#### **United States Department of Agriculture**



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# Sugar and Sweeteners Outlook: November 2021

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### U.S. and Mexican Sugar Supplies Projected Larger

Beet sugar production for both 2020/21 and 2021/22 are increased on higher-than-expected production in September and atypical growing and harvesting conditions in October and early November. Cane sugar production in Louisiana for 2021/22 is decreased on lower yields and for 2020/21 based on lower September production. The 2021/22 beet and cane sugar production levels of 5.413 and 3.919 million short tons, raw value (STRV), respectively, combine for a record U.S. sugar output. Imports for 2020/21 are reduced, while imports in 2021/22 are increased 45,000 STRV to 3.045 million in part due to increases in bulk raw sugar under the high-tier tariff. Sugar use for 2021/22 is unchanged, but for 2020/21 is reduced based on final data. Deliveries for human consumption for 2020/21 are reduced by 90,000 STRV, and unchanged for 2021/22. Ending stocks for 2020/21 are 1.73 million STRV with an ending stocks-to ratio of 14.0 percent. The ending stocks-to-use ratio for 2021/22 of 14.3 percent, up 1.1 percentage points over last month on the higher beginning stocks, production, and imports.

Mexico sugar production for 2021/22 is projected at 5.98 million metric tons (MT), up 39,000 over last month, and unchanged for 202/21. Mexico sugar deliveries for both 2020/21 and 2021/22 are down from last month, as both total and per capita sugar consumption continue to decline. Exports are marginally higher in 2020/21 and up 99,000 MT for 2021/22. Ending stocks are increased for 2020/21 due to the reduced demand, and fractionally down in 2021/22.

### U.S. Outlook Summary

Larger Sugar Supplies and Stocks-to-Use Ratio Projected for 2021/22

The November *World Agricultural Supply and Demand Estimates* (WASDE) projects larger total sugar supplies in the United States for 2021/22 as beginning stocks, production, and imports are increased from last month (table 1). With use unchanged, the net result is an increase in projected ending stocks-to-use ratio compared with the October report.

The increase in beginning stocks is due to the changes in the 2020/21 balance table as final data on early sugar production, trade, and use are now available. Domestic sugar production in 2021/22 is projected to be 9.332 million short tons, raw value (STRV), up 45,523 STRV from last month, as the increase in beet sugar production more than offsets the reduction in cane sugar production in Louisiana (table 1). If realized, it would be the largest sugar production on record, overtaking the record-high of 9.293 million STRV set in 2017/18. Imports for 2021/22 are increased 44,842 STRV to 3,045 million, on larger projection for raw cane sugar TRQ (up 19,842 STRV) and high-tier tariff imports (up 25,000 STRV). Use for 2021/22 remain remains unchanged at 12.305 million STRV. The result is a larger ending stocks-to-use ratio of 14.3 percent, above the finalized 2020/21 level of 14.0 percent.

Table 1: U.S. sugar: supply and use by fiscal year (October/September), November 2021

Items	2019/20		2020/21		2021/22			
		` ,	(estimate) November	•	(forecast) October	(forecast) November	Monthly change	
			1,0	000 short to	ns raw value	)		
Beginning stocks	1,783	1,618	1,618	0	1,681	1,728	48	
Total production	8,149	9,182	9,231	49	9,286	9,332	46	
Beet sugar	4,351	5,031	5,092	61	5,348	5,413	65	
Cane sugar	3,798	4,151	4,139	-12	3,939	3,919	-20	
Florida	2,106	2,089	2,089	0	2,005	2,005	0	
Louisiana	1,566	1,928	1,916	-12	1,804	1,784	-20	
Texas	126	134	134	0	130	130	0	
Hawaii	0	0	0	0	0		0	
Total imports	4,165	3,252	3,196	-56	3,000	3,045	45	
Tariff-rate quota imports	2,152	1,751	1,749	-2	1,591	1,611	20	
Other program imports	432	315	292	-23	250	250	0	
Non-program imports	1,581	1,186	1,155	-31	1,159	1,184	25	
Mexico	1,376	981	968	-13	1,084	1,084	0	
High-duty	206	205	187	-18	75	100	25	
Total supply	14,097	14,052	14,044	-7	13,967	14,105	138	
Total exports	61	52	49	-3	35	35	0	
Miscellaneous	74	0	40	40	0	0	0	
Deliveries for domestic use	12,344	12,319	12,226	-93	12,305	12,305	0	
Transfer to sugar-containing products								
for exports under re-export program	78	90	89	-1	80	80	0	
Transfer to polyhydric alcohol, feed, other alcohol	20	29	27	-2	25	25	0	
Commodity Credit Corporation (CCC) sale for ethanol	0	0	0	0	0	0	0	
Deliveries for domestic food and beverage use	12,246	12,200	12,110	-90	12,200	12,200	0	
Total use	12,479	12,371	12,316	-55	12,340	12,340	0	
Ending stocks	1,618	1,681	1,728	48	1,627	1,765	138	
Private	1,618	1,681	1,728	48	1,627	1,765	138	
Commodity Credit Corporation (CCC)	0	0			0		0	
Stocks-to-use ratio (percent)	13.0	13.6	14.0	0.4	13.2	14.3	1.1	

