



**Economic Research Service | Situation and Outlook Report** 

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# Sugar and Sweeteners Outlook

In this report:

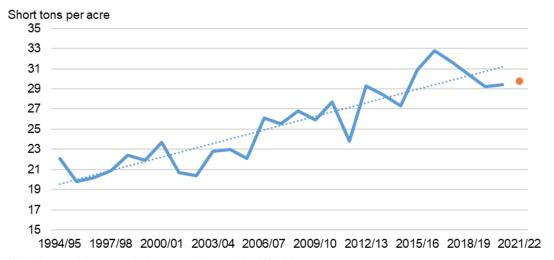
U.S. Sugar Outlook Mexico Sugar Outlook

Andrew Sowell, coordinator Ron Lord, contributor

# Higher U.S. Sugar Imports More than Offset Lower Production in 2021/22

Reductions in both beet and cane sugar production lower the total U.S. 2021/22 sugar production by 302,000 short tons raw value (STRV). U.S. imports from Mexico in 2021/22 are increased as a result of the formula provided for in the U.S./Mexico sugar suspension agreements. U.S. high-tier sugar imports are lowered for both fiscal 2019/20 and 2020/21 because of errors detected in the source data. For Mexico, exports to other markets in 2021/22 are residually lower to account for increased exports to the United States. Mexico's 2020/21 production is increased marginally as the season nears its end.

Figure 1 National sugarbeet yields, 1994/95–2021/22



Note: Orange dot represents the current forecast for 2021/22.

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

# **United States Outlook**

# Ending Stocks Higher on Larger Imports from Mexico

In USDA's July *World Agricultural Supply and Demand Estimates* (*WASDE*) report, U.S. total supplies of sugar for 2021/22 are forecast at 13.921 million short tons, raw value (STRV), up 203,000 STRV from the June *WASDE* figure (table 1). Beginning stocks are increased by 22,000 STRV based on increased 2020/21 imports, which more than offset a small 2020/21 production decrease. Production for 2021/22 is reduced 302,000 STRV, with smaller output of both beet and cane sugar. Imports from Mexico are residually set to bring the ending stocks-to-use ratio to 13.5 percent, resulting in an increase of 484,000 STRV from the June estimate. Imports and deliveries for 2019/20 are both revised lower by 92,000 STRV because of the data revision related to high-tier imports.

2020/24

2024/22

Table 1: U.S. sugar: supply and use by fiscal year (Oct./Sept.), July 2021

Items	2019/20				2020/21		2021/22		
	(forecast)	(forecast)	Monthly	(forecast)	(forecast)	Monthly	(forecast)	(forecast)	Monthly
	June	July	Change	June	July	Change	June	July	Change
			1,000	Short tons, rav	w value				_
Beginning stocks	1,783	1,783	0	1,618	1,618	0	1,755	1,777	22
Total production	8,149	8,149	0	9,299	9,286	-13	9,310	9,008	-302
Beet sugar	4,351	4,351	0	5,118	5,114	-4	5,225	5,033	-192
Cane sugar	3,798	3,798	0	4,181	4,172	-9	4,085	3,975	-110
Florida	2,106	2,106	0	2,100	2,091	-9	2,100	2,015	-85
Louisiana	1,566	1,566	0	1,949	1,949	0	1,850	1,825	-25
Texas	126	126	0	132	132	0	135	135	0
Hawaii	0	0	0	0	0	0	0	0	0
Total imports	4,235	4,143	-92	3,104	3,138	34	2,652	3,136	484
Tariff-rate quota imports	2,152	2,152	0	1,673	1,778	104	1,387	1,387	0
Other program imports	432	432	0	250	200	-50	250	250	0
Non-program imports	1,651	1,559	-92	1,181	1,161	-20	1,015	1,499	484
Mexico	1,376	1,376	0	981	981	0	965	1,449	484
High-duty	275	183	-92	200	180	-20	50	50	0
Total supply	14,166	14,074	-92	14,020	14,042	22	13,717	13,921	203
Total exports	61	61	0	35	35	0	35	35	0
Miscellaneous	74	74	0	0	0	0	0	0	0
Deliveries for domestic use	12,414	12,322	-92	12,230	12,230	0	12,230	12,230	0
Transfer to sugar-containing products									0
for exports under re-export program	78	78	0	80	80	0	80	80	0
Transfer to polyhydric alcohol, feed, other alcohol	20	20	0	25	25	0	25	25	0
Commodity Credit Corporation (CCC) sale for ethanol, other	0	0	0	0	0	0	0	0	0
Deliveries for domestic food and beverage use	12,316	12,224	-92	12,125	12,125	0	12,125	12,125	0
Total use	12,549	12,457	-92	12,265	12,265	0	12,265	12,265	0
Ending stocks	1,618	1,618	0	1,755	1,777	22	1,452	1,656	203
Private	1,618	1,618	0	1,755	1,777	22	1,452	1,656	203
Commodity Credit Corporation (CCC)	0	0	0	0	0	0	0	0	0
Stocks-to-use ratio (percent)	12.89	13.00	0.11	14.31	14.49	0.18	11.84	13.50	1.66

Source: USDA, Economic Research Service, Sugar and Sweeteners Outlook.

