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Sugar and Sweeteners Outlook

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U.S. Sugar Imports from Mexico Projected To Total 1.299 Million STRV, Based on Calculated U.S. Needs

Total U.S. sugar supplies are projected to total 13.836 million short tons, raw value (STRV) in 2015/16, a 57,000-STRV increase from the February projections. Beginning stocks are increased 41,000 STRV to 1.809 million STRV based on revisions provided by refiners to 2014/15 inventories. Sugar production in 2015/16 is projected to total 8.827 million STRV. Beet sugar production is projected at 5.016 million STRV—a 6,000-STRV increase from the previous month—while cane sugar production is projected to be 3.811 million STRV, a 27,000-STRV decline from the previous month due to reduced recovery rates expected in Florida. Sugar imports in 2015/16 are projected to be 3.200 million STRV. A 72,000-STRV increase in imports under quota programs due to a reallocation of the fiscal year (FY) 2016 raw sugar tariff-rate quota (TRQ) by the U.S. Trade Representative (USTR) is partially offset by a 33,000-STRV decline in imports from Mexico due to terms of the suspension agreements signed between the U.S. Department of Commerce and the Government of Mexico.

Projected domestic sugar deliveries in 2015/16 remain unchanged from the previous month at 12.090 million STRV, including 11.955 million STRV projected for food and beverage use. U.S. sugar exports are projected at 100,000 STRV, a 23,000-STRV decline from the previous month as changes by the Mexican government to the IMMEX program take hold. Ending stocks are projected to be 1.646 million STRV, which results in a stocks-to-use ratio of 13.5 percent.

Projected sugar production in Mexico remains unchanged at 6.056 million metric tons, actual value (MT), as the current Mexican sugarcane crop continues to progress. Imports are projected to total 70,000 MT, down 20,000 from the previous month due to fewer imports from the United States under the IMMEX program. Domestic deliveries remain unchanged from the previous month at 4.681 million MT. Exports are projected to total 1.122 million MT, a 29,000-STRV decline from the previous month due to fewer shipments to the United States. Ending stocks are projected to be 1.134 million MT, resulting in a stocks-to-domestic-consumption ratio of 26.1 percent.

Total Projected U.S. Sugar Supplies for 2015/16 Increased as Higher Reported Stocks Offset Lower Production

In the March *World Agricultural Supply and Demand Estimates* (WASDE), U.S. beginning stocks for 2015/16 are projected at 1.809 million short tons, raw value (STRV), a 41,000-STRV increase from the previous month. This change is the result of revisions made to the 2014/15 U.S. sugar stocks in the Farm Service Agency's *Sweetener Market Data* (SMD) to reported stocks by cane refiners. The change in 2014/15 stock levels also resulted in a change to miscellaneous food deliveries and total use for the year. The result of the revisions to the 2014/15 balance table is a stocks-to-use ratio of 14.8 percent for the year, compared with the previous month's estimate of 14.4 percent.

U.S. sugar production for 2015/16 is projected to be 8.827 million STRV, a 22,000-STRV decline from the previous month's projection. Beet sugar production is projected to total 5.016 million STRV, a slight 6,000-STRV increase. The small increase reflects minor, mostly offsetting changes from information provided by processors. Processors adjusted beet pile shrink forecasts from 8.2 percent in February to 7.2 percent in March, effectively increasing the expected volume of harvested sugarbeets that will be processed in this year's campaign. Sugar extracted from sliced sugarbeets, however, was reduced slightly from the previous month based on updated sugarbeet slice and sugar production data provided by processors through January.

Table 1 -- U.S. sugar: supply and use, by fiscal year (Oct./Sept.), March 2016.

Items		2014/15	2015/16		2014/15	2015/16		
	2013/14	(estimate)	(forecast)	2013/14	(estimate)	(forecast)		
	1,000 \$	Short tons, raw	value	1,000 Metric tons, raw value				
Beginning stocks	2,158	1,810	1,809	1,958	1,642	1,64		
Total production	8,462	8,649	8,827	7,676	7,847	8,008		
Beet sugar	4,794	4,893	5,016	4,349	4,439	4,550		
Cane sugar	3,667	3,756	3,811	3,327	3,408	3,458		
Florida	1,763	1,975	2,108	1,599	1,791	1,913		
Louisiana	1,591	1,513	1,423	1,444	1,372	1,291		
Texas	145	123	115	132	112	104		
Hawaii	168	146	165	153	132	150		
Total imports	3,742	3,553	3,200	3,394	3,223	2,903		
Tariff-rate quota imports	1,302	1,536	1,586	1,181	1,393	1,439		
Other program imports	305	471	300	277	427	272		
Non-program imports	2,135	1,546	1,314	1,937	1,403	1,192		
Mexico	2,130	1,532	1,299	1,932	1,389	1,179		
Total supply	14,362	14,012	13,836	13,029	12,712	12,551		
Total exports	306	185	100	278	168	91		
Miscellaneous	0	0	0	0	0	(
Deliveries for domestic use Transfer to sugar-containing products	12,246	12,019	12,090	11,109	10,903	10,968		
for exports under re-export program	82	103	100	74	93	9		
Transfer to polyhydric alcohol, feed, other alcohol	29	28	35	27	25	32		
Commodity Credit Corporation (CCC) sale for ethanol, other	316	0	0	287	0	(
Deliveries for domestic food and beverage use	11,819	11,888	11,955	10,722	10,785	10,845		
Total Use	12,552	12,204	12,190	11,387	11,071	11,059		
Ending stocks	1,810	1,809	1,646	1,642	1,641	1,493		
Private	1,810	1,809	1,646	1,642	1,641	1,493		
Commodity Credit Corporation (CCC)	0	0	0	0	0	(
Stocks-to-use ratio	14.42	14.82	13.50	14.42	14.82	13.50		

 $Source: \ U.S. \ Dept. \ of \ Agriculture, \ Economic \ Research \ Service, \ Sugar \ and \ Sweetener \ Outlook.$

Cane sugar production is projected to total 3.811 million STRV, a 27,000-STRV decline from the February projection. The entirety of the decline is in production in Florida, which is projected to produce 2.108 million STRV. The National Agricultural Statistics Service (NASS) increased its sugarcane forecast for the State in its March *Crop Production* report to 16.974 million tons from 16.769 million tons in February. The increase was due to forecast State yields improving from 41.0 tons per acre to 41.5 tons per acre.

