



Wheat Outlook

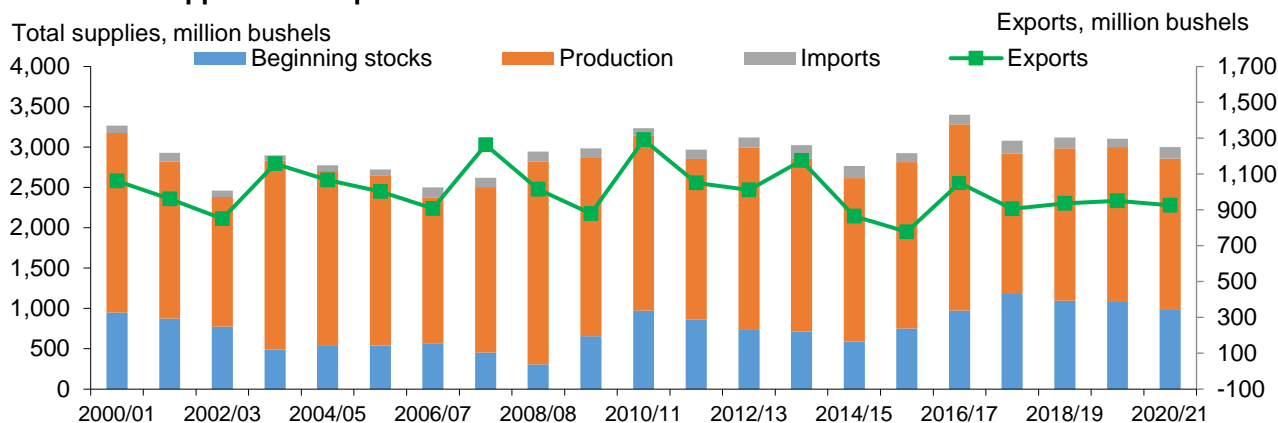
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U.S. Production Raised on Improved Prospects for Winter Wheat

While the outlook for 2020/21 European Union and Ukraine wheat crops is diminished this month, prospects for the U.S. crop are raised on improving yields for most winter varieties. The latest USDA, National Agricultural Statistics Service (NASS) yield for winter wheat is up 0.4 bushels per acre from the May forecast on an improving outlook for Kansas, Colorado, and Nebraska. The now 1 percent larger U.S. all wheat crop combines with a 5-million-bushel increase in carryin from the previous marketing year to support a 16 million bushel increase in total U.S. wheat supplies, which—while larger month to month—is still smaller than a year prior. Total wheat supplies and exports tend to move together (fig.1). Expectations for still-abundant exportable U.S. supplies and robust international demand support the export forecast of 950 million bushels, down slightly from the 2019/20 export estimate.

Figure 1
U.S. wheat supplies and exports tend to move in the same direction



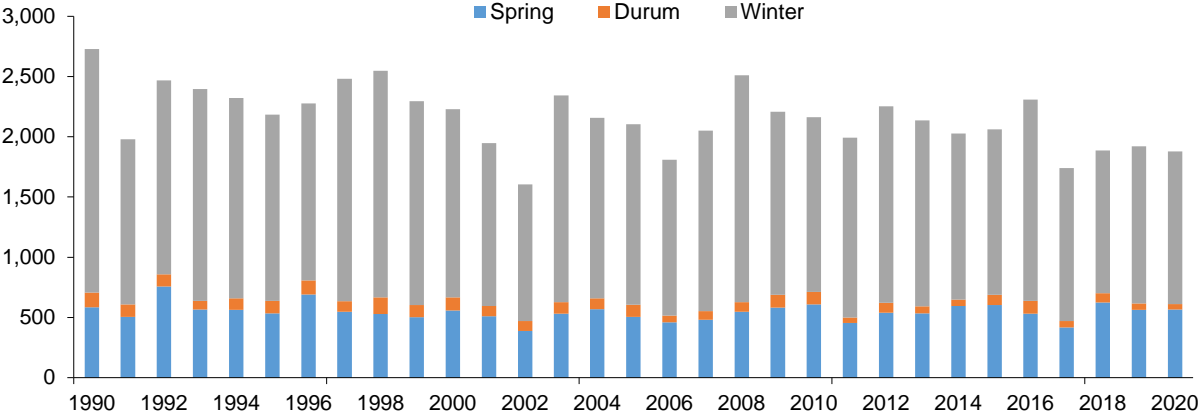
Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Domestic Outlook

