



Sugar and Sweeteners Outlook: October 2021

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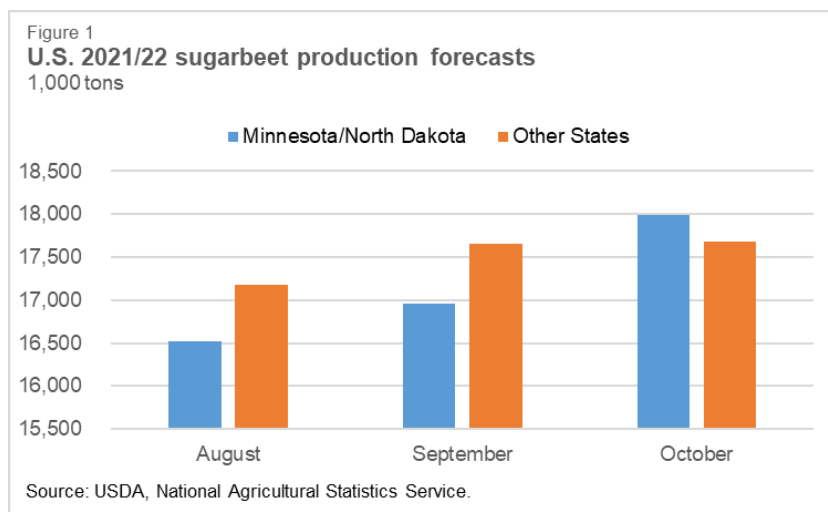
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U.S. and Mexican Sugar Production Increased

U.S. beet sugar production is increased 146,000 short tons, raw value (STRV) for 2021/22 and unchanged in 2020/21. Louisiana cane sugar production is lowered slightly for both 2020/21 and 2021/22. Imports in 2021/22 are decreased by 212,000 STRV due to reduced sugar under tariff-rate quotas (TRQs). Deliveries for human consumption in 2020/21 and 2021/22 are both unchanged. Sugarbeet production in Minnesota and North Dakota was increased to a combined level that is over half of total U.S. production (figure 1). Mexico’s 2021/22 sugar production was increased by 131 metric tons (MT) based on plentiful rain. Deliveries for the Mexican sugar re-export program are increased for both 2020/21 and 2021/22, as are deliveries for human consumption. Exports for 2020/21 to the United States are unchanged, but exports to other countries are reduced by 184,000 MT.



U.S. Outlook Summary

U.S. Fiscal Year 2021/22 Sugar Production Increased

Beet sugar production is increased 146,000 STRV for 2021/22, and unchanged in 2020/21 (table 1). For both fiscal years 2020/21 and 2021/22, Louisiana cane sugar production is lowered 21,000 STRV. Projected 2021/22 imports are decreased by 212,000 STRV due to reduced sugar under tariff-rate quotas (TRQs). Deliveries for human consumption in 2020/21 and 2021/22 are both unchanged, while minor adjustments are made to 2020/21 deliveries for the re-export program and other uses. Exports in both 2020/21 and 2021/22 are unchanged at 52,000 and 35,000 STRV, respectively. The ending stocks-to-use ratio for 2021/22 is down slightly to 13.2 percent, as reduced imports under TRQs more than offset larger beginning stocks and production.

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

Items	2019/20	2020/21			2021/22		
		(forecast) September	(forecast) October	Monthly change	(forecast) September	(forecast) October	Monthly change
		<i>Thousand short tons raw value</i>					
Beginning stocks	1,783	1,618	1,618	0	1,632	1,681	48
Total production	8,149	9,202	9,182	-21	9,162	9,286	125
Beet sugar	4,351	5,031	5,031	0	5,202	5,348	146
Cane sugar	3,798	4,171	4,151	-21	3,960	3,939	-21
Florida	2,106	2,089	2,089	0	2,005	2,005	0
Louisiana	1,566	1,949	1,928	-21	1,825	1,804	-21
Texas	126	134	134	0	130	130	0
Hawaii	0	0	0	0	0	0	0
Total imports	4,165	3,169	3,252	83	3,212	3,000	-212
Tariff-rate quota imports	2,152	1,693	1,751	58	1,803	1,591	-212
Other program imports	432	315	315	0	250	250	0
Non-program imports	1,581	1,161	1,186	25	1,159	1,159	0
Mexico	1,376	981	981	0	1,084	1,084	0
High-duty	206	180	205	25	75	75	0
Total supply	14,097	13,989	14,052	63	14,006	13,967	-39
Total exports	61	52	52	0	35	35	0
Miscellaneous	74	0	0	0	0	0	0
Deliveries for domestic use	12,344	12,305	12,319	14	12,305	12,305	0
Transfer to sugar-containing products for exports under re-export program	78	80	90	10	80	80	0
Transfer to polyhydric alcohol, feed, other alcohol	20	25	29	4	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	12,200	0	12,200	12,200	0
Total use	12,479	12,357	12,371	14	12,340	12,340	0
Ending stocks	1,618	1,632	1,681	48	1,666	1,627	-39
Private	1,618	1,632	1,681	48	1,666	1,627	-39
Commodity Credit Corporation (CCC)	0	0	0	0	0	0	0
Stocks-to-use ratio (percent)	12.96	13.21	13.58	0.38	13.50	13.18	-0.31

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

2021/22 Sugarbeet Production Increased from Last Month

The National Agricultural Statistics Service (NASS) *Crop Production* report increased the 2021/22 sugarbeet production from last month by 1.063 million short tons (3.07 percent) to 35.675 million short tons on improved yields and larger area harvested (figure 1). National acreage harvested is up by 1,600 acres to 1.151 million acres as the declines in Minnesota and California are offset by the increases in Montana and Wyoming. The national average sugarbeet yield is up by almost 1 ton per acre to 31.0 tons per acre, with the largest yield improvement in Minnesota and North Dakota.

Assuming a normal amount of shrinkage of beets in piles before they are sliced in the factories (6.6 percent), the forecast of sugarbeets sliced is 33.327 million short tons (table 2). The percentage of sugar recovered from the sliced sugarbeets is forecast at 14.697 percent based on the 10-year average for the 2010 to 2019 crops, and the quantity of sugar extracted from molasses is forecast at 360,000 STRV, both unchanged from last month. The crop year (August–July) 2021/22 beet sugar extracted from U.S. sugarbeets is forecast at 5.258 million STRV. To convert this to fiscal year 2021/22 (October–September), the projected August and September 2022 production (665,000 STRV) is added, the expected August and September 2021 production (615,000 STRV) is subtracted, and finally the estimated 40,000 STRV of sugarbeets imported from Canada is added. The resulting total is 5.348 million STRV, up 146,000 STRV (2.81 percent) from last month.

Final crop year 2020/21 (August–July) beet sugar production was 4.818 million STRV, which includes sugar from Canadian sugarbeets, and 362,000 STRV from molasses, yielding a total of 5.181 million STRV. Processors have reported producing 115,000 STRV in August in the latest *Sweetener Market Data* (SMD) published by USDA’s Farm Service Agency. The estimated August–September 2021 production is 615,000 STRV, which would then require residual September production of 500,000 STRV. This is a reasonable forecast since September 2020 production was 574,000 STRV and the 5-year average (2015/16–2019/20) was 505,000 STRV. Thus, the fiscal year 2020/21 beet sugar production estimate is 5.031 million STRV, unchanged from last month.

