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Wheat Outlook: December 2021

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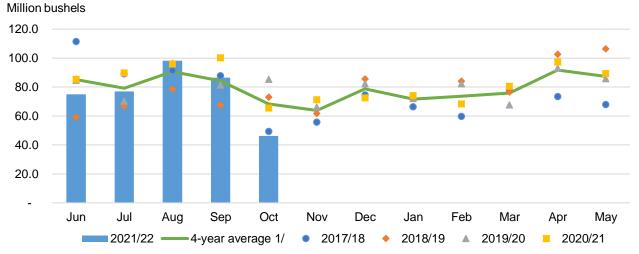
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U.S. Wheat Exports Slowing in Recent Months

U.S. wheat exports in October dropped by nearly half from the previous month to only 46 million bushels, the smallest monthly total in more than 30 years. Furthermore, USDA/Foreign Agricultural Service's *Export Sales* data show a continued weak pace of sales and shipments throughout November, suggesting that a quick turnaround in export pace is unlikely. Tight domestic supplies and high prices have put U.S. wheat in an uncompetitive position internationally with other major exporters. U.S. wheat will likely maintain much of its typical sales to core markets in Latin America and Asia, but exports are expected to be uncompetitive to much of Africa and the Middle East.





1/2017/18 through 2021/22.

Sources: U.S. Department of Commerce, Bureau of the Census; USDA, Economic Research Service calculations.

Domestic Outlook

Domestic Changes at a Glance:

- The 2021/22 all-wheat export forecast is reduced 20 million bushels to 840 million on a weakening pace of export sales and shipments. Official exports (calculations based on U.S. Bureau of the Census data) for June through October total 383 million bushels, down about 12 percent from the same period last year. This 5-month total represents about 40 percent of the full marketing year (June-May) projection. Notably, shipments in October fell by 46 percent from the previous month. Export sales (both new sales and shipments) have remained slow throughout November, as reported by USDA's Foreign Agricultural Service (FAS) in the U.S. Export Sales report.
- The Hard Red Spring (HRS) export forecast is reduced 10 million bushels to 205 million based on a slow pace of export sales. Official export data for June through October represent nearly half of the marketing year export projection, but sales of this class have been very slow for the past two months. Due to severe drought which affected production in the Northern Plains, supplies of this high-protein class are unusually tight this year and prices have been very elevated.
- Projected Hard Red Winter (HRW) exports are reduced 10 million bushels to 350 million.
 HRW production this year was relatively strong, but prices remain high driven by tight beginning stocks and strong domestic demand. Internationally, U.S. HRW prices are expected to remain at a premium to many key competitors, which will limit exports.
- The 2021/22 all-wheat import forecast is reduced 5 million bushels to 110 million on the pace of trade. Projected HRS imports are reduced by 5 million bushels to 50 million, while imports for all other classes are unchanged this month. U.S. imports of HRS during June through October totaled 19 million bushels, representing 38 percent of the full marketing year projection for this class. Last year, HRS imports during the same 5 months were about 24 million bushels and represented just over half of the full marketing year imports.
- The 2021/22 season-average farm price is raised \$0.15 per bushel to \$7.05 based on the strong farmgate prices through October as reported in the November 30 National Agricultural Statistics Service (NASS) Agricultural Prices report and expectations of continued strength in cash and futures prices. The October 2021 all-wheat farmgate price was estimated at \$7.90, which is up from \$7.75 in September 2021 and well above the \$4.98 in October 2020.

The major changes to the U.S. all-wheat balance sheet are summarized in table 1.

Table 1 - U.S. wheat supply and use at a glance 2021/22 (in million bushels)						
Balance sheet item	2020/21 December	2021/22 November	2021/22 December	2021/22 Change month to month	Comments	
Supply, total					June-May marketing year	
Beginning stocks	1,028	845	845	0		
Production	1,828	1,646	1,646	0		
Imports	100	115	110	-5	Lower projected imports of Hard Red Spring (HRS) on pace of trade	
Supply, total	2,957	2,606	2,601	-5		
Demand						
Food	961	962	962	0		
Seed	64	66	66	0		
Feed and residual	95	135	135	0		
Domestic, total	1,120	1,163	1,163	0		
Exports	992	860	840	-20	Exports reduced for HRS and Hard Red Winter (HRW) based on the slow pace of export sales and shipments	
Use, total	2,111	2,023	2,003	-20		
Ending stocks	845	583	598	+15	Stocks at the lowest level since 2013/14	
Season- average farm price	\$5.05	\$6.90	\$7.05	+\$0.15	Stronger farm gate prices as reported by USDA/NASS as well as higher futures and cash prices	
Source: USDA, World Agricultural Outlook Board World Agricultural Supply and Demand Estimates.						

