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Report Highlights:

Canola ending stocks are forecast to close marketing year (MY) 2021/22 at just 15 percent of the five-year average, driven by reduced yield due to drought and strong global demand for oilseeds. Assuming a return to average yields, canola exports are forecast to nearly double in MY 2022/23, driven by strong global demand for oilseeds and a rebuilding of exportable supplies. Canola yield recovery is dependent on vast canola-growing areas of Saskatchewan and Alberta receiving more spring rain and lessening current drought conditions. Six crush plant expansions and new builds are projected to bump canola crush capacity from 11 million metric tons (MT) in 2021 to at least 17 million MT by 2025.

SUMMARY

Marketing Year 2022/2023 and Beyond

In marketing year (MY) 2022/23, Canada's total production of oilseeds (canola, soybean, and sunflower seeds) is expected to increase 35 percent over the previous year to 25.7 million metric tons (MT) based on expectations of improved canola yields. Statistics Canada's planting intentions survey was not available at the time of this report.

More precipitation is needed in vast areas of canola-growing regions in Saskatchewan and Alberta to lessen current drought conditions. In Eastern Canada, meteorologists are forecasting above-normal precipitation this spring in soybean-growing regions of Ontario and Quebec.

Oil production is forecast to increase more than 20 percent, primarily on increased canola seed supplies available for crushing. Global demand is strong, due to tight global exportable supplies, but Canadian exports will be constrained by relatively low domestic supplies. Canola oil beginning stocks are forecast to be 70 percent below the five-year (MY 16/17 to MY 20/21) average.

Total meal production (soymeal and canola meal) is forecast to increase more than ten percent on increased domestic supplies of canola seed, while protein consumption in soymeal equivalent is forecast to fall slightly, in part due to a slight reduction of livestock inventories.

Looking beyond MY 2022/23, national canola crush capacity is projected to increase from the current 11.3 million MT to 17 million MT in 2025. This is more canola than Canada harvested in the drought year of MY 2021/22. Investment in crush capacity is largely being driven by the biodiesel and renewable diesel industries. Canada is actively exploring export markets for the increased domestic supply of canola meal, which is crucial to supporting crush margins.

Forecasts in this report do not fully reflect trade disruptions at Black Sea ports, and various export bans on crops and fertilizers imposed by Russia, China, and other countries. This forecast depends on world production of alternate oilseeds crops and assumes minimal shift in seeded area for most oilseed crops but lower global sunflower production because of extremely limited planting predicted to occur in Ukraine this year.

Marketing Year 2021/2022

Severe drought in the prairies reduced MY 2021/22 canola yields from 2.34 tons per hectare in 2020 to just 1.40 tons per hectare in 2021, subsequently lowering MY 2021/22 canola production by 35 percent over MY 2020/21 levels. Oil production fell due to lower domestic seed supplies and lower oil content, because of the drought. The Canada's canola seed stocks-to-use ratio is forecast to fall to the lowest in more than 20 years by the end of MY 2021/22 on reduced supplies and strong domestic and international demand.

National soybean production was only marginally lower than MY 2020/21 levels. Reduced production in the drought-stricken prairies was mostly offset by record-level yields in Canada’s largest soybean growing province, Ontario. FAS/Ottawa forecasts MY 2021/22 soy meal imports from the United States will increase more than ten percent over the previous marketing year due to domestic animal feed shortfalls resulting from summer drought in the Canadian Prairies.

The pace of exports was slowed by COVID-related supply chain challenges at the Port of Vancouver, landslides, extreme cold temperatures, and a two-and-a-half-day labor dispute at Canadian Pacific Rail. However, the burden on the oilseed sector was lessened by the fact that the pace of exports was weaker in the second half of the year than in previous years. This is both because total exportable supplies fell due to drought, and because exports were front-loaded in MY 2021/22 due to strong international demand.

This report refers to the USDA’s marketing years, which for oilseeds run from August to July, except for peanuts which run from October to September.

OILSEEDS

Canola (Rapeseed), Oilseeds

Table 1. Production, Supply, and Distribution of Canola

Oilseed, Rapeseed	2020/2021		2021/2022		2022/2023	
Market Begin Year	Aug-20		Aug-21		Aug-22	
Canada	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	8,325	8,325	9,005	9,005		8,415
Beginning Stocks	3,435	3,435	1,757	1,722		427
Production	19,485	19,485	12,600	12,595		19,000
MY Imports	125	125	115	120		120
Total Supply	23,045	23,045	14,472	14,437		19,547
MY Exports	10,518	10,589	5,300	5,500		9,000
Crush	10,425	10,425	8,500	8,400		10,000
Food Use Dom. Cons.	0	0	0	0		0
Feed Waste Dom. Cons.	345	309	162	110		97
Total Dom. Cons.	10,770	10,734	8,662	8,510		9,597
Ending Stocks	1,757	1,722	510	427		500
Total Distribution	23,045	23,045	14,472	14,437		19,597
Yield	2.340	2.340	1.400	1.400		2.260

(1000 HA) ,(1000 MT) ,(MT/HA)

Canola Seed Production – MY 2022/2023

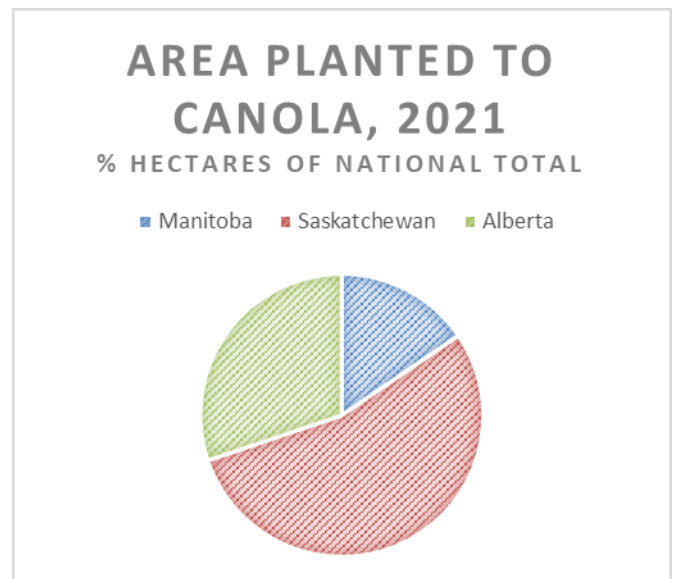
Canola production is forecast up more than 50 percent on the expectation of yield recovery in much of the eastern half of Saskatchewan and an increase in area planted throughout Alberta and Saskatchewan.

Statistics Canada’s planting intentions survey was not available at the time of this report, but high canola prices and extremely low storage stocks (reaching 15 percent of the five-year average by MY 2022/23) are expected to encourage farmers to plant more canola in 2022.

