

COVID-19: SUSTAINABLE AGRICULTURE PRODUCTION KEY FOR CANADA

EDC Economics

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SUMMARY

- The agriculture and agri-food sector has performed well throughout the pandemic. Record high agriculture prices are driving increased production of crops, as inventories shrink and exports boom to meet increased external demand.
- The desire for sustainable agriculture production is a growing global trend, with key concerns about food security and climate change. Canada is known for its high quality, regulatory and safety standards, and reliable supply. As such, Canada's positive brand is a major selling point, which supports an expansion of its agriculture exports. Meeting global and domestic food demand isn't only a matter of growing and producing more food, but also growing and producing food better, smarter, and more sustainably.

GLOBAL CONTEXT

Canada is a major player on the global agri-food stage. Since 2011, Canada has ranked as the world's fifth-largest exporter of agricultural commodities and the 11th-largest provider of agri-food, supplying the world with a diverse array of products. In 2020, our agriculture and agri-food exports totalled \$73.8 billion, an 8% jump over 2019. The agriculture sector performed better than most during the pandemic, despite dealing with COVID-19 restrictions, supply chain disruptions and generally, weaker economic activity.

China's economic recovery and the effects of African swine fever have contributed to a substantial boost in demand for crops related to animal feed, processed meats, and other consumer food stuffs. Unfortunately for importers, prices increased swiftly, supply chain disruptions continued and there were container shortages and rising shipping costs. Global economic recovery, including the resurgence of the hospitality industry, will boost the outlook for agriculture and agri-food production and exports, and support a continuation of strong prices.

GLOBAL OUTLOOK

The trajectory of global economic recovery will result in disparate performance throughout the sector; however, aggregate, agriculture and agri-food are expected to continue outperforming most other sectors. Three key issues impacting the agriculture outlook are:

- 1. China's recovery has led the global economy.** As one of the first countries hit by the pandemic, China imposed severe lockdowns before most other countries and in turn, has economically recovered sooner. Chinese consumer demand has rebounded swiftly, directly affecting agriculture imports. The country's recovering pork industry is also greatly contributing to crop and animal feed demand.
- 2. High prices are incentivizing stronger export activity and depleting stocks.** Higher prices have led to expanded production and the use of stocks to meet contracts. While most crops have benefited from both rising prices and shipments, others such as wheat, rice and products for more direct consumption—rather than inputs into animal feed or ethanol—have higher supplies and in turn, stabilized prices.
- 3. Increased shipping disruptions and other costs may put pressure on the sector's profitability.** Shipping container shortages aren't only impacting maritime shipments, but also the supply of containers for transporting goods within a country, including Canada. Combined with several shipping-related disruptions, this has led to higher logistics and shipping costs. But shipping challenges are expected to normalize in the second half of 2021.

Despite short-term challenges, the long-term outlook is stable-to-positive for many in the industry. Globally, the agriculture sector is highly diverse and major producing countries have developed comparatively advanced supply chains. In order to sustainably develop, however, the sector requires increased investment in research and development (R&D) and infrastructure. Appropriate public policies are also needed to reduce costs, increase risk-management knowledge and enhance technological access, especially in rural areas, for underdeveloped markets and expanding into value-added food production.

DOMESTIC PERFORMANCE

Canada is a highly diversified agriculture and agri-food producer and exporter. Exports by volume, however, are largely concentrated in a few key crops, like grains and pulses, processed meat, and to a lesser extent, various consumer products, including vegetable oils and pet food. Despite earlier forecasts calling for subdued commodity prices, prices have generally surprised on the upside (except for wheat prices). Demand for biofuels will also bring an added boost to oilseeds.

The United States remains our largest export destination for agri-food products, making up more than 50% of Canadian goods. But emerging markets, including China, Mexico, Bangladesh and United Arab Emirates, have been growing in importance.

In the years ahead, discussions around sustainable food production, food security—having a reliable access to nutritious, affordable food and avoiding excess trade reliance on other countries—and supply chain vulnerabilities could support domestic investment in Canada's agriculture sector.

