

## ::

Electronic Outlook Report from the Economic Research Service

## www.ers.usda.gov

# Sugar and Sweeteners Outlook 

Stephen Haley, coordinator shaley@ers.usda.gov

## U.S. Sugar November 2012

## Contents

Summary
Mexico Sugar and High
Fructose Corn Syrup
U.S. Sugar

Contacts and Links

## Websites

WASDE
Sugar Topic Room

The next release is
December 17, 2012.

Approved by the World Agricultural Outlook Board.

In October, the Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca) in Mexico revised its first forecast of Mexican sugarcane and sugar production for the upcoming 2012/13 crop year. 2012/13 sugarcane in Mexico is forecast at 49.859 million metric tons ( mt ), up from 46.231 million mt produced in 2011/12 and up from 46.642 million mt first forecast for 2012/13 in August. 2012/13 sugar is forecast at 5.668 million mt , up from 5.058 million mt produced in 2011/12 and up from 5.253 million forecast for 2012/13 in August. The production increases result from upward revisions to forecasts of area harvested and sugarcane yields.

On November 9, 2012, the U.S. Department of Agriculture (USDA) published in the World Agricultural Supply and Demand Estimates (WASDE) its latest supply and use estimates/projections for sugar in Mexico and the United States. The USDA adopted Conadesuca's production forecast for 2012/13. The USDA projects Mexico's sugar supply at 6.834 million mt , about $495,000 \mathrm{mt}$ more than last month. This reflects higher projected production of $418,000 \mathrm{mt}$ and higher beginning stocks of $77,000 \mathrm{mt}$. Projected imports of $198,000 \mathrm{mt}$ did not change from last month. The USDA projects sugar deliveries for human consumption at 4.200 million mt and HFCS consumption at 1.683 million mt , dry weight, unchanged from last month. Ending stocks are projected to be above optimal levels for a second year in a row. They are projected at 23.8 percent of domestic sugar consumption. The USDA projects 2012/13 exports at 1.294 million mt . All but $10,000 \mathrm{mt}$ are assumed to be exported to the United States.

The USDA forecasts total U.S. fiscal year (FY) 2013 sugar production at 8.825 million short tons, raw value (STRV). If realized, this would be the largest production total since FY 2000 's 9.050 million STRV. Due to improved sugarcane prospects in Louisiana, the USDA increased its Louisiana cane sugar production forecast by 75,000 STRV to 1.500 million STRV. Cane sugar production forecasts in other producing States were unchanged. The total cane sugar production for FY 2013 is forecast at 3.720 million STRV. The USDA projects beet sugar production unchanged for FY 2013 at 5.105 million STRV.

The USDA increased its forecast of FY 2013 sugar imports by 233,735 STRV to $3,248,089$ STRV. Sugar imports from Mexico are expected to be large at 1.500 million STRV. Partially offsetting these imports is the USDA increase of the raw sugar TRQ shortfall of 99,653 STRV to 265,000 STRV. The USDA reduced its forecast of sugar deliveries for human consumption in FY 2013 to 11.380 million STRV. The USDA projects FY 2013 ending sugar stocks as the difference between total supply and total use, or 2.216 million STRV. The implied stocks-to-use ratio is 18.68 percent.

## Mexico Sugar and High Fructose Corn Syrup

In October, the Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca) in Mexico revised its first forecast of Mexican sugarcane and sugar production for the upcoming 2012/13 crop year.
Conadesuca also released complete-year supply and use data for 2011/12.

## Revised First Estimate of 2012/13 Mexico Sugarcane and Sugar Production

Conadesuca revised its first production forecast for the 2012/13 crop year that starts on October 1, 2012 and runs through September 30, 2013. For 2012/13, sugarcane in Mexico is forecast at 49.859 million metric tons ( mt ), up from 46.231 million mt produced in 2011/12 and up from the 46.642 million mt first forecast for 2012/13 in August. 2012/13 sugar is forecast at 5.668 million mt, up from 5.058 million mt produced in 2011/12 and up from 5.253 million forecast for 2012/13 in August. The forecast is based on surveys of the 57 factories that are expected to produce sugarcane and sugar during 2012/13. Table 1 shows results by factory and by regional groupings of these factories. ${ }^{1}$

Sugarcane area for 2012/13 is forecast at a record 719,601 hectares (ha), about 2.3 percent above the previous record area harvested in 2011/12. Figure 1 shows that area is expected to expand mostly in the Gulf region, for a gain of 12,963 hectares compared with last year. Area in the combined regions of Central, Northeast, and Northwest Mexico expands by 5,800 hectares compared with last year. Area in the combined Pacific and South regions decreases modestly by 2,923 hectares.

