



Wheat Outlook

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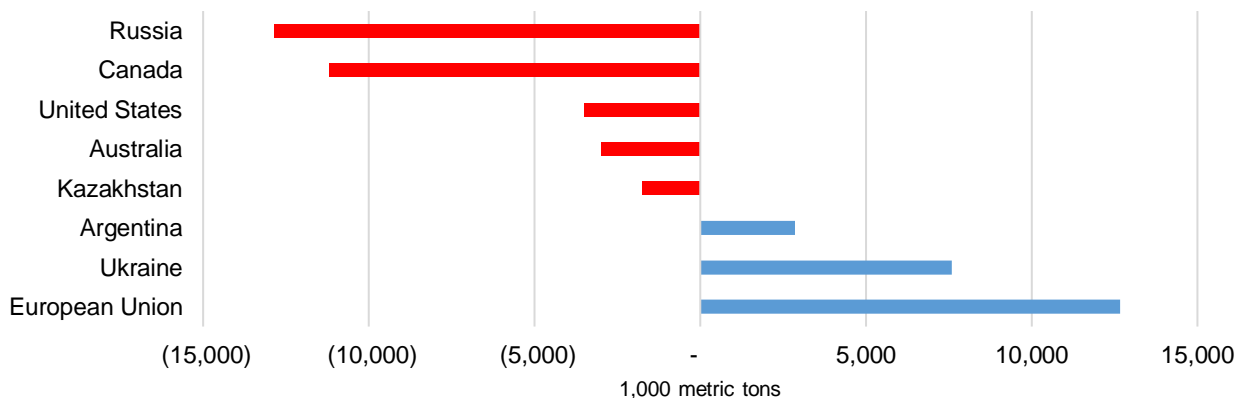
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Wheat Production Slashed for Russia and Canada

Global wheat production is lowered this month by 15.5 million metric tons (MT) to 776.9 with Russia and Canada accounting for the bulk of this change. Global production in 2021/22 is still forecast record-large, but production for the top 8 exporters is collectively down 9.2 million MT from the previous year. Both Russia and Canada are projected to have crops down more than 10 million MT year-to-year (figure 1) with their exports consequently down significantly. Exports for the United States and Kazakhstan are also projected down from the previous year based on smaller supplies. The European Union, Argentina, and Ukraine are all projected to have larger production and exports, benefitting from reduced competition. This year, Australia is projected to have slightly smaller production from last year's record, but this year's crop is still forecast as its third largest ever. With global prices trending upwards and tight supplies in key competitors, Australia is expected to have strong exports to nearby Asian markets.

Figure 1
Year-to-year production swings for major wheat exporters



Sources: USDA, World Agricultural Outlook Board; and USDA, Economic Research Service calculations.

Domestic Outlook

Domestic Changes at a Glance:

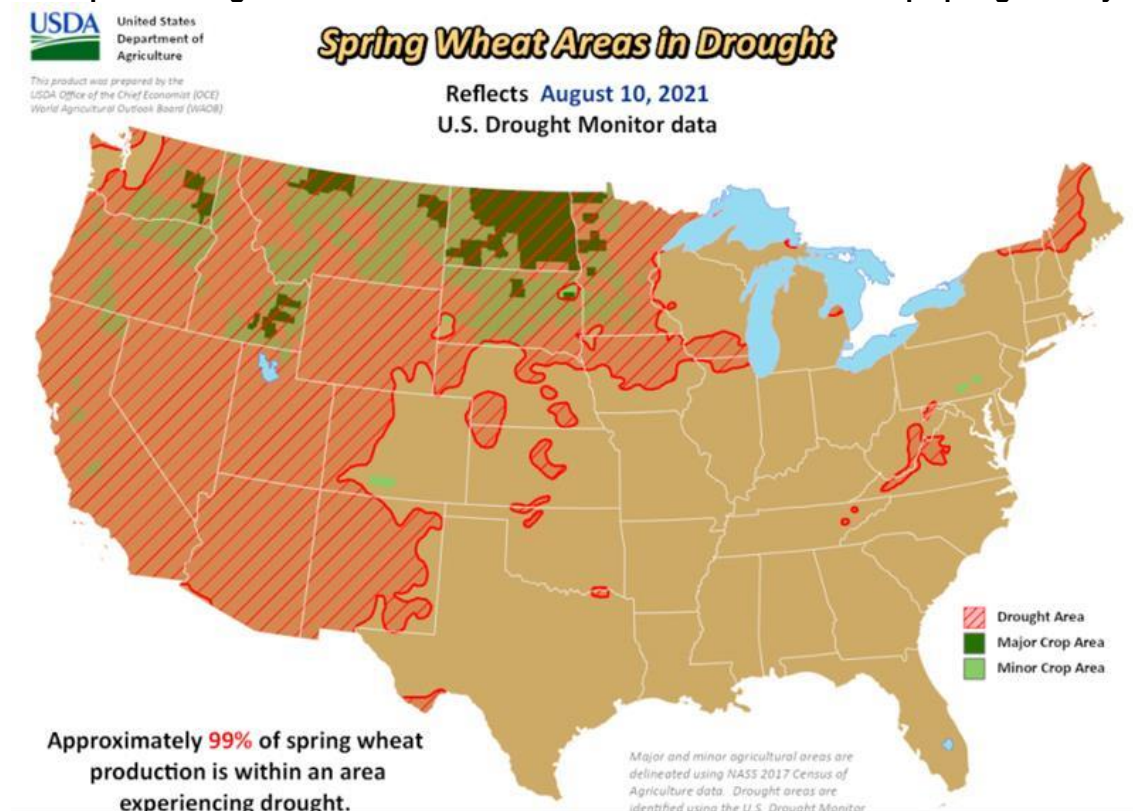
- U.S. wheat production for the 2021/22 marketing year is lowered 49 million bushels from the July forecast to 1,697 million.
 - The update incorporates data from the USDA-National Agricultural Statistics Service (NASS) August *Crop Production* report.
 - Hard Red Winter (HRW) production is projected at 777 million bushels, down 3 percent from last month, but up 18 percent from last year. Soft Red Winter (SRW) is forecast at 366 million bushels, up 1 percent from the July forecast.
 - White wheat production is lowered this month by 8 percent to 214 million bushels. The white wheat category is mainly comprised of soft white winter wheat (75 percent of the total), but also includes hard white winter, hard white spring, and soft white spring.
 - Durum production is forecast at 34.7 million bushels, down 7 percent from the July forecast and half the size of the previous year's crop.
 - Hard Red Spring (HRS) production is nearly unchanged from the July projection at 305 million bushels, down 42 percent from last year.
- Feed and residual is lowered 10 million bushels to 160 million based on lower anticipated HRW feed and residual in light of tighter supplies and rising prices.
- Food use is adjusted downward in 2021/22 slightly based on lower final data for 2020/21, as derived from the latest NASS *Flour Milling Products* report. A reduction to durum food use more than offsets higher estimated HRW consumption.
- Total food use is adjusted lower by 1 million bushels in 2021/22 to maintain a similar expectation for growth in the coming year. By-class food use adjustments in 2021/22 are made for HRW (+5 million bushels to 396), HRS (-2 to 248), White (-1 to 84), and Durum (-3 to 84), while SRW food use remains at 150 million bushels. Given the ongoing production issues in the Northern Plains, HRS is expected to occupy a slightly smaller proportion of the total use mill grind, with HRW occupying a slightly larger share. Durum use is projected to return to a more normal level after spiking in the past year due to strong consumer demand for pasta products during the COVID-19 Pandemic.
- According to the NASS *Crop Progress* report, winter wheat harvest in the primary 18 states is 95 percent complete as of August 8, which compares to 89 percent at the same

point last year and 91 percent in the most recent five-year average. Spring wheat harvest has begun and has now reached 38 percent completion in the 6 major producing states, relative to 14 percent last year and a five-year average of 21 percent. It is likely that the maturity of this crop is advanced at least in part because of the drought conditions that persisted during this year's production cycle. Only 11 percent of the spring wheat crop in those states is rated good/excellent, compared with 69 percent in the previous year.