CANADIAN AGRICULTURE AND NON-AGRICULTURE EXPORTS

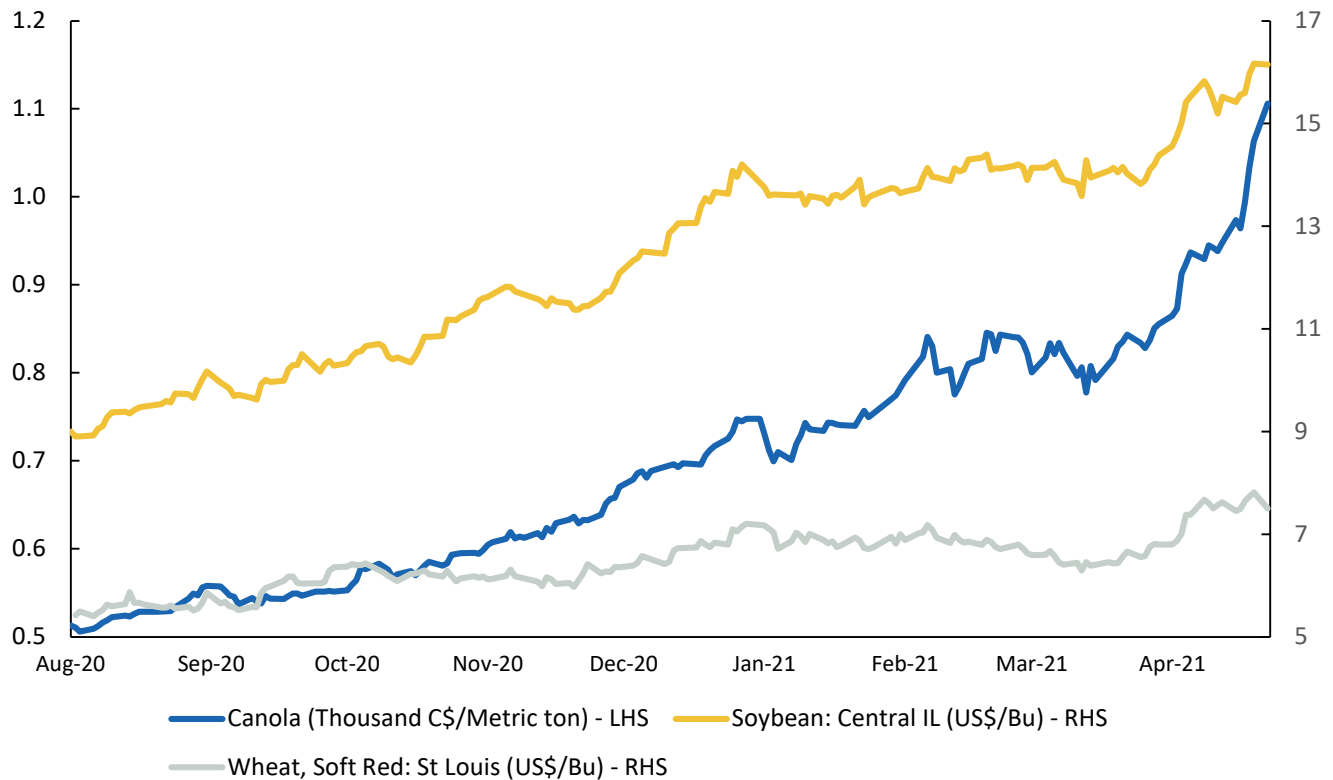
Canadian exports (C\$, millions)	2019	2020	y/y % Change
Agri-food	66,808	73,775	10%
Grains and oilseeds	20,992	25,623	14%
Food and beverage products	28,177	30,139	6%
Seafood	7,422	6,369	-13%
All other agriculture products	8,137	9,718	21%
Live animals	2,079	1,926	-10%
All other export sectors	477,805	404,192	-15%
Total goods exports	544,612	477,967	-12%

A SURGE IN CROP PRICES

The price of crops, especially cereals and oilseeds, have reached historic highs in large part due to booming demand from China. The African swine fever hit China in 2019 and spread throughout major swine and pork-producing regions before reaching other Asian and European countries such as Germany. By early 2020, China's pork production was slowly improving before the country was hit with a second wave in the latter part of the year. The impact on global markets has been a significant demand for animal feed and crops, including corn, soybean, and canola for ethanol or vegetable oil production as examples.

