



Sugar and Sweeteners Outlook: April 2022

Vidalina Abadam

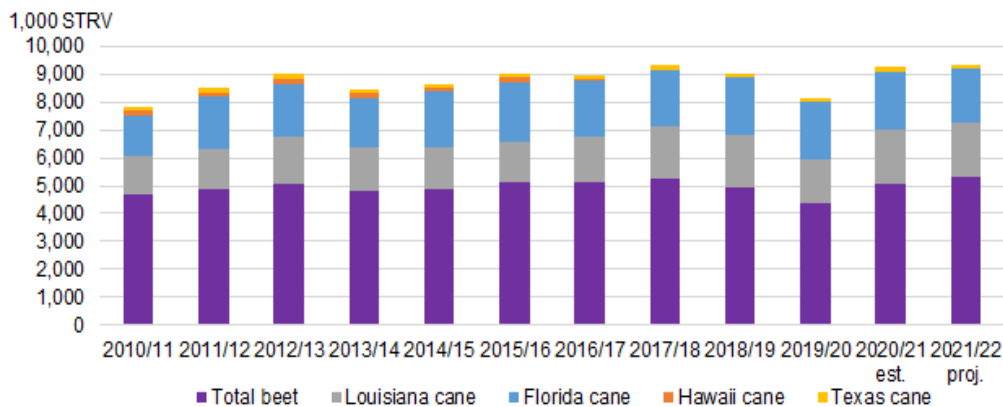
In this report:

[U.S. Sugar Outlook](#)
[Mexico Sugar Outlook](#)

Lower Sugar Production and Higher Use Reduce Ending Stocks

In the U.S. Department of Agriculture (USDA) April *World Agricultural Supply and Demand Estimates*, U.S. sugar ending stocks for 2021/22 are lowered on smaller supply and larger use. The reduction in both beet and cane sugar production (figure 1) is only marginally countered by the increase in high-tier imports. Total imports are raised solely on larger high-tier trade, but the overall forecast remains the lowest since 2008/09. Sugar for human consumption is raised on strong pace to date of beet sugar deliveries and imports of sugar for direct consumption. The Mexican 2021/22 sugar production is increased based on recent campaign developments.

Figure 1
U.S. beet and cane sugar production, crop year 2010/11 to 2021/22



STRV = short tons, raw value; est. = estimated; proj. = projected.
Sources: USDA, Farm Service Agency; USDA, World Agricultural Outlook Board.

U.S. Outlook Summary

Production in Both Beet and Cane Sectors Reduced

The April 2022 *World Agricultural Supply and Demand Estimates (WASDE)* lowered U.S. sugar ending stocks for 2021/22 by 125,000 short tons, raw value (STRV) to 1.567 million on smaller supply and larger use (table 1). This reduction translates to an ending stocks-to-use ratio of 12.5 percent, which is down by 1.1 percentage points from the prior month's 13.6 percent. U.S. sugar supply is lowered as the reduction in beet and cane sugar production is only partially offset by the increase in high-tier imports.

Table 1: U.S. sugar: supply and use by fiscal year (October/September), April 2022

| Items | 2019/20 | 2020/21 | | | 2021/22 | | |
|---|---------|----------------------------|---------------------|-------------------|---------------------|---------------------|-------------------|
| | | March (estimate) | April (estimate) | Monthly change | March (forecast) | April (forecast) | Monthly change |
| | | 1,000 short tons raw value | | | | | |
| Beginning stocks | 1,783 | 1,618 | 1,618 | 0 | 1,705 | 1,705 | 0 |
| Total production | 8,149 | 9,234 | 9,234 | 0 | 9,384 | 9,309 | -75 |
| Beet sugar | 4,351 | 5,092 | 5,092 | 0 | 5,389 | 5,338 | -51 |
| Cane sugar | 3,798 | 4,142 | 4,142 | 0 | 3,996 | 3,971 | -24 |
| Florida | 2,106 | 2,090 | 2,090 | 0 | 1,960 | 1,937 | -22 |
| Louisiana | 1,566 | 1,918 | 1,918 | 0 | 1,906 | 1,906 | 0 |
| Texas | 126 | 134 | 134 | 0 | 130 | 128 | -2 |
| Total imports | 4,165 | 3,195 | 3,195 | 0 | 3,043 | 3,058 | 15 |
| Tariff-rate quota imports | 2,152 | 1,749 | 1,749 | 0 | 1,568 | 1,568 | 0 |
| Other program imports | 432 | 292 | 292 | 0 | 250 | 250 | 0 |
| Non-program imports | 1,581 | 1,154 | 1,154 | 0 | 1,225 | 1,240 | 15 |
| Mexico | 1,376 | 968 | 968 | 0 | 1,050 | 1,050 | 0 |
| High-duty | 206 | 186 | 186 | 0 | 175 | 190 | 15 |
| Total supply | 14,097 | 14,046 | 14,046 | 0 | 14,132 | 14,072 | -60 |
| Total exports | 61 | 49 | 49 | 0 | 35 | 35 | 0 |
| Miscellaneous | 74 | 40 | 40 | 0 | 0 | 0 | 0 |
| Total deliveries | 12,344 | 12,252 | 12,252 | 0 | 12,405 | 12,470 | 65 |
| Domestic food and beverage use | 12,246 | 12,135 | 12,135 | 0 | 12,300 | 12,365 | 65 |
| To sugar-containing products re-export program | 78 | 89 | 89 | 0 | 80 | 80 | 0 |
| For polyhydric alcohol, feed, other alcohol | 20 | 27 | 27 | 0 | 25 | 25 | 0 |
| Commodity Credit Corporation (CCC) sale for ethanol | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total use | 12,479 | 12,341 | 12,341 | 0 | 12,440 | 12,505 | 65 |
| Ending stocks | 1,618 | 1,705 | 1,705 | 0 | 1,692 | 1,567 | -125 |
| Private | 1,618 | 1,705 | 1,705 | 0 | 1,692 | 1,567 | -125 |
| Commodity Credit Corporation (CCC) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stocks-to-use ratio (percent) | 13.0 | 13.8 | 13.8 | 0.0 | 13.6 | 12.5 | -1.1 |

Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates (WASDE)* report.

Beet sugar production for 2021/22 is reduced to 5.338 million STRV—51,000 less than last month—based on information reported by the processors on the Farm Service Agency’s (FSA) April *Sweetener Market Data* publication and through direct contact with all the processors. The USDA’s National Agricultural Statistics Service (NASS) has no update on sugar beet production data on its April *Crop Production* report. Half of the reduction in beet sugar production is driven by the lower expected production of the lone processor in the Great Lakes region. In aggregate, the beet processors reported lower sugar content, increased beet pile shrink, and smaller amount of imported sugarbeets from Canada for processing (table 2). The unusual late-season rainfall and warm weather during harvest contributed to the record-high average yield of 37.4 tons per acre that forced processors to leave some acres unharvested. However, the weather conditions did not trigger the beets to go into “storing sugar mode,” which consequently lowered the sugar content and diminished the quality of the beets going into the stockpiles. The less-than-ideal harvest conditions particularly affected the processor in the Great Lakes region that saw sucrose recovery below historic levels. Consequently, that beet processor declared *force majeure* in early April and announced a 25-percent reduction in the delivery of contracted sugar between April 1 to September 30. The sugar will instead be delivered between October 2022 to March 2023 to fulfill the contracts.

Table 2: Beet sugar production projection calculations, 2021/22

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2021/22 | Monthly |
|---|---------|---------|---------|---------|---------|---------|---------|
| | | | | | Mar | Apr | change |
| Area harvested (1,000 acres) | 1,114 | 1,096 | 980 | 1,142 | 1,108 | 1,108 | 0 |
| Yield (tons per acre) | 31.7 | 30.4 | 29.2 | 29.4 | 33.2 | 33.2 | 0 |
| Sugarbeet production (1,000 short tons) 1/ | 35,325 | 33,282 | 28,650 | 33,618 | 36,751 | 36,751 | 0 |
| Sugarbeet shrink (percent) | 7.31 | 5.17 | 5.34 | 6.60 | 8.38 | 8.90 | 0.5 |
| Sugarbeet sliced (1,000 short tons) | 32,742 | 31,561 | 27,072 | 31,399 | 33,672 | 33,481 | -191 |
| Sugar extraction rate from slice (percent) | 15.18 | 14.77 | 14.14 | 15.34 | 14.81 | 14.78 | -0.03 |
| Sugar from beets sliced (1,000 STRV) 2/ | 4,970 | 4,660 | 3,828 | 4,818 | 4,986 | 4,947 | -39 |
| Sugar from molasses (1,000 STRV) 2/ | 368 | 352 | 341 | 362 | 360 | 360 | 0 |
| Crop-year sugar production (1,000 STRV) 2/ | 5,338 | 5,012 | 4,169 | 5,181 | 5,346 | 5,307 | -39 |
| August-September sugar production (1,000 STRV) | 715 | 655 | 582 | 765 | 676 | 676 | 0 |
| August-September sugar production of subsequent crop (1,000 STRV) | 655 | 582 | 765 | 676 | 678 | 678 | 0 |
| Sugar from imported beets (1,000 STRV) 3/ | -- | N/A | N/A | N/A | 40 | 28 | -12 |
| Fiscal year sugar production (1,000 STRV) | 5,279 | 4,939 | 4,351 | 5,092 | 5,389 | 5,338 | -51 |
| Difference from April 2022 WASDE (1,000 STRV) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

RRV = Red River Valley region (includes Minnesota and North Dakota); STRV = short tons, raw value; NA = not applicable.

