



# Sugar and Sweeteners Outlook: April 2023

## In this report:

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

Vidalina Abadam, coordinator

## U.S. Sugar Supply Raised; Mexican Sugar Production Revised Upward

In the April 2023 *World Agricultural Supply and Demand Estimates (WASDE)*, the 2022/23 U.S. sugar supply is raised by 177,000 short tons, raw value (STRV) to 14.637 million from last month on larger imports. High-tier tariff sugar imports are revised upward based on increased pace and additional raw sugar imports that are expected after the Office of the U.S. Trade and Representative (USTR) reallocated the unused World Trade Organization (WTO) raw sugar tariff-rate quotas (TRQ) on March 14. Domestic sugar production is marginally down as the decline in beet sugar production offsets the increase in cane sugar production in Florida and Texas. Given that the U.S. sugar use is unchanged at 12.740 million STRV, ending stocks increased by 177,000 STRV to 1.897 million. The resulting ending stocks-to-use ratio is 14.9 percent, up by 1.4 percentage points from last month's 13.5 percent.

Mexico's sugar production in 2022/23 is increased by 75,000 metric tons (MT), actual value from last month to 5.560 million on higher area harvested. USDA projects that the production of less than 99.2 polarity sugar can potentially be as high as 840,000 MT, about 75 percent of the 1.118 million-MT Mexican export quota. The bulk of the increase in production—60,000 MT—is apportioned towards the *Industria Manufacturera, Maquiladora y de Servicios de Exportación* (IMMEX) deliveries, which are increased to 331,000 MT, but still relatively low barring any increases from domestic production and/or qualifying imports for IMMEX.

# U.S. Outlook Summary

## U.S. Sugar Supply Raised; Use Unchanged

In the April 2023 *WASDE*, the 2022/23 U.S. sugar supply is increased by 177,000 STRV to 14.637 million from last month on increased imports (table 1). The expected WTO raw sugar TRQ imports are increased by 122,000 STRV to 1.275 million following USTR's March 14 announcement to reallocate the 247,182-STRV of unused quota from countries that indicated their inability to fill the original allocation. Out of the reallocated amount, USDA expects only 46 percent to enter (114,905 STRV)—partly because of tight global sugar supplies—which contributes to a lower TRQ shortfall projection of 132,277 from last month's 254,632 STRV.

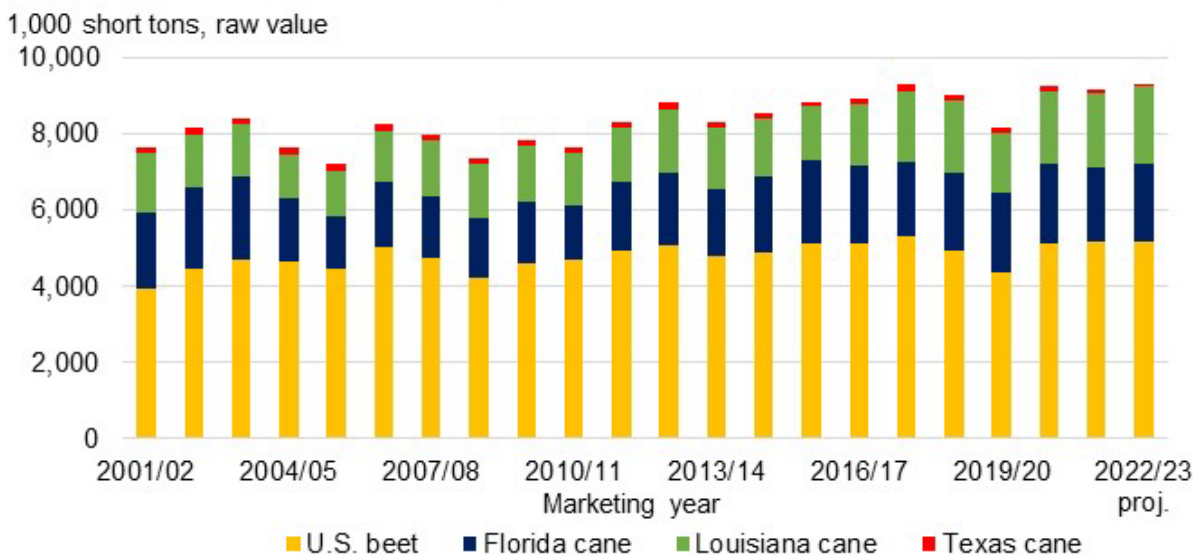
High-tier imports are raised by 69,000 STRV to 225,000 based on pace. Domestic sugar production is marginally down by 5,000 STRV to 9.306 million as the decline in beet sugar production offsets the increase in cane sugar production in Florida and Texas. If realized, total sugar production would still be a new record, surpassing 2017/18's 9.293 million (figure 1). The 2022/23 U.S. sugar use is unchanged from last month at 12.740 million STRV. As such, ending stocks are increased by 177,000 STRV to 1.897 million from last month. The resulting ending stocks-to-use ratio is 14.9 percent, up by 1.4 percentage points from last month's 13.5 percent.

**Table 1: U.S. sugar: supply and use by fiscal year (October/September), April 2023**

Items	2020/21		2021/22		2022/23		
	Final	March (estimate)	April (estimate)	Monthly change	March (forecast)	April (forecast)	Monthly change
	1,000 short tons raw value						
Beginning stocks	1,618	1,705	1,705	0	1,820	1,820	0
Total production	9,233	9,157	9,157	0	9,310	9,306	-5
Beet sugar	5,092	5,155	5,155	0	5,160	5,150	-10
Cane sugar	4,141	4,002	4,002	0	4,150	4,156	5
Florida	2,090	1,934	1,934	0	2,040	2,044	4
Louisiana	1,918	1,944	1,944	0	2,034	2,034	0
Texas	134	124	124	0	76	78	1
Total imports	3,221	3,646	3,646	0	3,330	3,511	182
Tariff-rate quota imports	1,749	1,579	1,579	0	1,618	1,730	112
Other program imports	292	298	298	0	250	250	0
Non-program imports	1,180	1,769	1,769	0	1,462	1,531	69
Mexico	968	1,379	1,379	0	1,306	1,306	0
High-duty	212	390	390	0	156	225	69
Total supply	14,072	14,508	14,508	0	14,460	14,637	177
Total exports	49	29	29	0	35	35	0
Miscellaneous	40	81	81	0	0	0	0
Total deliveries	12,277	12,578	12,578	0	12,705	12,705	0
Domestic food and beverage use	12,161	12,470	12,470	0	12,600	12,600	0
To sugar-containing products re-export program	89	80	80	0	80	80	0
For polyhydric alcohol, feed, other alcohol	27	27	27	0	25	25	0
Commodity Credit Corporation (CCC) for ethanol	0	0	0	0	0	0	0
Total use	12,367	12,688	12,688	0	12,740	12,740	0
Ending stocks	1,705	1,820	1,820	0	1,720	1,897	177
Private	1,705	1,820	1,820	0	1,720	1,897	177
Commodity Credit Corporation	0	0	0	0	0	0	0
Stocks-to-use ratio (percent)	13.8	14.3	14.3	0.0	13.5	14.9	1.4

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

**Figure 1**  
**U.S. production of beet sugar and cane sugar by State, 2001/02–2022/23**



proj. = projected.  
Source: USDA, Farm Service Agency.

## Beet Sugar Production in 2022/23 Reduced

Beet sugar production in crop year year 2022/23 is reduced by 10,000 STRV to 5.024 million from last month (table 2). The decline is based on information submitted by the beet processors to the Farm Service Agency's *Sweetener Market Data (SMD)* report. The processors indicated a higher expected crop year 2022/23 beet pile shrink of 6.99 percent and lower actual to-date (August–February) sucrose recovery from sliced beets of 15.39 percent (figure 2). Despite the reduction, recovery would still be the highest in the last decade as above-average-recovery rates are observed across most of the major sugarbeet-producing regions. With no changes to the other variables, including the projection for the August–September 2023 production, fiscal year 2022/23 beet sugar production is down by 10,000 STRV to 5.150 million, which is relatively close to last year's 5.155 million.

**Table 2: Beet sugar production calculations, 2019/20–2020/23**

	2020/21 final	2021/22 estimate	2022/23 March	2022/23 April	Monthly change
Sugarbeet production (1,000 short tons) 1/	33,610	36,751	32,574	32,574	0
Sugarbeet shrink (percent)	6.60	7.9	6.83	6.99	0.2
Sugarbeet sliced (1,000 short tons)	31,392	33,850	30,348	30,296	-52
Sugar extraction rate from slice (percent)	15.34	14.63	15.40	15.39	-0.01
Sugar from beets sliced (1,000 STRV) 2/	4,817	4,954	4,674	4,664	-10
Sugar from molasses (1,000 STRV) 2/	362	341	360	360	0
Crop year sugar production (1,000 STRV) 2/	5,181	5,294	5,034	5,024	-10
Aug.–Sep. sugar production (1,000 STRV)	765	676	537	537	0
Aug.–Sep. sugar production of subsequent crop (1,000 STRV)	676	537	633	633	0
Sugar from imported beets (1,000 STRV) 3/	N/A	N/A	30	30	0
Fiscal year sugar production (1,000 STRV)	5,092	5,155	5,160	5,150	-10

STRV = short tons, raw value; NA = not applicable.

1/ USDA, National Agricultural Statistics Service.