Sugarcane yield for 2012/13 is forecast at 69.29 mt per ha, higher than last year ( 65.69 mt per ha) and the year before ( 65.53 mt per ha). The 2012/13 forecast yield draws closer to the yields for the period 2000/01 through 2007/08, which were all above 70 mt per ha. Figure 2 shows that the largest regional increases over the past year were in the Northeast and the Gulf regions. Both these regions have received adequate rainfall during the growing season.

Sugar recovery for 2012/13 is forecast at 11.37 percent. This forecast is higher than last year's low 10.92 percent but significantly below the 11.75 percent of 2010/11. Figure 3 shows the regional rates compared with those of the last 2 years. All forecast recovery rates except for that of the Central region are higher than last year. Forecast rates in the large Gulf and Northeast producing regions significantly trail the rates from 2 years ago.

Figure 4 shows regional sugar production forecasts. Although production levels in the Gulf and Northeast regions are forecast to recover from last year's poor production showing, production in the Northeast is well below the level of 2 years earlier. Production in Mexico's South is forecast at about the same level as last year and the three other regions (Central, Northwest, and Pacific) are expected to produce slightly more than last year.

Table 2 presents a longer time series for the primary production statistics and also shows production by type of sugar. Although 2012/13 production is forecast short of the record 2004/05 of 5.796 million mt , 2012/13 production of refinado sugar is expected to be a record. An interesting contrast with 2004/05 is that while 2012/13 area exceeds that of 2004/05 by 63,190 hectares ( 9.6 percent), the 2004/05 sugarcane yield-which was close to a record at 77.53 mt per ha-is estimated 11.9 percent higher than the 69.29 mt per ha forecast for 2012/13. Sucrose recoveries in both years are expected to be about the same.

1 The Sugar and Sweetener Outlook has adopted the same factory regional groupings as those used by LMC International in its reporting of regional costs of sugar production and other production variable categories.