#### U.S. Cane Sugar Production Outlook Declines

Florida 2021/22 cane sugar is decreased by 85,000 STRV based on processors' reporting in the latest *Sweetener Market Data* (*SMD*) publication by USDA's Farm Service Agency (FSA). Processors reported a reduction in forecast area harvested stemming from the late finish to the 2020/21 harvest campaign. The Florida campaign typically runs through April or May, but this year extended into early June, the latest on record (back to 1992). October-May output stands at 2.086 million STRV, and USDA adopted the Florida processor's estimate for the full 2020/21 year of 2.091 million STRV, down 9,000 STRV from USDA's June estimate.

Louisiana fiscal 2021/22 cane sugar production forecast is decreased by 25,000 to 1.825 million STRV on lower sugarcane yields forecast by processors. This is slightly below the processor's forecast of 1,847 million STRV. USDA's National Agricultural Statistics Service (NASS) reports that Louisiana sugarcane conditions as of July 12 are 13 percent excellent, 52 percent good, 29 percent fair, 6 percent poor, and 0 percent very poor. These ratings are slightly below last year and the 5-year average (table 2).

Table 2: Crop conditions in Louisiana through July 11 1/

	2016	2017	2018	2019	2020	5-year average	2021
Excellent	22	15	13	10	11	14	13
Good	59	63	47	57	67	59	52
Fair	17	20	33	27	16	23	29
Poor	1	2	7	5	6	4	6
Very Poor	1	0	0	1	0	0	0
Weighted condition index 2/	400	391	366	370	383	382	372

<sup>1/</sup> Week 27; exact dates vary by year.

Louisiana's processing season is complete, but the fiscal year 2020/21 sugar production depends on the early harvest of the 2021/22 crop, which typically begins in September. October-May cane sugar production for Louisiana is 1.904 million STRV. The full fiscal year projection in *WASDE* is 1.949 million, which assumes 45,000 STRV production in September 2021.

#### Beet Sugar Production Outlook Also Declines

Beet sugar production in fiscal 2021/22 is projected lower by 192,000 STRV to 5.033 million STRV (table 3) because of a reduction from last month of projected yield in the Upper Midwest on processors' reporting and a lower U.S. area harvested forecast in the June NASS Acreage

<sup>2/</sup> This w eighted condition index is generated by multiplying the percentage of crops in excellent condition by 5, percentage good by 4, fair by 3, poor by 2, and very poor by 1.

Source: USDA, Economic Research Service; USDA, National Agricultural Statistics Service.

report. The sugarbeet crop is now forecast at 33.74 million short tons from 1.134 million acres planted. Sugarbeets sliced are projected at 31.52 million short tons, assuming an average amount of shrink from the sugarbeet piles. Sugarbeet yield is forecast at 29.76 short tons per acre, up marginally from the 2020/21 yield of 29.43.

Table 3: Beet sugar production projection calculation, 2020/21 and 2021/22

2017/18	2018/19	2019/20	2020/21	2020/21	2021/22	2021/22
			June	July	June	July
35,325	33,282	28,600	33,618	33,618	35,140	33,741
7.31	5.17	5.34	6.58	6.42	6.58	6.58
32,742	31,561	27,072	31,405	31,461	32,826	31,520
15.18	14.77	14.14	15.345	15.303	14.697	14.697
4,970	4,660	3,828	4,819	4,814	4,825	4,633
368	352	341	360	360	360	360
5,338	5,012	4,169	5,179	5,174	5,185	4,993
715	655	582	765	765	665	665
655	582	765	665	665	665	665
			40	40	40	40
5,279	4,939	4,351	5,119	5,114	5,225	5,033
	35,325 7.31 32,742 15.18 4,970 368 5,338 715 ) 655	35,325 33,282 7.31 5.17 32,742 31,561 15.18 14.77 4,970 4,660 368 352 5,338 5,012 715 655 ) 655 582	35,325 33,282 28,600 7.31 5.17 5.34 32,742 31,561 27,072 15.18 14.77 14.14 4,970 4,660 3,828 368 352 341 5,338 5,012 4,169 715 655 582 0 655 582 765	June   35,325   33,282   28,600   33,618   7.31   5.17   5.34   6.58   32,742   31,561   27,072   31,405   15.18   14.77   14.14   15.345   4,970   4,660   3,828   4,819   368   352   341   360   5,338   5,012   4,169   5,179   715   655   582   765   665     655     40	June         July           35,325         33,282         28,600         33,618         33,618           7.31         5.17         5.34         6.58         6.42           32,742         31,561         27,072         31,405         31,461           15.18         14.77         14.14         15.345         15.303           4,970         4,660         3,828         4,819         4,814           368         352         341         360         360           5,338         5,012         4,169         5,179         5,174           715         655         582         765         765           655         582         765         665         665              40         40	June         July         June           35,325         33,282         28,600         33,618         33,618         35,140           7.31         5.17         5.34         6.58         6.42         6.58           32,742         31,561         27,072         31,405         31,461         32,826           15.18         14.77         14.14         15.345         15.303         14.697           4,970         4,660         3,828         4,819         4,814         4,825           368         352         341         360         360         360           5,338         5,012         4,169         5,179         5,174         5,185           715         655         582         765         765         665           655         582         765         665         665              40         40         40

