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Sugar and Sweeteners Outlook

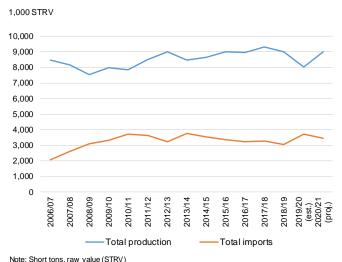
Michael McConnell, coordinator David Olson, contributor

U.S. Sugar Production Projected To Increase in 2020/21, Raising Sugar Supplies

Sugar production in North America is expected to increase in 2020/21, as sugarbeet and sugarcane growers in the United States and Mexico are expected to see more normal weather conditions and better crop production. As a result, the United States is projected to import less sugar in 2020/21. Imports from Mexico, however, are projected to be higher.

U.S. domestic deliveries in 2020/21 are projected to be flat with the current 2019/20 estimates. The strong pace of deliveries in the United States through the first half of 2019/20 is clouded by economic uncertainties and drastic changes to food marketing channels due to COVID-19.

U.S. sugar production and imports, 2006/07 to 2020/21



Source: USDA, World Agricultural Outlook Board

United States Outlook

U.S. Sugar Supplies Projected To Rebound in 2020/21, as Domestic Production Increases From Previous Year

In the USDA's May *World Agricultural Supply and Demand Estimates* (WASDE), the United States total sugar supply for 2020/21 is projected to be 13.733 million short tons, raw value (STRV). This would a 1.4-percent increase from the 2019/20 estimate. Domestic production is projected to be 9.005 million STRV—increasing 10.9 percent from the current year's relatively low production levels. Higher production more than offsets the 8.0-percent year-over-year decline in projected imports.

Table 1: U.S. sugar: Supply and use, by fiscal year (Oct./Sept.), May 2020

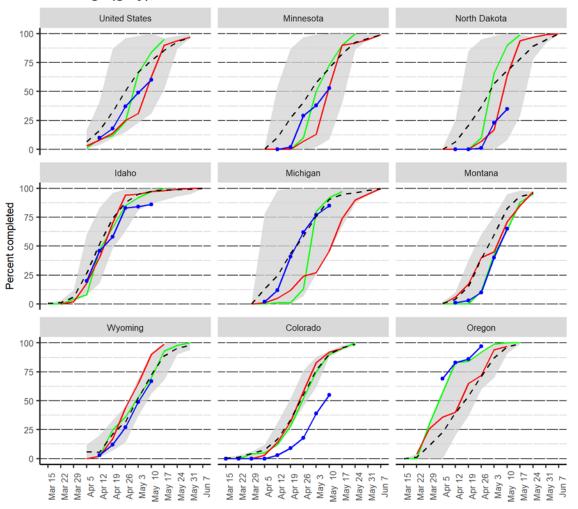
Items	, , , , , , , , , , , , , , , , , , ,	2019/20	2020/21		2019/20	2020/21
	2018/19	(estimate)	(forecast)	2018/19	(estimate)	(forecast)
	1,000 Short tons, raw value		1,000 Metric tons, raw value			
Beginning stocks	2,008	1,783	1,273	1,822	1,617	1,154
Total production	8,999	8,024	9,005	8,163		,
Beet sugar	4,939	4,285	4,965	4,480		4,504
Cane sugar	4,060	3,740	4,040	3,683		3,665
Florida	2,005	2,100	2,105	1,819	1,905	1,910
Louisiana	1,907	1,513	1,800	1,730	1,372	1,633
Texas	147	127	135	134	115	122
Hawaii	0	0	0	0	0	0
Total imports	3,070	3,731	3,456	2,785	3,384	3,135
Tariff-rate quota imports	1,541	2,180	1,395	1,398	1,978	1,266
Other program imports	438	350	350	397	318	318
Non-program imports	1,092	1,200	1,710	990	1,089	1,552
Mexico	1,000	1,050	1,660	908	953	1,506
High-duty	91	150	50	83	136	45
Total supply	14,076.75	13,538	13,733	12,770	12,281	12,458
Total exports	35	35	35	31	32	32
Miscellaneous	28	0	0	26	0	0
Deliveries for domestic use	12,231	12,230	12,230	11,096	11,095	11,095
Transfer to sugar-containing products						
for exports under re-export program	98	80	80	89	73	73
Transfer to polyhydric alcohol, feed, other alcohol	27	25	25	25	23	23
Commodity Credit Corporation (CCC) sale for ethanol, other	0	0	0	0	0	0
Deliveries for domestic food and beverage use	12,106	12,125	12,125	10,982	11,000	11,000
Total use	12,294	12,265	12,265	11,153	11,127	11,127
Ending stocks	1,783	1,273	1,468	1,617	1,154	1,332
Private	1,783	1,273	1,468	1,617	1,154	1,332
Commodity Credit Corporation (CCC)	0	0	0	0	0	0
Stocks-to-use ratio	14.50	10.38	11.97	14.50	10.38	11.97

