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Report Highlights:

In marketing year 2022/23, wheat production is forecast up more than 50 percent from the previous year on increased acreage and higher yields due to improved soil moisture. Wheat exports are forecast to increase year-over-year on larger domestic supplies. Crop 2022 will be the first sizable crop in four years to compete for rail services with other sectors throughout an entire marketing year. Non-durum and durum wheat are expected to be of high quality, resulting in lower feed-grade wheat supplies.

Table 1: Production, Supply, and Distribution of Wheat

WHEAT	2020/2021		2021/2022		2022/2023	
	Aug-20		Aug-21		Aug-22	
	USDA Official	Post	USDA Official	Post	USDA Official	Post
Market Begin Year						
Area Harvested (1000 HA)	10,018	10,018	9,193	9,193	10,000	10,059
Beginning Stocks (1000 MT)	5,499	5,499	5,953	5,953	3,671	3,673
Production (1000 MT)	35,437	35,437	22,296	22,296	35,000	34,703
MY Imports (1000 MT)	544	544	600	549	600	540
TY Imports (1000 MT)	549	543	557	555	600	540
TY Imp. from U.S. (1000 MT)	319	319				
Total Supply (1000 MT)	41,482	41,480	28,849	28,798	39,271	38,916
MY Exports (1000 MT)	26,429	26,429	15,000	15,110	26,000	25,000
TY Exports (1000 MT)	27,723	27,722	14,952	14,983	26,000	25,000
Feed and Residual (1000 MT)	4,150	4,160	5,178	5,009	4,000	4,916
FSI Consumption (1000 MT)	4,950	4,938	5,000	5,006	5,100	5,000
Total Consumption (1000 MT)	9,100	9,098	10,178	10,015	9,100	9,916
Ending Stocks (1000 MT)	5,953	5,953	3,671	3,673	4,171	4,000
Total Distribution (1000 MT)	41,482	41,480	28,849	28,798	39,271	38,916
Yield (MT/HA)	3.54	3.54	2.43	2.43	3.50	3.45

WHEAT PRODUCTION – Marketing Year (MY) 2022/23

Total wheat production is estimated to be up 56 percent from last year, according to the most recent Statistics Canada data. Final figures will be published in December. Production of spring and durum wheat increased significantly over the previous year on increased acreage and higher yields due to improved soil moisture. Winter wheat production is estimated down year-over-year on a 22 percent reduction in area planted in Ontario.

Table 2: Production of Wheat

	2020	2021	2022	2021/ 22 %Δ	5-yr avg (2017 - 2021)
Wheat, all	35,437	22,296	34,703	56%	30,626
Wheat, durum	6,571	3,038	6,117	101%	8,594
Wheat, spring	26,092	16,250	26,053	60%	19,041
Wheat, winter remaining	2,774	3,007	2,532	-16%	8,075