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

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

Sugarbeet yields have trended upwards over the last few decades (figure 1). The long-term trend would suggest a yield closer to 31.67 short tons/acre. If this yield were used to calculate sugarbeet production, total sugarbeet production for 2021/22 would be 35.904 million short tons and beet sugar production would be 5.330 million STRV, about 297,000 STRV above the July forecast.

As of July 6, 2021, the U.S. Drought Monitor maintained by the National Drought Mitigation Center indicated that most sugarbeet-producing counties in North Dakota and Minnesota were in either moderate or severe drought. None of the non-irrigated sugarbeet areas is in extreme or exceptional drought. Most sugarbeets grown in the Western portions of the United States are irrigated. This situation bears close monitoring, and the August USDA's National Agriculture Statistics Service (NASS) report will update the impact of drought conditions on sugarbeet yields.

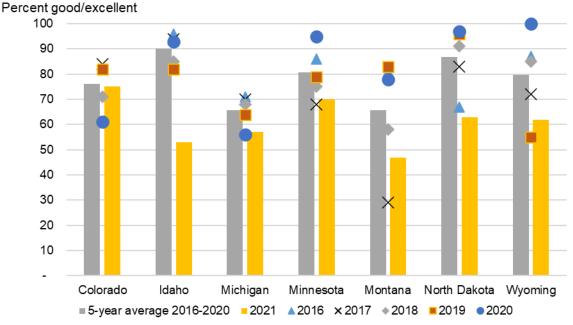
NASS reported crop conditions for some sugarbeet-producing States through July 11, 2021 (week 27) indicate that conditions in several key States are below the recent average (figure 2). Sugarbeet crops in Minnesota, the largest producing state, are reported to be 70 percent good/excellent, 26 percent fair, and 4 percent poor/very poor. Conditions in Idaho, the second leading producing State, are reportedly 53 percent good/excellent, 29 percent fair, and 18 percent poor/very poor. In North Dakota, the third leading producer, conditions are reported to be 63 percent good/excellent, 31 percent fair, and 6 percent poor/very poor.

<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.

Note: STRV = short tons, raw value.

Figure 2
Sugarbeet conditions in major producing States as of July 11 1/



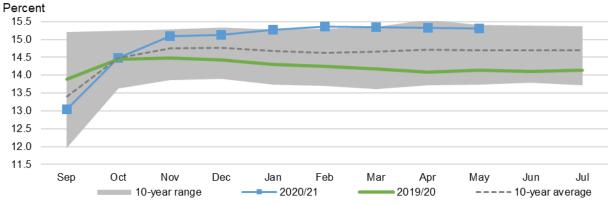
1/ Week 27, exact dates vary by year.

Source: USDA, National Agricultural Statistics Service.

Beet sugar production for fiscal 2020/21 is decreased by 4,000 STRV as lower estimated recovery is only partially offset by an increase in California's estimated sugarbeet production. The cumulative marketing year extraction rate, as reported in USDA's Sweetener Market Data, declined slightly from 15.321 percent in April to 15.303 in May but remains toward the upper end of the range observed over the last 10 years (figure 3). The projected extraction rate for the full sugarbeet marketing year (August-July) is reduced to 15.303 percent. Over the most recent 10 years, the August-May extraction rate has been larger than the full marketing year extraction rate by an average of only 0.006 percentage points. This suggests that the cumulative extraction rate through May tends to be a reasonably reliable indicator for the extraction rate over the full marketing year.

Figure 3

Cumulative sugar extraction rate, beet sugar produced per sugarbeet sliced, by crop year, 2010/11-2020/21



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

Beet sugar output for fiscal year 2020/21 includes the August-September portion of production from the new 2021/22 sugarbeet crop. The faster planting of the 2021 sugarbeet crop correlates with a higher possibility of a large August-September output, but this also depends on weather in the coming months and harvest conditions. August-September 2021 beet sugar production is assumed to be 665,000 STRV, unchanged from last month's forecast and in line with the five-year average.

