# *CANADA: OUTLOOK FOR PRINCIPAL FIELD CROPS* *April 20, 2021*

**Market Analysis Group / Crops and Horticulture Division**
**Sector Development and Analysis Directorate / Market and Industry Services Branch**

**Acting Executive Director: Lauren Donihee** **Deputy Director: Tony McDougall**

This report is an update of Agriculture and Agri-Food Canada's (AAFC) March outlook report for the 2020-21 and 2021-22 crop years. For most crops in Canada, the crop year starts on August 1 and ends on July 31, although for corn and soybeans, the crop year starts on September 1 and ends on August 31. The outlook incorporates recent information from the United States Department of Agriculture (USDA) World Agriculture Supply and Demand Estimates (WASDE), the International Grains Council (IGC) Grain Market Report and Agricultural Market Information System (AMIS) Market Monitor. The economic outlook for the world and Canadian grain markets is expected to continue to be impacted by the domestic and international uncertainty caused by COVID-19.

**For 2020-21,** carry-out stocks for all principal field crops are forecast to decrease sharply and are expected to end the year at their lowest level in eight years. The decrease in carry out stocks would be due to exceptionally strong exports, which are forecast to attain a record for the year. Grain prices in Canada are forecast to continue to be supported by robust international demand, as well as a general tightening of world and domestic grain supplies.

**For 2021-22,** based on favorable market conditions and historical trends, the area seeded to field crops in Canada is forecast to increase marginally. Total field crop production is forecast to decrease slightly though, on the assumption of a return to trend yields from the record production of 2020-21. Growing conditions are currently favourable in Eastern Canada, however dry conditions remain in parts of Western Canada and timely precipitation this spring and throughout the growing season will be needed to achieve trend yields. In general, prices are expected to remain strong, but decrease somewhat as world production is expected to increase and the value of the Canadian dollar is forecast to increase.

The next AAFC Outlook for Principal Field Crops is scheduled to be released on May 20, 2021.

Statistics Canada (STC) is scheduled to publish the results of its March 2021 Field Crop Area Survey on April 27, 2021. The survey collects information from farmers on their crop planting intentions for grains, oilseeds and special crops. STC is scheduled to publish on May 7, 2021 the Stocks of Principal Field Crops in Canada as of March 31, 2021.

**Canada: Principal Field Crops Supply and Disposition**

| | Area Seeded | Area Harvested | Yield | Production | Imports | Total Supply | Exports | Total Domestic Use | Carry-out Stocks |
|---|---|---|---|---|---|---|---|---|---|
| | *thousand hectares* | | *t/ha* | *thousand tonnes* | | | | | |
| **Total Grains And Oilseeds** | | | | | | | | | |
| 2019-2020 | 27,568 | 26,242 | 3.32 | 87,125 | 2,643 | 104,292 | 44,827 | 46,164 | 13,302 |
| 2020-2021f | 27,490 | 26,419 | 3.42 | 90,444 | 2,431 | 106,176 | 50,785 | 45,781 | 9,610 |
| 2021-2022f | 27,913 | 26,893 | 3.32 | 89,342 | 2,612 | 101,564 | 47,750 | 43,364 | 10,450 |
| **Total Pulse And Special Crops** | | | | | | | | | |
| 2019-2020 | 3,911 | 3,804 | 1.99 | 7,559 | 328 | 9,425 | 7,217 | 1,312 | 896 |
| 2020-2021f | 4,000 | 3,949 | 2.16 | 8,527 | 350 | 9,773 | 7,330 | 1,418 | 1,025 |
| 2021-2022f | 4,025 | 3,947 | 2.03 | 8,015 | 318 | 9,358 | 7,005 | 1,358 | 995 |
| **All Principal Field Crops** | | | | | | | | | |
| 2019-2020 | 31,479 | 30,046 | 3.15 | 94,685 | 2,972 | 113,717 | 52,044 | 47,475 | 14,198 |
| 2020-2021f | 31,490 | 30,368 | 3.26 | 98,971 | 2,781 | 115,949 | 58,115 | 47,199 | 10,635 |
| 2021-2022f | 31,938 | 30,840 | 3.16 | 97,357 | 2,930 | 110,922 | 54,755 | 44,722 | 11,445 |

**Source:** Statistics Canada (STC) and Agriculture and Agri-Food Canada (AAFC)
**f:** forecasts by AAFC except for area, yield and production for 2020-2021 which are STC

**Durum**

**For 2020-21**, according to Statistics Canada, total supply of durum wheat is estimated at 7.3 Mt, 6% more than last year and 2% more than the last five year average. Production of durum is reported at 6.57 Mt by Statistics Canada, 32% more than the previous year because of a 16% increase in seeded area accompanied by a 5% increase in yields. The Canadian Grain Commission's sample survey analysis to January 6, 2021 shows an average protein content of grades 1 and 2 durum at 13.8%, down from 2019-20 (14.1%), but relatively on par with the last five year average. Over 80% of all durum was classified within the top 2 grades.

On the demand side, exports of durum continue to move at a brisk pace to Europe, and have been revised upwards to 5.65 Mt on a continued strong export pace. For the period of August to February, Statistics Canada reports exports of durum at 3.2 Mt, 25% ahead of last year's volume and 29% more than the same period over the last five years. Carry out stocks were reduced to 0.8 Mt, the second lowest over the past 10 years if realized.

According to the IGC, the 2020-2021 world supply of durum is forecast at 42.7 Mt, down 3.4 Mt month over month, but representing an increase of 4% compared to the 2019-2020 volumes. Total demand was trimmed by 1% to 43.1 Mt on lower-than expected food use in Europe. Closing stocks are expected at 8 Mt, one of the lowest on record due to continued tightening in North Africa and Turkey. International pricing for durum has softened slightly as buyers await news on the outcome of the Mexican harvest and conditions for the new crop.

The average Canadian crop year producer price for Saskatchewan No. 1 Canadian Western Amber Durum (CWAD) 13% protein remains unchanged at $290/tonne.

**For 2021-22,** total supply is projected to drop 3% due to tight carry-out stocks and a return to average yields. The Canadian supply forecast will be fully reviewed next month following the release of the seeding intentions report by Statistics Canada. Canadian exports are expected to decrease to 5 Mt due to competition from Europe, whose climactic conditions to date have been favourable to a good harvest. Total domestic use is forecast to return to average pre-pandemic levels at 0.9 Mt, with a decline in food use offset by an increase in feed. Carry out stocks are forecast to increase to 1.2 Mt, following the decline in export volumes.

