

## Wheat Market Outlook and Price Report: March 21, 2022

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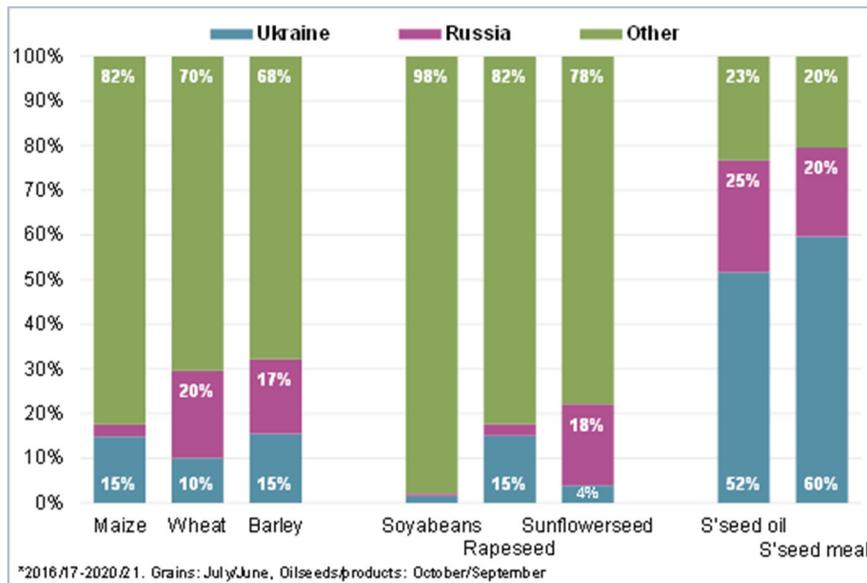
### i) Background and Rationale for the Report

The following wheat market outlook and price report will be published on a weekly basis on the Sask Wheat Website. The report provides producers with an overview of world wheat markets, a market forecast, and benchmark prices at both the primary elevator and export positions (FOB Vancouver or elsewhere).

The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various Saskatchewan locations (Table 1), grain spreads (Table 2), and FOB port prices and basis (as measured by subtracting the primary elevator price (Rosetown) from the relevant port location price for individual crops) (Table 3). Table 3 is preceded by a description of the various assumptions, definitions and methodology used in arriving at the FOB port prices and in the export basis calculation.

### ii) Wheat Market Outlook March 21, 2022

#### Ukraine/ Russia: Share of World Exports by Commodity (IGC):



- With Russia and Ukraine among the world's largest exporters of grains and oilseeds (and oilseed products), the ongoing conflict and resulting spike in agricultural commodity prices has fuelled concerns about potential food security risks, especially in import-dependent countries in Near East Asia and Africa.
- Commercial Black Sea port loadings are currently suspended in **Ukraine**. While the extent of infrastructure losses is unknown, potential damage to port facilities, railroads and storage silos could impact shipments over the longer term.
- Most of **Russia's** Black Sea terminals were operational as of mid-March, but with some ongoing restrictions in the Azov Sea.

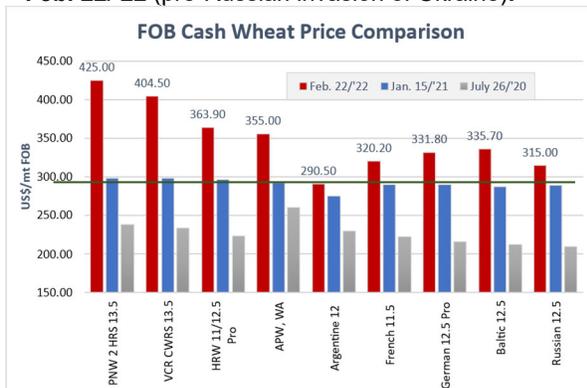
- **Additional exports** from other origins, including India, the US, the EU, and Brazil, will likely only partially offset lower Black Sea shipments over the remainder of the current season.
- With **high prices expected to ration demand**, 2021/22 world wheat and corn trade is forecast to fall short of earlier predictions, while uncertainties prevail for 2022/23.
- According to the IGC analysis, linked primarily to a solid increase in corn output, but with wheat and sorghum crops also larger y/y, **total grains production** is forecast at a record 2,284m mt (+3%) in 2021/22. With feed, food and industrial uses all expected to rise, **world consumption** is pegged 2% higher y/y, at 2,278m mt. After four consecutive years of tightening, **world stocks** are forecast to increase by 1%, *but with much of the upswing tied to an assumed accumulation in Ukraine*. **World trade** is projected to retreat by 3%, as lost Black Sea exports are not entirely offset by increases from other origins.

