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Wheat Outlook: October 2020

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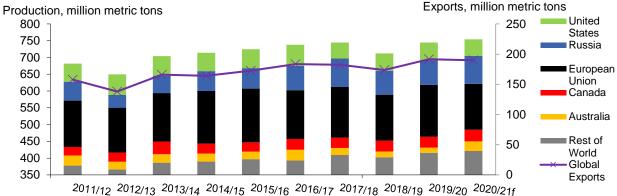
In this report:

- Domestic Outlook
- International Outlook

Global Wheat Production Raised to New Record on Surging Russia Production Despite U.S. Crop Cut

The global 2020/21 wheat production is raised 2.6 million tons this month on larger crops for Russia and the European Union that more than offsets reductions for the U.S. (0.32 million), Argentina (0.5 million), Canada (1 million), and Ukraine (1.5 million) (fig.1). Russian wheat production is now forecast to reach the second-highest level on record because of surging spring wheat production, particularly in the Volga and Central Districts. Bolstered global wheat supplies support fractionally increased global trade. Russia's exports are raised on expanded supplies while a strong early pace of shipments to China lifts that nation's import projection and supports a record-high domestic consumption forecast of 130 million tons for 2020/21.



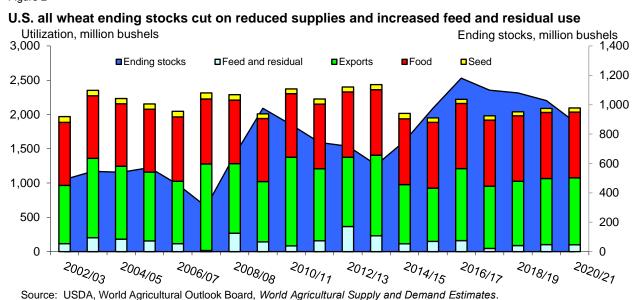


Source: USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database. 2020/21 production is forecast (f).

Domestic Outlook

Domestic Changes at a Glance:

- U.S. wheat supplies are reduced by 32 million bushels on lower beginning stocks and smaller 2020/21 production, as indicated in the USDA, NASS *Grains Stocks* and *Small Grains Annual Summary* reports (table 1).
- Imports are reduced 5 million bushels—all durum—on the slower-than-expected pace of imports in first quarter of the 2020/21 marketing year.
- Smaller-than-expected stocks in the first quarter of the 2020/21 (June/May) marketing
 year imply greater disappearance, resulting in increased feed and residual use June
 through August. This supports a 10-million-bushel increase in estimated annual feed and
 residual.
- Ending stocks for 2020/21 are lowered nearly 43 million bushels this month to 883 million, and if realized, will be the lowest carryout in 6 years (fig. 2).
- Wheat cash and futures prices surged following the release of bullishly interpreted NASS reports. Combined with a substantially tighter wheat balance sheet and generally rising commodity prices, the all wheat season average farm price for 2020/21 is raised 20 cents from the September forecast to \$4.70 per bushel.
- As of the week ending October 11, an estimated 68 percent of the 2021/22 winter wheat crop was planted, 7 points ahead of the 5-year average. Fourty-one percent of planted winter wheat acres had emerged. Conditions in the main hard red winter wheat growing region of the U.S. remain dry with and estimated 36 percent currently in drought.



