competition from Ukraine is expected to intensify further, as the harvest progresses.

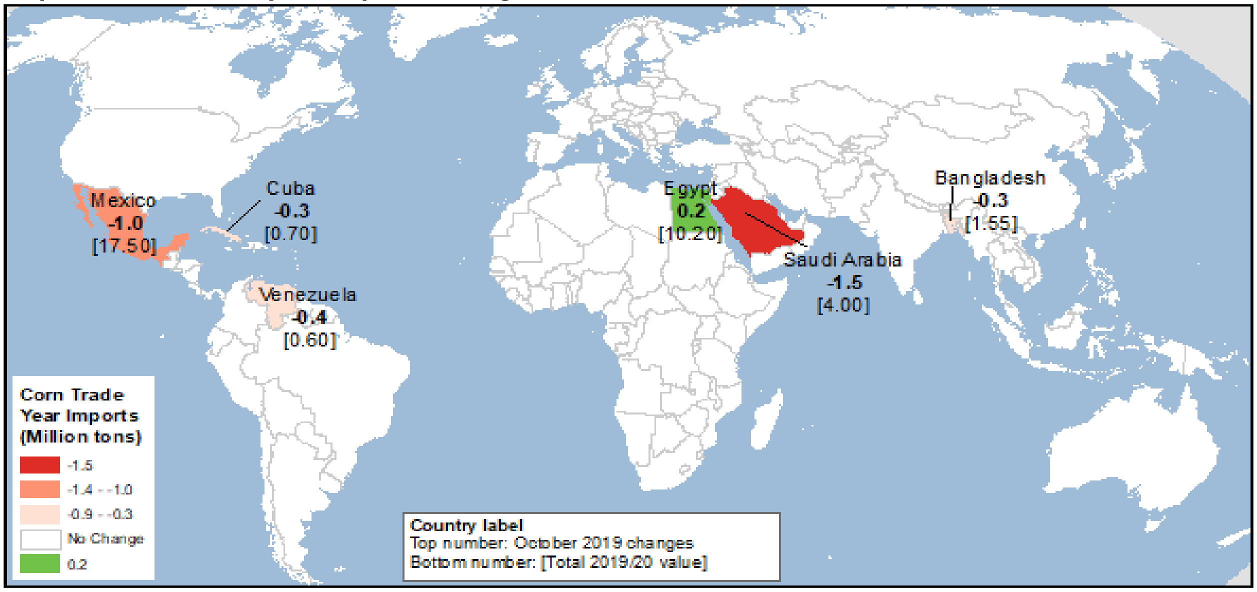
September U.S. export inspections came out at a mere 1.8 million tons. Census results for corn exports (September exports to be issued in November) typically exceed inspections, partly because not all exports require inspection. That point notwithstanding, this would still be the lowest level of September U.S. corn exports in about 45 years. Outstanding sales for corn at the beginning of October 2019 reached 7.9 million tons, down 45.5 percent from a year ago.

Partly offsetting reduced corn exports for the U.S. are increased corn export prospects for ***Brazil***, up 1.0 million tons to 35.0 million, and for ***Russia***, up 0.5 million tons to 5.2 million. September corn sales for Brazil, although slightly lower than in August, surpassed previous records for the month of September, exceeding 6.5 million tons and boosting export projections for both the 2019/20 October-September trade year and the 2018/19 March-February local marketing year. For the local marketing 2018/19 year, ***Brazil*** corn exports are up 1.0 million tons to a new record high of 39.0 million. Higher projected corn output boosts ***Russian*** exports by 0.5 million tons to 5.2 million.

Global corn import prospects are also adjusted down this month. Corn imports for ***Mexico*** are projected 1.0 million tons lower this month to reach 17.5 million, reflecting tighter exportable supplies and higher prices in the United States. However, exports to ***Mexico*** from ***Brazil*** are partly offsetting and ***Mexican*** corn imports from all sources are still projected to exceed last year's amount.