Winter Wheat Progress

Winter wheat planting progress was last reported by USDA/NASS in the November 22 *Crop Progress* report. At that time, winter wheat was 96 percent planted, just below 98 percent in the previous year and the 5-year (2016–20) average of 97 percent. In the 18 States surveyed, the overall pace of winter wheat planting was close to average throughout the fall months, but there were notable delays in some Eastern States, where Soft Red Winter (SRW) is mainly grown. In those areas, wet weather slowed the harvest of soybeans and consequently delayed planting of

winter wheat. In some areas, if the planting window closed, farmers may elect to sow other crops instead of wheat. This early in the production cycle, it is difficult to assess the effect of delayed sowings as spring and summer weather conditions tend to be more impactful in determining yield potential.

The final NASS *Crop Progress* report of the calendar year was released on November 29. This report noted winter wheat emergence at 92 percent, even with last year and just above the 5-year average of 91 percent. Winter wheat was rated to be 6 percent excellent, 38 percent good, 33 percent fair, 15 percent poor, and 8 percent very poor. These conditions are only marginally less favorable than what was reported at the same time last year (6, 40, 36, 13, and 5 across the respective classifications).

Another noteworthy development is expanding drought in key HRW growing regions in the Central Plains. The drought conditions also expand to the Northern and Western regions, potentially affecting production of other classes of wheat. Approximately 53 percent of total winter wheat growing regions are experiencing drought conditions (figure 2).

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Reflects December 7, 2021
U.S. Drought Monitor data

Drought Area Major Crop Area Milnor Crop Area Milnor Crop Area

Figure 2

Large portions of winter wheat area facing drought conditions, December 2021

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

production is within an area

experiencing drought.

delineated using NASS 2017 Census of Agriculture data. Drought areas are

identified using the U.S. Drought Monitor

International Outlook

Australia Helps Boost 2021/22 Global Production

Global production for 2021/22 is adjusted 2.6 million metric tons (MT) higher to 777.9 million based on higher-than-expected production in **Australia**, **Russia**, and **Canada**. If realized, Australia will have back-to-back record production years. While Australia has received recent rains delaying harvest, yield is projected to reach a near record 2.60 metric tons per hectare (MT/ha). Russia production increased by 1.0 million MT to 75.5 million due to new harvest reports. This revision was allocated only to winter wheat production (+1.0 million MT to 51.5 million), while spring wheat remained unchanged (23.0 million MT). Canada is raised 0.7 million MT to 21.7 million based on revised data from Statistics Canada.

Partially offsetting this increase are downward revisions for **Iran** and **Ethiopia**. Iran is projected to have the lowest domestic production since 2001/02 at 12.0 million MT based on lower yields. Ethiopia remains in a state of emergency that has slowed the harvest of their wheat crop. While production would have been good, the inability to get into the field due to safety concerns will result in higher abandonment. Table 2 shows an overview of all the production changes.

Table 2 - Wheat production at a glance (2021/22), December 2021						
Country or region	Marketing year	Production	Month-to-month change			
		Million tons				
World		777.9	↑ 2.6			
Foreign		733.1	↑ 2.6			
United States	June-May	44.8	- >			
Australia	October-September	34.0	↑ 2.5			
Canada	August-July	21.7	♠ 0.7			
Ethiopia	October-September	4.8	U (0.4)			
European Union	July-June	138.7	♠ 0.3			
Iran	April-March	12.0	U (1.5)			
Russia	July-June	75.5	1.0			
South Africa	October-September	2.2	♠ 0.1			
Note: Changes less than 100,000 metric tons are not included.						
Source: USDA, Foreign Agricultural Service, Production, Supply, and Distribution database.						