| Region/Factories | Municipality | State | Owner | Area (Hectares) | Sugarcane (Metric tons) | Sugar (Metric tons) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Region-4 factories |  |  |  |  |  |  |
| ATENCINGO | Chietla | Puebla | FEESA | 15,636 | 1,709,800 | 219,025 |
| CALIPAM | Coxcatlán | Puebla | GARCIA GONZALEZ | 1,974 | 190,853 | 18,540 |
| CASASANO (LA ABEJA) | Cuautla | Morelos | FEESA | 5,340 | 601,991 | 83,376 |
| EMILIANO ZAPATA | Zacatepec de Hidalgo | Morelos | FEESA | 11,578 | 1,291,671 | 169,842 |
|  |  |  |  | 34,528 | 3,794,315 | 490,783 |
| Gulf Region - 22 factories |  |  |  |  |  |  |
| ADOLFO LÓPEZ MATEOS | Tuxtepec | Oaxaca | PIASA | 23,855 | 1,362,919 | 158,125 |
| CENTRAL MOTZORONGO | Tezonapa | Veracruz | MOTZORONGO | 17,916 | 1,167,803 | 129,294 |
| CENTRAL PROGRESO | Paso del Macho | Veracruz | LA MARGARITA | 12,994 | 780,000 | 97,086 |
| CONSTANCIA | Tezonapa | Veracuz | BETA SAN MIGUEL | 12,514 | 690,442 | 75,466 |
| EL CARMEN | Ixtaczoquitlán | Veracruz | GARCIA GONZALEZ | 8,648 | 585,340 | 59,469 |
| EL MODELO | La Antigua | Veracruz | FEESA | 10,783 | 1,009,658 | 112,072 |
| EL Potrero | Atoyac | Veracruz | FEESA | 22,768 | 1,625,000 | 188,858 |
| EL REFUGIO | Cosolapa | Oaxaca | MOTZORONGO | 6,357 | 364,647 | 39,921 |
| LA GLORIA | Ursulo Galván | Veracruz | GRUPO AZUCARERO DEL TROPICO | 17,400 | 1,500,000 | 177,225 |
| LA PROVIDENCIA | Cuichapa | Veracruz | FEESA | 12,599 | 815,000 | 92,095 |
| MAHUIXTLAN | Coatepec | Veracruz | ZUCARMEX | 5,053 | 394,957 | 44,928 |
| NUEVO SAN FRANCISCO (NARANJAL) | Lerdo de Tejada | Veracruz | GARCIA GONZALEZ | 8,847 | 482,912 | 44,102 |
| PABLO MACHADO (LA MARGARITA) | Acatlan de Pérez Figueroa | Oaxaca | LA MARGARITA | 13,733 | 763,633 | 91,756 |
| SAN CRISTOBAL | Carlos A. Carrillo | Veracruz | FEESA | 43,645 | 2,479,104 | 255,596 |
| SAN JOSÉ DE ABAJO | Cuitlahuac | Veracruz | PERNO | 7,998 | 516,031 | 56,676 |
| SAN MIGUELITO | Cordoba | Veracruz | FEESA | 5,627 | 460,000 | 49,680 |
| SAN NICOLAS | Cuichapa | Veracruz | AMERICAN SUGAR REFINING, INC. | 15,220 | 1,089,000 | 118,930 |
| SAN PEDRO | Lerdo de Tejada | Veracruz | PORRES | 16,811 | 1,240,000 | 129,977 |
| TRES VALLES | Tres Valles | Veracruz | PIASA | 31,687 | 1,737,092 | 203,307 |
|  |  |  |  | 294,455 | 19,063,538 | 2,124,563 |
| Northeast - 8 factories |  |  |  |  |  |  |
| AARÓN SÁENZ GARZA | Xicotencatl | Tamaulipas | SAENZ | 18,510 | 1,200,000 | 132,000 |
| ALIANZA POPULAR | Tamasopo | San Luis Potosí | SANTOS | 16,960 | 909,986 | 106,239 |
| EL HIGO | El Higo | Veracruz | ZUCARMEX | 14,820 | 1,066,250 | 117,148 |
| EL MANTE | Cd. Mante | Tamaulipas | SAENZ | 14,513 | 930,000 | 99,510 |
