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Sugar and Sweeteners Outlook: January 2024

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Mexico Production Reduced; Record-high Forecast for U.S. Production

In the January 2024 *World Agricultural Supply and Demand Estimates (WASDE)*, the forecast for Mexico's 2023/24 sugar production, which is off to a slower-than-normal start, is reduced from last month by 267,000 metric tons (MT), actual weight, to 5.016 million MT, the lowest in a decade. Consequently, exports to the U.S. are reduced by 42,000 MT to 789,000, also the lowest in a decade. With deliveries unchanged and ending stocks set at a 2.5-months' worth of target ending stocks, Mexico's sugar imports are residually increased by 225,000 MT to 511,000, the largest import volume in 14 years.

The U.S. 2023/24 sugar supply is raised from last month by 190,000 short tons, raw value (STRV) to 14.544 million on a forecast of record-high sugar production and larger imports. U.S. exports are raised by 60,000 STRV to 160,000 based on increased pace of sugar going primarily to Mexico. With no changes to the other delivery categories, the larger export volume raised total use by 60,000 STRV to 12.790 million STRV. The resulting stocks-to-use ratio is 13.7 percent, up by about one percentage point from last month's 12.8 percent.

U.S. Outlook Summary

Larger Outlook for U.S. 2023/24 Supply and Use

In the January 2024 *WASDE*, the U.S. 2023/24 sugar supply is raised from last month by 190,000 STRV to 14.544 million on a forecast of record-high domestic sugar production and larger high-tier duty sugar imports (table 1). Beet sugar production—up 44,000 STRV to 5.407 million—would be a new record surpassing 2017/18's 5.279 million and mainly drives the 9.391 million-STRV record-high forecast for 2023/24 total sugar production (figure 1). In Louisiana, where the harvest campaign is wrapping up, sugar production is increased by 104,000 STRV to 1.904 million based on industry reporting. Raw sugar high-tier duty imports are raised by 110,000 STRV thereby increasing the total to 575,000 and offsetting the 49,000-STRV reduction of imports from Mexico to 922,000. U.S. exports are raised by 60,000 STRV to 160,000 based on increased pace of sugar going primarily to Mexico. With no changes to the other delivery categories, the larger export volume raised total use by 60,000 STRV to 12.790 million STRV. The resulting stocks-to-use ratio is 13.7 percent, up by about one percentage point from last month's 12.8 percent.

Record Forecast for Beet Sugar Production in 2023/24

U.S. beet sugar production in fiscal year 2023/24 is raised from last month by 44,000 STRV to a record 5.407 million STRV—219,000 STRV higher (4 percent) than last year's 5.187 million and 128,000 STRV higher (2 percent) than the prior record of 5.279 million in 2017/18.

The strong outlook is driven by a relatively high recovery rate that offsets the lower sugarbeet yield in the January 2024 USDA, National Agricultural Service Statistics (NASS) *Crop Production 2023 Summary* (down from last month's 31.7 tons per acre to 31.2 tons) (table 2, figure 2). The recovery rate is increased from last month's 15.03 percent to 15.28 percent based on processors' data through the end of November published in the USDA, Farm Service Agency *Sweetener Market Data* (*SMD*) (figure 3).

The forecast for sugarbeet shrink of 6.56 percent is carried over from last month. USDA received feedback that the shrink could be bigger considering the unseasonably warm December; however, communication with processors, particularly in the Red River Valley

region¹, indicated that the quality of sugarbeets in storage piles is holding up and that the recent onset of frigid temperature will allow the deep-freeze² process to start.

The expectation of a record strong sugarbeet production, along with the continued slow pace in deliveries, has recently pressured bulk refined beet sugar prices. As of the January 10 *Sosland Sweetener Report*, Midwest beet sugar spot prices in calendar year 2024 ranged between 55 to 58 cents per pound, about 1 to 2 cents lower from last week. Pricing in 2024/2025, while steady between 53 to 55 cents per pound, is relatively lower than prices in the prior 18 months that reached as high as 70 cents.

Table 1: U.S. sugar: Supply and use by fiscal year (October-September), January 2024

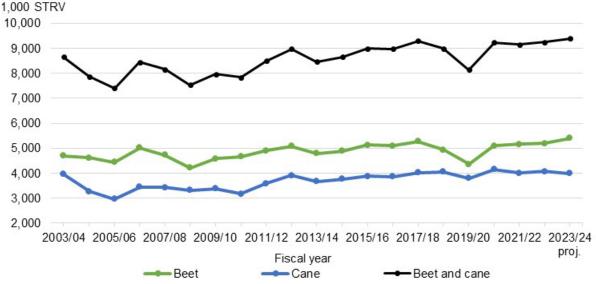
Items	2021/22		2022/23			2023/24	
	Final	December	January	Monthly	December	January	Monthly
		(estimate)	(estimate)	change	(forecast)	(forecast)	change
			1,000	short tons,	raw value		
Beginning stocks	1,705	1,820	1,820	0	1,855	1,843	-13
Total production	9,157	9,248	9,250	2	9,243	9,391	148
Beet sugar	5,155	5,187	5,187	0	5,363	5,407	44
Cane sugar	4,002	4,061	4,063	2	3,880	3,985	104
Florida	1,934	1,983	1,985	2	2,037	2,037	0
Louisiana	1,944	2,001	2,001	0	1,799	1,904	104
Texas	124	76	76	0	44	44	0
Total imports	3,646	3,614	3,614	0	3,256	3,310	54
Tariff-rate quota imports	1,579	1,862	1,862	0	1,620	1,613	-7
Other program imports	298	141	141	0	200	200	0
Non-program imports	1,769	1,611	1,611	0	1,436	1,497	61
Mexico	1,379	1,156	1,156	0	971	922	-49
High-duty	390	455	455	0	465	575	110
Total supply	14,508	14,683	14,685	2	14,354	14,544	190
Total exports	29	82	82	0	100	160	60
Miscellaneous	81	156	171	15	0	0	0
Total deliveries	12,578	12,589	12,589	0	12,630	12,630	0
Domestic food and beverage use	12,470	12,473	12,473	0	12,525	12,525	0
To sugar-containing products re-export program	80	94	94	0	80	80	0
For polyhydric alcohol, feed, other alcohol	27	22	22	0	25	25	0
Commodity Credit Corporation (CCC) for ethanol	0	0	0	0	0	0	0
Total use	12,688	12,827	12,842	15	12,730	12,790	60
Ending stocks	1,820	1,855	1,843	-13	1,624	1,754	130
Private	1,820	1,855	1,843	-13	1,624	1,754	130
Commodity Credit Corporation	0	0	0	0	0	0	0
Stocks-to-use ratio (percent)	14.3	14.5	14.3	-0.1	12.8	13.7	1.0