#### Reductions to High-Tier Imports in 2019/20 and 2020/21

Corrections were made to high-tier sugar imports in FY 2020 and FY 2021 after errors were discovered in the labelling of data maintained by the U.S. Department of Commerce, Bureau of the Census (Census). USDA's Foreign Agricultural Service (FAS) uses two sources for sugar imports. Imports under tariff-rate quotas (TRQs) and for the re-export program are obtained from the U.S. Customs and Border Protection (CBP); imports from Mexico and under high-tier duties are sourced from Census.

The Census data that USDA uses to identify high-tier imports was correct through the month of June 2020 but has been incorrect since July 2020. The error involves a database field called "Import Programs," specifically imports labelled as "No program claimed." This is the only label that can be used to separate high-tier sugar imports from other sugar imports. After consultation with USDA, Census staff identified and are correcting the problem. Census will publish the corrected data as soon as practicable. In the meantime, USDA is utilizing data for high-tier

imports from CBP but plans to revert to using official data from Census as soon as the corrected data are available.

As a result of changes for the three months of July-September 2020, high-tier imports for fiscal year 2019/20 are revised down, from 275,313 to 183,271 STRV (table 4), a reduction of 92,042 STRV. Total imports and total supply are revised downwards by the same amount (table 1). For fiscal 2020/21 all months are revised downwards (table 4) and forecast high-tier imports are reduced by 20,000 STRV.

Table 4: U.S. high-tier sugar imports, monthlly, fiscal years 2020 and 2021

													Total	WASDE Projection	Percent of WASDE Projection
	October	November	December	January	February	March	April	May	June	July	August	September		12-Jul-21	
E: 17 0000					Short To	ns, Raw	Value								
Fiscal Year 2020															
Corrected for July WASDE 1/	5,169	5,923	5,514	12,189	13,809	13,574	7,933	11,035	7,835	30,697	44,980	24,614	183,271	na	na
Uncorrected, as in June WASDE 2/	5,169	5,923	5,514	12,189	13,809	13,574	7,933	11,035	7,835	69,610	71,929	50,793	275,313	na	na
Fiscal Year 2021															
Corrected for July WASDE 3/	27,163	15,450	12,835	14,140	8,045	9,983	13,229	16,056	15,382	na	na	na	132,283	180,000	73%
Uncorrected, as in June WASDE 2/	42,360	20,543	15,420	18,444	17,665	39,434	13,265	14,715	na	na	na	na	181,845	200,000	91%

<sup>1/</sup> October-June, Census: July-September, CBP.

## **Deliveries Unchanged**

Deliveries for 2021/22 are unchanged from the June estimate and the previous year, continuing the recent trend of relatively flat demand (figure 4). Significant uncertainty remains in the outlook for deliveries based on the ongoing economic recovery from the COVID-19 pandemic.

Total deliveries for the 2020/21 marketing year are unchanged from the June estimate at 12.125 million STRV. Fiscal 2019/20 deliveries are reduced by 92,000 STRV based on the equivalent reduction in high-tier imports, thus FY 2020/21 deliveries are down an adjusted 99,000 STRV or about 1 percent from the prior year.

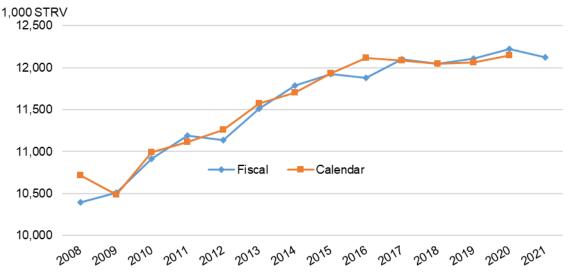
Total deliveries for food and beverage use during the period October-May are down 1.1 percent from the same time last year (table 5). Deliveries from reporting companies are up 1.3 percent with reduced deliveries by cane sugar refiners but increased deliveries by beet sugar processors. Non-reporter (direct consumption) imports are down 23.8 percent from the same time last year.

<sup>2/</sup> Sourced from Census.

<sup>3/</sup> Sourced from CBP.

Sources: U.S. Department of Commerce, Bureau of the Census (Census); U.S. Customs and Border Protection (CBP).