Despite the increased forecast in sugarcane production, the prospects for Florida sugar production have been hampered by warm and wet weather conditions in the State's producing regions during January and February that have slowed the pace of harvest and sugar production. Sugar production in the State through January has totaled just 1.084 million STRV, which is 13.8 percent behind the same period the previous year. With large amounts of cane still to be harvested, processing is expected to continue later in the year, most likely into May. As a result of the additional time the cane spent in the field, recovery rates are expected to be lower than previously anticipated. The current forecast implies a recovery rate of 12.4 percent, compared with 12.7 percent in the February projection. This decline is in line with the changes in processors' expectations reported to FSA.

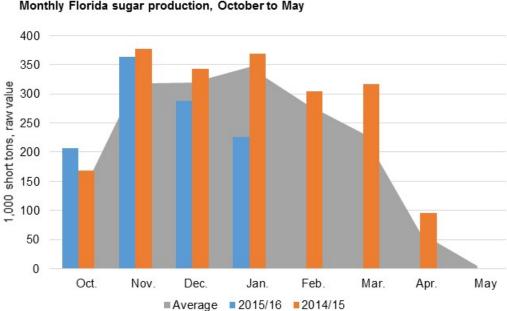


Figure 1
Monthly Florida sugar production, October to May

Source: Economic Research Service, USDA.

Announced TRQ Reallocation by USTR Results in Lower Projected Shortfall

U.S. sugar imports are projected to total 3.200 million STRV for 2015/16, up 38,000 STRV from the previous month's projection. Imports under quota programs are projected to be 1.586 million STRV, a 72,000-STRV increase from February. The increase is the result of a lower projected shortfall to the raw sugar TRQ. On March 7, 2016, the Office of the U.S. Trade Representative indicated that it would reallocate the quotas within the 2015/16 raw sugar TRQ from quota holders who were not anticipating filling their share to countries that would be able fill additional quota space. The result is expected to be additional imports under the raw sugar TRQ. Projected imports under other programs remain unchanged at 300,000 STRV.

Table 2: WTO raw sugar TRQ volumes and projected shoftfalls

	Initial FY2016 TRQ 1/	Reallocated FY2016 TRQ 2/
TRQ quantity	1,231,497	1,231,497
Projected shortfall	99,208	27,558
Projected TRQ Entries	1,132,289	1,203,939

Source: Foreign Agricultural Service, USDA.

Notes: 1/ As of the February 2016 WASDE report. 2/ Reallocations announced by U.S. Trade Representtive in March 2016.

Imports from Mexico are projected to total 1.299 million STRV. This total is based on the calculation of U.S. Needs, as defined by the suspension agreements signed between the U.S. Department of Commerce and the Government of Mexico in December 2014. According to the agreement, Mexico's Export Limit is set at 100 percent of the U.S. Needs, using the projections from the March WASDE. Given the current outlook for the Mexican sugar market, it is projected that the full Export Limit will be filled for 2015/16.

Projected Domestic Deliveries for 2015/16 Are Unchanged, Exports Are Lowered

U.S. domestic sugar deliveries for human consumption are projected to total 11.955 million STRV, unchanged from the previous month. Through January, domestic deliveries are 0.6 percent behind those in 2014/15. As detailed in previous month's reports, there has been a divergence in trends for cane and beet deliveries. Cane deliveries are 2.4 percent ahead of the previous year's pace, while beet deliveries remain 8.3 percent behind last year. The increasing influence of sourcing sugar to comply with labeling and marketing objectives remains a factor in the U.S. sugar market, although it remains unclear what impact it will have on potentially dividing the market into structurally separate segments.

U.S. exports are projected to be 100,000 STRV, down 23,000 STRV from the previous month's projection. Beginning in February, U.S. sugar benefiting from the U.S. re-export program no longer qualifies for duty-free status under the Mexican IMMEX program. Initially there was the potential for U.S. sugar shipments to Mexico to continue, benefiting from other market arrangements. No additional shipments are reportedly planned, however, from U.S. exporters to Mexico, indicating that such arrangements are not going to come to fruition. No alternative export market is expected to offset the reduced trade flows to Mexico.

Total use in 2015/16 is projected to be 12.190 million STRV, down 23,000 STRV from the previous month's projection, entirely due to the lowered export projections.

Ending stocks for 2015/16 are projected to be 1.646 million STRV, compared with the projected 1.565 million STRV projected in February. The stocks-to-use ratio is projected to be 13.5 percent, in line with the terms of the suspension agreements between the U.S. and Mexico.

Fewer Sugar Imports Projected for Mexico

Sugar supplies in Mexico are projected to total 6.937 million metric tons, actual value (MT) in 2015/16, down 20,000 MT from the February projection. The decline is accounted for by a 20,000-MT decline in projected sugar imports, corresponding to the reduction in projected U.S. exports. Mexican imports under the IMMEX program are projected to be 60,000 MT, compared with 80,000 MT projected the previous month. Imports for domestic consumption remain unchanged at 10,000 MT.