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

	2018/19	2019/20	2020/21	2021/22	2021/22	2021/22	Monthly
			October	August	September	October	change
Sugarbeet production (1,000 short tons) 1/	33,282	28,600	33,618	33,710	34,612	35,675	1,063
Sugarbeet shrink (percent)	5.17	5.34	7	6.60	6.6	6.6	0
Sugarbeet sliced (1,000 short tons)	31,561	27,072	31,399	31,491	32,334	33,327	993
Sugar extraction rate from slice (percent)	14.77	14.14	15.345	14.697	14.697	14.697	0
Sugar from beets sliced (1,000 STRV) 2/	4,660	3,828	4,818	4,628	4,752	4,898	146
Sugar from molasses (1,000 STRV) 2/	352	341	362	360	360	360	0
Crop-year sugar production (1,000 STRV) 2/	5,012	4,169	5,181	4,988	5,112	5,258	146
August–September sugar production (1,000 STRV)	655	582	765	615	615	615	0
August–September sugar production of subsequent crop (1,000 STRV)	582	765	615	665	665	665	0
Sugar from imported beets (1,000 STRV) 3/	–	–	0	40	40	40	0
Fiscal year sugar production (1,000 STRV)	4,939	4,351	5,031	5,078	5,202	5,348	146

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

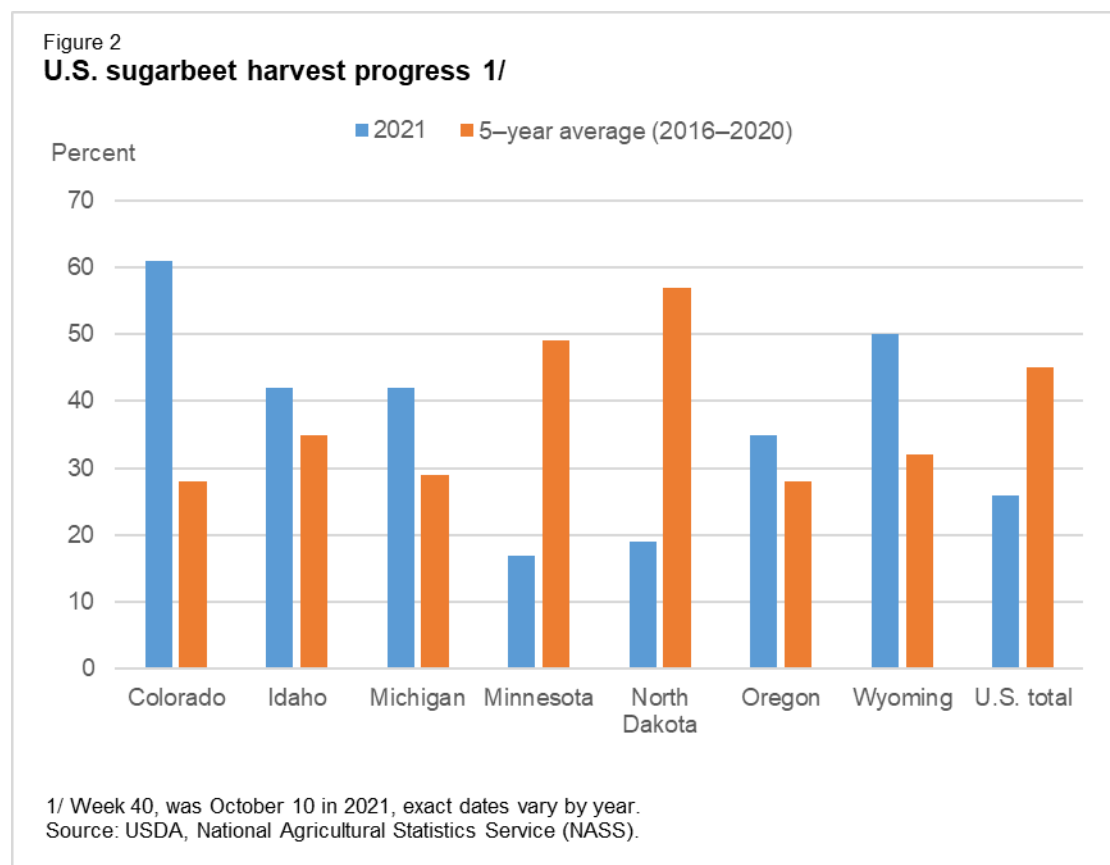
2/ August–July basis.

3/ 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.

Note: STRV = short tons, raw value.

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

The sugarbeet harvest progress nationally is at 26 percent compared with the previous 5-year average of 45 percent (figure 2). Most states are progressing faster than average, but Minnesota (17 percent) and North Dakota (19 percent) are well below their 5-year averages. In those two States, most of the sugarbeets are stored in outside piles once harvested, and to prevent spoilage, it is optimal to make the piles when the temperatures have dropped below freezing. Since temperatures have remained unseasonably warm through the first week of October, the portion of the harvest to keep factories operating is on schedule, but the harvest for building piles is being deferred until colder temperatures arrive. If sub-freezing temperatures arrive suddenly and the ground freezes solidly, there is a risk of some sugarbeets remaining frozen in the ground.



The October NASS *Crop Production* report increased projected 2021/22 sugarbeet planted area to 1.162 million acres, an increase of 900 acres from last month, and down 700 acres from 2020/21 (table 3). Compared with last year, Minnesota is down 4,000 acres, whereas North Dakota is up 5,000 acres.

Table 3: Sugarbeet planted area, 2016/17 to 2021/22

State	2017/18	2018/19	2019/20	2020/21	2021/22 August	2021/22 September	2021/22 October	Monthly change	Annual change
<i>1,000 acres</i>									
Minnesota	420.0	415.0	425.0	432.0	433.0	429.0	428.0	-1.0	-4.0
North Dakota	214.0	202.0	212.0	221.0	223.0	226.0	226.0	0.0	5.0
Idaho	167.0	163.0	171.0	172.0	172.0	172.0	173.0	1.0	1.0
Michigan	144.0	150.0	146.0	157.0	154.0	154.0	154.0	0.0	-3.0
Nebraska	46.1	45.5	44.0	46.2	45.0	44.0	44.0	0.0	-2.2
Montana	42.9	43.5	41.8	43.6	43.0	44.0	44.0	0.0	0.4
Wyoming	32.1	32.1	31.6	31.0	31.7	31.0	32.0	1.0	1.0
Colorado	29.4	26.3	25.1	24.2	25.0	24.4	24.2	-0.2	0.0
California	25.0	24.6	24.5	24.0	24.0	24.0	24.0	0.0	0.0
Oregon	9.1	9.3	10.0	9.4	10.4	10.3	10.4	0.1	1.0
Washington	1.8	1.8	2.0	1.8	1.7	1.9	1.9	0.0	0.1
U.S. Total	1,131.4	1,113.1	1,133.0	1,162.2	1,162.8	1,160.6	1,161.5	0.9	-0.7

Source: USDA, National Agricultural Statistics Service.

The 2021/22 acreage harvested is also projected up by 1,600 acres from last month (table 4). The two States with the largest monthly increases are Montana, up 1,500 acres (3.5 percent), and Wyoming, up 1,200 acres (3.9 percent).

Table 4: Sugarbeet harvested area, 2016/17 to 2021/22

State	2017/18	2018/19	2019/20	2020/21	2021/22 August	2021/22 September	2021/22 October	Monthly change	Annual change
<i>1,000 acres</i>									
Minnesota	409.0	408.0	337.0	427.0	419.0	427.0	426.0	-1.0	-1.0
North Dakota	212.0	199.0	170.0	219.0	216.0	224.0	224.0	0.0	5.0
Idaho	166.0	163.0	165.0	169.0	170.0	170.0	170.0	0.0	1.0
Michigan	143.0	148.0	145.0	154.0	152.0	152.0	152.0	0.0	-2.0
Nebraska	45.2	44.1	42.1	45.7	44.5	43.6	43.6	0.0	-2.1
Montana	42.7	42.4	36.5	38.0	41.0	42.0	43.5	1.5	5.5
Wyoming	31.6	30.7	24.0	30.8	30.8	30.5	31.7	1.2	0.9
Colorado	29.0	25.5	24.3	23.7	24.6	23.7	23.7	0.0	0.0
California	24.4	24.6	24.4	23.9	23.9	23.9	23.8	-0.1	-0.1
Oregon	9.1	9.3	9.8	9.4	10.2	10.3	10.3	0.0	0.9
Washington	1.8	1.8	2.0	1.8	1.7	1.9	1.9	0.0	0.1
U.S. Total	1,113.8	1,096.4	980.1	1,142.3	1,133.7	1,148.9	1,150.5	1.6	8.2

Source: USDA, National Agricultural Statistics Service.

