



Economic Research Service | Situation and Outlook Report

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Sugar and Sweeteners Outlook

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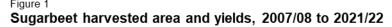
U.S. Sugar Outlook Mexico Sugar Outlook

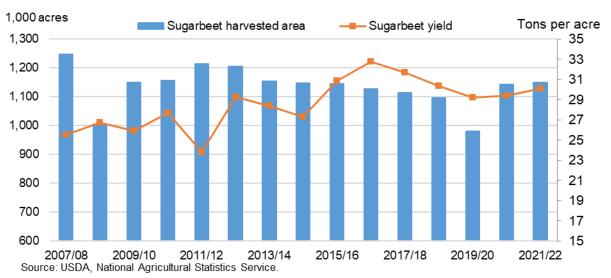
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U.S. Sugar Production Increased; Mexican Imports and Deliveries Lowered

U.S. beet sugar production for 2021/22 is increased based on higher acreage, yield and production of sugarbeets (figure 1). Increased beet sugar production more than offsets a small reduction to cane sugar. Imports are increased, with other imports more than offsetting a reduction from Mexico. Deliveries for 2020/21 and 2021/22 are increased. Exports in 2020/21 are revised upwards based on the pace to date, but exports for 2021/22 are left unchanged at 35,000 short tons, raw value (STRV). Mexican production is unchanged this month. Mexican imports were lowered for 2020/21 and 2021/22, with mostly offsetting small changes in use resulting in ending stocks for both years down marginally.





U.S. Outlook Summary

U.S. Fiscal Year 2021/22 Sugar Production Up

For 2021/22, production is increased 114,000 STRV, with increased beet sugar more than offsetting a small reduction to cane sugar (table 1). Imports are increased by 76,000 STRV, with increases of sugar under tariff-rate quotas (TRQs) and outside of TRQs (i.e. paying the high-tier duty) largely offset by a reduction in imports from Mexico. Deliveries for 2020/21 and 2021/22 are both increased by 75,000 STRV based on the strong pace of direct consumption imports (imports by companies that do not report their deliveries to USDA's *Sweetener Market Data* report). Exports in 2020/21 are revised upwards based on the pace to date, but exports for 2021/22 are left unchanged at 35,000 STRV. The ending stocks-to-use ratio for 2021/22 is 13.5 percent, as imports from Mexico are residually calculated to achieve this target level consistent with the U.S.-Mexico Sugar Suspension Agreements. Beginning stocks for 2021/22 are lowered by 121,000 STRV as a result of lower 2020/21 beet sugar production, imports, and increased 2020/21 use.

Table 1: U.S. sugar: supply and use by fiscal year (October/September), September 2021

| Items | | 2019/20 | , | | 2020/21 | | | 2021/22 | | |
|--|--------|-----------|---------|---------------|---------------|---------|------------|------------|---------|--|
| | | | Monthly | (forecast) | (forecast) | Monthly | (forecast) | (forecast) | Monthly | |
| | August | September | Change | August | September | change | August | September | change | |
| | | | 1, | 000 short tor | ns, raw value | | | | | |
| Beginning stocks | 1,783 | 1,783 | 0 | 1,618 | 1,618 | 0 | 1,753 | 1,632 | -121 | |
| Total production | 8,149 | 8,149 | 0 | 9,234 | 9,202 | -32 | 9,048 | 9,162 | 114 | |
| Beet sugar | 4,351 | 4,351 | 0 | 5,063 | 5,031 | -32 | 5,078 | 5,202 | 124 | |
| Cane sugar | 3,798 | 3,798 | 0 | 4,171 | 4,171 | 0 | 3,970 | 3,960 | -10 | |
| Florida | 2,106 | 2,106 | 0 | 2,089 | 2,089 | 0 | 2,015 | 2,005 | -10 | |
| Louisiana | 1,566 | 1,566 | 0 | 1,949 | 1,949 | 0 | 1,825 | 1,825 | 0 | |
| Texas | 126 | 126 | 0 | 134 | 134 | 0 | 130 | 130 | 0 | |
| Hawaii | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Total imports | 4,143 | 4,165 | 22 | 3,177 | 3,169 | -8 | 3,136 | 3,212 | 76 | |
| Tariff-rate quota imports | 2,152 | 2,152 | 0 | 1,789 | 1,693 | -96 | 1,387 | 1,803 | 416 | |
| Other program imports | 432 | 432 | 0 | 245 | 315 | 70 | 250 | 250 | 0 | |
| Non-program imports | 1,559 | 1,581 | 22 | 1,143 | 1,161 | 18 | 1,499 | 1,159 | -340 | |
| Mexico | 1,376 | 1,376 | 0 | 963 | 981 | 18 | 1,449 | 1,084 | -365 | |
| High-duty | 183 | 206 | 22 | 180 | 180 | 0 | 50 | 75 | 25 | |
| Total supply | 14,074 | 14,097 | 22 | 14,028 | 13,989 | -39 | 13,937 | 14,006 | 68 | |
| Total exports | 61 | 61 | 0 | 45 | 52 | 7 | 35 | 35 | 0 | |
| Miscellaneous | 74 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Deliveries for domestic use | 12,322 | 12,344 | 22 | 12,230 | 12,305 | 75 | 12,230 | 12,305 | 75 | |
| Transfer to sugar-containing products | | | | | | | | | 0 | |
| for exports under re-export program | 78 | 78 | 0 | 80 | 80 | 0 | 80 | 80 | 0 | |
| Transfer to polyhydric alcohol, feed, other alcohol | 20 | 20 | 0 | 25 | 25 | 0 | 25 | 25 | 0 | |
| Commodity Credit Corporation (CCC) sale for ethanol, other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Deliveries for domestic food and beverage use | 12,224 | 12,246 | 22 | 12,125 | 12,200 | 75 | 12,125 | 12,200 | 75 | |
| Total use | 12,457 | 12,479 | 22 | 12,275 | 12,357 | 82 | 12,265 | 12,340 | 75 | |
| Ending stocks | 1,618 | 1,618 | 0 | 1,753 | 1,632 | -121 | 1,672 | 1,666 | -7 | |
| Private | 1,618 | 1,618 | 0 | 1,753 | 1,632 | -121 | 1,672 | 1,666 | -7 | |
| Commodity Credit Corporation (CCC) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Stocks-to-use ratio (percent) | 12.99 | 12.96 | -0.02 | 14.28 | 13.21 | -1.08 | 13.64 | 13.50 | -0.14 | |