- All-wheat exports are unchanged at 875 bushels, but there are several offsetting changes to individual classes. White wheat exports are cut 10 million bushels to 160 million based on lower than anticipated production, while SRW and HRS are each raised 5 million.
- The 2021/22 season average farm price is raised \$0.10 per bushel to \$6.70 based on tightening supplies.
- According to the World Agricultural Outlook Board's Weekly Crop Weather Bulletin, 100 percent of durum production and 99 percent of other spring production is grown in areas that are experiencing drought (figure 2).
- The major changes to the U.S. all-wheat balance sheet are summarized in table 1.

Figure 2

Widespread drought in the Northern and Western U.S. is forecast to sap spring wheat yields



Source: USDA, World Agricultural Outlook Board, Agricultural Weather and Assessments Group.

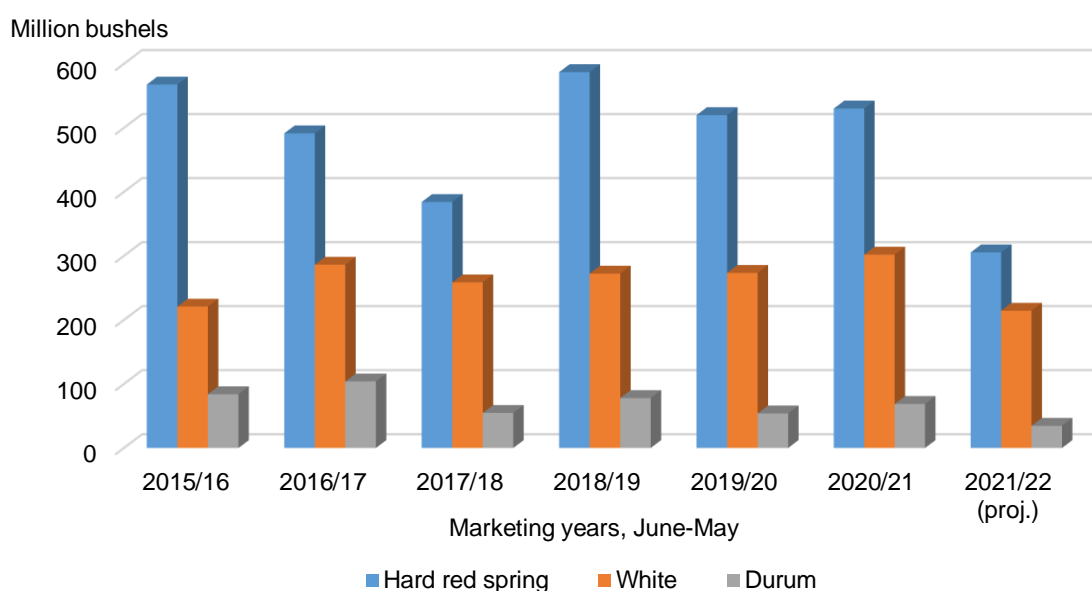
Table 1 - U.S. wheat supply and use at a glance 2021/22