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

Sugar production for 2020/21 is increased 60,682 short tons, raw value (STRV) to 5.092 million on larger-than-expected beet sugar production in August and September (table 2, figure 1). Last month's early sugar production estimate reflected concerns over drought conditions during the growing season, particularly in the Red River Valley that straddles the Minnesota and North Dakota border. The dry conditions have slowed crop development, consequently delaying the beginning of harvest to give more time for the sugarbeets to grow. But as soon as the weather cooled to ideal levels the harvest for stockpile sugarbeets went into full swing. By the end of

October, the pace of harvest had caught up (figure 2) and is expected to be completed in all States by the second week of November except for Michigan, eastern Montana, and Oregon.

Table 2: Beet sugar production projection calculations, 2020/21 and 2021/22

	2018/19	2019/20	2020/21	2021/22	2021/22	Monthly	2021/22	2021/22
_				Oct	Nov	change	Scenario A 4/	Scenario B 5/
Area harvested (1,000 acres)	1,096	980	1,142	1,151	N/A	N/A	1,151	1,100
Yield (tons/acre)	30.4	29.2	29.4	31.0	N/A	N/A	32.2	32.2
Sugarbeet production (1,000 short tons) 1/	33,282	28,650	33,618	35,675	36,493	819	37,040	35,414
Sugarbeet shrink (percent)	5.17	5.34	6.60	6.58	6.58	0.0	6.58	6.58
Sugarbeet sliced (1,000 short tons)	31,561	27,072	31,399	33,327	34,091	764	34,602	33,084
Sugar extraction rate from slice (percent)	14.77	14.14	15.345	14.697	14.697	0	14.697	14.697
Sugar from beets sliced (1,000 STRV) 2/	4,660	3,828	4,818	4,898	5,010	112	5,086	4,862
Sugar from molasses (1,000 STRV) 2/	352	341	362	360	360	0	360	360
Crop-year sugar production (1,000 STRV) 2/	5,012	4,169	5,181	5,258	5,370	112	5,446	5,222
August-September sugar production (1,000 STRV)	655	582	765	615	676	61	676	676
August-September sugar production of subsequent crop (1,000 STRV)	582	765	676	665	678	14	678	678
Sugar from imported beets (1,000 STRV) 3/	N/A	N/A	N/A	40	40	0	40	40
Fiscal year sugar production (1,000 STRV)	4,939	4,351	5,092	5,348	5,413	65	5,488	5,265
Difference from October 2021 WASDE	N/A	N/A	N/A	N/A	N/A	N/A	140	-83

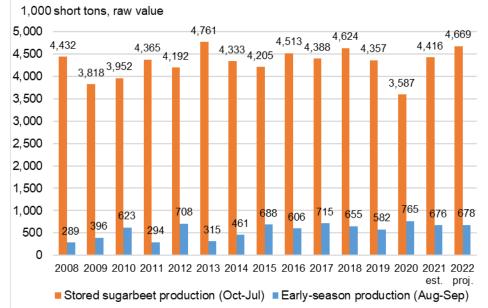
<sup>1/</sup> USDA, National Agricultural Statistics Service for historical data.

Note: STRV = short tons, raw value.

N/A = not applicable.

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

Figure 1 U.S. beet sugar production, fiscal years 2008–22



Note: est. = estimated; proj. = projected. Source: USDA, Farm Service Agency.

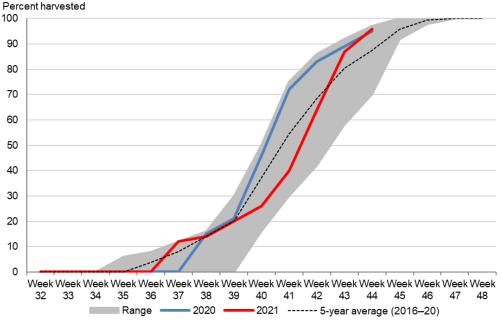
<sup>2/</sup> August-July basis.

<sup>3/</sup> Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded. Sugar from imported beets is incorporated into total production in historical data.

<sup>4/</sup> Using area harvested and yield from November 2021 NASS Crop Production report.

<sup>5/</sup> The harvested acreage was reduced for Michigan, Minnesota, and North Dakota based on updated processor information.