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

Sugarbeet Planting for the 2020/21 Crop Remains Behind Average Pace, Slightly Ahead of Previous Year

The planting season for most sugarbeet-producing States takes place in April and May. Through May 10, 60 percent of the U.S. sugarbeet crop had been planted according to the National Agricultural Statistics Service (NASS). This is slightly ahead of last year's pace, which was 54 percent by this time in the year. The pace has been impacted by a relatively slow pace set by Minnesota and North Dakota, which includes the key production region in the Red River Valley that straddles the two States. Colder spring weather conditions have kept the planting pace behind average in several States.

Figure 1
Planting progress by State, 2018 (green), 2019 (red), 2020 (blue), average (black), and range (gray), since 2000



Source: USDA, National Agricultural Statistics Service.

Planting sugarbeets in a timely manner is typically correlated with achieving higher yields, as it allows the plant to establish itself before the key growth and development phases that occur during the warmer summer months. Sugarbeet yields during the past 2 years have been lower than the longer term trend, from a combination of difficult planting seasons, challenging harvest conditions, and—in some regions- suboptimal growing conditions. The May WASDE's beet sugar production forecast is based on a national sugarbeet yield of 30.1 short tons per acre, based on an Olympic average of yields going back to 2012/13. This approach was chosen due to the sluggish pace of planting and because yields over the past few years have not followed the same upward trend that had been prevalent earlier. This forecast puts yields above the previous year, but lower than a longer term trend model.

Short tons per acre 35 33 31 29 27 25 23 21 19 17 15 2012/13 2000/01 2004/05 2008/09 2010/11 2002/03 2018/19 2020/21 2006/07

Figure 2
National sugarbeet yields, 2000/01 to 2020/21

Note: 2020/21 is the current forecast. Source: USDA, National Agricultural Statistics Service.

In its March *Prospective Plantings* report, the National Agricultural Statistics Service (NASS) showed sugarbeet planted acreage at 1.139 million acres—a slight 0.6-percent increase from 2019/20. Assuming a normal ratio of planted-to-harvested acres—excluding the 2019/20 crop—sugarbeet production for 2020/21 would be 33.672 million short tons. Beet sugar production is projected to be 4.965 million STRV, based on this sugarbeet production forecast and assuming

processing parameters that are in line with historical averages. This would represent a 13.7-percent increase over the revised 2019/20 estimate of 4.285 million STRV.