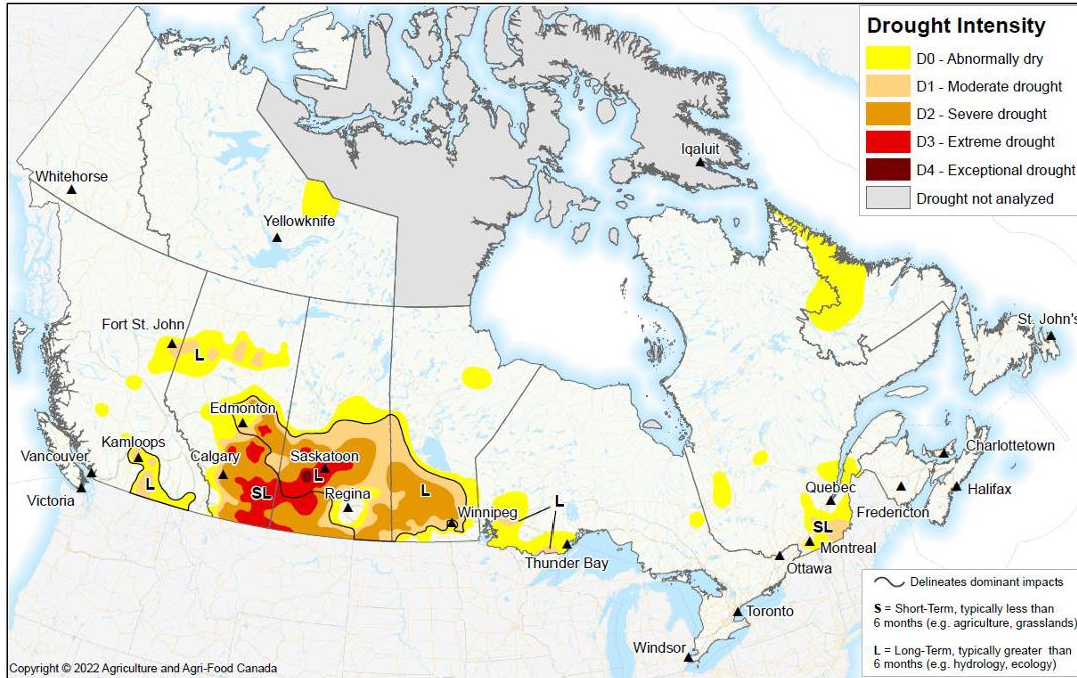
Canadian farmers are not currently benefiting financially from today’s high canola futures prices because supplies from last crop are limited and already contracted out. However, they will benefit if global oilseed supply tightness continues and prices remain strong, or if producers can lock in current prices for next fall.

Although production is forecast to increase significantly over 2021 levels, the downside risks to this outlook include on-going drought conditions, inhibited access to fertilizer and chemicals, and high fertilizer prices. All or a combination of these factors could impact yield, quality, and farmers’ willingness to plant canola. Producers may opt to grow a high-earning, lower-input crop that is better suited to dry conditions, such as spring wheat.

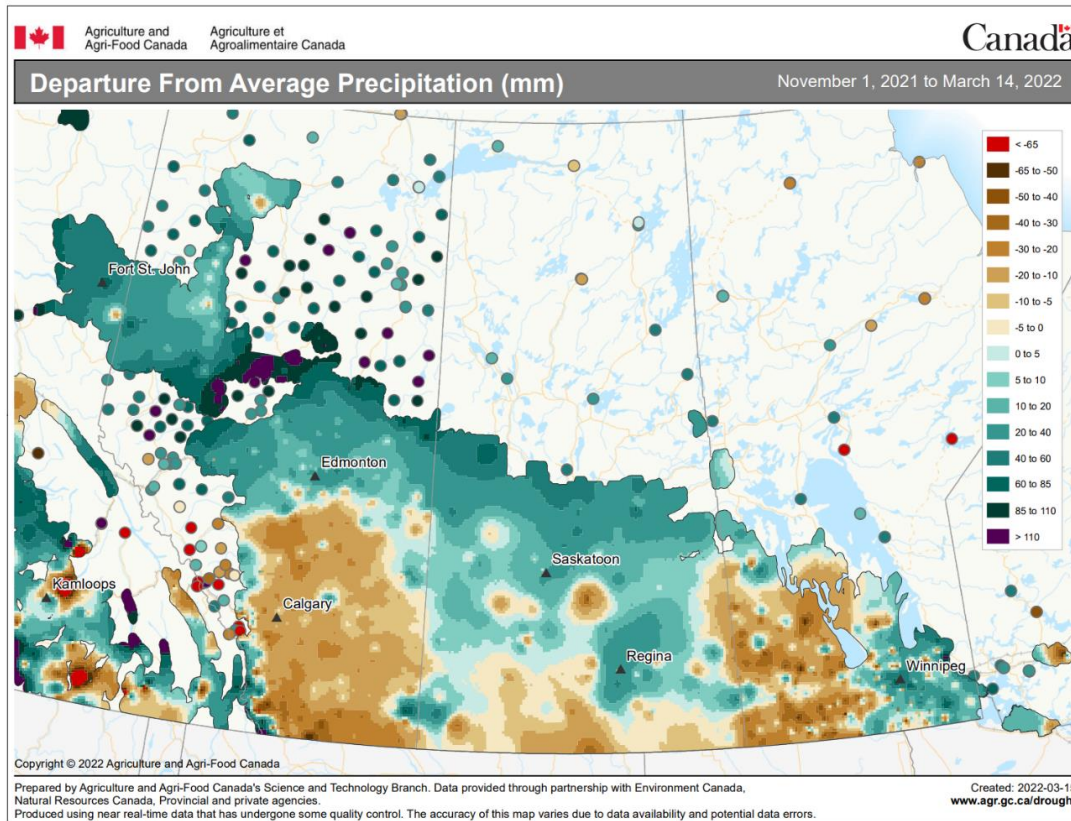
Generally, more precipitation is needed in vast areas of canola-growing regions in Saskatchewan and Alberta to lessen current drought conditions. The period from November 2021 to mid-March 2022 received more precipitation than the same period a year earlier. However, the MY 2021/22 growing season was marked by prolonged precipitation deficits and require significant replenishing of the soil that has yet to come for vast growing areas, leading to the persistence of moderate to extreme drought conditions (see third map, below). There is still time for spring precipitation; planting typically occurs in late April to mid-May but can occur as late as early June. However, a late planting typically results in lower yields.



The following two maps illustrate drought conditions and departure from average winter precipitation.



Source: [Agriculture, Agri-Food Canada](#)



Source: [Agriculture, Agri-Food Canada](#)

In the above map, departure from average precipitation is the difference between measured precipitation and average precipitation (based on a 30-year period from 1981 to 2010).

Access to Inputs

Several supply chain issues will challenge farmers' ability to access fertilizer and other inputs and, subsequently, elevate risk to MY 2022/23 crop yield and quality.

Domestically, FAS/Ottawa is monitoring the impacts of a labor disruption that took place at one of Canada's two main railroad companies. On March 20, Canadian Pacific (CP) Rail locked-out employees after a union representing more than 3,000 employees threatened a labor strike and both sides failed to come to an agreement. Key locomotive engineers, conductors, trainpersons, and yardpersons across the country stopped working for two and a half days before CP Rail and the Teamsters Union agreed to binding arbitration. Normal business operations resumed March 22 but there may be residual disruptions.

According to industry, rail is the dominant mode of fertilizer transportation, representing approximately 75 percent of all fertilizer produced and used in Canada, and 90-95 percent of the annual ton-kms (i.e., the distance travelled by rail is greater than truck). It is unlikely that a significant amount of fertilizer will be moved by truck, in part because trucking fleets are already stretched thin. Approximately 10 to 15 percent of CP's business is fertilizer.

The CP rail disruption will exacerbate a volatile and unpredictable fertilizer market already suffering from supply chain disruptions, trade interruptions at Black Sea ports, and fertilizer export bans currently in place in Russia and other countries.

Potash, nitrogen (mostly in the form of urea), and phosphorus are the primary nutrients in commercial fertilizers. Current export bans in place include China's export ban on phosphate, which began September 2021, and Russia's export ban on nitrogen. Russia is the world's largest nitrogen exporter. Canada is the world's largest producer of potash, followed by Russia. Fertilizer companies supplying the prairies typically source nitrogen from Canada and the United States, while eastern companies previously sourced over 90 percent of their nitrogen from Russia.

Canola (like all oilseeds grown in Canada) are particularly vulnerable to nitrogen supply shortages. A high-yielding canola crop in Canada's prairies requires a significant amount of nitrogen (N) - up to 2.9 to 3.5 lbs. per bushel – while cereal alternatives like spring wheat, barley, and oats require between 0.96 to 2.3 lbs. per bushel, according to data published in 2001 by [Manitoba Agriculture, Food and Rural Initiatives](#) (MAFRI), using data collected from

Saskatchewan.¹ Pulses, another type of crop alternative to canola, also require significant amounts of nitrogen.