Figure 2 U.S. sugarbeet harvest progress, 2020, 2021, and 5-year average (2016–20)



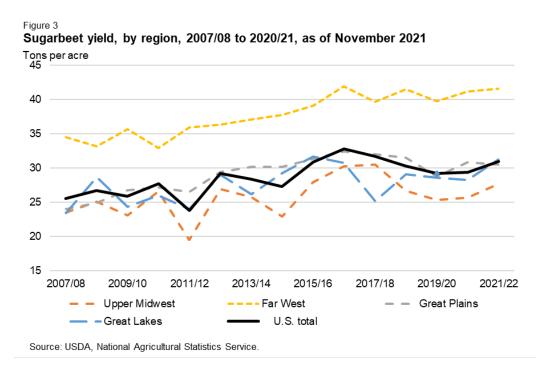
Source: USDA, National Agricultural Statistics Service.

The harvest delay, coupled with the unseasonably wet and warm weather, extended the growing season into late October and early November. In many of the non-irrigated areas, the sugarbeet root systems had grown deeper and wider than normal due to drought conditions earlier in the year, allowing them to grow tremendously larger during the final weeks. This led to record-high yields among some of the beet processors, with at least two reporting yields of about 36 tons per acre, in one case beating a previous record yield by 6 tons per acre. The National Agricultural Statistics Service (NASS) November *Crop Production* report increased its November 1 national sugarbeet yield forecast from 31.0 to 32.2 tons per acre, just under the record of 32.8 set in 2016/17 (figure 3).

Weighing the potential benefits against the risk of storing and processing all the sugarbeets late into the spring season, and given the constraints of daily factory slicing capacity, some processors decided not to harvest between 5 percent to 20 percent of their planted acreage. Another trade-off to the higher yields is the potential for lower sugar content, because as the sugarbeets shifted into growth mode during the rain events, the plants diverted energy into producing leaves and roots rather than storing sugar.

Because of the dynamic nature of production forecasts at the time of the *WASDE*, the beet sugar projection was based on the processors' expectation of slicing 34.091 million short tons of sugarbeets, as reported by the *Sweetener Market Data* (SMD) on November 9, 2021 (table 2).

The beet sugar production forecast maintains normal levels of beet pile shrink and sucrose content as in prior months but will be closely monitored as the campaign season progresses. The other change to the outlook is the upward revision of the August-September 2022 beet sugar to 678,500 STRV, in line with the five-year average which now includes August-September 2021. The net effect of these changes leads to the 2021/22 forecast of 5.413 million STRV beet sugar production, up 65,500 STRV from October. If realized, it would be the largest beet sugar production on record, overtaking the record high of 5.279 million STRV set in 2017/18.



Given the uncertainty in area harvested and yields between now and the final National Agricultural Statistics Service (NASS) *Crop Production* report in January 2022, two scenarios are presented, holding the other factors unchanged (table 2). Scenario A uses the NASS area harvested of 1.151 million acres (unchanged from last month) and national yield of 32.2 tons per acre (up from 31.0 and if realized, would be the second highest on record slightly behind the 32.8 tons per acre in 2016/17). Scenario B is the same as Scenario A, except it assumes a lower harvested acreage of 1.100 million acres based on up-to-date, corroborated processor information. The scenarios show beet sugar production hypothetically ranging between 5.265 to 5.488 to million STRV. Beet sugar production could even be potentially lower if less-than-ideal storage conditions lead to higher beet pile shrink and lower sugar content. Given late season rainfall in some areas, such as in Michigan, can lower sugar content and diminish the quality of beets going into the stockpiles, these variables will be closely monitored in the next months.

### Cane Sugar Production in 2020/21 Ended Lower; Outlook for 2021/22 Outlook also Reduced

Total cane sugar production is reduced for 2020/21 by 12,129 STRV to 4.139 million and for 2021/22 by 20,021 STRV to 3.919 million, with Louisiana accounting for the all the changes (table 3). Louisiana's final fiscal year 2020/21 sugar production is reduced to 1.917 million STRV due to the lower-than-expected September 2021 output of 12,266 STRV, down from last month's estimate of 24,214 STRV. The delays to the start of the harvest among processors most affected by Hurricane Ida in late August made this year's early production the lowest since 2015/16 (figure 4). Thus, the reduction for September 2021 has been pushed into fiscal year 2022. However, more than offsetting the 2021/22 increase is the decline in both the State's yield and sucrose recovery in Ida's aftermath. In the NASS November *Crop Production* report, Louisiana's 2021/22 yield projection was further lowered from 32.2 tons per acre to 31.8, causing sugarcane production to drop from 15.1 to 14.9 million tons. Sucrose recovery is also slightly reduced from based on the forecast submitted by the processors in the SMD. The net effect of these changes leads to the 2021/22 forecast of 1.784 million STRV cane sugar production for Louisiana.

The pace of sugarcane harvest in Louisiana has caught up but continues to run about a week late and lags the five-year average (figure 5). Cane processors typically aim to finish harvest and milling operations by end of December to early January to reduce the risk of production losses in case of unseasonably cold winter weather and freezing.

Cane sugar production for 2021/22 in Florida and Texas at 2.005 million STRV and 130,000 STRV, respectively, remains unchanged from last month.

