



Wheat Outlook: August 2023

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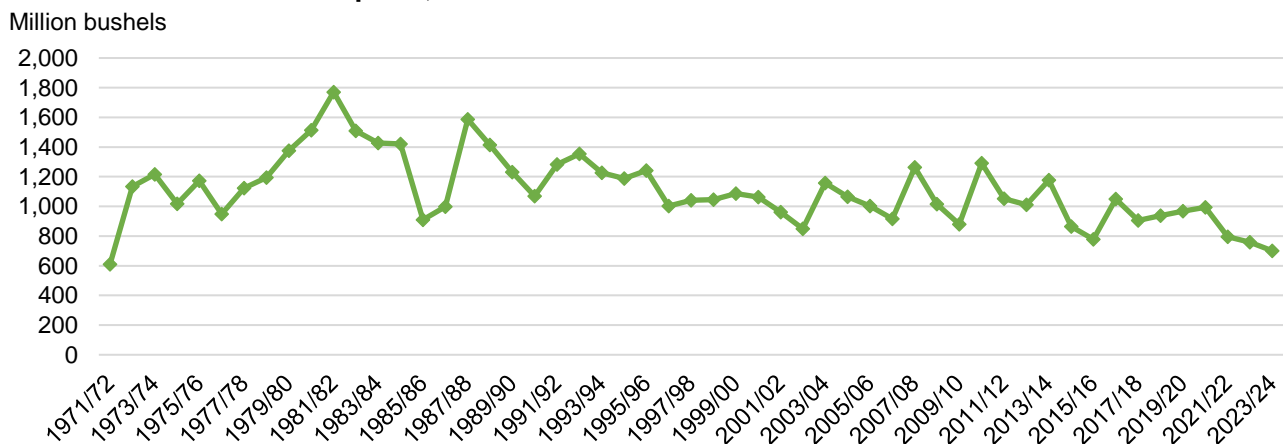
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U.S. Exports Projected at 52-Year Low

U.S. all-wheat exports are lowered 25 million bushels to 700 million bushels, the lowest since 1971/72 (figure 1). Despite an increase in Hard Red Winter (HRW) production, exports for HRW are cut 25 million bushels to 165 million, the lowest level since by-class supply and utilization records began in 1973/74. U.S. exports of HRW remain uncompetitive on the global market as shown in shipment and sales data. HRW exports in June 2023 were 10 million bushels, down from 19.2 million bushels in June 2022. Using data from the USDA, Foreign Agricultural Service’s *Export Sales Reporting*, all-wheat U.S. total commitments (the sum of accumulated exports and outstanding sales) are about 6.4 million metric tons as of August 3, down 26 percent from the same point last year and 37 percent below the recent 10-year average at this point (2013/14–2022/23). HRW total commitments are down 53 percent compared with last year as shipments from Russia and the European Union remain competitive internationally.

Figure 1
United States all-wheat exports, 1971/72–2023/24



Note: 2023/24 is a forecast.

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

Domestic Changes at a Glance:

- The USDA, National Agricultural Statistics Service (NASS) *Crop Production* report forecast U.S. wheat production for the 2023/24 marketing year is at 1,734 million bushels, down 5 million from the July forecast, but still 5 percent higher than last year (table 1). The average all-wheat yield is lowered 0.3 bushels per acre to 45.8 bushels. In addition to updated production statistics, the report provided revised area planted and harvested based on certified acreage data from the USDA, Farm Service Agency (FSA).
 - Average winter wheat yield forecast is 48.1 bushels per acre, up 1.2 bushels from the July forecast and up from 47.0 last year. Winter wheat area planted is lowered slightly to 36.8 million acres, while area harvested is lower at 25.5 million as well.
 - Hard Red Winter (HRW) production in the new marketing year is estimated by USDA, NASS at 585 million bushels, up 8 million from the July estimate. HRW production is up 10 percent from the previous year but remains historically low. Persistent drought has resulted in both lower yields and higher abandonment this season compared to average.
 - Soft Red Winter (SRW) production for 2023/24 is estimated at 440 million bushels, up 18 million from the July estimate and 31 percent above the previous year on higher area harvested and yield. SRW yield is estimated at 75.0 bushels per acre, up from 70.2 last year and up from the recent 5-year average of 67.1.
 - White Wheat production is forecast at 239 million bushels, down 6 million bushels from the previous month on lower yields. Soft White Winter wheat, which is primarily grown in the Pacific Northwest and represents the bulk of this category, is estimated down from last year as growing conditions have been somewhat drier. However, Hard White Winter, Hard White Spring, and Soft White Spring are all projected up slightly year to year.
 - Durum production is estimated at 57 million bushels, up 3 million from last month as an upward revision to area more than offsets a slight reduction to yield.
 - Hard Red Spring production is estimated at 413 million bushels, down 28 million from last month. The yield reduction more than offsets slightly higher area harvested.
- All-wheat exports for the United States in 2023/24 are projected at 700 million bushels, down 25 million from the July forecast on the slow pace of export sales. HRW exports are lowered 25 million bushels to 165 million bushels. Official U.S. wheat exports for

June 2023, calculated with data from U.S. Department of Commerce, Bureau of the Census, are estimated at 44 million bushels, down from 59 million in June 2022.