### Recent Developments in Wheat Demand:

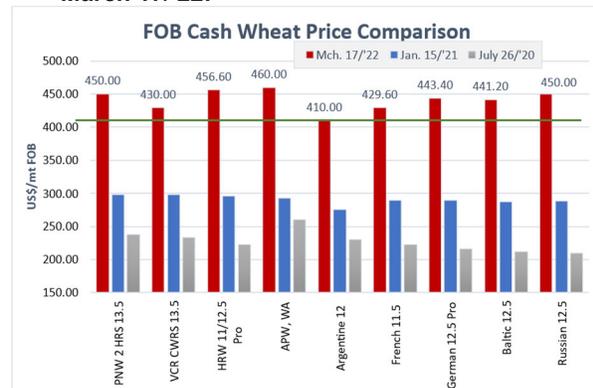
Per IGC: With **high prices expected to ration demand**, 2021/22 world wheat and corn trade is forecast to fall short of earlier predictions, while uncertainties prevail for 2022/23.

It is very difficult to give a true reflection of comparative fob values right now:

#### Feb. 22/'22 (pre-Russian invasion of Ukraine):



#### March 17/'22:



### ➤ Global wheat production and trade:

There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

#### Futures:

- May '22 contract **Chicago winter wheat** closed at 1063-6, down 34-2 cents on Friday, *down 42-6 cents on the week*.
- May '22 contract **Kansas hard red winter wheat** closed at 1070-4, down 21-6 cents in Friday's trade, *down 18-6 cents on the week*.
- May '22 **Minneapolis hard red spring wheat** closed at 1060-2, down 18-6 cents on Friday, *down 10-0 cents on the week*.
- This Monday morning wheat markets are up gain, currently showing 46c to 79c/bu gains, with the strongest gains in Chicago.

CBOT May 2022 Wheat (1 yr.)



KC May '22 Wheat



Minneapolis May '22 Wheat



### General Comment

Once again, a very volatile week as the Russian invasion of Ukraine continues. The Russians now concentrate on securing the ports like Odessa, stopping grain exports. Multinational grain companies like Cargill, ADM, Viterra, Glencore, and Bayer AG continue to work with Russia on Russian exports.

### Canadian Wheat:

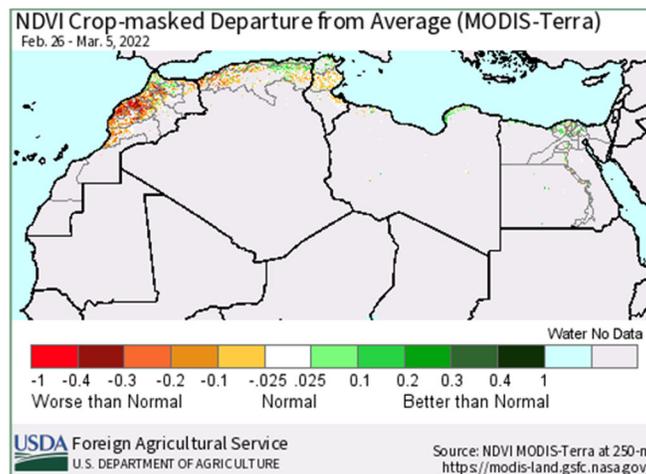
- The war in Ukraine continues to dominate any other news. The ICG reduced their wheat export number for Ukraine by 3.7 million mt to 20.8 million mt. Russia is reportedly blocking 300 cargo ships (most of which are carrying grain) from leaving the Black Sea. There are zero exports out of Ukraine and exports from Russia are “very limited”.
- Canada reportedly sold a number of wheat cargoes (upwards of 50) since the Russian invasion started. Most of this will be wheat as countries scramble to replace Black Sea supplies. *It would be a disgrace if the CP Rail strike/ debacle would impact Canada’s ability to export absolutely everything it can; both towards Canadian farmers selling into this void and towards buyers desperately trying to replace Black Sea grain.* Indeed, we would consider it to be highly irresponsible.
- Canadian wheat exports for week 32 were 237.7k mt. This makes for a season total of 7.3 million mt, or 40% less than last year. We need an average of 294k mt of exports per week to meet AAFC’s new projection. Right now, there are 1.1 million mt of wheat sitting in port locations. The first ship of the season to sail the St. Lawrence Seaway is scheduled to depart on March 24<sup>th</sup> which should aid movement.
- **AAFC** raised Canadian 2021/’22 wheat (excl. durum) exports by 200k mt to 13.2 million mt this week. ’21/22 ending stocks decreased a respective 200k mt to 3.3 million mt. If true, this is disappointingly high.
- *There is a lot of uncertainty in the wheat markets. We think it is time to finish up old crop sales. We recommended getting 50% sold new crop at \$13.00/bu. The window for this has passed for now but would look to take advantage of future opportunities at similar levels.*