Domestic Changes at a Glance:

- U.S. 2020/21 all wheat supplies are raised 16 million bushels this month on higher forecast winter wheat production and a 5-million-bushel increase in carryin from the 2019/20 marketing year.
- At 1.877 billion bushels, all wheat production is 11 million bushels above the May forecast but remains below the 2019/20 estimate of 1.920 billion bushels (fig. 2).
 - Please see this month’s Amber Wave Data Feature: *U.S. Farmers Planting Less Wheat, But Sowings of Winter Varieties Stay Stable* for more details on wheat by class plantings and use over time.
- Winter wheat production for the new crop year is raised from the May forecast on a 0.4 bushel per acre yield increase.
 - The USDA, National Agricultural Statistics Service (NASS) revised assessment of harvested area prospects by class, including spring and durum, will be released in the July *Crop Production* report.
- Abundant global and domestic supplies, as well as low corn prices, constrain wheat price improvement. The 2020/21 wheat season average farm price remains at \$4.60/bushel.
- For the 2019/20 balance sheet, exports are trimmed 5 million bushels this month to 965 million on slightly lower hard red spring and soft red winter shipments which is not fully offset by a recent uptick in hard red winter wheat sales, in part to China.

Figure 2
U.S. wheat production generally trending lower while shares by class remain relatively stable
 Million bushels



Source: USDA, National Agricultural Statistics Service.

Table 1 - U.S. wheat supply and utilization at a glance 2019/20

Balance sheet item	2019/20 June	2020/21 May	2020/21 June	2020/21 Change from previous month	Comments
Supply, total					<i>May-June Marketing Year (MY)</i>
Beginning stocks	1,079.8	977.9	982.9	5.0	On reduced exports for 2019/20, associated carryout is raised 5 million bushels leading to a similar increase in beginning stocks for the 2020/21 marketing year.
Production	1,920.1	1,866.0	1,877.0	11.0	The latest NASS crop production report raised the hard red winter and white winter production forecasts by one percent from the May forecast. These gains are only partially offset by a reduction for soft red winter wheat production, now forecast at 297 million bushels.
Imports	105.0	140.0	140.0	0.0	
Supply, total	3,104.9	2,983.9	2,999.9	16.0	Supplies are increased by the sum of additional carryin and production for the 2020/21 marketing year. While higher than the May forecast, all-wheat supplies are still expected to be lower (down 3 percent) from 2019/20 levels.
Demand					
Food	962.0	964.0	964.0	0.0	
Seed	60.0	61.0	61.0	0.0	
Feed and residual	135.0	100.0	100.0	0.0	
Domestic, total	1,157.0	1,125.0	1,125.0	0.0	
Exports	965.0	950.0	950.0	0.0	
Use, total	2,122.0	2,075.0	2,075.0	0.0	
Ending stocks	982.9	908.9	924.9	16.0	With no changes to 2020/21 utilization this month, ending stocks are increased by the full amount of the increase in supplies. At 44.6 percent, the stocks-to-use ratio is modestly increased from the May figure and remains below last year's 46.3 percent.
Season Average Farm Price	\$4.60	\$4.60	\$4.60	0.0	

Source: USDA, World Agricultural Outlook Board *Supply and Demand Estimates*

U.S. Winter Wheat Forecast Raised 1 Percent on Improved Yield Outlook Despite Lingering Dryness in the High Plains