- U.S. wheat imports for 2023/24 are unchanged at 130 million bushels. Official U.S. wheat imports for June 2023 total 10 million bushels.
- The 2023/24 season-average farm price is unchanged at \$7.50 per bushel. The June all-wheat average farm price is estimated at \$7.67 based on the latest USDA, NASS *Agricultural Prices* report.

Table 1					
U.S. wheat supply and use at a glance 2022/23 and 2023/24 (in million bushels)					
Balance sheet item	2022/23 August	2023/24 July	2023/24 August	Month-to-month change	Comments
Supply, total					June-May marketing year
Beginning stocks	698	580	580	0	
Production	1,650	1,739	1,734	-5	Updated production data from USDA, NASS shows lower Hard Red Spring and White, more than offsetting increases in other classes
Imports	122	130	130	0	
Supply, total	2,470	2,449	2,444	-5	
Demand					
Food	973	977	974	-3	Both 2022/23 and 2023/24 are lowered on reduced mill grind data based in the USDA, NASS <i>Flour Milling Products</i> report
Seed	69	65	65	0	
Feed and residual	90	90	90	0	
Domestic, total	1,131	1,132	1,129	-3	
Exports	759	725	700	-25	U.S. Hard Red Winter wheat exports lowered on slow export sales and uncompetitive pricing
Use, total	1,890	1,857	1,829	-28	
Ending stocks	580	592	615	23	Stocks up slightly year to year, but still the second lowest since 2013/14
Season-average farm price	\$8.83	\$7.50	\$7.50	0	2023/24 would be the fourth-highest price on record
Source: USDA, Economic Research Service calculations and USDA, World Agricultural Outlook Board, <i>World Agricultural Supply and Demand Estimates</i> .					

Drought Expanding Across Spring Wheat Areas

After a wet start to the spring wheat planting season, conditions have turned drier. Drought conditions expanded with 52 percent of spring wheat areas now reported to be in drought conditions (figure 2). This is up from only 25 percent last month and well above the season-low 4 percent on June 13. At this point last year, only 18 percent of spring wheat production was in areas of drought. Reported yields for other spring wheat were lowered this month from 45.2 bushels per acre to 41.8, more than offsetting the effect of a slight upward revision to area.