(CGC) Grain Handling Summary Wheat		Wk. 32	Mar 13/’22)
(’000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports Dom. Disappearance
Wk. 30	277.6	231.9	281.6 55.6
Week ago	462.2	192.5	210.3 71.2
YTD	9,414.8	8,732.9	6,867.0 2,425.0
Last YTD	12,926.7	13,055.8	11,370.0 2,410.9
<b>YTD less Last YTD</b>	<b>-3,511.9</b>	<b>-4,322.9</b>	<b>-4,503.0 14.1</b>
<b>YTD over Last YTD</b>	<b>73%</b>	<b>67%</b>	<b>60% 101%</b>

- **Durum:** Canada exported another 37.8k mt of durum in shipping week 32. There are 428.3k mt of stocks sitting in eastern ports, which will start moving in the upcoming weeks as the St. Lawrence Seaway opens March 24<sup>th</sup>.

(CGC) Grain Handling Summary Durum		Wk. 32		(Mar 13/'22)
('000 mt)	Prod. Dlvs.	Terminal Rcpts.	Bulk exports	Dom. Disappearance
Wk. 32	27.4	24.8	37.8	4.3
Week ago	33.7	20.6	13.8	5.4
YTD	1,814.6	2,101.8	1,541.6	282.5
Last YTD	4,032.9	4,403.9	3,722.3	354.6
<b>YTD less Last YTD</b>	<b>-2,218.3</b>	<b>-2,302.1</b>	<b>-2,180.7</b>	<b>-72.1</b>
<b>YTD over Last YTD</b>	<b>45%</b>	<b>48%</b>	<b>41%</b>	<b>80%</b>

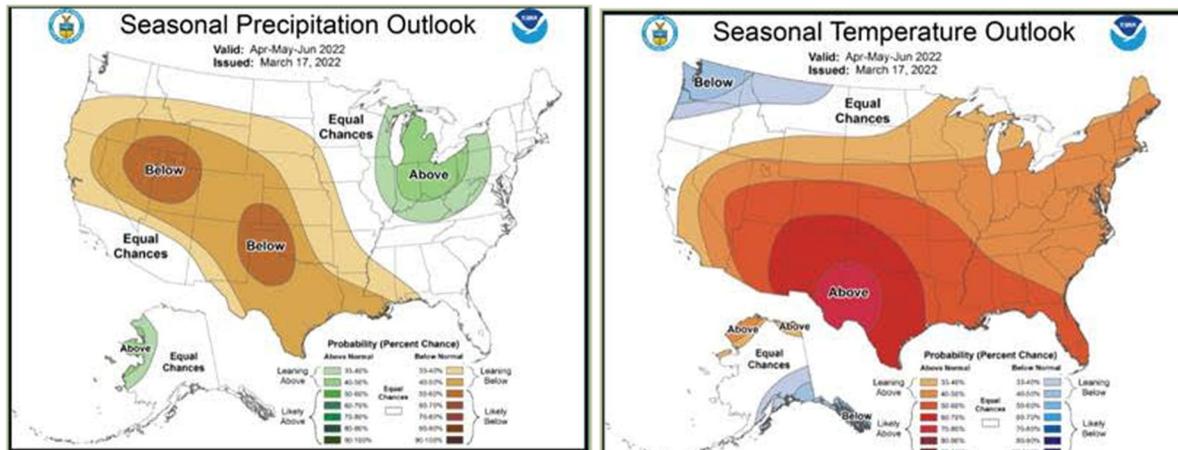
- **AAFC** left the Canadian durum balance sheet unchanged from last month. Exports remain at 2.4 million mt and ending stocks are at 500k mt.
- Problem areas in parts of **Northern Africa** are worsening. Prolonged drought has caused a severe break in crop conditions in Morocco and Algeria. Tunisia received more rain in Dec-Jan that its neighbours to the west, but dry conditions since then are causing soil moisture levels to deteriorate as well.