Table 2: Beet sugar production projection calculation, 2019/20 and 2020/21

	2015/16	2016/17	2017/18	2018/19	2019/20	2019/20	2020/21
					April	May	May
Sugarbeet production (1,000 short tons) 1/	35,371	36,881	35,325	33,282	28,600	28,600	33,671
Sugarbeet shrink	6.5%	8.3%	7.3%	5.2%	5.7%	5.7%	6.6%
Sugarbeet sliced (1,000 short tons)	33,066	33,834	32,742	31,561	26,984	26,984	31,454
Sugar extraction rate from slice	14.58%	13.72%	15.18%	14.77%	14.34%	14.31%	14.51%
Sugar from beets slice (1,000 STRV) 2/	4,820	4,643	4,970	4,660	3,870	3,861	4,564
Sugar from molasses (1,000 STRV) 2/	380	352	368	352	337	337	360
Crop-year sugar production (1,000 STRV) 2/	5,201	4,995	5,338	5,012	4,207	4,198	4,924
August-September sugar production (1,000 STRV)	688	606	715	655	582	582	633
August-September sugar production of subsequent crop (1,000 STRV)	606	715	655	582	633	633	638
Sugar from imported beets (1,000 STRV) 3/					40	36	36
Fiscal year sugar production (1,000 STRV)	5,119	5,103	5,279	4,939	4,298	4,285	4,965

^{1/}USDA, National Agricultural Statistics Service for historical data. 2/ August-July basis. 3/ Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded. Sugar from imported beets is incorporated into total production in historical data.

Source: USDA, Economic Research Service and World Agricultural Outlook Board.

Cane sugar production in 2020/21 is projected to be 4.040 million STRV, a 7.4-percent increase from the current 2019/20 estimate of 3.740 million STRV. The first official NASS statistics for the 2020/21 crop won't be released until the June 30 *Acreage* report. The current forecasts are based on historical averages of harvested area, yields, and recovery rates. Florida is projected to produce 2.105 million STRV of sugar, a slight 0.2-percent increase from current 2019/20 estimates. Louisiana is projected to produce 1.800 million STRV—a 16.0-percent increase based on the State-average yield returning to levels comparable with 2017/18 and 2018/19. Texas production is projected to be 135,000 STRV.

Deliveries Outlook for 2019/20 Unchanged as Markets Continue Adjusting to COVID-19-Related Developments

U.S. sugar use in 2019/20 is estimated to total 12.265 million STRV, unchanged from the April forecast. Domestic deliveries for food and beverage use are estimated at 12.125 million STRV, also unchanged from the previous month. Although forecast volumes have not been revised, there is considerable change and adjustment taking place within the U.S. sugar sector due to COVID-19 and its effects on consumer behavior and public policies.

Through reporting in the Farm Service Agency's *Sweetener Market Data* (SMD) for March—which represents the half-way point of the fiscal year—total deliveries have been 6.116 million STRV, which is 2.9 percent higher than the same period in 2018/19. As expected, deliveries from beet sugar processors are down 2.9 percent and cane sugar refiners' deliveries are 5.6 percent larger. This trend was anticipated due to the poor sugarbeet harvest conditions in the late fall of 2019 that reduced the sugarbeet crop. The unanticipated sugarbeet shortage forced

Note: STRV = short tons, raw value

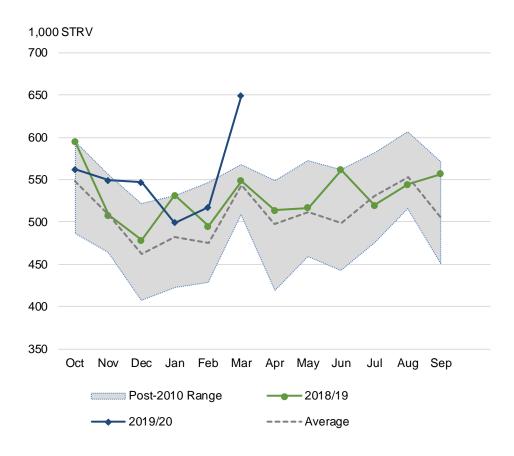
several companies to declare force majeure, reducing the amount of sugar deliveries that were previously contracted. In response, cane sugar refineries have increased their throughput in early 2020. The cane sugar refining sector's response was particularly pronounced in March, with the sector's melt rate (the amount of raw sugar processed into refined sugar) far surpassing historical levels. This spike reflects the increased demand for cane sugar due to tight beet sugar supplies.