Figure 2

United States spring (excluding Durum) wheat crop progress, 2023

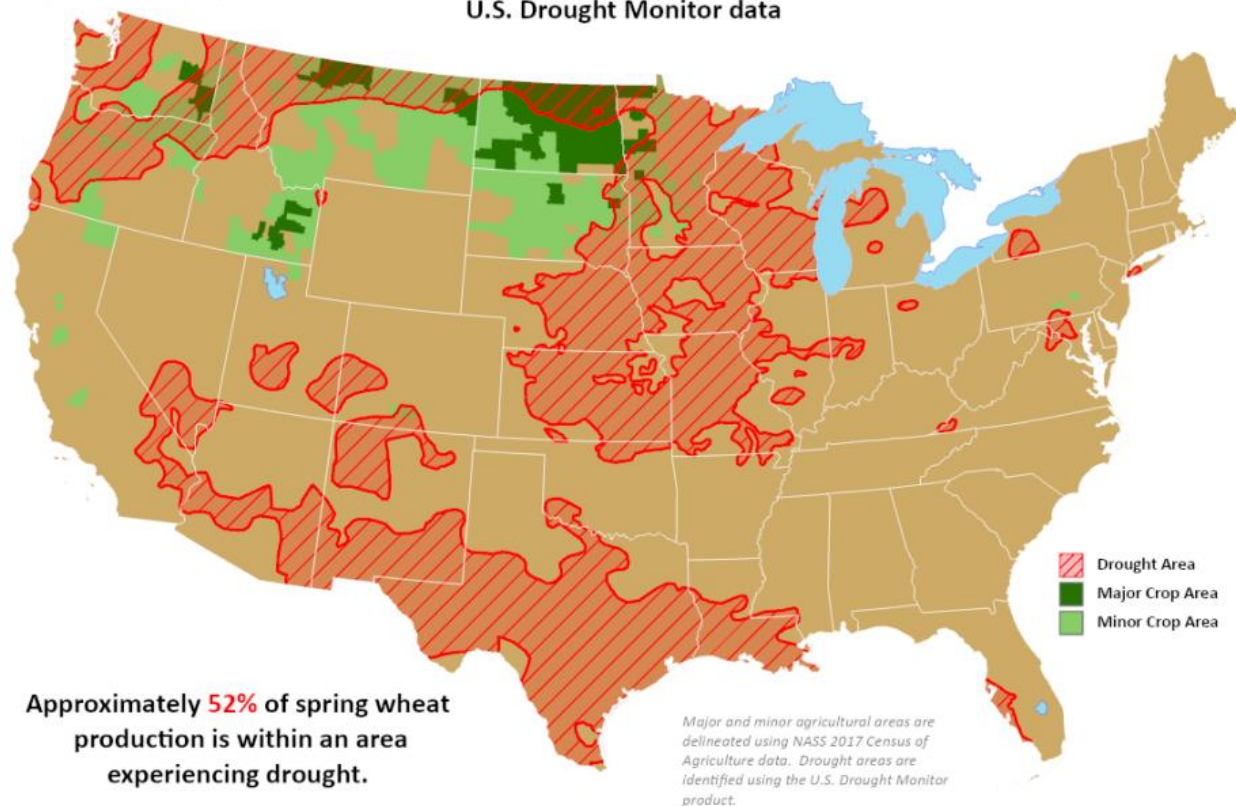


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Spring Wheat Areas in Drought

Reflects **August 8, 2023**

U.S. Drought Monitor data

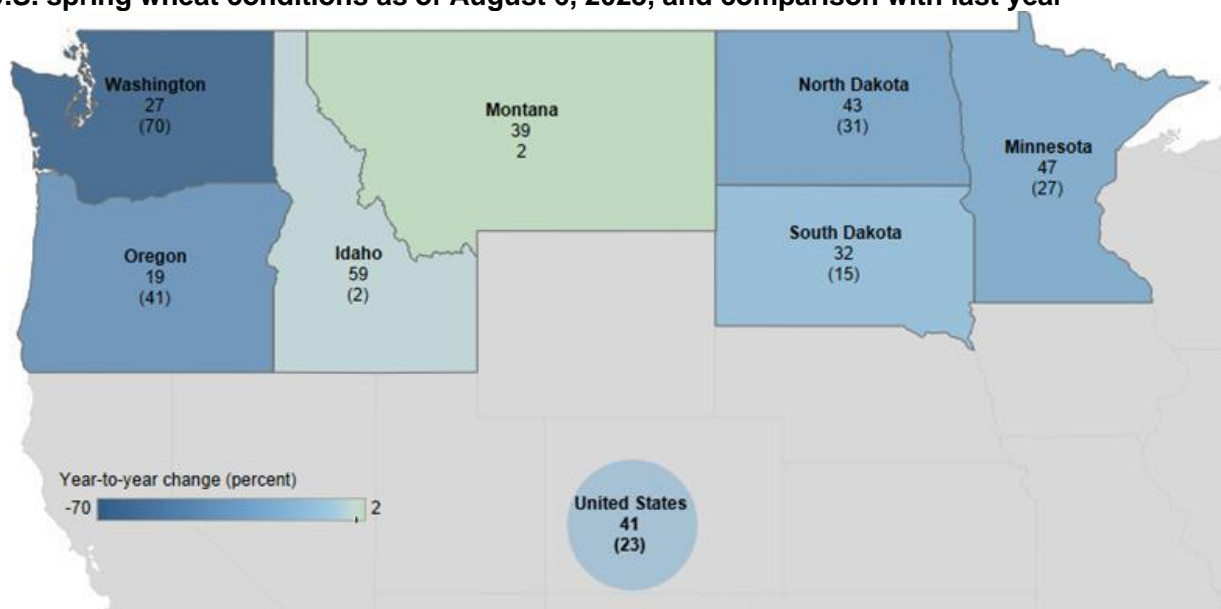


Note: This product was prepared by the USDA, Office of the Chief Economist (OCE), World Agricultural Outlook Board (WAOB). Major and minor agricultural areas are delineated using National Agricultural Statistics Service (NASS) 2017 Census of Agriculture data. Drought areas are identified using the U.S. Drought Monitor product.
Source: USDA, World Agricultural Outlook Board, Agricultural Weather and Assessments Group.

The USDA, NASS *Crop Progress* report indicates that spring wheat conditions are worse than last year across most major producing States (figure 3). Overall, 41 percent of surveyed spring wheat production is reported to be in good to excellent condition as of August 6, down from 64

percent last year. The largest declines in crop conditions are for Washington and Oregon; in terms of production volume, North Dakota has the most impactful decline in conditions. Conditions are up slightly from last year in Montana, the second-largest spring wheat producing State.