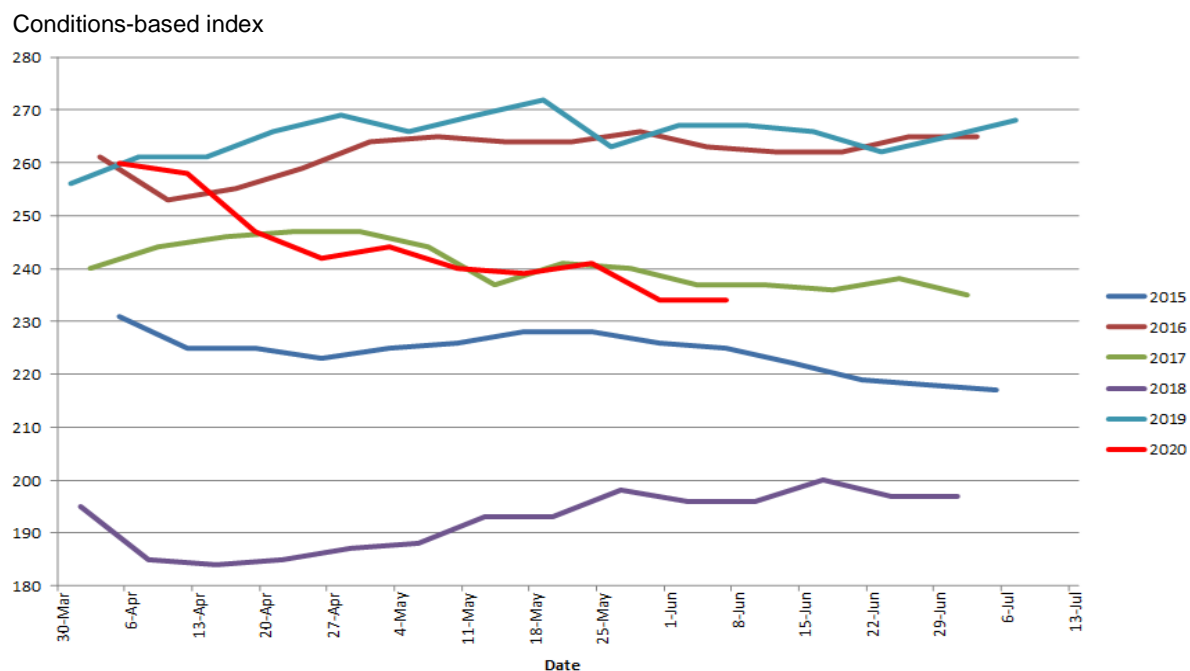
The June 11 *Crop Production* report provided the second, survey-based winter wheat production forecast for the 2020/21 marketing year. U.S. winter wheat production is forecast at 1.27 billion bushels, up 1 percent from the early May forecast but down 3.8 million bushels and about 3 percent from the 2019/20 figure. Expanding drought across the southern High Plains (western Kansas, southeastern Colorado, western Oklahoma, and northwestern Texas) is limiting the growth potential for 2020/21 yields. Yields in each of these major hard red winter wheat-producing States is down year-to-year and contribute to the slight decline in all winter wheat yields for 2020/21. At 52.1 bushels per acre, the June 1 yield forecast is up slightly from the May 1 forecast, but down from the 53.6 bushels per acre estimated for the 2019/20 marketing year. If realized, the 2020 winter wheat yield will be the third highest on record.

2019/20	HRW	SRW	HWW	SWW
Planted area (million acres)	22.458	5.201	0.434	3.066
Harvested area (million acres)	17.292	3.733	0.386	2.916
Production (million bushels)	833.181	239.166	19.954	211.702
2020/21				
Planted area (million acres)	21.700	5.690	0.451	2.969
Harvested area (million acres)	16.636	4.414	0.436	2.866
Production (million bushels)	742.939	297.343	16.584	208.834

Note: HRW=hard red winter wheat; SRW=soft red winter wheat. Hard white winter wheat (HWW) and soft white winter (SWW) area planted is based on the aggregate winter white wheat planted area reported by NASS (3.42 million acres) and historical proportions between the two classes.