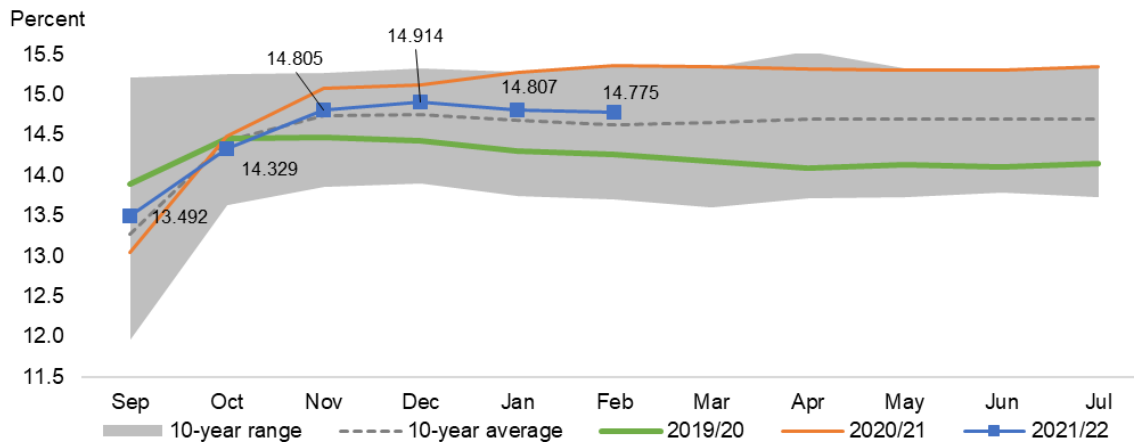
1/ USDA, National Agricultural Statistics Service.

2/ August–July.

3/ Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded.

Source: USDA, Economic Research Service; USDA, World Agricultural Outlook Board; USDA, Farm Service Agency.

Figure 2
Cumulative sugar extraction rate, beet sugar produced per sugarbeet sliced, by crop year, 2011/12 to 2021/22



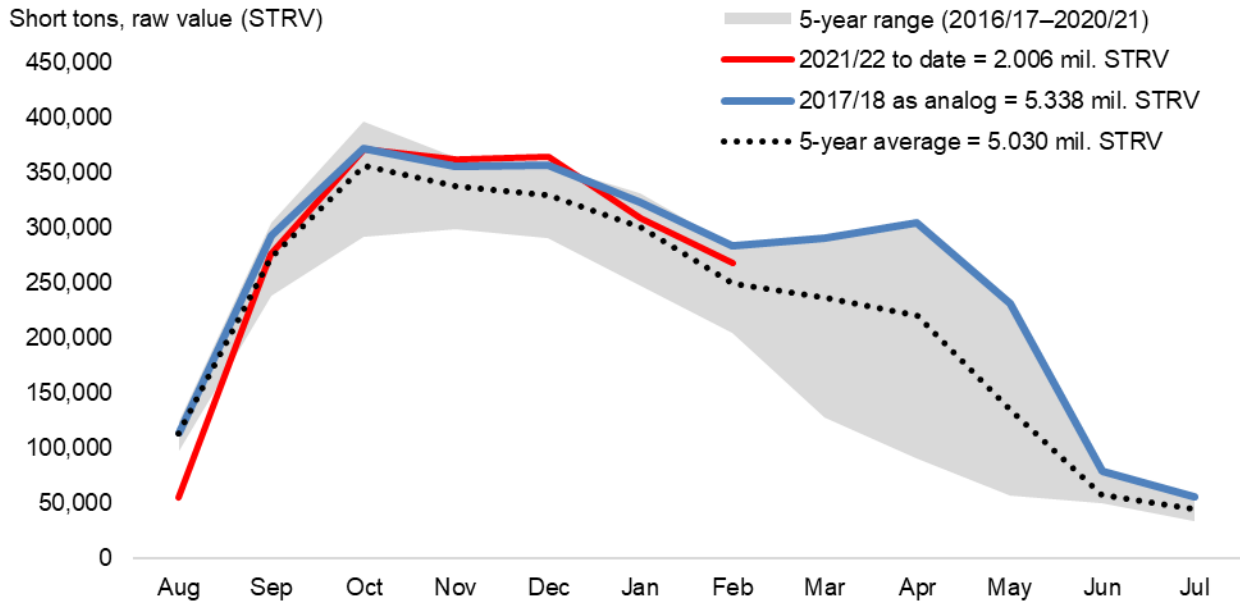
Source: USDA, Economic Research Service; USDA, Farm Service Agency.

While the beet slicing campaigns in the Pacific Northwest and Great Plains were expected to be mostly done by the time the April *WASDE* was published, sugar production in the Red River Valley (RRV) region—which contributes about 54 percent of the total—is expected to extend longer than normal into the first week of June mainly due to record-high yields and a late start for one of the processors. Thus, the reduction in the 2021/22 beet sugar production is also slightly driven by the risk that warm conditions pose to the quality of stored sugarbeets.

Given that the processors in North Dakota and Minnesota have increasingly deployed techniques to protect and ventilate the piles such that the beets remain frozen throughout the entire spring, a strong late-season campaign in the RRV such as in 2017/18 is likely particularly if normal weather conditions maintain the quality of the piles (figure 3). All processors in the region are confident in this appraisal.

A source of uncertainty is the early beet sugar production estimate from the August-September 2022 harvest. The projection for August-September 2022 production is 665,000 STRV, based on the 5-year average. In the *SMD* report, the beet processors indicate a more optimistic projection of 756,000 STRV. This estimate can be influenced by actual 2022/23 planted and harvested acreage, as well as timing and planting progress.

Figure 3
Scenarios for crop year 2021 beet sugar production in Red River Valley, August to July, 2016/17–2021/22



Note: If monthly production between March to July would equal that of 2017/18 and the 5-year average, the 2021/22 beet sugar production is forecast at 5.338 million STRV and 5.030 million STRV, respectively.

Source: USDA, Economic Research Service; USDA, Farm Service Agency.

On March 31, NASS issued its *Prospective Plantings*—a report that indicates growers’ planting intentions for 2022/23 prior to the start of actual planting operations. The report projected sugarbeet acres to decrease by 1.4 percent from 1.160 million acres to 1.143 million and if realized, would be second-consecutive yearly decline. The forecast will be updated and an initial forecast for harvested acreage will be provided in the NASS June 30 *Acreage* report.

NASS has also begun its *Crop Progress* publication and as of April 11, reported that 6 percent of sugarbeet area has been planted. The pace is behind last year (17 percent) and matches the 5-year average (5 percent). Planting has begun in Idaho, Oregon, and Wyoming but is yet to start among the major producing States (Michigan, Minnesota, and North Dakota) due to wet and cold conditions. A recent weather forecast indicated a potential winter storm this week in the Red River Valley that may further delay planting. But as soon as the weather turns conducive producers likely can finish planting in 1.5 to 2 weeks, given recent machinery advancements. The crucial cutoff date is around May 12 before late planting significantly increases the probability of lower yields. Thus, implications for August-September production

and the fiscal year 2021/22 sugar output are still too early to be made at this point but will continue to be evaluated.

Cane sugar production for 2021/22 is projected at 3.971 million STRV, 24,000 lower than the previous month's report (table 3). The reduction is mostly due to less production expected from Florida and Texas based on processor reporting on the *SMD*. As with sugarbeets, there were no updates to the sugarcane production forecast in the NASS April *Crop Production* report.

Florida cane sugar production was reduced 22,000 STRV to 1.937 million on lower sucrose content. The change is based on processors' most recent assessment as they are close to grinding most of the cane that sustained the most damage from the unusual freeze at the end of January. Cane sugar production in Texas is reduced 2,000 STRV to 128,000 on slower-than-usual pace through February (figure 4). The delay was caused by an atypical number of days lost because of excessive rain in the first part of harvest. The Texan processor expects to extend harvest through April and possibly later to make up for lost time. Depending on weather and logistics, there is a downside risk on the Texas sugar production estimate.

Cane sugar production in Louisiana remains unchanged from the previous month. The projected early season production (August and September)—which will affect the fiscal year 2021/22—is currently set at the 5-year average, 44,837 STRV. As such, the estimate may be revisited in the coming weeks as more information from NASS *Acreage report* at the end of June and from the processors become available.