Table 5: Sugarbeet area, percent harvested, 2016/17 to 2021/22

State	2017/18	2018/19	2019/20	2020/21	2021/22	2021/22	2021/22	Monthly change	Annual change
					August	September	October		
Minnesota	97.4	98.3	79.3	98.8	96.8	99.5	99.5	0.00	0.7
North Dakota	99.1	98.5	80.2	99.1	96.9	99.1	99.1	0.00	0.0
Idaho	99.4	100.0	96.5	98.3	98.8	98.8	98.3	-0.57	0.0
Michigan	99.3	98.7	99.3	98.1	98.7	98.7	98.7	0.00	0.6
Nebraska	98.0	96.9	95.7	98.9	98.9	99.1	99.1	0.00	0.2
Montana	99.5	97.5	87.3	87.2	95.3	95.5	98.9	3.41	11.7
Wyoming	98.4	95.6	75.9	99.4	97.2	98.4	99.1	0.68	-0.3
Colorado	98.6	97.0	96.8	97.9	98.4	97.1	97.9	0.80	0.0
California	97.6	100.0	99.6	99.6	99.6	99.6	99.2	-0.42	-0.4
Oregon	100.0	100.0	98.0	100.0	98.1	100.0	99.0	-0.96	-1.0
Washington	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.00	0.0
U.S. Total	98.4	98.5	86.5	98.3	97.5	99.0	99.1	0.06	0.8

Source: USDA, National Agricultural Statistics Service.

Total sugarbeet production is forecast at 35.675 million tons, up 1,063,000 from last month and about 2 million tons above last year (table 6). The States with the largest increases from last month are Minnesota (613,000 tons), North Dakota (426,000 tons), and Montana (48,000 tons).

Table 6: Sugarbeet production, 2015/16 to 2021/22

State	2017/18	2018/19	2019/20	2020/21	2021/22	2021/22	2021/22	Monthly change	Annual change
					August	September	October		
Minnesota	12,515	10,486	8,425	11,145	11,104	11,358	11,971	613	826
North Dakota	6,445	5,731	4,420	5,453	5,422	5,600	6,026	426	573
Idaho	6,507	6,602	6,435	6,845	6,868	6,987	6,987	0	142
Michigan	3,604	4,307	4,147	4,358	4,454	4,803	4,758	-45	400
Nebraska	1,437	1,407	1,069	1,417	1,326	1,295	1,295	0	-122
Montana	1,396	1,319	1,153	1,189	1,267	1,327	1,375	48	186
Wyoming	891	946	679	912	869	872	897	25	-15
Colorado	1,035	831	746	742	782	777	777	0	35
California	1,066	1,200	1,108	1,087	1,087	1,087	1,083	-4	-4
Oregon	334	366	377	384	449	415	415	0	31
Washington	87	87	91	86	82	91	91	0	5
U.S. Total	35,317	33,282	28,650	33,618	33,710	34,612	35,675	1,063	2,057

Source: USDA, National Agricultural Statistics Service.

The national average sugarbeet yield was increased from 30.1 to 31.0 tons per acre, which is an increase of 1.6 tons per acre from last year. Yield changes from last month were largest for North Dakota (up 1.9 tons per acre) and Minnesota (up 1.5 tons per acre).

Table 7: Sugarbeet yield, 2015/16 to 2021/22

State	2017/18	2018/19	2019/20	2020/21	2021/22 August	2021/22 September	2021/22 October	Monthly change	Annual change
Minnesota	30.6	25.7	25.0	26.1	26.5	26.6	28.0	1.4	1.9
North Dakota	30.4	28.8	26.0	24.9	25.1	25.0	26.9	1.9	2.0
Idaho	39.2	40.5	39.0	40.5	40.4	41.1	41.1	0.0	0.6
Michigan	25.2	29.1	28.6	28.3	29.3	31.6	31.3	-0.3	3.0
Nebraska	31.8	31.9	25.4	31.0	29.8	29.7	29.7	0.0	-1.3
Montana	32.7	31.1	31.6	31.3	30.9	31.6	32.7	1.1	1.4
Wyoming	28.2	30.8	28.3	29.6	28.2	28.6	29.4	0.8	-0.2
Colorado	35.7	32.6	30.7	31.3	31.8	32.8	32.8	0.0	1.5
California	43.7	48.8	45.4	45.5	45.5	45.5	45.3	-0.2	-0.2
Oregon	36.7	39.4	38.5	40.9	44.0	40.3	40.3	0.0	-0.6
Washington	48.3	48.3	45.5	47.8	48.2	47.9	47.9	0.0	0.1
U.S. Total	31.7	30.4	29.2	29.4	29.7	30.1	31.1	0.9	1.6

Source: USDA, National Agricultural Statistics Service.

Louisiana Cane Sugar Production Outlook Lowered

In the NASS September *Crop Production* report, Louisiana's 2021/22 yield projection was lowered to 32.2 tons per acre, resulting in a 2.3 percent drop in sugarcane production from 15.4 to 15.2 million tons in the aftermath of Hurricane Ida (table 8). Ida, which came at an inopportune time, disrupted sugarcane planting for the new crop and delayed early-season harvest. As seen in the weekly NASS crop harvest progress reports for Louisiana, as of October 10, which is week 40, 8 percent of the crop had been harvested compared with the 5-year average of 13 percent (figure 3).

Although area harvested for sugar and seed was unchanged at 490,000 acres, the portion of area harvested for sugar increased at the expense of sugarcane area for seed, but the former was not enough to offset the yield decrease. An estimated 21,000 STRV of sugar that would have been produced in September is now estimated to be produced in the next fiscal year after October 1, lowering the fiscal 2020/21 projection and increasing the 2021/22 projection by 21,000 STRV each. More than offsetting that fiscal year 2021/22 increase is a reduction of 42,000 STRV due primarily to the lower yield, resulting in a net decline of 21,000 STRV, to 1.804 million STRV.

Table 8: U.S. sugarcane and cane sugar production, by State, 2015/16 to 2021/22

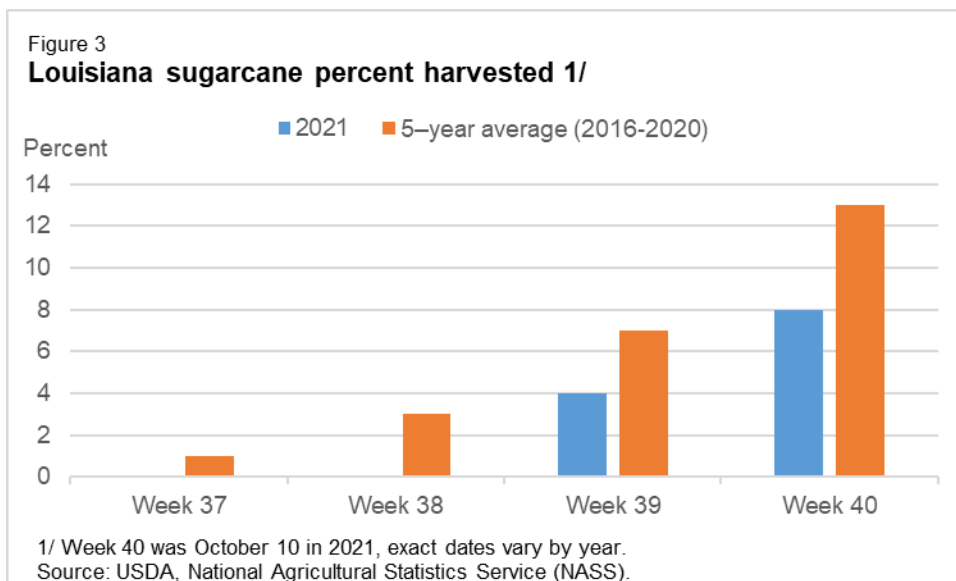
	2017/18	2018/19	2019/20	2020/21	2020/21	2021/22	2021/22	Change from September
				September	October	September	October	Percent
Florida								
Sugarcane harvested for sugar and seed (1,000 acres)	412.7	412.3	410.7	423.3	423.3	405.0	406.0	0.2
Sugarcane harvested for sugar (1,000 acres)	397.0	397.0	397.0	409.0	409.0	389.5	390.5	0.3
Sugarcane yield (short tons per acre)	40.9	41.7	42.8	44.4	44.4	42.7	42.7	0.0
Sugarcane production (1,000 short tons)	16,237	16,555	16,992	18,078	18,078	16,632	16,673	0.2
Recovery rate (percent)	12.2	12.1	12.4	11.6	11.6	12.1	12.0	-0.6
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	464.2	467.6	0.7
Sugarcane yield (short tons per acre)	32.5	35.3	27.7	32.9	32.9	33.2	32.2	-3.0
Sugarcane production (1,000 short tons)	13,455	15,003	12,243	15,167	15,167	15,411	15,058	-2.3
Recovery rate (percent)	13.9	12.5	12.7	13.0	13.0	11.8	11.8	0.4
Crop year sugar production (1,000 STRV) 1/	1,865	1,876	1,558	1,975	1,975	1,825	1,783	-2.3
Fiscal year sugar production (1,000 STRV) 1/	1,861	1,907	1,565	1,949	1,928	1,825	1,804	-1.2
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	34.6	33.6	-2.9
Sugarcane yield (short tons per acre)	36.8	36.6	33.6	34.0	34.0	32.5	32.8	1.0
Sugarcane production (1,000 short tons)	1,490	1,376	1,052	1,139	1,139	1,125	1,103	-2.0
Recovery rate (percent)	10.1	11.3	10.7	11.7	11.7	12.0	12.0	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	931.0	932.0	0.1
Sugarcane harvested for sugar (1,000 acres)	859.6	859.6	870.3	903.5	903.5	888.3	891.7	0.4
Sugarcane yield (short tons per acre)	36.6	38.3	34.8	38.1	38.1	37.3	36.8	-1.3
Sugarcane production (1,000 short tons)	31,182	32,934	30,287	34,384	34,384	33,168	32,834	-1.0
Recovery rate (percent)	12.9	12.3	12.5	12.1	12.2	11.9	11.9	0.3
Sugar production (1,000 STRV)	4,014	4,060	3,798	4,171	4,151	3,960	3,939	-0.5