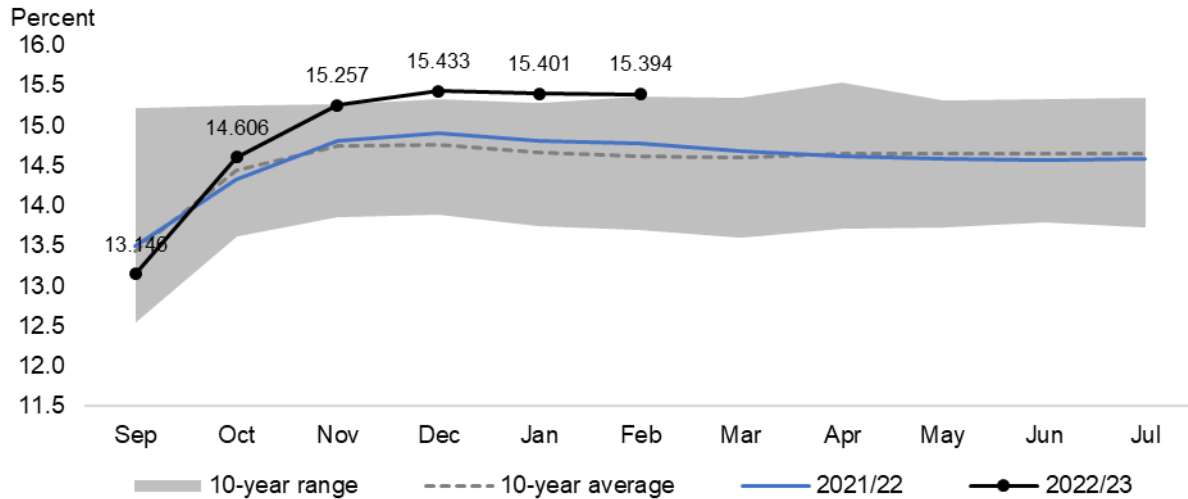
2/ August–July.

3/ Sugar from imported beets in 2020/21 and 2021/22 are already included in the crop year production. Typically, this component is separated for projections and included in total once full crop year slice is available.

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

Figure 2

**Cumulative sugar extraction rate, beet sugar produced per sugarbeet sliced, by crop year, 2012/13–2022/23**

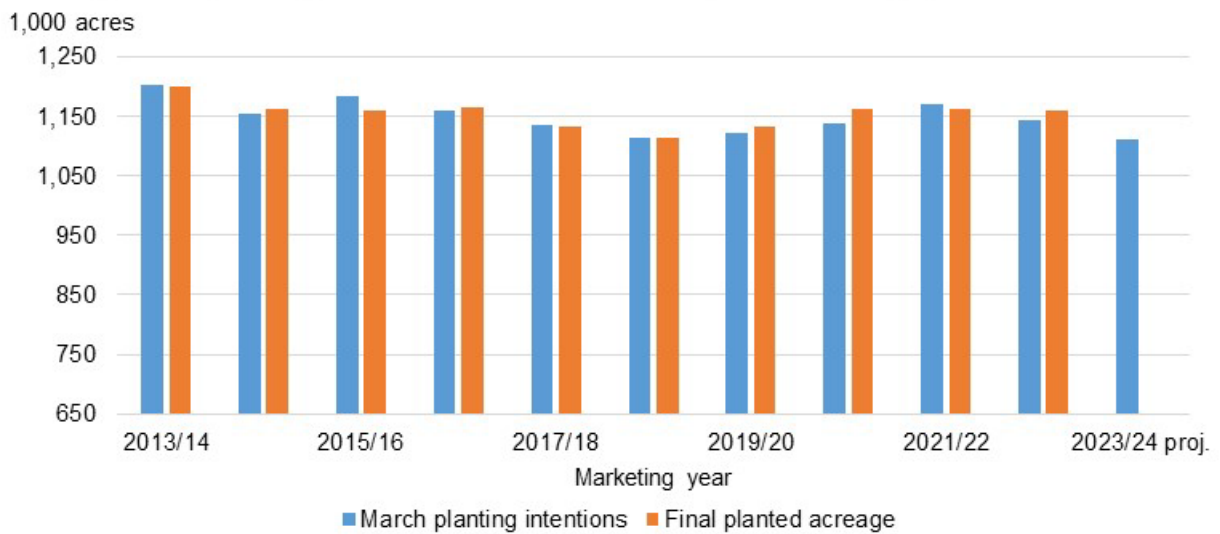


Source: USDA, Economic Research Service; USDA, Farm Service Agency.

The initial forecast for the 2023/24 sugarbeet planted acreage was published in the National Agricultural Statistics Service’s (NASS) March 31 *Prospective Plantings* report, which indicates growers’ intentions prior to the start of actual planting operations. NASS projected planting intentions at 1.111 million acres, a decrease of 48,700 (4.2 percent) from 2022/23’s planted acres of 1.160 million (figure 3).

Figure 3

**U.S. sugarbeet planting intentions in March and final planted acreage, 2013/14–2023/24**



proj. = projected.

Source: USDA, National Agricultural Statistics Service.

Since the final planted acreage can include areas that were ultimately not planted due to some factors, such as weather-delay issues, comparing this year’s planting intentions with those from the previous years can provide a better insight into processors’ original campaign plans. In this case, the 2023/24 planting intentions of 1.111 million acres would be 33,000, or only 2.9 percent lower than last year’s 1.143 million as the increases in Minnesota, Nebraska, Idaho, and Oregon were not enough to offset the reduction in other States.

Montana (MT) and North Dakota (ND) had the largest over-the-year decline—19,000 acres (44.2 percent) and 12,000 (5.3 percent), respectively. The decline is primarily due to the closure of the Sidney Sugars beet sugar processing plant in Sidney, Montana in April.<sup>1</sup> The processing facility sourced sugarbeets from five counties in eastern MT and two counties in western ND (table 3).

Planting intentions are also down in Michigan by 12,000 acres (8.3 percent) given the attractive prices of alternative crops for rotation, and in California by 6,000 acres (25 percent) partly due to drought concerns in the Imperial Valley. Declines were also projected in Colorado, Wyoming, and Washington. The forecast for planted acreage will be updated in the NASS June 30 *Acreage* report, which would include an initial forecast for harvested acreage.

**Table 3: U.S. sugarbeet planting intentions in March, 2018/19–2023/24**

Region and state	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Change from 2022/23	
							1,000 Acres	Percent
1,000 acres								
<b>Great Lakes</b>								
Michigan	147	147	150	155	145	133	-12	-8.3
<b>Upper Midwest</b>								
Minnesota	423	417	427	440	424	433	9	2.1
North Dakota	199	203	214	223	226	214	-12	-5.3
<b>Great Plains</b>								
Colorado	26	27	25	24	25	23	-2	-8.0
Montana	43	47	43	42	43	24	-19	-44.2
Nebraska	46	44	44	48	45	49	4	8.9
Wyoming	30	33	32	28	31	30	-1	-3.2
<b>Far West</b>								
California	25	25	24	24	24	18	-6	-25.0
Idaho	163	167	168	173	170	175	5	2.9
Oregon	11	10	10	10	9	10	2	17.6
Washington	2	2	2	2	2	2	0	-5.3
<b>U.S.</b>	<b>1,113</b>	<b>1,120</b>	<b>1,139</b>	<b>1,169</b>	<b>1,143</b>	<b>1,111</b>	<b>-33</b>	<b>-2.9</b>

Source: USDA, National Agricultural Statistics Service.

<sup>1</sup> The February 2023 Sugar and Sweeteners Outlook has a special article on Sidney Sugars’ closure.

## Delays Are Possible for 2023/24 Sugarbeet Planting

Delays are possible for the 2023/24 sugarbeet planting due to recent weather events. The soil needs to be dry for field preparation and planting to begin and requires ideal temperature for seed germination. Planting typically occurs in late April and early May to allow the sugarbeets sufficient time to deposit sugar.

The recent snowstorms in the Upper Midwest region added more inches to already snow-covered fields. Thus, there are concerns that upon melting, the additional snowpack can lead to flooding and soil oversaturation. Field oversaturation—caused by the sudden increase in temperature leading to rapid snowmelt—has already delayed the start of sugarbeet planting in Michigan. While in line with last year's zero percent progress for the same period, it is behind the State's 5-year average (9 percent).

Idaho is likewise affected by cold and snowy weather. The NASS' Northwest Regional Field Office reported that as of the week ending on April 9, sugarbeet planted in the State is 2 percent, up from last week's 1 percent but behind last year's 32 percent and the 5-year average's 29 percent for the same period. The regional office also reported progress in Oregon (4 percent), but the pace is significantly behind last year's 80 percent and the 5-year average's 59 percent.

NASS has reported zero percent planting progress for the 4-State aggregate of the largest producers (Idaho, Michigan, Minnesota, and North Dakota) in its April 3 and 10 *Crop Progress* reports. Last year's plantings were also delayed due to weather and played a factor in the relatively lower numbers for sugarbeet yields and early August–September 2022 production for the current crop year. However, when the weather becomes ideal, sugarbeet farmers can catch up and finish planting in 1.5 to 2 weeks. The crucial cutoff date is around May 12 before late planting significantly increases the probability of lower yields. Thus, implications for August–September 2023 production are still too early to be made and is unchanged from last month's 633,000 STRV.

## Cane Sugar Production Raised to a New Record

Cane sugar production in fiscal year 2022/23 is marginally raised by 5,000 STRV to 4.156 million from last month based on the Florida and Texas estimates submitted in *SMD*. There is no change for Louisiana. If realized, this would be a record, overtaking 2020/21's 4.142 million

STRV (table 4).

Florida cane sugar production is increased by 4,000 STRV to 2.044 million. Cumulative sugar production to date is 1.276 million STRV, the second lowest since fiscal year 2015/16, or about 62 percent of the updated fiscal year forecast compared with the 5-year average's 85 percent. The State's campaign started slowly as Hurricanes Ian and Nicole caused brief stoppages to harvest operations in September and November, respectively. Production needs to be above average levels in each of the succeeding months, and/or the campaign needs to be extended like what they did during 2020/21 to catch up (figure 4).