| PLAN DE AYALA | Cd. Valles | San Luis Potosí | SANTOS | 16,557 | 861,331 | 94,610 |
| PLAN DE SAN LUIS | Cd. Valles | San Luis Potosí | FEESA | 17,701 | 1,078,000 | 129,360 |
| SAN MIGUEL DEL NARANJO | El Naranjo | San Luis Potosí | BETA SAN MIGUEL | 20,502 | 1,137,835 | 136,913 |
| ZAPOAPITA - PÁNUCO | Pánuco | Veracruz | LA MARGARITA | 14,633 | 1,092,592 | $126,349$ |
|  |  |  |  | 134,196 | 8,275,994 | $942,129$ |
| Northwest - 3 factories |  |  |  |  |  |  |
| ELDORADO | Culiacan | Sinaloa | GPO. AZUC. MEX | 7,742 | 553,000 | 56,185 |
| LA PRIMAVERA | Navolato | Sinaloa | ZUCARMEX | 4,528 | 411,984 | 37,649 |
| LOS MOCHIS | Ahome | Sinaloa | AGA | 8,339 | 659,072 | 59,317 |
|  |  |  |  | 20,609 | 1,624,056 | 153,151 |
| Pacific-12 factories |  |  |  |  |  |  |
| BELLAVISTA | Acatlan de Juárez | Jalisco | SANTOS | 5,266 | 399,626 | 45,656 |
| EL MOLINO | Tepic | Nayarit | MENCHACA | 9,284 | 651,332 | 82,799 |
| JOSE MA. MARTINEZ (TALA) | Tala | Jalisco | GPO. AZUC. MEX | 23,484 | 1,878,870 | 220,467 |
| JOSÉ MARİA MORELOS | Casimiro Castillo | Jalisco | FEESA | 9,522 | 685,151 | 76,908 |
| LÁZARO CÁrdenas | Taretan | Michoacan | GPO. AZUC. MEX | 3,608 | 300,730 | 36,088 |
| MELCHOR OCAMPO | Autlán de Navarro | Jalisco | ZUCARMEX | 8,361 | 868,946 | 102,080 |
| PEDERNALES | Tacámbaro | Michoacan | SANTOS | 3,424 | 311,573 | 35,100 |
| PUGA | Tepic | Nayarit | AGA | 18,281 | 1,265,175 | 149,985 |
| QUESERIA | Cd. Cuauthemoc | Colima | BETA SAN MIGUEL | 12,657 | 940,443 | 106,486 |
| SAN FRANCISCO AMECA | Ameca | Jalisco | BETA SAN MIGUEL | 13,909 | 1,050,033 | 124,950 |
| SANTA CLARA | Los Reyes | Michoacan | PORRES | 7,014 | 550,000 | 63,800 |
| TAMAZULA | Tamazula | Jalisco | SAENZ | 12,119 | 1,296,443 | 159,161 |
|  |  |  |  | 126,929 | 10,198,322 | 1,203,480 |
| South-8 factories |  |  |  |  |  |  |
| AZSUREMEX- TENOSIQUE | Tenosique | Tabasco | JIMENEZ SAINZ | 3,438 | 190,063 | 16,899 |
| CUATOTOLAPAM | Hueyapan de Ocampo | Veracruz | SANTOS | 10,000 | 500,868 | 51,114 |
| HUIXTLA | Huixtla | Chiapas | PORRES | 13,744 | 1,154,460 | 118,909 |
| LA JOYA | Champotón | Campeche | GRUPO AZUCARERO DEL TROPICO | 11,029 | 600,000 | 67,968 |
| PRESIDENTE BENITO JUÁREZ | H. Cárdenas | Tabasco | GPO. AZUC. MEX | 20,902 | 1,140,004 | 126,667 |
| PUJILTIC (CIA. LA FE) | Venustiano Carranza | Chiapas | ZUCARMEX | 15,942 | 1,456,268 | 179,792 |
| SAN RAFAEL DE PUCTÉ | Othon P. Blanco | Quintana Roo | BETA SAN MIGUEL | 24,515 | 1,343,796 | 137,061 |
| SANTA ROSALIA | H. Cárdenas | Tabasco | BETA SAN MIGUEL | 9,318 | 516,849 | 55,544 |
|  |  |  |  | 108,888 | 6,902,308 | 753,954 |
| MEXICO |  |  |  | 719,601 | 49,858,532 | 5,668,062 |

