



# Sugar and Sweeteners Outlook

*Outlook*

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## Projected Ending Stocks Reduced for 2018/19 due to Lowered Supplies

The March *World Agricultural Supply and Demand Estimates* (WASDE) project U.S. sugar ending stocks for 2018/19 at 1.668 million short tons, raw value (STRV), a 128,000-STRV reduction from the previous month. Domestic production projections are raised 86,000 STRV, as more beet sugar production is slightly offset by lower cane sugar production. Projected imports are 214,000 STRV lower than the February report, primarily due to fewer imports from Mexico. No changes are made to total use for 2018/19.

Mexico's sugarcane harvest is in full swing, with projected production raised 127,000 metric tons, actual value (MT) from the previous report. Domestic deliveries are raised 201,000 MT based on the pace of domestic deliveries for human consumption reported through January. The increase in domestic deliveries is partially offset by a 164,000-STRV reduction in exports, primarily due to the lower expected shipments to the United States.

# U.S. Domestic Outlook

## Favorable Sugarbeet Storage Conditions Raise Beet Sugar Production

Total U.S. sugar supplies for 2018/19 are projected to be 13.973 million short tons, raw value (STRV) in the March 2019 *World Agricultural Supply and Demand Estimates* (WASDE). This is a 128,000-STRV reduction from the February report, with lower imports more than offsetting higher domestic production.

**Table 1: U.S. sugar: supply and use, by fiscal year (Oct./Sept.), March 2019**

| Items   | 2017/18                     |            |            | 2018/19                      |            |            |
|---|-----------------------------|------------|------------|------------------------------|------------|------------|
|   | 2016/17                     | (estimate) | (forecast) | 2016/17                      | (estimate) | (forecast) |
|   | 1,000 Short tons, raw value |            |            | 1,000 Metric tons, raw value |            |            |
| Beginning stocks  | 2,054                       | 1,876      | 2,008      | 1,863                        | 1,702      | 1,822      |
| Total production  | 8,969                       | 9,293      | 9,103      | 8,137                        | 8,430      | 8,258      |
| Beet sugar  | 5,103                       | 5,279      | 5,004      | 4,629                        | 4,789      | 4,540      |
| Cane sugar  | 3,866                       | 4,014      | 4,099      | 3,507                        | 3,641      | 3,718      |
| Florida   | 2,055                       | 1,983      | 2,078      | 1,864                        | 1,799      | 1,885      |
| Louisiana   | 1,628                       | 1,862      | 1,875      | 1,477                        | 1,689      | 1,701      |
| Texas   | 140                         | 169        | 145        | 127                          | 153        | 132        |
| Hawaii  | 43                          | 0          | 0          | 39                           | 0          | 0          |
| Total imports   | 3,244                       | 3,277      | 2,862      | 2,943                        | 2,973      | 2,596      |
| Tariff-rate quota imports   | 1,611                       | 1,663      | 1,560      | 1,462                        | 1,509      | 1,415      |
| Other program imports   | 419                         | 326        | 350        | 380                          | 296        | 318        |
| Non-program imports   | 1,213                       | 1,287      | 952        | 1,101                        | 1,168      | 863        |
| Mexico  | 1,201                       | 1,223      | 897        | 1,090                        | 1,110      | 813        |
| Total supply  | 14,267                      | 14,445     | 13,973     | 12,943                       | 13,105     | 12,676     |
| Total exports   | 95                          | 170        | 35         | 86                           | 154        | 32         |
| Miscellaneous   | 38                          | 82         | 0          | 35                           | 75         | 0          |
| Deliveries for domestic use   | 12,258                      | 12,185     | 12,270     | 11,121                       | 11,054     | 11,131     |
| Transfer to sugar-containing products for exports under re-export program | 127                         | 110        | 120        | 115                          | 100        | 109        |
| Transfer to polyhydric alcohol, feed, other alcohol                       | 29                          | 28         | 25         | 27                           | 25         | 23         |
| Commodity Credit Corporation (CCC) sale for ethanol, other                | 0                           | 0          | 0          | 0                            | 0          | 0          |
| Deliveries for domestic food and beverage use                             | 12,102                      | 12,048     | 12,125     | 10,979                       | 10,930     | 11,000     |
| Total use   | 12,391                      | 12,438     | 12,305     | 11,241                       | 11,283     | 11,163     |
| Ending stocks   | 1,876                       | 2,008      | 1,668      | 1,702                        | 1,822      | 1,513      |
| Private   | 1,876                       | 2,008      | 1,668      | 1,702                        | 1,822      | 1,513      |
| Commodity Credit Corporation (CCC)  | 0                           | 0          | 0          | 0                            | 0          | 0          |
| Stocks-to-use ratio   | 15.14                       | 16.14      | 13.55      | 15.14                        | 16.14      | 13.55      |

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

Beet sugar production is raised 104,000 STRV from the previous month, totaling 5.004 million STRV. The increase is primarily due to a lower shrink rate forecast for this year's crop. Cold temperatures, particularly in the Northern Midwest growing regions, have facilitated good storage conditions for this year's crop. While many processors have reported some challenges warming up the sugarbeets to ideal temperatures for slicing—and have used various operational

techniques to deal with colder, more frozen sugarbeets—these challenges have been broadly described as physical challenges rather than chemical ones that would hamper sucrose extraction.