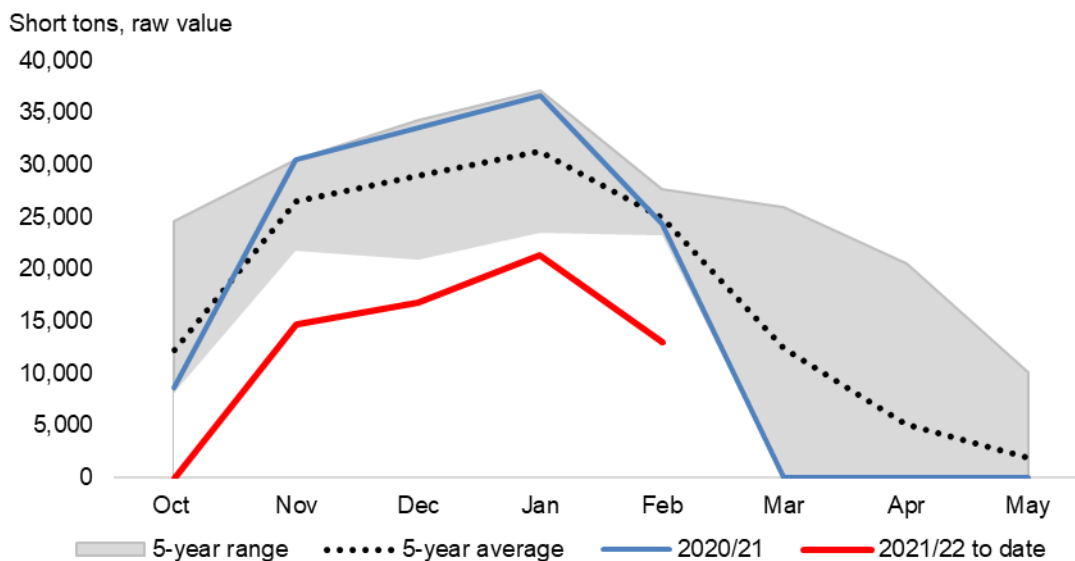
Table 3: U.S. sugarcane and cane sugar production, by State, 2015/16 to 2021/22

| | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2021/22 | Change from |
|--|---------|---------|---------|---------|---------|----------|---------|---------|-------------|
| | | | | | | | March | April | March |
| | | | | | | | | | Percent |
| Florida | | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 413.0 | 417.0 | 412.7 | 412.3 | 410.7 | 423.3 | 403.5 | 403.5 | 0.0 |
| Sugarcane harvested for sugar (1,000 acres) | 398.0 | 400.0 | 397.0 | 397.0 | 397.0 | 409.0 | 388.0 | 388.0 | 0.0 |
| Sugarcane yield (short tons per acre) | 42.5 | 40.3 | 40.9 | 41.7 | 42.8 | 44.4 | 42.4 | 42.4 | 0.0 |
| Sugarcane production (1,000 short tons) | 16,915 | 16,120 | 16,237 | 16,555 | 16,992 | 18,078.0 | 16,451 | 16,451 | 0.0 |
| Recovery rate (percent) | 12.8 | 12.7 | 12.2 | 12.1 | 12.4 | 11.6 | 11.9 | 11.8 | -1.1 |
| Sugar production (1,000 STRV) | 2,173 | 2,055 | 1,983 | 2,005 | 2,106 | 2,088.8 | 1,960 | 1,937 | -1.1 |
| Louisiana | | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 410.0 | 431.0 | 449.6 | 448.5 | 469.0 | 488.4 | 495.3 | 495.3 | 0.0 |
| Sugarcane harvested for sugar (1,000 acres) | 385.0 | 400.0 | 414.0 | 425.0 | 442.0 | 461.0 | 466.0 | 466.0 | 0.0 |
| Sugarcane yield (short tons per acre) | 29.6 | 28.8 | 32.5 | 35.3 | 27.7 | 32.9 | 29.0 | 29.0 | 0.0 |
| Sugarcane production (1,000 short tons) | 11,396 | 11,520 | 13,455 | 15,003 | 12,243 | 15,167 | 13,514 | 13,514 | 0.0 |
| Recovery rate (percent) | 12.4 | 14.0 | 13.86 | 12.51 | 12.73 | 13.02 | 13.86 | 13.86 | 0.0 |
| Crop year sugar production (1,000 STRV) 1/ | 1,415 | 1,618 | 1,865 | 1,876 | 1,558 | 1,975 | 1,874 | 1,874 | 0.0 |
| Fiscal year sugar production (1,000 STRV) 1/ | 1,428 | 1,628 | 1,862 | 1,907 | 1,566 | 1,916 | 1,906 | 1,906 | 0.0 |
| Texas | | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 36.6 | 39.6 | 41.8 | 38.9 | 33.5 | 35.9 | 36.4 | 36.4 | 0.0 |
| Sugarcane harvested for sugar (1,000 acres) | 35.2 | 37.7 | 40.5 | 37.6 | 31.3 | 33.5 | 34.3 | 34.3 | 0.0 |
| Sugarcane yield (short tons per acre) | 31.4 | 37.0 | 36.8 | 36.6 | 33.6 | 34.0 | 30.8 | 30.8 | 0.0 |
| Sugarcane production (1,000 short tons) | 1,105 | 1,395 | 1,490 | 1,376 | 1,052 | 1,139 | 1,056 | 1,056 | 0.0 |
| Recovery rate (percent) | 10.3 | 10.5 | 10.1 | 11.3 | 10.7 | 11.7 | 12.3 | 12.1 | -1.5 |
| Sugar production (1,000 STRV) | 116 | 140 | 169 | 147 | 126 | 133.5 | 130 | 128 | -1.5 |
| United States | | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 874.7 | 903.1 | 904.1 | 899.7 | 913.2 | 947.6 | 935.2 | 935.2 | 0.0 |
| Sugarcane harvested for sugar (1,000 acres) | 831.1 | 853.2 | 859.6 | 859.6 | 870.3 | 903.5 | 888.3 | 888.3 | 0.0 |
| Sugarcane yield (short tons per acre) | 36.8 | 35.6 | 36.6 | 38.3 | 34.8 | 38.1 | 34.9 | 34.9 | 0.0 |
| Sugarcane production (1,000 short tons) | 30,555 | 30,371 | 31,182 | 32,934 | 30,287 | 34,384 | 31,022 | 31,022 | 0.0 |
| Recovery rate (percent) | 12.7 | 12.7 | 12.9 | 12.3 | 12.5 | 12.2 | 11.9 | 11.9 | 0.0 |
| Sugar production (1,000 STRV) | 3,870 | 3,867 | 4,014 | 4,060 | 3,798 | 4,139 | 3,996 | 3,971 | -0.6 |

STRV = short tons, raw value.

1/ Louisiana's harvest and processing of sugarcane begins typically in September, thus the crop year and fiscal year sugar production for this State tend to be slightly different. Fiscal year production is the final value used for official USDA estimates. For Florida and Texas, the crop year is the same as the fiscal year.
Source: USDA, Farm Service Agency; USDA, National Agricultural Statistics Service; USDA, World Agricultural Outlook Board.

**Figure 4
Cane sugar production in Texas, 2016/17 to 2021/22**

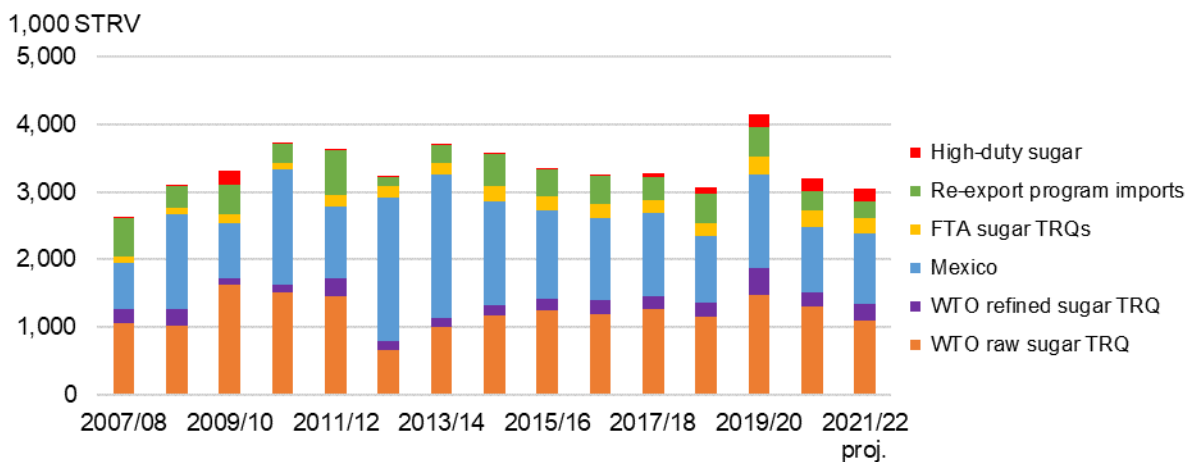


Source: USDA, Farm Service Agency.

High-tier Tariff Imports Raised; Total Imports Projection Lowest Since 2008/09

Total imports for 2021/22 are raised 15,000 STRV to 3.058 million solely on increased high-tier tariff imports (table 1). The estimates for the other import categories are unchanged from last month. The total imports projection is 138,000 STRV less than 2020/21 and would still be the lowest since 2008/09 (figure 5).

Figure 5
U.S. sugar imports, 2007/08 to 2021/22



STRV = short tons, raw value; FTA = free trade agreement; WTO = World Trade Organization; TRQ = tariff rate quota; proj. = projected.
 Source: USDA, Foreign Agricultural Service.

High-tier tariff imports are increased 15,000 STRV to 190,000, which if materializes, would surpass last year's 186,000 STRV (table 1). The 15,000-STRV increase reflects the recorded entries of high-tier raw sugar imports by cane refiners in January and February. There are no changes to the projected high-tier tariff imports of refined sugar, which are estimated to be 7,250 STRV per month through September. This follows prior methodology of adjusting the total high-tier tariff imports by the amount of high-tier raw sugar imports that entered to date. This is because historically, high-tier imports are usually comprised of refined sugar that does not require further processing. Fiscal year 2010 was the last time a significant quantity of high-tier raw sugar was imported.