Texas cane sugar production in fiscal year 2022/23 is revised upward by 2,000 STRV to 78,000 from last month. The campaign ended in February. This would be the State's lowest production since 1991/92 and would be 46,000-STRV lower (37 percent) than last year's 124,000 and 128,000-STRV lower (62 percent) than 2000/01's record-high production of 206,000.



**Table 4: U.S. sugarcane and cane sugar production, by State, 2020/21–2022/23**

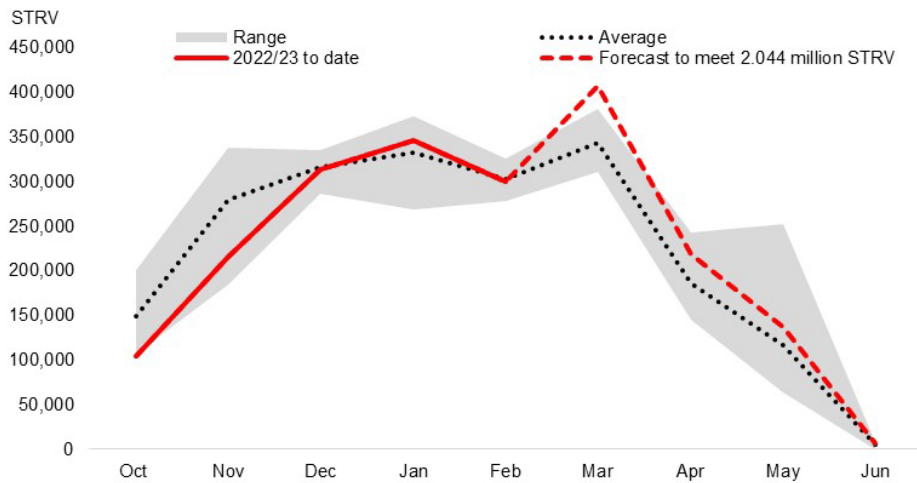
	2020/21 final	2021/22 estimated	2022/23 March	2022/23 April	Monthly change (percent)
<b>Florida</b>					
Sugarcane harvested for sugar and seed (1,000 acres)	423.3	403.5	401.9	401.9	0.0
Sugarcane harvested for sugar (1,000 acres)	409.0	388.0	386.0	386.0	0.0
Sugarcane yield (short tons per acre)	44.3	42.4	44.5	44.5	0.0
Sugarcane production (1,000 net tons)	18,119	16,451	17,177	17,177	0.0
Recovery rate (percent)	11.53	11.76	11.88	11.90	0.2
Sugar production (1,000 STRV)	2,090	1,934	2,040	2,044	0.2
<b>Louisiana</b>					
Sugarcane harvested for sugar and seed (1,000 acres)	488.4	495.3	497.8	497.8	0.0
Sugarcane harvested for sugar (1,000 acres)	461.0	466.0	475.0	475.0	0.0
Sugarcane yield (short tons per acre)	32.9	29.0	33.3	33.3	0.0
Sugarcane production (1,000 net tons)	15,167	13,514	15,818	15,818	0.0
Recovery rate (percent)	13.03	13.92	12.97	12.97	0.0
Crop year sugar production (1,000 STRV) 1/	1,976	1,881	2,054	2,054	0.0
Sep. sugar production (1,000 STRV)	70	12	75	75	0.0
Sep. sugar production of subsequent crop (1,000 STRV)	12	75	55	55	0.0
Fiscal year sugar production (1,000 STRV) 1/	1,918	1,944	2,034	2,034	0.0
<b>Texas</b>					
Sugarcane harvested for sugar and seed (1,000 acres)	35.9	36.4	31	31	0.0
Sugarcane harvested for sugar (1,000 acres)	33.4	34.3	31	31	0.0
Sugarcane yield (short tons per acre)	31.5	30.8	22.6	22.6	0.0
Sugarcane production (1,000 net tons)	1,052	1,056	698	698	0.0
Recovery rate (percent)	12.00	11.72	10.9	11.1	2.0
Sugar production (1,000 STRV)	134	124	76	78	2.0
<b>United States</b>					
Sugarcane harvested for sugar and seed (1,000 acres)	947.6	935.2	930.9	930.9	0.0
Sugarcane harvested for sugar (1,000 acres)	903.4	888.3	891.9	891.9	0.0
Sugarcane production (1,000 net tons)	38.0	34.9	37.8	37.8	0.0
Sugarcane production (1,000 short tons)	34,338	31,021	33,693	33,693	0.0
Recovery rate (percent)	12.2	12.7	12.4	12.4	0.1
Crop year sugar production (1,000 STRV)	4,200	3,939	4,170	4,176	0.1
Fiscal year sugar production (1,000 STRV)	4,142	4,002	4,150	4,156	0.1

STRV = short tons, raw value.

1/ Louisiana's harvest and processing of sugarcane begins typically in September, thus the crop year and fiscal year sugar production for this State tend to be slightly different. Fiscal year production is the final value used for official USDA estimates. For Florida and Texas, the crop year is the same as the fiscal year.

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

Figure 4  
**Cane sugar production in Florida, 2017/18–2022/23**



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

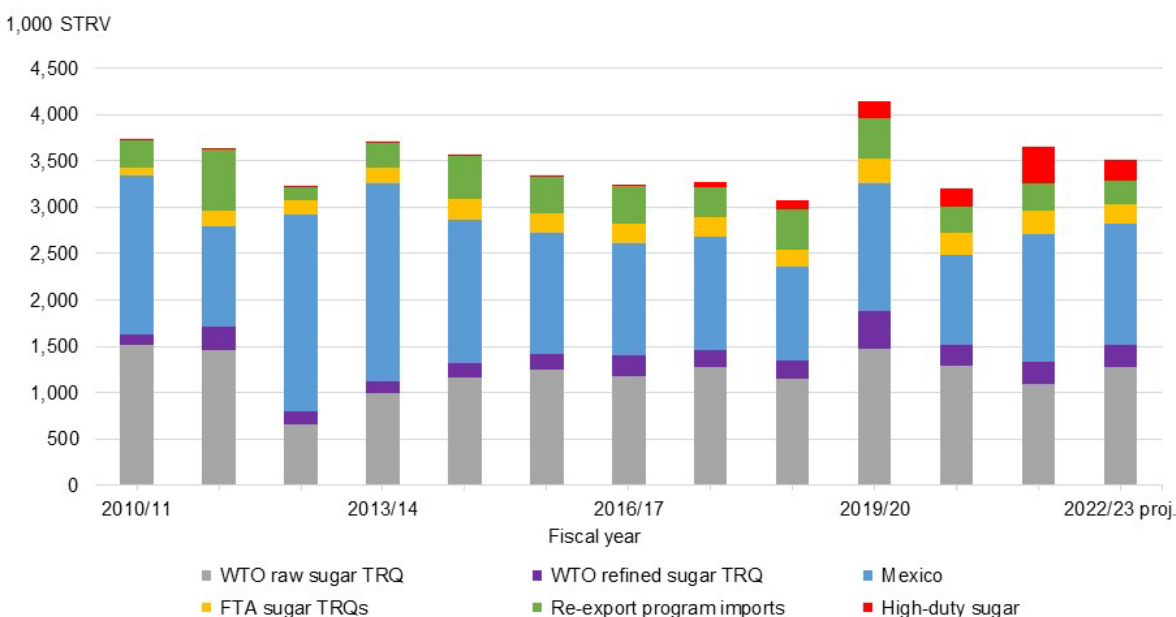
## Larger Imports Expected; Relatively Strong Cumulative Pace

Total imports in 2022/23 are increased by 182,000 STRV to 3.511 million from last month due to larger expected WTO raw sugar TRQ and high-tier imports offsetting the marginal reduction in the combined free trade agreement (FTA) TRQ. Despite the increase, this year's imports would be 135,000-STRV lower (4 percent) than last year's 3.646 million (figure 5).

The 2022/23 WTO raw sugar TRQ is raised by 122,000 STRV to 1.275 million from last month following the USTR's March 14 announcement to reallocate 247,182 STRV from countries that cannot ship their original raw sugar TRQ allocation. Out of the reallocated amount, USDA expects only 46 percent to enter (114,905 STRV)—partly because of tight global sugar supplies—which contributes to a lower TRQ shortfall projection of 132,277 from last month's 254,632 STRV.

The total imports of 1.770 million STRV in the first 6 months is the strongest during this period since 2017/18, slightly overtaking last year's 1.767 million. Except for the Re-export program, the pace at which imports are entering is up from last year in all categories, particularly Mexico, FTA TRQ, and high-duty (table 5).

Figure 5  
**U.S. sugar imports by type, 2010/11–2022/23**



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

**Table 5: Pace to date of U.S. sugar imports by type, 2017/18 to 2022/23**

	2017/18	2018/19	2019/20	2020/21	2021/22 est.	2022/23 proj.	5-year average	Over-the-year change		
<b>To-date: October to March</b>	1,000 short tons, raw value (STRV)								STRV	Percent
Mexico	433	359	430	326	520	562	414	42	8	
WTO raw sugar TRQ	809	705	723	867	718	733	764	15	2	
WTO refined sugar TRQ	124	128	207	106	147	148	142	2	1	
FTA sugar TRQ	65	70	106	83	112	130	87	18	16	
Re-export program	170	242	217	81	135	49	169	-86	-64	
High-duty sugar	7	41	56	91	135	148	66	12	9	
<b>Total</b>	<b>1,608</b>	<b>1,544</b>	<b>1,739</b>	<b>1,553</b>	<b>1,767</b>	<b>1,770</b>	<b>1,642</b>	<b>3</b>	<b>0</b>	
<b>Fiscal year: October to September</b>	1,000 short tons, raw value (STRV)								STRV	Percent
Mexico	1,223	1,000	1,376	968	1,379	1,306	1,189	-73	-5	
WTO raw sugar TRQ	1,272	1,144	1,468	1,296	1,096	1,275	1,272	179	16	
WTO refined sugar TRQ	190	207	408	217	237	241	248	4	2	
FTA sugar TRQ	202	190	276	236	246	213	223	-32	-13	
Re-export program	326	438	432	292	298	250	382	-48	-16	
High-duty sugar	64	91	183	186	390	225	107	-165	-42	
<b>Total</b>	<b>3,277</b>	<b>3,070</b>	<b>4,143</b>	<b>3,195</b>	<b>3,646</b>	<b>3,511</b>	<b>3,387</b>	<b>-135</b>	<b>-4</b>	
<b>Share of to-date to fiscal year total</b>	Percent								Percent	
Mexico	35	36	31	34	38	43	32	5		
WTO raw sugar TRQ	64	62	49	67	66	57	56	-8		
WTO refined sugar TRQ	66	62	51	49	62	61	55	0		
FTA sugar TRQ	32	37	38	35	46	61	35	15		
Re-export program	52	55	50	28	45	20	42	-26		
High-duty sugar	12	45	31	49	35	66	33	31		
<b>Total</b>	<b>49</b>	<b>50</b>	<b>42</b>	<b>49</b>	<b>48</b>	<b>50</b>	<b>44</b>	<b>2</b>		

WTO = World Trade Organization; TRQ = tariff-rate quota; FTA = free trade agreement; est. = estimated; proj. = projected.