**Table 2: Beet sugar production projection calculation,2018/19**

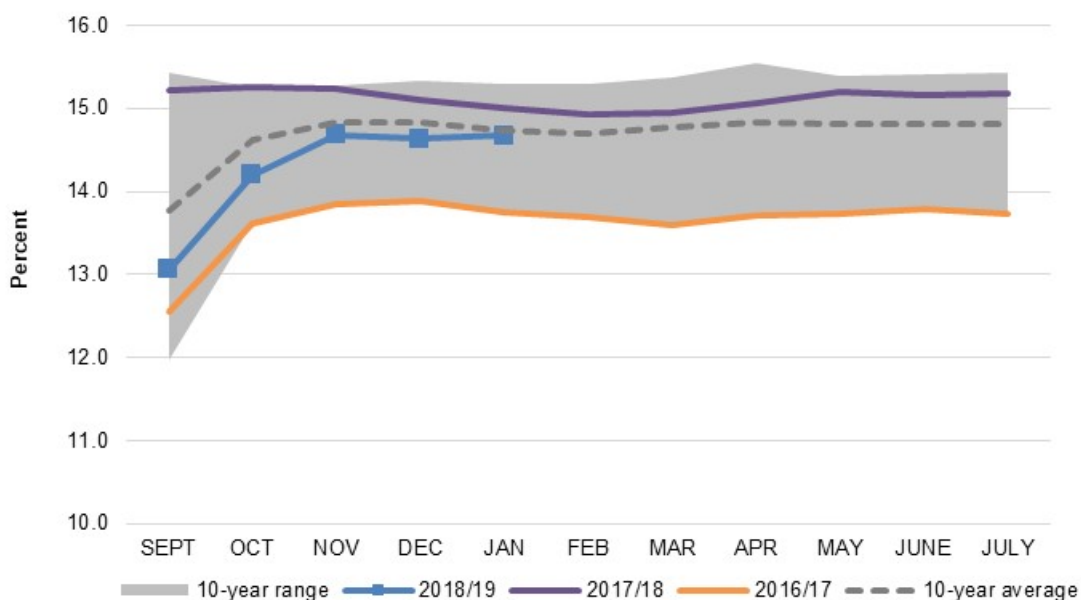
|   | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19<br>February | 2018/19<br>March |
|---|---------|---------|---------|---------|---------|---------|---------------------|------------------|
| Sugarbeet production (1,000 short tons) 1/              | 35,224  | 32,789  | 31,285  | 35,371  | 36,881  | 35,325  | 33,145              | 33,145           |
| Sugarbeet shrink 2/                                     | 4.8%    | 6.8%    | 5.4%    | 6.5%    | 8.3%    | 7.3%    | 6.9%                | 5.0%             |
| Sugarbeet sliced (1,000 short tons)                     | 33,532  | 30,545  | 29,595  | 33,066  | 33,834  | 32,742  | 30,858              | 31,488           |
| Sugar extraction rate from slice                        | 15.3%   | 14.3%   | 14.6%   | 14.6%   | 13.7%   | 15.2%   | 14.7%               | 14.7%            |
| Sugar from beets slice (1,000 STRV)                     | 5,142   | 4,325   | 4,325   | 4,820   | 4,643   | 4,970   | 4,522               | 4,626            |
| Sugar from molasses (1,000 STRV) 2/                     | 327     | 324     | 341     | 380     | 352     | 368     | 368                 | 368              |
| Crop-year sugar production (1,000 STRV) 3/              | 5,469   | 4,648   | 4,667   | 5,201   | 4,995   | 5,338   | 4,890               | 4,994            |
| August-September sugar production (1,000 STRV)          | 708     | 315     | 461     | 688     | 606     | 715     | 655                 | 655              |
| August-September sugar production forecast (1,000 STRV) | 315     | 461     | 688     | 606     | 715     | 655     | 625                 | 625              |
| Sugar from imported beets (1,000 STRV) 4/               | --      | --      | --      | --      | --      | --      | 40                  | 40               |
| Fiscal year sugar production (1,000 STRV)               | 5,076   | 4,794   | 4,893   | 5,119   | 5,103   | 5,279   | 4,900               | 5,004            |

Notes: 1/ National Agricultural Statistics Service, U.S. Dept. of Agriculture. 2/Projections based on processor forecasts published by U.S. Dept. of Agriculture, Farm Service Agency. 3/ August-July basis. 4/ Sugar from imported beets split out for projections only, included in total once full crop-year slice is recorded. They are incorporated into total production in historical data.

Source: U.S. Dept. of Agriculture, Economic Research Service and World Agricultural Outlook Board.

This season's national sucrose extraction rate of sliced beets continues to be on target to achieve its long-term average. The latest processing data from the Farm Service Agency's (FSA) *Sweetener Market Data* (SMD) through January shows a 14.67 percent cumulative sucrose extraction rate from sugarbeets sliced since the beginning of the crop year in August. While some variation can exist between January and the end of the season, it is usually fairly stable once the January rate is established. Given the relatively smaller sugarbeet crop this year compared with the previous 3 years, processors are expecting to wrap up their slicing activities sooner than in recent years, when slicing continued well into the spring and early summer.