Internationally, the IGC projects world durum production to increase 7% in 2021-22 driven by favourable climatic conditions in key growing regions of the world, especially in Europe. North African production is also expected to return to average yields following beneficial precipitation earlier this month. Total supply is projected at 44.2 Mt, up 4% compared to 2020-21; total demand is projected to rise 1%, due to higher domestic and feed use in Europe, underpinned by increased local supply.

The average Canadian crop year producer price for durum is forecast at $270/tonne.

**Wheat (excluding durum)**

**For 2020-21**, according to Statistics Canada, total supply is estimated at 33.5 MT, 5% more than the previous year and 11% more than the last five year average thanks to an increase in production. Production is reported at 28.6 Mt, the second highest on record since 2013-2014. As per the Canadian Grain Commission's sample survey analysis to January 6, 2021, the protein content of grades 1 and 2 CWRS averaged 13.3%, lower than in 2019-20 (13.5%), and also slightly below the last five year average (13.4%). Over 80% of all CWRS was graded within the top 2 grades.

On the demand side, exports have been trimmed slightly to 21 Mt, on a slight slowdown in exports over February, increased competition from Russia as buyers acclimatize to the export tax and increasing ocean freights. Carry-out stocks were adjusted to 4.5 Mt on a slight increase in commercial stocks.

According to the USDA April WASDE, the global outlook for all wheat (including durum) points to

smaller supplies, increased demand and a continued tightening of stocks. Compared to the March WASDE report, overall supply was reduced to 1,076.5 Mt (-0.5 Mt) despite record production of 776.5 Mt. World consumption was revised upward to 781 Mt (+5.1 Mt) supported by strong and continuing demand from China, where corn remains at a premium to wheat. China's domestic use was revised upward by 5Mt once again to 40 Mt, a record high if realized. Global exports for 2020-21 are projected at 198.9 Mt, up 1.2 Mt m/m on higher exports from Russia and the EU. Ending stocks were tightened another 5.7 Mt to 295.5 Mt on reductions in China, which holds approximately 50% of all global stocks.

For the US, the forecasted supply for 2020-21 was lowered slightly on a reduction in imports. US supply is forecast at 108,909 Mt, down 0.3% m/m and 5% less than the previous year. The forecast for exports remains unchanged m/m at 36.2 Mt and ending stocks are expected at 30.7 Mt, down 19% compared to 2019-20.

For the 2020-2021 crop year, average Canadian producer prices in Saskatchewan for No. 1 Canadian Western Red Spring (CWRS) 13.5% are forecast at $250/tonne.

**For 2021-22,** total supplies are forecast at 31 Mt, down 7% year over year due to a decline in harvested area, tight carry-in stocks and a return to average yields. Production is projected at 26.4 Mt, 8% less than the previous year. Statistics Canada releases the results of their farmers' seeding intention survey at the end of April; forecasted supply will be revised accordingly in the next report. Compared to last month, exports have been revised upward to 19.2 Mt on continued strength in world demand, and in particular Chinese demand, going into 2021-22. Carry-out stocks were trimmed to 4.85 Mt.

According to the USDA's prospective plantings report released March 31, 2021, all wheat acreage, including durum, is expected to rise 5% to 46.4 million acres, the fourth lowest on record. But, with slightly lower yields due to persistent dry conditions, expected production and supply is projected to remain relatively on par with current levels. US exports are expected to decline slightly with increased competition, in particular from Europe. US ending stocks are forecast at 25.6 Mt by the end of 21-22 (-5 Mt y/y).

Worldwide, early projections by the IGC are pointing to an increase in world supplies with an increase in harvested areas and yields, in particular in Europe. As crops emerge from dormancy, winter wheat conditions in the EU are favourable with 87% of the common wheat rated in good /excellent condition. Over winter losses in Russia may be slightly better than expected with some beneficial rain this month, although concerns for the central region persist. North American dry conditions throughout most of the US plains are still concerning with many states still harboring poor over winter crop ratings this year compared to last. World production is projected to increase 2% to 789.6 Mt, a new record if realized.

On the demand side, use is projected to increase 3% y/ y to 778 Mt on continued consumption in China; trade is expected to remain at above average levels, albeit down 3% compared to 2020-21 on lower import demand from the EU, UK, Iran, Turkey and Morocco who will likely come to rely more heavily on their increased domestic supplies.

Average Canadian producer prices for wheat for the crop year are forecast at $245/tonne.

**Romina Code: Wheat Analyst**
**Romina.Code@canada.ca**

## Barley

**For 2020-21,** the forecast for total Canadian barley exports (raw barley grain and grain equivalent of malt) is pegged at 3.75 million tonnes (Mt), up by 50 thousand tonnes (Kt) from last month, based on the stable and robust export of raw barley grain, offsetting slower exports of barley malt. Total exports are expected to be 23% higher than last year, the highest since 2007-08. Statistics Canada (STC) reported that exports of raw barley grain for the first seven months of the crop year increased by 68%, largely due to strong demand from China, although exports to the US and Japan fell. Exports of barley products decreased by 10%, largely due to weakening of demand from the US and Japan, although exports to Mexico, South Korea and Colombia increased.

Imports of barley are expected to increase sharply from last year to 180 Kt, as strong exports and domestic feed consumption have tightened domestic barley supply and, therefore, led barley imports to surge. Most of the increase in imported barley was shipped from the US to Alberta.

Total domestic use is projected to increase by 5%, driven by strong feed consumption. Industrial use is expected to decrease slightly. Carry-out stocks are projected to decline to 0.5 Mt, a record low.

During the past four weeks, feed barley prices in Lethbridge have been strong, mostly above $300/t, and over $310/t at times. The average price for the entire crop year is expected to rise by 16% from 2019-20 to $270/t, second only to the record high of $279/t in 2012-13.

Worldwide, demand for barley has been strong, driven by continuing robust demand from China. In the April projections, the United States Department of Agriculture (USDA) revised up 2020-21 world barley production by 520 Kt, which was more than offset by the forecast increase in world demand. The 2020-21 world barley carry-out stocks were revised up by more than 1.8 Mt, mainly backed by upward revisions in the EU barley carry-out stocks for 2020-21 and the past few years. After the revision, the 2020-21 world carry-out stock projection is slightly above last year's levels and at a four-year high, but it is still lower than the previous five-year average.