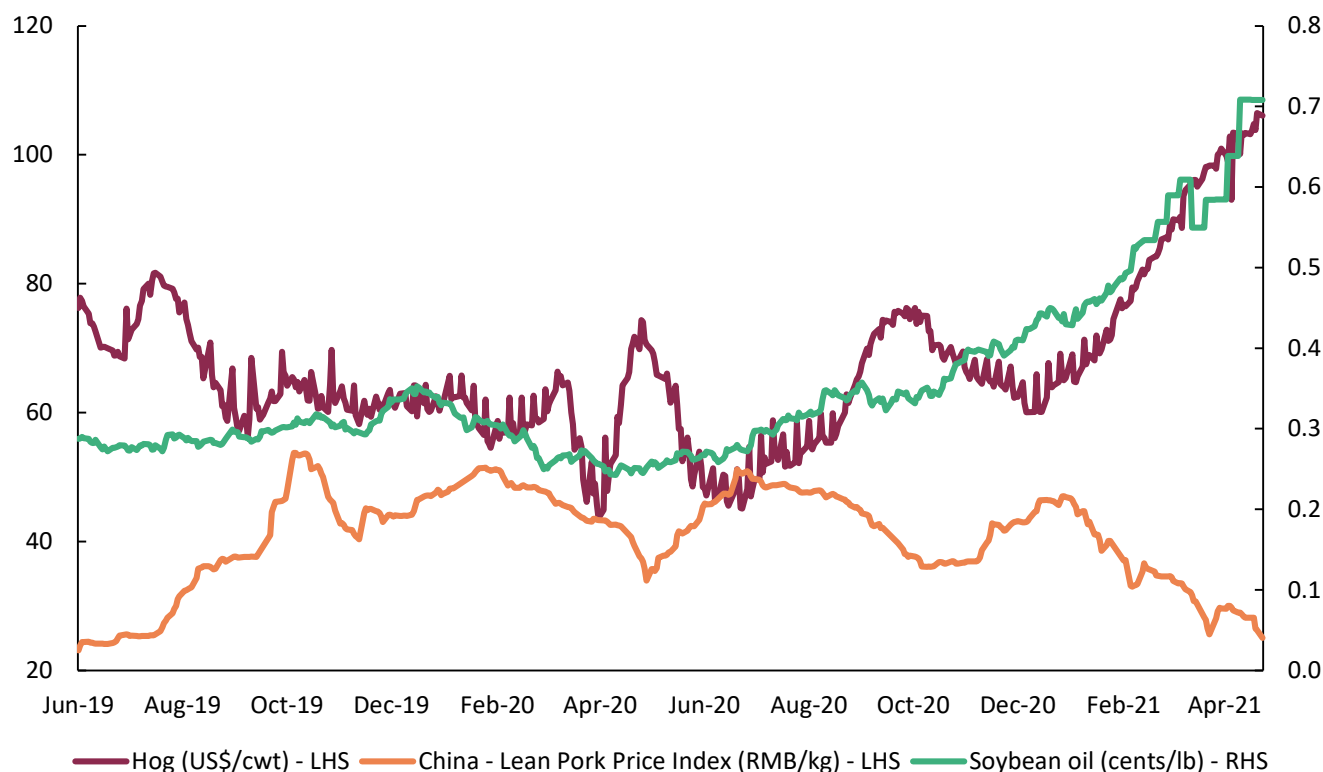
Not only has demand for principal crops driven this jump, weather events and inflation concerns have contributed to close management of supply, which combined with speculative trading, has contributed to higher-than-expected prices. As crop calendars move through the year and supply chain disruptions normalize, prices are expected to ease.

Rising demand and speculation leading to surge in price



Demand for consumer food stuffs is expected to remain robust, but prices will likely differ, depending on the product and location. For example, the prices of North American processed pork will be high, whereas in China, due to mass culling of pork and a market flooding of processed pork locally, local prices have decline. Vegetable oils have been the surprise of the year. Demand for biofuels, low stocks and shifting consumer demand has driven up the price of vegetable oils, especially soybean.