Table 3 -- Mexico sugar supply and use, 2013/14 - 2014/15 and projected 2015/16, March 2016

Items	2013/14	2014/15 (estimate)	2015/16 (forecast)
	1	,000 metric tons, actual weight	
Beginning stocks	1,460	831	811
Production	6,021	5,985	6,056
Imports	131	128	70
Imports for consumption	9	8	10
Imports for sugar-containing product exports (IMMEX) 1/	123	121	60
Total supply	7,613	6,944	6,937
Disappearance			
Human consumption	4,098	4,408	4,344
For sugar-containing product exports (IMMEX)	324	337	337
Statistical adjustment	-151	-54	
Total	4,271	4,691	4,681
Exports	2,511	1,442	1,122
Exports to the United States & Puerto Rico	1,823	1,311	1,112
Exports to other countries	689	131	10
Total use	6,782	6,134	5,803
Ending stocks	831	811	1,134
		1,000 metric tons, raw value	
Beginning stocks	1,548	881	859
Production	6,383	6,344	6,419
Imports	139	136	74
Imports for consumption	9	8	11
Imports for sugar-containing product exports (IMMEX)	130	128	64
Total supply	8,069	7,361	7,353
Disappearance			
Human consumption	4,344	4,673	4,605
For sugar-containing product exports (IMMEX)	343	357	357
Statistical adjustment	-160	-57	0
Total	4,527	4,973	4,962
Exports	2,662	1,529	1,189
Exports to the United States & Puerto Rico	1,932	1,389	1,179
Exports to other countries	730	139	11
Total use	7,189	6,502	6,151
Ending stocks	881	859	1,202
Stocks-to-human consumption (percent)	20.3	18.4	26.1
Stocks-to-use (percent)	12.3	13.2	19.5
High fructose corn syrup (HFCS) consumption (dry weight)	1,372	1,444	1,482

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

Source: USDA, World Agricultural Supply and Demand Estimates and Economic Research Service, Sugar and Sweeteners Outlook; Conadesuca.

Sugar production in Mexico is projected to be 6.056 million MT, unchanged from the previous month's projection. This also remains in line with the current forecast from the *Comité Nacional para el Desarrollo Sustentable de la Caña de Azúcar* (Conadesuca). Through the end of February, 357,000 hectares of sugarcane have been harvested in Mexico, representing about 45 percent of the expected harvest. This is slightly behind the previous year in terms of total area and percentage, but after a slow start at the beginning of the harvest season, there has been consistent progress over the past several weeks. Reported sugarcane yields have been ahead of last year's results, with crop yields comparable to the 2013/14 crop.

Figure 2
Cumulative Mexican sugarcane yield in metric tons (mt) per hectare (ha) during harvest season

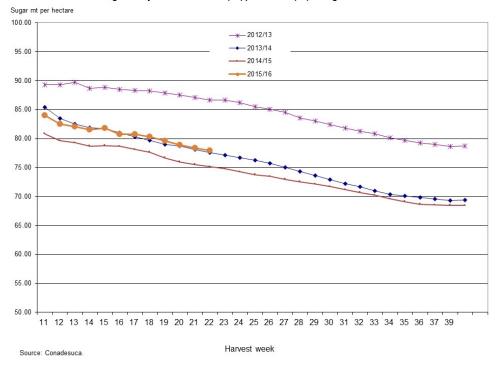
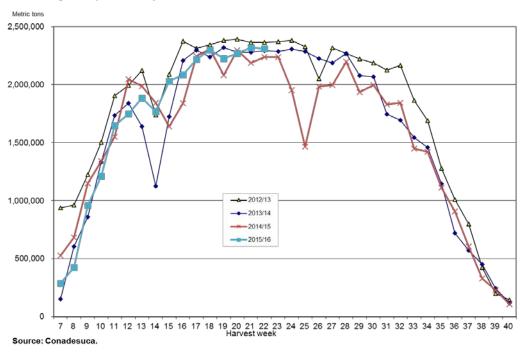


Figure 3 Mexican sugarcane production, by week of harvest, 2012/13-2015/16



Projected Mexican Domestic Deliveries for 2015/16 Unchanged, Exports Reduced

Total domestic deliveries in Mexico for 2015/16 are projected to total 4.681 million MT, unchanged from February. This would represent a 0.2 percent decline from 2014/15 totals, but would carry over the significant increase from

2013/14 levels. Through January, domestic deliveries for 2015/16 have totaled 1.442 million MT, which is also 0.2 percent behind the previous year's pace.

Sugar exports in Mexico are projected to total 1.122 million MT, a 29,000 MT decline from the February projection. The decline is due to a 29,000-MT decline in projected exports to the United States. Mexico is projected to ship 1.112 million MT to the United States, which is the full amount of the Export Limit determined by the projections of the March WASDE according to the terms of the suspension agreement.

Ending stocks for 2015/16 are projected to total 1.134 million MT, up nearly 9,000 MT from the previous month's projection. The result would be a stocks-to-consumption ratio of 26.1 percent, compared with the previous month's projection of 25.9 percent.

Special Section: Long-Term Projections for Sugar through 2025/26

In February, USDA's Office of the Chief Economist released *USDA Agricultural Projection to 2025*. The annual report was preceded by the release of the selected tables by ERS in December 2015. Included in the report were updated baseline projections for the U.S. sugar market through 2025/26.

The objective of the long-term projections is to provide an economic baseline for multiple commodity markets and the U.S. agricultural sector under specific modeling assumptions to serve as a point of departure for discussion of alternative farm-sector outcomes that could result under different domestic or international conditions. The projections assume normal weather conditions and generally assume trend crop production yields. The projections also assume that current agricultural and trade policies, including the Agricultural Act of 2014 and ratified trade agreements, remain in place throughout the duration of the projection period.