Figure 1  
**Cumulative sugar extraction rate, beet sugar produced per sugarbeet sliced, by crop year**

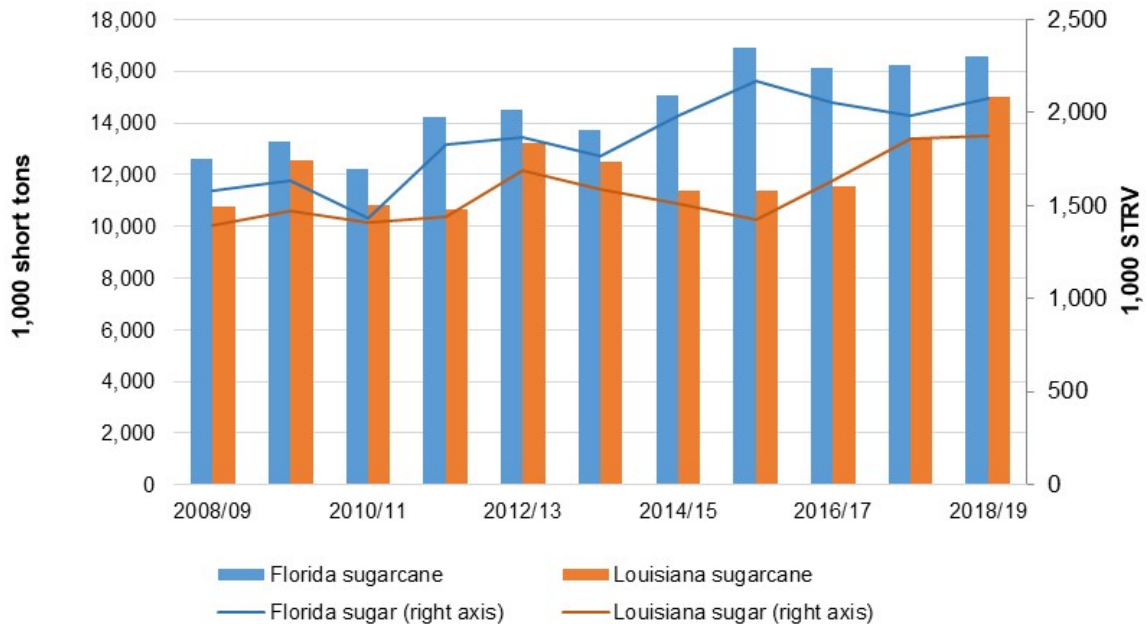


Source: U.S. Dept. of Agriculture, Economic Research Service and Farm Service Agency.

Cane sugar production is reduced 18,000 STRV from the February report, totaling 4.099 million STRV. Louisiana cane sugar production remains unchanged at 1.875 million STRV, as the harvest campaign concluded in January and expected September 2019 production is in line with the previous year. Florida production is reduced 13,000 STRV to 2.078 based on the latest forecasts provided by processors in the State. Despite the small decrease this month, processors report good weather conditions for this year's crop, with relatively warm temperatures throughout the winter; although a few rain events slowed the pace of the harvest and slightly reduced yields in some areas. Texas production is reduced 5,000 STRV to 145,000 STRV, also based on the latest forecasts from the region's processor.

The USDA's National Agricultural Statistics Service (NASS) published updated sugarcane production figures for 2018/19. According to NASS, 859,000 acres of sugarcane are forecast to be harvested for sugar production in the United States for 2018/19, down slightly from the previous month's forecast of 860,600 acres. National yield forecasts are increased from 38.1 short tons per acre in February to 38.3 in March, raising sugarcane production compared with the previous month's forecast. In Florida, some rainy conditions have impacted certain growers, reflected by the NASS reduction of yields. Louisiana sugarcane production for sugar is currently forecast to be 9.9 percent larger than the 2017/18 record production total, due to both higher acres and increased yields.

Figure 2  
**Sugarcane and sugar production, Florida and Louisiana, 2007/08 to 2018/19**