- *New crop durum prices have been mixed. We have seen \$11.00/bu bids (which is far too cheap) but have also head of ~\$13.75/bu prices recently which is very strong. We are 20% sold.*

## US Wheat:

- The drought over the **US winter wheat belt** is essentially unchanged from last week. Seventy-three percent of the US winter wheat crop is under drought conditions. Over half of the wheat crop in Kansas is under extreme drought which has caused crop rating to fall to 23% Gd/Ex. It does not look like the situation is set to improve much either. On the contrary, precipitation and heat maps show that hot dry weather is expected to continue in the US plains for the remainder of the season.



- Weekly US wheat sales came in at 146k mt for '21/'22, down 53% from the previous week and from the prior 4-week average. Increases primarily for Colombia and to Mexico. Traders had anticipated sales to be between 250k and 600k mt of old crop wheat and below 100k mt of new crop wheat, so were disappointed with the actual sales numbers.
- US HRS for Apr. '22 is valued at \$450.00/ mt FOB PNW (down \$20/mt from last week, and up \$25/mt since Feb. 14), FOB Gulf HRW 11/12.5 pro is valued at \$456.60/mt (down \$23/mt from last week, up \$1.90/mt since Feb. 24).

#### Australian wheat:

- There has been some severe flooding in parts of N and E Australia. It could have an impact on farming there, although most are not planting winter grains for another three weeks, or so. More rain is set to come in the same areas.
- Australian new crop FOB APW wheat for Apr. '22 was quoted at \$460.00/mt, up \$10/mt over the past week.

#### Argentine wheat:

- Argentina's current crop is essentially already committed.
- April shipment Argentine 12% pro wheat was valued at ~\$410.00/mt FOB, down \$20/mt from the previous week.

#### EU wheat:

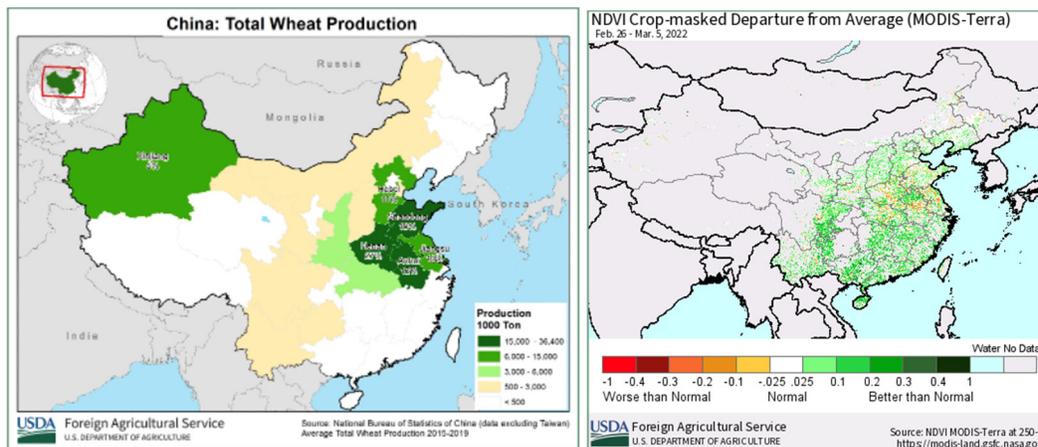
- Matif slumped €23/mt on article in the FT about peace talks between Russia and Ukraine, and additional weakness came from reports that the French feed manufacturers had asked their Govt to guarantee that 800k mt - 1 million mt of grain (presumably corn & wheat) be made available each month for the compound feed industry. The Govt refused the request and instead offered €400 million in direct aid to the livestock sector.
- Matif May milling wheat currently is up €14.50/mt this Monday.
- FranceAgriMer saw French new crop wheat conditions as 92% good/very good as of March 14.
- Fob prices in the EU: April '22 French 11.5 pro closed at \$429.60/mt, down \$8.90/mt from last week (up \$109.40/mt since Feb. 24). Apr. German 12.5 pro wheat closed at \$443.40/mt, down \$5.70/mt (up \$111.40/mt since Feb. 24). Apr. Baltic 12.5 pro wheat was at \$441.20/mt, down \$25.70/mt (up \$109.30/mt since Feb. 24).