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

2021/22 Sugarbeet Production Up from Last Month

The National Agricultural Statistics Service (NASS) September forecast of the 2021/22 sugarbeet crop is 34.612 million short tons, up 902,000 short tons (2.6 percent) from last month (table 2). Assuming a normal amount of shrinkage of beets in piles before they are sliced in the factories (that is 6.6 percent), the forecast of sugarbeets sliced is 32.334 million short tons. The quantity of sugar recovered from the sliced sugarbeets is forecast at 14.697 percent based on trend, and the quantity of sugar extracted from molasses is forecast at 360,000 short tons, both unchanged from last month. The crop year (August-July) 2021/22 beet sugar extracted from U.S. sugarbeets is forecast at 5.112 million STRV. To convert this to the fiscal year (October-September) 2021/22, we add projected August and September 2022 production (665,000 STRV), subtract expected August and September 2021 production (615,000 STRV), and add an

estimated 40,000 STRV made from sugarbeets imported from Canada, yielding a total of 5.202 million STRV, up 123.8 thousand STRV from last month.

Processors reported final crop year 2020/21 beet sugar production from sugarbeets of 4.818 million STRV, which includes sugar from Canadian sugarbeets, and 362,000 STRV from molasses, yielding a total of 5.181 million STRV. Subtracting August-September 2020 production of 765,000 STRV and adding projected August-September 2021 production of 615,000 STRV yields a fiscal 2020/21 beet sugar production forecast of 5.031 million STRV, down 32,000 STRV from last month.

Table 2: Beet sugar production projection calculations, 2020/21 and 2021/22

| | 2018/19 | 2019/20 | 2020/21 | 2020/21 | 2021/22 | 2021/22 | Monthly |
|---|---------|---------|---------|-----------|---------|-----------|---------|
| | | | August | September | August | September | change |
| Sugarbeet production (1,000 short tons) 1/ | 33,282 | 28,600 | 33,618 | 33,618 | 33,710 | 34,612 | 902 |
| Sugarbeet shrink (percent) | 5.17 | 5.34 | 6.46 | 6.60 | 6.60 | 6.6 | 0.0 |
| Sugarbeet sliced (1,000 short tons) | 31,561 | 27,072 | 31,448 | 31,399 | 31,491 | 32,334 | 843 |
| Sugar extraction rate from slice (percent) | 14.77 | 14.14 | 15.302 | 15.345 | 14.697 | 14.697 | 0.000 |
| Sugar from beets sliced (1,000 STRV) 2/ | 4,660 | 3,828 | 4,812 | 4,818 | 4,628 | 4,752 | 124 |
| Sugar from molasses (1,000 STRV) 2/ | 352 | 341 | 360 | 362 | 360 | 360 | 0 |
| Crop-year sugar production (1,000 STRV) 2/ | 5,012 | 4,169 | 5,172 | 5,181 | 4,988 | 5,112 | 124 |
| August-September sugar production (1,000 STRV) | 655 | 582 | 765 | 765 | 615 | 615 | 0 |
| August-September sugar production of subsequent crop (1,000 STRV) | 582 | 765 | 615 | 615 | 665 | 665 | 0 |
| Sugar from imported beets (1,000 STRV) 3/ | | | 40 | 0 | 40 | 40 | 0 |
| Fiscal year sugar production (1,000 STRV) | 4,939 | 4,351 | 5,063 | 5,031 | 5,078 | 5,202 | 124 |

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

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

On September 1, 2021, USDA's National Agricultural Statistics Service (NASS) announced that they would review all available data, including survey data, satellite-based data, and the latest information from USDA's Farm Service Agency (FSA) and Risk Management Agency for planted and harvested acreage for many of the field crops, including sugarbeets, for the September *Crop Production* report. The review for sugarbeets typically takes place in October, but the data were sufficiently complete to allow for adjustments in September. NASS will again review sugarbeet acreage for the October *Crop Production* report.

The September NASS *Crop Production* report lowered projected 2021/22 sugarbeet planted area to 1.161 million acres, a reduction of about 2,000 acres from last month, and little changed from 2020/21 (table 3). Nebraska shows the largest decline in planted acreage of about 5 percent.

^{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.

Note: STRV = short tons, raw value.

Table 3: Sugarbeet planted area, 2016/17 to 2021/22

| State | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2021/22 | Monthly | Annual |
|--------------|---------|---------|---------|---------|---------|---------|-----------|---------|--------|
| | | | | | | August | September | change | change |
| | | | | S | | | | percent | |
| Minnesota | 437.0 | 420.0 | 415.0 | 425.0 | 432.0 | 433.0 | 429.0 | -4.0 | -0.7 |
| North Dakota | 213.0 | 214.0 | 202.0 | 212.0 | 221.0 | 223.0 | 226.0 | 3.0 | 2.3 |
| Idaho | 172.0 | 167.0 | 163.0 | 171.0 | 172.0 | 172.0 | 172.0 | 0.0 | 0.0 |
| Michigan | 151.0 | 144.0 | 150.0 | 146.0 | 157.0 | 154.0 | 154.0 | 0.0 | -1.9 |
| Nebraska | 48.0 | 46.1 | 45.5 | 44.0 | 46.2 | 45.0 | 44.0 | -1.0 | -4.8 |
| Montana | 45.6 | 42.9 | 43.5 | 41.8 | 43.6 | 43.0 | 44.0 | 1.0 | 0.9 |
| Wyoming | 30.7 | 32.1 | 32.1 | 31.6 | 31.0 | 31.7 | 31.0 | -0.7 | 0.0 |
| Colorado | 28.1 | 29.4 | 26.3 | 25.1 | 24.2 | 25.0 | 24.4 | -0.6 | 0.8 |
| California | 25.3 | 25.0 | 24.6 | 24.5 | 24.0 | 24.0 | 24.0 | 0.0 | 0.0 |
| Oregon | 10.7 | 9.1 | 9.3 | 10.0 | 9.4 | 10.4 | 10.3 | -0.1 | 9.6 |
| Washington | 2.0 | 1.8 | 1.8 | 2.0 | 1.8 | 1.7 | 1.9 | 0.2 | 5.6 |
| U.S. Total | 1,163.4 | 1,131.4 | 1,113.1 | 1,133.0 | 1,162.2 | 1,162.8 | 1,160.6 | -2.2 | -0.1 |

Source: USDA, National Agricultural Statistics Service.