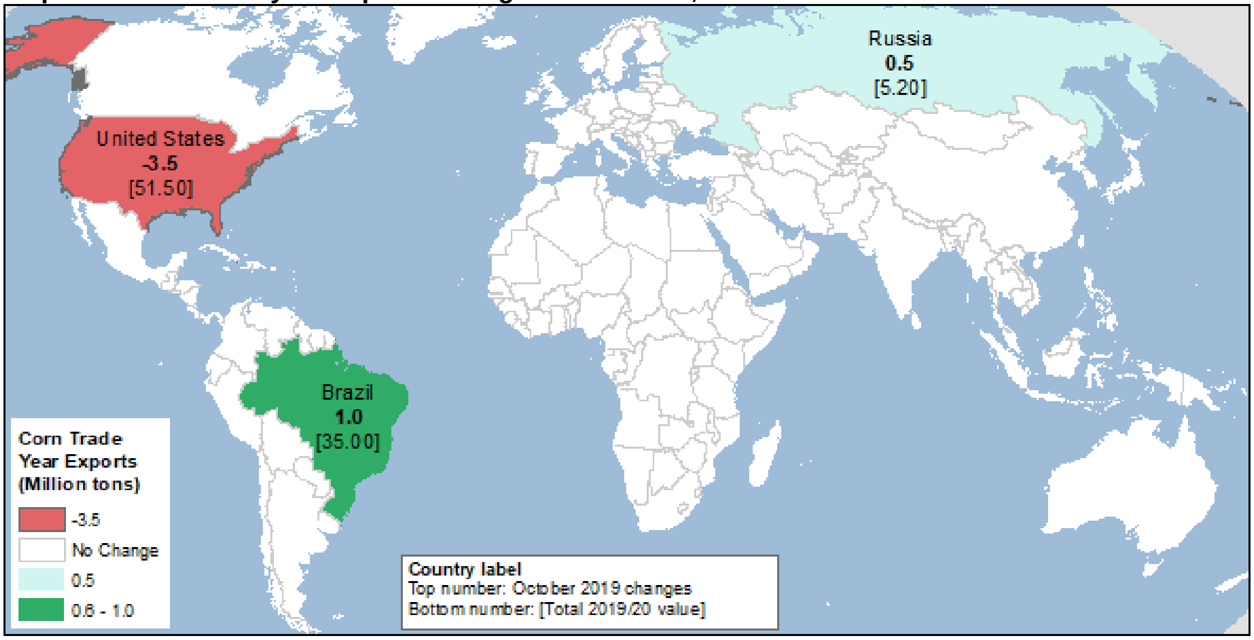
Corn imports for ***Saudi Arabia*** are reduced 1.5 million tons this month to reach 4.0 million tons, while its barley imports are up 0.5 million tons to 8.5 million. As ***China*** is projected to reduce its barley consumption and imports, down 0.5 million tons to 6.5 million this month, and barley prices are softening, ***Saudi Arabia*** is expected to shift part of its grain imports from more expensive corn to barley. Even with an aggregate grain import reduction of 1.0 million tons, total grain feeding in ***Saudi Arabia*** is still 14 percent ahead of last year. Corn imports are also projected down 0.4 million tons for ***Venezuela***, reflecting lower 2018/19 imports and the continued plight of the economy there. Sharply lower projected corn output boosts ***Egyptian*** imports by 0.2 million tons to 10.2 million, while corn imports for ***Bangladesh*** and ***Cuba*** are each down 0.3 million tons based on observed trade during the 2018/19 international trade year. There are also smaller changes in coarse grain imports for several other countries. For a visual display of the changes in corn trade year imports and exports, see maps A1 and A2 below.

Map A1 – Corn trade year imports changes for 2019/20, October 2019



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

Map A2 – Corn trade year exports changes for 2019/20, October 2019



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

Global sorghum and oats exports are projected lower this month, down 0.3 and 0.1 million tons, respectively, reflecting reduced projected output and exports for ***Australia***.

Barley exports are projected 0.1 million tons higher, because of an increased ***European Union*** production and exports forecast.

In addition to the offsetting changes for ***China*** (down 0.5 million tons) and ***Saudi Arabia*** (up 0.5 million tons) discussed above, barley imports are projected 0.2 million tons higher with small increases for the ***European Union*** (EU) and ***Japan***.

Higher Barley Drives Foreign Coarse Grain Output Up

Global coarse grain output is up marginally this month, as reductions in corn, oats, and sorghum are partly offset by higher barley output. For more information and a display of this month's output changes, see tables below: A1 (for aggregate global and foreign, and U.S., changes) and table A2 (for specific country changes).