Winter wheat conditions have generally fallen across the nation as evidenced by a trend of general decline in the NASS crop condition index used by USDA's Office of the Chief Economist Meteorological Team (fig.3). This index assigns the highest value (4) to "excellent" conditions rating and the lowest (0) to "very poor" ratings. At the outset of the 2020 crop conditions rating season, conditions for the nascent 2020 crop were on par with those for 2019 and 2016. However, as the season has progressed, the conditions index—which started out at near 260—has steadily fallen until reaching approximately 235 for the week ending June 8, 2020. While this is a sign that the winter crop is increasingly stressed, the conditions index remains well-above comparable figures for 2018 and 2015 when the winter wheat crop was beset by widespread and persistent dry conditions.

Figure 3
2020 winter wheat conditions and index eroded during the spring and into early summer



Note: The conditions index is calculated as the percent rated “excellent”, “good”, “fair”, “poor”, or “very poor” multiplied by 4, 3, 2, 1, and 0, respectively and then summed.

Source: Chart is courtesy of Brad Rippey, USDA Meteorologist, Office of the Chief Economist World Agricultural Outlook Board and is based on USDA, NASS crop conditions.

Minimal Balance Sheet Changes for Back Year and 2020/21

The modest increase (less than 1 percent) in the projected 2020/21 all wheat production forecast, combines with increased carryin of 5 million bushels to lift supplies by 16 million in the new marketing year. The slight increase in supplies does not support an increase in exports, where the U.S. continues to be a residual global supplier; nor to feed and residual use as an abundant corn harvest and anemic prices will continue to incentivize use of coarse grains instead of wheat in feed rations. Ending stocks are increased by the full amount of the supply augmentation and are raised to 925 million this month. On minimal balance sheet changes, the season average farm price is unchanged and remains at \$4.60 for both the 2019/20 and 2020/21 marketing years. Next month’s World Agriculture Supply and Demand (WASDE) report will feature the first 2020/21 balance sheets by class and will reflect new production data to be released in the June *Acreage* report.

International Outlook

Global Wheat Supplies are Raised 5.7 Million Tons on Higher Production, Beginning Stocks

Global wheat supplies for the new marketing year are raised 5.7 million tons on net increased production following updates for several key wheat-producing regions as well as increased beginning stocks. Wheat production (2020/21) for India and Australia are raised 4.2 million and 2 million tons, respectively, based on newly released government data. **India's** wheat harvest is estimated at 107.1 million tons, up from 103.6 million on both expanded harvested area and higher yields. The 2020/21 wheat crop was grown during the Rabi (winter) season; it was planted November 2019 to January 2020 and harvested throughout April 2020. Vegetative growth was aided by generally cool temperatures and abundant rainfall. While not a significant exporter of wheat, in recent months India has provided some wheat for food aid internationally. India's government is also distributing staple grains, including wheat, to vulnerable populations within the country. This year's abundant supplies are expected to support both domestic consumption and augment government stocks.

For **Australia**, following two years of drought conditions that culminated with wide-spread wildfires at the end of 2019, rains have returned and replenished soil moisture in key wheat producing regions. Yields are raised 0.2 metric tons per hectare this month to 2 metric tons, a sizable increase over last year's estimated 1.49 metric tons per hectare. Australia's production is also aided by an increase in harvested area, raised 0.9 million hectares this month on data from the Australian Bureau of Agricultural Research and Resource Economics and Sciences. The combination of increased harvested area and improved yields lifts estimated production for Australia by more than 8 percent this month to 26 million metric tons, a 71 percent increase over the 2019/20 wheat harvest of 15.2 million. The return of soil moisture has helped to green-up pastures, reducing the need for grain (including wheat) feeding. In addition, a new tariff on Australian barley shipments to China is expected to reduce exports of this grain and to increase use of barley in feed, offsetting yet more wheat in livestock rations. With more of the relatively abundant 2020/21 harvest available for export, Australia's shipments are raised 2 million metric tons from the May forecast, to 16 million.