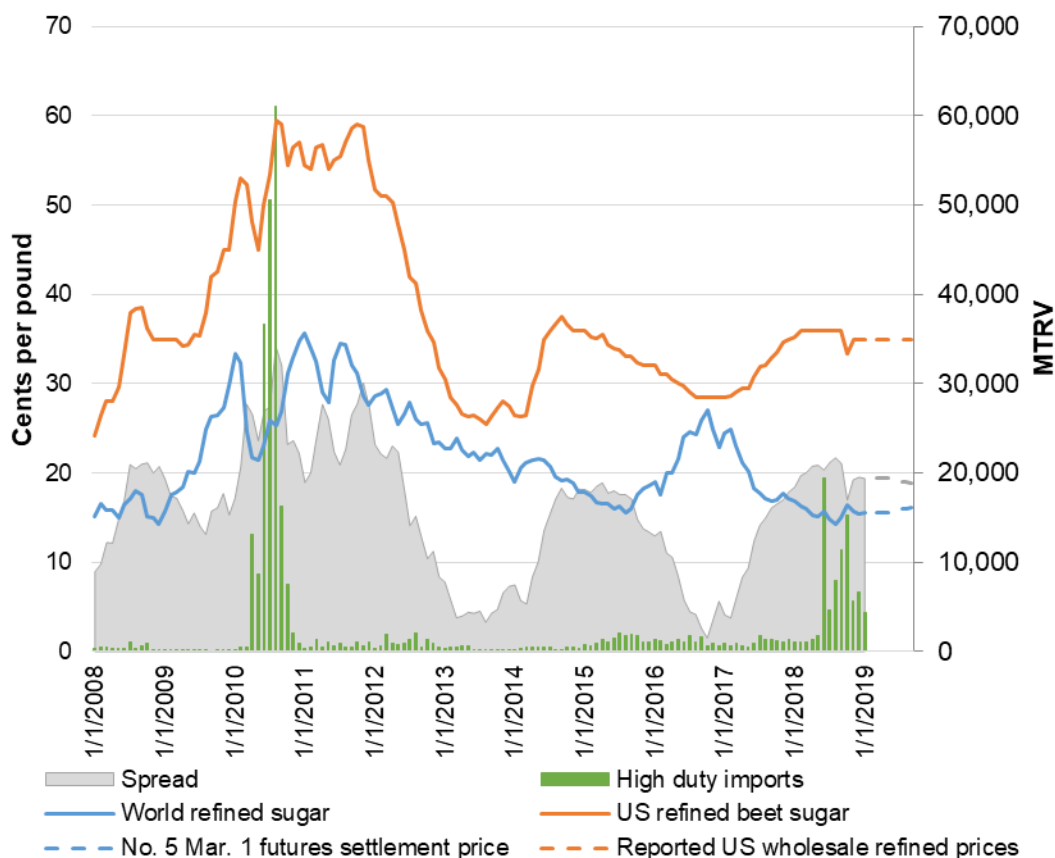


Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

## Projected Imports Lowered Due to Terms of the Suspension Agreement

U.S. sugar imports are projected to be 2.862 million STRV, a 214,000-STRV reduction from the previous month's forecast. The change is mostly due to lower imports expected from Mexico, given the updated parameters that determine Export Limit published by the U.S. Department of Commerce (USDOC). No changes are made to imports under quota programs, as the WTO raw sugar quota's shortfall is expected to remain at 99,000 STRV. Imports of high-duty rates are increased 10,000 STRV to 55,000 STRV. The increase is based on the pace to date. Through February, the Foreign Agricultural Service reports more than 35,000 STRV having entered at a high-duty rate. While the pace has not matched the high volumes in October—which were carried over from strong flows at the end of 2017/18—the volumes have remained well above the levels that typically entered on a monthly basis in previous years. The increase in projected imports reflects the continuation of the higher import level.

Figure 3  
 U.S. and World refined sugar prices, monthly, January 2008 to September 2019



Source: U.S. Department of Agriculture, Economic Research Service.

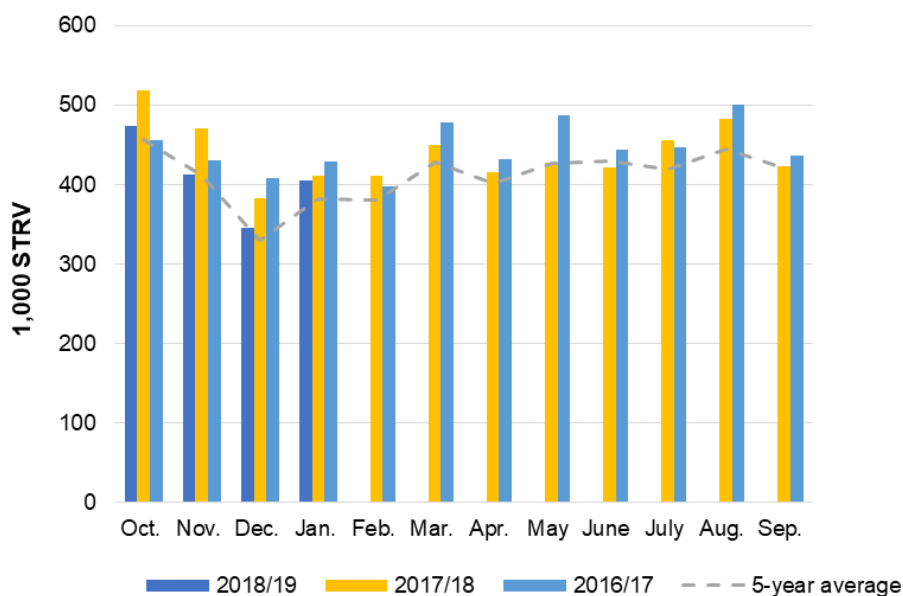
Imports from Mexico are projected to be 897,000 STRV, a 224,000-STRV reduction. The reduction reflects the difference between the calculation of U.S. Needs from the December 2018 WASDE and the Export Limit calculation from the March 2019 WASDE—as well as an additional 2,000 STRV of imports that entered in early October under licenses from the 2017/18 Export Limit Period. Based on the March WASDE, U.S. Needs would be 890,000 STRV (based on 100 percent of the U.S. Needs calculation). However, the Export Limit published by the USDOC in December was 895,000 STV (based on 80 percent of the calculated U.S. Needs). The terms of the Suspension Agreements dictate that the Export Limit cannot be lowered from one period to the next. This results in the current projection carrying over the Export Limit amount set in December, as well as the small amount entered in October.

## Total Use Unchanged From Previous Month, Slight Increase Expected From 2017/18

Domestic deliveries for 2018/19 remain unchanged from the previous month, totaling 12.125 million STRV. This represents a 0.6-percent increase from 2017/18 totals. According to data through January from the SMD, total food and beverage deliveries in the United States are a slight 0.4-percent behind the pace set at the same time in 2017/18.