In contrast to the reduced area planted, 2021/22 acreage harvested was projected up by 15,000 acres in the September *Crop Production* report (table 4). The two States with the largest monthly change were Minnesota and North Dakota, each up 8,000 acres harvested.

Table 4: Sugarbeet harvested area, 2016/17 to 2021/22

| State | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2021/22 | Monthly | Annual |
|--------------|---------|---------|---------|---------|---------|---------|-----------|---------|--------|
| | | | | | | August | September | change | change |
| | | | 1,000 a | | | | | percent | |
| Minnesota | 417.0 | 409.0 | 408.0 | 337.0 | 427.0 | 419.0 | 427.0 | 8.0 | 0.0 |
| North Dakota | 203.0 | 212.0 | 199.0 | 170.0 | 219.0 | 216.0 | 224.0 | 8.0 | 2.3 |
| Idaho | 170.0 | 166.0 | 163.0 | 165.0 | 169.0 | 170.0 | 170.0 | 0.0 | 0.6 |
| Michigan | 149.0 | 143.0 | 148.0 | 145.0 | 154.0 | 152.0 | 152.0 | 0.0 | -1.3 |
| Nebraska | 47.2 | 45.2 | 44.1 | 42.1 | 45.7 | 44.5 | 43.6 | -0.9 | -4.6 |
| Montana | 45.3 | 42.7 | 42.4 | 36.5 | 38.0 | 41.0 | 42.0 | 1.0 | 10.5 |
| Wyoming | 30.0 | 31.6 | 30.7 | 24.0 | 30.8 | 30.8 | 30.5 | -0.3 | -1.0 |
| Colorado | 27.6 | 29.0 | 25.5 | 24.3 | 23.7 | 24.6 | 23.7 | -0.9 | 0.0 |
| California | 25.2 | 24.4 | 24.6 | 24.4 | 23.9 | 23.9 | 23.9 | 0.0 | 0.0 |
| Oregon | 10.2 | 9.1 | 9.3 | 9.8 | 9.4 | 10.2 | 10.3 | 0.1 | 9.6 |
| Washington | 1.9 | 1.8 | 1.8 | 2.0 | 1.8 | 1.7 | 1.9 | 0.2 | 5.6 |
| U.S. Total | 1,126.4 | 1,113.8 | 1,096.4 | 980.1 | 1,142.3 | 1,133.7 | 1,148.9 | 15.2 | 0.6 |

Source: USDA, National Agricultural Statistics Service.

Sugarbeet production is now forecast at 34.612 million tons, up 902,000 from last month (2.6 percent) and about 3 percent above last year (table 5). The States with the largest changes from last month are Michigan, up 349,000 tons; Minnesota, up 254,000 tons, North Dakota, up 178,000 tons, and Idaho, up 119,000 tons.

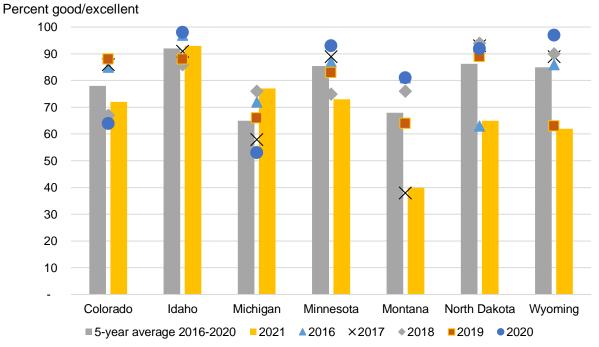
Table 5: Sugarbeet production, 2015/16 to 2021/22

| State | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2021/22 | Monthly | Annual |
|--------------|---------|---------|---------|---------|---------|---------|-----------|---------|--------|
| | | | | | | August | September | change | change |
| | | | ns | | | | percent | | |
| Minnesota | 12,510 | 12,515 | 10,486 | 8,425 | 11,145 | 11,104 | 11,358 | 254 | 1.9 |
| North Dakota | 6,252 | 6,445 | 5,731 | 4,420 | 5,453 | 5,422 | 5,600 | 178 | 2.7 |
| Idaho | 7,038 | 6,507 | 6,602 | 6,435 | 6,845 | 6,868 | 6,987 | 119 | 2.1 |
| Michigan | 4,589 | 3,604 | 4,307 | 4,147 | 4,358 | 4,454 | 4,803 | 349 | 10.2 |
| Nebraska | 1,411 | 1,437 | 1,407 | 1,069 | 1,417 | 1,326 | 1,295 | -31 | -8.6 |
| Montana | 1,586 | 1,396 | 1,319 | 1,153 | 1,189 | 1,267 | 1,327 | 60 | 11.6 |
| Wyoming | 951 | 891 | 946 | 679 | 912 | 869 | 872 | 3 | -4.4 |
| Colorado | 927 | 1,035 | 831 | 746 | 742 | 782 | 777 | -5 | 4.7 |
| California | 1,137 | 1,066 | 1,200 | 1,108 | 1,087 | 1,087 | 1,087 | 0 | 0.0 |
| Oregon | 428 | 334 | 366 | 377 | 384 | 449 | 415 | -34 | 8.1 |
| Washington | 91 | 87 | 87 | 91 | 86 | 82 | 91 | 9 | 5.8 |
| U.S. Total | 36,920 | 35,317 | 33,282 | 28,650 | 33,618 | 33,710 | 34,612 | 902 | 3.0 |

Source: USDA, National Agricultural Statistics Service.