## Black Sea wheat:

- Commercial Black Sea port loadings are currently suspended in **Ukraine**. While the extent of infrastructure losses is unknown, potential damage to port facilities, railroads and storage silos could impact shipments over the longer term.
- Most of **Russia's** Black Sea terminals were operational as of mid-March, but with some ongoing restrictions in the Azov Sea.
- There are zero exports out of Ukraine and exports from Russia are “very limited”.
- For the **new crop, wheat production in Ukraine** is expected to fall 2.3 million mt as total area and yield deteriorate due to an inability to perform field work (40% of Ukraine’s wheat area is near a conflict zone) and an inability to source inputs (especially fuel) and labor. These estimates are under the assumption that most farmers will be able to carry out fieldwork in April and that a cease fire is reached within several weeks.
- Private firm SovEcon’s preliminary outlook for Ukrainian wheat output in the coming year suggests the country could produce 26 million tonnes. That would be an overall 8% drop year over year if a ceasefire agreement was signed within the next several weeks.
- Russia is now concentrating on securing the Ports like Odessa, stopping grain exports, decimating Ukrainian cities and killing civilians...

## China:

- China stated that their winter wheat crop is in the worst condition in history. This is a surprising statement given the Chinese government usually likes to paint a fairly rosy story about their crops. Most (68%) of China’s wheat is grown in the Shandon, Henan, Jiangsu and Anhui provinces. While there are some trouble spots showing up on crop vegetation maps, it is too early to write off the crop and we think the announcement is to help Russian prices.



- Note: The highlighted area accounts for 68% of all of China’s wheat production

## ➤ Significant purchases/ trades:

- **Turkey** bought wheat at increased prices (cheapest offers were at \$450/mt).
- The **Philippines** tendered last week for a total 270k mt feed wheat for various shipments from May through October.
- **Bangladesh** is looking for 50k mt of optional origin milling wheat. There were 3 participants and offers ranging from \$409.97-\$442.38/mt.
- **Japan's** MAFF is doing an 80k MT wheat auction for Aug 25 delivery. There is Japan’s regular tender is for 104k mt of wheat from the U.S., Canada, and Australia.
- **Iraq** is seeking a nominal 50k tonnes of hard wheat, with their lowest offer coming from Australia at \$528/tonne C&F; no purchase has yet been made.

- **Weekly US wheat sales** at 146k mt for '21/'22 (down 53% from the previous week and from the prior 4-week average) were very disappointing to the trade.

➤ **Wheat Market Outlook:**

**Significant events:**

- The **war in Ukraine** continues to dominate any other news. The ICG reduced their wheat export number for Ukraine by 3.7 million mt to 20.8 million mt.
- Commercial Black Sea port loadings are currently suspended in **Ukraine**. While the extent of infrastructure losses is unknown, potential damage to port facilities, railroads and storage silos could impact shipments over the longer term.
- Most of **Russia's** Black Sea terminals were operational as of mid-March, but with some ongoing restrictions in the Azov Sea.
- With **high prices expected to ration demand**, 2021/22 world wheat and corn trade is forecast to fall short of earlier predictions, while uncertainties prevail for 2022/23.
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- FranceAgriMer saw **new crop wheat conditions in France** as 92% good/very good as of March 14.
- **Canada** reportedly sold a number of wheat cargoes (upwards of 50) since the Russian invasion started. Most of this will be wheat as countries scramble to replace Black Sea supplies. *It would be a disgrace if the CP Rail strike/ debacle would impact Canada's ability to export absolutely everything it can; both towards Canadian farmers selling into this void and towards buyers desperately trying to replace Black Sea grain.*