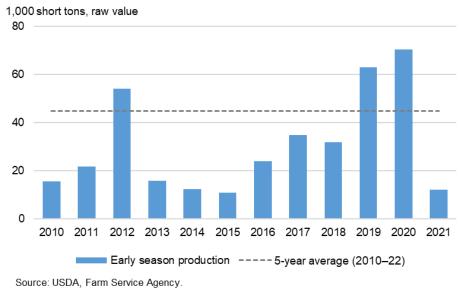
Table 3: U.S. sugarcane and cane sugar production, by State, 2015/16 to 2021/22

			· ·					Change from
	2017/18	2018/19	2019/20	2020/21	2020/21	2021/22	2021/22	October
				October	November	October	November	Percent
Florida								
Sugarcane harvested for sugar and seed (1,000 acres)	412.7	412.3	410.7	423.3	423.3	406.0	406.0	0.0
Sugarcane harvested for sugar (1,000 acres)	397.0	397.0	397.0	409.0	409.0	390.5	390.5	0.0
Sugarcane yield (short tons per acre)	40.9	41.7	42.8	44.4	44.2	42.7	42.7	0.0
Sugarcane production (1,000 short tons)	16,237	16,555	16,992	18,078	18,078	16,673	16,673	0.0
Recovery rate (percent)	12.2	12.1	12.4	11.6	11.6	12.0	12.0	0.0
Sugar production (1,000 STRV)	1,983	2,005	2,106	2,089	2,089	2,005	2,005	0.0
Louisiana								
Sugarcane harvested for sugar and seed (1,000 acres)	449.6	448.5	469.0	488.4	488.4	490.0	490.0	0.0
Sugarcane harvested for sugar (1,000 acres)	414.0	425.0	442.0	461.0	461.0	467.6	467.6	0.0
Sugarcane yield (short tons per acre)	32.5	35.3	27.7	32.9	32.9	32.2	31.8	-1.2
Sugarcane production (1,000 short tons)	13,455	15,003	12,243	15,167	15,167	15,058	14,871	-1.2
Recovery rate (percent)	13.86	12.51	12.73	13.02	13.02	11.84	11.78	-0.5
Crop year sugar production (1,000 STRV) 1/	1,865	1,876	1,558	1,975	1,975	1,783	1,752	-1.8
Fiscal year sugar production (1,000 STRV) 1/	1,862	1,907	1,566	1,928	1,916	1,804	1,784	-1.1
Texas								
Sugarcane harvested for sugar and seed (1,000 acres)	41.8	38.9	33.5	35.9	35.9	36.0	36.0	0.0
Sugarcane harvested for sugar (1,000 acres)	40.5	37.6	31.3	33.5	33.5	33.6	33.6	0.0
Sugarcane yield (short tons per acre)	36.8	36.6	33.6	34.0	34.0	32.8	32.8	0.0
Sugarcane production (1,000 short tons)	1,490	1,376	1,052	1,139	1,139	1,103	1,103	0.0
Recovery rate (percent)	10.1	11.3	10.7	11.7	11.7	11.8	11.8	0.0
Sugar production (1,000 STRV)	169	147	126	134	134	130	130	0.0
United States								
Sugarcane harvested for sugar and seed (1,000 acres)	904.1	899.7	913.2	947.6	947.6	932.0	932.0	0.0
Sugarcane harvested for sugar (1,000 acres)	859.6	859.6	870.3	903.5	903.5	891.7	891.7	0.0
Sugarcane yield (short tons per acre)	36.6	38.3	34.8	38.1	38.1	36.8	36.6	-0.6
Sugarcane production (1,000 short tons)	31,182	32,934	30,287	34,384	34,384	32,834	32,647	-0.6
Recovery rate (percent)	12.9	12.3	12.5	12.2	12.2	11.9	11.9	-0.3
Sugar production (1,000 STRV)	4,014	4,060	3,798	4,151	4,139	3,939	3,919	-0.5

Note: STRV = short tons, raw value.

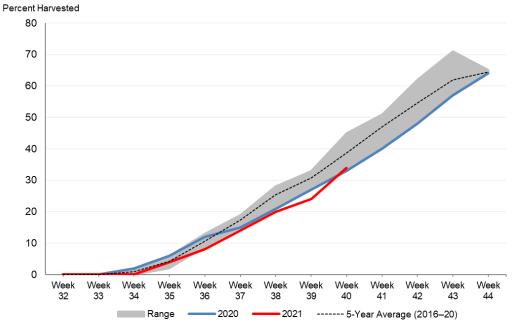
Source: USDA, Farm Service Agency; USDA, National Agricultural Statistics Service; USDA, World Agricultural Outlook Board.

Lousiana early cane sugar production, fiscal years 2010–22



<sup>1/</sup> 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.