Table 3: Food and beverage deliveries, 2014/15 to 2019/20, October through March

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Annual change
	1,000 STRV					Percent	
Beet sugar processors	2,352	2,179	2,600	2,645	2,455	2,382	-2.9
Cane sugar refiners	3,033	3,174	2,998	2,946	3,105	3,279	5.6
Total reporters	5,385	5,354	5,598	5,591	5,560	5,661	1.8
Nonreporter, direct consumption	267	425	302	343	384	454	18.2
Total deliveries	5,652	5,779	5,900	5,934	5,944	6,116	2.9
Final fiscal year deliveries 1/	11,921	11,881	12,102	12,048	12,106	12,125	0.2

1/ Latest WASDE estimate for 2019/20. Source: USDA, Farm Service Agency.

Figure 2
Sugarcane refiners melt, monthly, 2016/17 to 2019/20



Source: USDA, Farm Service Agency.

In addition to the adjustments that have taken place between the beet and cane sectors in the United States, sugar markets have also been forced to adjust to substantial shifts in consumer behavior. Since confirmed cases of COVID-19 have increased in the United States and public policies have encouraged social distancing, consumers have significantly increased food consumption at home—abruptly reversing longstanding trends in the United States. This has created significant logistical, packaging, and marketing changes for the U.S. sugar sector, as the market has rebalanced supplies between away-from-home consumption (such as the hospitality and foodservice sectors) and at-home consumption (such as retail grocers and food manufacturing).

The impacts of these shifts can be seen in the SMD's reporter delivery data, which includes reported deliveries by the packaging categories consumer-sized packaging (less than 50 lb. bags), packages greater than 50 lbs., unpackaged (bulk), and noncrystalline (liquid) shipments. The March data shows a significant increase in consumer-sized packaging compared with a statistically modeled baseline forecast, likely representing increased demand for bags of sugar purchased by households at retail markets. Deliveries in the form of packages of more than 50 lbs., and liquid sugar were also higher than the baseline average, although deliveries were within the expected range. Deliveries of bulk sugar—which is the largest segment of the industry—were lower than the baseline average, but also within the expected range.

The data reported through March, however, still does not fully capture the impact of the abrupt change in National economic activity that has taken place in recent weeks. The impacts of past and recent developments are expected to be reflected in future data. Deliveries data going forward will likely show adjustments that take place over an extended period as consumers and the food sector continue to adjust to dynamic and uncertain market conditions.

Figure 3

Consumer-sized packages, actual sugar deliveries (red), modeled deliveries (gray), and 80% confidence interval (black)

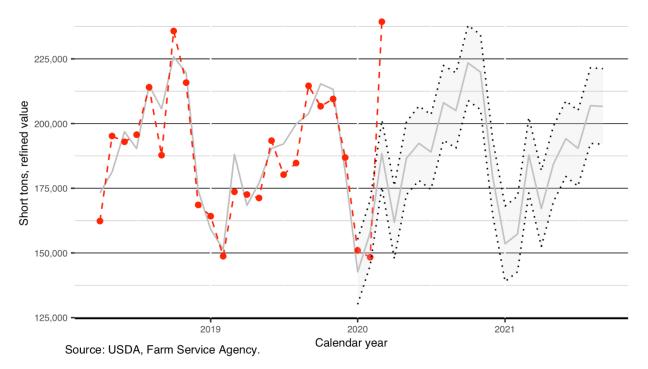


Figure 4

Larger (more than 50 lbs.) packages, actual sugar deliveries (red), modeled deliveries (gray), and 80% confidence interval (black)

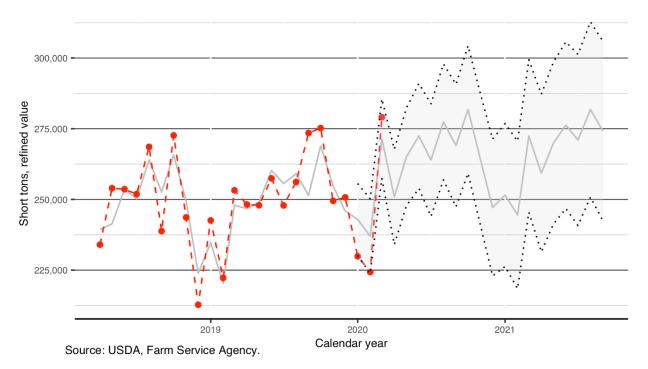


Figure 5

Bulk shipments, actual sugar deliveries (red), modeled deliveries (gray), and 80% confidence interval (black)