Balance sheet item	2020/21 September	2020/21 October	2020/21 Change from previous month	Comments	
Supply, total				May-June Marketing Year (MY)	
Beginning stocks	1,044	1,028	-16	Carryin lowered 16 million bushels on back year June 1 stocks revision.	
Production	1,838	1,826	-12	2020/21 production cut 12 million bushels largely on reduced hard red winter wheat (lowered nearly 37 million bushels) and reduced soft red winter (down almost 11 million) that is not fully offset by increased white, durum, and hard red spring wheat production (raise 28 million). 2019/20 production is raised about 12 million bushels.	
Imports	130	125	-5	Slow pace of durum imports in the first quarter of 2020/21 supports 5 million bushels cut to the marking year figure.	
Supply, total	3,011	2,979	-33	On reduced carryin, production, and imports, total U.S. supplies are reduced 32 million bushels to the lowest level since 2015/16.	
Demand					
Food	960	960	0	Food use is unchanged this month and is scheduled for review upon the release of next month's <i>Flour Milling Products</i> report.	
Seed	61	61	0	, op our	
Feed and residual	90	100	10	Higher-than-expected first quarter disappearance, based on Census trade data and the USDA, National Agricultura Statistics Service's September 1 stocks estimate, supports a lift in first quarter and annual feed and residual figures.	
Domestic, total	1,111	1,121	10	Domestic use is increased on expanded feed and residual.	
Exports	975	975	0	Offsetting by-class changes to white and soft red winter wheat result in no net change for all wheat exports.	
Use, total	2,086	2,096	10	With no change in exports, total use is increased by the full amount of the domestic change.	
Ending stocks	925	883	-43	On reduced domestic wheat supplies and higher expected use, carryout for the 2020/21 marketing year is lowered approximately 43 million bushels to the lowest level in six years.	
Season Average Farm Price Source: USDA, Wol	\$4.50	\$4.70	\$0.20	NASS prices reported through August, rising futures and cash wheat prices, an a tighter balance sheet, support a 20-cent increase in the season average farm price.	

Small Grains Report Reveals Cut to 2020/21 Production

As reported in the late September USDA, NASS *Small Grains Annual Summary* (SGAS), all wheat production for 2020/21 was lowered 11.8 million bushels (or less than one percent) from the previous forecast to 1,826 million. The small change in total production masks sizable byclass changes (table 2). Notably, hard red winter wheat production was cut nearly 37 million bushels or 5.3 percent, from the previous forecast to 658 million. Soft red winter wheat was lowered about 11 million bushels (3.9 percent) to 266 million. Offsetting reductions for these classes are increases for white wheat and durum, raised 28 million and 7 million bushels, respectively. Production updates for 2019/20 production were also released in the latest SGAS, resulting in a net increase in production of 11.9-million-bushels. Back year production gains were almost solely for hard red winter wheat, raised 11.8 million bushels to 844.9 million. Hard red winter wheat was trimmed slightly (down 1.6 million) while the other classes all saw very small gains.

Table 2: U.S. wheat production by class									
	2019/20	2020/21 (August)	2020/21 (September)	Month-to-Month change	Year-to-Year change				
Wheat Class	-	Million busl	nels	Percent					
Hard red winter	844.95	695.37	658.64	-5.3	-22.0				
Hard red spring	519.93	529.68	530.15	0.1	2.0				
Soft red winter	239.77	276.88	266.24	-3.8	11.0				
White Wheat	273.41	273.92	301.99	10.2	10.5				
Durum	53.96	61.79	68.81	11.4	27.5				
TOTAL	1932.02	1837.64	1825.82	-0.6	-5.5				
Source: USDA, National Agricultural Statistics Service, Crop Production.									

For 2020/21 production, winter wheat harvested area and yields were both lowered from the previous forecast. At 23.024 million acres, winter wheat area harvested in about 2 percent lower than the previous forecast and more than 6 percent below the 2019 value. Winter wheat yields are estimated at 50.9 bushels per acre, a 0.4 percent reduction from the August forecast and 5 percent below last year's estimate. Based on newly revised 2020/21 production data, the largest year-to-year winter wheat production cuts are for Kansas (down 19.3 percent), Montana (down 20 percent) and Oklahoma (down 5.5. percent).

On net, other spring wheat production was raised 1.5 percent from the August estimate to 585.9 million bushels. Forecast adjustments come on increased area harvested (raised 2.2. percent), despite a 0.8 percent decline in other spring wheat yields. Compared with last year, other spring wheat production was down more than 5 percent for the largest producer—North Dakota—where harvested area for the 2020/21 crop was 5.4 percent below the 2019/20 estimate. Production gains in Montana (up 23.4 percent), South Dakota (up 40.8 percent), and Washington (up 34.8 percent) more than offset losses in North Dakota contributing to a net year-to- year production increase of more than 4 percent.