NASS sugarbeet crop conditions as of September 12, 2021, are shown in figure 2. The combined good and excellent ratings are 73 percent for Minnesota and 65 percent for North Dakota, up from the previous week but still well below last year and the 5-year average. The only other non-irrigated area, Michigan, is above last year and the 5-year average.

Figure 2
Sugarbeet conditions in major producing States as of September 12 1/



1/ Week 36, exact dates vary by year.

Source: USDA, National Agricultural Statistics Service.

U.S. Cane Sugar Production Outlook Mostly Unchanged

Florida 2021/22 cane sugar is decreased by 10,000 STRV from last month, based on processors' reporting in the latest *Sweetener Market Data* (*SMD*) publication by USDA's Farm Service Agency (FSA). There are no changes from last month for 2020/21 cane sugar production.

In the NASS September *Crop Production* report, 2021/22 area harvested for sugar and seed for Florida is estimated at 405,000 acres, down from 423,300 last year. Using a 10-year average of acreage harvested for seed of 3.8 percent, the area harvested for sugar would be 389,500 acres, down from 409,000 the year before (table 6). Yield is projected at 42.7 tons per acre, and this would yield production of 16.6 million short tons harvested for sugar, both down from last year.

For Louisiana, the NASS September report shows 2021/22 area harvested for sugar and seed increasing slightly to 490,000 acres and yield at 33.2 short tons per acre, up from last year and also up from the August forecast of 32.3. Using an industry-reported estimate of 5.3 percent area harvested for seed leaves 464,200 acres harvested for sugar, and 15.4 million tons harvested for sugar.

For Texas, the *Crop Production* report showed area harvested for sugar and seed at 36 thousand acres and yield at 32.5 tons per acre. Using a 10-year average of sugar for seed of about 4 percent leaves 34.6 thousand acres harvested for sugar, and a crop of 1.125 million tons harvested for sugar.

Table 6: U.S. sugarcane and cane sugar production, by State, 2015/16 to 2021/22

| | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Annual change |
|--|---------|---------|---------|---------|---------|---------|---------|---------------|
| | | | | | | | | Percent |
| Florida | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 413.0 | 417.0 | 412.7 | 412.3 | 410.7 | 423.3 | 405.0 | -4.3 |
| Sugarcane harvested for sugar (1,000 acres) | 398.0 | 400.0 | 397.0 | 397.0 | 397.0 | 409.0 | 389.5 | -4.8 |
| Sugarcane yield (short tons per acre) | 42.5 | 40.3 | 40.9 | 41.7 | 42.8 | 44.4 | 42.7 | -3.8 |
| Sugarcane production (1,000 short tons) | 16,915 | 16,120 | 16,237 | 16,555 | 16,992 | 18,160 | 16,632 | -8.4 |
| Recovery rate (percent) | 12.8 | 12.7 | 12.2 | 12.1 | 12.4 | 11.5 | 12.1 | 4.8 |
| Sugar production (1,000 STRV) | 2,173 | 2,055 | 1,983 | 2,005 | 2,106 | 2,089 | 2,005 | -4.0 |
| Louisiana | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 410.0 | 431.0 | 449.6 | 448.5 | 469.0 | 488.4 | 490.0 | 0.3 |
| Sugarcane harvested for sugar (1,000 acres) | 385.0 | 400.0 | 414.0 | 425.0 | 442.0 | 461.0 | 464.2 | 0.7 |
| Sugarcane yield (short tons per acre) | 29.6 | 28.8 | 32.5 | 35.3 | 27.7 | 33.1 | 33.2 | 0.3 |
| Sugarcane production (1,000 short tons) | 11,396 | 11,520 | 13,455 | 15,003 | 12,243 | 15,259 | 15,411 | 1.0 |
| Recovery rate (percent) | 12.4 | 14.0 | 13.9 | 12.5 | 12.7 | 13.0 | 11.8 | -9.0 |
| Crop year sugar production (1,000 STRV) 1/ | 1,415 | 1,618 | 1,865 | 1,876 | 1,558 | 1,975 | 1,825 | -7.6 |
| Fiscal year sugar production (1,000 STRV) 1/ | 1,428 | 1,628 | 1,861 | 1,907 | 1,565 | 1,949 | 1,825 | -6.4 |
| Texas | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 36.6 | 39.6 | 41.8 | 38.9 | 33.5 | 35.9 | 36.0 | 0.3 |
| Sugarcane harvested for sugar (1,000 acres) | 35.2 | 37.7 | 40.5 | 37.6 | 31.3 | 33.4 | 34.6 | 3.6 |
| Sugarcane yield (short tons per acre) | 31.4 | 37.0 | 36.8 | 36.6 | 33.6 | 31.5 | 32.5 | 3.2 |
| Sugarcane production (1,000 short tons) | 1,105 | 1,395 | 1,490 | 1,376 | 1,052 | 1,052 | 1,125 | 6.9 |
| Recovery rate (percent) | 10.3 | 10.5 | 10.1 | 11.3 | 10.7 | 11.7 | 12.0 | 2.4 |
| Sugar production (1,000 STRV) | 116 | 140 | 169 | 147 | 126 | 134 | 130 | -2.6 |
| United States | | | | | | | | |
| Sugarcane harvested for sugar and seed (1,000 acres) | 874.7 | 903.1 | 904.1 | 899.7 | 913.2 | 947.6 | 931.0 | -1.8 |
| Sugarcane harvested for sugar (1,000 acres) | 831.1 | 853.2 | 859.6 | 859.6 | 870.3 | 903.4 | 888.3 | -1.7 |
| Sugarcane yield (short tons per acre) | 36.8 | 35.6 | 36.6 | 38.3 | 34.8 | 38.2 | 37.3 | -2.1 |
| Sugarcane production (1,000 short tons) | 30,555 | 30,371 | 31,182 | 32,934 | 30,287 | 34,471 | 33,168 | -3.8 |
| Recovery rate (percent) | 12.7 | 12.7 | 12.9 | 12.3 | 12.5 | 12.1 | 11.9 | -1.3 |
| Sugar production (1,000 STRV) | 3,870 | 3,867 | 4,014 | 4,060 | 3,798 | 4,171 | 3,960 | -5.1 |

Note: STRV = short tons, raw value.