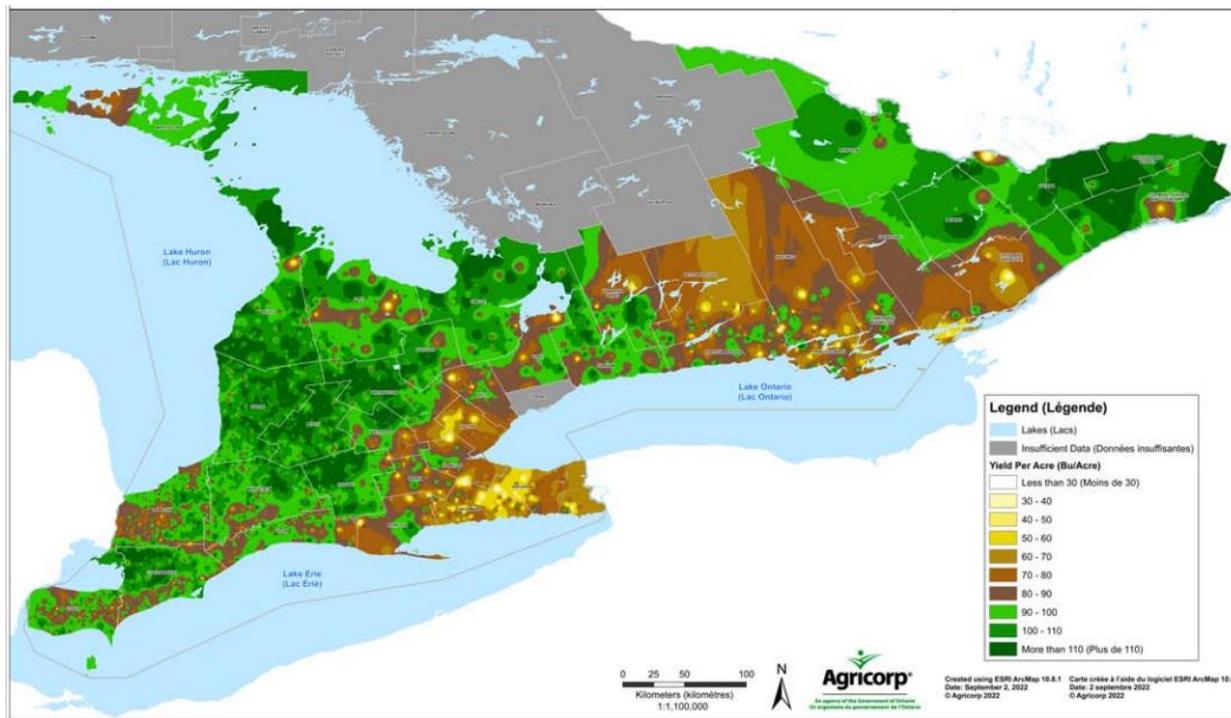
Source: FAS/Ottawa using Statistics Canada data

The Saskatchewan provincial government [reports](#) that limited moisture throughout much of the harvest season has allowed crop quality to remain high, especially Hard Red Spring Wheat (HRSW). HRSW is being reported as 75 percent grade No. 1, 23 percent No. 2 and two percent No. 3. The ten-year average is 39 percent No. 1, 35 percent No. 2, 17 percent No. 3 and nine percent No. 4/ feed grade. 41 percent of Canada's spring wheat was produced in Saskatchewan in 2022, in line with the five-year average.

The Alberta provincial government [reports](#) that the quality for hard red spring wheat is above its five-year average, while the quality of durum wheat is lower. About 94 percent of hard red spring wheat and 78 percent of durum wheat is grading in the top two grades. About 34 percent of barley is eligible for malt and 54 percent is grading as No. 1 feed. 38 percent of Canada's spring wheat was produced in Alberta in 2022, roughly in line with the five-year average.

Industry contacts report that Ontario winter wheat quality is excellent and average provincial yields are expected to be the second highest on record at 5.949 mt/ hectare, according to Statistics Canada. Final yield estimates will be published in December. Yield data reported by Agricorp production insurance customers shows that areas in the eastern and western parts of Ontario recorded more than 110 percent of average yield of soft red winter wheat. Ontario produced an estimated 81 percent of Canada's winter wheat, down from 89 percent in 2021.

Illustration 1: Soft Red Winter Wheat, Harvested Yield (2022)



Source: [Agricornp](https://www.agricorp.com)

Soil Salinization and Its Impact on Nitrogen Use and Planting Decisions

Salinization in Canadian Prairie soils has generally [declined](#) over the past forty years. This is largely attributed to an uptake of beneficial management practices such as conversion from annual crop to perennial cover, no-till or minimum-tillage, and the cessation or reduction in summer fallow.

However, anecdotally, salinization was a localized issue of concern in 2022 for some producers. On a June 2022 crop tour, FAS Ottawa observed ground whitening and salt crystals on several cereal fields in Southern Saskatchewan. Even high levels of soluble salts that are not visible slows nitrogen and water uptake in plants and subsequently slows plant development, causing yield loss.