Note: 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.

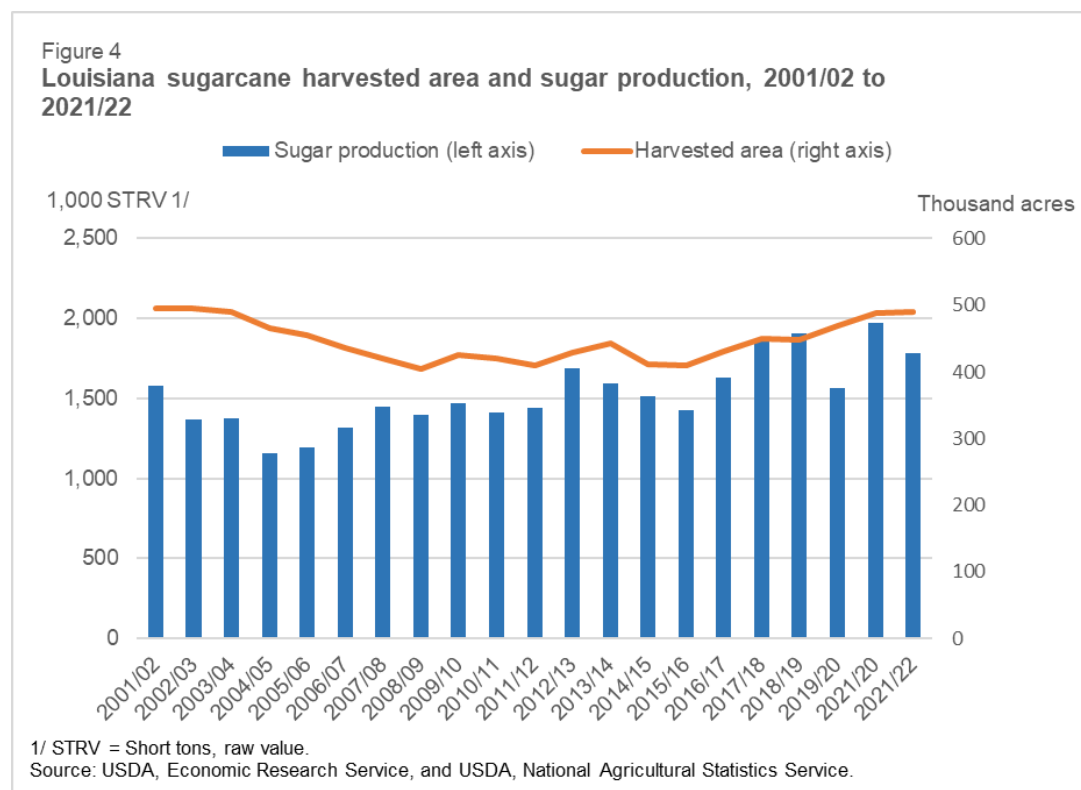


The 2021/22 area harvested for sugar and seed for Florida is estimated at 406,000 acres, up 1,000 from last month. Area harvested for sugar is correspondingly lowered by 1,000 acres. Total sugar production remains at 2 million STRV. The Florida processors did not change their forecast of Florida sugar production from September.

For Texas, area harvested is projected at 36,000 acres, up 1,000 from last month. Texas yield is lowered to 32.2 tons per acre from 33.2 last month, implying sugarcane production of 15.1 million tons. With Texas sugar production unchanged at 130,000 STRV, the implied recovery rate is slightly higher at 11.78 tons of sugar per ton of sugarcane, up from 11.57 last month.

Louisiana Production Trends Since 2001/02

Louisiana harvested area and sugar production trends since 2001/02 are shown in figure 4. In 2001/02, area harvested was 500,000 acres but declined steadily to about 400,000 acres by 2008/09, where it remained relatively unchanged for a few years. Acreage then increased beginning in 2016/17 and has shown a steady upward trend, reaching 490,000 acres in 2020/21 and 2021/22. The U.S.-Mexico sugar suspension agreements imply a minimum delivered import price for Mexican raw sugar of about 25 cents per pound, so as long as the agreements remain, the risk of low U.S. raw sugar prices is very low. This market environment should be supportive of steady or even increased acreage in Louisiana.



Large Reduction in TRQ Imports for 2021/22

Total U.S. imports for 2021/22 are down 212,000 STRV this month (table 1). The U.S. Embassy in the Philippines reported in their semi-annual sugar report that the country would be unlikely to fill any of its World Trade Organization (WTO) raw sugar tariff-rate quota (TRQ) allocation, wiping out 157,000 STRV of expected import supplies. Additionally, 64,000 STRV of fiscal year 2020/21 TRQ raw sugar, which had been expected to arrive in October while taking advantage of a 1-month extension granted by USDA on August 24, 2021, instead arrived prior to October 1. On September 15, 2021, the Office of the U.S. Trade Representative (USTR) announced the allocations of the 2021/22 raw and refined sugar WTO TRQs. The quantity of the WTO refined TRQ allocated to Mexico, 3,256 STRV, is subtracted from total expected WTO refined TRQ imports because all sugar from Mexico must be entered with export licenses issued by the government of Mexico and counted against Mexico's export limit, according to the terms of U.S.-Mexico sugar suspension agreements. Other minor adjustments to imports under U.S. free trade agreements are also made.

Total imports for 2020/21 are up 83,000 STRV, largely due to the 64,000 STRV of the 2020/21 WTO raw sugar TRQ which entered earlier than expected, as mentioned previously. Imports of high-tier tariff sugar are up 25,000 STRV based on pace to date. Other minor adjustments to imports under U.S. free trade agreements create a net reduction of 6,000 STRV.

On August 31, 2021, the government of Mexico requested the U.S. Department of Commerce (DOC) permit the 17,527 STRV of additional sugar announced on August 26 to be permitted an extra month for entry, until October 31, 2021. On September 29, 2021, DOC posted a public notice granting the request and announced a waiver period lasting until October 15, 2021.