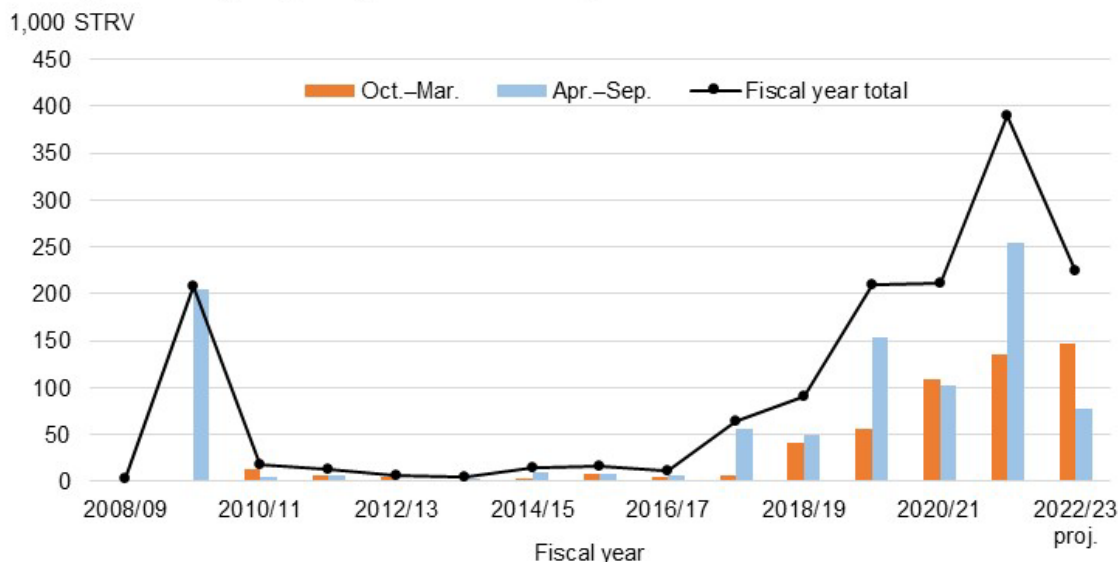
Note: Using the "Total" row as example, the share is interpreted as follows: the cumulative imports of 3.511 million STRV from October to March represent 50 percent of the total fiscal year imports.

Source: USDA, Foreign Agricultural Service.

High-tier imports in 2022/23 are raised by 69,000 STRV to 225,000 from last month on increased pace. If realized, this would overtake 2019/20's 205,000 STRV and 2020/21's 212,000 to be the second largest behind last year's 390,000 (figure 6). This month's upward revision incorporated an increased pace of refined imports in the remaining months, as well as the amount of raw sugar imported by a cane refiner in March.

In the first half of the fiscal year, raw and refined sugar imports paying high duties have totaled 148,000 STRV, the strongest pace for this period since 2008/09 and even exceeding last year's 135,000. This suggests that 66 percent of the 225,000 STRV has already entered through March, the largest share for this 6-month period since 2017/18, the year when high-tier imports started to accelerate.

Figure 6  
**U.S. high-tier duty sugar imports since fiscal year 2008/09**



STRV = short tons, raw value; proj. = projected.  
 Source: USDA, Foreign Agricultural Service.

Traditionally, high-tier imports are composed of high-value, refined sugar that is difficult to source domestically. Starting 2017/18, raw sugar paying the high duty has also been in the mix based on the Bureau of the Census trade data.<sup>2</sup> Last year, about 64 percent of the

<sup>2</sup> The data can be downloaded from either the U.S. International Trade Commission's *DataWeb* or USDA's GATS database. The data availability lags by 2 months. For example, the February trade data are available in April.

390,000 STRV of high-tier imports were raw sugar (figure 7). This year, Census shows that raw sugar imports between October 2022 to February 2023 amounted to 23,000 STRV. When the FAS estimate of high-tier duty raw imports that entered in March (36,000 STRV) is included, it appears that in the first half of 2022/23, about 59,000 STRV has already entered. This would surpass the fiscal-year total of high-tier raw sugar that entered in the last 5 years, except for 2021/22.

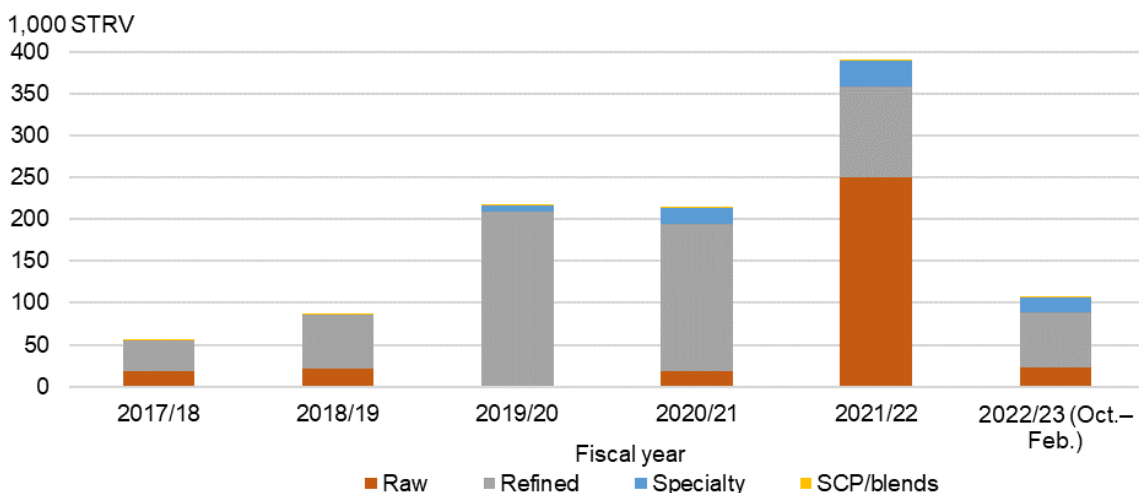
The 225,000-STRV forecast implies the expected high-tier duty imports would average about 12,900 per month for the second half of the year. This expected amount would align with the 5-year average for April and May, but lower relative to that of June–September. As seen in figure 6, the larger share of high-tier imports tends to arrive during the second half of the fiscal year. Thus, there can be an upside potential if the prior years' patterns hold, particularly amid the current high U.S. prices and tight supplies. Despite the record-high 2022/23 U.S. cane sugar production forecast, there is uncertainty of supplies from domestic beet sugar and Mexican sugar coupled with the inability of some major-supplying TRQ countries to fulfill either the initial or reallocated WTO TRQ quota. These factors can motivate import-based cane refineries and non-reporters<sup>3</sup> to meet the needs of customers who are willing to secure their sugar supplies despite paying the high duty.

---

<sup>3</sup> Non-reporters are neither beet processors nor cane refiners that are covered under the sugar program. These companies typically import refined sugar for direct consumption or delivery to an end-user.

Figure 7

**U.S. high-tier duty sugar imports, by type of sugar, 2017/18–2022/23**



STRV = short tons, raw value; est. = estimated; proj. = projected; SCP = sugar-containing products.

Note: The Harmonized Tariff Schedule (HTS) lines are 1701.12.5000, 1701.13.5000, and 1701.14.5000 for raw sugar; 1701.91.3000, 1701.99.5025, 1701.99.5050, for refined sugar; 1701.99.5015 and 1701.99.5017 for specialty sugar including organic; and 1702.90.2000, and 2106.90.4600 for SCP/blends.

Source: USDA, Economic Research Service's calculation using U.S. Department of Commerce, Bureau of the Census trade data downloaded from the U.S. International Trade Commission's *DataWeb*.