2021/22 Global Consumption is Revised Higher

Global consumption for 2021/22 is projected higher by 1.9 million MT to 789.4 million based on higher feed and residual use (+2.0 million MT to 160.6 million) partially offset by a slight downward revision to food, seed, and industrial (FSI) use (-0.5 million MT to 626.2 million). Larger-than-anticipated production in **Australia**, the **European Union (EU)**, and **Russia** pushes feed and residual use up. The recent harvest rains in Australia are likely to lead to more feed quality wheat resulting in higher feed and residual use (+0.5 million MT to 5.0 million). The EU feed and residual use was adjusted up 750,000 MT to 45.8 million to partially offset a reduction in feed and residual use for barley.

Reduction to FSI use in **China** (-0.5 million MT to 112.5 million), the **EU** (-0.4 million MT to 62.2 million), and **India** (-0.3 million MT to 97.3 million) more than offset the increase in FSI use for **Russia** (+0.3 million MT to 23.3 million). High wheat prices have made corn a more competitive option for some industrial options in the EU, such as biofuel production, resulting in less wheat used for industrial uses.

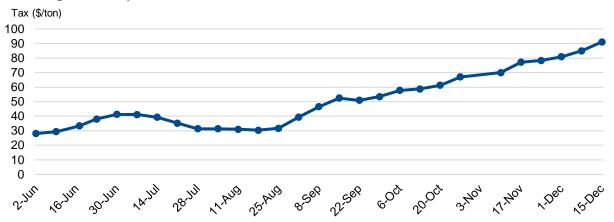
A slight adjustment is also made to total consumption based on the local marketing year (MY) trade adjustments for 2021/22. The unaccounted trade is increased marginally by 0.4 million MT to 2.5 million as a result of MY exports increasing relatively more than MY imports. By adding this updated calculation of unaccounted trade to total consumption, the total adjusted consumption in 2021/22 is projected at 789.4 million MT.

Global Wheat Trade Projected to Reach New Record

If realized, 2021/22 global wheat production is projected to be a record with trade year (TY) exports at 206.9 million MT and TY imports at 203.0 million MT. **Australia** and the **EU** export forecasts are revised up based on larger domestic production. Australia exports are projected at a record 26.0 million MT, 32 percent above 2020/21 exports. Strong first quarter shipments result in higher exports for **India** and **Ukraine**. The largest change to TY imports is for **Iran** (+1.5 million MT to 7.0 million) which continues to receive shipments from Russia, despite Russia's wheat export tax continuing to rise (figure 3). As **Indonesia** starts to ease COVID-related restrictions, its food use and imports of wheat are expected to increase as food away from home resumes. **China** has had a slow pace on wheat shipments and reduced purchases from France resulting in a decrease to imports by 0.5 million MT to 9.5 million. The summary of all adjustments is presented in table 3.

Figure 3

Floating wheat export tax in Russia, June 2021 – December 2021



Source: Ministry of Agriculture of the Russian Federation.

Table 3 - Summary of 2021/22 trade adjustments, December 2021							
	Trade year	ехр	orts	Trade year imports			
Country or region	December estimate Change		December estimate	Change			
	Million met	Million metric tons		Million metric tons			
World	206.9	Ŷ	1.9	203.0	1	1.9	
United States	23.5	•	(0.5)	3.0	4	(0.2)	
Afghanistan				2.8	€	(0.2)	
Australia	26.0	Ŷ	1.5	0.2	1	-	
China	0.9	Ψ	(0.1)	9.5	4	(0.5)	
Ethiopia				1.7	1	0.2	
European Union	37.0	Ŷ	0.5	5.2	•	(0.1)	
India	5.5	Ŷ	0.3				
Indonesia	0.4	4	-	10.8	₽	0.4	
Iran	0.4	4	-	7.0	企	1.5	
Lebanon				1.3	4	(0.1)	
Nigeria	0.6	4	-	6.2	Ŷ	0.2	
Philippines	0.1	4	-	6.5	企	0.1	
South Korea				4.4	企	0.3	
Ukraine	24.2	企	0.2	0.1	4	-	
Venezuela				1.1	企	0.2	
Vietnam	0.3	- >	-	3.8	企	0.3	

Note: Changes less than 100,000 metric tons are not included.