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

¹ Beet processors in the Red River Valley region are in Minnesota and North Dakota.

² The process of deep-freezing stops the respiration within the sugarbeets that are stored outside or in sheds—thereby minimizing the loss of sugar from deterioration—by using the frigid winter air to pass through the storage piles by ventilation.

Figure 1
U.S. beet and cane sugar production, by fiscal year, 2003/04–2023/24



STRV = short tons, raw value; proj. = projected.

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

Table 2: Beet sugar production, 2020/21-2023/24

rusio I. Boot ougui production, 1010/1. 1010/1.	2017/18	2022/23	2023/24	2023/24	Monthly
	Final	Final	December	January	change
Area planted (1,000 acres)	1,131	1,160	1,132	1,137	5
Planted/Harvested ratio	0.98	0.98	0.99	0.99	0.00
Area harvested (1,000 acres)	1,114	1,137	1,119	1,127	9
Yield (tons per acre)	31.7	28.6	31.7	31.2	-0.5
Sugarbeet production (1,000 short tons) 1/	35,325	32,574	35,508	35,226	-282
Sugarbeet shrink (percent)	7.31	6.19	6.56	6.56	0
Sugarbeet sliced (1,000 short tons)	32,742	30,558	33,180	32,916	-264
Sugar extraction rate from slice (percent)	15.18	15.35	15.03	15.28	0.25
Sugar from beets sliced (1,000 STRV) 2/	4,970	4,690	4,986	5,030	44
Sugar from molasses (1,000 STRV) 2/	368	372	360	360	0
Crop year sugar production (1,000 STRV) 2/	5,338	5,061	5,346	5,390	44
Aug.–Sep. sugar production (1,000 STRV)	715	537	663	663	0
AugSep. sugar production of subsequent crop (1,000 STRV)	655	663	644	644	0
Sugar from imported beets (1,000 STRV) 3/	N/A	N/A	35	35	0
Fiscal year sugar production (1,000 STRV)	5,279	5,187	5,363	5,407	44

STRV = short tons, raw value; N/A = not applicable.

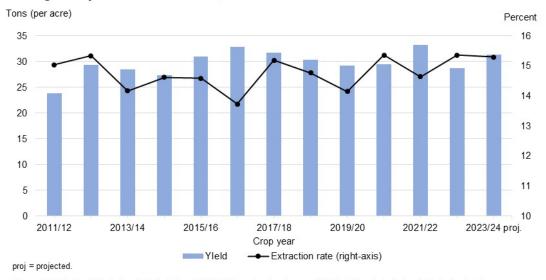
Source: USDA, Economic Research Service; USDA, World Agricultural Outlook Board; USDA, Farm Service Agency.

^{1/}USDA, National Agricultural Statistics Service.

^{2/} August-July.

^{3/} Sugar from imported beets in 2022/23 are already included in the crop year production. Typically, this component is separated for projection purposes and included in the total once the full crop year slice is available.

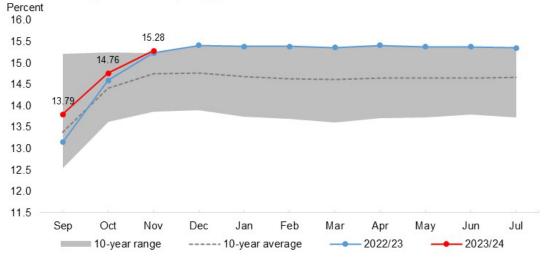
Figure 2
U.S. sugarbeet yield and extraction rate, 2011/12–2023/24



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

Figure 3

Cumulative sugar extraction, crop year 2013/14–2023/24



Note: Extraction rate = 100 * (sugar produced from sliced beets / sliced beets).

Source: USDA, Economic Research Service calculations using data from USDA, Farm Service Agency.