**For 2021-22,** the area seeded to barley in Canada is forecast to increase by 4% from 2020-21 to 3.2 million hectares (Mha), potentially at a 12-year peak. With projections for harvest area to be up by 4% and yields to be down by 3%, production is forecast to rise by 2%. Supply is forecast to drop by 3%, but will still be the second highest in twelve years. Exports are expected to be lower than the previous year, but still strong, as purchases by Canada's major barley importers are anticipated to remain strong. Domestic use is anticipated to drop on lower feed use. Carry-out stocks are forecast to rise but still remain tight.

The average price of feed barley for 2021-22 is forecast to decrease, based on anticipation of lower 2021-22 US corn prices and reduced demand.

The USDA released its Prospective Plantings report recently. This report indicates a slightly smaller 2021 barley area in the US, at 2.59 million acres (Mac), versus 2.62 Mac actually seeded in 2020.

Worldwide, the International Grains Council (IGC) projects lower 2021-22 harvested area and production in the world's major barley exporters, including the European countries, Russia and Australia. For Ukraine, the 2021-22 barley area is predicted to drop, but owing to an expected recovery in yields from the previous year, production is projected to increase. In total, world barley production for 2021-22 is predicted to drop by 3% from 2020-21 to 153.6 Mt, based on projections for lower harvested area and yield. However, it would still be 3% higher than the previous five-year average.

## Corn

**For 2020-21,** corn imports are projected at 1.6 Mt, 14% lower than in 2019-20. Corn exports are predicted at 1.4 Mt, increasing from 677 Kt last year. STC reported corn imports for the first half of

the current crop year at 772 Kt, a decrease of 9% from the same period in 2019-20. Most of the imported corn originated from the US and was shipped to Ontario and Manitoba. As for the exports, STC reported 636 Kt of corn exported for the first half of the current crop year, compared with 151 Kt and 872 Kt for the same period in 2019-20 and 2018-19, respectively. Approximately 92% of corn was exported from Ontario and Quebec. About 75% of the exports were destined to Europe, with 20% to the US and the rest to other countries.

Domestic use for 2020-21 is predicted to increase by 1% to 14.2 Mt due to rising feed use. Carry-out stocks are forecast to fall by 18% to 2.1 Mt from the record high of the previous year.

The average price of Chatham corn for 2020-21 is expected to increase by 18% from 2019-20 to $230/t, underpinned by stronger US corn prices.

The USDA predicted further tightening of the US corn carry-out stocks for 2020-21 in its April projections. The US corn stocks on September 1, 2021 was pegged at 1.35 billion bushels (Bbu), lowered by 10% from the March projections, as the estimates for feed consumption, ethanol production and exports were revised higher. If this happens, the 2020-21 carry-out stocks would be 30% lower than last year. The marketing-year weighted average price received by farmers was set at US$4.30/bu, versus US$3.56/bu for last year.

Worldwide, demand for corn has been strong. In the April projections, the USDA revised up the 2020-21 world corn production by 0.74 Mt, which was more than offset by an increase of 4.42 Mt for the world corn consumption estimate. The 2020-21 world corn carry-out stocks were lowered by 3.82 Mt to 284 Mt, a six-year low.

**For 2021-22,** the area seeded to corn in Canada is forecast to decrease by 3% from 2019-20 to 1.4 Mha. Production is forecast to decrease by 2% to 13.3 Mt on a projection for lower harvested area. Imports are expected to increase given the predictions for lower domestic supply and the appreciation of the Canadian currency making US corn more attractive. Supply is projected to drop by 3% from 2020-21, mainly due to lower carry-in stocks and production. Exports are projected to remain stable. Domestic use is projected to fall on reduced feed use. Carry-out stocks are forecast to decrease by 5% to 2.0 Mt.

The average price of corn for 2021-22 is forecast to drop by 6.5% to $215/t, following the forecast for lower US corn prices.

The USDA's Prospective Plantings report indicates that US farmers intended to grow 91.1 Mac of corn this year, which is 1% lower than the prediction set by the USDA's 97$^{th}$ annual Agricultural Outlook Forum and only slightly higher than the actually seeded acreage of 90.8 Mac in 2020. This could lead to another year of tight corn supply in the US.

For other major exporting countries, including Argentina, Brazil and Ukraine, the IGC projects higher 2021-22 corn harvested areas. The 2021-22 production in South America is forecast to be record high. For Ukraine, the 2021 production is projected to increase by 24% from 2020.

For the world's top importers of corn, the EU corn area in 2021 is predicted by IGC to dip by 1.7%, as some of the area has switched into winter wheat. However, production is forecast to be slightly higher than the 2020 level. The 2021 corn area in Mexico is forecast to increase slightly from the prior year's level and production is projected to increase by 4 %. The 2021 corn area in China is projected to increase for a second consecutive year, potentially 1.2% higher than in 2020, and production is projected to increase by 3%.

World corn harvested area in 2021-22 is projected by IGC to increase for a third consecutive year to a record 199.2 million hectares (Mha). Assuming trend yields, the IGC predicts world production to rise by 5% to 1,192.6 Mt, reaching a new peak.

**Oats**

**For 2020-21,** total exports of raw oat grain and oat products are projected at 2.95 Mt, 13% higher than last year and the highest level on record. STC reported an increase of 23% and 20%, respectively, for the exports of oat grain and oat products for the

first seven months of the current crop year, compared to the same period last year. The major destinations include the US, Mexico, Chile and Japan.

Total domestic use for 2020-21 is expected to increase by 7%, largely due to a forecasted increase in feed use. Carry-out stocks are expected to fall to a record low level, due to robust exports and solid domestic feed use.

For the crop year to date, the average cash oat prices in the Prairie provinces have increased by 8%, 11% and 5%, respectively, for Alberta, Saskatchewan and Manitoba. The Chicago Board of Trade (CBOT) oat futures price for 2020-21 is expected to rise by 8% from last year to $285/t, the highest level on record, supported by tight oat stocks in North America and strong prices of other crops.

The estimate for world oat usage was revised lower by the USDA, mainly because feed consumptions in the US and Mexico were adjusted downward. Oat carry-out stocks in the US were raised by 73Kt on lowered feed consumption. World oat carry-out stocks were raised by 63 Kt to 306 Kt,, hitting a four-year high.