## Sugar Prices Rallied to High Levels

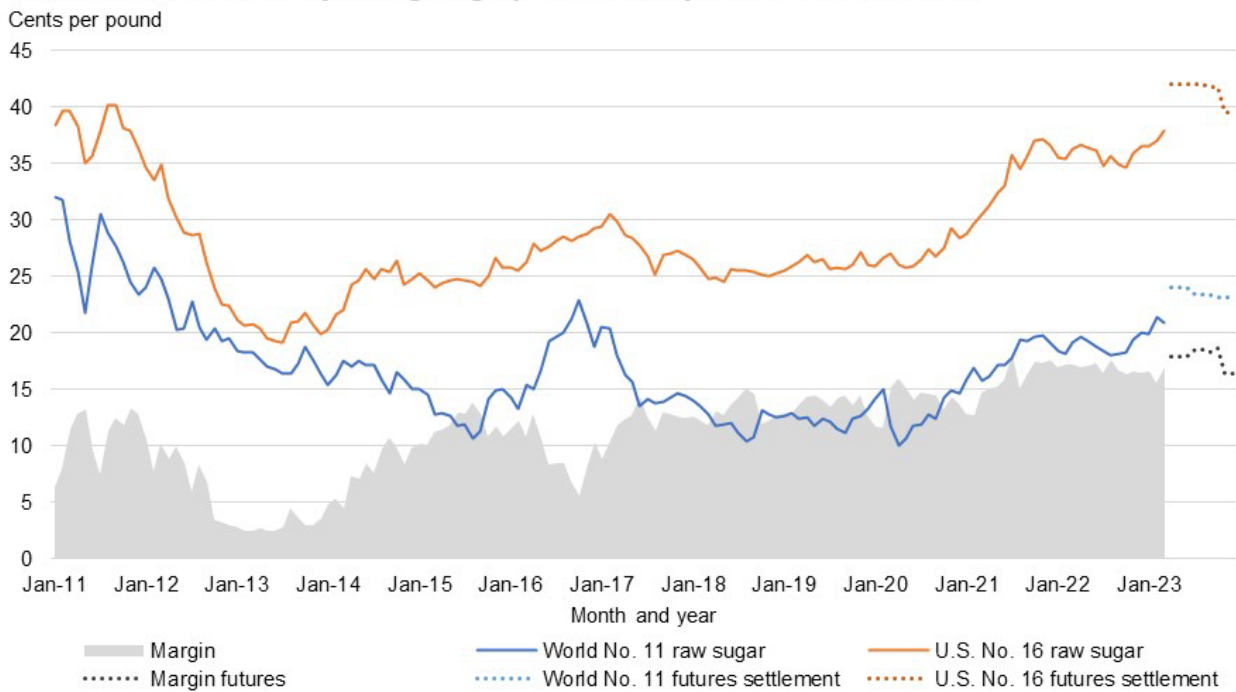
U.S. raw sugar No. 16 prices rallied above 40 cents per pound, the highest in 13 years, notwithstanding the expected record-high 2022/23 U.S. raw cane sugar production and the recent WTO TRQ reallocation (figure 8). As of April 14, the No.16 spot price (July 2023) settled at 42 cents per pound. Given that the September 2023 to May 2024 futures settled at prices between 39.5 to 41.75 cents per pound, raw sugar prices are likely to remain firm to higher going into the next year. The uptick in the No. 16 raw prices is mostly supported by the rally in the world No. 11 raw cane sugar prices on tight global supplies as the expected lower production in major-producing countries such as China, India, Pakistan, Thailand, and the European Union offsets the projected strong harvest in Brazil. As of April 14, the No.11 spot price (May 2023) closed at 24.10 cents per pound, the highest since the first quarter in 2012 (24.86). Futures for July 2023 to May 2024 are also at relatively high levels, between 21.68 to 23.46 cents per pound.

The No. 16 raw cane sugar prices, in turn, support U.S. refined cane sugar prices, which have experienced a steady climb as buyers seek alternative sources amid refined beet sugar's limited availability (figure 9). Per the April 12 Sosland *Sweetener Report*, the quoted 2022/23 Northeast

refined cane sugar spot price increased from 62 cents per pound since the start of the year to 65 cents. This would be 13 cents, or 25 percent, higher than this time last year. For calendar year 2024, while the offer price is lower at 60 cents per pound, it remains relatively high by historic standards.

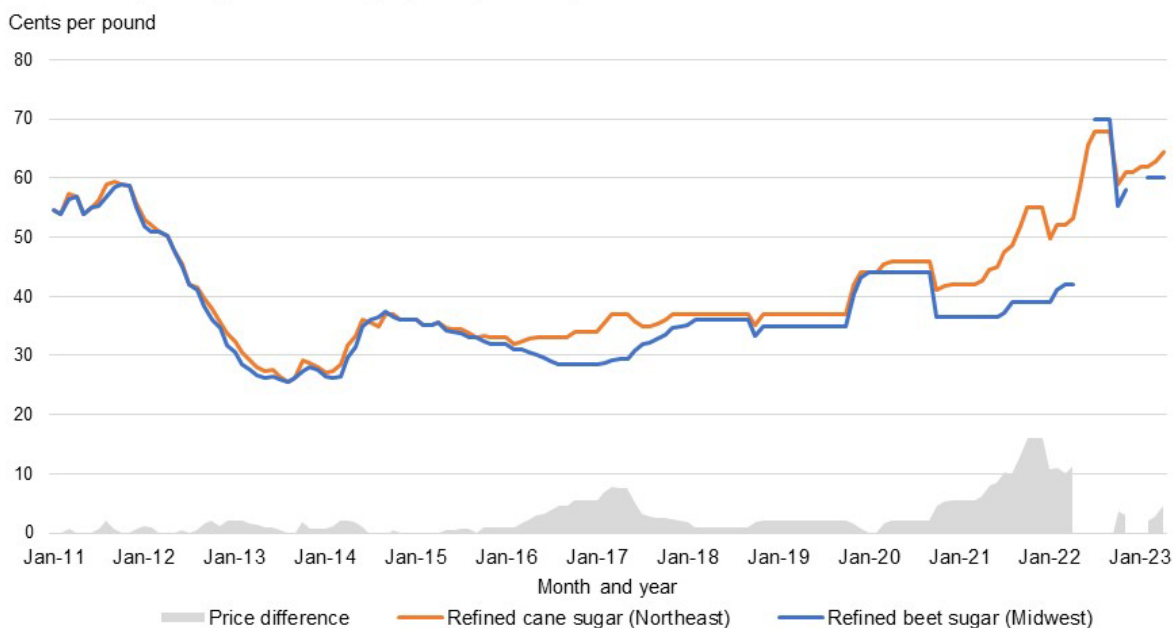
Nominal price for the 2022/23 Midwest refined beet sugar is 60 cents per pound and between 55 to 58 cents per pound for calendar year 2024, levels that are at least 15 cents higher than the same time of respective previous years. Sosland noted that after the past weeks' heightened pace of booking even before spring planting has begun, several beet processors have scaled back their 2024 sales activity to avoid overselling.

Figure 8  
**U.S. and world raw monthly average sugar prices, January 2011 to December 2023**



Note: No. 11 and No. 16 contract futures settlement prices on 4/14/2023 out to December 2023.  
 Source: USDA, Economic Research Service; Intercontinental Exchange, Inc.

Figure 9  
**U.S. monthly average refined sugar prices, January 2011 to December 2023**



Note: Refined beet sugar was unquoted by Sosland due to lack of spot supplies, thus there are breaks in the refined beet sugar price data (May, June, and December 2022; January 2023)  
 Sources: USDA, Economic Research Service; Sosland Sweetener Report.

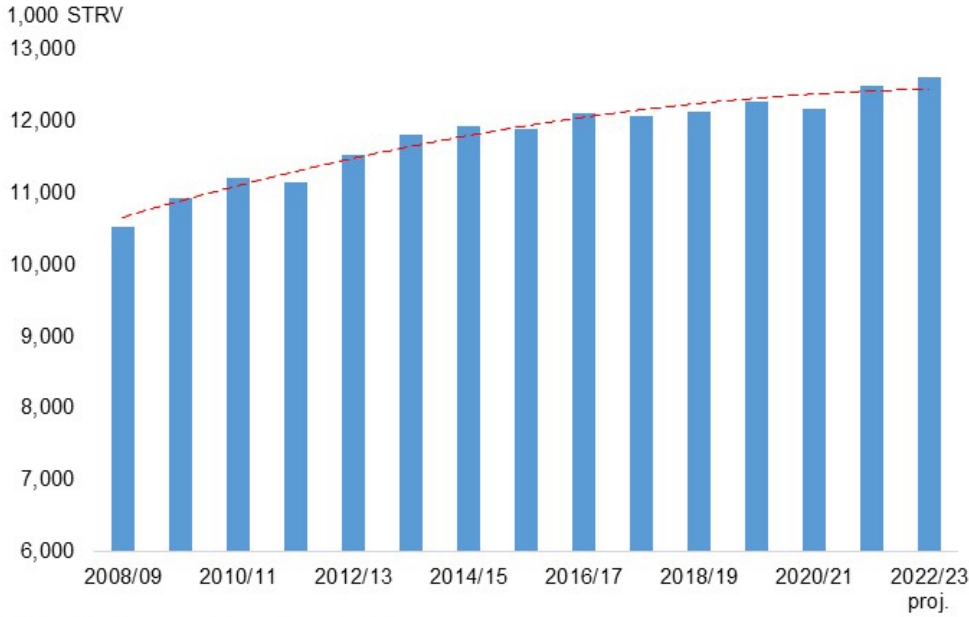
## Sugar Deliveries Unchanged

The 2022/23 forecast of sugar delivered for human consumption is unchanged at 12.6 million STRV. If realized, this reflects a 130,000-STRV increase (1 percent) from last year’s 12.470 million, continuing to overpass the trend line for 2 consecutive years (figure 10). With the rest of the deliveries’ components unchanged, total sugar delivery also remains at 12.705 million STRV.

The strong pace of cane sugar deliveries, with 4 out of the 5 months either surpassing or approximating the recent 5-year highs, offsets the average pacing of beet sugar deliveries (figure 11 and 12) that are constrained by limited supplies as reflected in below-average levels of beet sugar inventory (figure 13). As such, deliveries by these SMD reporters through February amount to 2.684 million STRV, the highest on record for this period (table 6).

