The impact of COVID-19 on the grains and oilseeds sector: 12 months later

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Abstract

Brewin (2020) was optimistic about the fate of the Canadian grains and oilseeds sector in 2020 as the COVID-19 pandemic descended on the world. The sector did generate a large crop and, towards the end of 2020, saw a lift in prices. This contributed to record farm income in Canada in 2020. The pace of grain and oilseed exports in Canada and ethanol demand in the east were affected by COVID-19, but the forecast of a “near normal” 2020 was relatively accurate. Production and prices stayed on track, largely because the world did not impose significant new barriers to trade in cereals and oilseeds and because these sectors have distanced labor in virtually every step of the supply chain which protected these markets from this pandemic. The dominant price factor for the sector remains global demand that had been growing before 2020 relative to the pace of production and may have been stimulated by deficit budgets around the world. Compared to the tight global stocks, COVID-19 had a minor impact on grain prices which led to steady production worldwide and in Canada. We are still waiting for more evidence to assess the role of federal coordination in the success of the grains and oilseed sector in 2020, but Canada’s past participation in trade and safety protocols based on science allowed the grains and oilseed sector in Canada to earn a very good income in 2020.

Résumé

Brewin (2020) était optimiste quant au sort du secteur canadien des céréales et des oléagineux en 2020 alors que la pandémie COVID-19 s’abattait sur le monde. Le secteur a généré une récolte importante et, vers la fin de 2020, a connu une hausse des prix. Cela a contribué à un revenu agricole record au Canada en 2020. Le rythme des exportations de céréales et d’oléagineux au Canada et la perte de la demande d’éthanol dans l’est ont été touchés par le COVID-19, mais la prévision d’une année 2020 « presque normale » était relativement précise. La production et les prix sont restés sur la bonne voie, en grande partie parce que le monde n’a pas imposé de nouvelles barrières importantes au commerce des céréales et des oléagineux et parce que ces secteurs ont une main-d’œuvre distancée à pratiquement chaque étape de la chaîne d’approvisionnement ce qui a protégé ces marchés de cette pandémie. Le facteur de prix dominant pour le secteur reste la...
1 | AN OVERVIEW OF 2020

In Brewin (2020), I suggested “a near normal year” in the Canadian grains and oilseed sector in 2020. This was based on my support for the estimates made in the Agriculture and Agri-food Canada March, 2020 Outlook for Principal Field Crops. By the time I was writing that article, we already knew a lot about the transmission of the virus and which supply chains were most likely to face problems. Gray (2020) correctly forecasted an improvement in bulk grain transportation of grain movement because of lower demand for rail crews for intermodal/container movements and for other commodities. This left more capacity to move grain. Vercammen (2020) noted the market expectations regarding the eventual abatement in the short run surge in flour and longer term income concerns. Vercammen also suggested a drop in demand for grains used in ethanol because of the many people working from home. Barichello (2020) noted a reluctance to hamper trade in staples for most of the world’s exporters and major importers. I predicted a modest impact on grains and oilseed production in agreement with the Agriculture and Agri-Food Canada (AAFC) March report and against any real threat to the provision of staple foods in Canada. I also suggested an important role for the Value Chain Roundtables to improve coordination in the supply chain that could help the food supply chains move quickly to address border issues for trucking to avoid disruptions in both bulk grain exports and imported foods. Previous policy supporting science based trading rules and safety protocols played a role in protecting this supply chain.

The AAFC March 2020 forecast for 2019/20 ending stocks for spring wheat and canola at 5.0 and 3.3 million tons were within 5.1% of the actual stocks. These kinds of shifts in Canada are unlikely to affect prices. The February, 2021 AAFC reporting of average prices for the 2019/2020 crop year are within the range of the March 2020 forecasts for wheat, canola, corn and soybeans (AAFC, 2020; AAFC, 2021a). Actual production from grains and oilseeds in 2020, according to current estimates, was 90.4 million tons (AAFC, 2021a). This is above the March 2020 estimate of 88.1 million tons (AAFC, 2021a), but within 3%; a fair estimate given the vagaries of the weather between March and September (the month harvest is over for most of Canada). With a historically high level of production and a run on prices into the end of 2020, AAFC is predicting a record for farm incomes in 2020 led by gains in the grains and oilseed sector (AAFC, 2021b). With all of that production and 13.3 million tons of grains and oilseed stock at the time of harvest (AAFC, 2021a), Canadians never faced a true threat of a shortage in flour or cooking oil or calories assuming a well-functioning distribution system and adequate incomes.