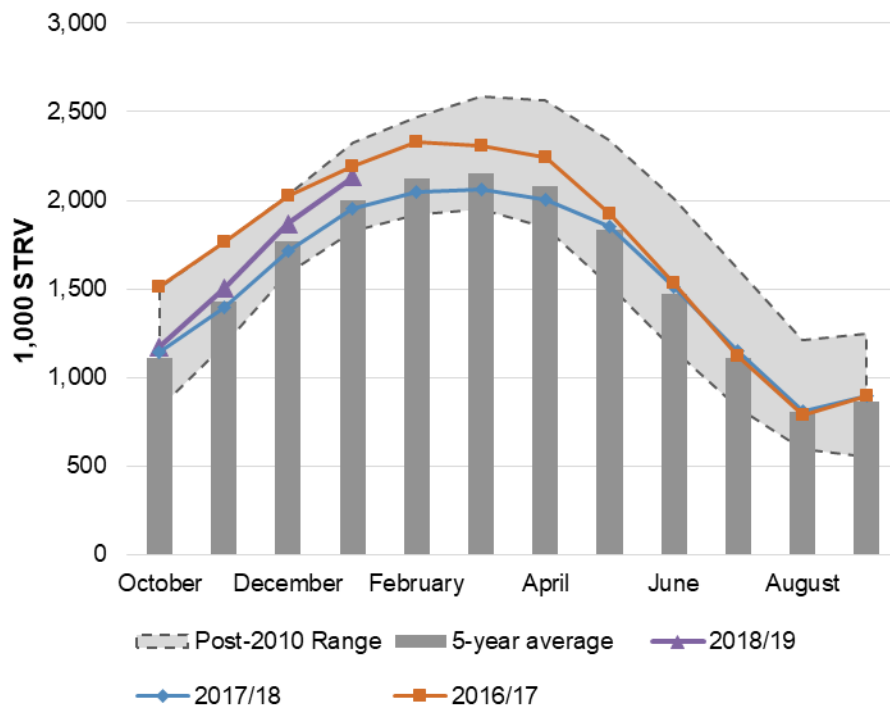
Deliveries from beet processors are 8.2 percent behind the same pace from 2017/18. Beet processor deliveries during the October-December quarter of 2017/18 remained large by historical standards, but were 10.2 percent lower than the record-setting mark of 2017/18. Seasonally, beet deliveries usually begin to pick up again during March. Beet processors' refined sugar inventory levels show volumes above the typical year, although the inventories do not appear burdensome through January.

Figure 4  
Beet sugar deliveries, monthly, 2016/17 through 2018/19



Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 5  
**Sugarbeet processors' total sugar inventories, monthly, 2016/17 to 2018/19**

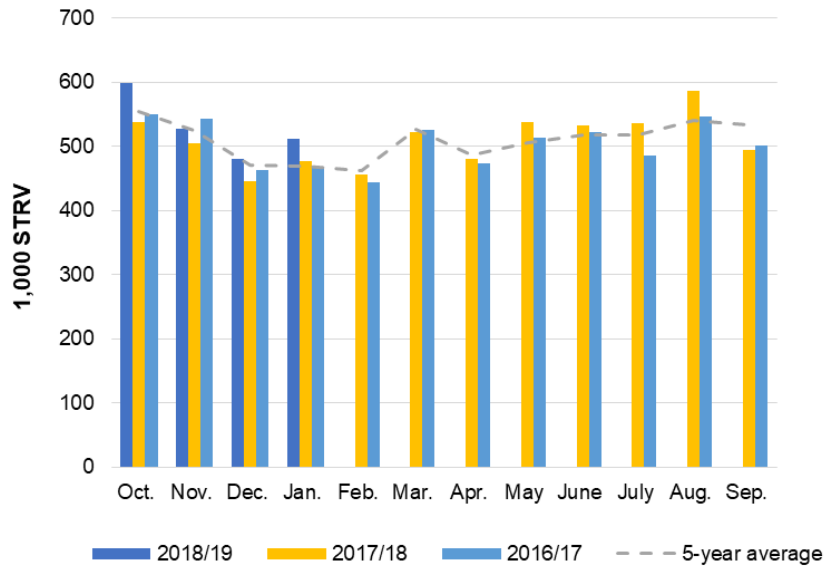


Source: U.S. Department of Agriculture, Farm Service Agency.

Deliveries by cane refiners are 7.7-percent larger through January than the previous year. In contrast to the beet sector, cane refiners have showed continued improvement from the sluggish pace seen in the previous 2 years. Melt rates, implied by data reported to the SMD by the industry, have been strong thus far in the year by historical standards. After several years of the sector's dealing with relatively tight raw sugar supplies, strong domestic production the past 2 years, complemented by imports, has brought raw sugar stocks levels to a relatively higher level. Most of the raw sugar stocks at the end of January were held by processors, which isn't usual for this time of year, but are relatively large due to the two-consecutive record production years from Louisiana. Refiners' raw inventories are close to historical averages—not nearly as low as they were in 2016/17.