Specifically, the projections for the U.S. sugar market assume that policies for the current sugar program are in place throughout the duration of the projection period. Additionally, the projections assume that the terms of the *Agreement Suspending the Countervailing Duty Investigation on Sugar from Mexico* signed by the U.S. Department of Commerce and the Government of Mexico and the *Agreement Suspending the Antidumping Duty Investigation on Sugar from Mexico* signed by the U.S. Department of Commerce and producers and exporters of sugar in Mexico—combined commonly referred to as the "suspension agreements"—remain in force. Both of these agreements were signed in December 2014. Finally, the projection's starting point for 2015/16 are the projections published in the November 2015 WASDE report.

In addition to the baseline scenario, the sugar ICEC committee also evaluated two alternative scenarios as part of its budgetary analysis for the USDA's sugar program to determine if alternative projection scenarios would result in program outlays through the forfeiture of sugar under the Sugar Loan Program. The USDA is required to purchase sugar off the market and resell it for biofuel production if forfeiture appears imminent. The two alternative scenarios evaluated were: (1) exports from Mexico fill the entirety of its projected Export Limit throughout the projection period, as defined by the suspension agreements and (2) the terms of the suspension agreements are removed from the market as a result of an AD/CVD sunset investigation by the U.S. Department of Commerce and the U.S. International Trade Commission during the projection period.

Baseline Scenario

As stated, the baseline scenario represents the results and assumptions presented in the *USDA Agricultural Projection to 2025*. Total use steadily grows throughout the demand period, driven by deliveries for food and beverage use at a rate of 0.8 percent per year between 2016/17 and 2025/26, due to population growth. Ending stocks are set to equate to a 13.5 percent stocks-to-use ratio, which is the level indicated in the terms of the suspension agreements in determining the Export Limit for imports from Mexico.

Table 4 U.S. sugar long-run projections of	supply and	use: base sp	ecifications									
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
				1,	000 short to	ns, raw valu	е					
Beginning Stocks	1,810	1,767	1,855	1,695	1,710	1,724	1,739	1,753	1,768	1,782	1,795	1,809
Production	8,649	8,810	8,763	9,203	9,512	9,694	9,745	9,772	9,783	9,776	9,754	9,716
Beet Sugar	4,893	5,075	4,970	5,250	5,416	5,474	5,420	5,362	5,303	5,242	5,179	5,113
Cane Sugar	3,755	3,735	3,793	3,952	4,095	4,220	4,325	4,410	4,479	4,534	4,575	4,603
Total Imports	3,569	3,398	3,633	3,478	3,277	3,202	3,257	3,335	3,428	3,538	3,662	3,801
TRQ	1,534	1,528	1,498	1,502	1,506	1,510	1,513	1,517	1,606	1,729	1,874	2,015
Mexico	1,549	1,540	1,720	1,561	1,357	1,278	1,329	1,403	1,408	1,393	1,374	1,371
Other Imports	486	330	415	415	415	415	415	415	415	415	415	415
Total Supply	14,028	13,974	14,251	14,375	14,498	14,620	14,741	14,860	14,978	15,095	15,211	15,326
Exports	185	200	225	225	225	225	225	225	225	225	225	225
Total delveries	12,076	11,920	12,331	12,440	12,549	12,656	12,763	12,868	12,972	13,075	13,177	13,278
Deliveries for food and beverage	11,945	11,785	12,121	12,230	12,339	12,446	12,553	12,658	12,762	12,865	12,967	13,068
Other deliveries	131	135	210	210	210	210	210	210	210	210	210	210
Use	12,261	12,120.00	12,556	12,665	12,774	12,881	12,988	13,093	13,197	13,300	13,402	13,503
Ethanol	0	0	0	0	0	0	0	0	0	0	0	0
Ending stocks	1,767	1,855	1,695	1,710	1,724	1,739	1,753	1,768	1,782	1,795	1,809	1,823
Total ending stocks-to-use	14.41	15.30	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
				CE	nts per pou	nd						
World raw sugar price	17.22	17.53	15.23	16.17	16.98	19.14	21.97	20.67	19.05	19.44	19.86	20.28
U.S. raw sugar price - 3rd quarter	24.46	25.25	25.25	25.25	25.25	25.25	25.25	25.25	25.25	25.25	25.25	25.25
Refining margin	8.85	7.97	9.52	9.39	9.43	9.61	9.92	10.19	10.43	10.64	10.84	11.01
Refined beet sugar spot price - 3rd quarter	33.31	33.22	34.77	34.64	34.68	34.86	35.17	35.44	35.68	35.89	36.09	36.26
Sugarbeet price (Dollars/ton)	43.30	42.81	42.68	43.58	43.64	43.80	44.04	44.32	44.57	44.77	44.95	45.09
Sugarcane price (Dollars/ton)	33.36	34.07	34.44	34.48	34.52	34.55	34.56	34.56	34.56	34.56	34.56	34.56

Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

U.S. domestic sugar production is projected to increase from 2016/17 to the start of the end of the projection period, peaking, however, in 2022/23 before declining slightly. Cane sugar production is projected to steadily increase throughout the period, as harvested sugarcane area is projected to increase due to improved returns over the course of the period, combined with steadily increasing sugarcane yields and sugar recovery levels. Beet sugar production is projected to increase through 2019/20 before steadily declining for the remainder of the projection period, although remaining higher than the 2016/17 projection. This pattern follows projected sugarbeet harvested area projections, although projected yields and sugar content follow trend increases that offset some of the area declines in the latter portion of the projection.