2 | WHERE DID COVID – 19 HAVE AN IMPACT?

2.1 | Ethanol

Although others mentioned a potential reduction in ethanol demand in their comments in the 2020 special issue (see Vercammen (2020) and Weersink et al. (2020)), it was not mentioned in my grains and oilseeds overview last spring. In their March 2020 outlook AAFC (2020) mentioned the March, 2020 USDA forecast for an increase in ethanol production.

1 March 19, 2020 AAFC Canada: Outlook for Principal Field Crops, 2019/2020 price ranges for 2019/2020 in $/ton: non-durum wheat 215-235; corn 190-220; canola 465-495; soybeans 400-430. February 17, 2021 AAFC Canada: Outlook for Principal Field Crops, average prices for 2019/2020 in $/ton: non-durum wheat 225; corn 195; canola 484; soybeans 419(AAFC, 2020 and AAFC, 2021a).
By June 2020, the weekly demand for gasoline in the US had dropped below 80% of the five year average for 10 weeks in 2020 and below 60% for 3 weeks. This led to a reduction in the demand for ethanol and thus for grains used in ethanol production in the U.S. Figure 1 shows weekly demand for gasoline from the beginning of 2014 up to early 2021. COVID-19 clearly had an impact on fuel demand and, through mandated shares, on ethanol, early on in the pandemic.

The Grain Growers of Canada flagged poor ethanol demand in Ontario as a reason for expanded government revenue insurance in their evidence to the May 29th Standing Committee on Agriculture (Nielsen, 2020). According to Statistics Canada (2021a) the monthly average corn prices for May 2020 was $212 per ton which was down 2.5% from March but still 9.3% higher than the 5 year average from 2014–2019. With a rebound in prices in the fall, it is unlikely that the revenue insurance for eastern Canadian grain farmers were triggered in 2020 by COVID-19 related events. There were reports of ethanol plant closures and reduced production in Canada, but increased demand from the EU for biofuels and in the form of hand sanitizers have led to actual food and industrial use and total Canadian use for wheat and corn ending up very close to the March 2020 estimates (USDA, 2020). 2019/20 actual and 2020/21 forecasts for industrial wheat use and total wheat use in Canada were higher than forecasted in March 2020. The actual corn use for the 2019/20 crop year, and in current 2020/21 AAFC forecasts, remains within 1% of the March 2020 forecasts (AAFC 2020; AAFC, 2021a).2 US corn used for ethanol fell by 9.8% in 2019/20 from 2018/19 levels and is staying low in 2020/21 in recent forecasts (USDA, 2020). Total domestic corn use in the US also fell but higher exports in the fall of 2020 and early 2021 have led to tight US corn stocks and higher prices.

### 2.2 The pace of grain and oilseed exports

As noted above, Gray (2020) correctly predicted increased bulk grain shipments by rail due, at least early in 2020, to reduced use of rail crews for oil and intermodal/container traffic. As well, the 2018 adjustments to the calculation of eligible costs in the Maximum Revenue Entitlement (MRE) in the Canada Transportation Act created a separation between rail firms for certain fixed costs. The MRE sets allowable rates for grain rail movement to export position tied to costs. It effectively encourages railways to move higher volumes and earn the MRE on every tonne shipped. The 2018 adjustments sparked immediate announcements by both major railways of investments in more efficient grain cars and in other infrastructure. The new rules let them count these costs in their MRE fees for hauling grain. Thousands of cars paid for by these investments became part of the fleet in 2020. This coupled with expansions in the capacity of grain terminals in Vancouver added to the efficiency of the supply chain. All of this helped the grain transportation and handling sector move 44.8 million tons of grains and oilseeds to export position in the 2019/2020 crop year. This was higher than expected in March 2020. With record movement in the fall of 2020, the February 17, 2021 AAFC forecast for grains and oilseed exports through 2020/21 is 50.2 million tons. This would be a new record for grains and oilseed exports.