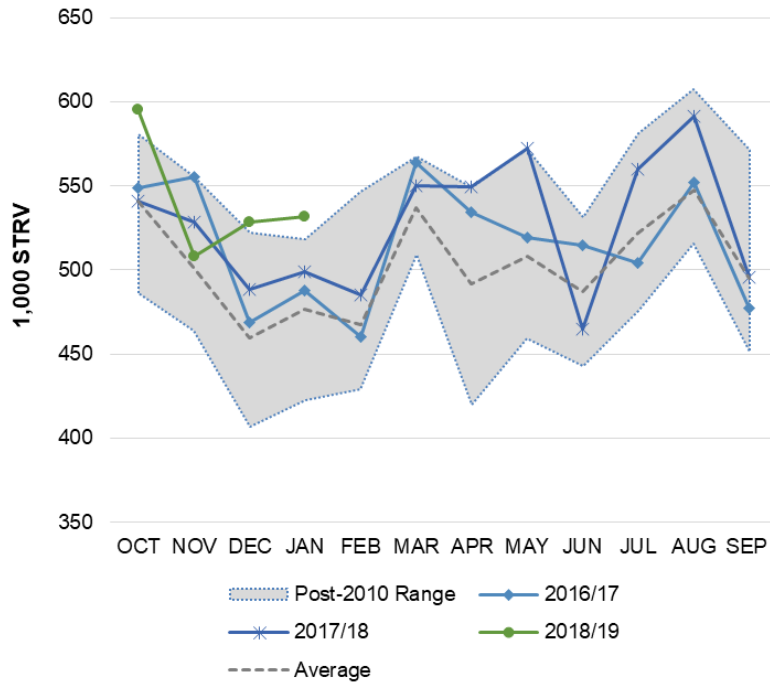


Figure 6  
Cane sugar deliveries, monthly, 2015/16 through 2018/19



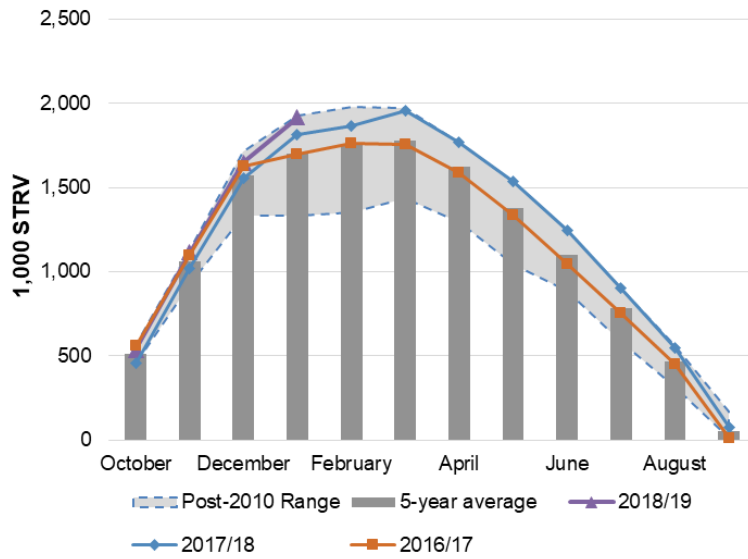
Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 7  
Sugarcane refiners melt, monthly, 2016/17 to 2018/19



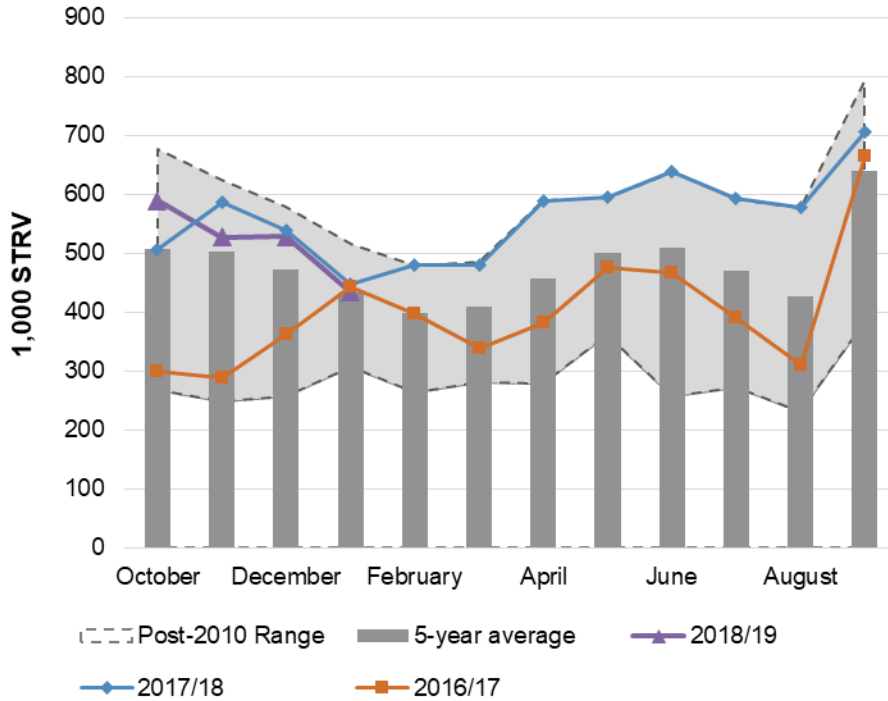
Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 7  
Sugarcane processors inventories, monthly, 2016/17 to 2018/19



Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 8  
Sugarcane refiners raw sugar inventories, monthly, 2016/17 to 2018/19



Source: U.S. Department of Agriculture, Farm Service Agency.

## Lower Supplies Result in Lower Ending Stocks for 2018/19

Ending stocks for 2018/19 are projected to be 1.668 million STRV. The 128,000-STRV reduction from the previous month is due to the reduction in projected total supplies, along with no changes in use. The resulting stocks-to-use is projected to be 13.6 percent, which would be a substantial reduction from the 2017/18 estimate of 16.1 percent, if realized.