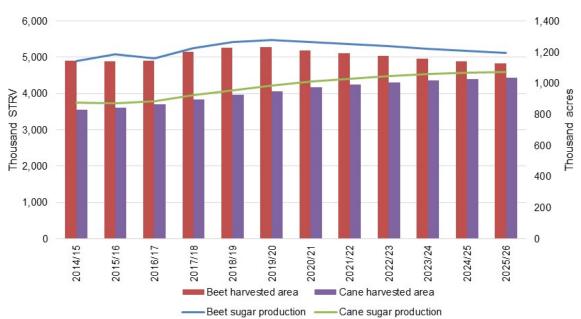


Figure 4: Projected U.S. sugar production and harvested area, 2014/15 to 2025/26

Source: U.S. Dept. of Agriculture, Sugar and Sweetener ICEC.

U.S. sugar imports are projected to steadily increase over the projection period as the growth in domestic deliveries will outpace domestic production. Imports from Mexico follow the terms laid out in the suspension agreements, with Mexico projected to fill the projected Export Limit until 2022/23, when available supplies for export constrain shipments. Imports under quota programs are initially projected to increase incrementally initially, following scheduled commitments from international agreements and constant projected shortfall in the WTO raw sugar TRQ. Imports under quotas increase more substantially beginning in 2022/23, as imports from Mexico decline, to meet U.S. domestic demand.

Sugar production projections for Mexico in the baseline scenario initially decline in the early portion of the projection period before steadily increasing from 2018/19 to the end of the period. Harvested area is projected to fall, as producer returns remain relatively lower than the high-price period that spurred expansion after 2008/09. Increasing production from steadily increasing yields, however, eventually surpasses the declines in area, resulting in increasing production trends. Imports are projected to remain a relatively small component of total sugar supplies.

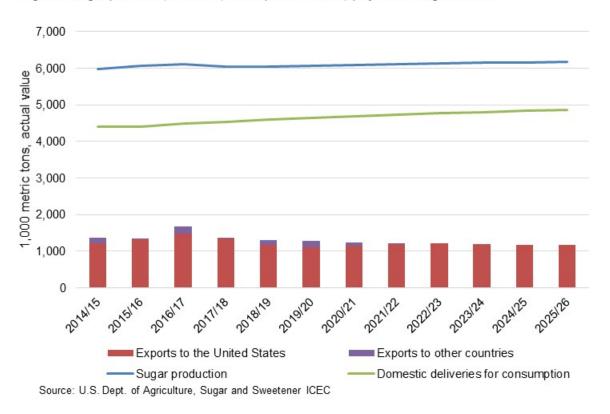
Table 5 -- Mexico sugar and high fructose corn syrup projections of supply and use: base specifications

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
				1	1,000 metric	tons, actu	al value					
Beginning Stocks	831	810	982	784	793	804	815	829	842	852	859	855
Area: hectares	739	756	754	740	737	736	734	732	731	729	728	727
Sugar Yield	7.64	7.55	7.65	7.70	7.74	7.78	7.83	7.87	7.92	7.96	7.98	8.03
Sugar Production	5,985	6,056	6,114	6,039	6,048	6,072	6,091	6,112	6,135	6,155	6,158	6,182
Imports	152	155	171	171	171	171	171	171	171	171	171	171
Supply	6,968	7,022	7,266	6,994	7,012	7,047	7,076	7,112	7,148	7,178	7,188	7,207
Disappearance	4,700	4,712	4,800	4,855	4,909	4,960	5,008	5,052	5,092	5,127	5,157	5,186
Consumption	4,408	4,388	4,476	4,532	4,585	4,636	4,684	4,728	4,768	4,803	4,833	4,862
Other Disappearance	291	324	324	324	324	324	324	324	324	324	324	324
Exports	1,370	1,335	1,682	1,346	1,298	1,272	1,240	1,218	1,205	1,193	1,176	1,173
To the United States	1,220	1,325	1,472	1,336	1,161	1,093	1,137	1,201	1,205	1,193	1,176	1,173
To other countries	150	10	210	10	137	178	102	17	0	0	0	0
Ending Stocks	897	975	784	793	804	815	829	842	852	859	855	848
Stocks-to-Consumption	20.36	22.21	17.51	17.50	17.54	17.58	17.70	17.82	17.87	17.88	17.69	17.44
High Fructose Corn Syrup	1,444	1,497	1,476	1,517	1,559	1,604	1,651	1,701	1,754	1,811	1,871	1,934
Producer ex-mill return (cents per pound)	24.19	20.68	22.00	22.24	22.12	22.15	22.24	22.25	22.25	22.25	22.25	22.25

Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

Domestic sugar deliveries for human consumption are projected to increase at a rate of 0.9 percent per year. Combined with growth in HFCS deliveries for human consumption, total sweetener consumption is projected to increase 1.5 percent per year from 2016/17 to 2025/26 as sweetener growth increases with projected population growth in Mexico. Projected exports are constrained by the terms of the suspension agreements with the United States, but are also constrained by the rate of domestic deliveries exceeding the rate of domestic production. As a result of available exportable supplies declining due to the growth in domestic demand, exports to the United States are less than the projected Export Limit in the latter few years of the projection period. Exports to other countries are relatively small throughout most of the projection period and eventually decline to zero to minimize the gap between the projected Export Limit with the United States and available exportable supplies. Ending stocks are projected to be large enough to maintain a stocks-to-consumption ratio of at least 17.4 percent.

Figure 5: Sugar production, deliveries, and exports in Mexico, projected through 2025/26.



Full Export Limit Scenario

Sugarcane price (Dollars/ton)

The first alternative scenario from the baseline scenario is one in which Mexico produces enough sugar to meet the full projected Export Limit. The total U.S. supply and use projections between this scenario and the baseline scenario are identical. The only change is the allocation of U.S. imports, as imports from Mexico are larger than the baseline scenario in the latter years of the projection period, reducing the need for additional imports under quota programs. Total imports in the baseline scenario and the full export limit scenario the same, however.