Deliveries for Food and Beverage Use Increased

Deliveries for food and beverage use in 2020/21 and 2021/22 are both unchanged at 12.2 million STRV (table 9). Non-reporter (direct consumption) imports through August are 811,000 STRV, down 21 percent over last year. Deliveries reported by domestic beet processors and cane refiners have stagnated and then declined over the past 4 years, while the amount of direct consumption imports has been more volatile. Although the refined sugar supplies from the two large cane refineries near New Orleans have largely recovered from the effects of Hurricane Ida, there were some lingering disruptions through the end of September due to a lack of electricity and logistical bottlenecks.

Table 9: Food and beverage deliveries, 2015/16 to 2020/21, October-August

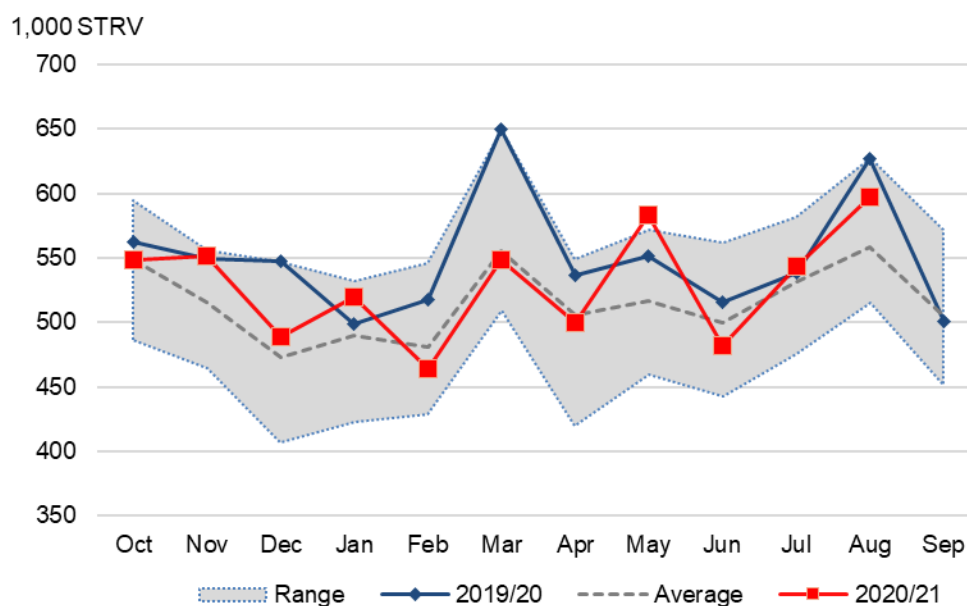
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Annual change
	1,000 short tons, raw value						Percent
Beet sugar processors	4,189	4,911	4,847	4,612	3,992	4,514	13.1
Cane sugar refiners	5,864	5,542	5,619	5,729	6,079	5,779	-4.9
Total reporters	10,053	10,453	10,466	10,340	10,071	10,292	2.2
Non-reporter, direct consumption	762	690	571	699	1,028	811	-21.1
Total October-July	10,816	11,143	11,037	11,040	11,099	11,103	0.0
Final fiscal year deliveries 1/	11,881	12,102	12,048	12,106	12,246	12,200	-0.4
September deliveries 1/	1,065	959	1,011	1,066	1,147	1,097	-4.4

1/ For 2020/21, final fiscal year deliveries is a forecast, and September deliveries is the residual to reach the forecast total.

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

In August, the amount of raw sugar melted (processed) by cane refiners rose to the highest monthly level of the year, about 600,000 STRV (figure 5). The July–September summer quarter is typically the time when refined beet stocks are lowest, and thus the market depends more heavily on refined cane sugar for supplies.

Figure 5
Sugarcane refiners' melt, monthly, 2010/11 to 2020/21



Melt = quantity of raw sugar processed.

STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

Total raw sugar imports reported by the Foreign Agricultural Service under the re-export program were 87,000 STRV in July and continued strong in August at 34,000 STRV, bringing the total through 11 months to 281,000 STRV (table 10). The 2020/21 forecast is 315,000 STRV, implying July–September imports of 155,192 STRV, which would be 19 percent of all imports in that quarter, compared with 9.7 percent of all imports for the year. The re-export

program has provided refiners with an alternative source of raw sugar for melting in the summer quarter.

Table 10: Re-export program imports in 2020/21 and share of total import

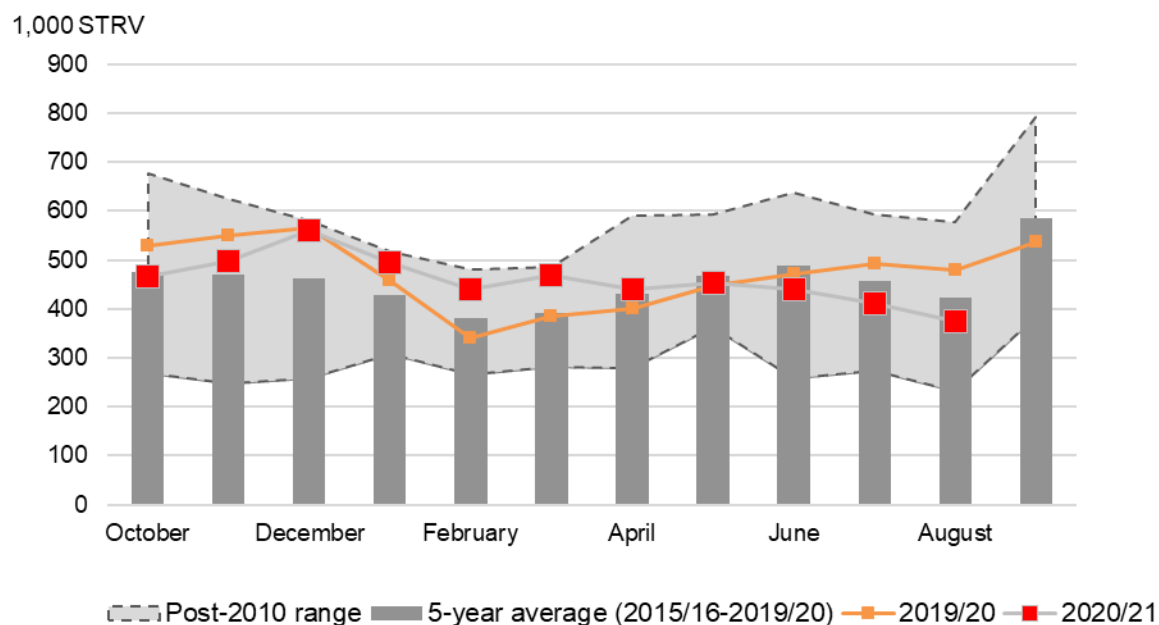
	October– June	July– September	Total
Imports (STRV):			
Re-export program	159,808	155,192	315,000
Other sugar	2,274,963	662,210	2,937,173
Total	2,434,770	817,403	3,252,173
Shares (percent):			
Re-export program	6.6	19.0	9.7
Other sugar	93.4	81.0	90.3
Total	100	100	100

Note: STRV = short tons, raw value.

Source: USDA, Foreign Agricultural Service.

The amount of raw sugar stocks held by refiners (figure 6) decreased and is slightly below both last year and the 10-year average. Refined stocks held by cane refiners (figure 7) are at the low end of the 10-year range and slightly below last year. Sugar inventories held by sugarbeet processors are close to the 5-year average and well above last year's weather-depressed level (figure 8).