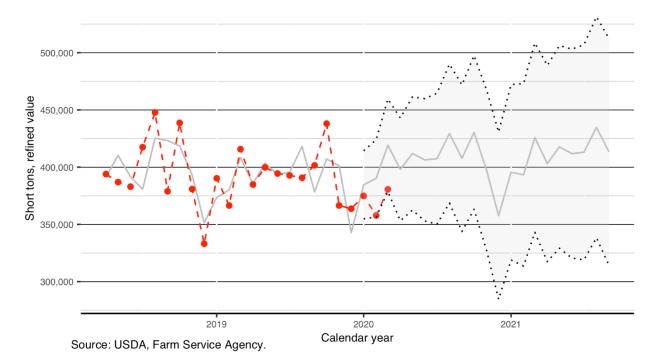
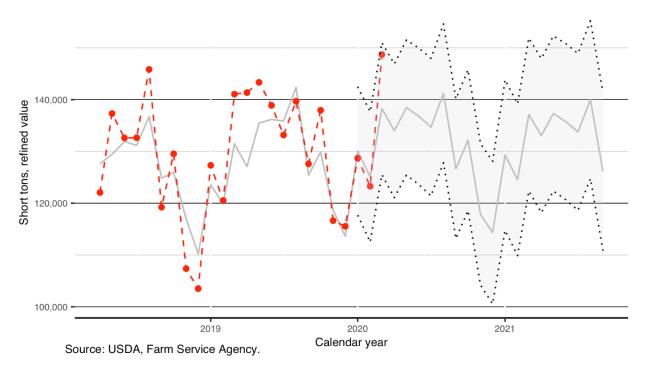


Figure 6
Liquid shipments, actual sugar deliveries (red), modeled deliveries (gray), and 80% confidence interval (black)



Domestic Deliveries for 2020/21 Projected To Remain Flat From 2019/20 Estimates

The outlook for sugar deliveries in 2020/21 is also affected by the current market uncertainties. The impacts of COVID-19 are expected to spill over into fiscal year 2020/21, which begins October 1. The May WASDE projects domestic deliveries for food and beverage use to be 12.125 million STRV, with no growth expected from the current 2019/20 estimate.

Sugar demand in the United States is not sensitive to changes in price or income. Macroeconomic uncertainties are not expected to impact consumer demand for sugar or products that contain sugar. The continued trend of at-home food consumption is expected to be a significant economic factor affecting sugar use. If certain significant sugar-using sectors continue to see reduced economic activity, this will likely have an impact on the overall throughput in the sugar-producing industry—even if consumers' diet and intake remain largely unchanged. Additionally, there are often lagged impacts on sugar deliveries from previous market disruptions. This has been evident in past events such as hurricanes, periods of policy changes or uncertainty, or temporary reductions in production capacities. Current events are expected to affect the sugar market in the several subsequent months or business quarters. The 2020/21 projection in sugar use reflects this uncertainty.

Sugar Imports in 2020/21 Expected To Be Lower Than Current 2019/20 Estimates

Sugar imports into the United States are expected to be less in 2020/21, as domestic production is forecast to return to levels consistent with historical averages. Imports for 2020/21 are projected to total 3.456 million STRV, an 8.0-percent decline from current 2019/20 estimates. Imports under quota programs are projected to be 1.395 million STRV. The additional Specialty Sugar Tariff-Rate Quota (TRQ) for 2020/21 has not yet been announced by the Secretary of Agriculture and therefore has not yet been included in the projection.

Imports from Mexico are projected to be 1.660 million STRV, based on the calculation of U.S. Needs—although the first U.S. Department of Commerce (USDOC) calculation to determine Mexico's Export Limit will not be made until after the July WASDE.