Production for both **Turkey** and **China** are each raised one million tons this month on improved conditions. For Turkey, a near-record yield is forecast and contributes to a 5 percent month-to-month increase in forecast production. A Normalized Difference Vegetative Index (NDVI) time

series analysis of the key winter wheat growing regions of Turkey shows that the effects of dryness during the autumn sowing period has largely been offset by a wet winter and spring. At 19.5 million metric tons, Turkey's projected wheat harvest is 5 percent above last year's estimate. The large harvest is expected to reduce Turkey's demand for imported wheat, which was record high in 2019/20. After a 0.5 million metric ton reduction this month to 7 million, the outlook for Turkish wheat imports remains robust and, if realized, would be the second highest on record.

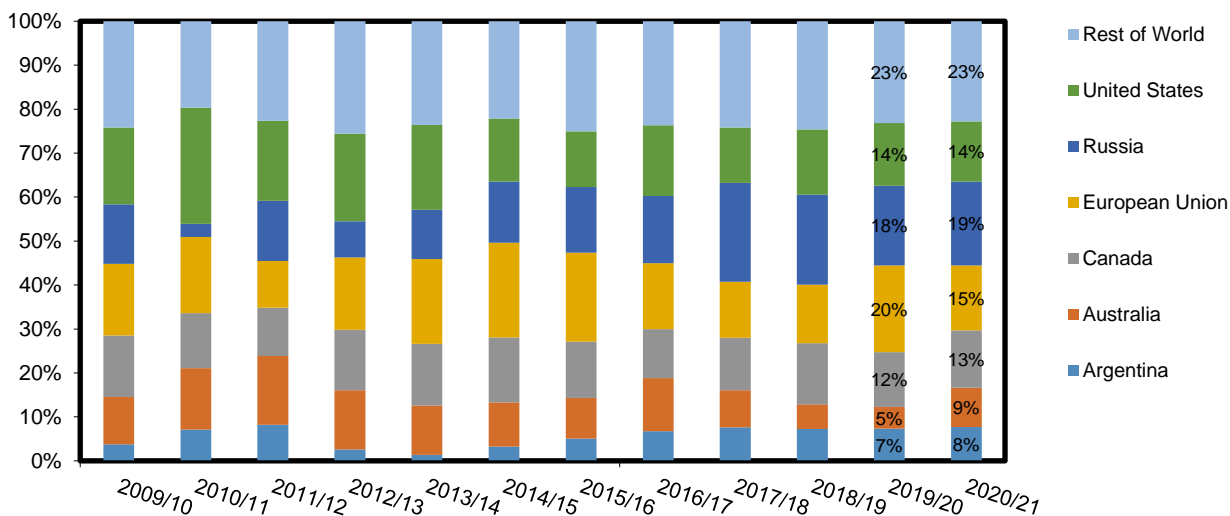
Offsetting production gains for the above-mentioned countries are reductions in expected wheat harvests for the **European Union** (EU 27+United Kingdom) and Ukraine. EU's 2020/21 wheat forecast is cut 2 million metric tons this month to 141 million on low vegetation vigor in key wheat producing regions. Romania, the United Kingdom, and France have been especially affected by dryness that has contributed to a 6 percent year-to-year reduction in the forecast EU wheat yield. On expectations of a smaller crop, EU's 2020/21 exports are trimmed 0.5 million metric tons this month to 28 million. In contrast, an abundant 2019/20 crop and competitive prices have supported a blistering export pace in recent months and a 1.5 million metric ton increase in old crop exports.

For **Ukraine**, fall planting of the 2020/21 winter wheat crop was completed under mostly dry conditions which has been succeeded by a drier-than-average spring, especially in southeastern and southwestern regions. Since early May, overall wheat conditions (measured by NDVI) in the key wheat producing regions of Odessa and Crimea have deteriorated. More recently, conditions in the key Forest Steppe Zone (northern Ukraine, where approximately 40 percent of Ukraine's wheat is produced) have begun to erode. Consequently, production for Ukraine is now forecast at 26.5 million tons, a 5 percent decline from the May forecast. Based on reduced exportable supplies, exports for Ukraine are lowered 1.5 million metric tons this month to 17.5 million. For additional information on wheat production changes to Ukraine and other countries, please see this month's USDA, Foreign Agricultural Service (FAS) *World Agricultural Production* circular.