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

Major Exporters' Ending Stocks See Relief

2021/22 global ending stocks are projected at 278.2 million MT, up 2.4 million from November based on higher global production. Upward revisions were made for a few major exporters including: **Australia** (+1.0 million MT to 4.5 million), **Canada** (+0.7 million MT to 5.1 million), the **EU** (+0.2 million MT to 9.9 million), **Russia** (+0.3 million MT to 10.2 million), and the **United States** (+0.4 million MT to 16.3 million). Ending stocks in **Argentina** are adjusted down 0.2 million MT to 2.3 million. These revisions bring major exporters' 2021/22 ending stocks to 50.7 million MT, up 2.3 million month-to-month (figure 4). While this brings some relief to the tight balance sheet, major exporters' ending stocks remain the lowest since 2007/08.

Million metric tons (MMT) 80 70 60 50 40 30 20 10 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 ■Argentina ■Australia ■Canada ■European Union ×Kazakhstan ■Russia □ Ukraine ■United States

Figure 4 **Major exporters' ending stocks, 2016/17 to 2021/22**

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

International Feature: Global Food Price and Policy Outlook

Introduction

Going into 2022, rising food prices continue to reflect the effects of the COVID-19 pandemic and are compounded by tight global grain supplies and supply chain issues. The Food and Agricultural Organization (FAO) tracks the consumer food price index globally and by country. FAO finds the global consumer food price index increased more than 6 percent in 2020, just under the maximum year-over-year change of 8 percent from 2007 to 2008. The global consumer food price index is currently projected to be higher in 2021 but is increasing at a slower rate compared to 2020. This article looks at the current global wheat conditions and how they compare with previous price spikes. We then examine how rising food prices vary by country and what steps countries are taking to mitigate the effects through trade policy changes.

Current Global Wheat Market Conditions

Global wheat production for 2021/22 fell by 1.4 percent from the first official USDA forecast in May to the December estimate but remains a record. The reductions in projected wheat exports are mainly accounted for by production shortfalls in Russia, Canada, and the United States. Global consumption is projected at a record, outpacing growth in supplies and resulting in tighter stocks. Higher prices and strong demand provide incentives for exporters to export their stocks, further tightening the global balance sheet. If realized, global 2021/22 wheat ending stocks-to-use ration (without China) will be 16 percent, the lowest since 2007/08. These tight stocks are one reason major exporters' freight on board (fob) bids to increase a from 21 to 55 percent since November 2020, with the largest increase coming from Canada. Freight rates for major exporters, as reported by the International Grains Council, also increased by more than 40 percent during this time due to supply chain bottlenecks and tight supplies of cargo ships.

Global Consumer Price Index

The consumer price index (CPI) is a leading measure of inflation. By looking at both the food and general CPI, we can see how the rise in food prices compares to the general economy. Figure 5 shows how the Food and Agricultural Organization's global food and general consumer price indices have changed each year from 2001 to 2021. These indices are adjusted to represent the basket value indexed in 2015 dollars. In periods where there has been a rise in

commodity prices (2007/08, 2010/11, and 2020/21), the food CPI grows at almost double the pace of the general CPI. As of its June 2021 update, the FAO predicts that both indices will grow at about 4.3 percent in 2021 with general CPI growing at a higher rate year-over-year while the food CPI is expected to grow at a slower rate than in 2020.

Percent change

9
8
7
6
5
4
3
2
1
0

The political poli

Figure 5 Year-over-year change in global consumer price index, 2001–21

Sources: Food and Agricultural Organization: USDA. Economic Research Service.