**Outlook:**

It seems that Russia is not going to back off and will continue their invasion of Ukraine. The West is incapable of stopping it, so the markets will continue to be very volatile. On the one hand, extremely high prices will eventually ration demand, while a 'long war' will ratchet up the risk of major supply losses. Meanwhile, exporting countries and their farmers continue to be able to achieve record prices for their grain. Canada should be increasing current crop exports to the maximum. – The CP rail strike at this time is unreasonable and should be stopped.

We think it is time to finish up old crop sales. We recommended getting 50% sold new crop at \$13.00/bu. The window for this has passed for now but would look to take advantage of future opportunities at similar levels.

### iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MILLION MT

Date: 21-03-2022					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		May '22 (bu.)	May '22 (mt)
1 CWRS 13.5	\$12.68	\$465.91	1 CWRS 13.5	\$12.82	\$471.06
1 CWAD 13.0	\$15.61	\$573.57	1 CWAD 13.0	\$15.14	\$556.30
1 CPSR 11.5	\$11.68	\$429.17	1 CPSR 11.5	\$11.89	\$436.89
SW Sask			SW Sask		
1 CWRS 13.5	\$12.62	\$463.71	1 CWRS 13.5	\$12.76	\$468.85
1 CWAD 13.0	\$15.60	\$573.21	1 CWAD 13.0	\$15.20	\$558.51
1 CPSR 11.5	\$11.74	\$431.37	1 CPSR 11.5	\$11.78	\$432.84
NE Sask			NE Sask		
1 CWRS 13.5	\$12.46	\$457.83	1 CWRS 13.5	\$12.56	\$461.50
1 CWAD 13.0	\$15.82	\$581.29	1 CWAD 13.0	n/a	
1 CPSR 11.5	n/a		1 CPSR 11.5	n/a	
SE Sask			SE Sask		
1 CWRS 13.5	\$12.42	\$456.36	1 CWRS 13.5	\$12.56	\$461.50
1 CWAD 13.0	\$15.58	\$572.47	1 CWAD 13.0	n/a	
1 CPSR 11.5	\$11.51	\$422.92	1 CPSR 11.5	\$11.74	\$431.37

Data source: PDQ, March 21/'22

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MILLION MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.10)	(3.67)
1 CWRS 12.5	(0.02)	(0.85)
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.00	0.00
2 CWAD 13.5	(0.09)	(3.31)
2 CWAD 12.5	(0.11)	(4.04)

Data source: PDQ, March 21/'22

### iv) FOB Wheat Prices and Export Basis Calculation

#### Background and Rationale:

Reporting FOB prices at port position and primary elevator prices allows the reader to gain an understanding of both local and international wheat prices and to understand the relationship between the two, as measured by the export basis. Export basis can be defined as FOB port position prices minus the primary elevator prices at any given prairie delivery location and is therefore reflective of transportation costs plus any premiums being captured by terminal grain elevator companies or the railway companies, at any given time.

In general, a widening basis is indicative of decreasing system performance in terms of either reduced port capacity or rail service, or both. A narrowing basis is indicative of increased available port capacity and/or better ability of the railways to provide ample service to grain shippers. In this regard, tracking these prices over time has value both in terms of producers being able to time the selling of their grain but also in terms of evaluating and setting policy related to various transportation and capacity issues.

Gray (2015) has calculated a normal basis to be in the range of C\$72/million mt. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/million mt, which indicated an inability of the grain handling and transportation system to adequately handle the record crop produced that year. This occurrence has highlighted the need to improve the level of rail service and take measures to expand port capacity where possible. It has also underscored the need for better price transparency and market information within the grain sector.