**For 2021-22,** the area seeded to oats in Canada is forecast to decrease by 3% to 1.5 Mha. Production is forecast to decrease by 7% to 4.2 Mt based on projections for lower harvested area and yield. Supply is forecast to drop by 8% to 4.6 Mt, largely due to lower production. Domestic use is anticipated to fall on lower feed use. Exports are expected to drop, based on forecasts for lowered exports for both oat grain and products. Carry-out stocks are forecast to rise, mainly due to reduced total use, despite lower supply.

The average price of oats for 2021-2022 is forecast to decrease due to a decline in demand and a drop in prices in neighboring markets.

The USDA's Prospective Plantings report indicates a sharply reduced 2021 oat acreage in the US, at 2.5 Mac, 17% lower than the actually seeded area of 3.0 Mac in 2020.

The IGC projects the world oat harvested area total in 2021-22 to decline by 3% from 2020-21, to 9.6 Mha, 1% down from the previous five-year average. Assuming trend yields, global production is forecast to decrease by 4% to 24.6 Mt, with declines predicted in the three major oat exporters: the EU, Canada and Australia.

**Rye**

**For 2020-21,** Canadian rye exports are estimated to fall by 12% to 145 Kt, based on the current export pace. Almost all the exports were shipped to the US. STC reported that Canadian rye exports for the first seven months of the current crop year decreased by 13% to 103 Kt from the same period last year.

Domestic feed use for 2020-21 is expected to increase significantly due to relatively cheap prices and good supplies. Carry-out stocks are projected to rise sharply due to a bumper crop that increased domestic supply by 37% from last year, the highest level since 2006.

Rye prices are expected to fall by 17% from 2019-20, due to ample supplies in Canada, the US and around the world.

**For 2021-22,** the area seeded to fall rye in Canada increased to 240 thousand hectares (Kha), versus 237 Kha for a year ago. It is also the highest level since 2006-07. Production and total supply are projected to be at record high levels. The bumper supply is expected to add to potentially higher exports and domestic feed consumption. Carry-out stocks are forecast to increase from 2020-21 and remain in the high range for the last two decades. The average price of rye for 2021-22 is forecast to decrease due to ample supply.

Based on expected lower area and production in the world's major rye exporters (the EU and Russia), the IGC projects global rye production in 2021-22 to be 10% lower than the 2020-21 level at 13.2 Mt.

**Mei Yu: Coarse Grains Analyst**
**Mei.Yu@canada.ca**

## Canola

**For 2020-21**, canola supplies tightened by 9% from last year, to 22.0 Mt, on a 29% decline in carry-in and a 5% drop in output. Demand for Canadian canola remains strong, with exports and crush running well ahead of last year supporting forecasts for a 10.9 Mt export program and a 10.2 Mt domestic crush. Carry-out is forecast to drop sharply from last year to 0.7 Mt, for a very tight stocks-to-use ratio of 3% vs 15% last year and the 5 year average of 14%.

Canola prices, simple average, track Vancouver are estimated at $690/t, surpassing the previous record of $650/t set in 2012-13. Canadian prices are supported by higher prices for oilseeds, vegetable oils and protein meal, which in turn are supported by increased Chinese and European imports, the slow South American soybean harvest, and by a tightening of the world stocks-to-use ratio.

**For 2021-2022,** seeded area in Canada is forecast to increase by 4%, to 8.8 million hectares, (Mha), while harvested area rises to 8.7 Mha, as farmers expand canola area at the expense of wheat, forages and summerfallow. The early spring moisture situation for canola across western Canada is dry, with most of the agricultural area across western Canada significantly drier than normal. Spring rains need to be significantly higher than normal to return soil moisture to normal growing conditions, while it is early in the season and widespread seeding has not started, the current outlook is for normal yields for the upcoming crop year.

Currently, canola yields are projected at the 5 year average of 2.32 tonnes per hectare (t/ha), up from the 2.25 t/ha achieved in 2020-21. Based on the expected increase in seeded area and assuming normal yields, production is forecast to rise by 8%, the third highest level on record. Total supply is forecast to tighten to 21.0 Mt with carry-in-stocks expected to be sharply lower than last year offsetting the expected rise in production.

Exports are forecast to fall by 5% to 10.4 Mt, as tighter domestic supplies limit Canada's ability to service strong world demand for vegetable oils and protein meals. Domestic crush is forecast to decline to 9.7 Mt, while carry-out stocks remain unchanged at a very tight 0.7 Mt, for a stock-to-use ratio of 3%. Canola prices are forecast to decline slightly to $650/t, track Vancouver, under pressure from an expected easing of US soybean prices for the upcoming crop year.

## Flaxseed

**For 2020-21,** supplies increased by 17%, to 0.66 Mt, versus 0.57 Mt last year, due to increased production and marginally higher carry-in stocks. Exports are estimated up by 55%, to 0.54 Mt on strong European buying, as the EU's traditional supplier Kazakhstan switches to supplying China instead. Total domestic use is expected to fall by 54%, to 71,700 t, on sharply lower feed waste and dockage. Carry-out stocks are forecast down 21% to 0.05 Mt while flaxseed prices rally sharply to $700/t, versus $518/t in 2019-20 and the 5 year average of $477/t.

**For 2021-22,** the area seeded to flaxseed in Canada is forecast to rise by 22% to a six-year high of 0.46 Mha, on support from the 2020-21 price rally. The shift into flaxseed is expected to be constrained by low spring soil moisture, and by competition for crop area from alternate crops, such as lentils. Flaxseed production is forecast at 0.68 Mt, assuming an area loss of 2% prior to harvest and five year average yields of 1.5 t/ha. Total supply is forecast to increase by 11%, to 0.74 Mt, as the decline in carry-in moderates the forecasted rise in output.

Exports are forecast down by 7% from 2020-21, to 0.50 Mt, on reduced Chinese, European and United States buying. Total domestic use is forecast to rise by about 53% to 0.11 Mt, on higher feed, waste and dockage. Carry-out stocks are forecast to increase by 150% to 0.13 Mt while prices for flaxseed decline by 9% to $650/t for 2021-22.

## Soybeans

**For 2020-2021,** domestic supplies of soybeans are estimated up 4% from last year to 7.4 Mt due to a marginal increase in carry-in stocks and a 3%

increase in production. Soybean imports are estimated up slightly to 0.4 Mt for the current crop year, versus the 0.24 Mt imported for 2019-20.