The USDA, Foreign Agricultural Service (FAS) *Sugar Monthly Import and Re-Export Data* report breaks down high-tier tariff imports through February by port and country of origin. The report

indicates that half (50 percent) entered in Savannah, GA (table 4). Adding the 15,000 of high-tier raw imports that reportedly entered via San Francisco, CA and Philadelphia, PA suggests that of the total high-tier sugar imports to date, more than half is raw sugar brought in by cane refiners. In terms of country of origin, the majority (68 percent) of the high-tier sugar imports to date has come from Brazil.

Table 4: U.S. high duty sugar imports, October 2021 to February 2022

| | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Total | Share of total |
|-------------------|-----------------------|--------|--------|--------|--------|---------|----------------|
| Top five ports: | Short tons, raw value | | | | | | Percent |
| Los Angeles, CA | 778 | 1,068 | 1,255 | 1,131 | 642 | 4,875 | 4 |
| Philadelphia, PA | 1,198 | 1,143 | 2,718 | 1,187 | 7,207 | 13,453 | 11 |
| San Francisco, CA | 141 | 768 | 264 | 13,303 | 181 | 14,657 | 12 |
| Savannah, GA | 29,078 | 5,698 | 27,973 | 286 | 119 | 63,154 | 50 |
| Seattle, WA | 2,651 | 3,452 | 2,728 | 2,861 | 2,371 | 14,064 | 11 |
| Rest of ports | 4,209 | 1,945 | 3,854 | 3,029 | 3,285 | 16,322 | 13 |
| Total | 38,057 | 14,075 | 38,793 | 21,797 | 13,804 | 126,525 | 100 |
| Top five origins: | | | | | | | |
| Brazil | 32,350 | 7,671 | 32,013 | 4,668 | 9,619 | 86,320 | 68 |
| Colombia | 29 | 2,004 | 3,711 | 2,614 | 1,414 | 9,772 | 8 |
| Costa Rica | 1,599 | 315 | 114 | 22 | 0 | 2,050 | 2 |
| Guatemala | 1,808 | 2,166 | 604 | 227 | 1,917 | 6,723 | 5 |
| Nicaragua | 0 | 0 | 368 | 12,237 | 0 | 12,605 | 10 |
| Rest of countries | 2,270 | 1,920 | 1,983 | 2,029 | 854 | 9,056 | 7 |
| Total | 38,057 | 14,075 | 38,793 | 21,797 | 13,804 | 126,525 | 100 |

Source: USDA, Foreign Agricultural Service.

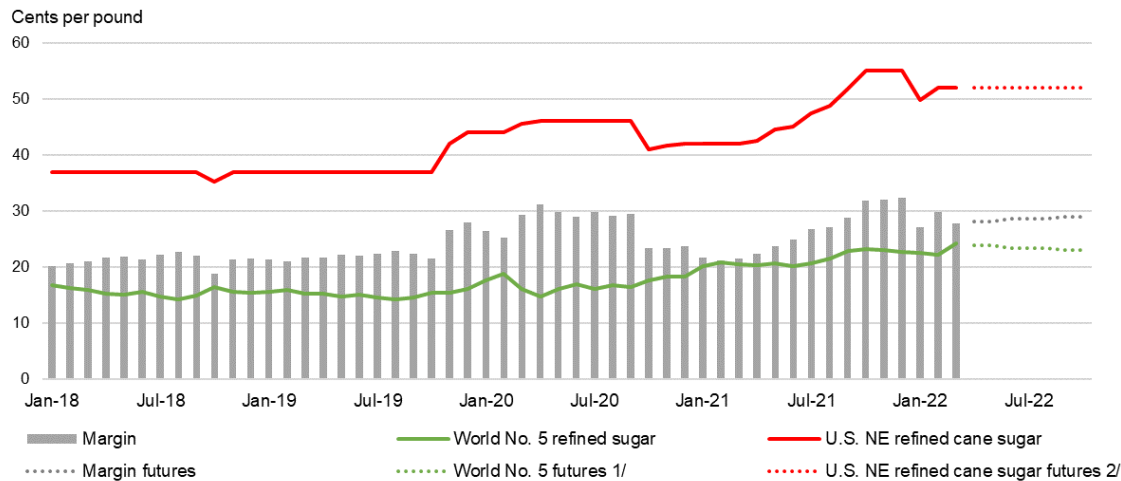
Uncertainty surrounds the high-tier sugar imports projection, including the possibility that the prior record high of 210,000 STRV during 2009/10 may be surpassed. This stems from industry news indicating that a cane refiner may be considering entering another 25,000 tons of raw sugar from Guatemala as high tier depending on market conditions and whether USDA takes action.

Second, as with last year, the fourth and fifth tranches of the specialty sugar TRQ (mostly comprised of organic sugar) that will open on April 15 and July 15, respectively, may likely be oversubscribed. As such, importers holding organic sugar in bonded warehouses after July 15 may resort to entering the oversubscribed organic sugar sooner and pay the high-tier duty versus the alternative of incurring storage expenses until the next TRQ opening in October 2022.

Third, U.S. refined prices will likely remain elevated given lower availability of supplies arising from several factors (i.e., beet processor's *force majeure* declaration, reduction in expected domestically produced sugar, and limited imports in the absence of USDA action). The most

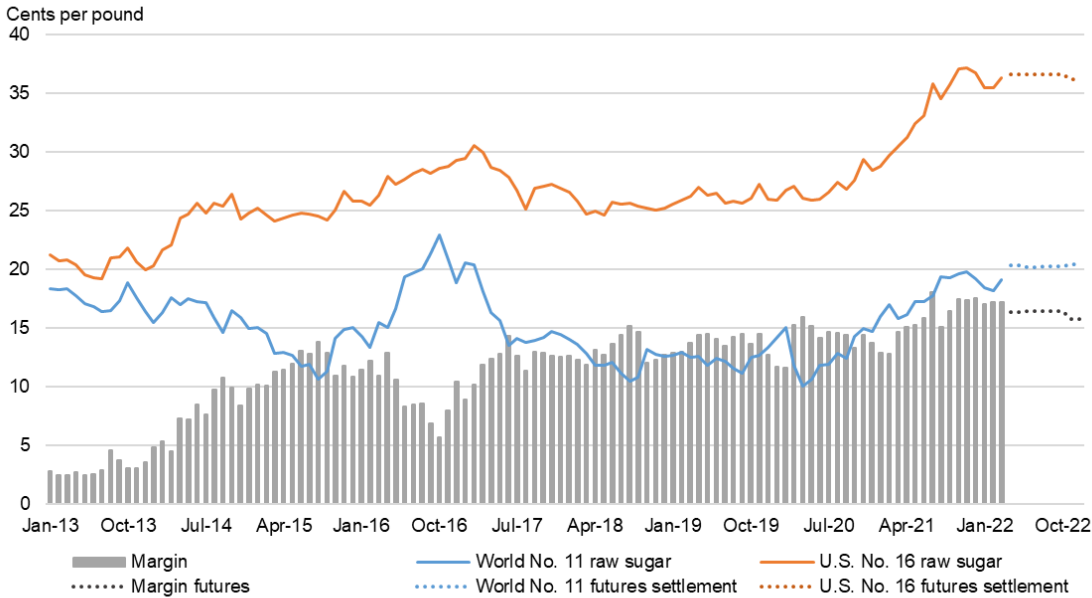
recent *Sosland Sweetener Report* quoted Midwest refined beet sugar at 42-44 cents per pound compared with 36.5-cents per pound a year ago, while 52-cent per pound quote for Northeast refined cane sugar is about 9-10-cents per pound higher than last year. As such, the current margin between U.S. refined prices and the world No. 5 refined sugar—28-29-cents per pound—is greater than the 22.4-cents per pound cost of importing high-tier refined sugar, assuming a 6.1-cent per pound logistic cost on top of the 16.3-cent pound tariff (figure 6). Fourth, while the current margins between the U.S. No. 16 and the world No. 11 raw cane sugar—15-16-cents per pound—hover below the 18.6-cent level where high-tier raw sugar imports would be economical (figure 7), a prolonged Russia-Ukraine conflict, via repercussions on crude oil prices and trade logistics, may lead to attractive price differentials.

Figure 6
Monthly U.S. refined cane sugar and world refined sugar prices and margin, January 2018 to October 2022



Note: Data on U.S. Northeast refined cane sugar are only available starting January 2018.
 NE = Northeast.
 1/ Nearby futures, No. 5 contract, Intercontinental Exchange Inc., and futures price settlements on 4/6/2022 through September 2022.
 2/ Northeast refined cane sugar and future price as quoted in *Milling and Baking News* on 4/6/2022 through September 2022.
 Sources: *Milling and Baking News*; Intercontinental Exchange, Inc. (ICE).

Figure 7
U.S. and world raw sugar prices and margin, monthly, January 2013 to December 2022



Note: No. 11 and No. 16 contract futures settlement prices, Intercontinental Exchange Inc., on 4/11/2022 out to December 2022.
 Source: USDA, Economic Research Service; Intercontinental Exchange, Inc.