Farmers and analysts agree that access to nitrogen and phosphate may take a toll on quality and yields, but impacts are expected to be minimal. Anecdotally, farmers and analysts in Saskatchewan and Alberta have told FAS/Ottawa that many have already taken hold of spring fertilizer requirements. Other producers in drier areas of the prairies were reluctant to fertilize at seeding time anyway, since fertilizer can only be safely applied with seed if seedbed soil moisture is good to excellent.

Bayer, the leading producer of glyphosate, has described the supply of Roundup branded products as tight but sufficient. The production of glyphosate is being impacted by Hurricane Ida, China's energy crisis, and a “mechanical failure” with an undisclosed glyphosate supplier. Bayer [notified](#) its clients in February of the mechanical failure, which may impact its ability to supply customers with glyphosate or glyphosate-containing products as agreed upon. The mechanical failure is expected to take until May 2022 to fix. Glyphosate is the active ingredient in several commercial herbicides for nonselective weed control. Glyphosate herbicides are among the world's most widely used herbicides.

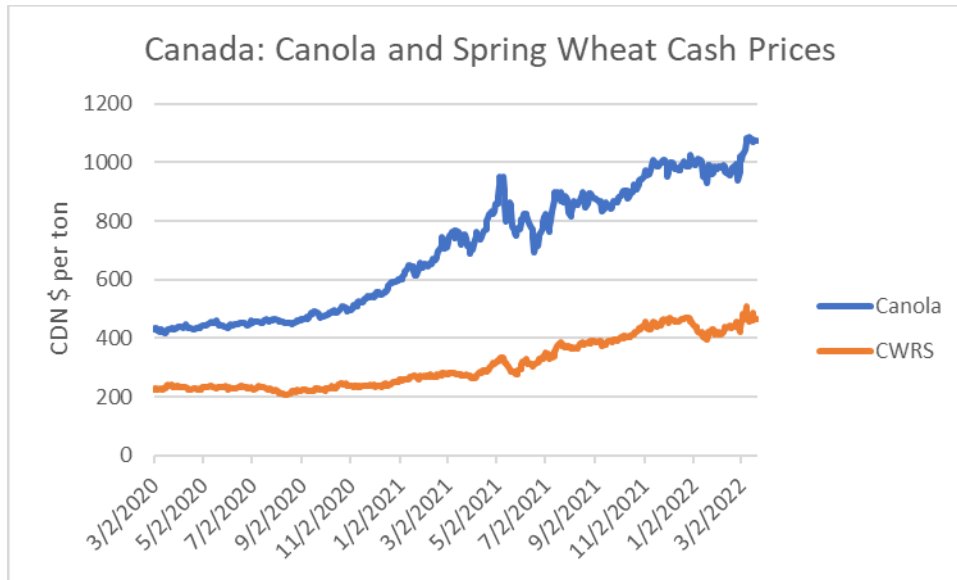
An additional factor impacting producers is the federal carbon tax, set to increase by 25 per cent on April 1, from \$40 CDN a ton to \$50 CDN a ton. This will increase the price of gasoline by about \$0.022 cents per liter as the carbon tax rises from \$0.088 to \$0.11 per liter. The tax is scheduled to increase \$10 CDN annually until it reaches \$170 CDN a ton by 2030, or \$0.396 per liter.

The Governor of the Bank of Canada recently told the House of Commons Standing Committee on Finance that, to date, the carbon tax has increased Canada's inflation rate by [0.4 percent](#).

Canola Seed Production – MY 2021/2022

During MY 2021/22, production fell 35 percent, despite an eight percent increase in area planted. Severe drought in canola-growing regions of the prairies reduced the average yield to a rate not seen since the prairie drought of 2002. Although low yielding, the quality in most areas was deemed to be high. However, oil content is below average, and the national average extraction rate has subsequently fallen.

¹ With the development of new crop varieties with enhanced yield potential and different genetics, the nutrient uptake demands may have changed since the referenced report was published.



Source: PDQ Price and Data Quotes

Canada produced 18 percent of global canola seeds, a reduction from the five-year average (2016 to 2020) of 28 percent and is on track to provide nearly 40 percent of exportable supply (forecasted), down from the five-year average of 64 percent.

Several farmers and agronomists commented that wildfire smoke from British Columbia may have protected prairie crops from high ultraviolet rays and heat stress during the scorching hot summer of 2021. The smoke may have helped reduce bud-blasting (aborted flowers), which can improve yield. Smoke can also have the effect of slowing down crop maturity. The complex impact of wildfire smoke on different stages of canola development is being researched by seed companies and academics.

Canola Seed Storage Stocks – MY 2022/2023

MY 2022/23 ending stocks are forecast to remain well below the five-year average on strong global demand and despite higher, but unrecovered, production levels.

MY 2021/22 ending stocks are forecast to reach only 15 percent of the five-year average because of a smaller crop and strong global demand.

Canola Seed Exports – MY 2022/2023

Exports are forecast to nearly double on strong world demand and a rebuilding of exportable supplies, assuming a return to normal yields.

The accuracy of the MY 2022/23 forecast depends on the production success of the 2022 canola crop, world production of oilseed crops, and any additional agricultural export bans. This forecast assumes that sunflower production in Ukraine in MY 2022/23 will be lower due to either no or minimal planting because of the ongoing conflict there.

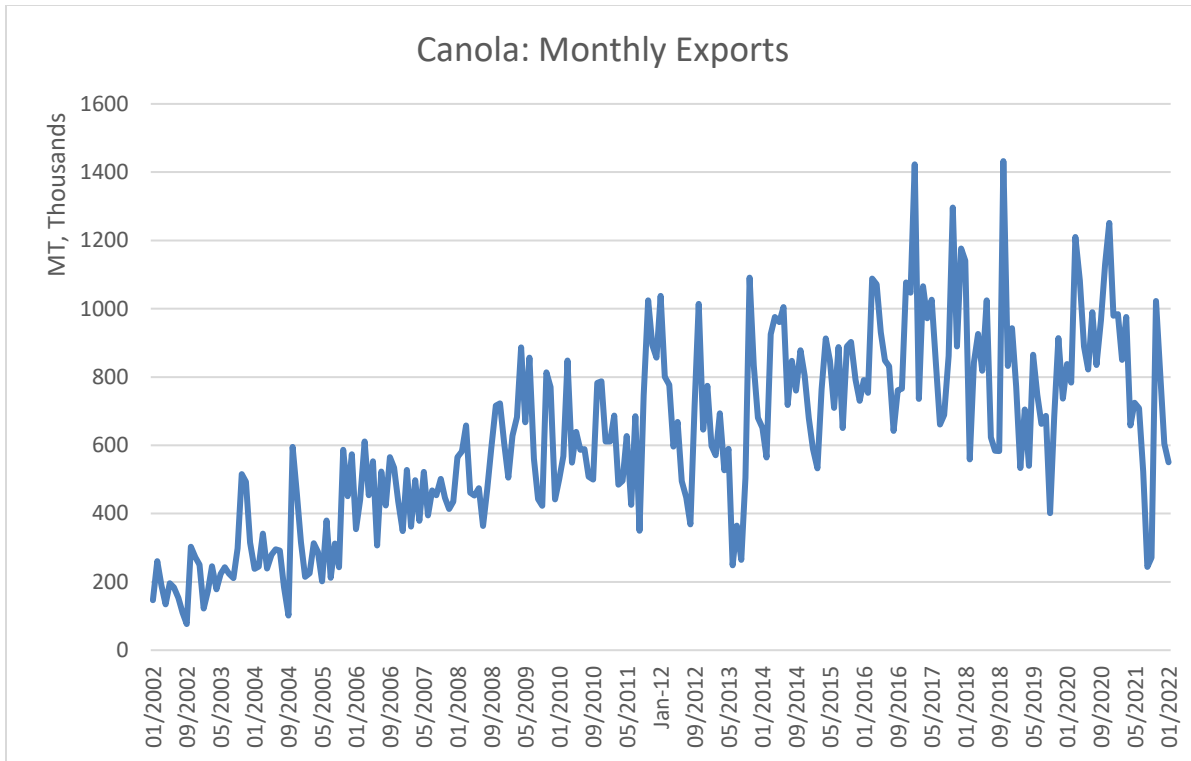
Looking ahead to MY 2023/24, more seed is expected to remain in Canada to be processed as additional processing capacity comes online (see canola oil section), reducing seed exports.