Figure 5
Sugarcane harvest progress, Louisiana 2020, 2021, and 5-year average (2016–20)



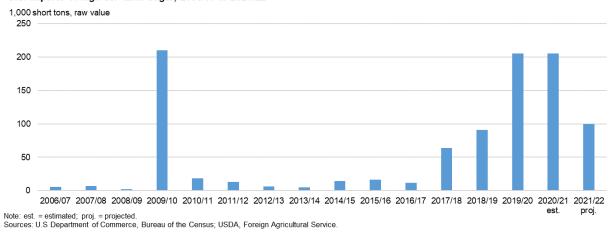
Source: USDA, National Agricultural Statistics Service.

### Imports of Bulk Raw High-Tier Sugar Rise Significantly

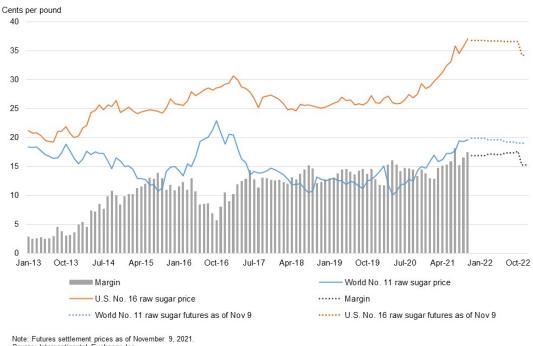
U.S. imports of high-tier tariff sugar for 2021/22 are projected up by 25,000 to 100,000 STRV this month (figure 6). As shown in figure 7, the margin between the U.S. and world raw sugar prices was a record 18 cents per pound in July 2021. The margin of the U.S. raw sugar price over the world price is more than 17 cents per pound for futures extending through September 2022. The No. 11 nearby raw sugar futures contract on the Intercontinental Exchange Inc. (ICE) for October average 19.6 cents per pound. Adding the U.S. duty on raw sugar of 15.36 cents per pound would result in a duty-paid base price of 34.96 cents per pound, to which would be added transportation and logistics costs. The U.S. No. 16 raw sugar nearby futures on the ICE for October was 37.1 cents per pound, a gap of about 2 cents per pound over the duty-paid world price.

In October, a large U.S. refiner imported a bulk shipment of raw sugar. The last time that the United States imported any significant quantity of bulk raw sugar was in 2010.

U.S. imports of high-tier tariff sugar, 2006/07 to 2021/22



Monthly U.S. and world raw sugar prices and margin, January 2013 to October 2022



Source: Intercontinental Exchange Inc

Additionally, the price differential between the U.S. wholesale market and the world refined sugar futures market in the past few months has allowed traders and commercial users to complete transactions at profitable levels for the high-duty imports to enter the United States (figure 8). The margin starting January 2022, although lower, still does not fall below 26 cents through next October, which is about 10 cents above the high-tier import duty of 16.3 cents per pound for refined sugar.

Monthly U.S. refined cane sugar and world refined sugar prices and margin, January 2018 to September 2022 Cents per pound 50 30 10 Jan-18 Jul-18 Jan-19 Jul-19 .lan-20 Jul-20 .lan-21 Jul-21 Jan-22 Jul-22 World No. 5 refined sugar Margin U.S. NE refined cane sugar 1/ ····· Margin ····· World No. 5 futures settlement prices on Oct 29 2/ ..... U.S. NE refined cane sugar forward pricing as of Nov 10 1/

Note: Data on U.S. Northeast refined cane sugar is only available starting January 2018.

17 Northeast refined cane sugar and future price as quoted in Milling and Baking News.

2/ Nearby futures, No. 5 contract, Intercontinental Exchange Inc., and futures price settlements on October 29 out to September 2022.

Sources: Milling and Baking News; Intercontinental Exchange Inc. (ICE).

On October 29, 2021, USDA extended the fiscal year 2021 Tariff Rate Quota (TRQ) period to allow entry until December 31, 2021. On November 3 the Office of the U.S. Trade Representative re-allocated 29,442 metric tons, raw value of the TRQ away from countries that had stated that they could fulfill their allocations. As a result of these actions and additional 20,000 STRV of sugar allocated under the fiscal year 2021 TRQ is expected to arrive in November and December. Along with the increase of 25,000 STRV in high-tier tariff sugar, total U.S. imports for 2021/22 are up 45,000 STRV this month (table 1).

Imports for 2020/21 are reduced by 57,000 STRV, with data from U.S. Customs and the Bureau of the Census for the 2020/21 year mostly finalized. Imports under the re-export program were reduced 23,000 STRV, under high-tier tariffs by 19,000 STRV, from Mexico by 13,000 STRV, and a 2,000 STRV reduction in imports under the refined sugar TRQ.

In the Census data, which is the source for high-tier imports, an entry for the month of August indicated that 12,500 metric tons of sugar was imported from Venezuela. Upon further investigation, it was determined that this sugar was actually from Mexico and entered under the provisions of the U.S.-Mexico Sugar Suspension Agreements. The USDA's Foreign Agricultural Service has made this correction in its monthly Sugar Monthly Import and Re-Export Data report. The expectation is that this entry will be not be corrected in the Census data until the 13th month revisions are reported by Census in the spring of 2022.