Despite yield declines both month to month and year to year for 2020/21 durum, estimated production is raised more than 11 percent from the August forecast and is up nearly 30 percent from last year. The SGAS showed harvested area for durum increased substantially from the previous forecast with the greatest gains seen for Northern Plains growing region.

Year-to-year changes in all wheat production by State correspond with production changes by class. With hard red winter wheat production down 22 percent year-to-year, it is no surprise that the largest reductions in production come from key winter wheat producing States Kansas, Colorado, and Nebraska (fig. 3). Similarly, year-to-year growth in production in the Northern Plains and Pacific Northwest corresponds with increased U.S. production of hard red spring and white wheat.

MT 9.6 ND -8.4 OR -3.2 MN -7.7 NY МІ WY -2.4 NE -21.3 0.3 UT -1.1 IL -1.5 DE MO -1.6 KY -3.7 1.3 MD NC TN OK -6 -0.8 NM -0.1 SC MS **Production Change** (in million bushels) <= -50 -4.9 to -1 -0.9 to 1 5.1 to 10 > 10 No data

Figure 3
Wheat production shifts by State track closely with wheat by class production changes

Source: USDA, Economic Research Service.

Planting of the 2021/22 winter wheat crop is well underway across the Great Plains. As of the week ending October 11, 68 percent of the expected crop had been planted compared with 61 percent last year. Dry conditions have aided fieldwork; however, the nascent crop will benefit from rains that foster emergence and plant health. Emergence is 41 percent as of the latest report and is 6 percent ahead of the five-year average and 4 percent ahead of last year. In the short term, prospects for soil moisture replenishing rains are limited across the winter wheat belt. The USDA, *Weekly Weather and Crop Bulletin* and the World Agricultural Outlook Board's weather team reports that drier-than-normal conditions are expected to persist well into the winter across the central and southern Great Plains, courtesy of the development and evolution of the ocean-atmospheric phenomenon known as La Niña. La Niña can bring dry conditions because of cooler-than-average sea surface temperatures. Based on the current data, relief from dry conditions is expected to eventually occur on the northern High Plains.

Grain Stocks Report Reveals Much Stronger Than Expected First Quarter Disappearance

Before the release of the *Grain Stocks* report, USDA's first quarter carry-out totaled about 2.23 million bushels. Industry estimates of September 1 wheat stocks ranged between 2.15 to 2.38 million bushels with a reported average of 2.24 million. Newly released September 1 stocks tallied the sum of wheat held both on- and off- farm in the U.S. at 2.159 million bushels—well below both industry expectations and the previous forecast. A near 69-million-bushel, month-to-month reduction in the first quarter carry-out implied greater-than-expected wheat use in the first quarter. With official trade data through August available from the U.S. Bureau of the Census and long-term stability in first-quarter estimates of food and seed use, increased utilization is fully attributed to feed and residual use.

Surging wheat prices following the release of the *SGAS* and are expected to limit feeding interest in coming months. However, sizable feed and residual use in the first 3 months of the marketing year compared with a year earlier are sufficient to support an increase of 10 million bushels in the annual feed and residual figure. Tighter corn stocks and a recent corn price increase help to maintain the wheat-to-corn price ratio below 1.3:1 and within the upper bounds of the range in which wheat feeding is typically reported. Expectations for expanded sorghum production may pressure wheat feeding in Central States in coming months. However, continued export demand for U.S. sorghum (for use in the production of the distilled liquor baijiu in China) is forecast to create space to meet the current projection for domestic wheat feeding.

U.S. Wheat Price Lifted on Bullish USDA Reports

With the key late September wheat reports providing evidence of a significantly tighter U.S. wheat balance sheet, cash and futures prices have generally strengthened in the days and weeks following their release. Tighter supplies of corn and soybeans have provided further support for commodity prices and collectively contribute to a 20-cent month-to-month increase in the all-wheat season average farm price. As of the end of September, an estimated 43 percent of the U.S. wheat crop had been marketed, slightly behind the 5-year average of 45 percent. As less wheat than is typical had been marketed before the early October price surge, it is expected that proportionally more wheat is available to be marketed at the current, higher prices.