Figure 3
U.S. spring wheat conditions as of August 6, 2023, and comparison with last year

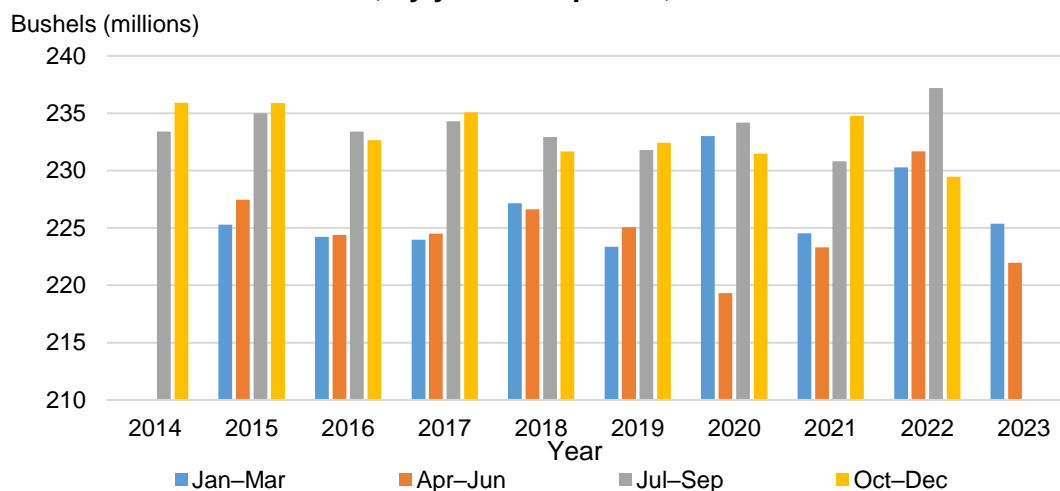


Source: USDA, Economic Research Service using data from USDA, National Agricultural Service.

Food Use Revised Lower on Slowing Mill Grind

USDA, NASS published the *Flour Milling Products* report on August 1, which showed smaller-than-expected wheat use for milling in the April-June quarter. Quarterly wheat milled was lower for the third straight quarter (figure 4) following the record-large wheat milling seen in the third quarter of 2022. As a result of the noted slowing pace of the mill grind, marketing year 2022/23 food use is reduced 2 million bushels to 973 million. This level of food use is still the highest on record, supported by strong mill grind earlier in the year and a robust pace of net flour and product imports throughout the marketing year. The reduction to 2022/23 food use and slowing mill grind pace supports a reduction in the forecast food use for 2023/24, down 3 million bushels from last month, to 974 million. USDA, Economic Research Service food use figures also include an estimated level of nonmilled food use.

Figure 4

U.S. wheat milled for flour, by year and quarter, 2014–23

Note: Data from this source unavailable before July 2014.

Source: USDA, National Agricultural Statistics Service, *Flour Milling Products*.