Balance sheet item	2020/21 August	2021/22 July	2021/22 August	2021/22 Change from previous month	Comments
Supply, total					<i>June-May Marketing Year (MY)</i>
Beginning stocks	1,028	844	844	0	
Production	1,826	1,746	1,697	-49	Slightly larger production for Soft Red Winter is more than offset by reductions to the other 4 classes.
Imports	100	145	145	0	No changes to by-class wheat imports.
Supply, total	2,954	2,735	2,686	-49	
Demand					
Food	959	963	962	-1	Wheat milling declined slightly in April-June 2021, resulting in slightly lower food demand for 2020/21. Expected food demand for 2021/22 is trimmed to maintain a similar growth projection.
Seed	61	62.0	62.0	0	
Feed and residual	98	170	160	-10	U.S. feed and residual use is trimmed on reduced supplies and higher wheat prices.
Domestic, total	1,119	1,195	1,184	-11	
Exports	992	875	875	0	U.S. supplies remain tight this year with prices not currently competitive internationally. Tightening global supplies are expected to shift more demand to the United States later in the marketing year.
Use, total	2,110	2,070	2,059	-11	
Ending stocks	844	665	627	-38	Lower supplies more than offset reduced use, leading carryout to contract by 6 percent from July. Ending stocks are now projected to be the lowest in 8 years.
Season-Average Farm Price (SAFP)	5.05	\$6.60	\$6.70	\$0.10	A tightening stocks-to-use ratio as well as elevated cash and futures prices support this month's rising wheat SAFP.
Source: USDA, World Agricultural Outlook Board <i>World Agricultural Supply and Demand Estimates</i> .					

Drought Dries up Production of Key U.S. Wheat Classes

Widespread drought across the northern and western regions of the United States has dampened prospects for projected production and exports in the 2021/22 marketing year of 3 classes of U.S. wheat: hard red spring (HRS), white, and durum (figure 3). Production of HRS is projected to fall 42 percent from the previous year to the lowest level in more than 30 years, while exports are projected at the lowest in more than a decade. Canada's spring wheat production is also down significantly this year because of drought, which magnifies the global shortage of high-protein wheat.

Figure 3
U.S. production of wheat by selected class, 2015/16 through 2021/22



Source: USDA, Economic Research Service; USDA, World Agricultural Outlook Board.

U.S. durum production in 2021/22, which is also concentrated in the Northern Plains, is down by nearly half from the previous year to the lowest level in 60 years. With the United States generally a net importer of durum, larger imports from Canada are expected. Canada is usually the world's leading exporter of durum wheat by far, but its production is similarly affected by drought, resulting in tightening global supplies of this class as well.

Drought has also affected the Pacific Northwest region, where the majority of U.S. white wheat is produced, resulting in a 29 percent year-to-year decline in production of that class. With white wheat production at the lowest level on record (back to 1974/75), exports—mainly destined for markets in Asia—are projected down 41 percent from the prior marketing year. White wheat exports were robust in 2020/21 with strong demand from China, which left beginning stocks

relatively tight this year. With exports of both HRS and white wheat slashed this year, Australia stands as the most likely contender to replace some of that demand, given the quality of its wheat, relatively close substitutability, and proximity to major Asian markets.

International Outlook

Russian and Canadian Wheat Drives Down World Production

Global wheat production in 2021/22 is projected at 776.9 million metric tons (MT), down 15.5 million this month. **Russia** and **Canada** lead the way with a combined downward revision of 20.0 million MT. The **United States** also saw a decrease in production of 1.3 million MT to 46.2 million. Despite the large reductions, global wheat production is still forecast at a record due to partially offsetting increases to **Ukraine**, **Australia**, and the **European Union (EU)**.

Total wheat production in **Russia** is down 12.5 million MT to 72.5 million, primarily due to ‘ice crusting’ issues in winter wheat, which more than offset a slight increase in spring wheat production. ‘Ice crusting’ is a process where a freeze-thaw cycle causes the snow to melt providing moisture in and around the plant that then refreezes with colder temperatures causing winterkill. Central and Volga regions experienced ice crusting late February and early March of 2021. Russia experienced a similar scenario in 2003, which contributed to its production decreasing 16.5 million MT from the previous year. Winter wheat production in 2021/22 is estimated to be down 13.5 MMT month-over-month with reductions to both harvested area and yield. Winter wheat harvested area is revised down to 15.2 million hectares due to updated estimates from Russia’s Federal State Statistical Service, Rosstat. Table 2 breaks out the changes by class. Russia spring wheat is revised upwards relative to last month based on improving conditions, specifically in the Siberian District (table 2).