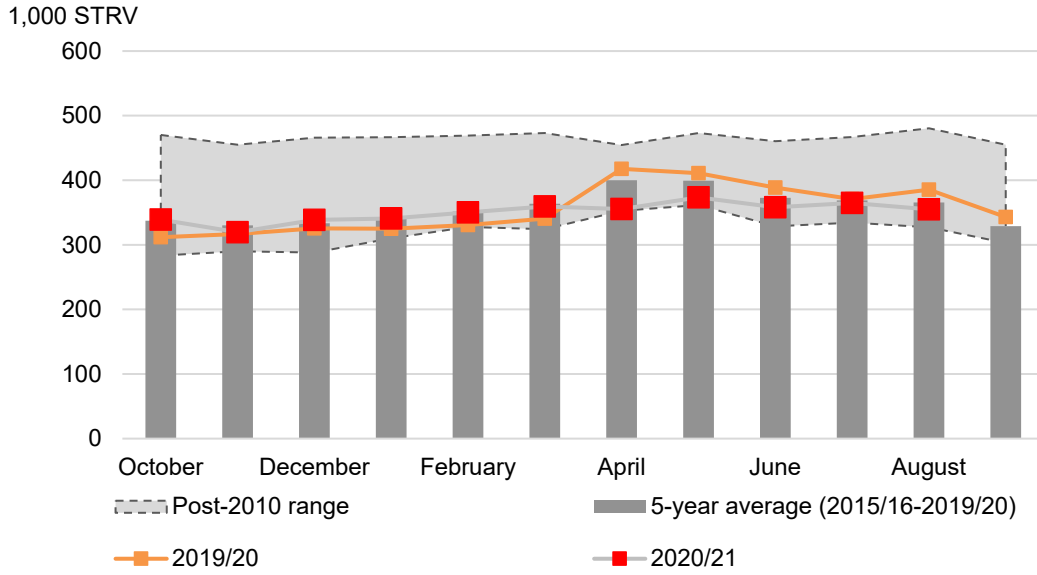
Figure 6
Sugarcane refiners' raw sugar inventories, monthly, 2015/16 to 2020/21



STRV = short tons, raw value.

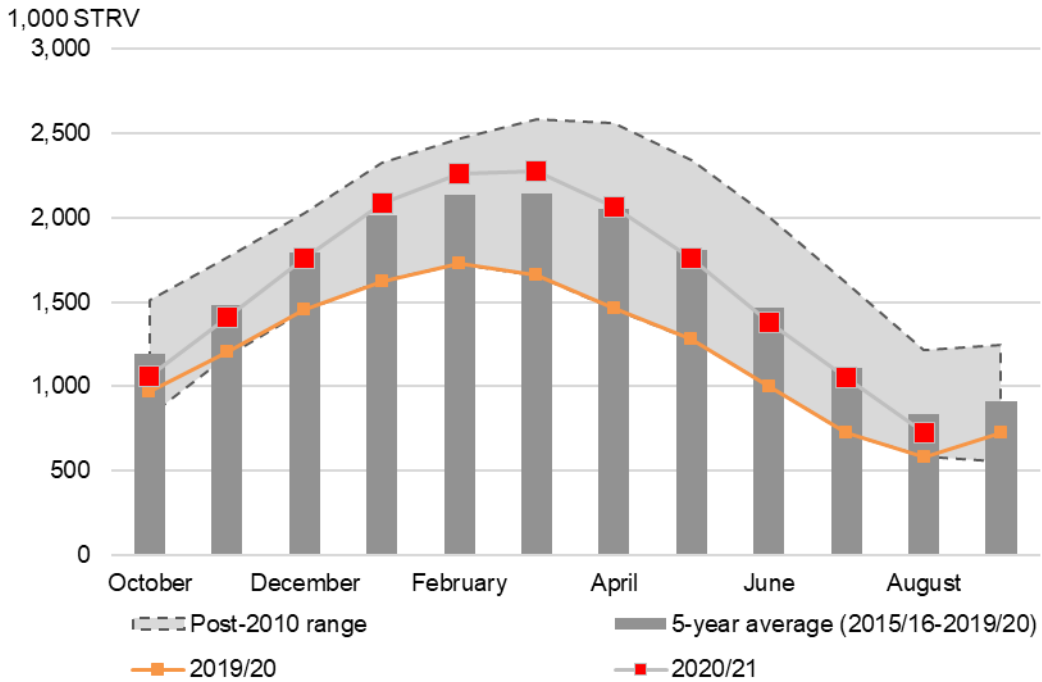
Source: USDA, Farm Service Agency.

Figure 7
Sugarcane refiners' refined sugar inventories, monthly, 2015/16 to 2020/21



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

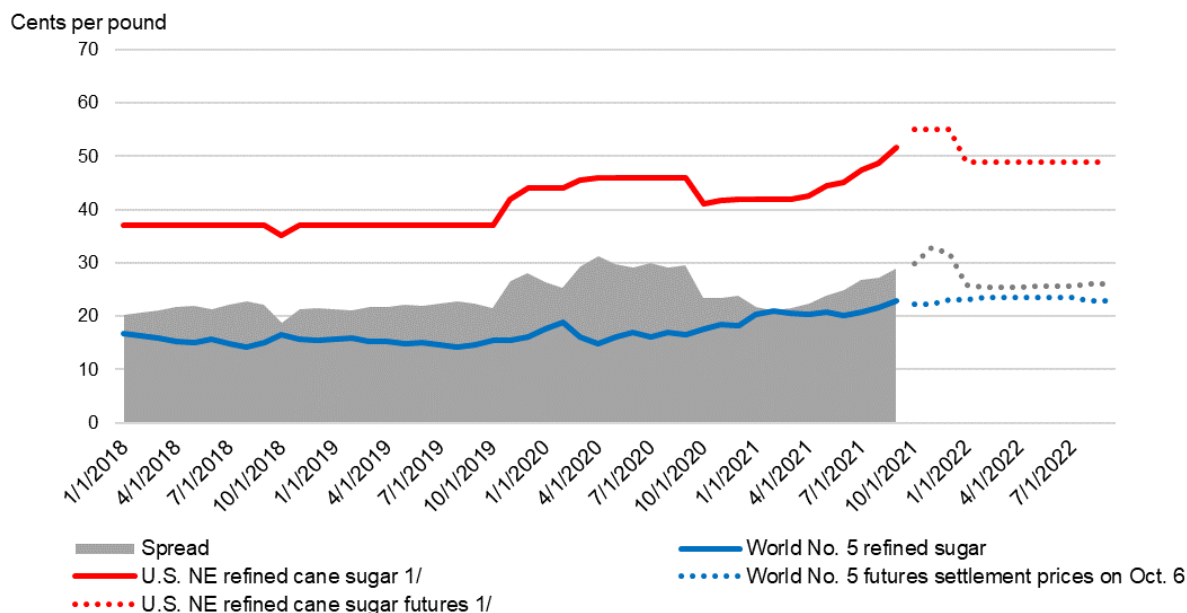
Figure 8
Sugarbeet processors' total sugar inventories, monthly, 2015/16 to 2020/21



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

The spread between the U.S. refined cane sugar price in the Northeast and the world refined sugar price averaged 28.86 cents per pound for the month of September (figure 9), up from 27.16 cents in August. The publication *Milling and Baking News*, the source USDA uses for U.S. refined sugar prices, reported that the U.S. refined cane sugar in the northeast rose to 55 cents per pound as of October 1, 2021, and as of October 8 was unquoted due to tight supplies. The nearby spread between the U.S. northeast refined cane sugar price and the world price is now about 33 cents per pound and remains well above 25 cents per pound for futures prices out to September 2022. This margin exceeds the high tier tariff for refined sugar of 16.2 cents per pound.

Figure 9
U.S. refined cane sugar and world refined sugar prices, monthly, January 2018 to September 2022, and spread between them



1/ Northeast refined cane sugar and future price as quoted in *Milling and Baking News*.