### Deliveries for Food and Beverage Use Lowered in 2020/21; Unchanged in 2021/22

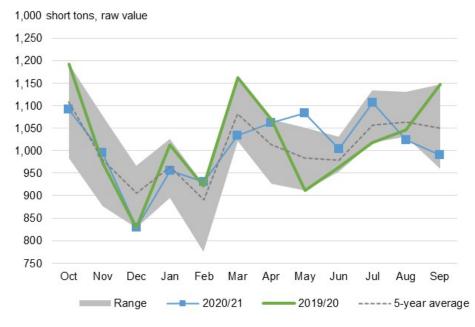
Food and beverage deliveries in the United States for 2020/21 are finalized at 12.109 million STRV, which represents a 91,000 STRV reduction from the previous month's forecast and a 1.1-percent decline from 2019/20 (table 4). The final 2020/21 cane sugar deliveries at 6.265 million STRV came in lower than expected, primarily because of the refining time lost during September by the two major U.S. cane refineries in Louisiana after Hurricane Ida in late August, on top of lingering logistical challenges. As seen in figure 9, cane sugar deliveries in September were down 9.4 percent from the five-year average and were the lowest since 2011/12. This is substantiated by the cane refineries' melt in September, which is 10.5 percent lower than the ten-year average and at par with the lowest since 2011/12 (figure 10).

Table 4: Food and beverage deliveries, 2015/16 to 2020/21, October-September

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Annual change
		1,000 short tons, raw value					
Beet sugar processors	4,598	5,348	5,271	5,044	4,422	4,966	12.3
Cane sugar refiners	6,444	6,044	6,113	6,302	6,615	6,265	-5.3
Total reporters	11,042	11,392	11,384	11,346	11,037	11,231	1.8
Non-reporter, direct consumption	839	710	664	760	1,209	878	-27.4
Final fiscal year deliveries	11,881	12,102	12,048	12,106	12,246	12,109	-1.1

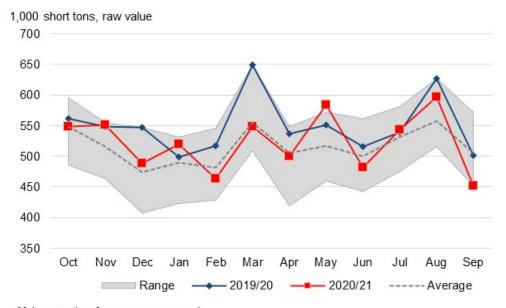
Source: USDA, Farm Service Agency; USDA, World Agricultural Outlook Board.

Figure 9
Total U.S. sugar deliveries, monthly, 2015/16 to 2020/21



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

Figure 10
Sugarcane refiners' melt, monthly, 2010/11 to 2020/21

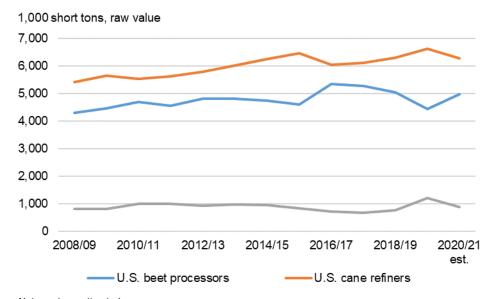


Melt = quantity of raw sugar processed. Source: USDA, Farm Service Agency.

Beet sugar deliveries in 2020/21, finalized at 4.966 million STRV, clearly rebounded from the weather-diminished beet sugar production in 2019/20 and was enough to compensate for the decline in cane sugar deliveries. However, the net growth in the reporting companies' deliveries is not enough to offset the reduction in deliveries from the prior year of nonreporters— imported refined sugar that is not further processed or marketed by beet processors or cane refiners covered under the U.S. sugar program and counted as having been delivered immediately. But to start the 2019/20 nonreporting companies' deliveries were unusually high. The 2020/21 levels seem to be an indication of the three sectors settling into normal levels before 2019/20, reflecting the continuation of the relatively flat growth seen in food and beverage deliveries since 2016/17 (figure 11).

Figure 11

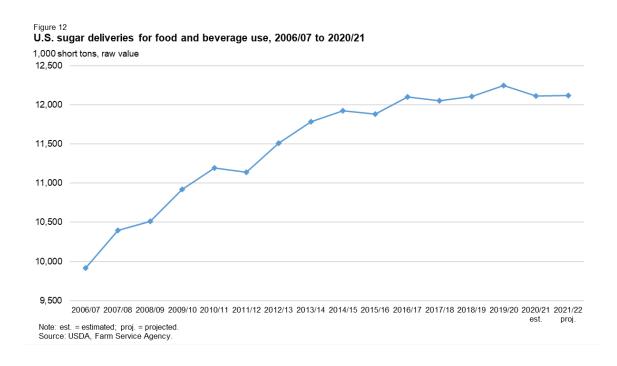
Total U.S. sugar deliveries, by sector, 2008/09 to 2020/21



Note: est. = estimated.