While the expected volume of total imports for 2021/22 is historically on the low side, 2021/22 accumulated imports through March 31 are 225,948 STRV higher than at the same time last year (table 5). Of the import categories, only the World Trade Organization raw sugar tariff-rate quota (TRQ) is behind last year's pace in terms of quantities entered. This is mainly due to the large TRQ shortfall expected such as from the Philippines. A reallocation of the TRQ shortfall can be an option to increase raw sugar imports. In terms of shares, the FAS data suggest that 58 percent of the total expected imports have already entered during the first half of the fiscal year, which is the strongest in the last 5 years (table 4). Leading the pace is high-tier imports, with 71 percent out of the updated 190,000 STRV for 2021/22, or 134,989 STRV, already entered through March.

Table 5: U.S. sugar imports, October to March, 2016/17 to 2021/22

| | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 projected | 5-year average |
|----------------------------|-----------------------|-----------|-----------|-----------|-----------|----------------------|-------------------|
| October to March | Short tons, raw value | | | | | | |
| Mexico | 453,928 | 432,994 | 359,437 | 430,040 | 326,224 | 520,076 | 400,525 |
| WTO raw sugar TRQ | 629,619 | 808,669 | 704,779 | 723,405 | 866,998 | 717,910 | 746,694 |
| WTO refined sugar TRQ | 151,523 | 124,448 | 127,557 | 206,505 | 105,718 | 146,620 | 143,150 |
| FTA sugar TRQ | 87,915 | 64,951 | 69,831 | 105,698 | 82,818 | 111,878 | 82,243 |
| Re-export program | 132,859 | 169,832 | 241,544 | 217,417 | 80,625 | 147,507 | 168,455 |
| High-duty sugar | 5,013 | 7,362 | 41,054 | 56,177 | 90,649 | 134,989 | 40,051 |
| Total | 1,460,857 | 1,608,256 | 1,544,204 | 1,739,241 | 1,553,032 | 1,778,979 | 1,581,118 |
| Share of fiscal year total | Percent | | | | | | |
| Mexico | 38 | 35 | 36 | 31 | 34 | 50 | 35 |
| WTO raw sugar TRQ | 53 | 64 | 62 | 49 | 67 | 66 | 59 |
| WTO refined sugar TRQ | 69 | 66 | 62 | 51 | 49 | 61 | 59 |
| FTA sugar TRQ | 42 | 32 | 37 | 38 | 35 | 48 | 37 |
| Re-export program | 32 | 52 | 55 | 50 | 28 | 59 | 43 |
| High-duty sugar | 41 | 12 | 45 | 31 | 49 | 71 | 35 |
| Total | 45 | 49 | 50 | 42 | 49 | 58 | 47 |

WTO = World Trade Organization; TRQ = tariff rate quota; FTA = free trade agreement.

Source: USDA, Foreign Agricultural Service.

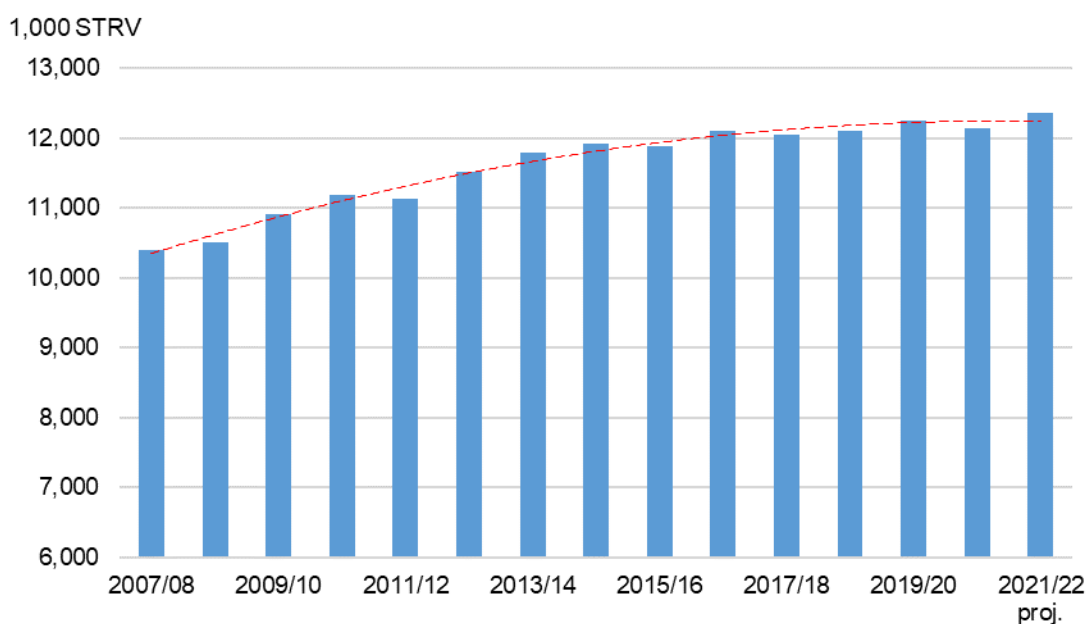
Sugar Deliveries Up

The 2021/22 domestic sugar deliveries for food and beverage use are raised 65,000 STRV from last month to 12.365 million, marking the second consecutive month of increase since February. Similar with March, the increase this month is based on the strong delivery pace for beet sugar and direct consumption imports. This increase reflects a 1.9-percent growth from the 2020/21 level of 12.135 million STRV (figure 8). With no changes to the rest of delivery categories, 2021/22 use is also up 65,000 STRV to 12.470 million.

The latest release of the USDA, FSA *Sweetener and Market Data* report shows that food and beverage deliveries through February are 5.107 million STRV (table 6). This represents a 6.3-percent increase during the same period in 2020/21 and would be a new record high for the October-February period, surpassing the 4.929 million STRV previously set in 2019/20 (figure 9). Deliveries of reporting beet processors are 165,000 larger (or 8.3 percent) than the same period last year and more than offset the cane refiners' deliveries, which are down 27,000 STRV (or 1.1 percent) from last year. Cane refiners' melt was down in February, which is typical this time of the year, but at a level below the 10-year average (figure 10). This can be a manifestation of limited availability of raw sugar imports. Non-reporter, direct consumption

imports through February are 162,000 STRV larger than the same period as last year, translating to a 60.7 percent yearly increase. The cumulation of non-reporter imports totaling 429,000 STRV is now the largest between October to February. The 12.365-million STRV forecast for 2021/22 food and beverage use deliveries is predicated on the assumption that the remaining months closely track the 5-year average (figure 11). As such, the pace in the ensuing months will be closely monitored, particularly the non-reporter deliveries which tend to be volatile.

Figure 8
U.S. sugar deliveries for food and beverage use, fiscal year, 2007/08 to 2021/22



STRV = short tons raw value; proj. = projected.
 Source: USDA, Economic Research Service.

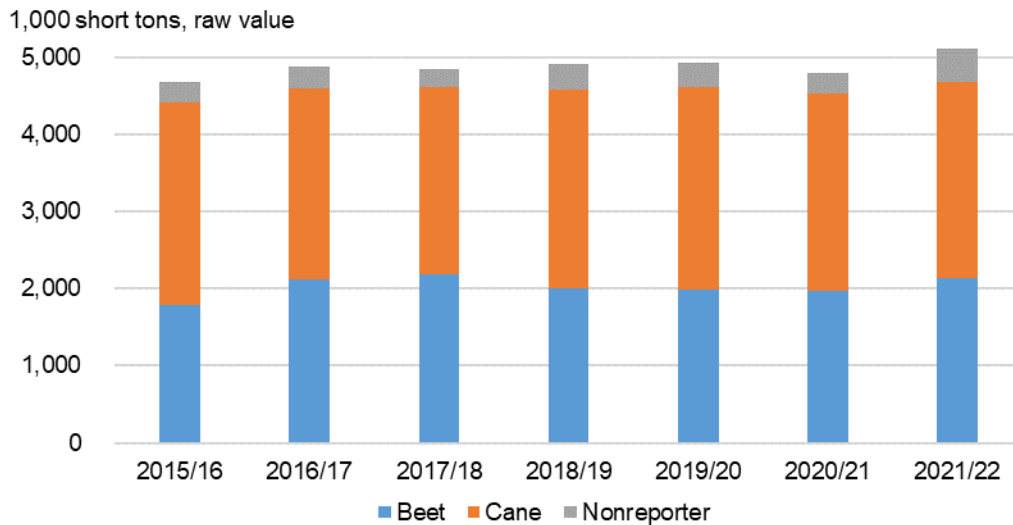
Table 6: Food and beverage deliveries, October–February, 2016/17 to 2021/22

| | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Annual change |
|----------------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------------|
| | 1,000 short tons, raw value | | | | | | | Percent |
| Beet sugar processors | 1,797 | 2,121 | 2,195 | 2,005 | 1,993 | 1,979 | 2,144 | 8.3 |
| Cane sugar refiners | 2,616 | 2,472 | 2,424 | 2,578 | 2,617 | 2,558 | 2,531 | -1.1 |
| Total reporters | 4,412 | 4,593 | 4,619 | 4,583 | 4,611 | 4,537 | 4,674 | 3.0 |
| Non-reporter, direct consumption | 269 | 287 | 225 | 323 | 319 | 267 | 433 | 62.3 |
| Total | 4,682 | 4,879 | 4,844 | 4,906 | 4,929 | 4,804 | 5,107 | 6.3 |

Source: USDA, Farm Service Agency.