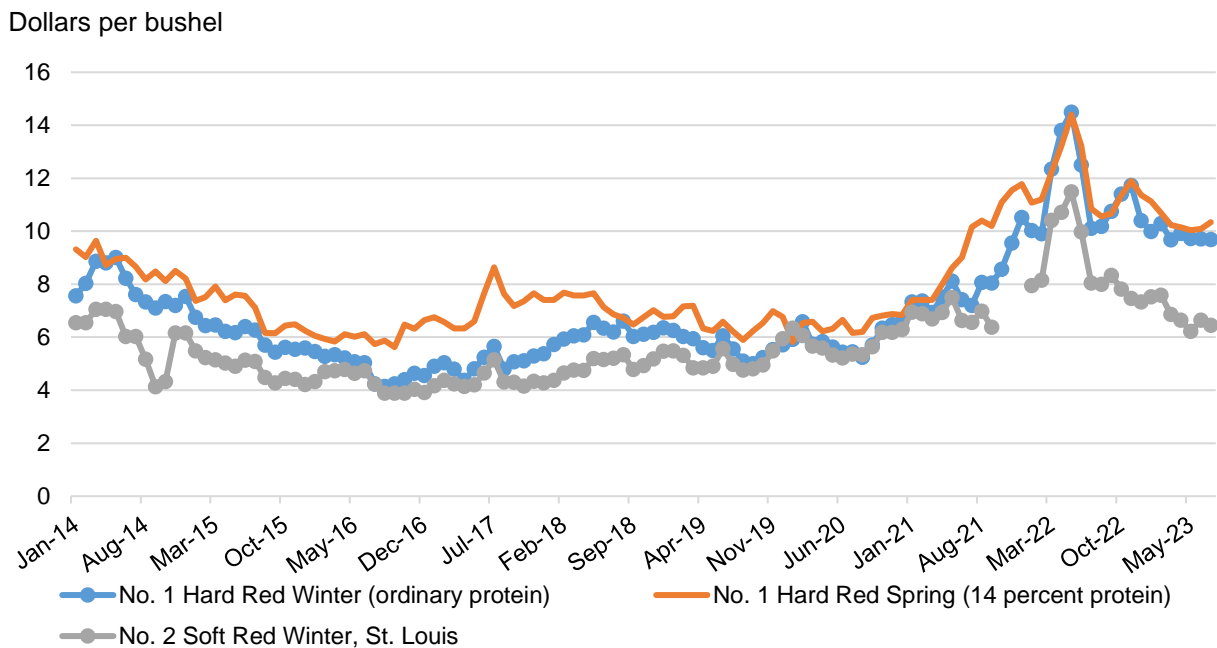
In addition to the revision to all-wheat food use, there are also notable shifts in by-class food use. Durum food use is adjusted slightly lower for 2022/23. Milling data for Durum is available through USDA, NASS, and Durum food use can be calculated directly once trade adjustments are factored. See tables 13–16 of the *Wheat Data* product for more details. Food use figures for other classes are estimated based on market conditions. For 2022/23 and 2023/24, HRS food use is lowered, while HRW is increased. These changes are motivated by a growing price spread between the two classes. The distribution of mill grind between HRS and HRW is expected to be closer to normal in 2023/24 after HRW grind was minimal in 2022/23.

	Final	Final	Final	July	August	Change	July	August	Change
Class	2019/20	2020/21	2021/22	2022/23	2022/23	2022/23	2023/24	2023/24	2023/24
	<i>Bushels (millions)</i>								
HRW	378.2	376.8	410.6	373.0	373.9	0.9	365.0	374.0	9.0
HRS	265.0	263.0	245.0	269.0	266.0	-3.0	276.0	260.0	-16.0
SRW	148.0	148.0	154.0	163.0	163.0	0.0	166.0	170.0	4.0
White	85.0	85.0	83.0	85.0	85.0	0.0	85.0	85.0	0.0
Durum	85.4	87.7	78.8	85.0	84.7	-0.3	85.0	85.0	0.0
Total	961.6	960.5	971.4	975.0	972.6	-2.4	977.0	974.0	-3.0

Note: HRW = Hard Red Winter; HRS = Hard Red Spring; SRW = Soft Red Winter.
Source: USDA, National Agricultural Statistics Service and USDA, Economic Research Service calculations.

SRW food use is raised in 2023/24 to a record 170 million bushels. The price spread between SRW and HRW has remained historically large in recent months (figure 5), which is expected to encourage additional blending of SRW into mill grinds. Also supporting the greater incorporation of lower-protein SRW into mill grinds is the relatively high protein content of the HRW crop in drought-stricken regions of the Great Plains. Millers aim to achieve target protein levels in flour blends. A higher average HRW protein content allows millers to reduce HRW grain in the mill grind while still achieving the desired protein level.

Figure 5
U.S. wheat cash prices, January 2014–July 2023



Notes: The Hard Red Winter quote is for Kansas City. The Hard Red Spring quote is for Minneapolis and refers specifically to Dark Northern Spring, a subclass of Hard Red Spring. Prices are monthly averages of daily quotes.

Source: USDA, Economic Research Service calculations using data from USDA, Agricultural Marketing Service.