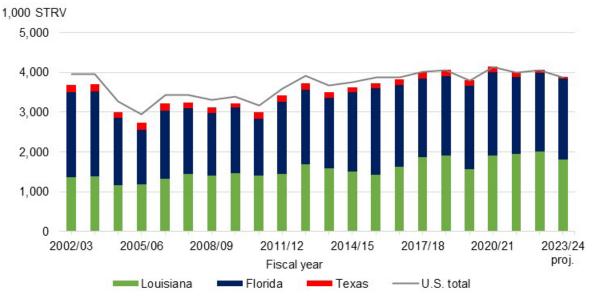
U.S. 2023/24 Cane Sugar Production Increased

The harvest campaign in Louisiana is wrapping up with 10 of 11 mills finished as of the week ending in January 13. Based on industry reporting, crop year sugar production from last month is increased by 104,000 STRV to 1.850 million. This is converted to fiscal year basis—1.904 million STRV—by subtracting the September 2023 production (5,623 STRV) and adding the

projected September 2024 (59,193 STRV) based on recent years' average. Despite the increase, the fiscal year production of 1.904 million is 98,000-STRV lower (5 percent) than last year's record 2.001 million primarily due to the negative impacts of drought on yield and sugar recovery. Prior to the onset of drought conditions, the State was poised to continue its 3 successive years of strong production, overtaking Florida for the first time for 2 consecutive years (2021/22 and 2022/23).

With the forecast unchanged in Florida (2.037 million STRV) and Texas (44,000 STRV), U.S. cane sugar production is increased from last month by 104,000 STRV to 3.985 million. However, with the over-the-year decline in Louisiana and all-time low outlook for Texas due to drought and water access issues, the 3.985 million-STRV forecast would be 78,000-STRV lower (2 percent) than last year's 4.063 million and would be the lowest in 4 years (figure 4).

Figure 4
U.S. production of cane sugar by State, 2002/03–2023/24



STRV = short tons, raw value; proj. = projected.

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

U.S. Imports in 2023/24 Raised

U.S. 2023/24 sugar imports are raised from last month by 54,000 STRV to 3.310 million as a 110,000-STRV increase in high-tier tariff imports offset the combined 56,000-STRV decrease of imports from Mexico (49,000 STRV) and under the free trade agreements (FTA) tariff-rate quotas (TRQs) (7,000 STRV). Even with the increase, the expected 3.310 million-STRV would be around 300,000-STRV lower than last year, mostly due to the relatively large over-the-year reduction of imports from Mexico (down 234,000 STRV) and under the World Trade Organization (WTO) raw sugar TRQ (down 245,000 STRV) (table 3, "Fiscal year" section and "over-the-year change" column). The pace-to-date of volume entered between October and December for each of these 2 categories also have the largest year-over-year decline (42,000 STRV and 95,000 STRV, respectively) (table 3, "Pace-to-date" section).

Table 3: U.S. sugar imports by type, pace-to-date and by fiscal year 2018/19-2023/24

		-,			2022/23	2023/24	5-year	0	
	2018/19	2019/20	2020/21	2021/22	est.	proj.	average	Over-the-yea	r cnange
Fiscal year		1,000	short tons,	raw value (S	STRV)			STRV	Percent
Mexico	1,000	1,376	968	1,379	1,156	922	1,176	-234	-20.2
WTO raw sugar TRQ	1,144	1,468	1,296	1,096	1,384	1,140	1,278	-245	-17.7
WTO refined sugar TRQ	207	408	217	237	241	252	262	11	4.6
FTA sugar TRQ	190	276	236	246	237	221	237	-16	-6.7
Re-export program	438	432	292	298	141	200	320	59	41.4
High-duty sugar	91	206	212	390	455	575	271	120	26.5
Total	3,070	4,165	3,221	3,646	3,614	3,310	3,543		-8.4
Share of category in fiscal y	year		Percent					Percentage point	
Mexico	32.6	33.0	30.0	37.8	32.0	27.9	33.1	-4.1	
WTO raw sugar TRQ	37.3	35.2	40.2	30.1	38.3	34.4	36.2	-3.9	
WTO refined sugar TRQ	6.7	9.8	6.7	6.5	6.7	7.6	7.3	0.9	
FTA sugar TRQ	6.2	6.6	7.3	6.7	6.5	6.7	6.7	0.1	
Re-export program	14.3	10.4	9.1	8.2	3.9	6.0	9.2	2.1	
High-duty sugar	3.0	4.9	6.6	10.7	12.6	17.4	7.6	4.8	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Pace-to-date: OctDec.		1,000 short	tons, raw w	alue (STRV)				STRV	Percent
Mexico	74	67	34	125	81	39	76	-42	-52.1
WTO raw sugar TRQ	351	481	575	583	512	417	500	-95	-18.5
WTO refined sugar TRQ	68	69	55	77	79	76	70	-3	-3.9
FTA sugar TRQ	30	52	41	39	27	32	38	5	17.6
Re-export program	170	140	36	77	38	8	92	-30	-78.2
High-duty sugar	29	17	66	90	74	141	55	67	91.3
Total	721	826	807	991	811	713	831	-98	-12.1
Share of pace-to-date in fis	ace-to-date in fiscal year Percent						Percentage point		
Mexico	7.4	4.8	3.6	9.0	7.0	4.2	6.4		
WTO raw sugar TRQ	30.7	32.8	44.4	53.2	37.0	36.6	39.6		
WTO refined sugar TRQ	32.7	17.0	25.3	32.4	32.7	30.0	28.0		
FTA sugar TRQ	15.7	18.7	17.2	15.8	11.5	14.4	15.8		
Re-export program	38.8	32.5	12.4	26.0	26.9	4.1	27.3		
High-duty sugar	31.3	8.1	31.4	23.1	16.2	24.5	22.0		
Total	23.5	19.8	25.1	27.2	22.4	21.5	23.6		

 $WTO = World\ Trade\ Organization; TRQ = tariff-rate\ quota; FTA = free\ trade\ agreement; est. = estimated; N/A = not\ applicable.$

Note: Totals may not add due to rounding.