1/ Louisiana's harvest and processing of sugarcane begins typically in September, thus the crop year and fiscal year sugar production for this State tend to be slightly different. Fiscal year production is the final value used for official USDA estimates. For Florida and Texas, the crop year is the same as the fiscal year. Source: USDA, Farm Service Agency; USDA, National Agricultural Statistics Service; USDA, World Agricultural Outlook Board.

Hurricane Ida came ashore on the Louisiana coastline on August 29 as a category 4 hurricane with sustained winds of up to 150 miles per hour, and it passed over some of the more southeastern sugarcane growing parishes. Neither the NASS September *Crop Production* report nor the processor's forecasts reported to the Farm Service Agency included any potential impacts of the storm as there was insufficient time.

The Louisiana State University AgCenter reported that approximately 25 percent of Louisiana's sugarcane acreage was affected by the storm. Early estimates of yield losses range from 5 to 25 percent in the affected areas. Louisiana is also in the middle of planting season, which was about 75 percent completed when Ida hit. Some of the fields will have to be replanted, and those fields from which sugarcane is harvested for the additional seed cane will not be available to be processed into sugar.

There are two major U.S. cane refineries in the New Orleans area, and both were shut down ahead of Hurricane Ida. Neither sustained any major damage from the storm. Initially the refineries remained closed because of issues with the electric power grid and the logistics of rail and road closures. By mid-September one refinery was close to full capacity, and the other was

running at less than half of its capacity mostly because of lack of rail service, but that is expected to be restored soon.

USDA's National Agricultural Statistics Service (NASS) reports that as of September 12, Louisiana sugarcane conditions are 8 percent excellent, 52 percent good, 34 percent fair, 6 percent poor, and 0 percent very poor. The percent rated excellent did not change from a month ago, while the percent rated good dropped 3 percentage points from 55 percent. These ratings are slightly below last year and the 5-year average (table 7). The ratings, taken one week after Hurricane Ida, suggest that much of the affected sugarcane has a chance to recover before harvest. NASS does not report conditions for Florida or Texas.

Table 7: Crop conditions in Louisiana through September 12, 2021 1/

| | | | | | | 5-year | |
|-----------------------------|------|------|------|------|------|--------|------|
| | | | | | | averag | |
| | 2016 | 2017 | 2018 | 2019 | 2020 | е | 2021 |
| Excellent | 13 | 17 | 12 | 11 | 13 | 13 | 8 |
| Good | 39 | 60 | 47 | 56 | 56 | 52 | 52 |
| Fair | 40 | 19 | 35 | 28 | 23 | 29 | 34 |
| Poor | 7 | 3 | 5 | 4 | 8 | 5 | 6 |
| Very poor | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| Weighted condition index 2/ | 356 | 389 | 364 | 372 | 374 | 371 | 362 |

^{1/} Week 36; exact dates vary by year.

Source: USDA, Economic Research Service; USDA, National Agricultural Statistics Service.

Large Offsetting Changes in Imports for 2020/21 and 2021/22

Total imports for 2021/22 are up 76,000 STRV this month (table 1), with increases in TRQ and high-tier tariff imports partially offset by a decline in imports from Mexico. For 2020/21, TRQ imports are down 96,000, while imports for the re-export program and Mexico are up.

The quantity of imports under the U.S. World Trade Organization (WTO) raw sugar tariff-rate quota (TRQ) for 2021/22 are increased by 416,000 STRV from last month. USDA's Foreign Agricultural Service announced on September 13 the levels of the 2021/22 raw and refined WTO TRQs. The raw sugar TRQ was established at the minimum level to which the United States is committed under the WTO, 1,231,256 STRV, or 1,117,195 metric tons raw value (MTRV). The refined sugar TRQ was established at 244,713 STRV or 222,000 MTRV. Since last month's 2021/22 import estimate assumed only the minimum WTO raw and refined TRQ levels, the increase in the permitted level of TRQ imports is 220,462 STRV (200,000 MTRV), the amount of the refined sugar TRQ reserved as additional specialty sugar.

^{2/} This weighted condition index is generated by multiplying the percentage of crops in excellent condition by 5, percentage good by 4, fair by 3, poor by 2, and very poor by 1.

On August 24, 2021, USDA increased the 2020/21 WTO raw sugar TRQ by 99,318 STRV (90,100 MTRV) and extended the quota period by 1 month through October 31, 2021. On August 25, 2021, the Office of the U.S. Trade Representative (USTR) allocated the TRQ increase. USDA estimates that of the new total TRQ of 1,330,815 STRV, a quantity of 195,285 STRV will enter during the month of October and thus be counted as imports for fiscal year 2021/22. A projected 74,957 STRV will remain unshipped (shortfall), and 1,060,572 STRV will enter during October 2020-September 2021.

The 2020/21 export limit for Mexico is comprised of three components:

- In March, the U.S. Department of Commerce (DOC) established an export limit of 927,920 STRV.
- On April 30, 2021, the DOC added 50,000 STRV, all of which must have a polarity of less than 99.2 degrees.
- On August 26, 2021, the DOC increased the Mexican export limit by 17,527 STRV, and this sugar can be of higher quality but must still have a polarity of less than 99.5 degrees.
- The sum of these three components is 995,447 STRV.

USDA's forecast of imports from Mexico projects a shortfall of 17,527 STRV from the April 30 access quantity due to lack of production by an export licenseholder, as well as a quantity of 2,382 STRV of 2019/20 sugar which was permitted entry in October 2020.

On August 31, 2021, the government of Mexico requested that DOC permit the 17,527 STRV of additional sugar announced on August 26 to be permitted an extra month for entry, until Ocotober 31, 2021. On September 9, 2021, DOC posted a public notice that if the government of Mexico would promptly supply additional justification, including the list of the affected export licenses that would require an extension, the DOC would promptly respond to the request.

Based on revisions made by the U.S. Departement of Commerce, Bureau of the Census (Census), USDA has made some corrections to high-tier imports for the months from July 2020 to May 2021. These revisions have resulted in an increase in 2019/20 high-tier tariff imports of 22,000 STRV (table 1), which also resulted in an increase in deliveries for human consumption of the same amount and a small adjustment to the ending stocks-to-use ratio.