Attribute	Unit	2021/2022 Estimates		
		July	August	Change
Winter wheat				
Area	<i>Million hectares</i>	16.3	15.2	(1.1)
Yield	<i>Metric tons/hectare</i>	3.93	3.32	(0.61)
Production	<i>Million metric tons</i>	64.0	50.5	(13.5)
Spring wheat				
Area	<i>Million hectares</i>	12.7	12.8	0.1
Yield	<i>Metric tons/hectare</i>	1.65	1.72	0.07
Production	<i>Million metric tons</i>	21.0	22.0	1.0
Total wheat				
Area	<i>Million hectares</i>	29	28	(1.0)
Yield	<i>Metric tons/hectare</i>	2.93	2.59	(0.34)
Production	<i>Million metric tons</i>	85.0	72.5	(12.5)

Wheat production in **Canada** is revised down 7.5 million MT to 24.0 million. This is the lowest wheat production for Canada since 2010/11. Hot and dry conditions have persisted throughout the Canadian Prairies, causing rapid maturation and expected yield loss. In the past 30 days, areas of Saskatchewan, Alberta, and Manitoba have seen less than 50 percent of the average rainfall during the same time period of a year earlier. Much of the Prairies have seen less than 200 millimeters (or 8 inches) of accumulated precipitation during the growing season to date. The Canadian yield is revised to 2.61 MT/ha, down 24 percent from last month and the 5-year average (3.42 MT/ha). This is the lowest yield since 2007/08. Canada's production of durum and spring wheat is dramatically smaller year-over-year, which mirrors the situation for the U.S. hard red spring and durum crops. Dry conditions in both countries are resulting in very tight supplies of high-protein wheat. For more detail, see this month's *World Agricultural Production* report published by the Foreign Agricultural Service.

Ukraine, Australia, and the **EU** partially offset these reductions with a combined increase of 4.9 million MT. **Ukraine** is forecast to have record production and yields due to optimal growing conditions. Production is revised upwards by 3.0 million MT to 33.0 million (30 percent increase year-over-year) and yield is estimated at 4.46 MT/ha (20 percent higher year-over-year).

Australia is the second largest upward revision with a production increase of 1.5 million MT to 30.0 million due to higher yield and area harvested. Australia saw a yield increase of 4.25 percent due to timely rains during plant establishment. While South Australia saw some planting delays, they received above average rainfall and a boost in planting progress. The **EU** saw an increase in production of 0.4 million MT to 138.6 million. While there is an upward revision to yield, excessive rains have delayed harvest and raised grain quality concerns. Production is revised upwards for both **France** (+200,000 MT to 38.3 million) and **Romania** (+500,000 MT to 10 million). **Germany** and **Hungary** are estimated down by 250,000 MT and 50,000 MT, respectively.

Production in **Kazakhstan** and **Turkey** each saw a month-to-month reduction of 0.5 million MT. Kazakhstan continued to see dry weather resulting in a 10 percent decrease in yield compared to last month. There was a increase in area (+700,000 hectares), but this was not enough to completely offset a lower yield. Turkey saw below average rainfall during the crop's peak growing period. This led to yield and quality losses in the Southeast and Central Anatolia regions. Yield is estimated down 0.07 MT/ha to 2.36 MT/ha, which is 8 percent lower year-over-year.

Outside the major exporting countries, **Brazil** is estimated to reach a record production of 7.7 million MT (+0.8 million MT from the previous month). Yield in Brazil is expected to reach 2.85

MT/ha, 0.22 MT/ha above the 3-year average. **Morocco** saw an increase in production of 0.7 million MT to 7.5 million. This change comes from an upward revision to yield as a result of optimal production conditions. The **United Kingdom (UK)** saw an increase in production (+200,000 MT to 15.0 million) as an increase in yield offset the decrease in area harvested. During the month of July, the UK experienced above average rainfall leading to a higher yield estimate (+0.23 MT/ha to 8.57).