# Mexico Outlook

## Delivery Pace for Sugar and HFCS In Line with Longer-Term Trends Through January

Mexico's 2018/19 sugarcane harvest campaign has progressed at a steady rate into the peak of the season. Total supplies for 2018/19 are projected to be 7.617 million metric tons, actual value (MT). Projected total use is also increased from the previous month, but only by 38,000 MT, resulting in lower ending stocks expected for the year.

**Table 3: Mexico sugar supply and use, 2016/17 - 2017/18 and projected 2018/19, March 2019**

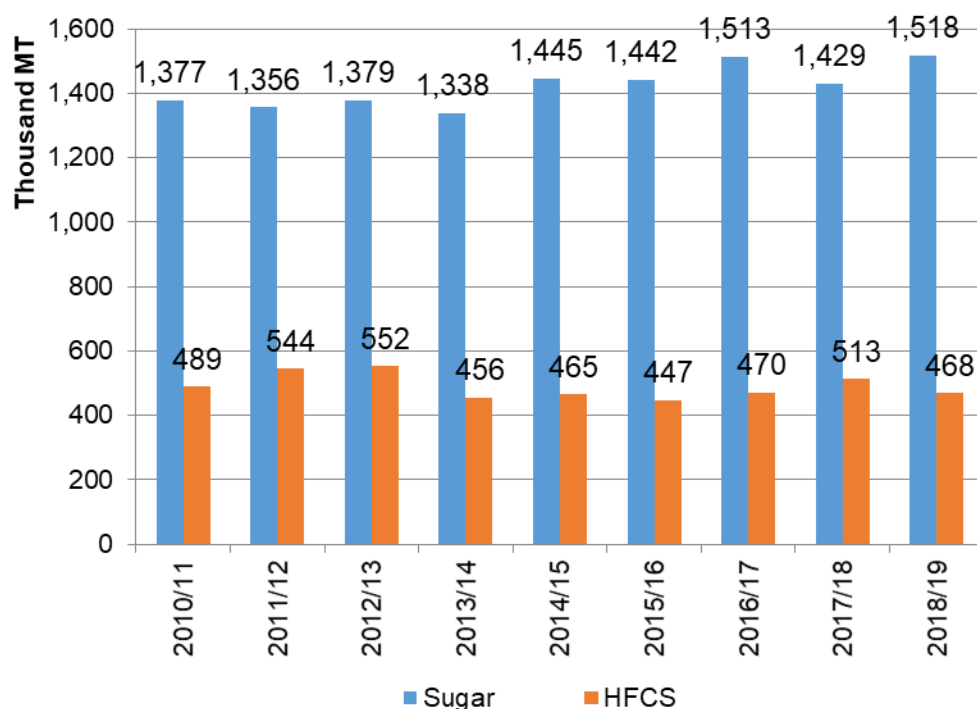
| Items   | 2016/17                          | 2017/18 (estimate) | 2018/19 (forecast) |
|---|----------------------------------|--------------------|--------------------|
|   | 1,000 metric tons, actual weight |                    |                    |
| Beginning stocks  | 1,037                            | 1,002              | 1,395              |
| Production  | 5,957                            | 6,010              | 6,152              |
| Imports   | 93                               | 220                | 70                 |
| Imports for consumption                                       | 48                               | 132                | 20                 |
| Imports for sugar-containing product exports, IMMEX 1/, other | 45                               | 88                 | 50                 |
| Total supply  | 7,087                            | 7,232              | 7,617              |
| Disappearance   |                                  |                    |                    |
| Human consumption   | 4,515                            | 4,228              | 4,615              |
| For sugar-containing product exports (IMMEX)                  | 397                              | 482                | 480                |
| Other deliveries and end-of-year statistical adjustment       | -61                              | 29                 | 0                  |
| Total   | 4,851                            | 4,739              | 5,095              |
| Exports   | 1,234                            | 1,099              | 1,102              |
| Exports to the United States & Puerto Rico                    | 1,028                            | 1,047              | 767                |
| Exports to other countries                                    | 205                              | 52                 | 335                |
| Total use   | 6,085                            | 5,838              | 6,197              |
| Ending stocks   | 1,002                            | 1,395              | 1,420              |
|   | 1,000 metric tons, raw value     |                    |                    |
| Beginning stocks  | 1,099                            | 1,062              | 1,478              |
| Production  | 6,315                            | 6,370              | 6,522              |
| Imports   | 98                               | 234                | 74                 |
| Imports for consumption                                       | 51                               | 140                | 21                 |
| Imports for sugar-containing product exports (IMMEX)          | 47                               | 93                 | 53                 |
| Total supply  | 7,512                            | 7,666              | 8,074              |
| Disappearance   |                                  |                    |                    |
| Human consumption   | 4,786                            | 4,482              | 4,892              |
| For sugar-containing product exports (IMMEX)                  | 420                              | 510                | 509                |
| Other deliveries and end-of-year statistical adjustment       | -64                              | 31                 | 0                  |
| Total   | 5,142                            | 5,023              | 5,400              |
| Exports   | 1,308                            | 1,165              | 1,168              |
| Exports to the United States & Puerto Rico                    | 1,090                            | 1,110              | 813                |
| Exports to other countries                                    | 218                              | 55                 | 355                |
| Total use   | 6,450                            | 6,188              | 6,569              |
| Ending stocks   | 1,062                            | 1,478              | 1,505              |
| Stocks-to-human consumption (percent)                         | 22.2                             | 33.0               | 30.8               |
| Stocks-to-use (percent)                                       | 16.5                             | 23.9               | 22.9               |
| High fructose corn syrup (HFCS) consumption (dry weight)      | 1,522                            | 1,593              | 1,555              |