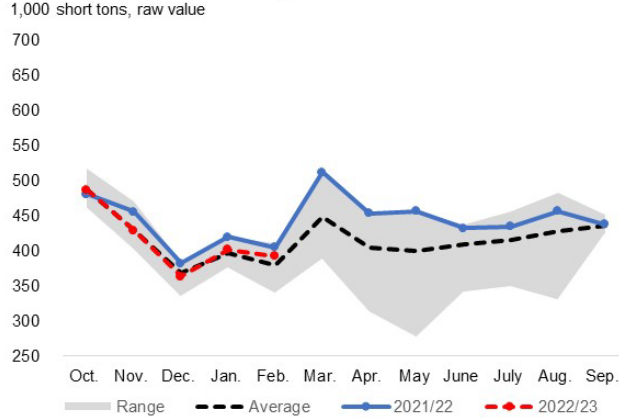


Figure 10  
**U.S. sugar deliveries for food and beverage use, fiscal year, 2008/09–2022/23**



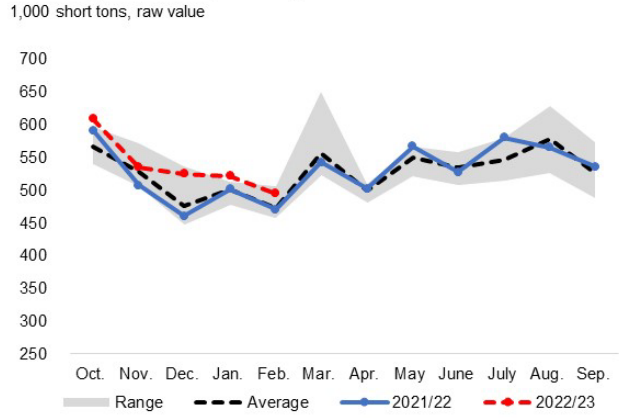
STRV = short tons, raw value; proj. = projected.  
 Source: USDA, Farm Service Agency.

Figure 11  
**Beet sugar deliveries, monthly, 2017/18 to 2022/23**



Source: USDA, Farm Service Agency.

Figure 12  
**Cane sugar deliveries, monthly, 2017/18 to 2022/23**



Source: USDA, Farm Service Agency.

**Table 6: Food and beverage deliveries, October–February, 2017/18–2022/23**

	2017/18	2018/19	2019/20	2020/21	2021/22 est.	2022/23 proj.	Annual change	
	1,000 short tons, raw value (STRV)						1,000 STRV	Percent
Beet sugar processors	2,195	2,005	1,993	1,979	2,144	2,073	-71	-3
Cane sugar refiners	2,424	2,578	2,617	2,558	2,531	2,684	153	6
Total reporters	4,619	4,583	4,611	4,537	4,674	4,757	82	2
Non-reporter (direct consumption)	225	323	319	283	427	413	-14	-3
Total	4,844	4,906	4,929	4,820	5,102	5,170	68	1
	Percent share in total						5-year average	
Beet sugar processors	45	41	40	41	42	40	42	
Cane sugar refiners	50	53	53	53	50	52	52	
Non-reporter (direct consumption)	5	7	6	6	8	8	6	
Total	100	100	100	100	100	100	100	

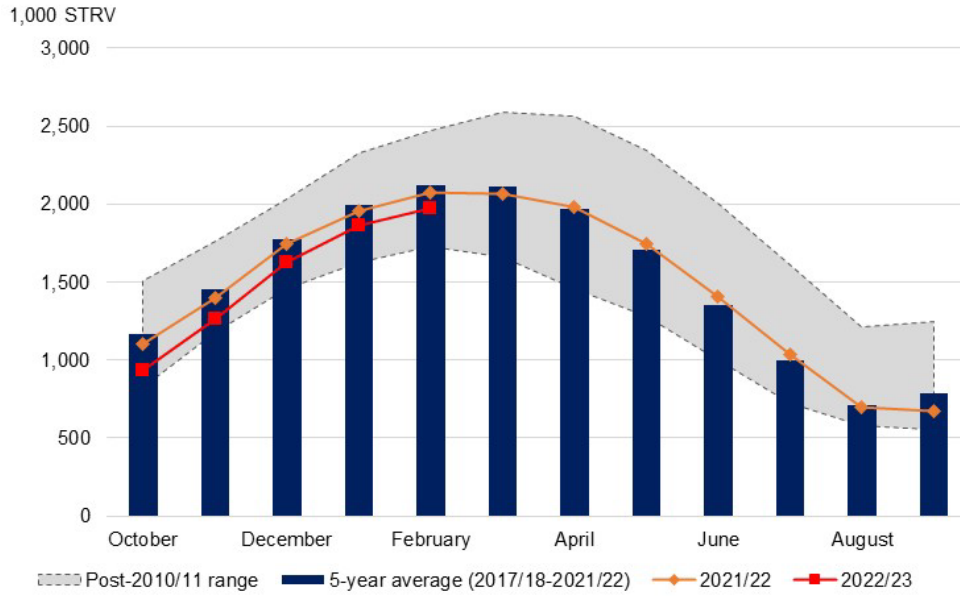
est. = estimated; proj. = projected.

Source: USDA, Farm Service Agency.

At the going rate, cane sugar deliveries in 2022/23 can potentially exceed the prior record of 6.615 million STRV in 2019/20, particularly given the refiners' above-average inventory levels of raw and refined sugar (figure 14 and 15). As with cane refiners, monthly deliveries by non-reporters have similarly been on the upper end except for November (figure 16), totaling 413,000 STRV through February, the second largest behind last year's 427,000. Together, these three entities delivered 5.710 million STRV, or 41 percent of the projected food use, which would be a record since 2010/11.

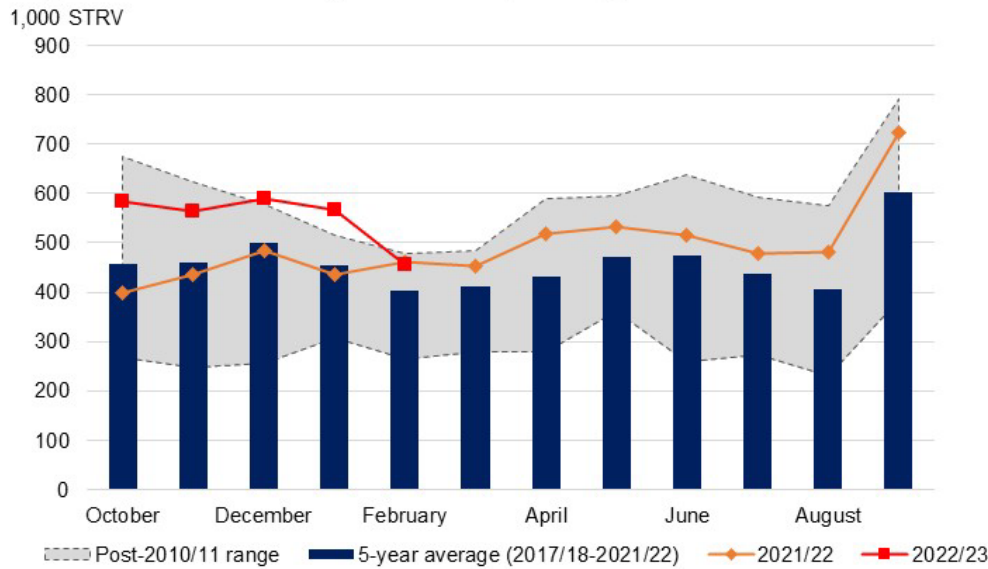
Given that the *SMD* data lags by 2 months and amid recent industry reports of users' slowdown in taking contracted sugar and reduction in the volumes being delivered, an additional month of data would improve the statistical validity of the deliveries forecast. Another factor to consider, if the pace of high-tier imports continues to be strong, is whether the additional supplies complement or crowd out domestic deliveries.

Figure 13  
**Sugarbeet processors' total sugar inventories, monthly, 2010/11 to 2022/23**



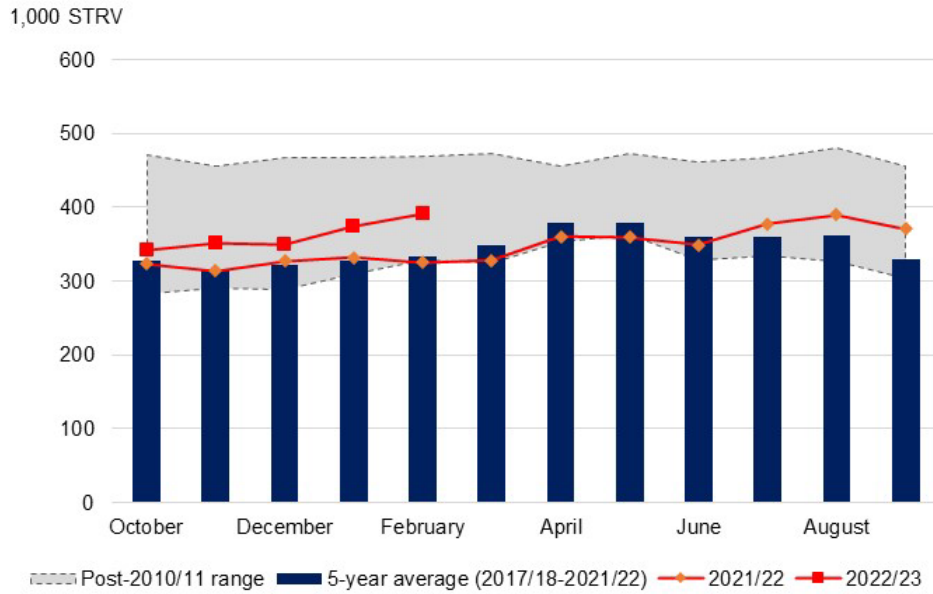
Note: STRV = short tons, raw value.  
 Source: USDA, Farm Service Agency.