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2 March 19, 2020 AAFC Canada: Outlook for Principal Field Crops, 2019/2020 estimates for Food and industrial use in ‘000 tonnes: corn 5,300; Estimates for Total Use: non-durum wheat 8,518; corn 14,258. February 17, 2021 AAFC Canada: Outlook for Principal Field Crops, actual 2019/2020 Food and industrial use in ‘000 tonnes: non-durum wheat 3,585, corn 5,303; 2019/20 actual Total Use: non-durum wheat 8,816; corn 14,331. Forecasted 2020/2021 Food and industrial use: non-durum wheat 3,730, corn 5,300; Forecasted 2020/2021 Total Use: non-durum wheat 8,516; corn 14,123 (AAFC, 2020 and AAFC, 2021a).
The improved efficiency in rail movement means farmers in the middle of Canada may see a bigger share of export prices. This could be part of the canola price run noted below. The canola futures contract price is based on delivery to elevators close to Saskatoon. By the end of 2020, the pandemic may have actually driven up the demand for intermodal rail movement, as remote buyers started to use some of their disposable income to buy manufacturing goods normally shipped in containers on intermodal rail cars. Certainly, intermodal traffic returned to pre-COVID-19 levels late in 2020. But even as intermodal traffic began to grow in late 2020, Canada had large grain movements at the end of 2020. Figure 2 shows that the cyclical crop and intermodal rail traffic in the spring of 2020 dropped lower than in the previous 2 years, but by the fall things had picked up and both grain and intermodal movements were reaching new highs. Again, COVID-19 had an impact but it was muted by world demand and expanded capacity in transportation infrastructure.

2.3 A commodity price boom

Vercammen (2020) mentioned the potential for a commodity price increase due to institutional investors moving out of equities and into agricultural assets in the face of uncertainty related to the eventual impacts of COVID-19. This could be part of the increased prices for commodities generally at the end of 2020, but global stock markets have returned most of their value lost in early 2020. Income growth in the developing world and a trend towards tight stocks could be bullish for grain prices in 2021 and beyond. Chinese imports of corn and soybeans in 2020 have been particularity robust (USDA, 2020). Despite larger global wheat, corn and soybean crops in 2020, total use has increased even faster (USDA, 2020). US stocks of soybeans are particularly low, with 2020/21 ending stocks forecasted at 3.8 million tonnes. This is down from 24.7 and 14.3 million tonnes in 2018/19 and 2019/20, respectively. Even with a higher Canadian dollar driven by higher oil prices, the world stock situation has been good for Canadian grain prices. Figure 3 shows weekly Manitoba canola
prices from 2015 to early 2021. The recent canola price spike is now higher than the highest level reached during the global financial crisis.

Similar to the wheat situation discussed by Vercammen (2020) last year, the forward contracts for canola are much lower. The ICE Canola contract for May 2022 is $140 per ton or 19% lower than the May 2021 contract as of closing on March 1, 2021. Like in the U.S. soybean market, Canadian canola stocks are also very low. Forecasted stocks of 700,000 tons for 2020/21 are down 78% from stock levels in the summer of 2020. Generally the stock position has overridden any negative price impacts caused by COVID-19.

2.4 | Stimulus impacts

A major failing of much of the forecasts for the agricultural sectors in the face of the COVID-19 pandemic was the incorporation of the willingness of central governments to borrow to meet the basic needs of their people through 2020. In Canada, the wide spread support to unemployed and under employed workers led to record levels of disposable income per capita in the second and third quarters of 2020 (Statistics Canada, 2021b). Similar state responses around the world could be part of the increased use of grains and oilseeds in the 2019/20 and 2020/21 crop years (USDA, 2020). As public debt levels grow, the capacity for this level of support will fall off, but increased household savings due to imposed retail shutdowns could lead to expanded growth as the world gets back to normal.