Source: USDA, Farm Service Agency.

Projected food and beverage deliveries for 2021/22 are unchanged from last month at 12.200 million STRV, which represents a 0.7-percent annual increase in line with population growth rate (figure 12).



### Ending Stocks Increased for both 2020/21 and 2021/22 Higher

The 2020/21 U.S. ending stocks held by processors and refiners totaled 1.728 million STRV, a 6.8-percent increase from the previous year (figure 13). Total inventories held by cane sugar refiners at the end of the year were 3.3 percent lower than the previous year, while beet sugar processors' stocks were 16.2 percent higher. Raw sugar made up 32.8 percent of the total ending stock figures, which is lower than the previous year's ending stock levels share of 33.9 percent.

September 30 sugar inventories, fiscal years 2008–21

1,000 short tons, raw value
2,500

2,000

1,500

1,000

1,000

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Raw sugar

Source: USDA, Farm Service Agency.

For 2021/22, ending stocks are increased 138,000 STRV to 1.765 million as a residual effect of larger beginning stocks, record-breaking sugar production, and imports. The U.S. stocks-to-use ratio is projected at 14.3 percent, significantly up from the October forecast of 13.2 percent. This is also larger than the 2020/21 final 14.0 percent stocks-to-use ratio even after upward revisions from last month. After the next *WASDE* scheduled to be published on December 9, 2021, the U.S. Department of Commerce will use the target U.S. sugar ending stocks-to-use ratio of 13.5 percent provided for in the U.S.-Mexico Sugar Suspension Agreements to calculate a revised U.S. Needs amount.

### Mexico Outlook

## Sugar Production for 2021/22 Increased on Favorable Growing Conditions

Mexico's 2021/22 projected sugar production is increased by 39,000 metric tons, actual value (MT) to 5.979 million on improved field yields due to favorable conditions as most growing areas received ample rains (table 5). This forecast is still about 137,500 MT lower than the National Committee for the Sustainable Development of Sugar Cane's (CONADESUCA) first official production forecast of 6.11 million MT, released on October 21, based on surveys of Mexican mills. The main difference is factory yield expectations. This year's harvest season is set to get underway, with mills scheduled to begin operations between mid-November and early January, depending on location. The progress and reporting by mills during the harvest season will be an important factor in future adjustments made to Mexico's production outlook.

Table 5: Mexico sugar: supply and use by fiscal year (October/September), November 2021

	2019/20		2020/21			2021/22	
		(estimate)	(estimate)	Monthly	(forecast)	(forecast)	Monthly
_ltems		October	November	change	October	November	change
		1,000 r					
Beginning stocks	1,169	858	858	0	1,010	1,053	43
Production	5,278	5,715	5,715	0	5,940	5,979	39
Imports	77	67	65	-2	63	63	0
Imports for consumption	55	32	32	0	28	28	0
Imports for sugar-containing product exports, IMMEX 1/	23	35	33	-2 0	35	35	0
Total supply	6,524	6,640	6,638	-2	7,013	7,095	82
Disappearance							
Human consumption	4,101	3,983	3,935	-48	3,970	3,915	-55
For sugar-containing product exports (IMMEX)	352	486	485	-2	445	486	41
Other deliveries and end-of-year statistical adjustment	1						
Total	4,455	4,469	4,420	-49	4,415	4,401	-14
Exports	1,212	1,161	1,165	4	1,678	1,777	99
Exports to the United States and Puerto Rico	1,177	839	828	-11	928	928	0
Exports to other countries	35	322	337	15	750	850	99
Total use	5,667	5,630	5,585	-45	6,093	6,178	85
Ending stocks	858	1,010	1,053	43	920	917	-3
Stocks-to-human consumption (percent)	20.9	25.4	26.8	1.40	23.2	23.4	0.2
Stocks-to-use (percent)	15.1	17.9	18.9	0.92	15.1	14.8	-0.3
High-fructose corn syrup (HFCS) consumption (dry weight)	1.388	1.325	1.320	-5	1.300	1.310	10

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

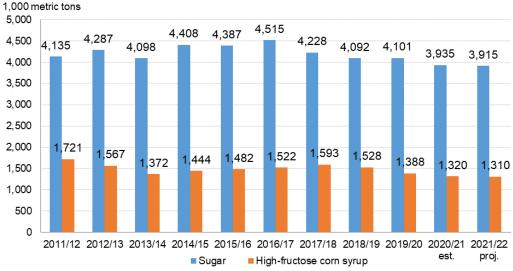
Sources: USDA, World Agricultural Outlook Board; USDA, Economic Research Service; Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