Canola Seed Exports – MY 2021/2022

Partner	08/2019 - 01/2020	08/2019 - 01/2020 % Share	08/2020 - 01/2021	08/2020 - 01/2021 % Share	08/2021 - 01/2022	08/2021 - 01/2022 % Share
World	4,261,087	100	6,147,838	100	3,505,063	100
China	659,448	15.5	1,449,099	23.6	917,294	26.2
Japan	1,000,455	23.5	1,169,447	19.0	863,147	24.6
Mexico	449,777	10.6	601,920	9.8	650,103	18.5
EU 27 Brexit	1,146,485	26.9	1,432,046	23.3	511,984	14.6
United Arab Emirates	495,709	11.6	644,748	10.5	307,233	8.8
United States	170,162	4.0	176,411	2.9	140,069	4.0
Pakistan	240,206	5.6	447,380	7.3	80,781	2.3

Source: Trade Data Monitor, LLC

Despite strong global demand since the start of the crop year, canola exports are forecast down due to lower domestic production. MY 2021/22 began with a fast pace of exports as producers sold their harvest early to capture high prices driven up by strong global demand. Export pace then slowed significantly, as domestic supplies were driven down to extremely low levels.



Source: Trade Data Monitor, LLC; FAS Ottawa

Soybeans, Oilseeds

Table 3. Production, Supply, and Distribution of Soybeans

Oilseed, Soybean	2020/2021		2021/2022		2022/2023	
	Aug-20		Aug-21		Aug-22	
Market Begin Year	USDA Official	Post	USDA Official	Post	USDA Official	Post
Canada						
Area Harvested	2,041	2,041	2,134	2,134		2,285
Beginning Stocks	621	621	294	294		356
Production	6,359	6,359	6,272	6,272		6,581
MY Imports	516	516	500	490		450
Total Supply	7,496	7,496	7,066	7,056		7,387
MY Exports	4,543	4,702	4,400	4,300		4,500
Crush	1,642	1,642	1,750	1,800		1,950
Food Use Dom. Cons.	0	0	0	0		0
Feed Waste Dom. Cons.	1,017	858	598	600		600
Total Dom. Cons.	2,659	2,500	2,348	2,400		2,550
Ending Stocks	294	294	318	356		337
Total Distribution	7,496	7,496	7,066	7,056		7,387
Yield	3.12	3.12	2.94	2.94		2.88

(1000 HA) ,(1000 MT) ,(MT/HA)

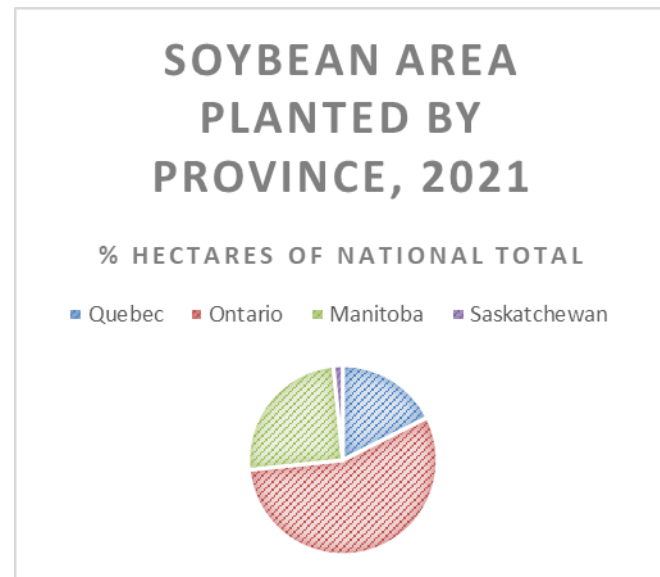
Soybean Production– MY 2022/2023

In MY 2022/23, farmers are forecast to plant more soybeans, as indicated by a continuation of strong prices and lower winter wheat planting than the previous year.

Soybean Inputs

Industry sources state that Eastern Canada is particularly vulnerable to Russia’s ban on nitrogen exports as the majority of Ontario’s nitrogen supply is typically imported from Russia. Shortages may have damaging effects on soybean yield and quality.

A high-yielding soybean crop in Ontario requires a tremendous amount of nitrogen (N) - up to 200 to 300 lbs. per acre, according to the [Ontario Ministry of Agriculture, Food and Rural Affairs](#) (OMAFRA).



Soybean Production – MY 2021/2022

In MY 2021/22, Canada’s soybean production inched lower on smaller yields in Manitoba and Quebec.

Manitoba, the province with the second-largest soybean growing area, saw yields fall to 1.82 tons per hectare in MY 2021/22 from 2.5 tons per hectare the previous year, due to extreme drought.

At the same time, and despite a prolonged wet harvest period, Ontario soybean yields reached a new record of 3.47 tons per hectare. Area planted in Ontario was up three percent from the previous year, and production increased 4.4 percent.

Soybean Trade – MY 2022/2023

Export volumes are forecast to increase on an expansion of exportable supplies and strong global demand for oilseeds. Imports of soybeans remain limited by soybean processing capacity. Most soybean commodity volume is imported in meal form for animal feed.

Soybean Trade – MY 2021/2022

Due to the low exportable supplies, relative to recent years, export volumes to nearly every major importing market are down, but rose in Pakistan, Indonesia, and Egypt. The equivalent of approximately 65 percent of Canada’s MY 2021/2022 production is projected to be exported around the world. Since MY 2019/20, Iran has displaced China as the single largest importer of

Canadian soybeans. China's Canadian soybeans purchases plunged by 95 percent that year and have yet to recover.

Table 4: Soybean Exports, Aug-Jan, MT

	08/2019 - 01/2020	08/2019 - 01/2020 % Share	08/2020 - 01/2021	08/2020 - 01/2021 % Share	08/2021 - 01/2022	08/2021 - 01/2022 % Share
World	2,764,273	100	3,616,448	100	3,346,031	100
EU 27 Brexit	1,159,672	42.0	1,012,613	28.0	907,842	27.1
Iran	655,780	23.7	660,189	18.3	404,077	12.1
China	37,074	1.3	406,224	11.2	390,846	11.7
Algeria	69,690	2.5	318,015	8.8	219,228	6.6
Bangladesh	287,440	10.4	245,462	6.8	179,898	5.4
Pakistan	0	0.0	65,764	1.8	172,653	5.2
Indonesia	132,557	4.8	126,238	3.5	156,084	4.7
Egypt	0	0.0	82,542	2.3	154,182	4.6

Source: Trade Data Monitor, LLC

Sunflower Seeds, Oilseeds

Table 5. Production, Supply, and Distribution of Sunflower Seeds

Oilseed, Sunflowerseed	2020/2021		2021/2022		2022/2023	
	Aug-20		Aug-21		Aug-22	
Market Begin Year	USDA Official	Post	USDA Official	Post	USDA Official	Post
Canada						
Area Harvested	45	45	40	40		44
Beginning Stocks	31	104	44	116		110
Production	101	101	82	82		90
MY Imports	36	36	30	35		25
Total Supply	168	241	156	233		225
MY Exports	51	51	59	50		80
Crush	0	0	0	0		0
Food Use Dom. Cons.	10	9	10	9		9
Feed Waste Dom. Cons.	63	65	65	64		45
Total Dom. Cons.	73	74	75	73		54
Ending Stocks	44	116	22	110		91
Total Distribution	168	241	156	233		225
Yield	2.24	2.25	2.05	2.03		2.05

(1000 HA) ,(1000 MT) ,(MT/HA)

Sunflower Seed Production – MY 2022/2023

FAS Ottawa forecasts area planted to increase to 45,000 hectares in 2022. If Canadian processors can contract at the current high price points (for sunflower oilseeds and confections), producers may increase area planted to sunflowers in 2022. Another consideration is that sunflowers require less fertilizer. Therefore, if availability and price of certain inputs such as fertilizer are a concern, producers may be incentivized to plant more sunflower seeds.