Figure 4
Total U.S. sugar deliveries, fiscal and calendar years, 2008–2021



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

Table 5: Food and beverage deliveries, 2015/16 to 2020/21, October-May

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	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Annual change			
		1,000 short tons, raw value								
Beet sugar processors	2,953	3,519	3,487	3,320	2,973	3,238	8.9			
Cane sugar refiners	4,221	3,987	3,964	4,132	4,332	4,163	-3.9			
Total reporters	7,174	7,506	7,451	7,452	7,305	7,401	1.3			
Non-reporter, direct consumption	557	505	438	487	767	584	-23.8			
Total deliveries	7,731	8,011	7,888	7,939	8,072	7,986	-1.1			
Final fiscal year deliveries	11,881	12,102	12,048	12,106	12,224	12,125	-0.8			

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

At 7.986 million STRV, October-May deliveries represent 65.9 percent of the projection for the full fiscal year 2020/21 (table 6). This compares with last year when those 7 months accounted for 66.0 percent. Over the past 10 years, October through May deliveries have accounted for between 63.1 and 66.2 percent of the full fiscal year deliveries, with a weighted average of 65.1 percent. By this metric, the pace of deliveries this year is slightly ahead of normal for the current fiscal year projection. May deliveries were well above the average pace and the largest for that month on record (figure 5).

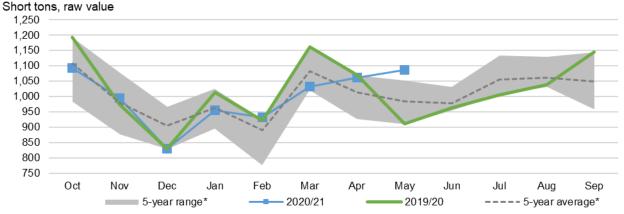
Table 6: Pace of U.S. deliveries, October-May

	1,000 short		
	Oct-May	Fiscal year (FY)	Percent of total
FY11	7,216	11,193	64.5
FY12	7,190	11,141	64.5
FY13	7,470	11,511	64.9
FY14	7,687	11,786	65.2
FY15	7,528	11,921	63.1
FY16	7,731	11,881	65.1
FY17	8,011	12,102	66.2
FY18	7,888	12,048	65.5
FY19	7,939	12,106	65.6
FY20	8,072	12,224	66.0
FY21 (estimate)	7,986	12,125	65.9
10-year average	7,673	11,791	65.1

Source: USDA, Farm Service Agency, Sweetener Market Data; USDA,

Economic Research Service.

Figure 5 Total U.S. sugar deliveries, monthly, 2015/16-2020/21

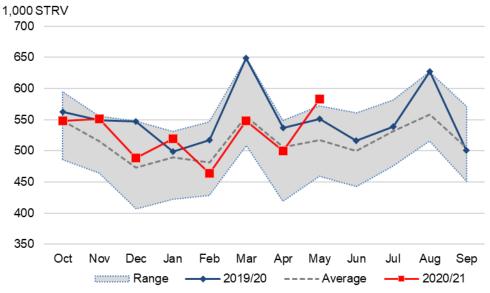


\*2015/16 through 2019/20.

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

Refiners' melt rose during May to the highest level in 10 years (figure 6). Raw stocks held by refiners (figure 7) increased slightly in May and are close to both last year and the 10-year average. Refined stocks held by refiners (figure 8) increased in May. Sugar inventories held by sugarbeet processors are down in May, close to the 5-year average but well above last year's weather-depressed level (figure 9).

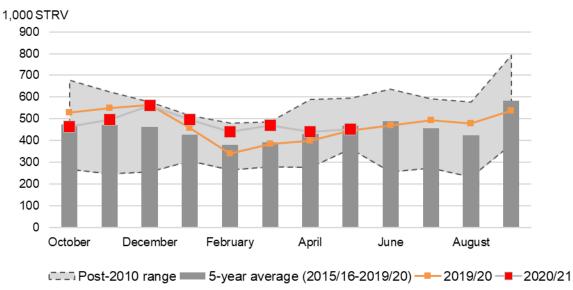
Figure 6
Sugarcane refiners' melt, monthly, 2010/11 to 2020/21



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

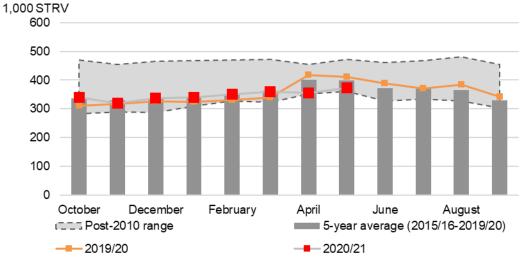
Figure 7 Sugarcane refiners' raw sugar inventories, monthly, 2015/16 to 2020/21



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

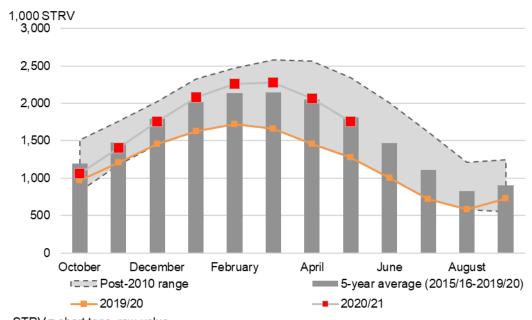
Figure 8
Sugarcane refiners' refined sugar inventories, monthly, 2015/16 to 2020/21