In the days following the release of bullishly interpreted USDA production and stocks data, global export prices rallied similarly to domestic U.S. wheat prices. Export price support was also provided on reports of yield-sapping dry conditions in Argentina and dryness in both the Black Sea, as the spring wheat harvest concluded, and in U.S. Southern Plains, as new crop winter wheat was being planted. A potential counterbalance to these market signals is the Russian Ministry of Agriculture's October 7 release of updated wheat harvest data showing a significant increase in production. Despite this development, world wheat export prices have largely remained steady to higher for the past week, with FOB Russian milling (12.5%) wheat prices increasing from \$240 per metric ton on October 6 to \$245 per ton as of October 13, 2020.

International Outlook

Mostly Dry Conditions in the Black Sea Region Lead to **Differing Wheat Production Outcomes**

Global wheat production for 2020/21 is raised 2.6 million tons this month to 773.08 million as lower production for the U.S. (down 0.32 million), Argentina (down 0.5 million), Canada (down 1 million), and Ukraine (down 1.5 million) is more than offset by gains for Russia (raised 5 million) and the European Union (raised 0.6 million) (fig. 4). The Black Sea region experienced widespread dryness through much of the winter and spring wheat growing seasons. In Ukraine, the dryness was consistent and profound leading to declining yields year to year: 3.75 tons/hectare in 2020/21 compared to 4.16 ton/hectare in 2019/20. In contrast, both winter and spring wheat crops in Russia experience more mixed conditions.

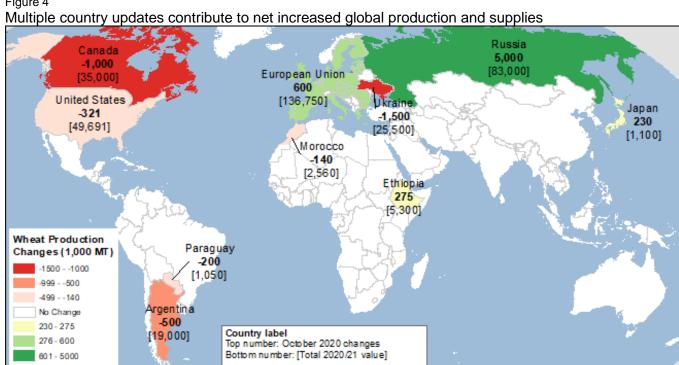


Figure 4

Note: MT=Metric tons.

Sources: USDA, Foreign Agricultural Service Production and Supply Distribution database and USDA, Economic Research Service calculations.

For Russian winter wheat, dryness in the Southern District—where an average of about 43 percent of the winter wheat is grown—was offset with bumper crops in the Central (that typically accounts for 26 percent of production) and Volga (14 percent) Districts. The Russian spring wheat crop is harvested later (August through October) than the winter wheat crop, enabling scattered rain events in later summer to benefit spring wheat during grain fill and leading to above average conditions in the northern regions of the spring wheat belt.

Accordingly, yields along the border with Kazakhstan were lifted and help to support the current forecast for record spring wheat yields. Investments in modern agricultural techniques—including expanded use of fertilizers, contemporary machinery, and improved seed varieties—are cited by USDA, Foreign Agricultural Service (FAS) staff in this month's *World Agricultural Production* (WAP) as additional reasons for better-than-expected spring wheat production in Russia. Please see the FAS-WAP report for additional details.