### Mexico Domestic Deliveries Lowered for 2020/21 and 2021/22

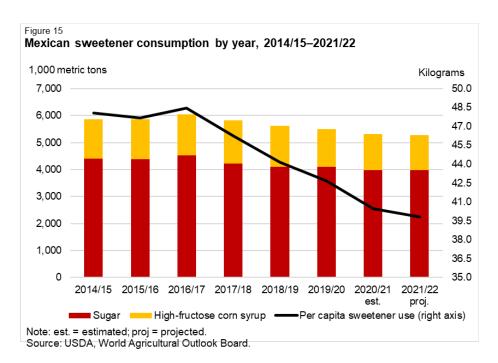
Domestic sugar deliveries use in Mexico for 2020/21 are finalized at 4.420 million MT, down 49,000 from the previous month, with deliveries destined for domestic consumption mostly accounting for the downward revision (table 5). The changes are based on full-year reporting from CONADESUCA for the completed fiscal year. Domestic deliveries for human consumption in 2020/21 are revised to 3.935 million MT, a 47,500-MT decrease from the October report, continuing the declining trend of the past several years (figure 14). The same trend is observed in high-fructose corn syrup (HFCS) deliveries, which are lowered by 57,000 to 1.320 million MT for 2020/21 (dry basis). Sweetener consumption in Mexico has been declining in recent years, mainly due to ongoing product reformulations. In particular, the front-of-pack labeling laws instituted in October 2020 resulted in soda companies reducing their use of HFCS.

Both per capita and total sweetener consumption have trended downward since 2016/17 and this trend is expected to continue in 2021/22 (figure 15). The 2020/21 per capita sweetener (sugar and HFCS combined) consumption is finalized at 40.44 kg, significantly down from the last year's 42.67 kg. With both sugar and HFCS use down in 2021/22, per capita sweetener consumption is further reduced to 39.82 kg, declining for the fifth consecutive year. As such, sugar consumption in 2021/22 is reduced by 55,000 MT to 3.915 million MT. Since this decline in human consumption deliveries are only partially offset by the projected increase in deliveries to the IMMEX program (discussed in more detail in the next section), total deliveries for 2021/22 are down from last month by 14,000 MT.

Figure 14 Mexican sweetener consumption, October to September, 2011/12 to 2020/21



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



Deliveries for the Industria Manufacturera, Maquiladora y de Servicios de Exportación program (IMMEX) are marginally trued up to 485,000 MT, a new record high, as deliveries for IMMEX have been elevated for much of 2020/21 (figure 16). The IMMEX program permits manufacturers of sugar-containing products to get either imported or domestic sugar at lower prices, if the products are exported. The high level of deliveries to the IMMEX program is expected to be sustained at 486,000 MT in 2021/22 due to more favorable returns compared with exporting to the world market.

Figure 16
Mexican domestic IMMEX deliveries, monthly, 2016/17 to 2020/21



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

### Mexico's Imports Mostly Unchanged, Exports Increased

Final total imports in 2020/21 are finalized at 65,000 MT, all on IMMEX's account, while imports in 2021/22 are unchanged from last month.

Exports for 2020/21 are estimated at 1.165 million MT, including 828,341 million MT shipped to the United States, according to the U.S. Census Bureau from which final 2020/21 data are now available. Exports to other destinations are estimated at 336,522 MT, a 15,000-MT increase from the previous month's estimate, based on updated figures published by CONADESUCA. Included in the 336,522 MT are 57,683 MT shipped to the United States through the U.S. reexport program as these shipments do not fall under the Suspension Agreements and do not require Export Licenses.

The U.S. Department of Commerce, which administers the sugar suspension agreements, posted several public notices granting requests by Mexico to permit extra time of up to 1 month for certain quantities of sugar to enter the United States. Any of these quantities imported in October will be recorded in the 2021/22 U.S. sugar balance sheet.

Exports for 2021/22 are projected to total 1.777 million MT, a 99,000-MT increase from the previous month. The increase is solely due to larger projected exports other than the United States under the Suspension Agreements, which now stand at 850,000 MT. The increase is predicated on larger available supplies (higher beginning stocks and production) expected for 2021/22. Exports to the United States are projected to total 927,000 MT, unchanged from the

previous month's projection and based on the U.S. Department of Commerce's calculation of U.S. Needs from the September *WASDE*, per the terms of the Suspension Agreements. The next calculation from the agency will be subsequent to the December WASDE.

Ending stocks are now 917,000 MT, which was adjusted slightly from last month to reflect an amount sufficient for Mexico's domestic needs in 2022/23 before the start of harvest and sugar production campaign in mid-November of 2022. This amount is roughly equivalent to 2.5 months of domestic consumption and is the target Mexican authorities use to monitor and manage the domestic sugar program. Supplies above that level of ending stocks are forecast to be exported first to the United States to satisfy its market access provided by the Suspension Agreements, and then to non-U.S. markets and possibly into the U.S. re-export program.

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