Source: USDA, Economic Research Service calculations using data from USDA, Foreign Agricultural Service.

Raw Sugar High-tier Imports in 2023/24 at Record High

The 110,000-STRV increase in high-tier tariff³ sugar imports from last month is entirely raw sugar, bringing the expected volume for this category to 400,000 STRV (figure 5), more than double last year's 195,000 STRV and 61 percent larger than the prior record in 2021/22 (249,000 STRV). With refined sugar unchanged at 175,000 STRV, total high-tier tariff imports are forecast at 575,000 STRV—also a new record— surpassing last year's 455,000 STRV by 26 percent. Thus, while historically the smallest import category, 2023/24 high-tier imports are projected to comprise 17 percent of the total compared with the 5-year average (8 percent). As such, it would now be the third largest source of imports behind raw sugar TRQ and Mexico in 3 consecutive years.

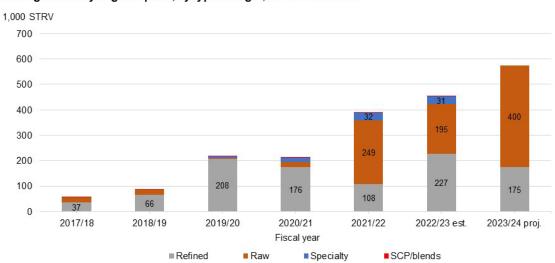


Figure 5
U.S. high-tier duty sugar imports, by type of sugar, 2017/18–2023/24

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

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 calculations using U.S. Department of Commerce, Bureau of the Census trade data from the U.S. International Trade Commission's *DataWeb*.

This month's increase in the high-tier raw sugar category is based on the expected continuation of the recent strong pace⁴. About 169,174 STRV of high-tier raw sugar have been imported as of January 10, according to data from U.S. Department of Commerce, Bureau of the Census and U.S. Department of Homeland Security, Customs and Border

³ High-tier tariff imports are also known as "high-tier duty" or "high-tier" imports.

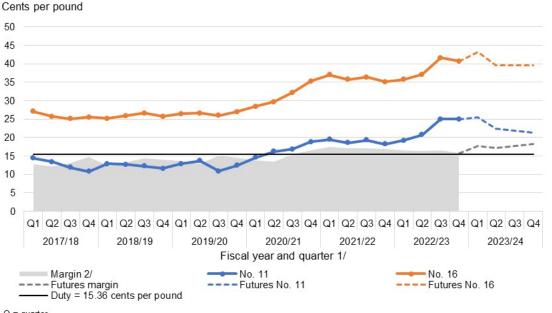
⁴ Prior to October 2023, USDA only increased the high-tier raw sugar estimate after sugar officially entered the country.

Protection. This implies that within the first 4 months of the fiscal year, 42 percent of the projected total volume (400,000 STRV) has already entered.

While traditionally comprised of high-value, refined sugar that is difficult to source domestically, high-tier raw sugar imports have surged in the last 3 years. The increase in this month's forecast to 400,000 STRV implies that high-tier raw sugar imports in 2023/24 alone would be greater than the total high-tier imports from 2017/18 to 2021/22 and would almost match last year's total of 455,000 STRV. The drought-reduced raw sugar supply from domestic (Louisiana and Texas) and international (Mexico) sources are contributing factors to this unprecedented market development.

Along with the tight availability of raw sugar in the U.S. market, the positive influence of the world Number (No.) 11 raw sugar futures on the U.S. No. 16 has also played a big role. The wide margin between the prices, starting around the second FY quarter of 2020/21 (January–March 2021) exceeded the raw sugar high-tier duty of 15.36 cents per pound (figure 6, black horizontal line), thereby making high-tier raw sugar economical (gray shade). The No. 11 has softened since December 2023 given Brazil's stronger-than-expected season ending production and pace of exports due to conducive weather and improved logistics. However, as of January 17, 2024, the futures margin between the No. 16 and No. 11 in the succeeding months remains above 15.36 cents per pound (gray dotted line). In addition, expected weather-reduced production in several sugar exporters (Australia, India, Thailand, and European Union) will likely support the No. 11, and in turn, the No. 16. As long as the margin remains attractive and supplies from traditional sources inadequate, import-based U.S. cane refiners are expected to continue relying on high-tier raw sugar.

Figure 6
U.S. and world raw average sugar prices relative to high-tier raw sugar duty, by fiscal year quarters, 2017/18-2023/24



Q = quarter.

1/ For example, in 2017/18: Q1 = October-December 2017; Q2 = January-March 2018; Q3 = April-June 2018; and Q4 = July-September 2018. 2/ Margin is the difference between the No. 16 and No. 11.

Note: No. 11 and No. 16 contract futures settlement prices are as of 1/17/2024 and out to September 2024.