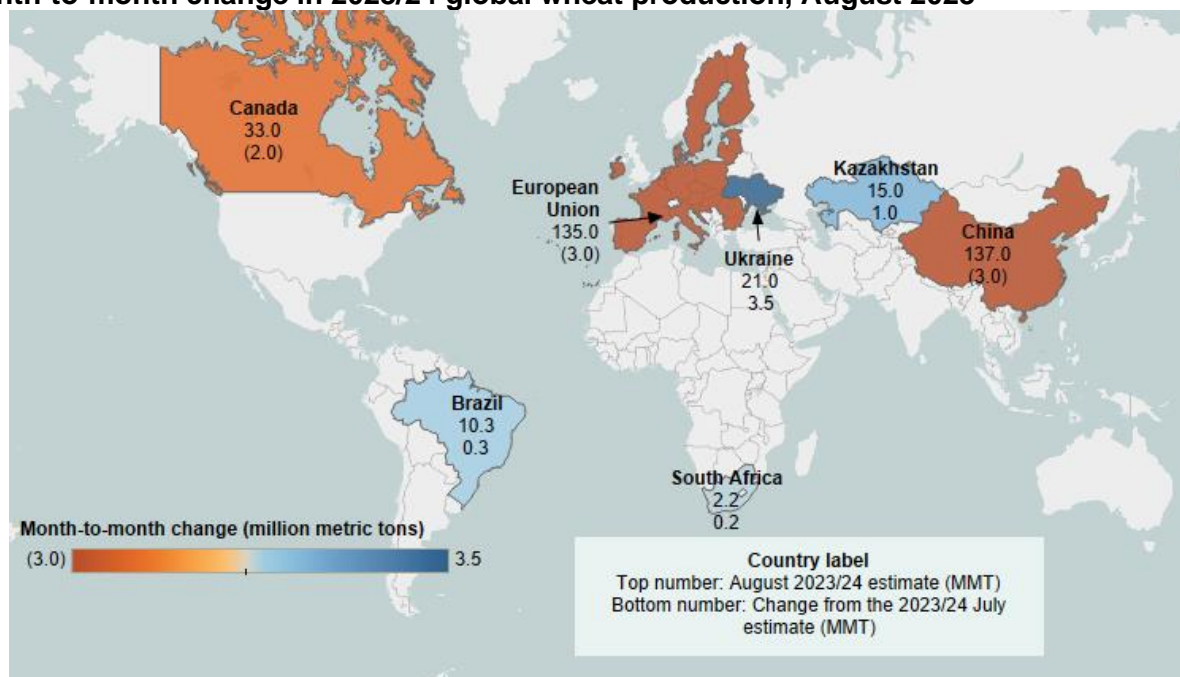
International Outlook

2023/24 International Overview

- The 2023/24 global wheat production is forecast down 3.3 million metric tons (MMT) to 793.4 MMT with smaller crops forecast for **China**, the **European Union (EU)**, and **Canada**, partially offset with upward revisions for **Ukraine** and **Kazakhstan** (figure 6).
 - National Bureau of Statistics of China showcased lower yields due to late season rains. Production in China is forecast down 3.0 MMT to 137.0 MMT.
 - European Union production is down 3.0 MMT to 135.0 MMT with most of the change coming from the Baltic countries and Spain.
 - Canadian yields are lowered (-0.19 metric tons per hectare to 3.11) because of drought conditions in Alberta.
 - Ukraine's production is boosted on beneficial growing conditions, particularly in the Forest Steppe region, resulting in improved yields (+0.31 metric tons per hectare to 4.38). Kazakhstan's production is raised as higher area harvested (+1.1 million hectares to 13.6 million) is only partially offset by lower yields.

Figure 6

Month-to-month change in 2023/24 global wheat production, August 2023



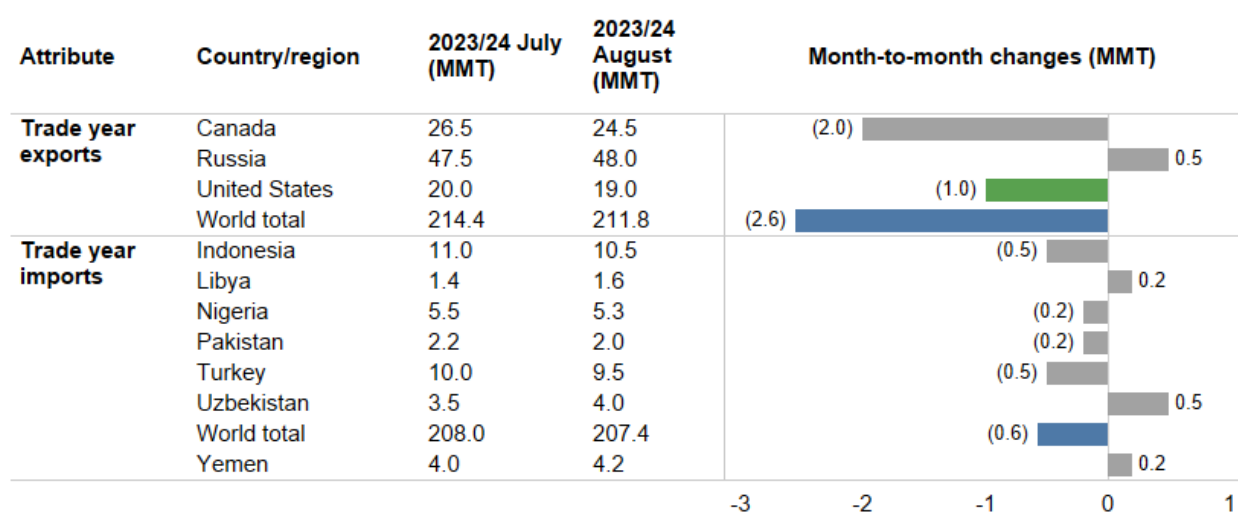
Note: MMT=million metric tons; Changes less than 200,000 metric tons are not included.