Table A1 - World and U.S. coarse grain production at a glance (2019/20), October 2019				
Region or country	Production	Change[1]	YoY change[2]	Comments
	Million tons			
Coarse grain production (total)				
World	1,396.7	+0.2	+0.6	
Foreign	1033.0	+0.9	+16.9	Partly offsetting changes are made for a number of countries and commodities. See table A2.
United States	363.7	-0.7	-16.3	See section on U.S. domestic output.
World production of coarse grains by type of grain				
CORN				
World	1,104.0	-0.9	-19.2	
Foreign	754.0	-0.4	-2.9	A reduction for Egypt is partly offset by higher prospects in Russia. See table A2.
United States	350.0	-0.5	-16.3	See section on U.S. domestic output.
BARLEY				
World	155.8	+1.7	+16.2	
Foreign	152.1	+1.7	+15.8	Higher output in the European Union and Syria. See table A2.
United States	3.7	Small change	+0.4	See section on U.S. domestic output.
SORGHUM				
World	58.8	-0.4	-0.2	
Foreign	49.9	-0.3	+0.2	Lower production in Australia. See table 2.
United States	8.9	-0.1	-0.4	See section on U.S. domestic output.
OATS				
World	22.6	-0.3	+0.7	
Foreign	21.8	-0.2	-0.8	Lower production in Australia. See table 2.
United States	0.8	-0.1	Small change	See section on U.S. domestic output.

[1]Change from previous month. [2]YoY change: year over year changes.

For changes and notes by country, see table A2.

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

Table A2 - Coarse grain foreign production by country at a glance, October 2019						
	Type of crop	Crop year	Production	Change in forecast[1]	YoY[2] change	Comments
			Million tons			
Coarse grain production by country and by type of grain (2018/19)						
AUSTRALIA						
↓	**Oats**	*Nov-Oct*	**1.0**	**-0.2**	**+0.1**	Almost half of the country's oats are produced in Western Australia (WA) where both oats area and yields are reduced this month because of winter drought.
↓	**Sorghum**	*Mar-Feb*	**1.4**	**-0.3**	**+0.1**	Sorghum is a summer crop that grows exclusively in the east of the country in areas mostly affected by the drought. Sorghum area is projected 17 percent lower, while at this period of the crop cycle, yields are adjusted just 1 percent lower.
RUSSIA						
↑	**Corn**	*Oct-Sep*	**13.5**	**+0.5**	**+2.1**	With almost 50 percent of area harvested, the reports indicate higher-than-expected yields. Beneficial precipitation and cool weather in August-September boosted yields in late-filling corn up north (the Central District producing 1/3 of the country's crop).
EUROPEAN UNION (EU)						
↑	**Barley**	*Jul-Jun*	**61.6**	**+0.9**	**+6.0**	Changes are based on harvest results. Area and yield are adjusted up in ***France;*** yields are boosted for the ***United Kingdom (UK)*** .
EGYPT						
↓	**Corn**	*Oct-Sep*	**6.4**	**-0.8**	**-0.4**	Corn area is projected lower as rice planting expanded this year, taking area from corn.
SYRIA						
↑	**Barley**	*Jul-Jun*	**2.0**	**+0.8**	**+1.6**	Barley area and yields are substantially boosted this month, reflecting exceptionally beneficial precipitation and vegetation health.
↓	**Corn**	*Jul-Jun*	**0.1**	**-0.1**	**No change**	Corn area and yields are projected lower this month.

[1]Change from previous month. Smaller changes for coarse grain output are made for several countries.
[2] YoY change: year-over-year changes.
Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Coarse Grain Use Reduced, Foreign Stocks Up

Global coarse grain use in 2019/20 is projected down 2.7 million tons this month to 1,413.5 million. Given that domestic use in the U.S. is projected 1.3 million tons higher (see domestic section), foreign use of coarse grain is down 4.0 million tons this month.

The series for corn feed use in Brazil is revised down since 2017/18 for the last 3 years by 1.0 million ton for each year, based on observed trade and updated domestic utilization estimates for 2017/18 and 2018/19. With lower projected production, corn use in Egypt is trimmed 0.2 million tons, while lower corn imports result in lower feed use in Bangladesh and Cuba.

A partial shift from corn to barley feeding is projected for the two last years in Saudi Arabia, with total grain feeding in 2019/20 coming out 1.0 million tons lower this month, though still remaining 14 percent ahead of last year. While barley use is projected 0.5-million-tons lower for China, an offsetting 0.5-million-ton change is made for barley feeding in Saudi Arabia, while its corn feed use is reduced by 1.5 million tons. Barley feeding is also projected higher for Syria, boosted by its exceptional projected harvest.

With a reduction of 2.2 million tons in projected global 2019/20 coarse grain ending stocks, the new projection of 334.0 million tons remains the lowest since 2014, down almost 17 million tons from the year before (with China driving this year-over-year decline).

Foreign corn ending stocks are up 2.9 million tons, led by an increase in Brazil (a downward revision of the corn feed and residual use for 3 consecutive years: 2017/18–2019/20). Barley foreign stocks are projected higher, up 1.5 million tons, and are mainly in line with this month's production changes (with increases for the EU and Syria). Changes in ending stocks for other coarse grains (sorghum, oats, and rye) are fractional.

Suggested Citation

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