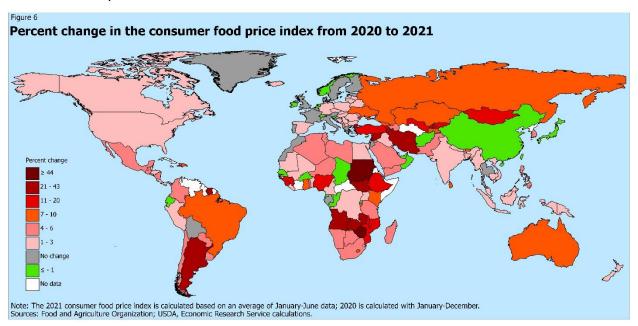
The FAO also publishes an annual FAO food price index (FFPI) that represents the change in the international price of a basket of food commodities in real terms (2014–16 base year) and is used as an indicator for food security. As of December 2, the FFPI is projected to increase to 124.2 in 2021, the highest since 1975 and 25 percent higher than 2020. This means that if a consumer bought a basket of goods for \$100 in the base year that the same basket of goods is \$24 higher in 2021. The FFPI is further broken into sub-indices representing major food groups (see table 4). By looking at the sub-indices, we can compare the effects of each major food group on the growth of the overall food price index. The FFPI increased for the fourth consecutive month in November, mainly driven by higher cereal and dairy prices. Table 4 compares the year-over-year change in the food price sub-indices with previous analog years. In 2021, the meat and oils sub-indices are projected to have the greatest year-over-year change since at least 1990.

Table 4: Comparison of consumer food price indices in previous spikes, 2007–21								
Year-over- year	Food price index	Meat price index	Dairy price index	Cereal price index	Oils price index	Sugar price index		
change	– Percent –							
2007/08	15.70	8.85	0.33	26.58	21.99	17.84		
2010/11	11.27	4.26	4.54	19.09	15.56	10.01		
2020/21	25.26	10.30	14.22	24.38	61.93	34.57		
Sources: USDA, Economic Research Service; Food and Agricultural Organization of the United Nations.								

In previous analog years, the cereal price sub-index grew at a faster rate than the FFPI and had a more significant effect on the overall increase in the food price index. The current market condition shows that the cereal price index is growing at 24 percent, a slightly slower pace than the overall FFPI at 25 percent. While wheat prices have been elevated in 2021, the cereal price index indicates a less pivotal role in the rise of global food prices from cereals than other categories, such as oils. The oils price sub-index is forecast to grow 62 percent year over year versus previous time periods when it only grew by 15 to 22 percent. While looking at the effect of global food price indices is helpful to get a worldwide picture, it is important to see how increases in food prices differ across countries.

Food Price Effect by Country

The consumer food price index (CFPI) is a common metric for analyzing food price trends facing consumers. The FAO publishes consumer food price index data by country for each month. Figure 6 shows how different countries and regions have been affected by increases in the yearly average consumer food price index compared with 2020. A positive change in the CFPI is a leading indicator for food inflation. The dark red countries saw the largest increase in the consumer food price index in 2021.



Outside of Canada, the United States, Europe, and China, most of the world is experiencing elevated growth in CFPI. In the November *Wheat Outlook*, we discussed the implications of rising wheat prices in the United States. We found that the consumer and producer price indices for wheat and flour products have not seen significant increases as compared to historical price increases. China saw a decline in CFPI due to the recovery of the swine herd after African

swine fever resulting in lower pork prices. Despite production issues in Canada, the data show that their CFPI has increased by only 1.1 percent.

Latin America and the Caribbean countries are predicted to see a 15 percent increase in CFPI compared with 2020, with some areas experiencing currency depreciation, food disruptions, and rising commodity prices. The CFPIs in Brazil and Argentina are expected to increase 10 and 36 percent, respectively, compared with 2020. Western and Middle Africa also saw a significant increase of 13 to 15 percent CFPI in 2021. Other notable increases in CFPI are for Iran (43 percent) and Turkey (16 percent).

Policy Changes to Control for Rising Food Prices

Over the past year, some countries have implemented trade policies intended to mitigate the effects of rising food prices on their producers and consumers. For example, Russia, a major wheat exporter, has taxed wheat exports since February 2021 to help limit exports and secure lower priced domestic supplies for their consumers. Both Ukraine and Kazakhstan announced wheat export limits to increase domestic stocks. Other countries suspended import duties, expanded import quotas, or removed import tariffs. Despite having an above-average wheat crop this year, Morocco suspended import duties on durum and common wheat to maintain price stability and build stocks. Amid inflationary pressures, Pakistan approved expanded purchases of wheat to increase its strategic reserves and banned exports of wheat and flour products. Turkey eliminated its wheat import tariff to help combat tight domestic supplies and rising international wheat prices. These policies can impact and possibly distort the global wheat market through reduced trade flows from exporters or by importers seeking new sources to maintain their supplies.

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