Table 6 -- U.S. sugar long-run projections of supply and use: alternative full Export Limit specifications 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 2022/23 2023/24 2024/25 2025/26 1.000 short tons, raw value 1,810 1,855 Beginning Stocks 1,767 1,695 1,710 1,724 1,739 1,753 1,768 1,782 1,795 1,809 Production 8,649 8,810 8,763 9,203 9,512 9,694 9,745 9,772 9,783 9,776 9,754 9,716 4,893 5,075 4,970 5,250 5,416 5,474 5,420 5,303 5,242 5,179 Beet Sugar 5,362 5,113 Cane Sugar 3.755 3.735 3.793 3.952 4.095 4.220 4.325 4.410 4.479 4.534 4.575 4.603 3.569 3.398 3.633 3.478 3.277 3.202 3.257 3.335 3.428 3.538 3.662 3.801 Total Imports TRQ 1.534 1.528 1.498 1.502 1.506 1.510 1.513 1.517 1.521 1.525 1.528 1.532 Mexico 1.549 1,540 1.720 1,561 1.357 1,278 1.329 1,403 1,493 1,598 1,719 1,854 Other Imports 486 330 415 415 415 415 415 415 415 415 415 415 Total Supply 14,028 13,974 14,251 14,375 14,498 14,620 14,741 14,860 14,978 15,095 15,211 15,326 Exports 185 185 225 225 225 225 225 225 225 225 225 225 12,068 Total delveries 11,920 12,331 12,440 12,549 12,656 12,763 12,868 12,972 13,075 13,177 13,278 Deliveries for food and beverage 11,937 11,785 12,121 12,230 12,339 12,446 12,553 12,658 12,762 12,865 12,967 13,068 Other deliveries 210 131 135 210 210 210 210 210 210 210 210 210 12,253 12.105 12.556 12.665 12.774 12.881 12.988 13.093 13.197 Use 13.300 13.402 13.503 Ethanol 0 0 0 0 0 0 0 0 0 0 0 0 1 775 1 869 1 695 1 710 1 739 1 753 1 768 1 782 1 795 1 809 1 823 Ending stocks 1 724 Total ending stocks-to-use 14.49 15.44 13.50 13.50 13.50 13.50 13.50 13.50 13.50 13.50 13.50 13.50 per pound World raw sugar price 17.22 17.53 15.23 16.17 16.98 19.14 21.97 20.67 19.05 19.44 19.86 20.28 25.25 25.25 25.25 25.25 25.25 25.25 25.25 25.25 25.25 U.S. raw sugar price - 3rd quarter 24.46 25.25 25.25 8.85 7.97 9.52 9.39 9.43 9.61 9.92 10.19 10.43 10.64 10.84 11.01 Refining margin 34.68 Refined beet sugar spot price - 3rd quarter 33.31 33.22 34.77 34.64 34.86 35.17 35.44 35.68 35.89 36.09 36.26 Sugarbeet price (Dollars/ton) 43.30 42.81 42.68 43.58 43.64 43.80 44.04 44.32 44.57 44.77 44.95 45.09

33.36 Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

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Projected sugar supply and use in Mexico over the projection period in the Full Export Limit scenario also deviates from the baseline scenario only in the latter portion of the projection period, where Mexico fully meets the volumes of the projected Export Limit. To achieve higher projected export volumes, additional production is projected. To stimulate the additional production, additional returns are introduced into the model. The additional returns represent the amount of added revenue needed for producers to fully supply projected Export Limits while keeping ending stock levels the same. The final year's producer returns are 22.49 cents per pound in the Full Export Limit scenario, compared with 22.25 cents per pound for the baseline scenario. The additional returns would be a non-sugar-market return, such as a producer subsidy.

Table 7 -- Mexico sugar and high fructose corn syrup projections of supply and use: alternative full Export Limit specifications

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
				1	1,000 metric	tons, actu	al value					
Beginning Stocks	831	810	982	784	793	804	815	829	842	852	859	855
Area: hectares	739	756	754	740	737	736	734	733	743	753	766	779
Sugar Yield	7.64	7.55	7.65	7.70	7.74	7.78	7.83	7.87	7.92	7.96	7.98	8.03
Sugar Production	5,985	6,056	6,114	6,039	6,049	6,073	6,092	6,117	6,232	6,357	6,482	6,626
Imports	152	155	171	171	171	171	171	171	171	171	171	171
Supply	6,968	7,022	7,266	6,994	7,013	7,048	7,078	7,117	7,245	7,380	7,512	7,651
Disappearance	4,700	4,712	4,800	4,855	4,909	4,960	5,008	5,052	5,092	5,127	5,157	5,186
Consumption	4,408	4,388	4,476	4,532	4,585	4,636	4,684	4,728	4,768	4,803	4,833	4,862
Other Disappearance	291	324	324	324	324	324	324	324	324	324	324	324
Exports	1,370	1,335	1,682	1,346	1,299	1,273	1,241	1,223	1,301	1,394	1,499	1,617
To the United States	1,220	1,325	1,489	1,346	1,178	1,111	1,157	1,223	1,301	1,394	1,499	1,617
To other countries	150	10	193	0	121	162	84	0	0	0	0	0
Ending Stocks	897	975	784	793	804	815	829	842	852	859	855	848
Stocks-to-Consumption	20.36	22.21	17.51	17.50	17.54	17.58	17.70	17.82	17.87	17.88	17.69	17.44
High Fructose Corn Syrup	1,444	1,497	1,476	1,517	1,559	1,604	1,651	1,701	1,754	1,811	1,871	1,934
Producer ex-mill return (cents per pound)	24.19	20.68	22.02	22.25	22.13	22.16	22.25	22.25	22.42	22.45	22.49	22.49

Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

Suspension Agreements Sunset Scenario

The second alternative scenario provides a projection if the suspension agreements were removed beginning in 2020/21 and the U.S.-Mexico sweetener sector returned to the free-trade conditions experienced from 2008/09 to 2013/14. The first year of the modeled free-trade market conditions corresponds to the first year after a potential 5-year sunset review by the U.S. Department of Commerce and the U.S. International Trade Commission of the AD/CVD case.