Agronomists that FAS Ottawa spoke with recommended that producers with salinity issues increase nitrogen application, and plant saline-tolerant crops such as barley.

The Impact of Fertilizer Prices on Planting Decisions

Several producer contacts told FAS Ottawa that they are not aware of farmers in the Canadian Prairies significantly changing their crop rotation due to high fertilizer prices. Statistics Canada area planted data indicates that farmers were more incentivized to plant higher-earning crops than reduce their fertilizer costs by significantly departing from their long-term (typically, five to seven-year) planting strategy. For example, while some farmers told FAS Ottawa that they planted nitrogen-fixing crops like fava beans (*Vicia faba*) in 2022, hoping to reduce fertilizer use in 2023, fava bean planted area is just 55 percent of what it was in 2021.

However, it is possible that a continuation of limited global fertilizer supplies and high fertilizer prices will affect 2023 planting decisions. Further, high fertilizer prices may also impact investment decisions. For example, farmers that have not already adopted precision fertilizing may be more willing to invest in it.

WHEAT EXPORTS – MY 2022/23

Wheat exports are projected to increase year-over-year on increased domestic supplies. Pent up demand driven by relative scarcity last year may lead to frontloaded exports for MY 2022/23.

Durum wheat exports to North Africa (particularly Morocco) and Italy are forecast to increase on larger Canadian durum supplies.

Countries typically reliant on Ukrainian wheat are unlikely to substitute Ukrainian wheat with Canadian wheat, at least not at a 1:1 replacement ratio. Ukrainian wheat has different characteristics (e.g. lower protein) than Canada's most exported wheat, Canadian Western Red Spring, and generally sells at a lower price. Countries that traditionally purchase wheat from Ukraine (such as East African countries) may purchase Canadian wheat to blend with lower-protein wheat purchased from other markets.

Improving Predictability and Transparency in Transportation

Canadian National (CN) Railway and Canada Pacific (CP) Railway are expected to see a total of eight labor agreements expire in late 2022. In advance of a possible lockout or strike, the railway lines typically begin to reduce shipping pace to prepare for the possibility. If an actual stoppage occurs, possible outcomes include: the delay of farmer deliveries into the elevator system, vessel demurrage, contract extension penalties, defaults, declaring force majeure, deferring sales, and further damage to the reputation of Canada's grain handling system. Four labor contracts expired this year, in January and July. However, no major disruptions to the transportation of principle field crops occurred.

Crop 2022 will be the first sizable crop in four years to compete for rail services with other sectors throughout an entire marketing year. In 2020 and 2021, some competing sectors required less

transportation due to the pandemic-induced economic slowdown, and in 2022 less Canadian grain was moved due to Canada’s drought.

The industry-backed “[Canada’s Ready](#)” campaign seeks to assure international buyers that Canada’s grain transportation services will provide timely, predictable service. The campaign also aims to pressure rail and container lines to commit to a transparent plan to move grain.