Sunflower Seed Production – MY 2021/2022

In MY 2021/22, production was down on reduced area planted. Eighty-six percent of sunflower area was in Manitoba, in line with the province's five-year average share. Although there is no national breakdown, an industry association informs FAS/Ottawa that in 2021 there were 15,652 hectares planted to confectionary sunflowers in Manitoba and 64,238 hectares planted to oilseed sunflowers.

Sunflower Seed Imports

Sunflower seed is not a major oilseed in Canada, and any shortfall in supply of seed will not have a major impact on the overall supply.

Sunflower Seed Ending Stocks

Ending stocks are higher than USDA official estimates and are derived from Statistics Canada table 32-10-0013-01, which comes from the agency's Commercial Stocks of the Major Special Crops Survey of industry.

Peanuts, Oilseeds

Table 6. Production, Supply, and Distribution of Peanuts

Oilseed, Peanuts	2020/2021		2021/2022		2022/2023	
Market Begin Year	Oct-20		Oct-21		Oct-22	
Canada	USDA Official	Post	USDA Official	Post	USDA Official	Post
Area Harvested						
Beginning Stocks	3	3	5	5		5
Production	0	0	0	0		0
MY Imports	175	175	175	175		175
Total Supply	178	178	180	180		180
MY Exports	0	0	0	0		0
Crush	0	0	0	0		0
Food Use Dom. Cons.	173	173	175	175		175
Feed Waste Dom. Cons.	0	0	0	0		0
Total Dom. Cons.	173	173	175	175		175
Ending Stocks	5	5	5	5		5
Total Distribution	178	178	180	180		180

(1000 HA) ,(1000 MT) ,(MT/HA)

Peanut production is less than 500 MT and limited to a few farms in Southern Ontario. Canada will remain a net importer of peanuts, with the United States and China being the top suppliers. Peanut production is constrained by climatic conditions, with insufficient heat limiting quality and yield potential. Imports remain steady.

OIL

Canola Oil

Table 7. Production, Supply, and Distribution of Canola Oil

Oil, Canola	2020/2021		2021/2022		2022/2023	
Market Begin Year	Aug-20		Aug-21		Aug-22	
Canada	USDA Official	Post	USDA Official	Post	USDA Official	Post
Crush	10,425	10,425	8,300	8,400		9,500
Extr. Rate, 999.9999	0.43	0.43	0.42	0.42		0.44
Beginning Stocks	457	73	560	103		50
Production	4,528	4,528	3,455	3,490		4,142
MY Imports	19	19	20	20		20
Total Supply	5,004	4,620	4,035	3,613		4,212
MY Exports	3,439	3,447	2,750	2,300		2,900
Industrial Dom. Cons.	330	335	325	340		340
Food Use Dom. Cons.	675	735	695	923		900
Feed Waste Dom. Cons.	0	0	0	0		0
Total Dom. Cons.	1,005	1,070	1,020	1,263		1,240
Ending Stocks	560	103	265	50		75
Total Distribution	5,004	4,620	4,035	3,613		4,212

(1000 HA) ,(1000 MT) ,(MT/HA)

Canola Oil Production – MY 2022/2023

Crush capacity is expected to remain very low in the first month or two of MY 2022/23 (less than 60 percent), due to extremely low supplies of canola seed, and ramp up to full capacity after the September/October canola harvest.

There are currently 14 crush plants in Canada with a total crush capacity of 11.3 MMT per year. To date, six announcements of expansions and new builds have been made, largely to supply feedstock to the fast-expanding renewable diesel (RD) industry.

- In March 2021, Richardson International [announced](#) it would double its canola-crushing capacity to 2.2 MMT at Yorkton, Saskatchewan, making it Canada’s largest canola crush plant in 2024, until Viterra’s new facility opens.
- In April 2021, Viterra [announced](#) its intent to build a new crushing facility in Regina, Saskatchewan with “an initial targeted annual crush capacity of 2.5 million metric tonnes.” The plant is targeted to be operational in late 2024.
- Also in April 2021, Cargill Inc. [announced](#) plans to build a processing plant in Regina, Saskatchewan, bringing an additional 1 MMT of crush capacity online. It is expected to be operational by early 2024. Construction is expected to begin in 2022.

- Cargill also announced that it will be modernizing its two existing canola crush facilities (in Clavet, SK and Camrose, AB) to increase capacity at each. The level of increase has not been made public. Work is slated to be complete by April 2022.
- In May 2021, Ceres Global Ag Corp. [announced](#) plans to build a processing plant in Northgate, Saskatchewan, that will produce more than 500,000 tons/year (14.3 million gal) of canola oil. The company said the plant, which is scheduled to begin operating in the summer of 2024, will be able to process 1.1 million mt of canola annually.
- In January 2022, Federated Co-operative Limited (FCL) [announced](#) they have signed a memorandum of understanding to form a joint venture (JV) partnership with AGT Food and Ingredients Inc. (AGT Foods). The newly formed JV will look to construct a \$360 CDN million canola crush facility with planned capacity of 1.1 million MT per year. The facility will be in operation “before 2027.” More details are expected in Spring 2022.

Table 8: Canola Crush Capacity, MT

Plant	Location	Feedstock	2001	2011	2021	...	2024(f)	2025(f)
ADM *	Windsor, ON	Canola, soybeans	630,000	630,000	630,000	...	630,000	630,000
Bunge *	Hamilton, ON	Canola, soybeans	1,050,000	1,050,000	1,050,000	...	1,050,000	1,050,000
Viterra *	Becancour, QC	Canola, soybeans	0	1,050,000	1,050,000	...	1,050,000	1,050,000
ADM	Lloydminster, AB	Canola	650,000	650,000	1,400,000	...	1,400,000	1,400,000
Bunge	Fort Saskatchewan, AB	Canola	230,000	297,500	297,500	...	297,500	297,500
Bunge	Nipawin, SK	Canola	350,000	350,000	525,000	...	525,000	525,000
Bunge	Harrowby, MB	Canola	490,000	490,000	490,000	...	490,000	490,000
Bunge	Altona, MB	Canola	350,000	385,000	-	...	-	-
Bunge	Altona, MB	Canola	0	0	875,000	...	875,000	875,000
Cargill	Camrose, AB	Canola	0	0	1,000,000	...	1,000,000	1,000,000
Cargill	Clavet, SK	Canola	750,000	1,575,000	1,575,000	...	1,575,000	1,575,000
Cargill	Regina, SK	Canola	0	0	0	...	1,000,000	1,000,000
Louis Dreyfus Crusher	Yorkton, SK	Canola	0	850,000	850,000	...	850,000	850,000
Richardson	Lethbridge, AB	Canola	341,250	392,000	700,000	...	700,000	700,000
Richardson	Yorkton, SK	Canola	0	840,000	1,100,000	...	2,200,000	2,200,000
Viterra	Regina, SK	Canola	0	0	0	...	0	2,500,000
Viterra	Ste. Agathe, MB	Canola	0	350,000	350,000	...	350,000	350,000
Ceres	Northgate, SK	Canola	0	0	0	...	1,100,000	1,100,000
Federated Co-op/ AGT**	Regina, SK	Canola	0	0	0	...	0	0
Sub total			4,211,250	8,279,500	11,262,500	...	14,462,500	16,962,500

Notes:

* ADM in Windsor, Bunge in Hamilton, and Viterra in Becancour, process both canola and soybeans. ADM in Windsor has a total oilseed capacity of 1,260,000 and uses about half of its capacity for soybeans, according to industry sources. The plant also has a flex line that can process both canola and soybeans. The share of capacity dedicated to soybeans or flex lines at Bunge's Hamilton plant and ADM's Windsor plant is unknown and therefore the total canola capacity of these two plants may be an over-estimate.