Deliveries for Food and Beverage Use Increased

Deliveries for food and beverage use in 2020/21 are increased by 75,000 STRV to 12.2 million STRV based on the strong pace of direct consumption imports (table 8), and the forecast for 2021/22 is also increased to 12.2 million STRV. Deliveries from reporting companies are down from the three years from 2016/17 to 2018/19. Those are more useful years for comparison since 2019/20 had a U.S. beet sugar production shortfall and unusually large non-reporter deliveries from direct consumption imports. Non-reporter (direct consumption) imports in July were 175,000 STRV, bringing the 10-month total to 819,000 STRV. While this is down 12 percent from last year, there appears to be an upward trend to non-reporter imports in this last quarter of the fiscal year. Deliveries reported by domestic beet processors and cane refiners have stagnated and then declined over the past four years, while the amount of direct consumption imports has been more volatile.

Table 8: Food and beverage deliveries, 2015/16 to 2020/21, October-July

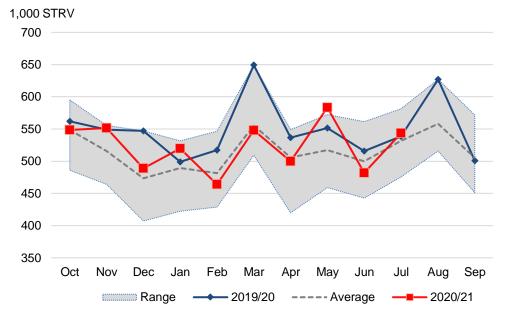
| | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | Annual change | | | |
|----------------------------------|---------|-----------------------------|---------|---------|---------|---------|---------------|--|--|--|
| | 2010/10 | 1,000 short tons, raw value | | | | | | | | |
| Beet sugar processors | 3,753 | 4,410 | 4,364 | 4,173 | 3,662 | 4,079 | 11.4 | | | |
| Cane sugar refiners | 5,289 | 4,995 | 5,032 | 5,203 | 5,450 | 5,197 | -4.6 | | | |
| Total reporters | 9,042 | 9,405 | 9,397 | 9,376 | 9,112 | 9,276 | 1.8 | | | |
| Non-reporter, direct consumption | 718 | 608 | 591 | 633 | 940 | 819 | -13.0 | | | |
| Total October-July | 9,759 | 10,012 | 9,988 | 10,008 | 10,053 | 10,095 | 0.4 | | | |
| Final fiscal year deliveries 1/ | 11,881 | 12,102 | 12,048 | 12,106 | 12,246 | 12,200 | -0.4 | | | |
| AugSept. deliveries 1/ | 2,121 | 2,090 | 2,061 | 2,097 | 2,193 | 2,105 | -4.0 | | | |

^{1/} For 2020/21, final fiscal year deliveries is a forecast, and Aug.-Sept. deliveries is the residual to reach the forecast total. Source: USDA, Farm Service Agency; USDA, World Agricultural Outlook Board.

In July the amount of raw sugar melted (processed) by cane refiners rose to about the same level as last year and the 10-year average (figure 3). In July imports reported by the Foreign Agricultural Service of raw sugar under the re-export program were 79,324 STRV, providing over one-fourth of all imports that month and a boost to the raw sugar available for melting. Although an equivalent amount of the refined sugar produced from these imports will eventually have to be exported either in sugar or products, in the short run this program can provide additional sugar supplies. The amount of raw sugar stocks held by refiners (figure 4) decreased and are slightly below both last year and the 10-year average. Refined stocks held by cane refiners (figure 5) are at the low end of the 10-year range and about equal to the 5-year average. Sugar inventories held by sugarbeet processors are close to the 5-year average and still well above last year's weather-depressed level (figure 6).

Figure 3

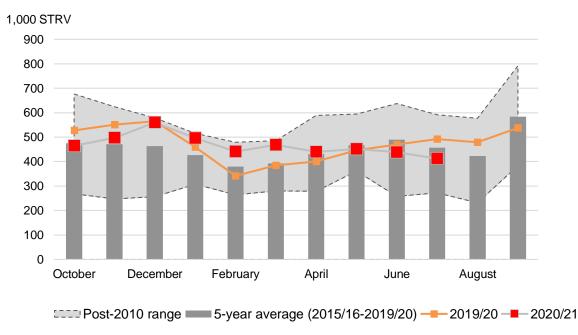
Sugarcane refiners' melt, monthly, 2010/11 to 2020/21



Melt = quantity of raw sugar processed STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

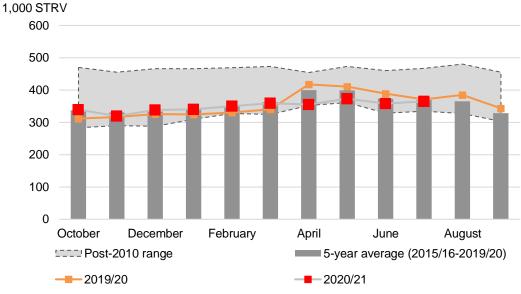
Figure 4
Sugarcane refiners' raw sugar inventories, monthly, 2015/16 to 2020/21



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

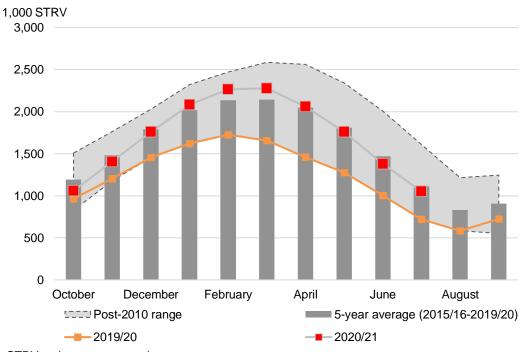
Figure 5
Sugarcane refiners' refined sugar inventories, monthly, 2015/16 to 2020/21



STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

Figure 6
Sugarbeet processors' total sugar inventories, monthly, 2015/16 to 2020/21

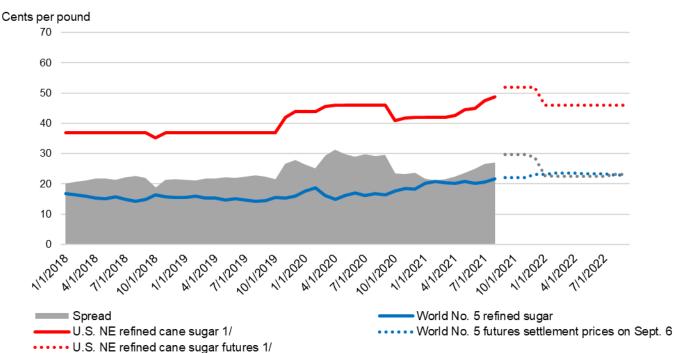


STRV = short tons, raw value.