3 | WHAT IS STILL UNKNOWN?

Many of the impacts forecasted in articles of the CJAEC COVID-19 special issue in 2020 are still unrolling (Ker and Cardwell, 2020). Long run income and trade effects from COVID-19 are still sorting themselves out. Many of the forecasts suggested in the special issue will take longer than 12 months to confirm. Overall, government policies to protect trade and manage the numerous impacts of the pandemic have mitigated the potential damages that could have been leveled against the grains and oilseeds market. As noted in Brewin (2020), the rapid identification of transportation and farming as essential services was key to reducing the potential impacts of the pandemic on access to the U.S. and other markets in terms of needed inputs and in terms of buyers for Canadian grain production.

Brewin (2020) noted a key role for the Value Chain Roundtables. I still feel these Roundtables helped address key concerns in 2020 and will play a key role in preparing Canada for any future crisis, but this is difficult to confirm without more transparency. The grains and oilseeds supply chains suffered less disruption because trade routes remained open and processing in these sectors was less prone to be affected by this pandemic. That may not always be the case. At least according to official sanctions, minor pests in seed exports have led to significant trade disruptions with China (Cardwell and Brewin, 2019). Previously innocuous things, like a flu virus, can still potentially create havoc in important supply chains. The BSE crisis in the beef sector shows us the devastation to a sector when it loses exports representing 50% of its demand (CAFTA, 2021). Canadian wheat and canola producers export over 75% of their crop as seeds or products (CAFTA, 2021). Imagine the devastation to these markets if trade was completely shut off. Federal trade policy and safety protocols based on science have helped protect the sector. That policy benefited from transparent discussions. Supply chain coordination could benefit from the same openness.

4 | CONCLUSIONS

While the suggestion last spring of “a near normal year” for grains and oilseeds missed significant shifts in ethanol demands and the pace of exports, in the end, 2020 production was near normal and prices were very good after a modest dip in the spring. This lead to forecasted record farm incomes in the Canadian grains and oilseeds sector for 2020. A rise in export demand from China, for biofuels in the EU, and for sanitizers from the health sector in North America, has left current grains and oilseed stocks quite low. The recent spikes in various grain and oilseed prices will likely lead to increased input use and large crops in 2021. If those crops do not materialize, prices could remain robust for an extended period. This would make the value of supply chain coordination in the event of future interruptions even greater. Bottlenecks in our supply chains or breakdowns tied to trade restrictions represent greater losses as prices increase and make the value of a coordinated effort by the industry and regulators even more important. I repeat my request of last spring regarding the
assessment of the Value Chain Roundtables designed to address this coordination. The quick response to identify essential services in trucking and processing provides some evidence of effective coordination, but “more transparency regarding the work of these roundtables, in this time of national anxiety, would be welcome”.

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**REFERENCES**

Agriculture and Agri-Food Canada (AAFC). (2020). Canada: Outlook for Principal Field Crops, March 19, 2020. *AAFC, Market Analysis Group*. [http://multimedia.agr.gc.ca/pack/pdf/fco-ppc_20200319-eng.pdf](http://multimedia.agr.gc.ca/pack/pdf/fco-ppc_20200319-eng.pdf) (Accessed February 27, 2021)

Agriculture and Agri-Food Canada (AAFC). (2021a). Canada: Outlook for Principal Field Crops, February 17, 2021. *AAFC, Market Analysis Group*. [http://multimedia.agr.gc.ca/pack/pdf/fco-ppc_2021_02-eng.pdf](http://multimedia.agr.gc.ca/pack/pdf/fco-ppc_2021_02-eng.pdf) (Accessed February 27, 2021)

Agriculture and Agri-Food Canada (AAFC). (2021b). Farm Income Forecast results for 2020 and 2021. [https://www.agr.gc.ca/eng/canadas-agriculture-sectors/sector-overviews-data-and-reports/farm-income-forecast-results-for-2020-and-2021/?id=16235472942](https://www.agr.gc.ca/eng/canadas-agriculture-sectors/sector-overviews-data-and-reports/farm-income-forecast-results-for-2020-and-2021/?id=16235472942) (Accessed February 27, 2021)

Barichello, R. (2020). The COVID-19 pandemic: Anticipating its effects on Canada’s agricultural trade. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 219–224.