Figure 9

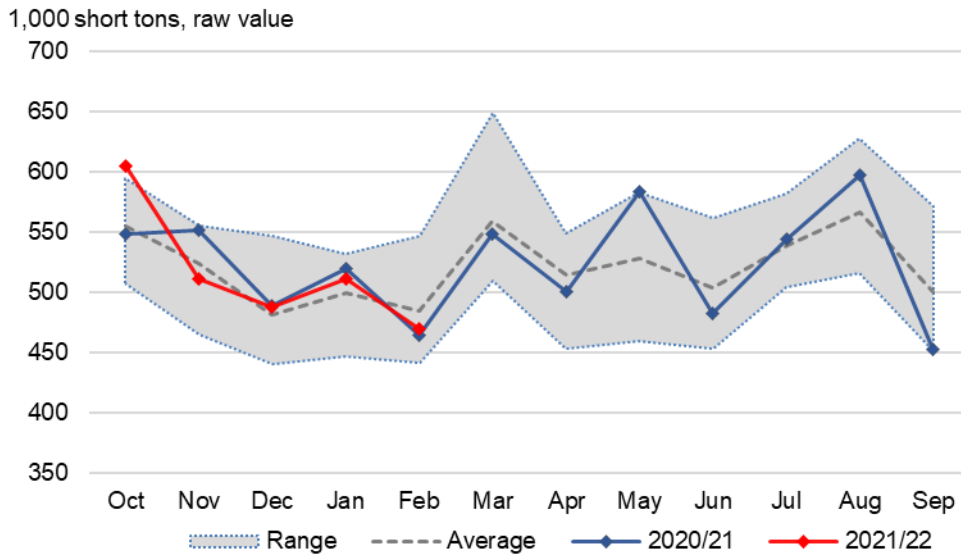
U.S. sugar deliveries for food and beverage use, October-February, 2016/17 to 2021/22



Source: USDA, Farm Service Agency.

Figure 10

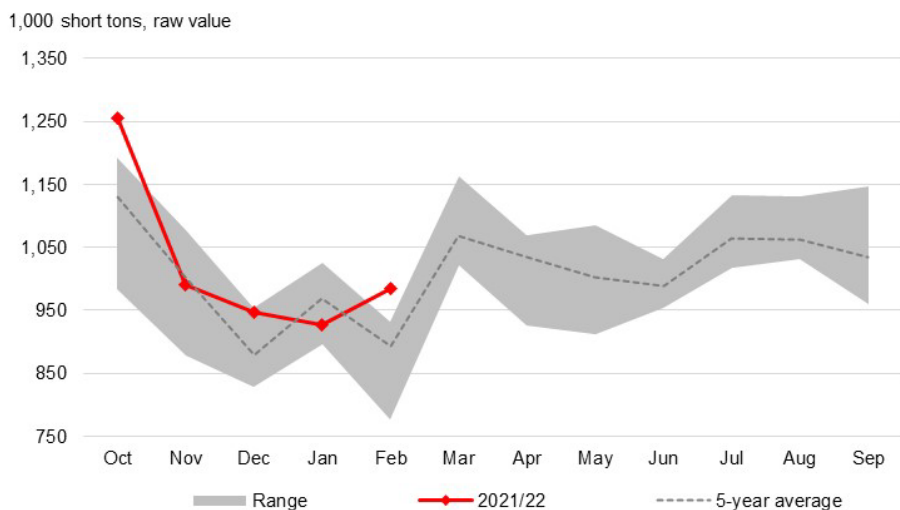
Sugarcane refiners' melt, monthly, 2011/12 to 2021/22



Note: Melt = quantity of raw sugar processed.

Source: USDA, Farm Service Agency.

Figure 11
Total U.S. sugar deliveries, monthly, 2016/17 to 2021/22



Source: USDA, Farm Service Agency.

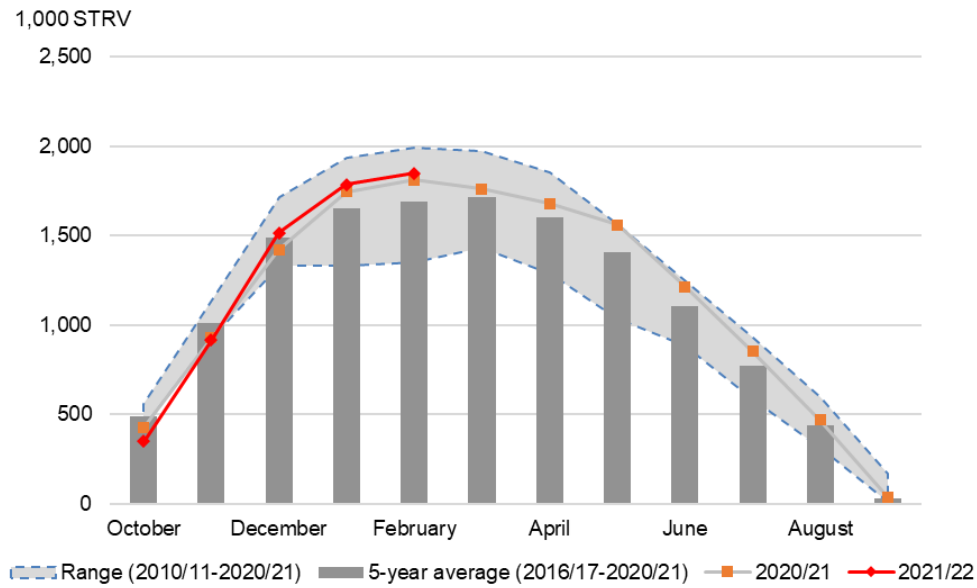
Ending Stocks Down

The projection for smaller sugar supply and larger use reduced 2021/22 ending stocks to 1.567 million short tons, raw value (STRV)—125,000 lower than last month. Correspondingly, the stocks-to-use ratio dropped 1.1 percentage points from last month’s 13.6 percent to 12.5 percent.

The amount of raw sugar stocks held by cane processors by the end of February are up from last month, following long-term seasonal trend of stock build-up around this time of the year (figure 12). Cane refiners’ raw sugar inventory are up from last month and at a level that is relatively close to the highest seen for February since 2010/11. Cane refiners’ efforts, particularly those that rely heavily on imports for their throughput, to secure supplies including from high-tier trade before summer may have contributed to this trend (figure 13). Conversely, refined sugar stocks held by cane refiners by the end of February are lower than both the 5-year average and the 10-year minimum for that month (figure 14). Refined sugar held by beet processors are also lower than the 5-year average (figure 15). These trends may reflect the net effect of the overall increased demand for sugar amid the reduction in refined beet sugar supply due to the *force majeure* situation and the likelihood that cane sugar is filling the supply void.

Figure 12

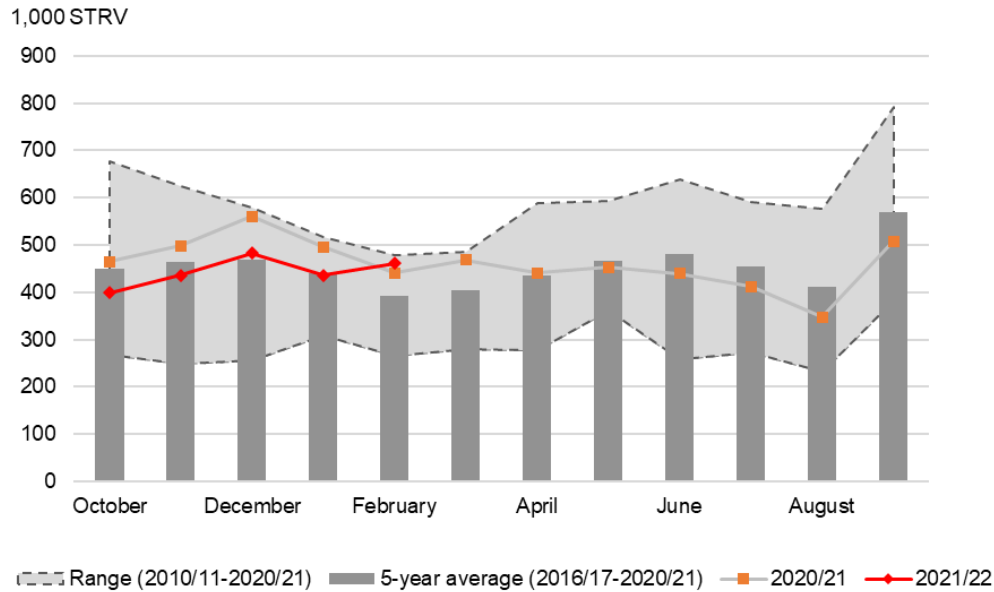
Sugarcane processors' raw sugar inventories, monthly, 2010/11 to 2021/22



Note: STRV = short tons, raw value.
Source: USDA, Farm Service Agency.