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

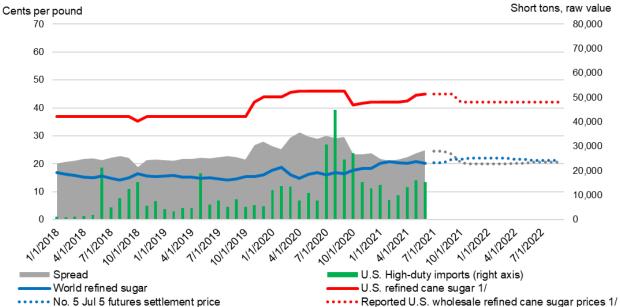
Figure 9
Sugarbeet processors' total sugar inventories, monthly, 2015/16 to 2020/21



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

The spread between the U.S. refined cane sugar price (Northeast) and the world refined sugar price rose in June to 24.88 cents per pound (figure 10), up from 23.74 cents in May. The increase in the spread of both U.S. raw and refined prices above world prices could eventually increase the competitiveness of high-tier imports.

Figure 10 U.S. and world refined sugar prices, monthly, January 2018 to September 2022



1/ Northeast refined cane sugar.

Source: USDA, Economic Research Service; USDA, Foreign Agricultural Service.

# Mexico Outlook

#### Production Reduced for 2020/21; Steady Outlook for 2021/22

USDA's June 2021 *World Agricultural Supply and Demand Estimates (WASDE)* publication forecasts Mexico's 2020/21 sugar production at 5.708 million metric tons (MT), actual value, marginally up from last month's estimate (table 7). Many mills ended production earlier than planned due to the early onset of rain in Veracruz, Tabasco, and Tamaulipas. As of July 3, only one mill is still producing sugar. The forecast for Mexico's 2021/22 sugar production remains at 5.809 million MT.

As of July 10, Mexico's total sugar produced is 5.708 million MT, up from 5.277 million at the same point last year, but down from the same point in 2017/18 and 2018/19 (figure 11). 788,608 hectares have been harvested to date, which is higher than the same point last year and in 2017/18, but below 2018/19. The cumulative sugarcane yield to date is only slightly above the same point last year (figure 12). While sugarcane yields are substantially behind 2017/18 and 2018/19, the cumulative extraction rate to date remains relatively comparable to those years and well above 2019/20 (figure 13). As the season progresses sugarcane yields tend to decline while extraction rates generally rise. Most of Mexico's sugar produced to date has been estándar (standard) sugar, the most used sugar in Mexico. Through July 10, this type of sugar represents 60 percent of Mexico's cumulative sugar production, compared with 54 percent at the same time last year and 66 percent in the previous year (figure 14). Mexico's production of low-polarity sugar, below 99.2 degrees, is 728,914 MT, and appears sufficient to fulfill export allocations to the U.S. market.

Deliveries for both sugar and high-fructose corn syrup are unchanged this month (discussed in more detail in next section). Deliveries for the Mexico's sugar-containing products re-export program, called IMMEX, are increased by 13,000 metric tons actual weight because of recent information reported by the USDA Post in Mexico City. This increase is assumed to carry over into 2021/22.

2020/21 exports to the United States are unchanged, while exports to the rest of the world are residually lowered by 8,000 MT. Exports in 2021/22 to the United States are increased by 414,000 MT, as provided in the U.S./Mexico suspension agreements by which the first export limit determination is based on the July *WASDE* report. Exports to the rest of the world are lowered by 427,000 MT. Ending stocks for both 2020/21 and 2021/22 are up marginally to

913,000, roughly equivalent to 2.5 months of domestic consumption. This is the target Mexican authorities use to monitor and manage the domestic sugar program.