Figure 14  
**Sugarcane refiners' raw sugar inventories, monthly, 2010/11 to 2022/23**



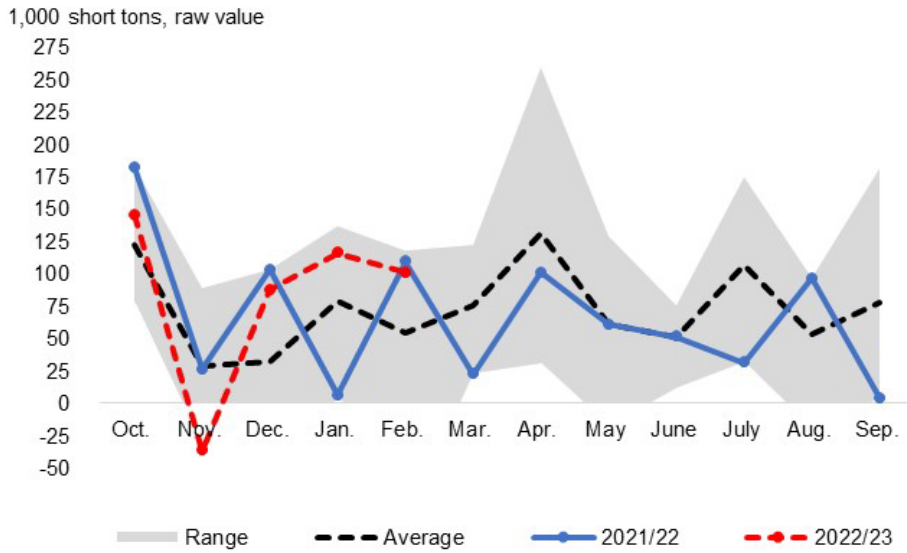
Note: STRV = short tons, raw value.  
 Source: USDA, Farm Service Agency.

Figure 15  
**Sugarcane refiners' refined sugar inventories, monthly, 2010/11 to 2022/23**



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

Figure 16  
**Non-reporter deliveries (direct consumption imports), monthly, 2017/18 to 2022/23**



Source: USDA, Farm Service Agency.

# Mexico Outlook

## Sugar Production Raised; Low Polarity Sugar Production Expected to Meet Export Quota

In the April 2023 *WASDE*, Mexico's sugar production in 2022/23 is increased by 75,000 metric tons (MT), actual value from last month to 5.560 million on higher area harvested (table 7). This would be the second lowest sugar production in the last decade behind 2019/20's 5.278 million MT and implies a 625,000-MT decrease (10 percent) from last year (figure 17).

Based on Mexico's National Committee for the Sustainable Development of Sugarcane's (CONADESUCA) production report through April 1 (Week 27 of the campaign), USDA raised the area harvested projection by 9,000 hectares (ha) from last month to 828,186, which is more in line with CONADESUCA's 828,941 ha (table 8). If this year's harvested area is realized, it would overtake the prior high of 805,511 ha in 2018/19 by 23,430 (3 percent).

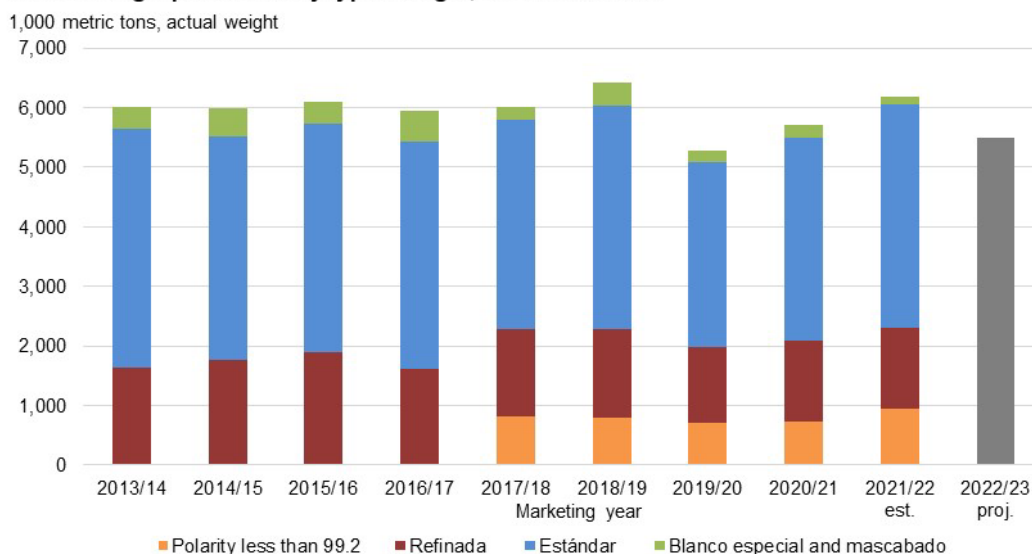
**Table 7: Mexican sugar: supply and use by fiscal year (October/September), April 2023**

Items	2020/21		2021/22		2022/23		
	Final	March (estimate)	April (estimate)	Monthly change	March (forecast)	April (forecast)	Monthly change
	1,000 metric tons, actual weight						
Beginning stocks	858	1,053	1,053	0	964	964	0
Production	5,715	6,185	6,185	0	5,485	5,560	75
Imports	65	31	31	0	35	35	0
Imports for consumption	32	7	7	0	10	10	0
Imports for sugar-containing product exports (IMMEX) 1/	33	24	24	0	25	25	0
Total supply	6,638	7,269	7,269	0	6,484	6,559	75
Disappearance							
Human consumption	3,935	4,113	4,113	0	4,168	4,168	0
For sugar-containing product exports (IMMEX)	485	532	532	0	271	331	60
Other deliveries and end-of-year statistical adjustment	0	-16	-16	0	0	0	0
Total	4,420	4,629	4,629	0	4,438	4,499	60
Exports	1,165	1,676	1,676	0	1,121	1,123	2
Exports to the United States and Puerto Rico	828	1,180	1,180	0	1,118	1,118	0
Exports to other countries	337	495	495	0	4	6	2
Total use	5,585	6,305	6,305	0	5,560	5,622	62
Ending stocks	1,053	964	964	0	925	937	13
Stocks-to-human consumption (percent)	26.8	23.4	23.4	0	22.2	22.5	0
Stocks-to-use (percent)	18.9	15.3	15.3	0	16.6	16.7	0
High-fructose corn syrup (HFCS) consumption (dry weight)	1,320	1,291	1,291	0	1,291	1,291	0

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

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

Figure 17  
**Mexican sugar production by type of sugar, 2013/14–2022/23**



est. = estimated, proj. = projected.

Notes: Sugar with polarity less than 99.2 is produced starting in 2017/18 after the terms of the suspension agreements were revised. Breakdown by type is not yet available for 2022/23.

Source: USDA, *World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates (WASDE)*; Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

**Table 8: Comparison of 2022/23 forecasts between USDA and CONADESUCA**

	CONADESUCA second estimate (Feb. 2023)	WASDE (Apr. 2023)	Difference	Difference (percent)
Harvested area (1,000 ha)	828.941	828.186	-1	0
Yield (MT per ha)	62.37	61.07	-1.3	-2
Sugarcane processed (1,000 MT)	51,703	50,579	-1,124	-2
Recovery (percent)	11.20	10.99	-0.2	-2
Sugar production (1,000 MT)	5,792	5,560	-232	-4

ha = hectare; MT = metric tons.

Source: USDA, *World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates (WASDE)*, Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

This year's cumulative national yield of 63.81 MT per ha (table 9) would be even lower than the weather-affected 2019/20's 65.79 MT per ha. Cumulative sucrose recovery of 10.86 percent is also below historical levels but better than 2019/20's 10.43 percent. Both variables reflect the negative effects on this year's campaign by several factors: lower rainfall during the critical growing season, delayed start of mills due to unfavorable late rains that prevented the timely harvest of sugarcane and its transportation to mills, and less-than-ideal input application (e.g., fertilizer) due to high input prices. Thus, USDA remains conservative in its projection of 2022/23 sugarcane yields (61.07 MT per ha versus CONADESUCA's 62.37), and sucrose recovery (10.99 percent versus 11.20 percent). Thus, CONADESUCA's production forecast stands at

5.792 million MT, 232,000 MT (4 percent) more than the *WASDE*'s 5.560 million.

**Table 9: Mexican sugar production as of week 27, 2021/22, 2022/23, and 5-year average**

	As of week 27			Difference vs. 2021/22		Difference vs. 5-year average	
	2021/22	2022/23	5-year average	Level	Percent	Level	Percent
			(2017/18–2021/22)				
Area harvested (ha)	542,056	591,298	553,800	49,242	9	37,498	7
Sugarcane processed (MT)	40,064,843	37,730,883	39,775,902	-2,333,960	-6	-2,045,019	-5
Sugarcane yield (MT per ha)	73.91	63.81	71.87	-10.1	-14	-8.1	-11
Number of mills in operation	48	48	48	0	0	0	1
Extraction rate (percent)	11.17	10.86	10.97	-0.31	-3	-0.11	-1
Total factory yield (MT per sugar ha)	8.25	6.93	7.89	-1.32	-16	-0.96	-12
Sugar production (metric tons)	4,474,295	4,097,031	4,365,910	-377,264	-8	-268,879	-6
By type:							
Refinada	985,373	877,122	1,011,848	-108,251	-11	-134,726	-13
Estándar	2,749,734	2,578,155	2,632,713	-171,579	-6	-54,558	-2
Polarity less than 99.2	660,177	584,061	564,115	-76,116	-12	19,946	4
Blanco especial and mascabado	79,012	57,694	157,234	-21,318	-27	-99,540	-63

ha = hectares; MT = metric tons; vs. = versus.

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

The more optimistic CONADESUCA forecast published in mid-February is the basis for the Government of Mexico's (GOM) response to the Department of Commerce (DOC) consultations per the terms of the suspension agreements. As noted on DOC's March 29 summary, GOM indicated that not only would Mexico meet its export quota (1.118 million MT), but it has extra sugar (255,772 MT, of which 80,000 have a polarity of less than 99.2) to export to the United States if USDA requests additional sugar to DOC, which it did not in March.