**Specific timelines not available until Spring 2022, but Federated Co-op/ AGT state the facility will be in operation "before 2027." FAS/Ottawa assumes no capacity coming online in 2025. Planned capacity is 1.1 million tons per year.

In recent years, several announcements related to the upgrade of existing infrastructure promise to increase efficiency and provide quick turnaround for farmers and truckers delivering seed to plants. For example, Cargill's plans for its Clavet and Camrose plants, described above. Further,

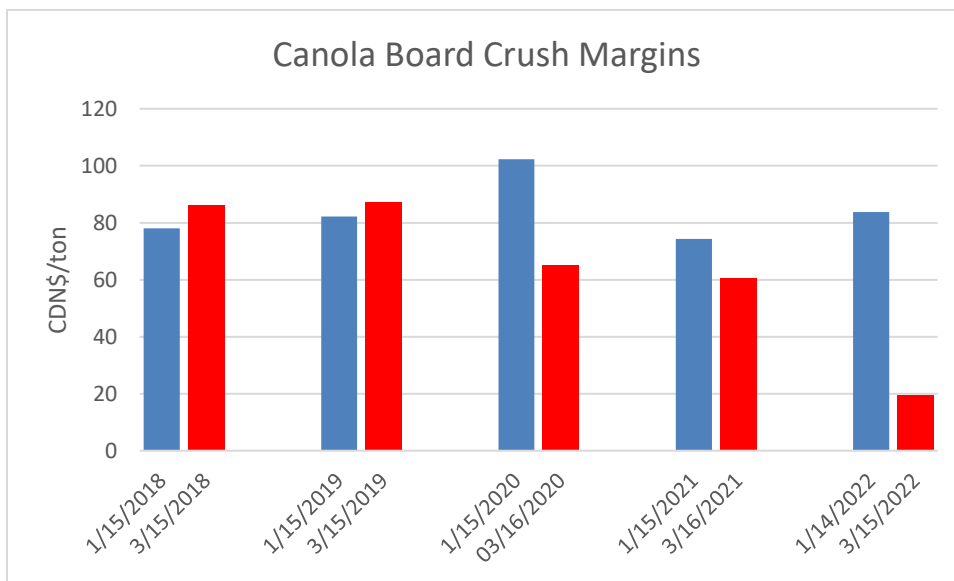
looptracks² like the high-speed shipping system to be installed at [Richardsons](#)' Yorkton facility, are becoming increasingly common in the prairies.

Canola Oil Production – MY 2021/2022

Oil production fell due to lower domestic supplies and lower oil content, because of the drought. The canola oil extraction rate fell from 0.434 tons of oil per ton of crush in MY 2020/21 to 0.415 (projected) in MY 2021/22.

Crush facilities have generally produced at about 95 percent of capacity in recent years, but industry sources told FAS/Ottawa that national capacity usage has averaged less than 80 percent from the start of the marketing year (August) to mid-January, and about 60 percent from mid-January to mid-February, because of low supplies and reduced crush margins. There is no expectation that capacity levels will increase again this marketing year.

Crush margins are low, even reaching negative values for a period in February, meaning canola oil producers were losing money making oil.



Source: [ICE](#); FAS/Ottawa

² Loop tracks allow cargo such as grain to be loaded as the train continues to move, significantly speeding up delivery.

Canola Oil Domestic Consumption - MY 2022/2023

In the MY 2022/2023, domestic canola crush is forecast to represent 48 percent of total disposition of canola in Canada, down from 58 percent the year previous, as high seed prices, low crush margins, and strong global demand move more seed to export.

About eight percent of total disposition of canola oil typically goes to produce Canada's biodiesel, a sector which produces about 25 percent as much biodiesel as the United States (RD excluded) but is expanding. Several industry developments will influence the amount of canola oil feedstock the biofuels industry consumes over the next two years.

First, Canada's [Clean Fuels Regulation](#) (CFR) is expected for release in Spring 2022. The coming-into-force date for carbon intensity reduction requirements in fuels is December 1, 2022. The regulation will encourage more production of renewable fuels. See FAS Ottawa's [Biofuels Annual](#) for more information.

Secondly, RD production is expected to ramp up in Canada in coming years, increasing demand for vegetable oil. FAS/Ottawa is aware of 2.8 billion liters of RD expected to come online by 2024 and another 870 million planned to be online in 2027. Of the total 3.7 billion, 2.3 billion liters are expected to be produced with either only canola oil, or a mix of canola oil, soybean oil, and (in some cases) used cooking oil (UCO) and tallow.

Thirdly, companies that have invested in RD research in Canada have told FAS/Ottawa that they are interested in adopting alternatives that have lower-carbon intensity than vegetable oils like canola oil, similar to the several U.S. companies that are moving ahead with non-soybean oil feedstocks (E.g., Diamond Green, REG, PBF, Next Renewable, etc.).

The successful development of lower-carbon feedstocks will reduce demand for canola oil feedstocks; however, alternatives to vegetable oils are currently extremely limited in Canada. UCO and tallow, popular alternatives in the United States, have only small markets in Canada and are not expanding significantly. UCO production is directly related to population and there is far more UCO in the United States than in Canada. Animal fats for biofuels are an inelastic market (higher biofuel demand does not lead to more animal fat production). Industry sources told FAS/Ottawa that Canada is sold out of fats, and the fats that Canada does sell into renewable fuel markets are exported to the United States. Meanwhile, the planned expansion of several U.S. facilities using non-vegetable oil feedstocks, comprising the bulk of the demand in California in the future, will increase North American competition for UCO.

Only a minority of fuel producers in Canada import UCO from the United States because they are situated on a rail line near the border and can obtain U.S. UCO at a lower cost than vegetable oil while achieving lower carbon intensity scores by using UCO (even after accounting for the transportation, because once the UCO is on the train the carbon footprint is minimal).

Fourthly, similar to the United States, consumption of RD is expected to partly replace biodiesel usage in Canada, further displacing vegetable oils if RD companies discover lower-carbon alternatives.

Lastly, North America has seen actual capacity not meet announced/planned capacity in the past for both ethanol and biodiesel. There is a possibility that this could happen for RD, especially with smaller announcements competing for higher cost feedstocks. The majority of the RD capacity coming online remains in the pre-construction phase and some plans may not materialize.

In summary, the investment into RD that Canada is currently experiencing may not lead to a lockstep increase in vegetable oil demand over a 30-year horizon. However, in the mid-term, the share of canola oil used domestically is expected to increase.

Canola Oil Domestic Consumption - MY 2021/2022

Overall crush is forecast down in MY 2021/22 on lower domestic supplies, but crush is projected to represent 58 percent of total disposition of canola in Canada, up from 45 percent the year previous, on strong margins earlier in the crop year.

Canola Oil Exports – MY 2022/2023

The U.S. Environmental Protection Agency's (EPA) potential July approval for canola oil pathways for RD, sustainable aviation fuel, and naphtha³ under the U.S. Renewable Fuels Standard, could add more canola oil supply to the North American market, possibly leading to more canola oil being traded between the United States and Canada.

Looking ahead, additional Canadian domestic crush capacity will make far more oil available in North America even if seed for export markets is limited.

³ [Naphthas](#) are refined or partly refined light distillates. Blended further or mixed with other materials, they make high-grade motor gasoline or jet fuel.