Canadian exports of soybeans are forecast to rise by 23% to 4.4 Mt for the current crop year, on strong world demand and increased domestic supplies. Domestic processing of soybeans is forecast to increase by 9% from last year to a historically normal 1.9 Mt on good crush margins and strong demand for vegetable oils and protein meal. Soybean prices are estimated to increase by 39%, to $585/t, versus the simple average of $420/t earned in 2019-20.

The factors to watch for the remainder of the crop year are: (1) US 2021-22 soybean plantings, (2) South American production and shipping pace and (3) the strength of Chinese buying.

**For 2021-2022,** planted area in Canada is forecast to increase by 12% to 2.3 Mha on support from high prices, with the gains in area limited by low sub soil moisture, short growing season in western Canada and attractive prices for competing crops. Assuming 5-year average yields, production is forecast at 6.6 Mt, versus 6.4 Mt in 2020-21 and the 6.1 Mt grown in 2019-2020.

Total supply is forecast to increase to 7.6 Mt as the rise in production and slightly higher imports more than offset lower carry-in stocks. Exports are forecast to increase by 14% to 5.0 Mt on strong world demand, with shipments headed to a diverse group of countries. Domestic processing is forecast stable at 1.9 Mt while carry-out stocks fall to 0.23 Mt, versus 0.50 Mt for 2020-21 and the 5 year average of 0.57 Mt. Soybean prices are forecast to fall by $35/t to $550/t, under pressure from expected lower US prices.

For 2021-22, the United States is unlikely to rebuild its soybeans stocks with planted area estimated up by a smaller than expected 3.8 Million Acres (Mac) to 87.6 Mac, based on the USDA's Prospective Plantings report. Assuming normal abandonment of 0.9 Mac and yields of 50.8 bushels per acre, total soybean production is estimated at 4.4 Billion Bushels, (Bbu). This results in supplies falling to 4.6 Bbu versus 4.7 Bbu for 2020-21 after accounting for beginning stocks and imports.

World demand for US soybeans is forecast to moderate marginally resulting is a slight rebuilding of ending stocks to 0.15 Bbu, vs 0.12 Bbu for 2020-21 and 0.53 Bbu for 2019-20. The US farm-gate season average price for soybeans is projected at US$11.25/bu versus US$11.15/bu for 2020-21 and US$8.57/bu for 2019-20. The strength in US soybean prices for the upcoming crop year is expected to support prices worldwide, including those for Canadian soybeans.

**Chris Beckman: Oilseeds Analyst**
**Chris.Beckman@canada.ca**

### Dry Peas

**For 2020-21,** exports are forecast to increase to 3.8 million tonnes (Mt). China, Bangladesh and Cuba are the three main markets for Canadian dry peas. Carry-out stocks are forecast to increase, despite a stronger export demand, due to increased supply. The average price is expected to rise from 2019-20, mostly due to higher prices for yellow and feed peas.

Monthly exports of dry peas have been higher than the five-year average since September, mostly due to increased exports to China. Production of the winter pulse crop in India is forecast by the Government of India at nearly 16 Mt, up over 5% from the previous year. If this level of production is realized, it would be the second largest winter crop on record. Canadian dry pea export demand to China is expected to remain firm throughout the remainder of the crop year.

During the month of March, the on-farm price of yellow peas in Saskatchewan was unchanged while the green pea price fell marginally. Green pea prices have been at a $30/t discount to yellow pea prices in the month of March. For the entire crop year, green dry pea prices are expected to be similar to yellow pea prices, compared to a green pea premium of $115/t to yellow types in 2019-20.

**For 2021-22,** seeded area is expected to be marginally higher from the previous year at 1.75 Mha, due to solid returns relative to other crops and above average export demand. However, due to average yields, production is forecast to decrease to 4.4 Mt with total supply falling marginally to 4.8 Mt. Exports are expected to be lower at 3.7 Mt, and carry-out stocks are expected to decrease. The average price is expected to fall marginally from 2020-21 due to expectations for world supply similar to the previous year.

The USDA March Prospective Planting report showed that US area seeded to dry peas for 2021-22 is forecast at nearly 0.9 million acres, 11% lower than 2020-21. This is largely due to a large expected decrease in North Dakota area.

### Lentils

**For 2020-21,** Canadian lentil exports (August to February) total about 1.4 Mt, higher than this time in 2019-20. Crop year exports are forecast at 2.7 Mt with Turkey, United Arab Emirates and India currently the top export markets. Carry-out stocks are forecast to fall due to the limited supply. The overall average price is forecast to rise due to lower carry-out stocks.

During the month of March, the on-farm price of large green and red lentils in Saskatchewan was unchanged. The average price for large green lentils is forecast to maintain a $155/t premium over red lentil prices, compared to a $105/t premium to red lentils in 2019-20.

**For 2021-22,** area seeded in Canada is expected to be mostly unchanged at 1.7 Mha, due to higher expected returns relative to other crops. With trend yields, production is forecast to fall marginally to 2.7 Mt and supply is expected to decrease to 2.9 Mt due to a fall in carry-in stocks. Exports are forecast to be lower at 2.5 Mt. Carry-out stocks are expected to remain tight, which will be supportive for prices. The average price for all grades is forecast to fall from 2020-21 with increased world supply.

The USDA March Prospective Planting report showed that US area seeded to lentils is expected to increase 16% from last year to 0.61 million acres. Area seeded is expected to rise sharply in North Dakota and in Montana.

### Dry Beans

**For 2020-21,** with a record domestic supply, exports are expected to rise to a record 405 thousand tonnes (Kt). The US and the EU remain the top two markets for Canadian dry beans, with smaller volumes exported to Angola, Mexico and Japan. Carry-out stocks are expected to rise sharply. The average Canadian dry bean price is forecast to decrease due to higher North American supply. As a result, there is a larger than expected canning quality supply in North America. To-date (August-March), white pea bean prices are 10% lower, pinto bean prices are 20% lower, while black bean prices are

10% higher than in 2019-20.

**For 2021-22,** the area seeded is forecast to fall from 2020-21 to 160 thousand hectares (Kha) because of lower potential returns compared to other crops. Production is expected to fall sharply to 355 Kt due to a return to trend yields and lower area. Supply is expected to fall despite higher carry-in stocks. Exports are forecast to be lower with lower demand from the US and the EU. Carry-out stocks are expected to increase. The average price of dry beans is forecast to fall compared to the previous year.