WHEAT EXPORTS – MY 2021/22

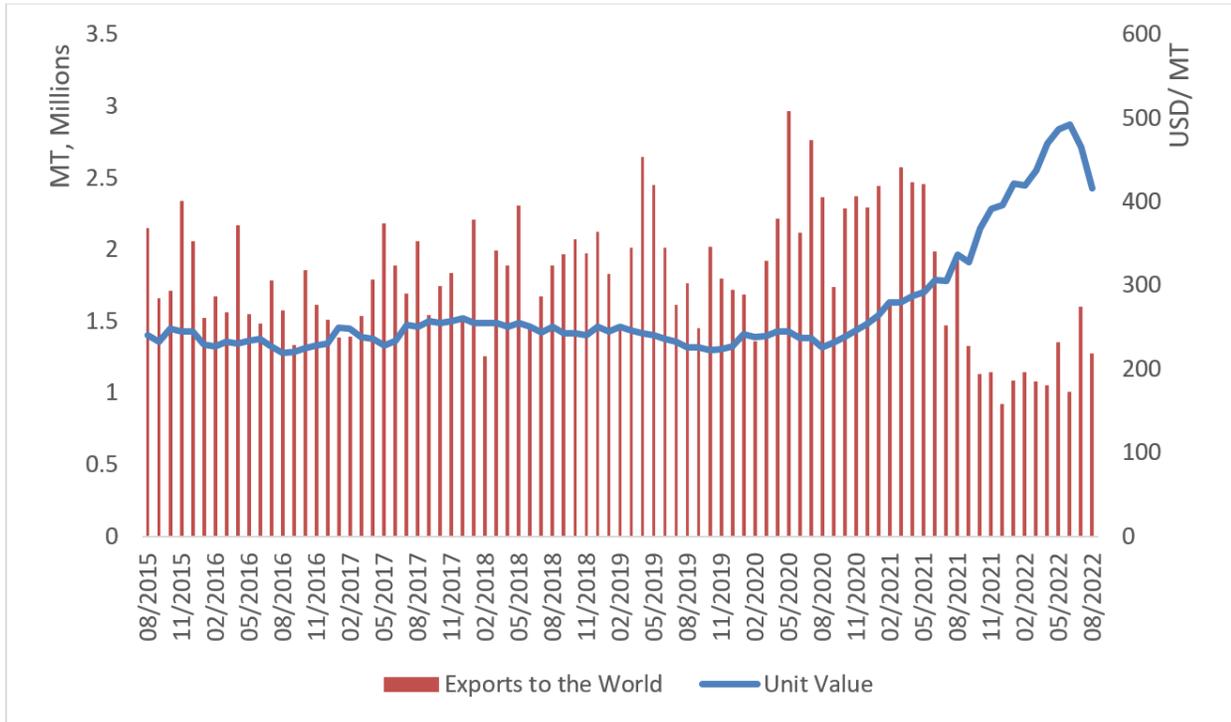
Table 3: Canadian Non-Durum Wheat Exports (1,000 MT)

	2020	2021	2022	5-yr avg (2017- 2021)	2021/ 22 %Δ
World	18,534	20,385	12,109	18,236	-41%
Japan	1,838	1,547	1,627	1,593	5%
Indonesia	2,198	2,280	1,221	2,046	-46%
United States	1,220	1,089	1,112	1,618	2%
Colombia	1,309	1,463	969	1,274	-34%
West Africa	1,135	1,429	893	1,216	-37%
Peru	1,197	1,825	807	1,256	-56%
China	1,806	3,324	690	1,748	-79%
Ecuador	565	869	678	629	-22%
Bangladesh	1,092	1,108	656	1,077	-41%
Nigeria	635	919	481	767	-48%

Source: Created by FAS Ottawa using Statistics Canada data from Trade Data Monitor, LLC