Source: Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca).
Note: On November 20, the owner of the San Nicolas mill was corrected to read American Sugar Refining, Inc.

Figure 1
Mexico sugarcane area: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region
Hectares (ha)


Source: Conadesuca.

Figure 2
Mexico sugarcane yield: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region
Hectares (ha)


Source: Conadesuca.

Figure 3
Mexico sugar recovery: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region
Metric tons


Figure 4
Mexico sugar production: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region
Metric tons


Source: Conadesuca.

Table 2 -- Mexico sugarcane, area harvested, sugar, by region, 2003/04-2011/12 and projected 2012/13

| Region |  | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 3,026,327 | 3,229,706 | 2,912,213 | 3,245,105 | 3,194,736 | 3,011,639 | 3,109,317 | 3,216,196 | 3,676,224 | 3,794,315 |
| Area harvested | Has. | 26,589 | 27,665 | 27,899 | 29,659 | 29,324 | 28,946 | 28,231 | 30,795 | 31,602 | 34,528 |
| Sugar production | Tons | 360,356 | 393,861 | 358,899 | 399,244 | 402,583 | 379,756 | 386,309 | 411,041 | 481,420 | 490,783 |
| Refinado | Tons | 163,834 | 135,740 | 127,668 | 121,413 | 0 | 0 | 0 | 0 | 0 | 0 |
| Estandar | Tons | 196,522 | 258,121 | 231,231 | 277,831 | 402,583 | 379,756 | 386,309 | 411,041 | 481,420 | 490,783 |
| Other | Tons | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |
| Sucrose recovery | Percent | 11.91 | 12.19 | 12.32 | 12.30 | 12.60 | 12.61 | 12.42 | 12.78 | 13.35 | 12.93 |
| Cane yield | Tn/Ha. | 113.82 | 116.74 | 104.39 | 109.41 | 108.95 | 104.04 | 110.14 | 104.44 | 116.33 | 109.89 |
| Sugar yield | Tn/ha | 13.55 | 14.24 | 12.86 | 13.46 | 13.73 | 13.12 | 13.68 | 13.35 | 15.53 | 14.21 |
| Gulf |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 17,759,294 | 20,269,579 | 18,707,864 | 19,302,127 | 18,749,219 | 15,466,962 | 16,762,064 | 15,646,792 | 16,669,325 | 19,063,538 |
| Area harvested | Has. | 258,256 | 272,143 | 272,332 | 282,538 | 285,346 | 269,539 | 272,335 | 274,485 | 281,492 | 294,455 |
| Sugar production | Tons | 1,978,663 | 2,290,966 | 2,100,380 | 2,077,359 | 2,092,869 | 1,798,622 | 1,802,381 | 1,834,977 | 1,746,091 | 2,124,563 |
| Refinado | Tons | 848,973 | 1,036,836 | 875,373 | 927,629 | 933,947 | 844,042 | 889,132 | 871,414 | 830,203 | 984,285 |
| Estandar | Tons | 1,129,107 | 1,253,255 | 1,206,551 | 1,147,968 | 1,146,448 | 915,273 | 912,446 | 918,215 | 897,639 | 1,140,278 |
| Other | Tons | 583 | 875 | 18,456 | 1,762 | 12,474 | 39,306 | 804 | 45,351 | 18,248 | 0 |
| Sucrose recovery | Percent | 11.14 | 11.30 | 11.23 | 10.76 | 11.16 | 11.63 | 10.75 | 11.73 | 10.47 | 11.14 |
| Cane yield | Tn/Ha. | 68.77 | 74.48 | 68.70 | 68.32 | 65.71 | 57.38 | 61.55 | 57.00 | 59.22 | 64.74 |
| Sugar yield | Tn/ha | 7.66 | 8.42 | 7.71 | 7.35 | 7.33 | 6.67 | 6.62 | 6.69 | 6.20 | 7.22 |
| Northeast |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 7,253,412 | 9,542,032 | 8,282,055 | 7,532,287 | 8,915,731 | 7,707,869 | 6,422,780 | 9,140,820 | 6,649,561 | 8,275,994 |
| Area harvested | Has. | 104,662 | 127,991 | 126,482 | 121,914 | 125,489 | 128,997 | 122,284 | 134,331 | 131,753 | 134,196 |
| Sugar production | Tons | 772,141 | 1,070,114 | 950,967 | 794,523 | 1,043,359 | 908,832 | 696,051 | 1,122,889 | 717,721 | 942,129 |
| Refinado | Tons | 360,727 | 329,146 | 390,431 | 297,882 | 314,912 | 398,370 | 300,023 | 475,673 | 305,641 | 526,830 |
| Estandar | Tons | 411,414 | 740,968 | 560,536 | 496,641 | 728,447 | 510,461 | 396,028 | 643,936 | 412,079 | 415,299 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 | 0 | 0 |
| Sucrose recovery | Percent | 10.65 | 11.21 | 11.48 | 10.55 | 11.70 | 11.79 | 10.84 | 12.28 | 10.79 | 11.38 |
| Cane yield | Tn/Ha. | 69.30 | 74.55 | 65.48 | 61.78 | 71.05 | 59.75 | 52.52 | 68.05 | 50.47 | 61.67 |
| Sugar yield | Tn/ha | 7.38 | 8.36 | 7.52 | 6.52 | 8.31 | 7.05 | 5.69 | 8.36 | 5.45 | 7.02 |
| Northwest |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 1,769,732 | 1,257,460 | 1,882,054 | 2,488,029 | 2,140,474 | 1,774,361 | 954,571 | 1,194,424 | 1,613,186 | 1,624,056 |