Canola Oil Exports – MY 2021/2022

Table 9: Canola Oil Exports, MT, Aug to Jan

Partner	08/2018 - 01/2019	08/2018 - 01/2019 % Share	08/2019 - 01/2020	08/2019 - 01/2020 % Share	08/2020 - 01/2021	08/2020 - 01/2021 % Share	08/2021 - 01/2022	08/2021 - 01/2022 % Share
World	1,585,826	100	1,706,143	100	1,674,995	100	1,257,197	100
United States	837,855	52.8	939,449	55.1	820,550	49.0	955,810	76.0
China	573,930	36.2	472,072	27.7	638,672	38.1	102,227	8.1
Mexico	36,007	2.3	49,264	2.9	70,838	4.2	76,779	6.1
South Korea	67,877	4.3	84,194	4.9	71,903	4.3	47,754	3.8
Chile	50,990	3.2	86,336	5.1	42,031	2.5	45,717	3.6

Source: Trade Data Monitor, LLC

The federal carbon tax is set to increase on April 1, 2022. Speaking to the Senate Standing Committee on Agriculture, the president of the Canola Growers Association [expressed concern](#) that the federal carbon tax has implications on international competitiveness for Canada’s oilseed processors:

Many of the jurisdictions that oilseed processors compete with do not have carbon pricing mechanisms in place. In this regard, oilseed processors are vulnerable to the trade and commercial impacts of a carbon tax and will not be able to pass the costs on to consumers.

Similarly, processors will not be able to pass the costs on to farmers. As the industry competes with grain elevators that source canola seed for export, this seed is often destined to markets such as China where no carbon pricing mechanism exists. In the absence of cost mitigation measures to offset the costs associated with carbon pricing and address competitiveness implications, our members will need to re-think current and future capacity investments in Canada.

Canola Oil Imports

Canola oil imports are historically low and are currently tempered by relatively high prices.

Canola Oil Ending Stocks

FAS/Ottawa’s canola oil ending stocks are below USDA official estimates and are derived from a Statistics Canada survey of oilseed crushing operations (Table: 32-10-0352-01). Data is collected from industry in the first ten days following the reference month (which for canola oil is July) and represent 90 percent of the canola industry.

Soybean Oil

Table 10: Production, Supply, and Distribution of Soybean Oil

Oil, Soybean	2020/2021		2021/2022		2022/2023	
Market Begin Year	Aug-20		Aug-21		Aug-22	
Canada	USDA Official	Post	USDA Official	Post	USDA Official	Post
Crush	1,642	1,642	1,750	1,800		1,950
Extr. Rate	0.180	0.190	0.180	0.186		0.186
Beginning Stocks	10	8	9	8		8
Production	300	305	320	335		363
MY Imports	48	48	42	42		40
Total Supply	358	361	371	385		411
MY Exports	119	119	140	140		160
Industrial Dom. Cons.	0	0	0	0		0
Food Use Dom. Cons.	230	234	225	237		243
Feed Waste Dom.	0	0	0	0		0
Total Dom. Cons.	230	234	225	237		243
Ending Stocks	9	8	6	8		8
Total Distribution	358	361	371	385		411

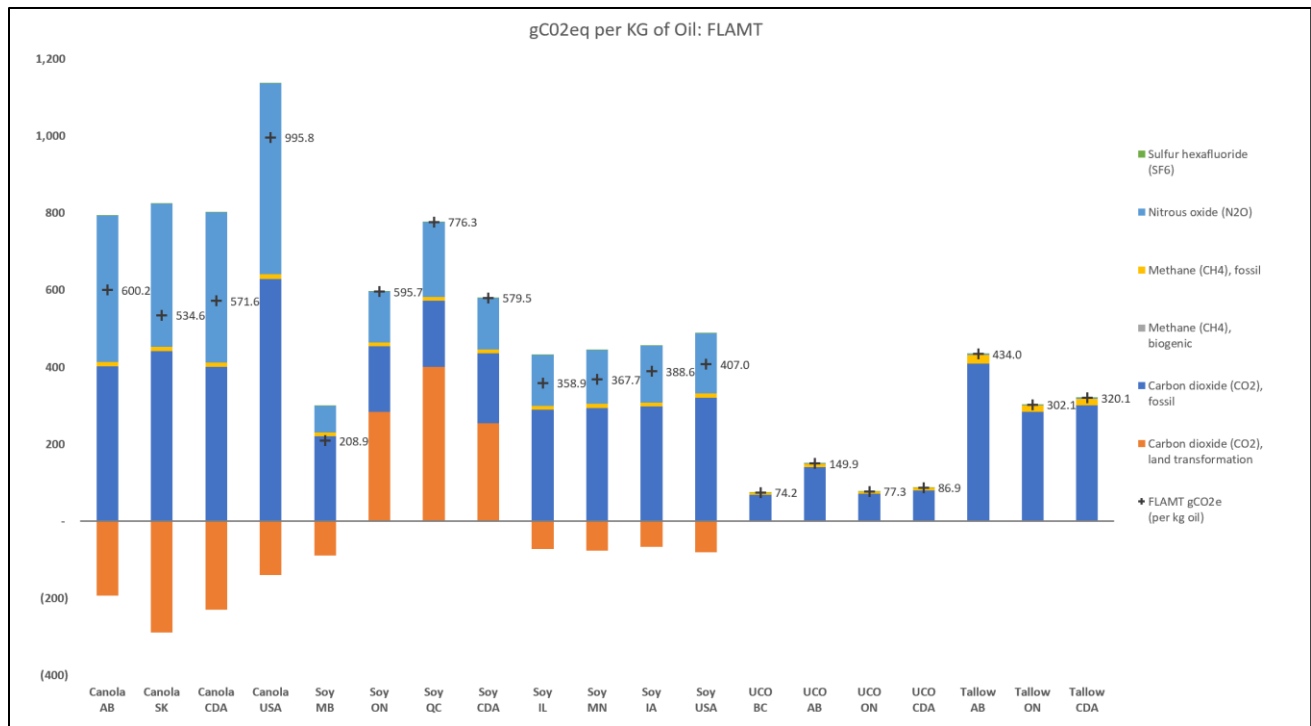
(1000 HA) ,(1000 MT) ,(MT/HA)

Soybean Oil Production

Soybean oil production is constrained by limited soybean capacity in Canada, primarily located in Eastern Canada.

Soybean Oil Domestic Consumption

Environment and Climate Change Canada's (ECCC) fuel life cycle analysis (LCA) [model](#) suggests U.S. soybeans are allocated greater carbon sequestration values than Ontario or Quebec soybeans. Visually, this is represented as the orange part of each bar in the graph below. Since Canadian biodiesel producers benefit from using U.S. soybeans, this may lead to an increase in U.S. soybean oil imports into Canada when Canada's CFR enters into law in Spring 2022 and the biodiesel/ RD industry expands.



Source: Advanced Biofuels Canada

Soybean Oil Imports – MY 2021/2022

Though not a direct soybean oil import, the share of U.S. biodiesel produced with U.S. soybean oil is falling, a trend that is expected to continue. British Columbia’s most recent [Renewable and Low Carbon Fuel Requirements Summary](#) indicates that the use of UCO, imported from the United States, is rising faster than any other feedstock type. Data from British Columbia’s mandatory reporting program, published in the same report, indicates that in 2020 fuel suppliers supplied 318 million liters of renewable fuel produced from UCO (primarily imported from the United States), versus 120 million liters of fuel produced from vegetable oil. Canada’s use of U.S. RD produced from UCO will continue to increase, particularly if the U.S. blenders’ tax credit extends past 2022. For more information on the impact of the blenders’ tax credit in Canada, please read FAS Ottawa’s [2021 Biofuels Annual](#).

Soybean Oil Storage Stocks

Soybean oil ending stocks slightly differ from USDA official data and are derived from a Statistics Canada survey of oilseed crushing operations (Table: 32-10-0352-01).