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

- 2023/24 global wheat consumption is down 1.7 MMT to 794.1 MMT driven largely by lower food, seed, and industrial (FSI) use (-1.2 MMT to 637.4 MMT). To match the statistics presented in the *World Agricultural Supply and Demand Estimates (WASDE)* report, adjusted consumption is calculated based on the differences between exports and imports on a local marketing year (MY) basis. This difference, or the unaccounted trade, is lowered 1.7 MMT to 2.0 MMT for 2023/24 as MY imports are lowered less than MY exports. Total consumption plus unaccounted trade results in an adjusted consumption of 796.1 MMT, down 3.4 MMT from the July estimate.
- FSI use in China is lowered 1.0 MMT to 116.0 MMT because of smaller domestic production. Global feed and residual use is down 0.5 MMT to 156.6 MMT. Feed and residual use in the **EU** is lowered 2.0 MMT to 43.0 MMT on a smaller crop. This is partially offset by upward revisions for **Ukraine** (+1.0 MMT to 3.5 MMT) and **Kazakhstan** (+0.4 MMT to 2.0 MMT); both countries are projected to have larger crops.
- Global wheat trade in trade year 2023/24 (July/June) is forecasted lower at 211.8 MMT. Expectations for smaller crops and fewer exportable supplies in **Canada** and the **United States** are only partially offset by projections for higher exports from **Russia** (figure 7). Despite an increase in production for **Ukraine**, exports remain unchanged at 10.5 MMT as the Black Sea Grain Initiative (BSGI) ended on July 17. See this month's *Grain: World Markets and Trade* by the USDA, Foreign Agricultural Service for more information on the effect of the BSGI.

Figure 7

Month-to-month change in 2023/24 wheat trade, August 2023



Notes: MMT = million metric tons; changes less than 100,000 metric tons are not included; month-to-month change is the difference between August 2023 and July 2023 estimates.

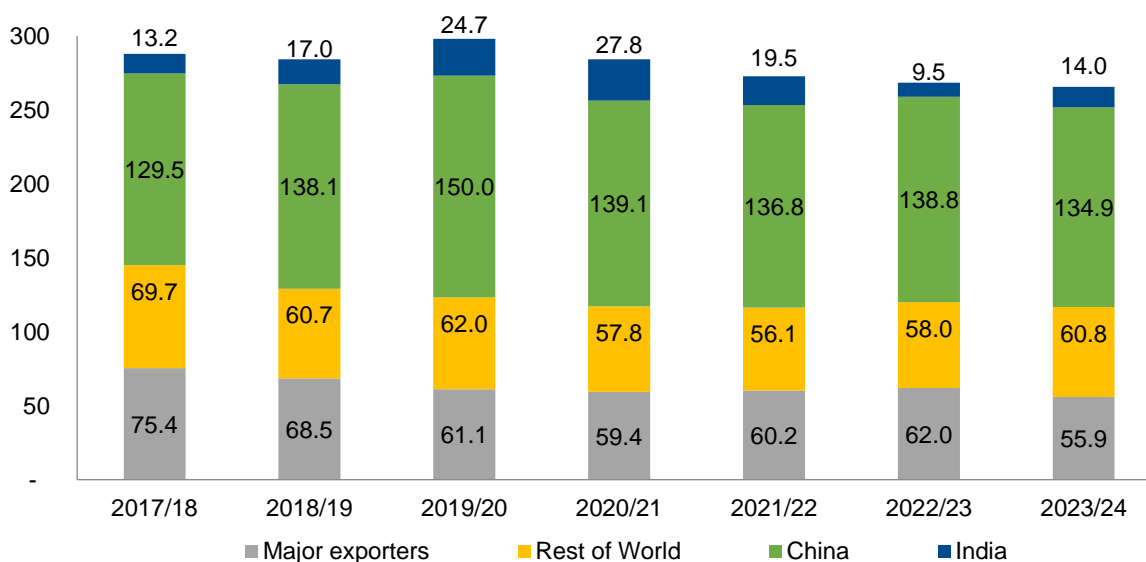
Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