Figure 13

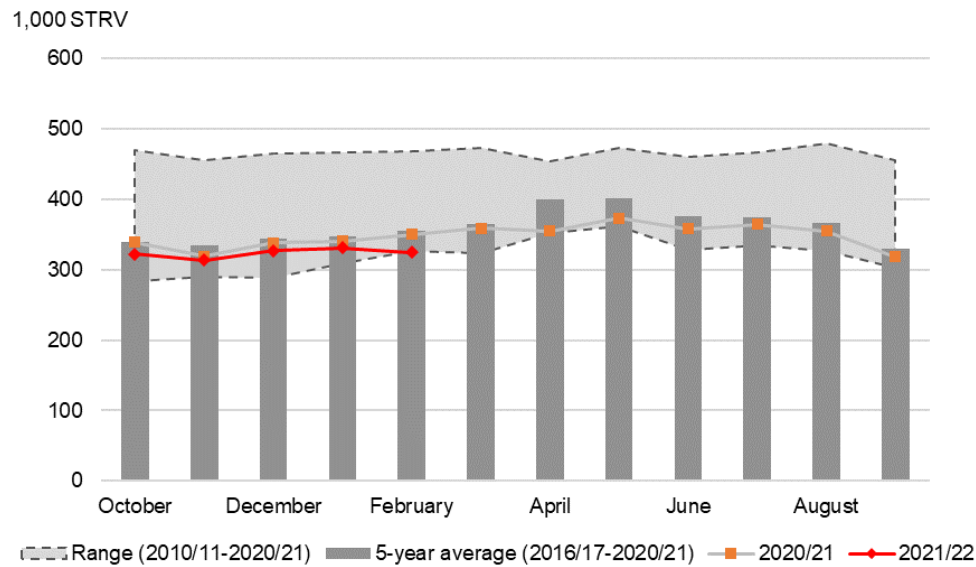
Sugarcane refiners' raw sugar inventories, monthly, 2010/11 to 2021/22



Note: STRV = short tons, raw value.
Source: USDA, Farm Service Agency.

Figure 14

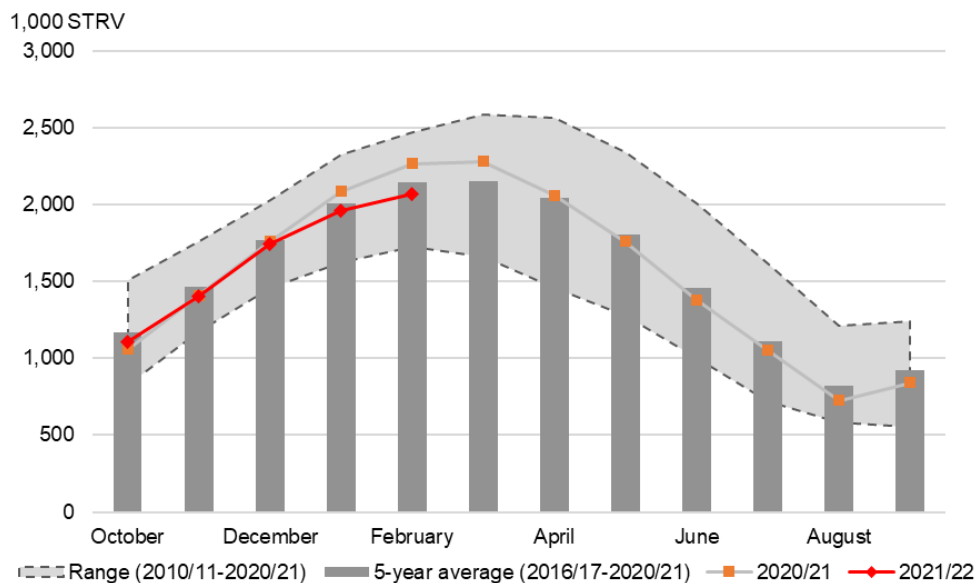
Sugarcane refiners' refined sugar inventories, monthly, 2010/11 to 2021/22



Note: STRV = short tons, raw value.
Source: USDA, Farm Service Agency.

Figure 15

Sugarbeet processors' total sugar inventories, monthly, 2010/11 to 2021/22



Note: STRV = short tons, raw value.
Source: USDA, Farm Service Agency.

Mexico Outlook

Mexican Sugar Production Increased

The April 2022 *World Agricultural Supply and Demand Estimates (WASDE)* report increased Mexican 2021/22 production by 188,000 metric tons to 6.167 million (table 7). The only other change on the Mexican supply and use table is the consequent 188,000-metric-ton projected increase in Mexican exports to other countries to maintain the government program goal of maintaining 2.5-months-worth of ending stocks.

The sugar production increase is based on the weekly data published by Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA) through week 26 (as of April 2). The updated forecast—6.167 million metric tons—is in line with the third estimate of 6.175 million metric tons that CONADESUCA released at the beginning of April. A closer look at the variables shows that while USDA and CONADESUCA forecast the same sucrose recovery (11.29 percent and 11.30 percent, respectively), USDA is expecting a lower area (791,383 hectares versus 804,776) and a higher yield (69.038 metric tons per hectare versus 67.87). While the calculated sugarcane yield from the CONADESUCA report through April 2 (week 27 of the campaign) is 5 percent higher than the same time last year, area harvested lags by about 26,000 hectares, or 6 percent (table 8).

Table 7: Mexican sugar: supply and use by fiscal year (October/September), April 2022

| Items | 2019/20 | 2020/21 | | | 2021/22 | | |
|--|--------------|----------------------------------|---------------------|-------------------|---------------------|---------------------|-------------------|
| | | March (estimate) | April (estimate) | Monthly change | March (forecast) | April (forecast) | Monthly change |
| | | 1,000 metric tons, actual weight | | | | | |
| Beginning stocks | 1,169 | 858 | 858 | 0 | 1,053 | 1,053 | 0 |
| Production | 5,278 | 5,715 | 5,715 | 0 | 5,979 | 6,167 | 188 |
| Imports | 77 | 65 | 65 | 0 | 50 | 50 | 0 |
| Imports for consumption | 55 | 32 | 32 | 0 | 15 | 15 | 0 |
| Imports for sugar-containing product exports, IMMEX 1/ | 23 | 33 | 33 | 0 | 35 | 35 | 0 |
| Total supply | 6,524 | 6,638 | 6,638 | 0 | 7,082 | 7,270 | 188 |
| Disappearance | | | | | | | |
| Human consumption | 4,101 | 3,935 | 3,935 | 0 | 3,915 | 3,915 | 0 |
| For sugar-containing product exports (IMMEX) | 352 | 485 | 485 | 0 | 497 | 497 | 0 |
| Other deliveries and end-of-year statistical adjustment | 1 | | | | | | |
| Total | 4,455 | 4,420 | 4,420 | 0 | 4,412 | 4,412 | 0 |
| Exports | 1,212 | 1,165 | 1,165 | 0 | 1,751 | 1,939 | 188 |
| Exports to the United States and Puerto Rico | 1,177 | 828 | 828 | 0 | 899 | 899 | 0 |
| Exports to other countries | 35 | 337 | 337 | 0 | 852 | 1,040 | 188 |
| Total use | 5,667 | 5,585 | 5,585 | 0 | 6,163 | 6,351 | 188 |
| Ending stocks | 858 | 1,053 | 1,053 | 0 | 919 | 919 | 0 |
| Stocks-to-human consumption (percent) | 20.9 | 26.8 | 26.8 | 0.0 | 23.5 | 23.5 | 0.0 |
| Stocks-to-use (percent) | 15.1 | 18.9 | 18.9 | 0.0 | 14.9 | 14.5 | -0.4 |
| High-fructose corn syrup (HFCS) consumption (dry weight) | 1,388 | 1,320 | 1,320 | 0 | 1,310 | 1,310 | 0 |

1/ IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

Sources: USDA, World Agricultural Outlook Board; USDA, Economic Research Service; Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Table 8: Mexican sugar production as of week 27

| | As of week 27 | | Difference | |
|---|------------------|------------------|---------------|----------|
| | 2020/21 | 2021/22 | Level | Percent |
| Area harvested (hectares) | 572,841 | 542,056 | -30,785 | -5 |
| Sugarcane processed (metric tons) | 40,134,838 | 40,064,843 | -69,995 | 0 |
| Sugarcane yield (metric tons per hectare) | 70.06 | 73.91 | 3.85 | 5 |
| Number of mills in operation | 46 | 48 | 2 | 4 |
| Extraction rate (percent) | 11.01 | 11.17 | 0.16 | 1 |
| Total factory yield (metric tons sugar per hectare) | 7.72 | 8.25 | 0.53 | 7 |
| Sugar production (metric tons) | 4,419,882 | 4,474,295 | 54,413 | 1 |

Sources: USDA, Economic Research Service calculations using data from Mexico's National for the Committee Sustainable Development of Sugarcane (CONADESUCA).