| Area harvested | Has. | 23,246 | 22,688 | 20,928 | 24,156 | 24,910 | 21,527 | 14,437 | 15,228 | 20,178 | 20,609 |
| Sugar production | Tons | 163,684 | 112,623 | 178,260 | 222,983 | 199,404 | 164,786 | 92,475 | 118,142 | 143,384 | 153,151 |
| Refinado | Tons | 86,425 | 48,127 | 96,410 | 106,614 | 98,585 | 66,163 | 22,316 | 35,326 | 46,443 | 59,317 |
| Estandar | Tons | 77,259 | 64,496 | 81,851 | 116,369 | 100,819 | 98,623 | 70,159 | 82,816 | 96,941 | 93,834 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sucrose recovery | Percent | 9.25 | 8.96 | 9.47 | 8.96 | 9.32 | 9.29 | 9.69 | 9.89 | 8.89 | 9.43 |
| Cane yield | Tn/Ha. | 76.13 | 55.42 | 89.93 | 103.00 | 85.93 | 82.43 | 66.12 | 78.44 | 79.95 | 78.80 |
| Sugar yield | Tn/ha | 7.04 | 4.96 | 8.52 | 9.23 | 8.00 | 7.65 | 6.41 | 7.76 | 7.11 | 7.43 |
| Pacific |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 9,491,642 | 10,232,129 | 9,163,852 | 10,053,313 | 9,628,431 | 8,887,714 | 9,890,549 | 8,827,922 | 10,407,966 | 10,198,322 |
| Area harvested | Has. | 110,209 | 113,635 | 117,895 | 119,572 | 119,248 | 115,718 | 113,413 | 113,296 | 127,348 | 126,929 |
| Sugar production | Tons | 1,114,910 | 1,237,508 | 1,030,471 | 1,166,484 | 1,166,888 | 1,064,392 | 1,168,930 | 1,022,131 | 1,197,322 | 1,203,480 |
| Refinado | Tons | 287,732 | 342,695 | 293,654 | 318,871 | 290,831 | 281,710 | 297,022 | 266,634 | 308,485 | 311,775 |
| Estandar | Tons | 827,178 | 894,813 | 736,817 | 847,613 | 876,057 | 782,682 | 871,886 | 592,145 | 689,009 | 663,536 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 163,352 | 199,830 | 228,170 |
| Sucrose recovery | Percent | 11.75 | 12.09 | 11.24 | 11.60 | 12.12 | 11.98 | 11.82 | 11.58 | 11.50 | 11.80 |
| Cane yield | Tn/Ha. | 86.12 | 90.04 | 77.73 | 84.08 | 80.74 | 76.81 | 87.21 | 77.92 | 81.73 | 80.35 |
| Sugar yield | Tn/ha | 10.12 | 10.89 | 8.74 | 9.76 | 9.79 | 9.20 | 10.31 | 9.02 | 9.40 | 9.48 |
| South |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 6,161,435 | 6,361,737 | 6,342,370 | 6,404,263 | 5,776,882 | 5,678,293 | 6,229,105 | 6,105,416 | 7,214,967 | 6,902,308 |
| Area harvested | Has. | 89,392 | 92,293 | 93,493 | 96,855 | 98,688 | 97,973 | 96,876 | 102,533 | 111,392 | 108,888 |
| Sugar production | Tons | 634,322 | 691,367 | 663,111 | 653,491 | 615,587 | 646,108 | 679,415 | 674,319 | 762,532 | 753,954 |
| Refinado | Tons | 76,551 | 65,407 | 47,370 | 72,453 | 63,837 | 80,269 | 94,300 | 59,376 | 74,244 | 88,667 |
| Estandar | Tons | 557,771 | 625,960 | 615,741 | 581,038 | 551,750 | 565,838 | 585,114 | 594,079 | 659,883 | 592,502 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,864 | 28,405 | 72,785 |
| Sucrose recovery | Percent | 10.30 | 10.87 | 10.46 | 10.20 | 10.66 | 11.38 | 10.91 | 11.04 | 10.57 | 10.92 |
| Cane yield | Tn/Ha. | 68.93 | 68.93 | 67.84 | 66.12 | 58.54 | 57.96 | 64.30 | 59.55 | 64.77 | 63.39 |
| Sugar yield | Tn/ha | 7.10 | 7.49 | 7.09 | 6.75 | 6.24 | 6.59 | 7.01 | 6.58 | 6.85 | 6.92 |
| Mexico |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 45,461,842 | 50,892,643 | 47,290,409 | 49,025,124 | 48,405,473 | 42,526,838 | 43,368,387 | 44,131,570 | 46,231,229 | 49,858,533 |
| Area harvested | Has. | 612,354 | 656,415 | 659,029 | 674,694 | 683,005 | 662,700 | 647,575 | 670,667 | 703,765 | 719,605 |
| Sugar production | Tons | 5,024,076 | 5,796,439 | 5,282,088 | 5,314,084 | 5,520,690 | 4,962,495 | 4,825,560 | 5,183,500 | 5,057,833 | 5,668,060 |
| Refinado | Tons | 1,824,242 | 1,957,951 | 1,830,906 | 1,844,862 | 1,702,112 | 1,670,555 | 1,602,793 | 1,708,423 | 1,565,016 | 1,970,874 |
| Estandar | Tons | 3,199,251 | 3,837,613 | 3,432,726 | 3,467,460 | 3,806,104 | 3,252,633 | 3,221,942 | 3,242,232 | 3,236,971 | 3,396,232 |
| Other | Tons | 583 | 875 | 18,456 | 1,762 | 12,474 | 39,306 | 804 | 232,847 | 246,483 | 300,955 |
| Sugar production | Tons, raw value | 5,325,521 | 6,144,225 | 5,599,013 | 5,632,929 | 5,851,931 | 5,260,245 | 5,115,094 | 5,494,510 | 5,361,303 | 6,008,144 |
| Sucrose recovery | Percent | 11.05 | 11.39 | 11.17 | 10.84 | 11.41 | 11.67 | 11.13 | 11.75 | 10.94 | 11.37 |
| Cane yield | Tn/Ha. | 74.24 | 77.53 | 71.76 | 72.66 | 70.87 | 64.17 | 66.97 | 65.80 | 65.69 | 69.29 |
| Sugar yield | Tn/ha | 8.20 | 8.83 | 8.01 | 7.88 | 8.08 | 7.49 | 7.45 | 7.73 | 7.19 | 7.88 |