Table 7: Mexico sugar: supply and use by fiscal year (Oct./Sept.), July 2021

Table 7. Mexico sugar. supply and use by listal year (Ott./Se	2019/20	2020/21					
		(forecast)	(forecast)	Monthly	(forecast)	2021/22 (forecast)	Monthly
Items		June	July	Change	June	July	Change
			1,000 n	netric tons,	actual weigh	t	
Beginning stocks	1,169	858	858	0	910	913	3
Production	5,278	5,700	5,708	8	5,809	5,809	0
Imports	77	105	105	0	3,003	85	0
Imports for consumption	55	40	40	0	20	20	0
Imports for sugar-containing product exports, IMMEX 1/, other	23	65	65	0	65	65	0
Total supply	6,524	6,663	6,671	8	6,804	6,807	3
Disappearance							
Human consumption	4,101	3,963	3,963	0	3,955	3,955	0
For sugar-containing product exports (IMMEX)	352	415	428	13	415	428	13
Other deliveries and end-of-year statistical adjustment	1	0	0	0	0	0	0
Total	4,455	4,378	4,391	13	4,370	4,383	13
Exports	1,212	1,374	1,366	-8	1,524	1,511	-13
Exports to the United States and Puerto Rico	1,177	839	839	0	826	1,240	414
Exports to other countries	35	535	527	-8	698	271	-427
2.pono to onto commo	00	000	02.		000		
Total use	5,667	5,752	5,757	5	5,894	5,894	0 0
Ending stocks	858	910	913	3	910	913	3
		1,000 metric tons, raw value					
Beginning stocks	1,239	909	909	0	965	968	3
Production	5,595	6,042	6,050	8	6,158	6,158	0
Imports	82	111	111	0	90	90	0
Imports for consumption	58	42	42	0	21	21	0
Imports for sugar-containing product exports (IMMEX)	24	69	69	0	69	69	0
Total supply	6,916	7,062	7,071	8	7,213	7,215	3
Disassessess							
Disappearance Human consumption	4,347	4,201	4,201	0	4,192	4,192	0
For sugar-containing product exports (IMMEX)	373	440	454	14	440	454	14
Other deliveries and end-of-year statistical adjustment	1	0	0	0	0	0	0
Total	4,722	4,641	4,654	14	4,632	4,646	14
Exports	1,285	1,457	1,448	-8	1,615	1,602	-14
Exports to the United States and Puerto Rico	1,248	890	890	0	875	1,314	439
Exports to other countries	37	567	559	-8	740	287	-453
1							0
Total use	6,007	6,097	6,103	6	6,248	6,248	0
Ending stocks	909	965	968	3	965	968	3
Stocks-to-human consumption (percent)	20.9	23.0	23.0	0.1	23.0	23.1	0
Stocks-to-use (percent)	15.1	15.8	15.9	0.0	15.4	15.5	0
High-fructose corn syrup (HFCS) consumption (dry weight)	1,388	1,325	1,325	0	1,300	1,300	0

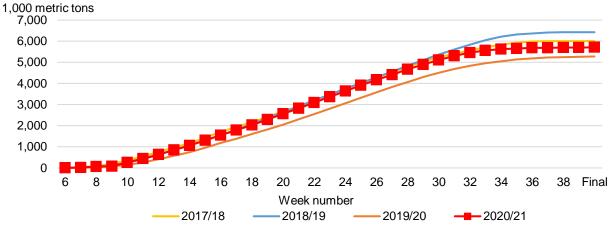
<sup>1/</sup> IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

Sources: USDA, World Agricultural Outlook Board; USDA, Economic Research Service; Mexico's National

 $<sup>\</sup>label{thm:committee} \mbox{Committee for the Sustainable Development of Sugarcane (CONADESUCA)}.$ 

Figure 11

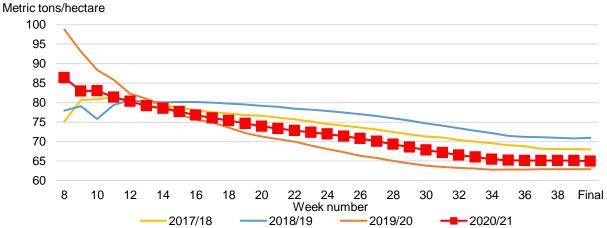
Mexico cumulative sugar production, by week



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

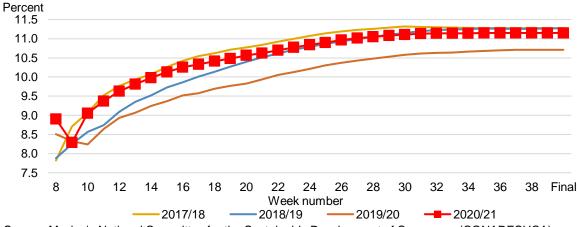
Figure 12

Mexico cumulative sugarcane yields, by week



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

Figure 13 **Mexico cumulative sugar extraction rate, by week** 



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

1,000 metric tons 7,000 6,000 5.000 4,000 3,000 2.000 1,000 0 2018/19 2019/20 2020/21 Refined sugar Standard sugar ■ White special Brown sugar ■ Polarity <99.2

Figure 14

Mexico sugar production, by type of sugar, through week 41\*

\*Dates of comparison are July 10, 2021; July 7, 2020; and July 13, 2019.
Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

### **Deliveries Unchanged**

The monthly pace of sugar deliveries in 2020/21 has been consistently slower than in recent years (figure 15). Deliveries during May increased to a level similar to last year. Through 8 months of data, sugar deliveries totaled 2.613 million MT, 65.9 percent of the full year projection of 3.963 million MT (table 8). Over the last decade, these 8 months have accounted for a weighted average of 70.4 percent of the fiscal year total. Sugar deliveries are unchanged this month despite the slow pace to-date.