Consumer demand to drive prices of food products



KEY FUTURE TRENDS AND OPPORTUNITIES

In a 2020 Export Development Canada (EDC) report, [*COVID-19: Canada's agri-food sector yields strong results despite pandemic*](#), it described the opportunities in niche and non-traditional areas for Canadian companies, including organics, non-meat protein and dairy substitutes. In this overview, we focus on sustainable agriculture trends and opportunities, which EDC could support by building more partnerships to facilitate additional business.

Sustainable agriculture

- According to the *Global Food Security Index*, Canada ranks eighth in overall food security, however, falls in the ranking of quality and availability of required nutrients, vitamins, and protein. Importantly, Canada's ranking of food loss, drops to 34 out of 114. In the latest census available from 2011-2012, 8.3% of Canadian households are moderately or severely food insecure. During the pandemic, it's likely that food insecurity has jumped, making addressing the issue even more imperative.
- Globally, food waste averages 30%-40% throughout the supply chain. In Canada, while data is limited, some estimate that almost 60% of food produced is lost or wasted. Importantly, about 30% of food waste is avoidable, making technology, data and interconnectedness throughout the supply chain a gap that can be filled by Canadian companies.

- While Canadian agriculture is comparatively more sustainable than other major agriculture and agri-food producers, there are key areas for improvement, including more effective and targeted use of fertilizer, water and seeds.
- The environmental impact of agriculture in Canada is slightly more positive than in other countries because of the Canadian climate. While rising temperature generally has negative effects on climate and can exacerbate extreme weather events, for the Canadian agriculture sector, it increases our ability to grow crops in new places. The main risks of rising temperatures in Canada are:
 - water quality and use;
 - weather fluctuations and reduced predictability;
 - and pests.
- The challenge for Canada is to diversify its exports and reduce relative export dependence on crop and meat production to develop a more sustainable, healthier industry. Diversification, particularly expanding into value-added production, would significantly boost Canada's export potential and meet rising demand from health and environmentally conscious consumers worldwide.

Opportunities for Canadian companies

- Despite its high quality, Canada will find it increasingly difficult to compete over the long-term on crop production due to costs. Therefore, there's a significant opportunity to develop high value-added, food manufacturing by leveraging the crops Canada produces in abundance. As an example, lentils and chickpeas are growing in popularity in the production of meat substitutes. Canada is one of the largest producers and exporters of these crops. Shifting to local manufacturing could be beneficial. Some companies are already taking advantage of this potential, including Cargill's latest announcement to open a canola processing facility in 2024.
- While most food is wasted by consumers, waste also occurs across the value chain, making it challenging to address effectively. This is where technology, data and connectivity throughout the supply chain can make a difference.
- Higher manufacturing and technology employment, as well as expanding research and development, could benefit from a shift to value-added production. This requires a multi-stakeholder, partnership approach. For example, the expected impact of developing the [Protein Industries Canada Supercluster](#) is C\$4.5 billion (double Canada's total exports of soybeans) and more than 4,500 jobs.

Lentils (US\$, millions) *				Chickpeas (US\$, millions) *			
Exports		Imports		Exports		Imports	
Canada	904	India	346	Australia	235	Pakistan	213
Australia	204	Turkey	157	Russia	167	India	204
Turkey	190	UAE	114	Turkey	135	Turkey	73
UAE	127	Pakistan	55	Mexico	130	UAE	65
UAE	124	Egypt	55	India	107	Spain	52
Russian	53	Colombia	45	UAE	100	U.K.	46
Kazakhstan	52	UAE	45	Canada	83	Saudi Arabia	42
All others	110	All others	459	All others	224	All others	329
Total	1,762	Total	1,277	Total	1,181	Total	1,023

*Data is dependent on reporting to UN Comtrade

ABOUT THIS REPORT

This report is part of a publication series of concise reports written by EDC Economics on the impact of COVID-19 on Canadian international trade and investment. The views expressed in this report are those of the author and shouldn't be attributed to Export Development Canada or its Board of Directors.

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