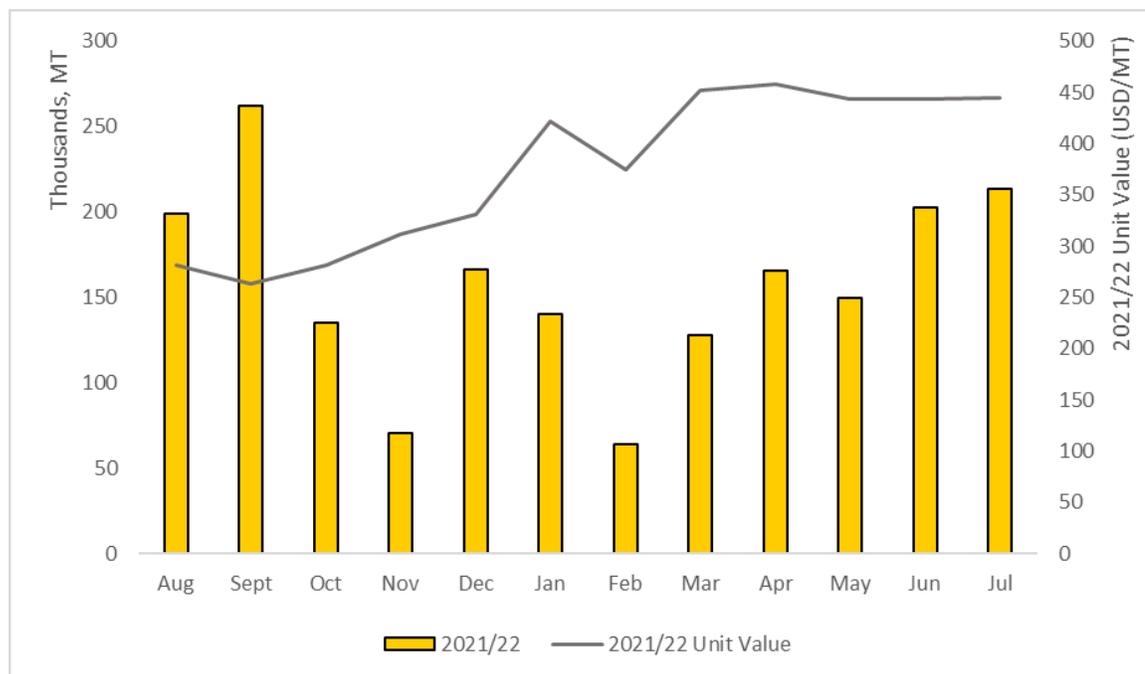
Most major buyers of Canadian wheat imported less wheat in MY 2021/22 than the previous year, due to lower Canadian exportable supplies and rising prices. However, Japan and the United States paid a premium and imported more than the previous year.

Graph 1: Canadian Wheat Exports to the World



Source: Statistics Canada data drawn from Trade Data Monitor, LLC

Graph 2: Canadian Exports of Wheat and Wheat Products to the United States



Source: Created by FAS Ottawa using Statistics Canada data from Trade Data Monitor, LLC

U.S. purchases of Canadian wheat products increased four percent year-over-year, due to stronger U.S. demand and increased Canadian supplies driven by domestic milling capacity expansion in 2022.

Table 4: Canadian Durum Wheat Exports (1,000 MT)

	2020	2021	2022	5-yr avg (2017-2021)	2021/ 22 %Δ
World	5,282	5,752	2,703	5,517	-53%
Morocco	885	1,057	679	971	-36%
United States	501	329	500	415	52%
Algeria	365	1,121	413	743	-63%
Italy	1,257	1,398	301	1,328	-78%
Japan	227	231	202	229	-13%
Nigeria	159	173	123	166	-29%
Belgium	104	306	105	205	-66%
Peru	125	158	73	142	-54%
Venezuela	35	82	70	59	-15%

Source: Created by FAS Ottawa using Statistics Canada data from Trade Data Monitor, LLC

WHEAT IMPORTS – MY 2022/23

Wheat grain imports are projected to remain low. Some demand for feed wheat will be driven by the scarcity of feed grade wheat in a year of high-quality production, but freight rates will determine the level of feed wheat imported. Feed wheat has represented an annual average of only 13 percent of total distribution over the past five years, and only 12 percent of feed wheat consumption was met by U.S. imports. Feed corn and barley are preferred over feed wheat.

U.S. wheat is generally imported primarily for the purpose of feeding livestock, because of sufficient domestic supplies for other end uses and because of Canada's varietal registration system.¹

Post projects that Canadian demand for U.S. wheat products (e.g. flour, pasta) will remain strong in the first three months of the marketing year, similar to the final months of MY 2021/22, and then return to historic levels as Canadian wheat becomes available to domestic millers and processors.