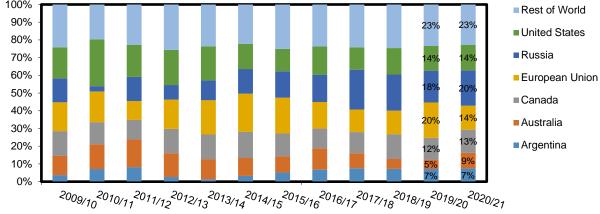
Expanded production and supplies for Russia underpin a 1.5 million ton increase in 2020/21 exports for that nation. At 39 million tons, Russia's 2020/21 exports are projected to be second only to the 2017/18 estimate when 41.447 million tons were exported. Based on this month's increase, Russia expands its lead as the globe's top wheat exporting nation and is expected to account for nearly one-fifth of global wheat exports in the current marketing year (fig. 5).

Figure 5

Production increase helps to lift Russian share of global exports to nearly one-fifth of total

Share of total

100%
90%
Rest of W



Sources: USDA Foreign Agricultural Service, Production, Supply, and Distribution database and Economic Research Service calculations based on USDA National Agricultural Statistics Service data.

In Argentina, a modest reduction in area harvested combines with reduced yield prospects to lower the October production forecast by 0.5 million tons or roughly 2.6 percent from the September estimate. Persistent dryness in Argentina, reportedly brought on by La Niña conditions, has led to moderate to abnormally dry conditions in the four main wheat growing provinces of Cordoba, La Pampa, Entre Rios, and Buenos Aires. Despite the dryness, Argentina remains the leading South American producer of wheat and is forecast to produce 19 million tons in 2020/21. On reduced exportable supplies, Argentine exports are lowered 0.5 million tons to 13 million. FOB wheat prices for Argentina have steadily risen in recent weeks and are now nearly 12 percent higher than a year ago. At \$258 per ton (October delivery) to \$251 per ton (December delivery), Argentina's wheat is still priced below most classes of U.S. wheat, but is well-above prices for most other key wheat exporting nations.

Argentina's primary export partner is fellow Mercosur bloc member, Brazil, which is expected to harvest 6.6 million tons of wheat in this marketing year. If realized, this will be Brazil's second-highest wheat production on record behind only 2016/17 when the country harvested 6.73 million tons. Brazil's wheat crop is harvested slightly later than Argentina's, helping to insulate the crops from the yield-sapping effects of a regional freeze event that affected both nations in early September. To date, the impact of dryness and cold on Brazil has been mixed and is expected to take more time to fully ascertain. No changes are made to Brazil's production, export, or import forecast this month.

Global Consumption Lifted Fractionally on Increased Feeding

Despite a sizable increase for global production this month, consumption is raised only very modestly, up 0.13 million tons to 751 million. Expanding feed and residual use for Russia combines with greater food, seed, and industrial use for Pakistan and the European Union to more than offset reduced feed and residual use for both Canada and Ukraine. The residual component of most nations' balance sheets tends to fluctuate in concert with production changes, as is the case for most of the major wheat producing countries this month. Global imports are raised slightly less than 1 million tons from the September forecast on the brisk pace of sales to China and Pakistan—each raised 0.5 million. At 7.5 million tons, projected imports for 2020/21 are now more than 2 million tons above 2019/20 imports. China is now the third largest wheat importing nation in the world. Month-to-month import boosts for both China and Pakistan are expected to supplement stocks.

Production Gains Largely Serve to Lift Already Record-Large Global Wheat Carryout

With global wheat supplies increased 2.2 million tons this month and minimal changes in use, much of the expanded supplies are expected to augment ending stocks. Last year's carryout of 299.40 million tons set the previous record which has since been eclipsed by this year's ending stocks forecast of 321.45 million tons. Rising stocks for Russia, China, the European Union, and Pakistan help to offset reduced carryout for the U.S. and Canada. More than 51 percent of global wheat stocks are held by China, the result of farmer subsidies that have encouraged the cultivation of relatively low-quality wheat as opposed to other row crops. A sizable portion of China's wheat stocks are believed to have been harvested several years ago, calling into question the suitability of the aged wheat for milling purposes. China has typically imported high-quality wheat for use in food manufacturing. Following a smaller-than-normal local harvest, recent shipments to China have originated from France, the U.S., and Australia--all nations that are known for producing high-quality soft wheat, spring and winter wheat, and white wheat, respectively.

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