The USDA March Prospective Planting report indicated that the intended US area seeded to dry beans (excluding chickpeas) is forecast to decrease by 11% to 1.54 million acres, due to lower seeded area across the US states, with the exception of Washington.

**Chickpeas**

**For 2020-21,** a rise in demand from the US has resulted in an increase in the forecast for Canadian exports. Pakistan, the US and the EU are the main markets for Canadian chickpeas. However, carry-out stocks are expected to rise sharply due to higher supply. Despite this, the average price is forecast to rise compared to the previous year despite average export demand and excess North American stocks.

**For 2021-22,** the area seeded is forecast to fall sharply from 2020-21 because of higher carry-in stocks and the potential for lower returns relative to other crops. As a result, production is expected to decrease to 170 Kt. However, supply is forecast to increase from last year due to the burdensome carry-in stocks. Exports are forecast to rise and carry-out stocks are expected to rise from the previous year. The average price is forecast to be lower, despite expectations for similar world supply.

The area seeded to chickpeas in the US is estimated by the USDA to rise to 0.29 million acres, up 7% from 2020-21. This is due to a sharp rise in area seeded in Idaho and Montana, partly offset by lower area in Washington and North Dakota.

**Mustard Seed**

**For 2020-21,** exports are expected to be lower than last year at 110 Kt. However, carry-out stocks are forecast to fall sharply due to the smaller supply. The US and the EU are the main export markets for Canadian mustard seed. The average price is forecast to rise from 2019-20 due to the limited domestic supply and the expected decrease in carry-out stocks.

**For 2021-22,** the area seeded is expected to be higher than the previous year due to good returns compared to other crops. Production is forecast to increase to 145 Kt with trend yields. Supply is expected to be similar to the previous year, as the increase in production combines with lower carry-in stocks. Exports are expected to rise to 115 Kt and carry-out stocks are forecast to continue to fall. The average price is forecast to fall from 2020-21, but remain above the five year average, despite the similar supply and tight carry-out stocks.

**Canary Seed**

**For 2020-21,** exports are expected to be lower than last year, as increased demand from Mexico and Brazil has been more than offset by lower demand from Belgium, Indonesia and Egypt. Supply is estimated to be down from 2019-20 causing carry-out stocks to tighten. The average price is forecast to rise from the 2019-20 level.

**For 2021-22,** the area seeded is forecast to rise due to solid returns relative to other crops. Production is expected to increase with trend yields. Supply is forecast to increase marginally to 180 Kt. Exports are expected to rise with the increase in supply, and carry-out stocks are expected to remain tight. The average price is forecast to be lower than the 2020-21 level.

**Sunflower Seed**

**For 2020-21,** exports are forecast to rise sharply from 2019-20 but carry-out stocks are forecast to be higher than the previous year due to higher supply. The US remains Canada's main export market for sunflower seed. The average price is forecast to decrease from 2019-20, due to lower prices for both types. Confectionery and oilseed sunflower seed prices have been pressured by higher North American supply and a stronger Canadian dollar when compared to the US dollar.

**For 2021-22,** area seeded is expected to be lower than 2020-21 due to lower potential returns. Production is forecast to fall to 75 Kt, assuming a return to average yields. Supply is expected to decrease to 225 Kt and, and exports are expected to fall. Carry-out stocks are also expected to rise despite the lower supply. The average price is forecast to increase from 2020-21, due to similar confectionary type prices in the US and Canada, but higher oil type prices.

The prospective planting of sunflower seed in the US for 2021-22 is forecast by the USDA at 1.22 million acres, down 29% from 2020-21. This is largely due to an expected sharp fall in area seeded in North and South Dakota. The area seeded to the oil type varieties of sunflower seed is expected to decrease to 1.08 million acres while the area allocated to confectionery type varieties is forecast to fall sharply to below 0.14 million acres.