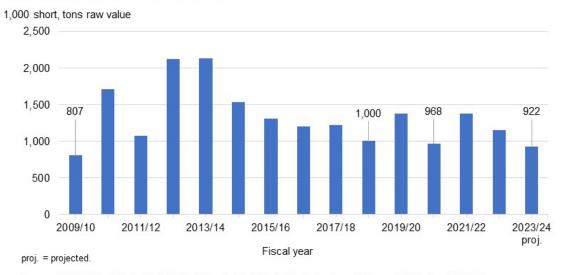
Source: USDA, Economic Research Service calculations of data from Intercontinental Exchange, Inc.

U.S. Imports from Mexico in 2023/24 Reduced Further

For 2023/24, U.S. imports from Mexico, the largest source from a single country averaging about 33 percent of the total in the last 5 years, are reduced from last month by 49,000 to 922,000. This volume is 234,000-STRV lower (20 percent) than last year and would be the second lowest in the last 15 years after 2009/10 (807,000 STRV) (figure 7). The downward revision is primarily due to Mexico's reduced sugar production based on the relatively slow progress through week 14. The Mexico Outlook section provides a detailed explanation of the *WASDE* calculation.

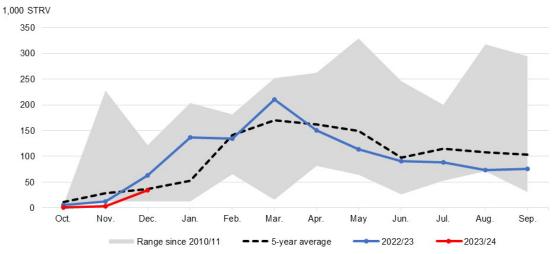
The slow pace of U.S. imports from Mexico through December is reflective of the drought-reduced Mexican production. While entries in December match the 5-year average, the cumulative imports in the first 3 months only amount to 39,000 STRV of the total projected 922,000 or 4.2 percent, the second slowest pace during this period in the last 6 years behind 2020/21.

Figure 7
U.S. imports from Mexico, 2006/07–2023/24



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

Figure 8
U.S. sugar imports from Mexico, monthly, fiscal year 2010/11–2023/24



STRV = short tons, raw value

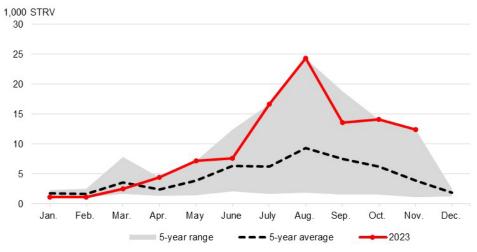
Source: USDA, Foreign Agricultural Service

Total Use in 2023/24 Raised on Larger U.S. Exports

U.S. exports for 2023/24 have been raised for 2 consecutive months, this month by 60,000 STRV to 160,000. The current projection is almost double (94 percent) of last year's 82,000 STRV and, if realized, will be the third largest volume of U.S. exports in a decade behind 2014/15 (185,000 STRV) and 2017/18 (170,000). The increase is driven by the expectation that the strong pace of sugar exports going primarily to Mexico will continue in the following months (figure 9, figure 10).

With sugar deliveries for food and beverage use remaining at 12.525 million STRV (reflecting a 0.4 percent annual growth) and the rest of the delivery categories unchanged, the higher export volume raises total use in 2023/24 by 60,000 STRV to 12.790 million STRV, the second largest since 2000/01 just behind last year (12.843 million).

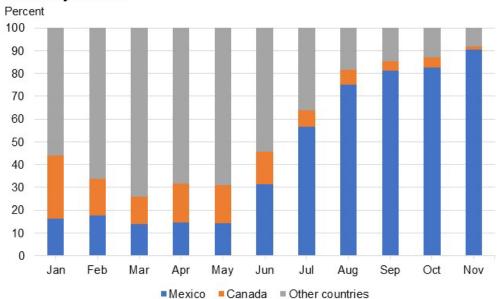
Figure 9 U.S. sugar exports, monthly, calendar year 2017–23



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

Figure 10
U.S. sugar exports, share by country of destination, monthly, calendar year 2023



Source: USDA, Foreign Agricultural Service, Global Agricultural Trade System (GATS).

Mexico Outlook

Mexico's Sugar Production Further Reduced in 2023/24

In the January *World Agricultural Supply and Demand Estimates (WASDE)*, Mexico's 2023/24 sugar production is reduced by 267,000 metric tons (MT), actual weight from last month to 5.016 million MT (table 4). This drought-reduced production would be lower than last year (5.224 million MT) by 208,000 (4 percent), and thus would be the lowest level in a decade (figure 11).

Table 4: Mexican sugar: Supply and use by fiscal year (October-September), January 2024

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Items	2021/22		2022/23			2023/24	
		December	January	Monthly	December	January	Monthly
		(estimate)	(estimate)	change	(forecast)	(forecast)	change
		1	1,000 me	tric tons, ac	ctual weight		
Beginning stocks	1,053	964	964	0	835	835	0
Production	6,185	5,224	5,224	0	5,283	5,016	-267
Imports	31	285	285	0	286	511	225
Imports for consumption	7	267	267	0	261	486	225
Imports for sugar-containing product exports (IMMEX) 1/	24	18	18	0	25	25	0
Total supply	7,269	6,473	6,473	0	6,404	6,362	-42
Disappearance							
Human consumption	4,113	4,193	4,193	0	4,248	4,248	0
For sugar-containing product exports (IMMEX)	532	405	405	0	400	400	0
Other deliveries and end-of-year statistical adjustment	-16	29	29	0	0	0	0
Total	4,629	4,627	4,627	0	4,648	4,648	0
Exports	1,676	1,011	1,011	0	856	814	-42
Exports to the United States and Puerto Rico	1,180	989	989	0	831	789	-42
Exports to other countries 2/	495	22	22	0	25	25	0
Total use	6,305	5,638	5,638	0	5,504	5,462	-42
Ending stocks	964	835	835	0	900	900	0
Stocks-to-human consumption (percent)	23.4	19.9	19.9	0	21.2	21.2	0
Stocks-to-use (percent)	15.3	14.8	14.8	0	16.3	16.5	0
High-fructose corn syrup (HFCS) consumption (dry weight)	1,291	1,392	1,392	0	1,407	1,407	0