Three of the 49 mills have already concluded their campaigns as of April 1<sup>4</sup>: Calipam on March 23 (11 days later than the projected finish date); El Refugio on March 23 (9 days earlier); and Central Motzorongo on March 31 (7 days earlier). In terms of the sugar type, to date production of sugar with polarity less than 99.2 is 584,000 MT, about 76,000-MT (12 percent) less than the same period last year, but larger than the 5-year average by 20,000 MT (4 percent).

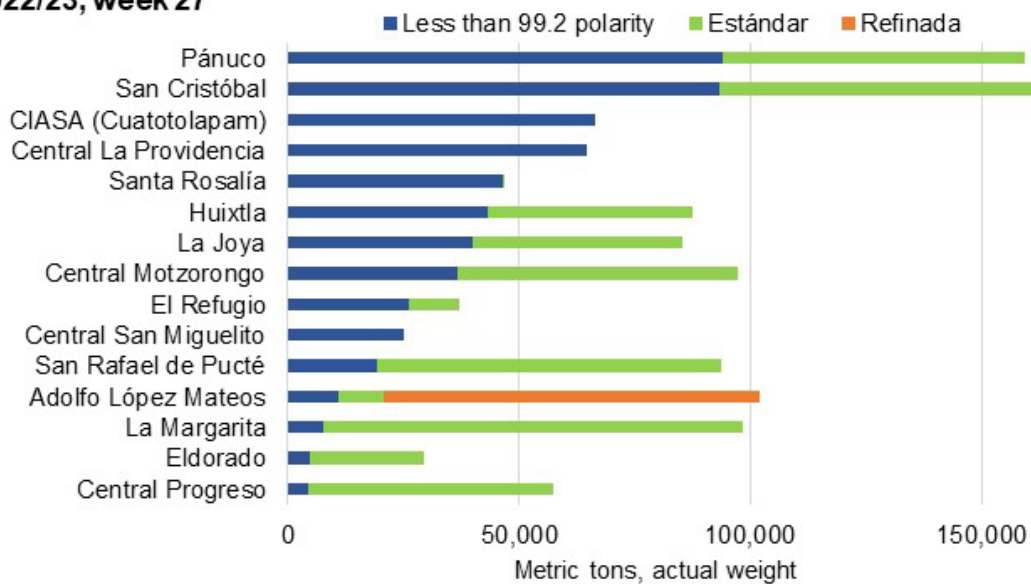
During this year's campaign, there are 15 low polarity sugar-producing mills, including El Refugio and Central Motzorongo mills (figure 18). Except for Adolfo López Mateos, these mills either produce estándar and/or low polarity sugar. Adolfo López Mateos historically has only produced refined and estándar sugar. Four of the mills, including two of the top five low polarity sugar mills—CIASA (Cuatotolapam) and El Refugio—appear to be primarily dedicated to exclusively produce low polarity sugar in this campaign. USDA projects that the final production of less than 99.2 polarity sugar can potentially be as high as 840,000 MT, about 75 percent of

<sup>4</sup> Historically, Mexico's sugar production typically starts in early November, then winds down by mid-April and concludes by late June.

the 1.118 million-MT Mexican export quota.

Figure 18

**Types of sugar produced by low polarity sugar-producing Mexican mills, 2022/23, week 27**



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

## Increased Outlook for Sugar Production Raised IMMEX

The 75,000-MT increase in the 2022/23 Mexican sugar production resulted in a 60,000-MT residual increase in IMMEX deliveries from last month to 331,000, after accounting for a 2,000-MT increase in exports to other countries that was reported by CONADESUCA's in its April *Balance Nacional de Edulcorantes* (National Balance of Sweeteners) report. Despite the improved outlook, this year's 331,000 MT would be among the lowest levels seen since 2014/15's 337,000, though not by much (figure 19). This year's cumulative pace of IMMEX deliveries through February of 147,000 MT would be the largest since 2008/09, indicating strong demand.

Barring any improvement in domestic sugar production and/or supply increases via imports consistent with the United States-Mexico-Canada Agreement (USMCA) provisions, Mexico may have to balance its competing commitments to meet export quota to the United States, fulfill IMMEX-dependent companies' orders, and maintain ending stocks equivalent to 2.5-months' worth of domestic consumption. Given the recent surge in estándar and refined sugar prices



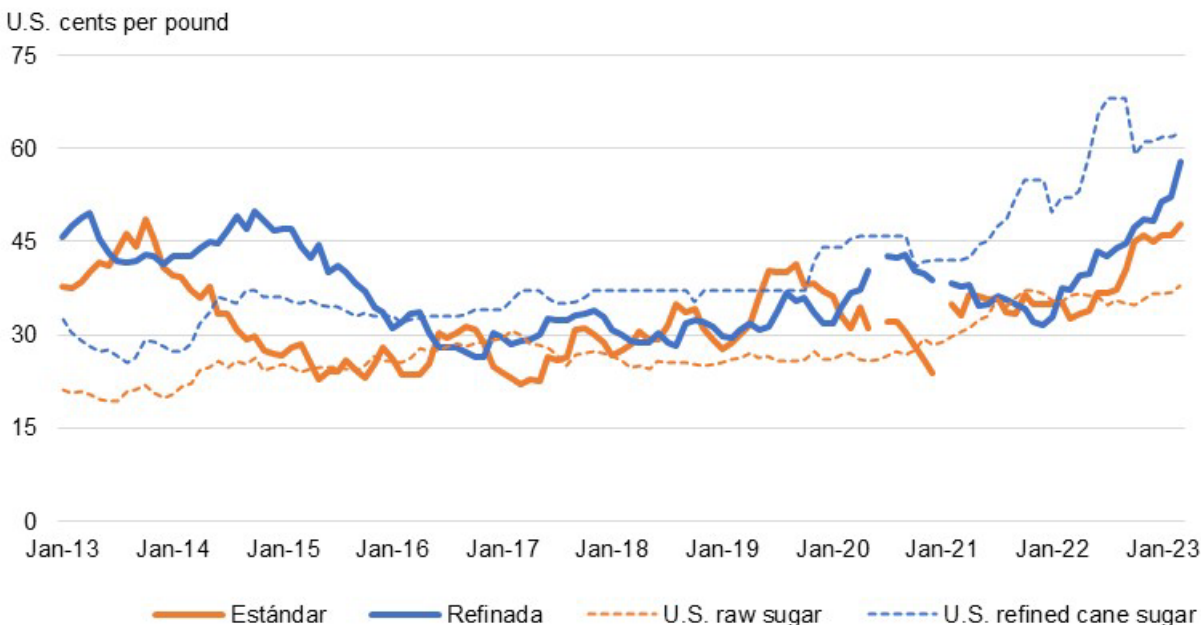
(figure 20), Mexican officials may be cautious to draw down stocks. The improved production outlook increased the 2022/23 ending stocks from last month by 13,000 MT to 937,000, which translates to a 22.5 percent stocks-domestic-consumption ratio, which would be already lower than the past 2 years (figure 21).

Figure 19  
**Mexican sugar deliveries to IMMEX program, 2008/09–2022/23**



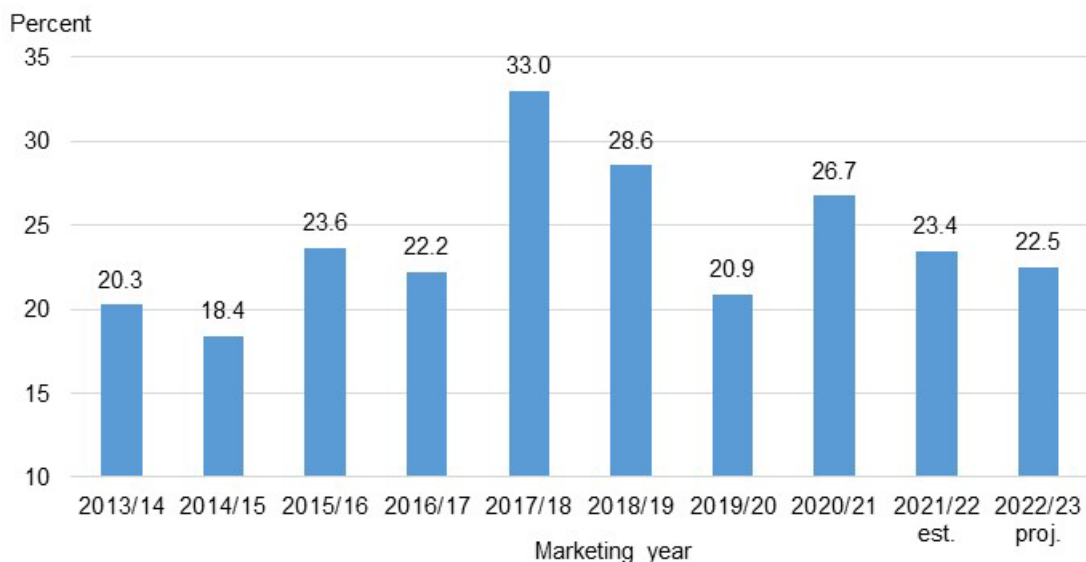
IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación; proj. = projected.  
 Source: USDA, Economic Research Service calculations using data from Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Figure 20  
**Mexican and U.S. sugar prices, monthly, January 2013 to March 2023**



Note: The breaks in the Mexican sugar price series on June 2020 and January 2021 are due to data unavailability.  
 Source: USDA, Economic Research Service calculations.

Figure 21  
**Mexican stocks-to-human consumption ratio, 2013/14–2022/23**



est. = estimated; proj. = projected.  
 Source: USDA, Economic Research Service calculations.

## Suggested Citation

Abadam, Vidalina. *Sugar and Sweeteners Outlook: April 2023*, SSS-M-416, U.S. Department of Agriculture, Economic Research Service, April 17, 2023.

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

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

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

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

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