The results of this modeling scenario deviate from the baseline scenario only after the 2020/21, where the implementation of the potential sunset review finding is introduced to the model. At this point, trade flows are no longer constrained by suspension agreement terms, but rather by relationships between the U.S. and Mexico market returns and world raw sugar prices.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
				1,	000 short to	ns, raw valu	е					
Beginning Stocks	1,810	1,767	1,855	1,695	1,710	1,724	1,739	2,094	2,104	2,104	2,109	2,077
Production	8,649	8,810	8,763	9,203	9,512	9,694	9,745	9,766	9,761	9,744	9,714	9,681
Beet Sugar	4,893	5,075	4,970	5,250	5,416	5,474	5,420	5,358	5,289	5,225	5,161	5,101
Cane Sugar	3,755	3,735	3,793	3,952	4,095	4,220	4,325	4,408	4,472	4,519	4,553	4,580
Total Imports	3,569	3,398	3,633	3,478	3,277	3,202	3,597	3,337	3,435	3,561	3,656	3,760
TRQ	1,534	1,528	1,498	1,502	1,506	1,510	1,513	1,517	1,521	1,525	1,528	1,532
Mexico	1,549	1,540	1,720	1,561	1,357	1,278	1,669	1,405	1,500	1,621	1,713	1,814
Other Imports	486	330	415	415	415	415	415	415	415	415	415	415
Total Supply	14,028	13,974	14,251	14,375	14,498	14,620	15,081	15,197	15,301	15,409	15,479	15,519
Exports	185	185	225	225	225	225	225	225	225	225	225	225
Total delveries	12,068	11,920	12,331	12,440	12,549	12,656	12,763	12,868	12,972	13,075	13,177	13,278
Deliveries for food and beverage	11,937	11,785	12,121	12,230	12,339	12,446	12,553	12,658	12,762	12,865	12,967	13,068
Other deliveries	131	135	210	210	210	210	210	210	210	210	210	210
Jse	12,253	12,105	12,556	12,665	12,774	12,881	12,988	13,093	13,197	13,300	13,402	13,503
Ethanol	0	0	0	0	0	0	0	0	0	0	0	0
Ending stocks	1,775	1,869	1,695	1,710	1,724	1,739	2,094	2,104	2,104	2,109	2,077	2,016
Total ending stocks-to-use	14.49	15.44	13.50	13.50	13.50	13.50	16.12	16.07	15.94	15.86	15.50	14.93
				CE	ents per pou	nd						
World raw sugar price	17.22	17.53	15.23	16.17	16.98	19.14	21.97	20.67	19.05	19.44	19.86	20.28
J.S. raw sugar price - 3rd quarter	24.46	25.25	25.25	25.25	25.25	25.25	24.97	24.71	24.48	24.73	25.44	26.53
Refining margin	8.85	7.97	9.52	9.39	9.43	9.61	8.49	8.69	8.92	9.25	9.88	10.78
Refined beet sugar spot price - 3rd quarter	33.31	33.22	34.77	34.64	34.68	34.86	33.46	33.40	33.40	33.98	35.31	37.30
Sugarbeet price (Dollars/ton)	43.30	42.81	42.68	43.58	43.64	43.80	43.70	43.04	43.07	43.23	43.82	44.90
Sugarcane price (Dollars/ton)	33.36	34.07	34.44	34.48	34.52	34.55	34.40	34.14	33.92	33.97	34.47	35.36

Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

Projected ending stocks in the United States are higher in this alternative scenario compared with the baseline, as additional imports from Mexico lead to additional supplies. This is partially offset by lower imports from quota programs compared with the baseline. Likewise, the stocks-to-use ratio deviates from the 13.5-percent baseline level, ranging from 14.9 to 16.1 percent based on relative prices between world and U.S. sugar markets.

Projected production in Mexico under this scenario is larger than in the baseline, as producers' market returns are larger, which would spur a steady increase in area over the projection period. Exports are also larger than in the baseline scenario, as ending stocks are projected to be reduced substantially in order to supply the U.S. market. The result would be Mexican stocks-to-consumption ratios that ranged from 10.7 to 13.9 percent, which is substantially lower than historical levels.