Table 11

Annual renewable fuel volume by feedstock (million litres)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Canola	38.6	71.1	48.1	62.4	76.8	91.3	95.5	92.9	79	64.8	65.6
Soy	14.8	2.8		7.6	15.2	11.1	9.5	14.4	36.5	54.3	54
Tallow		16.9	7	3.5		0.3	0.4	0.5	3.7	44.6	24.4
UCO				1.6	3.2	46.8	26.9	27.9	72.5	142.5	318.3

Source: [British Columbia's Ministry of Energy, Mines and Low Carbon Innovation](#)

Sunflower Seed Oil

Sunflower Seed Oil – Production

Sunflower seed processing remains very limited in Canada. FAS/Ottawa anticipates that sunflower seeds grown for oil in Manitoba will continue to be exported to North Dakota for crushing.

Sunflower Seed Oil Imports – MY 2022/2023

Looking ahead to MY 2022/23, the share of sunflower seed oil imports from the United States is projected to increase to 95 percent or more, following Russia's invasion of Ukraine. Ukraine is the world's sunflower-growing leader. However, Canada's total import level is forecast to fall, again due to tight global supplies and high prices. As a result, total sunflower seed oil imports from the United States are expected to fall.

Sunflower Seed Oil Imports – MY 2021/2022

In MY 2020/2021, the share of sunflower oil imported from the United States fell from a five-year average of 77 percent to 47 percent. The shift in market share is due to record sunflower seed production in Ukraine in MY 2019/20 which resulted in low sunflower oil prices in spring 2020 and a subsequent increase in Canadian buying, according to an FAS/Kyiv analyst in spring 2021. Canada's market share imported from Ukraine increased to 38 percent in MY 2020/21, up from a five-year average of six percent.

Flax Oil

In January 2022, [Scoular Canada](#) opened a flax processing plant in Regina, Saskatchewan in response to strong world demand for vegetable oils and growing demand for pet food. It is the first flax processing plant to open in Canada in ten years. The capacity is unknown.

OILSEEDS, MEAL

Table 12. Soymeal equivalent (SME) protein consumption, 1,000 MT

Protein Meal	2018/19	2019/20	2020/21	2021/22(f)	2022/23(f)
Meal, Soybean	2,201	2,163	2,170	2,476	2,306
Meal, Rapeseed	597	737	623	675	705
Soybean (full fat)	1,205	823	858	600	600
Meal, Sunflowerseed	40	45	40	41	42
Total in SME	3,611	3,369	3,320	3,458	3,309

Source: Statistics Canada; FAS Ottawa

Marketing year: Aug/ July

f = forecast

CANOLA MEAL

Table 13: Production, Supply, and Distribution of Canola Meal

Meal, Canola	2020/21		2021/22		2022/23	
Market Begin Year	Aug-20		Aug-21		Aug-22	
Canada	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush	10,425	10,425	8,300	8,400		10,000
Extr. Rate, 999.9999	0.57	0.57	0.59	0.59		0.56
Beginning Stocks	96	93	67	94		85
Production	5,936	5,936	4,875	4,956		5,600
MY Imports	8	9	10	10		10
Total Supply	6,040	6,038	4,952	5,060		5,695
MY Exports	5,321	5,321	4,325	4,300		4,900
Industrial Dom. Cons.	0	0	0	0		0
Food Use Dom. Cons.	0	0	0	0		0
Feed Waste Dom. Cons.	652	623	556	675		705
Total Dom. Cons.	652	623	556	675		705
Ending Stocks	67	94	71	85		90
Total Distribution	6,040	6,038	4,952	5,060		5,695
SME	464	443	396	480		502

(1000 MT) ,(PERCENT)

Canola Meal Production - MY 2022/2023

In MY 2022/23, meal production is forecast to increase on increased domestic supplies. Looking ahead, high canola oil prices may lift margins in the near term but if Canada overproduces canola meal and does not have a domestic/export market, margins will decline. Canada (similar to the soybean sector in the United States) is constrained by assumptions in the growth of meal markets and Canada's international market share as well as how high canola oil prices can get before capital investments in RD plants are not as profitable.

In MY 2021/22, canola meal production is down on reduced domestic seed production.

Canola Meal Trade

MY 2022/23 exports are forecast to increase over the previous year on growth of domestic supplies. Canada is actively exploring export markets for the increased domestic supply of canola meal, which is crucial to supporting crush margins.

MY 2021/22 exports are down over MY 2020/21 on reduced canola seed supplies. Market share distribution to date (August to January) are in line with three-year average of 69 percent to United States and 29 percent to China.

Table 14: Exports of Canola Meal, YTD (Aug - Jan), MT

Partner	08/2019 - 01/2020	08/2019 - 01/2020 % Share	08/2020 - 01/2021	08/2020 - 01/2021 % Share	08/2021 - 01/2022	08/2021 - 01/2022 % Share
World	2,432,318	100	2,604,038	100	2,309,125	100
United States	1,795,659	73.8	1,838,407	70.6	1,575,803	68.2
China	625,974	25.7	754,485	29.0	728,252	31.5
Mexico	4,671	0.2	7,339	0.3	5,070	0.2

Source: Trade Data Monitor, LLC

Canola Meal Domestic Use

Domestic demand for canola meal is rising in MY 2021/22 on increased demand for animal feed, meal's primary use.

In December 2020, Merit Foods opened the first [canola protein processing facility](#) in the world. The company supplies pea and canola protein to produce plant-based products.

Canola Meal Storage Stocks

FAS/Ottawa's storage stocks estimates are higher than USDA official estimates and are derived from a Statistics Canada survey of oilseed crushing operations (Table: 32-10-0352-01).

SOYMEAL

Table 15: Production, Supply, and Distribution of Soymeal

Meal, Soybean	2020/2021		2021/2022		2022/2023	
Market Begin Year	Aug-20		Aug-21		Aug-22	
Canada	USDA Official	Post	USDA Official	Post	USDA Official	Post
Crush	1,642	1,642	1,750	1,800		1,950
Extr. Rate, 999.9999	0.7800	0.7800	0.7800	0.7700		0.7800
Beginning Stocks	158	10	136	20		15
Production	1,279	1,281	1,360	1,386		1,521
MY Imports	1,262	1,262	1,320	1,400		1,150
Total Supply	2,699	2,553	2,816	2,806		2,686
MY Exports	363	363	385	315		370
Industrial Dom. Cons.	0	0	0	0		0
Food Use Dom. Cons.	0	0	0	0		0
Feed Waste Dom. Cons.	2,200	2,170	2,300	2,476		2,686
Total Dom. Cons.	2,200	2,170	2,300	2,476		2,306
Ending Stocks	136	20	131	15		10
Total Distribution	2,699	2,553	2,816	2,806		2,686

(1000 HA) ,(1000 MT) ,(MT/HA)

Soymeal Production

Soy processing in MY 2022/23 is forecast to increase from the previous year on strong crush margins and robust demand for vegetable oils. Similar factors are driving up the MY 2021/22 soymeal production forecast. Soymeal production is constrained by domestic soybean supply and limited crush capacity, located primarily in eastern Canada.

Soymeal Domestic Use

Soymeal use is forecast to rise in MY 2021/22 and soften but remain relatively high in MY 2022/23. There is a strong demand for soymeal in Canada because of the drought-induced feed shortage but also reportedly due to shortages of dry lysine caused by supply chain issues. Lysine is fed to livestock and typically sourced from China.

Soymeal Imports

Soymeal imports year-to-date (August 2021 to January 2022) are 17 percent higher than the same period in MY 2020/21 due to domestic animal feed shortfalls resulting from summer drought in the Canadian Prairies. FAS Ottawa forecasts MY 2021/22 imports will increase more than ten percent over the entire marketing year.

Industry has reported that shipments of soymeal imports were cancelled in the second half of March as a result of the potential CP Rail labor disruption. Although CP Rail and the Teamsters Union agreed to binding arbitration, the potential of further disruptions represent a downside risk to this forecast.

Soymeal Storage Stocks

FAS/Ottawa soymeal storage stock estimates are lower than USDA official estimates and are derived from a Statistics Canada survey of oilseed crushing operations (Table: 32-10-0352-01).

Attachments:

No Attachments