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

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

Domestic deliveries for human consumption are projected to be 4.615 million MT, a 201,000-million MT increase. Through January, Conadesuca reports sugar deliveries 6.2 percent higher than the previous year. The previous year was marked by a slow pace of domestic shipments from the beginning of the year, likely due in part to high sugar prices. The current 2018/19 delivery pace for both sugar and high-fructose corn syrup (HFCS) appear to be in line with the volumes seen in 2016/17, however, suggesting that 2017/18 was an outlier from historical trends. As a result, estimates of raised deliveries in 2018/19 are based on per capita sweetener deliveries returning to levels consistent with 2 years ago. Likewise, deliveries of HFCS are reduced 53,000 MT to 1.555 million MT.

Figure 9  
**Mexican sweetener consumption October to January, 2010/11 to 2018/19**



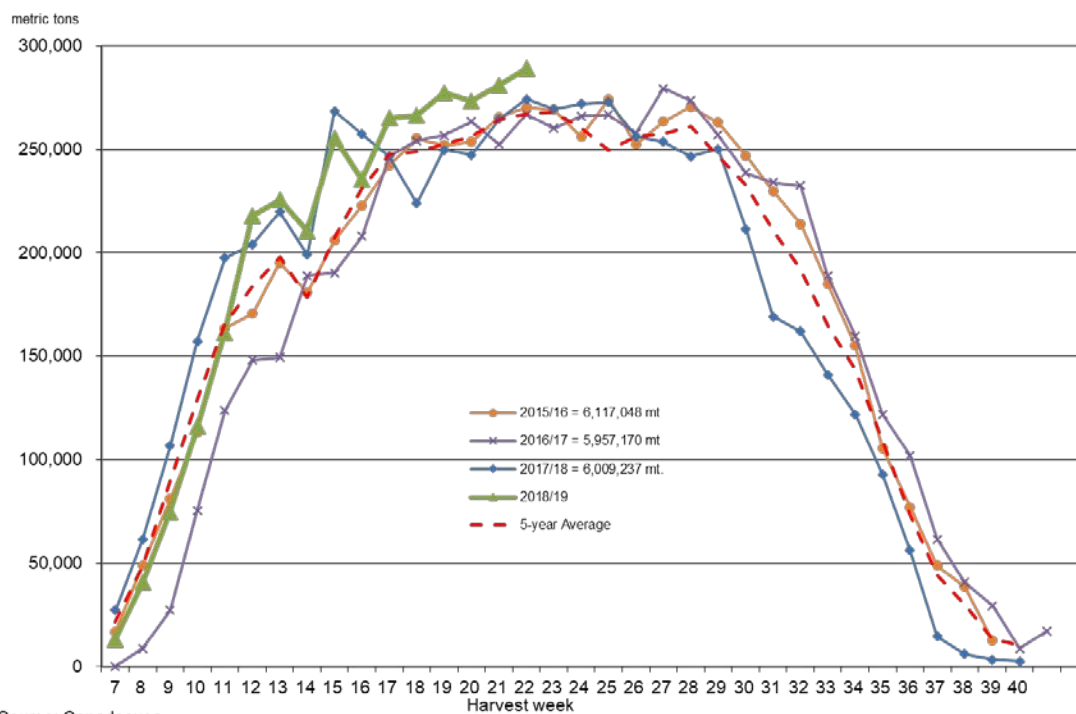
Source: Conadesuca.

## Strong Results for the Mexican Sugarcane Harvest Raise Production Prospects

Projected production in Mexico for 2018/19 is raised 127,000 MT, totaling 6.152 million MT. If realized, this would be a 2.4-percent increase from the 2017/18 total. The harvest did not begin as quickly as the previous year, but the pace has picked up as it hits the peak production period after the beginning of the year. Data reported by Conadesuca show strong weekly sugarcane

and sugar production figures thus far in the campaign. Through March 2, 2019, Mexico has harvested nearly 385,000 hectares—still slightly behind last year’s total of 388,000 hectares, but that gap has narrowed in the past few weeks. Despite less area harvested, cane production is ahead of the previous year due to strong sugarcane yields. Mexican mills have produced 3.205 million MT through March 2, which is 0.1 percent behind the previous year, but the gap has narrowed substantially the past few weeks, mirroring the trend in area harvested.

Figure 10  
Mexico sugar production, by week of harvest, 2015/16-2018/19



Source: Conadesuca.

Mexico exports are projected at 1.102 million MT, a 164,000-MT reduction from the previous month’s projection. Exports to the United States are projected to total 767,000 MT, a 191,000-MT reduction from the February report. The total reflects the terms of the Suspension Agreement.

Exports to other countries are projected to total 335,000 MT, partially offsetting the reduction in U.S. exports by 28,000 MT. Through February 24, 2019, Conadesuca reports that 325,000 MT of exports have been shipped, including 45,000 MT to the U.S. re-export program and 258,000 MT shipped as part of the FIMAE certificate program, which shipped supplies from the 2017/18 production year. Conadesuca has listed an additional 291,000 MT in the certificate program at the end of February, indicating that 2018/19 supplies have begun to enter the program.

Currently, WASDE projections assume that additional shipments through the program are unlikely to occur until the 2019/20 marketing year.

## Suggested Citation

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