**Bobby Morgan: Pulse and Special Crop Analyst**
**Bobby.Morgan@agr.gc.ca**

## CANADA: GRAINS AND OILSEEDS SUPPLY AND DISPOSITION

**April 20, 2021**

| Grain and Crop Year (a) | Area Seeded | Area Harvested | Yield | Production | Imports (b) | Total Supply | Exports (c) | Food & Industrial Use (d) | Feed, Waste & Dockage | Total Domestic Use (e) | Carry-out Stocks | Average Price (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *thousand ha* | | *t/ha* | *thousand tonnes* | | | | | | | | *$/t* |
| **Durum** | | | | | | | | | | | | |
| 2019-2020 | 1,980 | 1,902 | 2.62 | 4,977 | 96 | 6,906 | 5,268 | 216 | 464 | 901 | 737 | 270 |
| 2020-2021f | 2,302 | 2,295 | 2.86 | 6,571 | 25 | 7,333 | 5,650 | 230 | 420 | 873 | 810 | 290 |
| 2021-2022f | 2,430 | 2,369 | 2.66 | 6,302 | 25 | 7,137 | 5,000 | 200 | 514 | 937 | 1,200 | 270 |
| **Wheat Except Durum** | | | | | | | | | | | | |
| 2019-2020 | 8,145 | 7,754 | 3.53 | 27,371 | 179 | 31,758 | 19,081 | 3,369 | 3,727 | 7,915 | 4,763 | 225 |
| 2020-2021f | 7,892 | 7,723 | 3.71 | 28,616 | 90 | 33,469 | 21,050 | 3,500 | 3,602 | 7,919 | 4,500 | 250 |
| 2021-2022f | 7,496 | 7,346 | 3.60 | 26,446 | 100 | 31,046 | 19,200 | 3,200 | 3,019 | 6,996 | 4,850 | 245 |
| **All Wheat** | | | | | | | | | | | | |
| 2019-2020 | 10,125 | 9,656 | 3.35 | 32,348 | 275 | 38,664 | 24,349 | 3,585 | 4,191 | 8,816 | 5,499 | |
| 2020-2021f | 10,194 | 10,018 | 3.51 | 35,187 | 115 | 40,801 | 26,700 | 3,730 | 4,021 | 8,791 | 5,310 | |
| 2021-2022f | 9,926 | 9,715 | 3.37 | 32,748 | 125 | 38,183 | 24,200 | 3,400 | 3,533 | 7,933 | 6,050 | |
| **Barley** | | | | | | | | | | | | |
| 2019-2020 | 2,996 | 2,728 | 3.81 | 10,383 | 63 | 11,308 | 3,054 | 277 | 6,759 | 7,298 | 957 | 232 |
| 2020-2021f | 3,060 | 2,809 | 3.82 | 10,741 | 180 | 11,877 | 3,750 | 268 | 7,089 | 7,627 | 500 | 270 |
| 2021-2022f | 3,190 | 2,930 | 3.73 | 10,923 | 60 | 11,483 | 3,500 | 288 | 6,734 | 7,283 | 700 | 250 |
| **Corn** | | | | | | | | | | | | |
| 2019-2020 | 1,496 | 1,451 | 9.24 | 13,404 | 1,870 | 17,254 | 677 | 5,303 | 8,698 | 14,017 | 2,560 | 195 |
| 2020-2021f | 1,440 | 1,402 | 9.67 | 13,563 | 1,600 | 17,723 | 1,400 | 5,300 | 8,908 | 14,223 | 2,100 | 230 |
| 2021-2022f | 1,400 | 1,362 | 9.77 | 13,308 | 1,800 | 17,208 | 1,400 | 5,300 | 8,492 | 13,808 | 2,000 | 215 |
| **Oats** | | | | | | | | | | | | |
| 2019-2020 | 1,459 | 1,171 | 3.61 | 4,227 | 13 | 4,637 | 2,615 | 143 | 1,324 | 1,597 | 426 | 274 |
| 2020-2021f | 1,554 | 1,245 | 3.62 | 4,576 | 14 | 5,015 | 2,950 | 140 | 1,450 | 1,715 | 350 | 285 |
| 2021-2022f | 1,500 | 1,220 | 3.48 | 4,240 | 15 | 4,605 | 2,600 | 140 | 1,243 | 1,505 | 500 | 270 |
| **Rye** | | | | | | | | | | | | |
| 2019-2020 | 175 | 103 | 3.25 | 333 | 3 | 386 | 165 | 19 | 140 | 180 | 40 | 210 |
| 2020-2021f | 237 | 146 | 3.34 | 488 | 2 | 530 | 145 | 24 | 240 | 284 | 100 | 175 |
| 2021-2022f | 240 | 159 | 3.21 | 510 | 2 | 612 | 150 | 24 | 270 | 311 | 150 | 170 |
| **Mixed Grains** | | | | | | | | | | | | |
| 2019-2020 | 145 | 68 | 2.84 | 192 | 0 | 192 | 0 | 0 | 192 | 192 | 0 | |
| 2020-2021f | 166 | 67 | 3.49 | 233 | 0 | 233 | 0 | 0 | 233 | 233 | 0 | |
| 2021-2022f | 148 | 69 | 2.74 | 188 | 0 | 188 | 0 | 0 | 188 | 188 | 0 | |
| **Total Coarse Grains** | | | | | | | | | | | | |
| 2019-2020 | 6,271 | 5,520 | 5.17 | 28,539 | 1,950 | 33,777 | 6,510 | 5,743 | 17,113 | 23,284 | 3,982 | |
| 2020-2021f | 6,457 | 5,669 | 5.22 | 29,601 | 1,796 | 35,378 | 8,245 | 5,732 | 17,919 | 24,083 | 3,050 | |
| 2021-2022f | 6,477 | 5,740 | 5.08 | 29,169 | 1,877 | 34,096 | 7,650 | 5,752 | 16,928 | 23,095 | 3,350 | |
| **Canola** | | | | | | | | | | | | |
| 2019-2020 | 8,481 | 8,456 | 2.32 | 19,607 | 155 | 24,197 | 10,042 | 10,129 | 834 | 11,025 | 3,131 | 484 |
| 2020-2021f | 8,410 | 8,320 | 2.25 | 18,720 | 100 | 21,950 | 10,900 | 10,200 | 90 | 10,350 | 700 | 690 |
| 2021-2022f | 8,750 | 8,698 | 2.32 | 20,150 | 100 | 20,950 | 10,400 | 9,700 | 99 | 9,850 | 700 | 650 |
| **Flaxseed** | | | | | | | | | | | | |
| 2019-2020 | 379 | 339 | 1.43 | 486 | 22 | 568 | 350 | N/A | 138 | 155 | 64 | 518 |
| 2020-2021f | 377 | 371 | 1.56 | 578 | 20 | 662 | 540 | N/A | 52 | 72 | 50 | 700 |
| 2021-2022f | 460 | 449 | 1.50 | 675 | 10 | 735 | 500 | N/A | 90 | 110 | 125 | 650 |
| **Soybeans** | | | | | | | | | | | | |
| 2019-2020 | 2,313 | 2,271 | 2.71 | 6,145 | 242 | 7,087 | 3,576 | 1,742 | 930 | 2,885 | 626 | 419 |
| 2020-2021f | 2,052 | 2,041 | 3.12 | 6,359 | 400 | 7,385 | 4,400 | 1,900 | 385 | 2,485 | 500 | 585 |
| 2021-2022f | 2,300 | 2,292 | 2.88 | 6,600 | 500 | 7,600 | 5,000 | 1,900 | 275 | 2,375 | 225 | 550 |
| **Total Oilseeds** | | | | | | | | | | | | |
| 2019-2020 | 11,172 | 11,066 | 2.37 | 26,239 | 419 | 31,852 | 13,968 | 11,871 | 1,903 | 14,064 | 3,820 | |
| 2020-2021f | 10,839 | 10,732 | 2.39 | 25,656 | 520 | 29,997 | 15,840 | 12,100 | 526 | 12,907 | 1,250 | |
| 2021-2022f | 11,510 | 11,438 | 2.40 | 27,425 | 610 | 29,285 | 15,900 | 11,600 | 464 | 12,335 | 1,050 | |
| **Total Grains And Oilseeds** | | | | | | | | | | | | |
| 2019-2020 | 27,568 | 26,242 | 3.32 | 87,125 | 2,643 | 104,292 | 44,827 | 21,198 | 23,207 | 46,164 | 13,302 | |
| 2020-2021f | 27,490 | 26,419 | 3.42 | 90,444 | 2,431 | 106,176 | 50,785 | 21,562 | 22,466 | 45,781 | 9,610 | |
| 2021-2022f | 27,913 | 26,893 | 3.32 | 89,342 | 2,612 | 101,564 | 47,750 | 20,752 | 20,925 | 43,364 | 10,450 | |