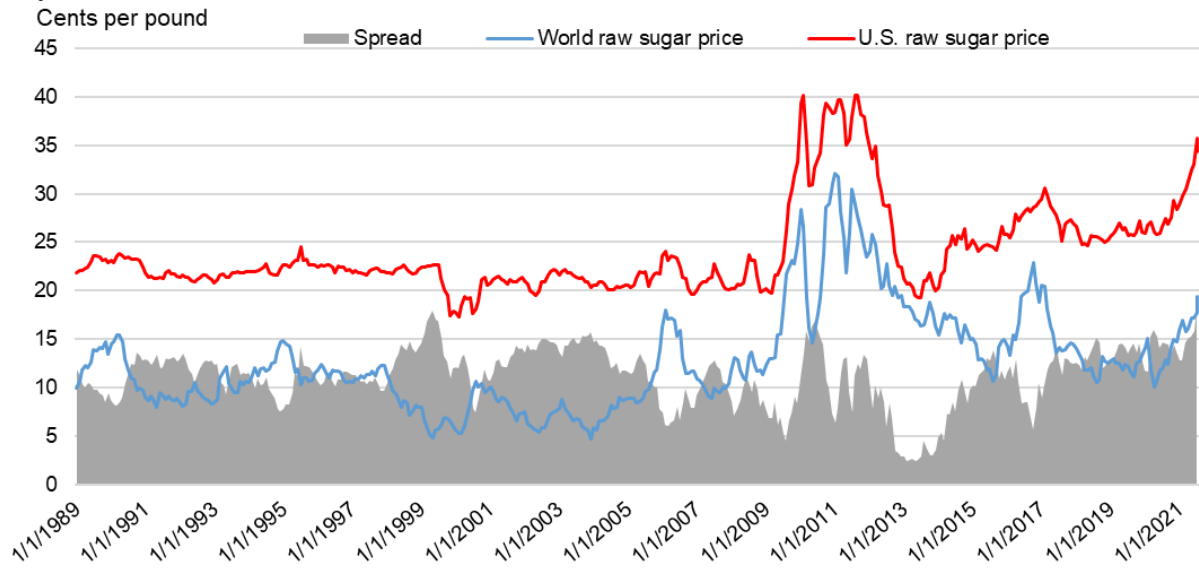
2/ Nearby futures, No. 5 contract, Intercontinental Exchange Inc., and futures price settlements on 10/6/2021 out to September 2022.

Source: *Milling and Baking News*; Intercontinental Exchange Inc.

The spread between the U.S. raw cane sugar price (No. 16 nearby futures contract) and the world raw sugar price (No. 11 nearby futures contract) is shown in figure 10. In September 2021, the average prices (cents per pound) were 35.7 for the United States, 19.3 for the world, and the margin was 16.4. This margin exceeds the high duty for raw sugar of 15.3 cents per pound.

The forecast of 2021/22 high-tier tariff imports is unchanged this month at 75,000 STRV (table 1). The current margins for both raw and refined sugar clearly provide incentives to import at the high-tier tariff, and this variable will be closely monitored during coming months.

Figure 10
U.S. and world raw sugar prices, monthly, January 1989 to September 2021, and spread between them



Source: USDA, Economic Research Service.

Mexico Outlook

Production Increased for 2021/22

The USDA October 2021 *World Agricultural Supply and Demand Estimates (WASDE)* publication estimate of Mexico's 2021/22 sugar production was increased by 131,000 metric tons (MT) (table 11). Deliveries were increased in 2020/21 for human consumption by 20,000 MT, and for the Mexican *Industria Manufacturera, Maquiladora y de Servicios de Exportación (IMMEX)* program by 59,000 MT. For 2021/22, deliveries for human consumption were increased by 15,000 MT and for the IMMEX program by 18,000 MT. Exports for 2020/21 to the United States are unchanged, but exports to other countries are reduced by 184,000 MT. Ending stocks for both 2021/22 are marginally up to 920,000, roughly equivalent to 2.5 months of domestic consumption. This is the target Mexican authorities use to monitor and manage the domestic sugar program. Ending stocks for 2020/21 are up to 1 million MT, primarily based on reduced exports.

Table 11: Mexico sugar: supply and use by fiscal year (October/September), October 2021

Items	2019/20	2020/21			2021/22		
		(forecast) September	(forecast) October	Monthly change	(forecast) September	(forecast) October	Monthly change
1,000 metric tons, actual weight							
Beginning stocks	1,169	858	858	0	913	1,010	97
Production	5,278	5,715	5,715	0	5,809	5,940	131
Imports	77	75	67	-8	55	63	8
Imports for consumption	55	40	32	-8	20	28	8
Imports for sugar-containing product exports, IMMEX 1/	23	35	35	0	35	35	0
Total supply	6,524	6,648	6,640	-8	6,777	7,013	236
Disappearance							
Human consumption	4,101	3,963	3,983	20	3,955	3,970	15
For sugar-containing product exports (IMMEX)	352	427	486	59	427	445	18
Other deliveries and end-of-year statistical adjustment	1	0	0	0	0	0	0
Total	4,455	4,390	4,469	79	4,382	4,415	33
Exports	1,212	1,345	1,161	-184	1,482	1,678	196
Exports to the United States and Puerto Rico	1,177	839	839	0	928	928	0
Exports to other countries	35	506	322	-184	554	750	196
Total use	5,667	5,735	5,630	-105	5,864	6,093	229
Ending stocks	858	913	1,010	97	913	920	7
1,000 metric tons, raw value							
Beginning stocks	1,239	909	909	0	968	1,070	103
Production	5,595	6,058	6,058	0	6,158	6,296	139
Imports	82	80	71	-9	58	67	8
Imports for consumption	58	42	34	-9	21	30	8
Imports for sugar-containing product exports (IMMEX)	24	37	37	0	37	37	0
Total supply	6,916	7,046	7,038	-8	7,183	7,433	250
Disappearance							
Human consumption	4,347	4,201	4,222	21	4,192	4,208	16
For sugar-containing product exports (IMMEX)	373	453	515	63	453	472	19
Other deliveries and end-of-year statistical adjustment	1	0	0	0	0	0	0
Total	4,722	4,653	4,737	84	4,645	4,680	35
Exports	1,285	1,425	1,230	-195	1,571	1,779	208
Exports to the United States and Puerto Rico	1,248	889	889	0	984	983	0
Exports to other countries	37	536	341	-195	587	795	208
Total use	6,007	6,079	5,968	-111	6,216	6,458	243
Ending stocks	909	968	1,070	103	968	975	8
Stocks-to-human consumption (percent)	20.9	23.0	25.4	0.07	23.1	23.2	0.07
Stocks-to-use (percent)	15.1	15.9	17.9	0.03	15.6	15.1	0.05
High-fructose corn syrup (HFCS) consumption (dry weight)	1,388	1,325	1,325	0	1,300	1,325	0

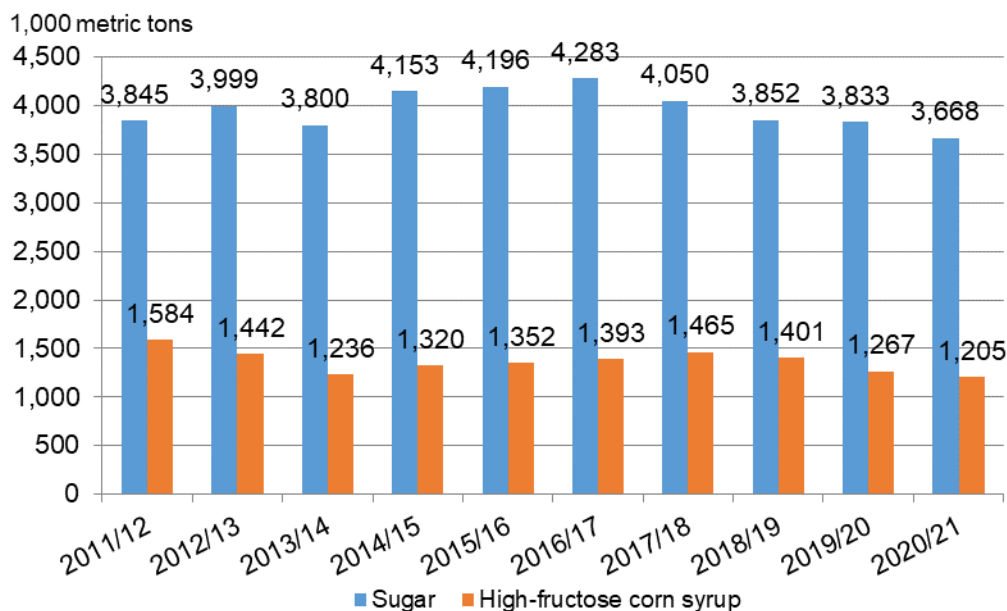
1/ IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

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

Deliveries Increased for 2020/21 and 2021/22

The monthly pace of sugar deliveries for domestic consumption in 2020/21 has been consistently slower than in most of the past 8 years (figure 8). Deliveries during August were above last year.