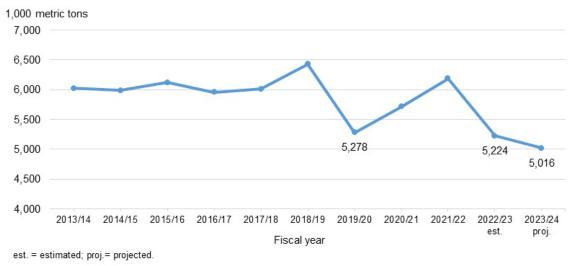
^{1/} IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

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

^{2/} Includes exports participating in the U.S. re-export programs.

Figure 11

Mexican sugar production, by fiscal year, 2013/14–2023/24



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

The *WASDE* forecast was updated based on the campaign's relatively slow start (table 5) to reflect the lower expectation for both sugarcane yields (down from last month's 60.69 MT per hectare to 59 MT) and the recovery rate (down from last month's 10.91 percent to 10.65 percent) (table 6). Mexico's National Committee for the Sustainable Development of Sugarcane's (CONADECUSA) initial forecast for yield (58.46 MT/ha) is still lower than USDA (59 MT/ha) but higher in terms of recovery rate (11.12 percent versus USDA's 10.65 percent).

CONADESUCA's weekly report as of January 6, the fourteenth week of the campaign, indicates that 42 of the 48 mills are in operation, with 3 of the remaining 6 mills originally expected to start between December 16–20, 2023. As such, the number of operating mills is lower than this time last year (46 mills) and the 5-year average (47 mills). In aggregate, the 42 mills produced 744,000 MT of sugar, behind last year (857,000 MT) and the 5-year average (955,000 MT) as the current campaign's sugarcane yield, recovery rate, and factory yield are relatively behind.

Table 5: Mexican sugar production as of week 14, 2022/23, 2023/24, and 5-year average

	As of week 14			Difference vs.		Difference vs. 5-	
				2022	123	year average	
			5-year				
	2022/23	2023/24	average1/	Level	Percent	Level	Percent
Area harvested (1,000 ha)	120	117	126	-3	-3	-9	-7
Sugarcane processed (1,000 MT)	9,007	8,646	9,868	-361	-4	-1,222	-12
Sugarcane yield (MT per ha)	75.00	74.07	78.49	-0.93	-1	-4.42	-6
Number of mills in operation	46	42	47	-4	-9	-5	-10
Extraction rate (percent)	9.51	8.61	9.65	-0.90	-9	-1.04	-11
Total factory yield (MT sugar per ha)	7.13	6.37	7.57	-0.76	-11	-1.20	-16
Sugar production (1,000 metric tons)	857	744	955	-113	-13	-210	-22

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).

Table 6: Mexican sugar production, 2017/18-2023/24

Fiscal year	Harvested area (1,000 ha)	Yield (MT per ha)	Sugarcane processed (1,000 MT)	Recovery (percent)	Sugar production (1,000 MT)
2017/18	785	67.97	53,336	11.27	6,010
2018/19	804	70.94	57,037	11.27	6,426
2019/20	783	62.89	49,274	10.71	5,278
2020/21	790	64.93	51,293	11.14	5,715
2021/22	800	68.37	54,681	11.31	6,185
2022/23	806	58.99	47,564	10.98	5,224
2023/24 proj. WASDE (01/2024)	798	59.00	47,099	10.65	5,016
2023/24 proj. CONADESUCA	798	58.46	46,668	11.12	5,188
5-year average (2018/19–2022/23)	797	65.22	51,970	11.08	5,766

ha = hectares; MT = metric tons; proj. = projected.

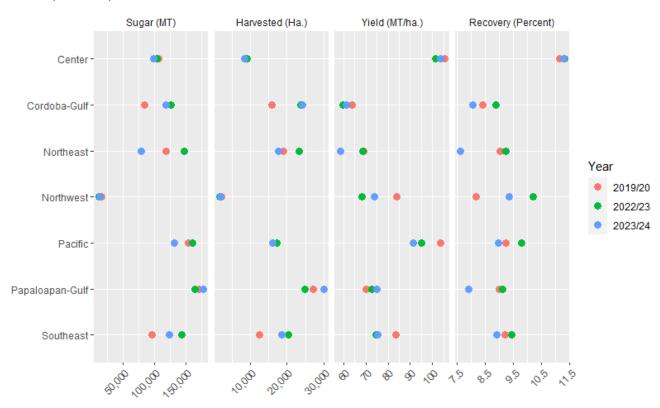
Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates (WASDE) published in November 2023; Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA) first production forecast published in November 2023.