Russia is expected to benefit from the reduced competition from Ukraine; exports for the Black Sea juggernaut are raised 1 million metric tons this month to 36 million. After Russia's exports for the 2019/20 marketing year fell to 33.5 million tons following several years of world-leading wheat exports, the EU emerged as the top wheat exporter (fig. 4). On expectations of a smaller crop for both the EU and Ukraine in the new marketing year, Russia is again poised to top the world in wheat exports.

Figure 4
Russia projected to regain position of leading global exporter of wheat in 2020/21

Share of total

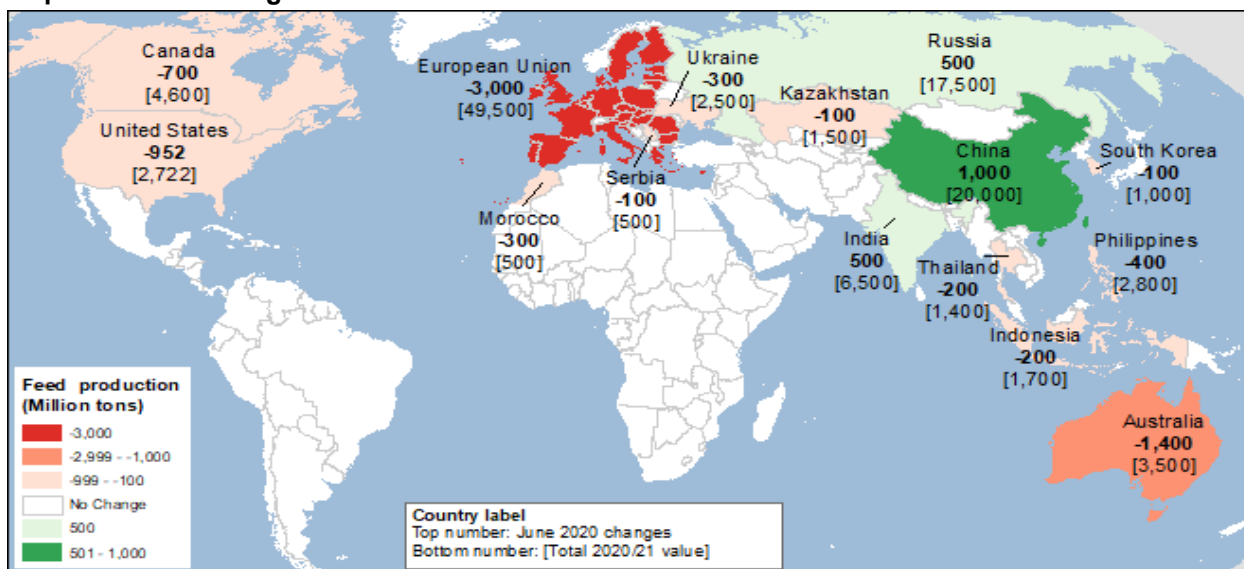


Sources: USDA Foreign Agricultural Service, Production, Supply, and Distribution database and ERS calculations using data from USDA, National Agricultural Statistics Service.

Global Wheat Feed Use Lowered on Increasing Use of Barley in EU, Australia Rations

Global use of wheat for feed in 2020/21 is forecast at 136.47 million metric tons following a 1 million metric ton cut from the May estimate, the cumulative results of feed use changes for many countries (map 1).