Table 9 Mexico sugar and high fructose corn syrup projections of supply and use: alternative suspension agreement sunset specifications													
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	
	1,000 metric tons, actual value												
Beginning Stocks	831	810	982	784	793	804	815	607	636	660	646	593	
Area: hectares	739	756	754	740	737	736	734	732	742	750	756	763	
Sugar Yield	7.64	7.55	7.65	7.70	7.74	7.78	7.83	7.87	7.92	7.96	7.98	8.03	
Sugar Production	5,985	6,056	6,114	6,039	6,048	6,072	6,091	6,112	6,229	6,330	6,399	6,495	
Imports	152	155	171	171	171	171	171	171	171	171	171	171	
Supply	6,968	7,022	7,266	6,994	7,012	7,047	7,076	6,890	7,036	7,161	7,216	7,259	
Disappearance	4,700	4,712	4,800	4,855	4,909	4,960	5,008	5,052	5,092	5,127	5,157	5,186	
Consumption	4,408	4,388	4,476	4,532	4,585	4,636	4,684	4,728	4,768	4,803	4,833	4,862	
Other Disappearance	291	324	324	324	324	324	324	324	324	324	324	324	
Exports	1,370	1,335	1,682	1,346	1,298	1,272	1,462	1,203	1,284	1,388	1,466	1,552	
To the United States	1,220	1,325	1,472	1,336	1,161	1,093	1,429	1,203	1,284	1,388	1,466	1,552	
To other countries	150	10	210	10	137	178	33	0	0	0	0	0	
Ending Stocks	897	975	784	793	804	815	607	636	660	646	593	521	
Stocks-to-Consumption	20.36	22.21	17.51	17.50	17.54	17.58	12.96	13.45	13.85	13.46	12.27	10.71	
High Fructose Corn Syrup	1,444	1,497	1,476	1,517	1,559	1,604	1,651	1,701	1,754	1,811	1,871	1,934	
Producer ex-mill return (cents per pound)	24.19	20.68	22.00	22.24	22.12	22.15	24.63	24.40	24.16	24.40	25.11	26.21	

Source: U.S. Department of Agriculture, Sugar and Sweetener Interagency Commodity Estimate Committee.

Comparison of Scenario Results

After conducting these alternative scenarios to evaluate the potential for a market scenario that could result in forfeitures under the Sugar Loan Program, and hence, program outlays, the findings show that there are no program costs under any of the scenarios. Overall, the three model scenarios do not result in large differences in import levels. Looking at the terminal projection year in 2025/26, total imports for the baseline and the full Export Limit scenarios are identical. The only difference is in the allocation of imports between tariff-quota programs and

Mexico. Total imports in the suspension agreement sunset scenario are actually slightly lower than the other two scenarios, as imports from Mexico are projected to be slightly less. This scenario does include a spike in imports from Mexico in 2020/21, which is the year suspension agreement terms are removed from the projection, but otherwise import levels are similar to the other projection scenarios.

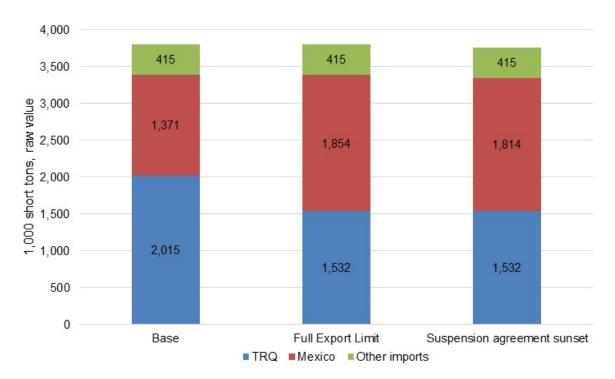


Figure 6: U.S. composition of imports, 2025/26, base and alternative scenarios

Source: U.S. Dept. of Agriculture, Sugar and Sweetener ICEC.

Similarly, price levels for the baseline and full Export Limit scenarios are identical, as total supply and use projections are the same in each scenario, as is the projected stocks-to-use ratio that is a key variable in projecting price. If the suspension agreements were removed from the market, then prices would initially fall to a lower level before increasing in the last few years of the period. The declines are not large enough, however, to reach the current national loan rate of 24.09 cents per pound for refined beet sugar, making the likelihood of forfeiture under the scenario relatively small.

Full Export Limit

Suspension agreement sunset

Figure 7: Projected U.S. refined beet sugar price, base and alternative scenarios

Source: U.S. Dept. of Agriculture, Sugar and Sweetener ICEC.

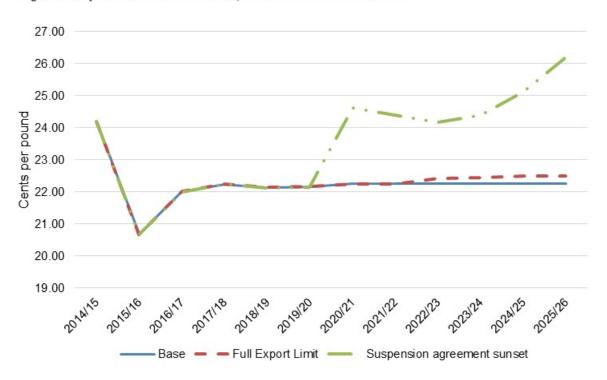
The scenarios produce three distinct market conditions for Mexican sugar production. Comparing the final years of each projection scenario, Mexican production in both the alternative scenarios is larger than the baseline scenario. Likewise, harvested area is larger in each alternative scenario, as trend yields are kept in each scenario. Production is largest in the full Export Limit scenario, as is harvested area. Production under the sunset scenario is slightly lower than the full Export Limit. Producer returns are larger than in the full Export Limit. Returns are larger throughout the projection period, but the differences are largest in the final few years of the projection period due to higher modeled world sugar prices, which do not impact projections under each of the scenarios where the terms of the suspension agreements are in place. It should be noted, however, that this scenario with higher production and higher returns is achieved by ending stocks running at lower levels, unprecedented for the Mexican sugar market.

Table 10: Mexico sugar production, area harvested, and producer returns, 2025/26

			Suspension
		Full Export	agreements
	Baseline	Limit	sunset
Sugar production (1,000 MT)	6,182	6,626	6,495
Harvested area (1,000 hectares)	727	779	763
Producer returns (U.S. cents per pound)	22.25	22.49	26.21

Source: U.S. Department of Agrculture, Sugar and Sweetener ICEC.

Figure 8: Projected mill returns in Mexico, base and alternative scenarios



Source: U.S. Dept. of Agriculture, Sugar and Sweetener ICEC.

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