Source: USDA, Farm Service Agency.

The spread between the U.S. refined cane sugar price in the northeast and the world refined sugar price averaged 27.16 cents per pound for the month of August (figure 7), up from 26.7 cents in July. The publication *Milling and Baking News*, the source USDA uses for U.S. refined sugar prices, reported that the U.S. refined cane sugar in the northeast rose to 52 cents per pound as of September 10, 2021, which is up 1 cent from the week before, up 3 cents from August 27, and up 12 cents from a year ago. The nearby spread between the U.S. northeast refined cane sugar price and the world price is about 30 cents per pound and remains well above 20 cents per pound for futures prices out to September 2022. This margin exceeds the high tier tariff of 16.2 cents per pound. USDA increased its forecast of 2021/22 high tier tariff imports by 25,000 STRV this month, from 50,000 STRV to 75,000 STRV (table 1).

Figure 7
U.S. refined cane sugar and world refined sugar prices, monthly, January 2018 to September 2022, and spread between them



^{1/} Northeast refined cane sugar and future price as quoted in *Milling and Baking News*.

^{2/} Nearby futures, No. 5 contract, Intercontinental Exchange Inc., and futures price settlements on 9/5/2021 out to September 2022 Source: *Milling and Baking News*; Intercontiental Exchange Inc. (ICE).

Mexico Outlook

Exports to the United States Lowered for 2021/22

The USDA September 2021 *World Agricultural Supply and Demand Estimates* (*WASDE*) publication estimate of Mexico's 2021/22 sugar production remains at 5.809 million MT (table 9). Deliveries are mostly unchanged. Exports for 2020/21 to the United States are reduced by 123,000 MT because of the recalculation of U.S. needs of sugar from Mexico which is based on each September *WASDE* report. Ending stocks for both 2020/21 and 2021/22 are up down to 913,000, roughly equivalent to 2.5 months of domestic consumption. This is the target Mexican authorities use to monitor and manage the domestic sugar program.

Table 9: Mexico sugar: supply and use by fiscal year (October/September), September 2021

| | 2019/20 | | 2020/21 | | | 2021/22 | |
|--|------------|------------|-----------------|--------------|------------|------------|----------|
| | | (forecast) | (forecast) | Monthly | (forecast) | (forecast) | Monthly |
| Items | | August | September | change | August | September | change |
| | | 1,000 r | metric tons, a | ctual weight | t | | |
| Beginning stocks | 1,169 | 858 | 858 | 0 | 916 | 913 | -3 |
| Production | 5,278 | 5,715 | 5,715 | 0 | 5,809 | 5,809 | 0 |
| Imports | 77 | 105 | | -30 | 85 | 55 | -30 |
| Imports for consumption | 55 23 | 40 | 40 35 | 0 -30 | 20 65 | 20 35 | 0 |
| Imports for sugar-containing product exports, IMMEX 1/, other | 23 | 65 | 35 | -30 | 65 | 35 | -30 |
| Total supply | 6,524 | 6,678 | 6,648 | -30 | 6,810 | 6,777 | -33 |
| Disappearance | | | | | | | |
| Human consumption | 4,101 | 3,963 | 3,963 | 0 | 3,955 | 3,955 | 0 |
| For sugar-containing product exports (IMMEX) | 352 | 442 | 427 | -15 | 442 | 427 | -15 |
| Other deliveries and end-of-year statistical adjustment Total | 1 4,455 | 0 4,405 | 0 4,390 | 0 -15 | 0 4,397 | 0 4,382 | 0 -15 |
| | ., | ., | .,000 | .0 | .,001 | .,002 | |
| Exports | 1,212 | 1,357 | 1,345 | -12 | 1,497 | 1,482 | -15 |
| Exports to the United States and Puerto Rico | 1,177 | 824 | 839 | 15 | 1,240 | 1,117 | -123 |
| Exports to other countries | 35 | 533 | 506 | -27 | 257 | 365 | 108 |
| Total use | 5,667 | 5,762 | 5,735 | -27 | 5,894 | 5,864 | -30 |
| Ending stocks | 858 | 916 | 913 | -3 | 916 | 913 | -3 |
| | | 1,000 me | etric tons, raw | value | | | |
| Beginning stocks | 1,239 | 909 | 909 | 0 | 970 | 968 | -3 |
| Production | 5,595 | 6,058 | 6,058 | 0 | 6,158 | 6,158 | 0 |
| Imports | 82 | 111 | 80 | -32 | 90 | 58 | -32 |
| Imports for consumption | 58 | 42 | | 0 | 21 | 21 | 0 |
| Imports for sugar-containing product exports (IMMEX) | 24 | 69 | 37 | -32 | 69 | 37 | -32 |
| Total supply | 6,916 | 7,078 | 7,046 | -32 | 7,218 | 7,183 | -35 |
| Disappearance | | | | | | | |
| Human consumption | 4,347 | 4,201 | 4,201 | 0 | 4,192 | 4,192 | 0 |
| For sugar-containing product exports (IMMEX) | 373 | 469 | 453 | -16 | 469 | 453 | -16 |
| Other deliveries and end-of-year statistical adjustment | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4,722 | 4,669 | 4,653 | -16 | 4,661 | 4,645 | -16 |
| Exports | 1,285 | 1,438 | 1,425 | -13 | 1,587 | 1,571 | -16 |
| Exports to the United States and Puerto Rico | 1,248 | 873 | 889 | 16 | 1,314 | 1,184 | -130 |
| Exports to other countries | 37 | 565 | 536 | -29 | 272 | 387 | 114 |
| Total use | 6,007 | 6,108 | 6,079 | -29 | 6,248 | 6,216 | -32 |
| Ending stocks | 909 | 970 | 968 | -3 | 970 | 968 | -3 |
| Stocks-to-human consumption (percent) | 20.9 | 23.1 | 23.0 | 0.1 | 23.1 | 23.1 | 0.1 |
| Stocks-to-use (percent) | 15.1 | 15.9 | 15.9 | 0.0 | 15.5 | 15.6 | 0.0 |
| High-fructose corn syrup (HFCS) consumption (dry weight) | 1,388 | 1,325 | 1,325 | 0 | 1,300 | 1,300 | 0 |