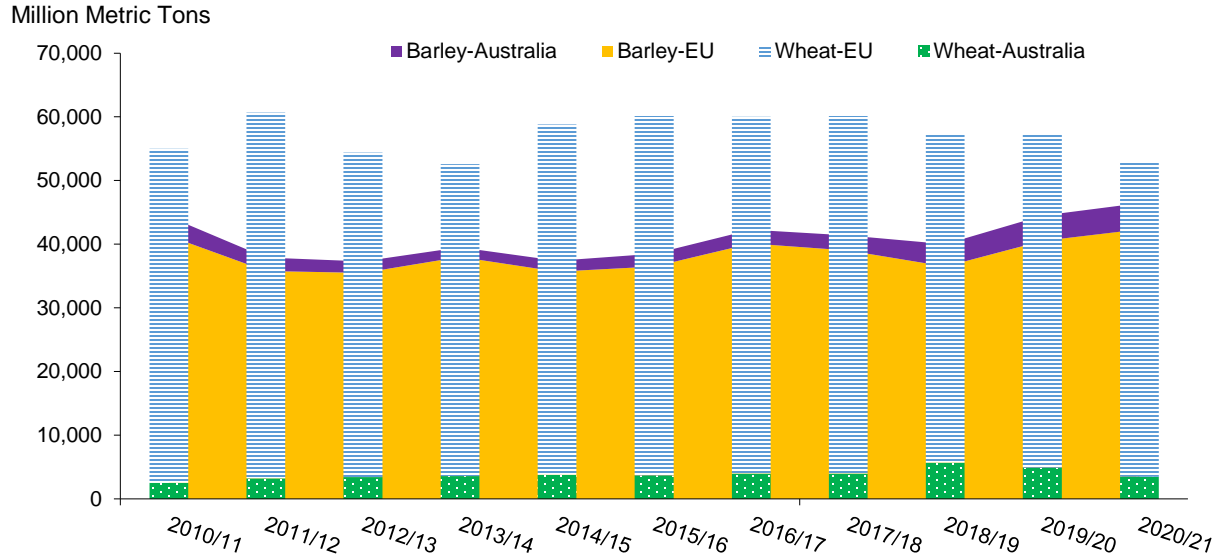
Map 1: Wheat feeding lowered for a number of countries



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

At the current estimate, global wheat feeding is forecast to fall to the lowest level since 2014/15 when slightly more than 132 million metric tons of wheat were designated for feed use. Several factors contribute to reduced wheat feeding in 2020/21 with record-large global corn supplies likely exerting the greatest downward pressure. In contrast to wheat feed use, global corn feeding in the new year is up sharply. Regionally, increased use of barley in feed ratios is expected to also reduce demand for wheat feeding. In Australia, where new restrictions limit export opportunities for the barley crop (for which planting is well underway), reduced export demand is expected to make significantly more barley available for feeding domestically, thus offsetting demand for feed wheat (fig.5).

Figure 5
In 2020/21, barley to displace wheat in Australia and European Union (EU) feed ratios



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

In the EU, demand for wheat feeding is also forecast to fall sharply as a second consecutive bumper crop of barley is expected to create abundant, competitively priced supplies. Indeed, barley feeding in the EU is projected up 2.35 million metric tons in 2020/21 compared to the year prior, while wheat feeding is projected to fall by 3 million. Following a 1.05 million metric ton increase in global barley feeding this month, the 2020/21 forecast is now set at a record-high 106.56 million tons; a sharp contrast to the near 6 million metric ton reduction in global wheat feeding year-to-year.

Growing Global Supplies More than Offset Use Increase, Boosting Already Record-High Carryout

On a net increase in global wheat supplies—aided by increased production and beginning stocks, global carryout for the 2020/21 marketing year is lifted by 6 million metric tons from the May forecast to 316.09 million. If realized, global carryout will be more than 20 million metric tons greater than the previous record-high of 295.8 million for the 2019/20 marketing year. Abundant global supplies support an increase in wheat food, seed, and industrial use, up nearly 9.3 million metric tons from the 2019/20 estimate. Ample supplies and carryout of staple crops, such as wheat, have the potential to buffer the direct and indirect economic effects of the COVID-19 pandemic, particularly for food insecure nations. However, for producers, wheat prices are expected to be constrained by the dual effects of record supplies and carryout combined with very low corn prices.

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