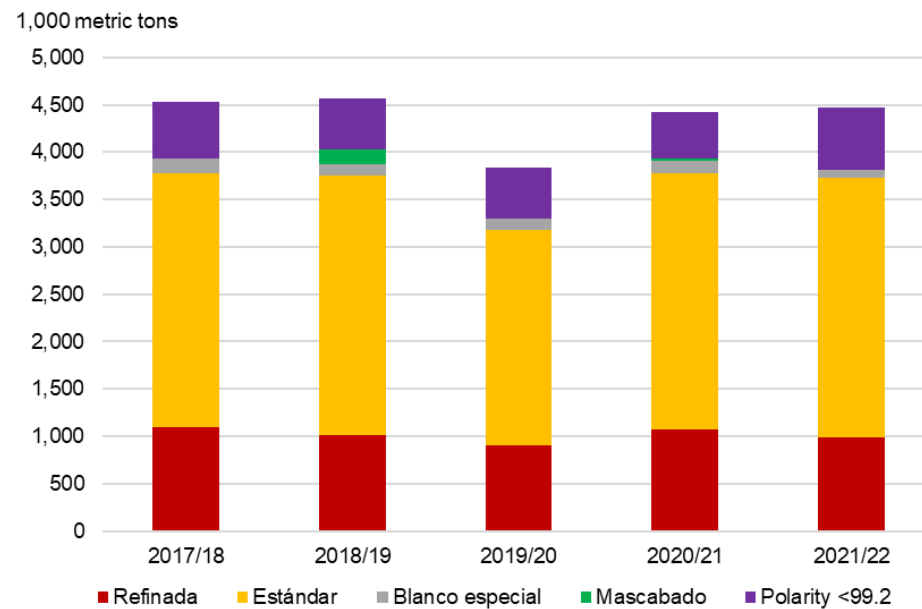
To date, production pace for less than 99.2 polarity sugar continues to be strong. As of week 27, 660,177 metric tons have been produced, which would be the largest in the last 5 years and up 171,738 metric tons, or 35 percent, from last year (figure 16). In its third estimate, CONADESUCA forecasts a total production for less than 99.2 polarity sugar at 861,209 metric tons, which is more than enough to meet the sugar suspension agreements' fiscal year 2022

Export Limit portion that has to be filled with Other Sugar (660,003 metric tons).¹ Thus, supplies are likely available in the event that USDA decides to request for additional 99.2 polarity raw sugar from Mexico before May 1.

Production pace for the rest of the sugar types is relatively slower than last year except for estándar which is ahead by 45,953 metric tons, or 2 percent. While production of the less than 99.2 polarity sugar is more than enough to meet the 150,000 short tons, raw value of “Other Sugars” that USDA has asked for in November 2021, the pace of export was behind in meeting the March 31 deadline for sugar to be exported into the U.S. During the first week of April 2022, the Mexican government, citing reduced availability of shipping vessels and recent high oil prices, requested the U.S. Department of Commerce (DOC) to grant extension beyond March 31. Right before the Mexican extension request, the data from CONADESUCA's *Avance de Comercio Exterior Ciclo 2021/22 (Advance of Foreign Sugar Trade 2021/2022)* report showed that exports were about 44,000 metric tons short of compliance. After consulting with USDA, DOC granted multiple extensions, the latest of which would be April 20, 2022. The latest *Avance de Comercio Exterior Ciclo 2021/22* report shows as of April 3 the remaining export shortfall is down to 8,300 metric tons.

¹ On March 11, 2022, the Department of Commerce (DOC) published the Export Limit effective April 1, 2022 equal to 1,037,400 short tons, raw value (STRV), or 887,843 metric tons, actual weight (MT). The formula is as follows: $1,037,400 / (1.06 * 1.10231125) = 887,843$. Per the DOC methodology, out of this total, Refined Sugar (greater than 99.2 polarity) may account for no more than 266,220 STRV or 227,840 MT, leaving 660,003 MT to be filled by Other Sugar (less than 99.2 polarity).

Figure 16
Mexican sugar production, by type of sugar, as of week 27



Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

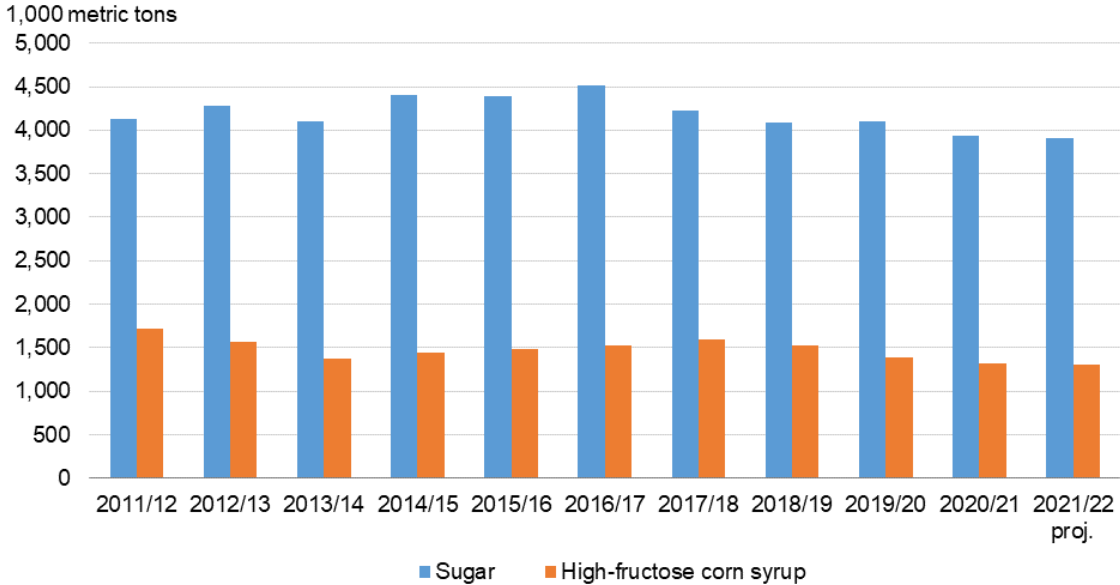
Imports, Deliveries Unchanged

Mexico's sugar imports for 2021/22 are unchanged at 50,000 metric tons (table 8). Total deliveries remain at 4.412 million metric tons as estimates for deliveries of sugar for human consumption of 3.915 million metric tons and to the *Industria Manufacturera, Maquiladora y de Servicios de Exportación* (IMMEX) program of 497,000 metric tons were the same as last month. Consumption of high-fructose corn syrup (HFCS) is also unchanged at 1.310 million, dry basis.

The current forecasts for sugar and HFCS consumption reflect the continuation of the downward trend in place since 2016/17 (figure 17). Monthly deliveries to the *Industria Manufacturera, Maquiladora y de Servicios de Exportación* (IMMEX) program, which allows the use of imported and domestically produced sugar as inputs to manufacture products for export, continue to be higher than the 5-year average. The elevated monthly pace is driven by the program's higher returns and logistical advantages over shipping to non-U.S. export destinations (figure 18).

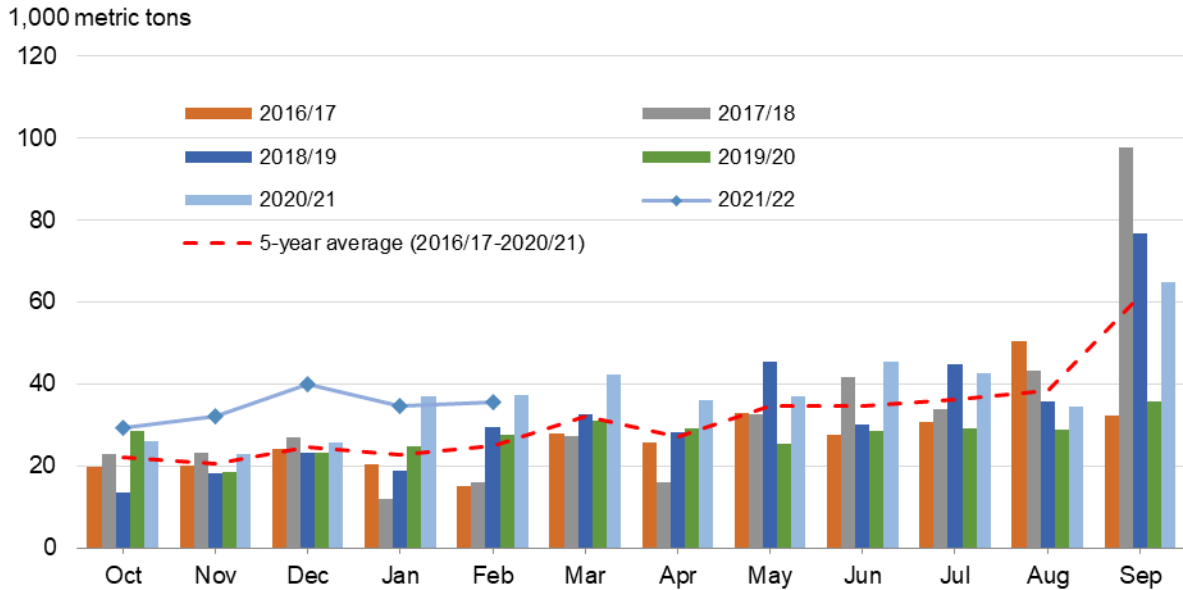
Ending stocks are unchanged at 919,000 metric tons, which is roughly equivalent to the Mexican government's target of 2.5 months-worth of domestic consumption.

Figure 17
Mexican sweetener consumption, October to September, 2011/12 to 2021/22



proj. = projected.
 Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Figure 18
Mexican domestic IMMEX deliveries, monthly, 2016/17 to 2021/22



IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.
 Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Suggested Citation

Abadam, Vidalina. *Sugar and Sweeteners Outlook: April 2022*, SSS-M-404, U.S. Department of Agriculture, Economic Research Service, April 14, 2022.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.