Figure 11
Mexican sweetener consumption, October to August, 2011/12 to 2020/21



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

Through 11 months of data, sugar deliveries totaled 3.7 million MT, 92.6 percent of the full year projection of 3.983 million MT (table 12). Over the last decade, these 11 months have accounted for a weighted average of 94 percent of the total. To reach USDA's forecast, September deliveries would need to be 315,000 MT, compared with 268,000 MT in September last year.

Deliveries of high-fructose corn syrup (HFCS) are projected unchanged this month with deliveries through 11 months at 1,205,000 MT, dry basis, which represents 91 percent of the full-year projection of 1.325 million. Over the last 10 years, deliveries through 11 months of data have represented a weighted average of 91.5 percent of the deliveries for the full year.

Table 12: Pace of Mexican sweetener deliveries through 11 months, fiscal years 2011–21

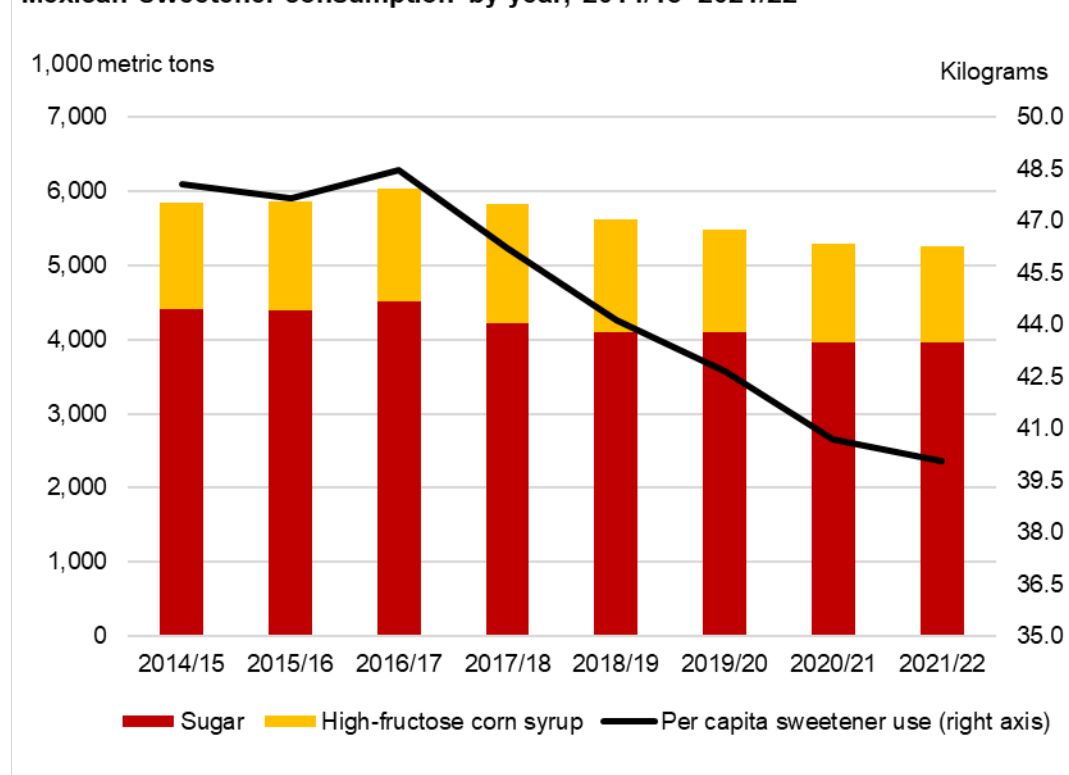
	Sugar, 1,000 metric tons (MT)			High-fructose corn syrup, 1,000 MT, dry weight		
	Oct-Aug	Fiscal year	Percent of total	Oct-Aug	Fiscal year	Percent of total
FY11	3,642	3,950	92.2	1,495	1,635	91.4
FY12	3,845	4,135	93.0	1,584	1,721	92.1
FY13	3,999	4,287	93.3	1,442	1,567	92.0
FY14	3,800	4,098	92.7	1,236	1,372	90.1
FY15	4,153	4,408	94.2	1,320	1,444	91.4
FY16	4,196	4,387	95.7	1,352	1,482	91.2
FY17	4,283	4,515	94.9	1,393	1,522	91.5
FY18	4,050	4,228	95.8	1,465	1,593	92.0
FY19	3,852	4,092	94.1	1,401	1,528	91.7
FY20	3,833	4,101	93.5	1,267	1,388	91.3
FY21	3,668	3,963	92.6	1,205	1,325	91.0
10-year average	3,965	4,220	94.0	1,396	1,525	91.5

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

Both per capita and total sweetener consumption have trended downward since 2016/17, and this trend is expected to continue in 2021/22 (figure 12). Per capita sweetener consumption is projected to continue the downward trend, from 40.7 kilograms in 2020/21 to 40 kilograms in 2021/22.

Figure 12

Mexican sweetener consumption by year, 2014/15–2021/22

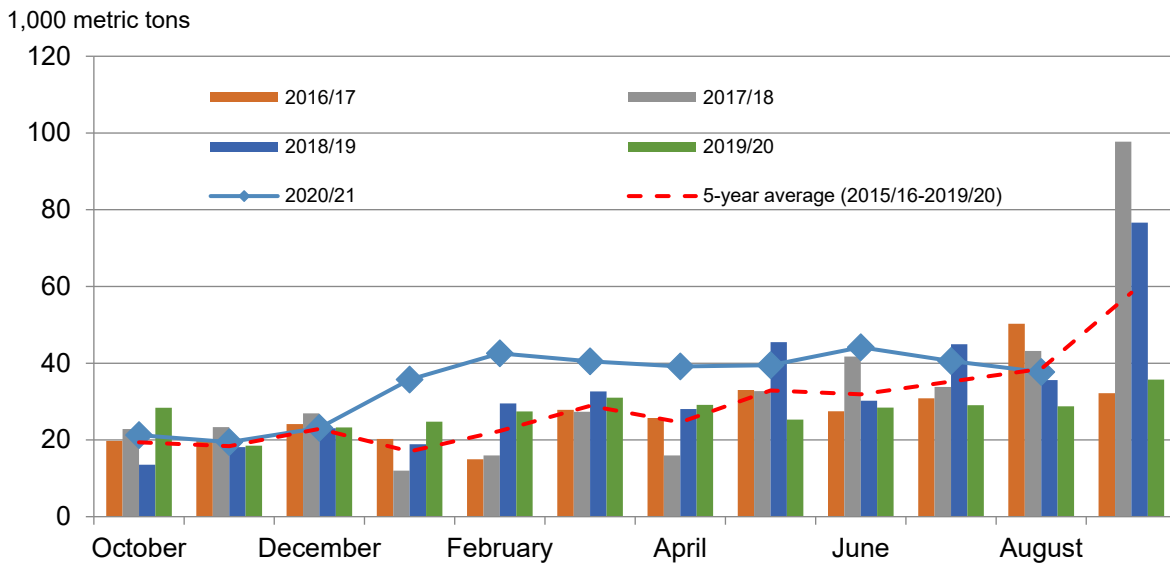


Source: USDA, World Agricultural Outlook Board.

Mexico's estimated 2020/21 deliveries, including from imported sugar, to the IMMEX program are raised 59,000 MT this month to 486,000 MT (table 11), based on increased amounts of domestic sugar diverted from exports. Those exports would have otherwise been exported at the world sugar price, which is significantly lower than the price paid for by IMMEX companies.

The estimate for 2021/22 is increased by 18,000 MT to 445,000 MT. Imports for IMMEX are unchanged at 35,000 MT for both 2020/21 and 2021/22. The IMMEX program permits manufacturers of sugar-containing products to get either imported or domestic sugar at lower prices, if the products are exported. Deliveries for IMMEX have been elevated for much of 2020/21 (figure 13).

Figure 13
Mexican domestic IMMEX deliveries, monthly, 2016/17 to 2020/21



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

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