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

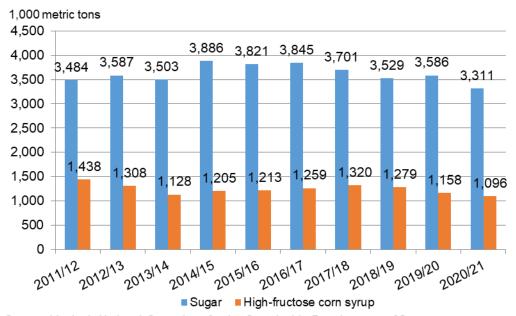
Sources: USDA, World Agricultural Outlook Board; USDA, Economic Research Service; Mexico's National

Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Deliveries Mostly Unchanged

The monthly pace of sugar deliveries for domestic consumption in 2020/21 has been consistently slower than in most of the past eight years (figure 8). Deliveries during July were well below last year.

Figure 8
Mexican sweetener consumption, October to August, 2011/12 to 2020/21



Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Through 10 months of data, sugar deliveries totaled 3.311 million MT, 83.5 percent of the full year projection of 3.963 million MT (table 10). Over the last decade, these 10 months have accounted for a weighted average of 86 percent of the fiscal-year total. The forecast for full-year deliveries are unchanged this month, despite the slow pace to date. Deliveries of high-fructose corn syrup (HFCS) are also projected unchanged this month with deliveries through 10 months at 1,096,000 MT, dry basis, which represents 82.7 percent of the full-year projection of 1.325 million. Over the last 10 years, deliveries through 10 months of data have represented a weighted average of 82.9 percent of the deliveries for the full year.

Table 10: Pace of Mexican sweetener deliveries through 10 months, fiscal years 2011-21

| | Sugar | , 1,000 metri | c tons (MT) | High-fructose corn syrup, 1,000 MT, dry weight | | | | |
|-----------------|----------|---------------|------------------|--|-------------|------------------|--|--|
| | Oct-July | Fiscal year | Percent of total | Oct-July | Fiscal year | Percent of total | | |
| FY11 | 3,331 | 3,950 | 84.3 | 1,341 | 1,635 | 82.0 | | |
| FY12 | 3,484 | 4,135 | 84.3 | 1,438 | 1,721 | 83.6 | | |
| FY13 | 3,587 | 4,287 | 83.7 | 1,308 | 1,567 | 83.5 | | |
| FY14 | 3,503 | 4,098 | 85.5 | 1,128 | 1,372 | 82.2 | | |
| FY15 | 3,886 | 4,408 | 88.2 | 1,205 | 1,444 | 83.4 | | |
| FY16 | 3,821 | 4,387 | 87.1 | 1,213 | 1,482 | 81.8 | | |
| FY17 | 3,845 | 4,515 | 85.1 | 1,259 | 1,522 | 82.7 | | |
| FY18 | 3,701 | 4,228 | 87.5 | 1,320 | 1,593 | 82.9 | | |
| FY19 | 3,529 | 4,092 | 86.2 | 1,279 | 1,528 | 83.7 | | |
| FY20 | 3,586 | 4,101 | 87.5 | 1,158 | 1,388 | 83.5 | | |
| FY21 | 3,311 | 3,963 | 83.5 | 1,096 | 1,325 | 82.7 | | |
| 10-year average | 3,627 | 4,220 | 86.0 | 1,265 | 1,525 | 82.9 | | |

Source: Mexico's National Committee for the Sustainable Development of Sugarcane (CONADESUCA).

Both per capita and total sweetener consumption have trended downward since 2016/17 and this trend is expected to continue in 2021/22 (figure 9). Sugar consumption in 2021/22 remains projected at 3.955 million MT, while HFCS is forecast at 1.3 million MT (table 9).

Mexican sweetener consumption by year, 2014/15–2021/22 1,000 metric tons Kilograms 7.000 50.0 48.5 6,000 47.0 5,000 45.5 44.0 4,000 42.5 3,000 41.0 39.5 2,000 38.0 1,000 36.5 0 35.0 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 Sugar High-fructose corn syrup Per capita sweetener use (right axis)

Source: USDA, World Agricultural Outlook Board.

Mexico's estimated 2020/21 deliveries, including from imported sugar, to the *Industria Manufacturera, Maquiladora, y Servicios de Exportación* (IMMEX) program are lowered 15,000 MT this month to 427,000 MT (table 9), based on lower expected imports for the IMMEX program, more than offsetting increased deliveries to the program from domestic production. The estimate for 2021/22 is lowered by a like amount. Imports for IMMEX are lowered 30,000 MT to 35,000 MT for both 2020/21 and 2021/22. The IMMEX program permits manufacturers of sugar-containing products to get either imported or domestic sugar at lower prices, so long as the products are exported. Deliveries from domestic sugar sources for IMMEX have been elevated for much of 2020/21 (figure 10).

1,000 metric tons 120 2016/17 2017/18 100 2018/19 2019/20 2020/21 - 5-year average (2015/16-2019/20) 80 60 40 20 February April August October December June

Figure 10
Mexican domestic IMMEX deliveries, monthly, 2016/17 to 2020/21

Source: National Committee for the Sustainable Development of Sugarcane (CONADESUCA). IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

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