For the 2020/21 marketing year, production was revised for **Moldova** and **Uruguay**. Moldova was adjusted down 182,000 MT, while Uruguay was revised up by 191,000 MT offsetting the reduction. Production in **Paraguay** was adjusted up 100,000 MT for the 2019/20 marketing year based on final data.

For an overview of all changes in wheat production estimates for the 2021/22 marketing year, see table 3.

Table 3 - Wheat production at a glance (2021/22), August 2021			
Country or region	Marketing year	Production	MoM change ¹
		Million tons	
World		776.91	↓ (15.49)
Foreign		730.73	↓ (14.15)
United States	<i>June-May</i>	46.18	↓ (1.34)
Australia	<i>October-September</i>	30.0	↑ 1.5
Brazil	<i>October-September</i>	7.7	↑ 0.8
Canada	<i>August-July</i>	24.0	↓ (7.5)
European Union	<i>July-June</i>	138.6	↑ 0.4
Kazakhstan	<i>September-August</i>	12.5	↓ (0.5)
Mexico	<i>July-June</i>	3.1	↑ 0.05
Moldova	<i>July-June</i>	1.4	↑ 0.1
Morocco	<i>July-June</i>	7.5	↑ 0.7
Russia	<i>July-June</i>	72.5	↓ (12.5)
South Africa	<i>October-September</i>	1.9	↑ 0.1
Turkey	<i>June-July</i>	16.5	↓ (0.5)
Ukraine	<i>July-June</i>	33.0	↑ 3.0
United Kingdom	<i>July-June</i>	15.0	↑ 0.2
¹ MoM: month-over-month changes.			
Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, <i>Production, Supply, and Distribution</i> database.			

Global Wheat Consumption Declines Month-over-Month

As the global wheat supply situation has tightened, it is expected that wheat consumption will be rationed somewhat by higher expected prices. Total global wheat consumption this month is projected lower at 786.7 million MT, mainly driven by a decrease in feed and residual use for **Russia** (-2 million MT) and **Canada** (-1.2 million MT). These revisions are driven by a decrease in production tightening the world wheat balance sheet even further. Tighter global supplies for wheat have driven global export prices higher over the past month. The **EU** and **Morocco** partially offset these reductions in consumption with upward revisions of 500,000 MT and 200,000 MT, respectively. Feed and residual use in the EU is revised up to 46.0 million MT based on a larger crop and the likelihood of more feed quality wheat due to excessive wet conditions at harvest Morocco is higher due to an upward revision to domestic production.

Food, seed, and industrial (FSI) consumption is slightly down month-to-month for 2021/22. Global FSI is adjusted down 852,000 MT to 627.5 million, driven mainly by decrease to **Russia** (-500,000 MT). **Peru**, **Sudan**, and the **UK** each had a 200,000 MT decrease in FSI. These reductions are mainly driven by curtailed global production. Partially offsetting these reductions are upward revisions to FSI for **Nigeria**, **Yemen**, and **Uzbekistan** based on stronger levels of trade and consumption in 2020/21. Nigeria's FSI is boosted up 300,000 MT with larger expected imports (2020/21 FSI is boosted 400,000 MT to 5.5 million). Yemen was revised up 100,000 MT in 2021/22 and 300,000 MT in 2020/21. Uzbekistan is revised up by 200,000 MT in both 2020/21 and 2021/22.

A slight adjustment is also made to total global consumption based on the difference between global exports and imports on a local marketing year (MY) for 2021/22. This unaccounted trade is added to total consumption under the assumption that all wheat traded is eventually consumed as global exports and imports balance. this month, the unaccounted trade is increased by 185,000 MT to 1.8 million MT based on a local MY as a result of exports being lowered more than imports. With this revision in mind, total adjusted consumption in 2021/22 is projected at 786.7 million MT this month. 2020/21 marketing year consumption is relatively steady month-to-month based on offsetting reductions.