High-tier imports, which enter the United States at the full-duty rate, are projected at 50,000 STRV for 2020/21. This is lower than the current 2019/20 forecast of 150,000 STRV, due to the expectation of increased supply availability in the coming fiscal year. This is supported by the

lower wholesale spot prices quoted for 2020/21—particularly beginning in January 2021, after the domestic sugarbeet harvest has been completed.

Imports for 2019/20 are estimated to be 3.731 million STRV, a 149,000-STRV reduction from the previous month's forecast. The reduction is due to fewer imports from Mexico anticipated for the current fiscal year. Mexico's production outlook is also reduced, based on the most recent harvest information produced in Mexico.

Mexico Outlook

Mexico 2019/20 Sugarcane Harvest Shows Signs of Ending, Lowering Production Outlook

Sugar production in Mexico for 2019/20 is estimated at 5.125 million metric tons, actual value (MT), a 110,000-MT decrease from the April outlook. Less domestic production and lower domestic supplies result in lower exports forecast for the year.

Table 4: Mexico sugar supply and use, 2018/19 - 2019/20 and projected 2020/21, May 2020

Items	2018/19	2019/20 (estimate)	2020/21 (forecast)		
	1,000 metric tons, actual weight				
Beginning stocks	1,395	1,169	953		
Production	6,426	5,125	6,100		
Imports	85	89	89		
Imports for consumption	22	24	24		
Imports for sugar-containing product exports, IMMEX 1/, other	63	65	65		
Total supply	7,905	6,383	7,142		
Disappearance					
Human consumption	4,092	4,057	4,140		
For sugar-containing product exports (IMMEX)	460	435	435		
Other deliveries and end-of-year statistical adjustment	-20	0	0		
Total	4,532	4,492	4,575		
Exports	2,204	938	1,614		
Exports to the United States & Puerto Rico	856	899	1,421		
Exports to other countries	1,348	39	193		
Total use	6,737	5,430	6,189		
Ending stocks	1,169	953	953		
	1,000 metric tons, raw value				
Beginning stocks	1,478	1,239	1,010		
Production	6,811	5,433	6,466		
Imports	90	94	94		
Imports for consumption	23	25	25		
Imports for sugar-containing product exports (IMMEX)	67	69	69		
Total supply	8,380	6,766	7,571		
Disappearance					
Human consumption	4,337	4,300	4,388		
For sugar-containing product exports (IMMEX)	488	461	461		
Other deliveries and end-of-year statistical adjustment	-21	0	0		
Total	4,804	4,761	4,850		
Exports	2,337	994	1.711		
Exports to the United States & Puerto Rico	908	953	1,506		
Exports to other countries	1,429	42	205		
Total use	7,141	5,755	6,560		
Ending stocks	1,239	1,010	1,010		
Stocks-to-human consumption (percent)	28.6	23.5	23.0		
Stocks-to-use (percent)	17.3	17.6	15.4		
High-fructose corn syrup (HFCS) consumption (dry weight)	1,528	1,493	1,493		

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

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

Drought conditions that have affected most sugarcane-producing regions in Mexico continue to lower the domestic production outlook for 2019/20. Through May 2, the sugarcane harvest was beginning to see weekly harvested acres fall significantly from previous weeks, according to Conadesuca. Sugar production totals have likewise fallen steadily. With more than one-third of Mexico's sugar mills reporting completion for this challenging season, prospects for sugar production have been reduced. Production is estimated to be 5.125 million MT in the May WASDE, a 110,000-MT reduction from the previous month.

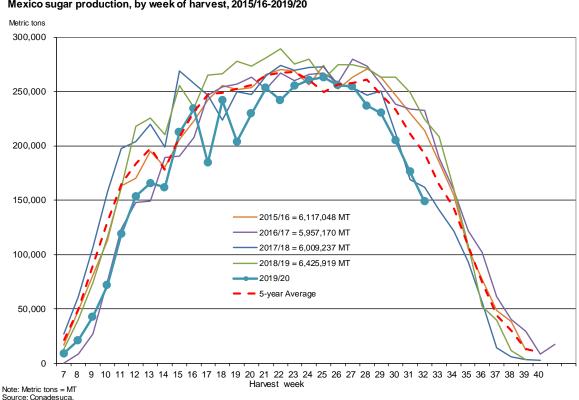


Figure 7 **Mexico sugar production, by week of harvest, 2015/16-2019/20**

Production is projected to rebound in 2020/21, increasing 19.0-percent to 6.100 million MT based on a return to normal weather and growing conditions. The production outlook will be adjusted with the meteorological conditions reported in sugarcane-growing regions in Mexico during the spring and summer growing seasons.