Brewin, D. G. (2020). The impact of COVID-19 on the grains and oilseeds sector. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 185–188.

Canadian Agri-Food Trade Alliance (CAFTA). (2021). Export Statistics. [http://cafta.org/agri-food-exports/](http://cafta.org/agri-food-exports/) (Accessed February 27, 2021)

Cardwell, R., & Brewin, D. G. (2019). Blackleg or blackmail? Economics of the Canada–China canola trade dispute. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 67(3), 251–260.

Gray, R. S. (2020). Agriculture, transportation, and the COVID-19 crisis. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 239–243.

Ker, A. P., & Cardwell, R. (2020). Introduction to the special issue on COVID-19 and the Canadian agricultural and food sectors: Thoughts from the pandemic onset. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 139–142

Manitoba Agriculture and Resource Development (MARD). (2021). Grains and oilseed market prices. [https://www.gov.mb.ca/agriculture/markets-and-statistics/crop-statistics/grains-oilseeds-market-prices-current-year.html](https://www.gov.mb.ca/agriculture/markets-and-statistics/crop-statistics/grains-oilseeds-market-prices-current-year.html) (Accessed February 27, 2021)

Nielsen, J., (Chair of the Board, Grain Growers of Canada). ((2020). May 29). Testimony to the Standing Committee on Agriculture, Parliament of Canada. *AGRI-13*. [https://www.ourcommons.ca/DocumentViewer/en/43-1/AGRI/meeting-13/evidence](https://www.ourcommons.ca/DocumentViewer/en/43-1/AGRI/meeting-13/evidence) (Accessed February 27, 2021)

Renewable Fuels Association (RFA). (2021). Weekly Ethanol Supply and Demand. Historical Data. [https://ethanolrfa.org/statistics/weekly-monthly-ethanol-supply-demand/](https://ethanolrfa.org/statistics/weekly-monthly-ethanol-supply-demand/) (Accessed February 27, 2021)

Statistics Canada. (2021a). Farm product prices, crop and livestock, monthly. Table 32-10-0077-01. [https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210007701](https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210007701) (accessed February 27, 2021)

Statistics Canada. (2021b). Current and capital accounts - Households, Canada, quarterly. Table 36-10-0112-01. [https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610011201](https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610011201) (Accessed February 27, 2021)

Statistics Canada. (2021c). Railway carloading statistics, by total tonnage transported. Table 23-10-0216-01. [https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2310021601](https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2310021601) (Accessed February 27, 2021)

United States Department of Agriculture (USDA). (2020). Overview of COVID-19 Impacts on Canadian Agriculture. *USDA, Foreign Agricultural Service*. [https://www.fas.usda.gov/data/canada-overview-covid-19-impacts-canadian-agriculture](https://www.fas.usda.gov/data/canada-overview-covid-19-impacts-canadian-agriculture) (Accessed February 27, 2021)

United States Department of Agriculture (USDA). (February). (2021). World Agricultural Supply and Demand Estimates. *USDA, Agricultural Marketing Service*. [https://www.usda.gov/oce/commodity/wasde](https://www.usda.gov/oce/commodity/wasde) (Accessed February 27, 2021)

Vercammen, J. (2020). Information-rich wheat markets in the early days of COVID-19. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 177–184.

Weersink, A., von Massow, M., & McDougall, B. (2020). Economic thoughts on the potential implications of COVID-19 on the Canadian dairy and poultry sectors. *Canadian Journal of Agricultural Economics/Revue canadienne d’agroeconomie*, 68(2), 195–200

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