- Trade year (TY) imports are lowered 0.6 MMT to 207.4 MMT with lower imports for **Indonesia** and **Turkey**, only partially offset with an increase for **Uzbekistan**.
 - In 2022/23, 46 percent of Indonesia’s imports were covered by Australia and 20 percent by Canada. Both countries are projected to have a lower production in 2023/24 than last year which is expected to contribute to reduced imports for Indonesia.
 - Turkey’s wheat imports reached a record 12.5 MMT in 2022/23 and were sourced dominantly from the Black Sea region. The Government of Turkey lifted an import duty for the 2022/23 trade year. However, the duty was reinstated for the private sector and is expected to limit the 2023/24 import potential.
- Global ending stocks are lowered 0.9 MMT to 265.6 MMT largely driven by lower ending stocks for China—down 2.2 MMT to 134.9 MMT on reduced production (figure 8). Major exporters ending stocks are raised 1.2 MMT to 55.9 MMT.
 - Lower production in the EU lowers ending stocks down 1.5 MMT to 13.2 MMT. Record exports in Russia (48.0 MMT) pushes stocks down 1.0 MMT to 11.4 MMT. Larger crops provide relief for Ukraine and Kazakhstan’s stocks, while uncompetitive pricing pushes U. S. exports lower and raises stocks 0.6 MMT to 16.7 MMT. Stocks in Argentina, Australia, and Canada remain unchanged.

Figure 8

Global ending stocks, 2017/18–2023/24

Million metric tons



Note: Major exporters include Argentina, Australia, Canada, the European Union, Kazakhstan, Russia, Ukraine, and the United States.

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

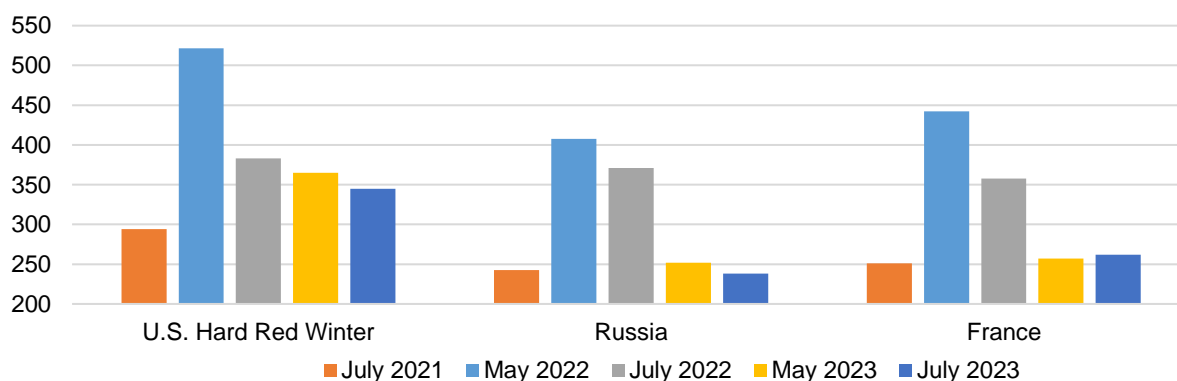
Global Wheat Prices Cooling on Larger Exportable Supplies

Wheat prices reached historic highs in May 2022. Since then, U.S. and global wheat prices have cooled as supply concerns in many key wheat exporting countries subsided. Wheat export prices for the **United States**, **Russia**, and **France** in July 2023 are well below the peaks observed in May 2022 after Russia invaded **Ukraine** in February 2022 (figure 9). Large exportable supplies in Russia and France have contributed to low prices for those exporters. Russia's total is forecast above 100 million metric tons (MMT) for the second consecutive year, despite lower production in 2023/24 due to large carryover stocks. Wheat production for France in 2023/24 is forecast to recover from the dry condition in 2022/23.

Figure 9

U.S. and competitor wheat export prices, monthly averages

Dollars per metric ton



Note: All prices are monthly averages of daily freight-on-board quotes. Hard Red Winter is 11.5 percent protein content for Gulf of Mexico ports. Quotes for Russia are for milling wheat at 12.5 percent protein content. Quotes for France are for Grade 1 wheat for Rouen ports. Protein levels not measured at standard moisture content across countries.

Source: USDA, Economic Research Service calculations using data from the International Grains Council.

Markets have recently reacted to the expiration of the *Black Sea Grain Initiative* on July 17. Russia's subsequent attacks on Ukraine's port infrastructure were further reflected in global wheat prices. However, Ukraine is expected to continue shipping through alternative routes, so the price developments were relatively minimal compared to the more extreme swings observed at the start of the conflict. In July 2023, prices in France were up slightly from May 2023, but 27 percent lower than in July 2022. U.S. Hard Red Winter wheat export prices decreased 10 percent in July 2023 from July 2022, and were 34 percent lower from May 2022, but are higher compared with other key exporters partly driven by ongoing drought in major U.S. growing regions. A record crop in 2022/23 pushed Russia's prices down 36 percent from July 2022. While production in 2023/24 is lower, ample supplies and competitive pricing is forecast to push Russia to export a record 48.0 MMT.

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