Domestic Deliveries Strong Through First-Half of Fiscal Year

Based on the latest data published by Conadesuca, domestic deliveries in Mexico have shown strength through March. Domestic deliveries for human consumption are up 7.4 percent through the first-half of the fiscal year. This is partially offset by a 3.9-percent decline in high-fructose

corn syrup (HFCS) deliveries. As with the United States, however, the impacts of the COVID-19 outbreak create uncertainty. The current 2019/20 estimate for domestic deliveries for human consumption is unchanged from the previous month at 4.057 million MT. Deliveries of HFCS are reduced 35,000 MT to 1.493 million MT.

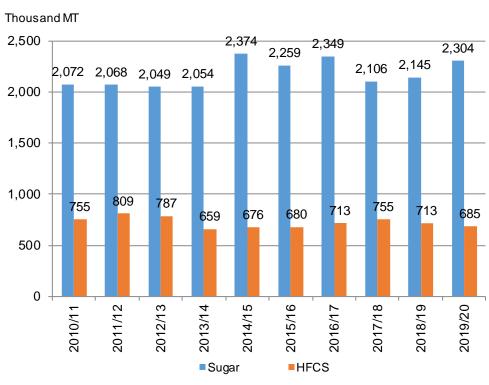


Figure 8 **Mexican sweetener consumption October to March, 2010/11 to 2019/20**

Source: Conadesuca.

Total domestic sugar deliveries in 2020/21 are projected to increase 1.9 percent. The growth is expected to come from deliveries for human consumption, which is projected at 4.140 million MT—or 2.1-percent higher than the current 2019/20 estimate. The forecast is based on steady per capita consumption rates for total sweeteners, but with sugar capturing a higher share of the total. Deliveries of HFCS are projected to total 1.493 million MT, unchanged from the 2019/20 estimate. Deliveries to the IMMEX program are projected to total 435,000 MT, the same amount as estimated for the current year.

Trade Outlook Lowered Based on Fewer Supplies

The reduced 2019/20 production outlook for Mexico results in less sugar available for export. Mexico is estimated to ship 938,000 MT of sugar overseas—a 127,000-MT reduction from the

previous month's forecast. The reduction is expected to be from shipments to the United States—which accounts for nearly the entirety of Mexico's exports. Exports to the United States are estimated at 899,000 MT. Exports to other countries are estimated at 39,000 MT. The current export levels result in Mexico's ending stocks for 2019/20 estimated at 953,000 MT, which equates to 2-½ months of 2020/21 domestic deliveries, covering the period between the end of September and when the 2020/21 production begins to come to market in December.

The current 2 ½ month-ending stocks is based on stated policy by Conadesuca. One policy action that has been reportedly in discussion is lowering the ending stock target to 2 months of domestic consumption. If this were done, it would allow additional 2019/20 supplies to be shipped as exports. Such a change in the outlook would not be incorporated into the WASDE estimates unless it were officially announced by Mexican authorities.

Exports in 2020/21 are projected to total 1.614 million MT, as a rebound in domestic production will allow for additional supplies to be marketed overseas. Exports to the United States are projected to be 1.421 million MT. This total is based on the calculated U.S. Needs, as well as an assumption that the Specialty Sugar TRQ is comparable to the 2019/20 quota. The outlook for exports to the United States will be updated along with announcements and decisions made regarding the Suspension Agreements by the USDOC. Exports to other countries in 2020/21 are projected at 193,000 MT. This level of exports would allow Mexico to maintain enough ending stocks to carry the country into 2021/22.

Suggested Citation

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