Global Wheat Trade Lower Amid Tighter Supplies

Global wheat trade is reduced this month based on a rationing of tighter available supplies. See table 4 below for a summary of the changes among the major exporters. **Canada** and **Russia** exports are reduced the furthest based on significantly smaller available supplies. **Kazakhstan** exports are marginally lower with a reduced crop, while **Argentina's** export outlook is unchanged. With larger supplies and diminished competition, exports for Ukraine, Australia, and the **EU** are boosted this month. **U.S.** exports are forecast unchanged this month despite a smaller crop and a slow early pace to sales. U.S. export prices are high relative to other major suppliers, but demand is expected to pick up later in the marketing year with competitor supplies diminished.

Country	2020/21 Adjustments		2021/2022 Adjustments	
	August estimate	Change	August estimate	Change
	1,000 metric tons		1,000 metric tons	
World	198,156	↑ 580	199,818	↓ (5,660)
United States	26,702	↑ 202	24,500	
Argentina	9,500		13,000	
Australia	19,782	↑ 282	23,500	↑ 1,500
Canada	27,706	↓ (294)	17,500	↓ (5,500)
European Union	30,750		35,000	↑ 1,000
Kazakhstan	8,000		7,200	↓ (300)
Russia	38,500		35,000	↓ (5,000)
Ukraine	16,750		23,500	↑ 2,500

¹Month-over-month changes to the July/June Trade Year.
Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Outside of the major exporting countries, **Turkey's** projected exports are reduced 500,000 MT to 6.0 million based on tighter domestic supplies and reduced imports for re-export. Exports are boosted for **Brazil** (+300,000 MT to 1.3 million) based on larger supplies. **India's** exports are forecast 300,000 MT higher to compensate for reduced competition from other. Contrasting with the tight supplies elsewhere in the world, India's supplies are abundant, and its exports should be competitive to nearby markets. **Iran's** projected wheat exports are halved to 250,000 MT based on a return to normal historical levels.

Imports in 2021/22 are reduced for many countries, with most changes reflecting the general environment of tighter global supplies and expectations of demand rationing on higher expected

export prices. Several countries are also reduced due to expectations of slower demand growth due to reduced imports in 2020/21. See table 5 below for a summary of the major trade changes this month.

Table 5 - Summary of import adjustments, August 2021 ¹				
Country	2020/21 Adjustments		2021/2022 Adjustments	
	August estimate	Change	August estimate	Change
	1,000 metric tons		1,000 metric tons	
World	194,346	↑ 1,098	196,169	↓ (5,675)
United States	2,689	↓ (261)	3,700	
Afghanistan	3,000		3,000	↓ (500)
Algeria	7,400	↑ 400	7,150	↓ (500)
Brazil	6,279	↑ 29	6,500	↓ (500)
Colombia	1,950		2,000	↓ (200)
Egypt	12,500	↓ (500)	13,000	↓ (200)
Ethiopia	1,400	↑ 400	1,500	
European Union	5,500	↓ (100)	5,400	↓ (400)
Indonesia	10,200	↑ 200	10,400	↓ (350)
Iran	2,200	↑ 200	2,100	
Kenya	2,000		2,200	↓ (300)
Morocco	5,400	↓ (300)	4,500	↓ (500)
Nigeria	6,500	↑ 500	5,600	
Peru	2,240	↑ 40	2,000	↓ (250)
Philippines	6,115	↓ (385)	6,500	↓ (300)
Sudan	2,200		2,150	↓ (250)
Thailand	3,306	↑ 106	3,300	↓ (200)
Turkey	8,051	↓ (499)	10,000	↓ (250)
United Kingdom	3,200	↑ 400	2,000	
Uzbekistan	3,500	↑ 400	3,200	
Vietnam	3,900	↑ 500	3,650	
Yemen	3,900	↑ 400	3,600	↓ (200)

¹Month-over-month changes to the July/June Trade Year. Changes less than 200,000 metric tons are not included

Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

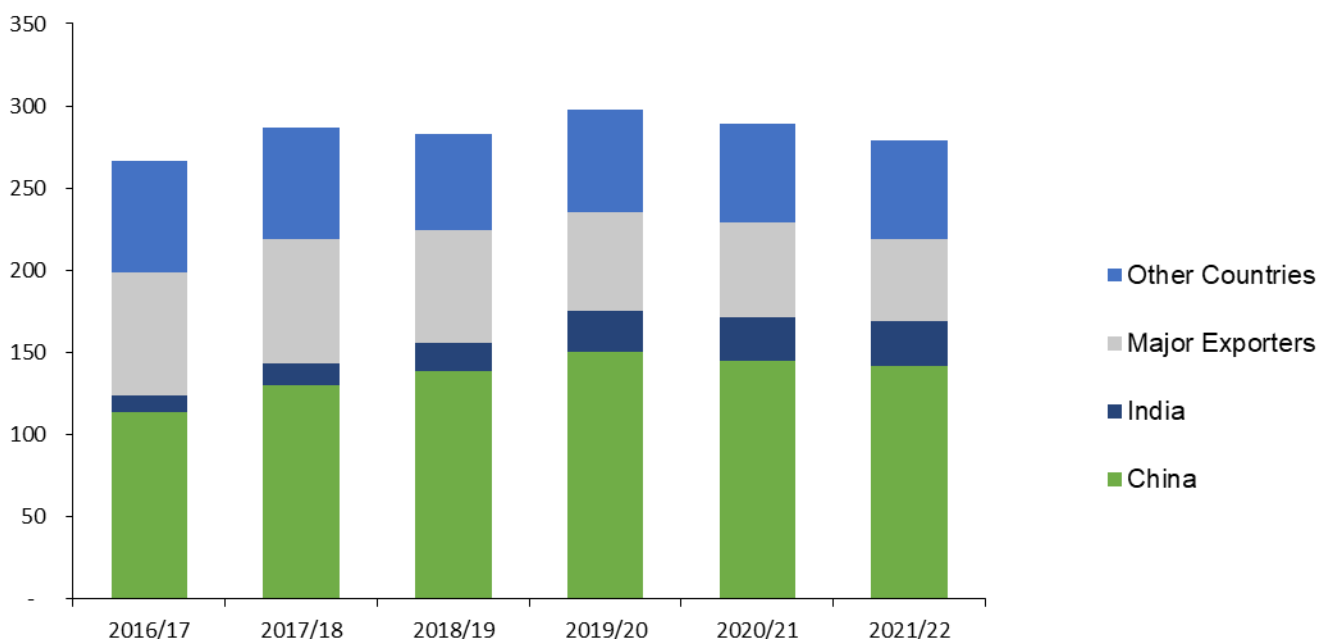
Tighter Global Stocks

Global stocks are also projected smaller this month to 279.0 million tons, the lowest level in five years (figure 4). **China's** stocks are projected to shrink for the second consecutive year amid robust demand from the feed sector, but this total still represents 51 percent of the world's stocks. Despite slightly stronger export demand, **India's** stocks are still projected up slightly from the previous year. Stocks held by the major exporting countries are projected to decline a total of 8.3 million tons to 50.2 million, the tightest level since 2007/08. Exporter-held stocks are considered to be an important metric for analysis since these are the supplies that are most available to the world market. **U.S.** stocks are revised down to the lowest level in 8 years. The largest stock reduction among exporters is for **Russia**, whose stocks are revised down 5.1 million tons this month, which is down only slightly from last year's estimated stock level. Also notable is that **Canada's** stock total is projected to be the lowest on record. Some importing countries are also expected to carry lower stock levels, with the possibility that buyers may delay purchases and work down existing inventories later in the year.

Figure 4

2021/22 global ending stocks projected to decline from previous year

Million metric tons



Note: Major Exporters include Argentina, Australia, Canada, the EU, Kazakhstan, Russia, Ukraine, and the United States.
Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Suggested Citation

Sowell, Andrew R. and Bryn Swearingen. *Wheat Outlook*, WHS-21h, U.S. Department of Agriculture, Economic Research Service, August 16, 2021.

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