At the regional level, sugar production (figure 12, first vertical panel) is either behind last year (due to suboptimal fertilizer application) and/or behind 2019/20 (the last time drought negatively affected the Mexican crop). The exception is the biggest producing region of Papaloapan-Gulf where slightly larger harvested area (second panel) and yield (third panel) compensate for the poor recovery rate (fourth panel). Sugar production in the 2 other major regions—Pacific and Northeast—are behind both 2019/20 and 2022/23 primarily because of lagging progress in all 3 variables (area harvested, yield, and recovery rate).

^{1/} Years included are 2018/19–2022/23.

In terms of types, the volume of low polarity sugar produced is behind last year's level in all the four sugar-producing regions⁵, particularly in Papaloapan-Gulf and Southeast—the largest producers of this sugar type (figure 13). Conversely, except for the Northeast region where the drought was most severe, production of standard sugar—which is about 65 percent of total sugar produced—is either ahead of the 2 prior years (Cordoba-Gulf, Northwest, Papaloapan-Gulf) or relatively close (Center, Pacific, Southeast). The production of refined sugar to date, similar with that of low polarity sugar, is relatively lagging that of 2019/20 and/or 2022/23 over the same period.

Figure 12
Mexican sugar campaign progress at week 14, by sugar-producing regions, fiscal year 2019/20, 2022/23, and 2023/24

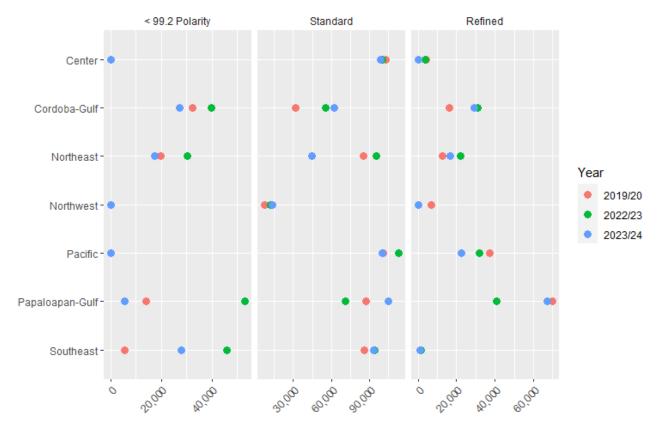


Source: USDA, Economic Research Service calculations using data from Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

⁵ Since 2017/18, low-polarity sugar has not been produced in the Center and Pacific regions, and only minimally produced in the Northwest region (between 1 to 4 percent of the total low-polarity sugar production).

Figure 13

Mexican sugar production at week 14, by type and sugar-producing regions, fiscal year 2019/20, 2022/23, and 2023/24

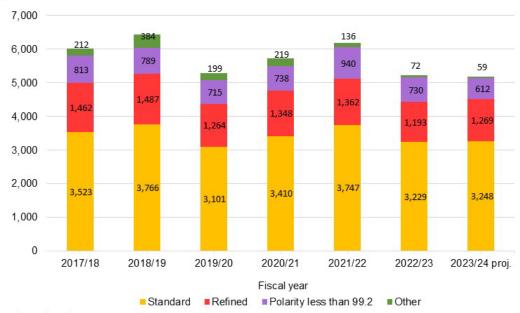


Source: USDA, Economic Research Service calculations using data from Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Given the drought-reduced sugarcane crop and the historically high domestic prices, meeting Mexico's domestic requirements for standard and refined sugar would likely be prioritized over the production of low polarity sugar destined for the United States. Based on its initial forecast, released in November 2023, CONADESUCA's 2023/24 forecast of standard (3.248 million MT) and refined sugar (1.269 million MT) production currently represents 62.6 percent and 24.5 percent of the 5.188 million MT, respectively. This is the highest share for each sugar type since 2017/18. Conversely, CONADESUCA's 612,131-MT forecast of low polarity sugar and its corresponding 11.8 percent portion of the total sugar production would be the lowest since 2017/18 in terms of volume (figure 14) and share (figure 15), respectively.

Figure 14 Mexican sugar production by type of sugar, 2017/18-2023/24

1,000 metric tons

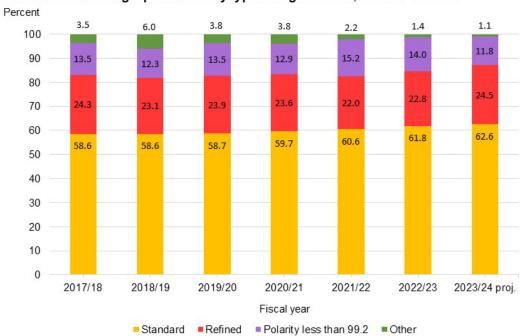


proj. = projected.

Note: The "Other" category is comprised of white special and brown sugar.

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

Figure 15 Share of Mexican sugar production by type of sugar to total, 2017/18-2023/24



proj. = projected.
Note: The "Other" category is comprised of white special and brown sugar.
Source: USDA, Economic Research Service calculations using data from Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Mexico's Sugar Exports to the U.S. Lowered

Mexico's 2023/24 exports to the United States are lowered by 42,000 MT from last month to 789,000, a 20 percent (200,000 MT) decline from last year (989,000 MT). If realized, this would be the lowest exports from Mexico to the United States in the last decade (figure 16). With exports to other countries forecast at 25,000 MT (unchanged from last month), total exports from Mexico in 2023/24 would be 814,000 MT, also the lowest in the last decade.