**(a)** Crop year is August-July, except corn and soybeans, for which the crop year is September-August.
**(b)** Imports exclude products.
**(c)** Exports include grain products but exclude oilseed products.
**(d)** Food and Industrial use for soybeans is based on data from the Canadian Oilseed Processors Association.
**(e)** Total Domestic Use = Food and Industrial Use + Feed Waste & Dockage + Seed Use + Loss in Handling
**(g)** Crop year average prices: Wheat (No.1 CWRS, 13.5% protein) and Durum (No.1 CWAD, 13% protein), both are average Saskatchewan producer spot prices. Barley (No. 1 feed, cash, I/S Lethbridge), Corn (No.2 CE, cash, I/S Chatham), Oats (US No. 2 Heavy, CBOT nearby futures); Rye (No. 1 CW, cash, I/S Saskatoon); Canola (No. 1 Canada, cash, Track Vancouver); Flaxseed (No. 1 CW, cash, I/S Saskatoon); Soybeans (No. 2 CE, cash, I/S Chatham)
**Source:** Statistics Canada (STC) and Agriculture and Agri-Food Canada (AAFC)
**f:** forecasts by AAFC except for area, yield and production for 2020-2021 which are STC

# CANADA: PULSES AND SPECIAL CROPS SUPPLY AND DISPOSITION

**April 20, 2021**

| Grain and Crop Year (a) | Area Seeded | Area Harvested | Yield | Production | Imports (b) | Total Supply | Exports (b) | Total Domestic Use (c) | Carry-out Stocks | Stocks-to-Use Ratio | Average Price (d) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***thousand ha*** | | ***t/ha*** | ***thousand tonnes*** | | | | | | ***%*** | ***$//t*** |
| **Dry Peas** | | | | | | | | | | | |
| 2019-2020 | 1,753 | 1,711 | 2.48 | 4,237 | 82 | 4,631 | 3,708 | 689 | 233 | 5% | 265 |
| 2020-2021f | 1,722 | 1,685 | 2.73 | 4,594 | 100 | 4,927 | 3,800 | 827 | 300 | 6% | 340 |
| 2021-2022f | 1,750 | 1,715 | 2.57 | 4,400 | 90 | 4,790 | 3,700 | 840 | 250 | 6% | 330 |
| **Lentils** | | | | | | | | | | | |
| 2019-2020 | 1,530 | 1,489 | 1.60 | 2,382 | 90 | 3,327 | 2,733 | 385 | 209 | 7% | 485 |
| 2020-2021f | 1,713 | 1,705 | 1.68 | 2,868 | 105 | 3,182 | 2,700 | 332 | 150 | 5% | 630 |
| 2021-2022f | 1,700 | 1,675 | 1.61 | 2,700 | 75 | 2,925 | 2,500 | 275 | 150 | 5% | 585 |
| **Dry Beans** | | | | | | | | | | | |
| 2019-2020 | 160 | 150 | 2.11 | 317 | 75 | 442 | 361 | 56 | 25 | 6% | 985 |
| 2020-2021f | 185 | 183 | 2.68 | 490 | 65 | 580 | 405 | 55 | 120 | 26% | 870 |
| 2021-2022f | 160 | 154 | 2.31 | 355 | 75 | 550 | 365 | 55 | 130 | 31% | 825 |
| **Chickpeas** | | | | | | | | | | | |
| 2019-2020 | 159 | 156 | 1.61 | 252 | 48 | 440 | 105 | 85 | 250 | 132% | 490 |
| 2020-2021f | 121 | 120 | 1.79 | 214 | 43 | 507 | 115 | 87 | 305 | 151% | 610 |
| 2021-2022f | 100 | 97 | 1.75 | 170 | 45 | 520 | 125 | 85 | 310 | 148% | 545 |
| **Mustard Seed** | | | | | | | | | | | |
| 2019-2020 | 161 | 155 | 0.87 | 135 | 7 | 214 | 112 | 42 | 61 | 39% | 700 |
| 2020-2021f | 104 | 101 | 0.98 | 99 | 7 | 166 | 110 | 41 | 15 | 10% | 840 |
| 2021-2022f | 160 | 155 | 0.94 | 145 | 8 | 168 | 115 | 43 | 10 | 6% | 800 |
| **Canary Seed** | | | | | | | | | | | |
| 2019-2020 | 118 | 115 | 1.52 | 175 | 0 | 186 | 161 | 10 | 15 | 9% | 630 |
| 2020-2021f | 111 | 110 | 1.46 | 161 | 0 | 176 | 155 | 11 | 10 | 6% | 670 |
| 2021-2022f | 120 | 117 | 1.45 | 170 | 0 | 180 | 160 | 10 | 10 | 6% | 630 |
| **Sunflower Seed** | | | | | | | | | | | |
| 2019-2020 | 31 | 29 | 2.18 | 63 | 26 | 186 | 37 | 45 | 103 | 125% | 615 |
| 2020-2021f | 45 | 45 | 2.25 | 101 | 30 | 235 | 45 | 65 | 125 | 114% | 570 |
| 2021-2022f | 35 | 34 | 2.21 | 75 | 25 | 225 | 40 | 50 | 135 | 150% | 585 |
| **Total Pulses and Special Crops (c)** | | | | | | | | | | | |
| 2019-2020 | 3,911 | 3,804 | 1.99 | 7,559 | 328 | 9,425 | 7,217 | 1,312 | 896 | 11 | |
| 2020-2021f | 4,000 | 3,949 | 2.16 | 8,527 | 350 | 9,773 | 7,330 | 1,418 | 1,025 | 12 | |
| 2021-2022f | 4,025 | 3,947 | 2.03 | 8,015 | 318 | 9,358 | 7,005 | 1,358 | 995 | 12 | |

**(a)** Crop year is August-July. Grains Include pulses (dry peas, lentils, dry beans, chick peas) and special crops (mustard seed, canary seed, sunflower seed).
**(b)** Imports and exports exclude products.
**(c)** Total Domestic Use = Food and Industrial Use + Feed Waste & Dockage + Seed Use + Loss in Handling
**(d)** Producer price, FOB plant, average over all types, grades and markets.
**Source:** Statistics Canada (STC) and Agriculture and Agri-Food Canada (AAFC)
**f:** forecasts by AAFC except for area, yield and production for 2020-2021 which are STC