WHEAT IMPORTS – MY 2021/22

Imports of wheat grain increased 13 percent year-over-year and imports of wheat products fell three percent year-over-year.

However, in the second half of MY 2021/22, imports of wheat grain were the weakest since MY 2013/14, while imports of wheat products reached a multi-year high of at least 15 years. This indicates that while Canadian feedlots reduced their purchases of U.S. wheat in the second half of the marketing year, wheat products such as U.S. flour were in high demand.

DOMESTIC CONSUMPTION

Provincial data thus far indicates that the quality of the 2022 wheat crop is high and the supply of feed grade wheat in MY 2022/23 remains low. Low supplies have driven up feed wheat prices to \$450 CDN/MT in Lethbridge, Alberta as of October 21, 2022, from \$420 CDN/MT a year ago, and \$260 CDN/MT in 2020.

Cattle-on-feed levels in Alberta and Saskatchewan have been easing below MY 2021/22 levels since August 2022, which is expected to marginally ease consumption levels of feed grains for cattle, at least in the near term.

¹ The varietal registration system prevents non-registered wheat and barley varieties from receiving a premium (i.e. non-feed) grade in Canada. Most wheat varieties grown in the United States are not registered in Canada.

Table 5: Total Wheat Milled ('000 MT), Marketing Year (Aug to July)

	MY 2018/19	MY 2019/20	MY 2020/21	MY 2021/22
Total wheat milled	3,206	3,218	3,178	3,534
Western red spring wheat milled	2,251	2,279	2,214	2,375
Western amber durum wheat milled	215	234	212	237
Other western wheat milled	105	76	65	108
Ontario winter wheat milled	553	547	584	664
Other eastern wheat milled	81	81	101	151

Source: Statistics Canada; FAS Ottawa

Note: Figures do not add to totals because of rounding

Industry contacts state that the increase in wheat milled is due to Canadians returning to restaurants after pandemic related closures occurred in 2020 and 2021, and increased milling capacity due to the 2022 completion of the Parrish & Heimbecker, Limited (P&H) mill in Hamilton.

According to Statistics Canada data, flour prices were up 24 percent in August 2022 compared with the same month last year, pasta prices were up 21 percent, and bread prices were up 18 percent. In MY 2022/23, consumers are likely to continue to feel the pressure of prices that are higher than historic averages.

The agency states factors contributing to price increases for food include increased fertilizer and natural gas prices, and geopolitical instability stemming from Russia's invasion of Ukraine.

STORAGE STOCKS

MY 2022/23 storage stocks of wheat are projected to increase year-over-year, due to increased domestic supplies. However, pent up international and domestic demand will prevent total stocks from returning to historic averages.

Statistics Canada reports that total stocks of wheat fell 38 percent year-over-year to 3.7 million MT as of July 31, 2022, largely because of lower total supplies. Commercial stocks were down 23 percent year-over-year to 2.7 million MT and on-farm stocks were down 60 percent to 970,100 MT. The decrease in total wheat stocks was driven by both wheat excluding durum (down 39.6 percent to 3.1 million MT) and durum (down 30.5 percent to 565,300 MT).

POLICY

Fertilizer Emissions Reduction

The government of Canada announced a goal to reduce nitrous-oxide emissions from fertilizer 30 percent by 2030. This goal has led to concerns by some producer associations that any requirement to reduce fertilizer will jeopardize food production. However, the Minister of Agriculture Marie-Claude Bibeau [stated](#) that the government is, “not talking about having any intention of limiting the use of fertilizer itself.”

Fertilizer Canada and the Canola Council of Canada [sponsored a study showing that a 14 percent reduction in greenhouse gas \(GHG\) emissions by 2030 can be achieved](#) without jeopardizing food production.

Minister Bibeau reportedly responded that other strategies and innovations can be adopted to achieve a further reduction in GHG emissions.

Attachments:

No Attachments