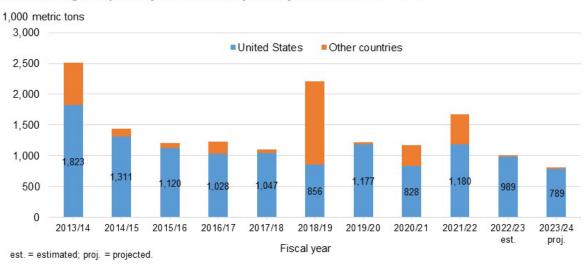


Figure 16

Mexican sugar exports by destination, by fiscal year, 2013/14–2023/24

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

The *WASDE* arrived at a forecast of 789,000-MT of exports to the United States using CONADESUCA's initial sugar production forecast of 5,188,233 million MT in November, of which 612,131 MT or 11.8 percent⁶ is comprised of low polarity sugar, the lowest since 2017/18 in terms of volume and share as pointed out in the earlier section.

The 11.8 percent share of low polarity sugar that is derived from CONADESUCA is then multiplied by the January *WASDE*'s sugar production projection for Mexico of 5.016 million MT. This results in an estimate of 591,810 MT of low polarity sugar production presumably destined to the United States. Assuming this 591,810-MT of low polarity sugar would comprise 75 percent of Mexico's total exports to the U.S.—same share as last year—the total

⁶ 11.7984485 percent.

exports from Mexico to the U.S. are expected to be 789,080 MT (i.e., 591,810 MT divided by 0.75). The methodology for forecasting Mexico's exports to the United States will likely change next month with the availability of additional production data that increases the statistical validity of methods such as regression analysis.

Mexico's Sugar Imports Residually Increased to a 14-Year High

While the 2023/24 forecast for Mexico's total exports were lowered from last month by 42,000 MT to 814,000, the other use components are unchanged. Deliveries for domestic consumption and companies participating in the Industria Manufacturera, Maquiladora y de Servicios de Exportación (IMMEX) program remain at 4.248 million MT and 400,000 MT, respectively. Thus, total use is lowered from last month by the same amount (42,000 MT) to 5.462 million.

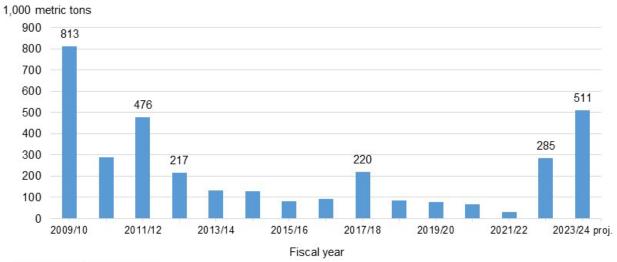
With a lower forecast for sugar production, unchanged total use, and the same 2.5-months' worth of target ending stocks, Mexico's 2023/24 imports for domestic consumption are residually increased from last month by 225,000 MT to 486,000 MT. With imports for IMMEX (25,000 MT) carried over from last month, total imports increased by the same magnitude to 511,000—an 80-percent increase from last year (285,000 MT) and a 14-year high (figure 17). The significant increase in imports can be attributed to several factors including the poor prognosis for domestic production and current high internal prices that make high-tier imports into Mexico economical. As seen in figure 18, while the average monthly prices for the standard and refined sugar came down from their record high levels in December 2022, they remain historically elevated.

The increase in Mexico's sugar imports is supported by the actual pace of volume entered between October and December. In its December 2023 *Monthly National Sugar Balance*, CONADESUCA reported that Mexico already imported 203,137 MT compared with 1,635 MT over the same period last year. This implies that Mexico had already imported about 40 percent of the *WASDE*'s 511,000-MT forecast just in the first three months of fiscal year 2023/24.

CONADESUCA's data is consistent with the 263,000-MT that sugar exporters to Mexico reported in the Trade Data Monitor (TDM). As of January 12, TDM data through December 2023 show several countries exporting sugar to Mexico (table 7). Brazil is the top exporter,

supplying 70 percent of the total, followed by the United States (12 percent) and Saudi Arabia (11 percent).

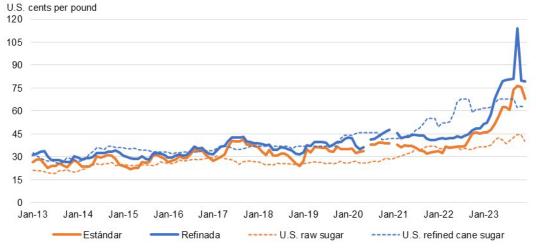
Figure 17
Mexican total sugar imports, by fiscal year, 2009/10–2023/24



est. = estimated; proj.= projected.

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

Figure 18
Mexican and U.S. sugar prices, monthly, January 2013–October 2023



U.S. = United States.

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 using data from Intercontinental Exchange, Inc. (U.S. prices),
Servicio Nacional de Información e Integración de Mercados (Mexican prices), and U.S. Federal Reserve Bank (exchange rates).

Table 7: Countries' reported sugar exports to Mexico, (October-December 2023)

Origin	Quantity (metric tons)	Share in total (percent)
Brazil	183,393	70
China	1	0
El Salvador	5,547	2
EU 27 External Trade (Bre	3	0
Guatemala	8,493	3
Honduras	1,500	1
India	1,176	0
Paraguay	22	0
Saudi Arabia	28,651	11
South Korea	0	0
Thailand	2,000	1
United States	32,634	12
Total	263,419	100

Note: Totals may not add due to rounding.

Source: USDA, Economic Research Service calculations using Trade Data Monitor.

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