Deliveries of high-fructose corn syrup (HFCS) are projected unchanged this month. Deliveries through 8 months stand at 879,000 MT, dry basis, which represents 66.4 percent of the full year projection of 1.325 million. Over the last 10 years, deliveries through 8 months of data have represented a weighted average of 65.1 percent of the deliveries for the full year.

HFCS deliveries through 8 months of data (October through May) tend to be a reliable indicator of the deliveries total for the full fiscal year, as indicated by an R-squared of 0.96 (figure 16). This contrasts with sugar, where the R-squared is only 0.83, indicating that pace analysis has less explanatory value in determining the expected deliveries for a fiscal year (figure 17).

Both per capita and total sweetener consumption have trended downward since 2016/17 and this is expected to continue in 2021/22 (figure 18). Sugar consumption in 2021/22 remains projected at 3.955 million MT, while HFCS is forecast at 1.3 million MT.

1,000 metric tons 600 500 Ж 400 300 200 100 0 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep 2020/21 ▲ 2013/14 **2014/15** 2015/16 **x** 2016/17 **2017/18** +2018/19 ×2019/20

Figure 15 **Mexican sugar deliveries for consumption, monthly, 2013/14 to 2020/21** 

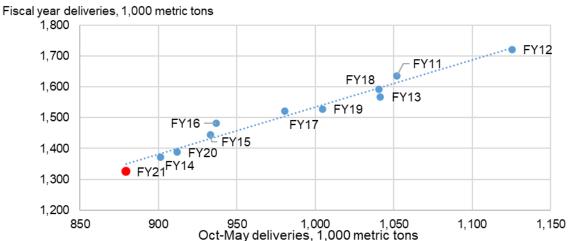
Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Table 8: Pace of Mexico sweetener deliveries through first 8 months of fiscal year

	Sugar,	1,000 metric	tons (MT)	High-fructose	corn syrup, 1,0	,000 MT, dry weight		
	Oct-May	Fiscal year Pe	ercent of total	Oct-May	Fiscal year	Percent of total		
FY11	2,664	3,950	67.4	1,052	1,635	64.3		
FY12	2,785	4,135	67.3	1,125	1,721	65.4		
FY13	3,029	4,287	70.7	1,042	1,567	66.5		
FY14	2,865	4,098	69.9	901	1,372	65.7		
FY15	3,212	4,408	72.9	933	1,444	64.6		
FY16	3,171	4,387	72.3	937	1,482	63.2		
FY17	3,162	4,515	70.0	981	1,522	64.4		
FY18	2,929	4,228	69.3	1,040	1,593	65.3		
FY19	2,919	4,092	71.3	1,005	1,528	65.7		
FY20	2,976	4,101	72.6	912	1,388	65.7		
FY21 (forecast)	2,613	3,963	65.9	879	1,325	66.4		
10-year average	2,971	4,220	70.4	993	1,525	65.1		

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

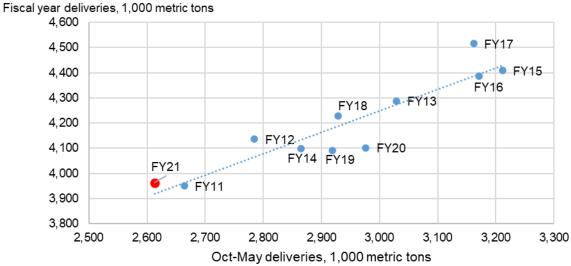
Figure 16
Mexico HFCS deliveries, fiscal year relative to first 8 months, 2011–21



HFCS = high-fructose corn syrup

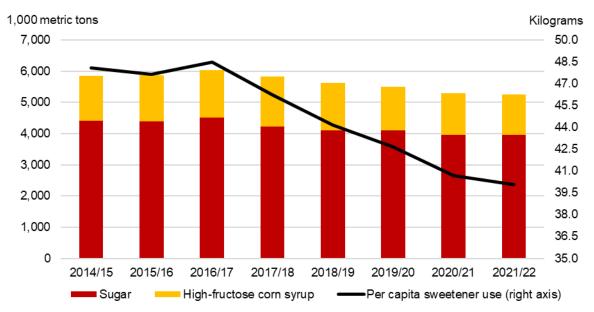
Sources: USDA, Economic Research Service; Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Figure 17
Mexico sugar deliveries, fiscal year relative to first 8 months, 2011–21



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

Figure 18 **Mexico sweetener consumption by year** 



Source: USDA, World Agricultural Outlook Board.

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