### Assumptions, Definitions, and Methodology

The following background information should assist in understanding and interpreting international market signals and to relate them to the 'local' Saskatchewan wheat market:

- The price information generated for the weekly report is designed to show farmers at what price levels several wheat classes are trading at local primary elevators (Table 1) and in nearby international markets (Table 3). To express the Export Basis<sup>1</sup> (see *Export Basis* in Table 3) defined as Canadian. FOB Prices minus primary elevator bids, the FOB prices are translated into Canadian dollars from US dollars and compared to current actual primary elevator Street prices at Rosetown, Saskatchewan (see *Street Prices* in Table 3). Rosetown is used as a proxy for all primary elevators in the basis calculation. The actual handling and transportation costs from the West Coast to delivered elevator (Rosetown area) range from ~C\$58.00-C\$74.72/million mt, depending on number of cars moved and elevator used.
- Approximate relationship between U.S. wheat classes and Canadian wheat classes:
  - DNS 14% in the Pacific Northwest (PNW) ≈ 1 CWRS 13.5% in Vancouver
  - HRS in the Pacific Northwest (PNW) ≈ 2 CWRS 13.0% in Vancouver
  - HRW in the Pacific Northwest (PNW) ≈ 3 CWRS in Vancouver
  - SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
  - HAD (Lakes) ≈ CWAD (Thunder Bay/ Lawrence)
- Abbreviations: DNS (Dark Northern Spring Wheat); HRS (Hard Red Spring Wheat); HRW (Hard Red Winter Wheat); SW (Soft Wheat); HAD (Hard Amber Durum Wheat); CWRS (Canadian Western Red Spring Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)
- Hard wheat price calculations:  
Exporters in Western Canada generally derive their primary elevator wheat prices from HRS values at the West Coast (Pacific Northwest - PNW).

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<sup>1</sup> Gray, R.S. (2015). The Economic Impacts of Elevated Export Basis Levels on Western Canadian Grain Producers 2012/13, 2013/14 and 2014/15.

“The difference between FOB Vancouver prices and the Saskatchewan elevator cash bids to producers is referred to as export basis: Basis can refer to the difference between any two prices. As the largest volume port, Vancouver FOB, minus the elevator bid prices representative measure of the “export” basis for grains in Western Canada.”

Similarly, HRW values are used for lower grade (3) CWRS.

- West Coast HRS and HRW values essentially dominate the international hard wheat trade and determine its basic value.
- If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium

➤ Durum wheat price calculations:

The primary export route for Canadian durum wheat is still through Thunder Bay, not the West Coast of Canada.

- Nevertheless, the Pacific Coast has increased in importance for durum over time with 38% of total export volume crop year to date.
- Italy is the single biggest buyer of Canadian durum wheat with 27% of total Canadian durum exports YTD (East Coast shipments).

➤ Optional origin grain sales:

Most major international grain companies sell 'optional origin' wheat to their customers and often cover their sales 'at best' closer to the shipment position. The Canadian grain system is not conducive to servicing optional origin sales because the volume of wheat kept in storage in port today is much smaller than prior to deregulation of the Canadian wheat market.

**Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT**

Relevant FOB Prices and Export Basis				21-03-2022
Type of Wheat	FOB Prices CDA <sup>1</sup> (calculated)		Street Prices	Export Basis <sup>2</sup>
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$553.96	\$756.37		
HRS	\$547.01			
HRW 11.5	\$574.81			
SWW 12.0	\$539.14			
1 CWRS 13.5 <sup>3</sup>	\$553.96		\$489.80	\$64.16
2 CWRS 13.0 <sup>3</sup>	\$547.01		\$485.76	\$61.26
3 CWRS <sup>3</sup>	\$574.81		\$476.57	\$98.24
CPS <sup>3</sup>	\$532.66		\$437.62	\$95.03
1 CWAD <sup>4</sup>		\$749.89	\$551.16	\$198.73
<b>Competing wheat:</b>				
	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$450.00	April		
French 11.5 (Rouen)	\$429.60	April		
APW 10.5 (W Coast)	\$460.00	April		
Argentina 12.0	\$410.00	April		

<sup>1</sup> FOB Prices CDA = FOB US\$ converted into Canadian Currency

<sup>2</sup> Export Basis = FOB Prices CDA minus Cdn. Street Price

<sup>3</sup> DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS

<sup>4</sup> Values derived to Lakehead FOB