Table 2 -- Mexico sugarcane, area harvested, sugar, by region, 2003/04-2011/12 and projected 2012/13 - continued

| Region |  | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pacific |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 9,491,642 | 10,232,129 | 9,163,852 | 10,053,313 | 9,628,431 | 8,887,714 | 9,890,549 | 8,827,922 | 10,407,966 | 10,198,322 |
| Area harvested | Has. | 110,209 | 113,635 | 117,895 | 119,572 | 119,248 | 115,718 | 113,413 | 113,296 | 127,348 | 126,929 |
| Sugar production | Tons | 1,114,910 | 1,237,508 | 1,030,471 | 1,166,484 | 1,166,888 | 1,064,392 | 1,168,930 | 1,022,131 | 1,197,322 | 1,203,480 |
| Refinado | Tons | 287,732 | 342,695 | 293,654 | 318,871 | 290,831 | 281,710 | 297,022 | 266,634 | 308,485 | 311,775 |
| Estandar | Tons | 827,178 | 894,813 | 736,817 | 847,613 | 876,057 | 782,682 | 871,886 | 592,145 | 689,009 | 663,536 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 163,352 | 199,830 | 228,170 |
| Sucrose recovery | Percent | 11.75 | 12.09 | 11.24 | 11.60 | 12.12 | 11.98 | 11.82 | 11.58 | 11.50 | 11.80 |
| Cane yield | Tn/Ha. | 86.12 | 90.04 | 77.73 | 84.08 | 80.74 | 76.81 | 87.21 | 77.92 | 81.73 | 80.35 |
| Sugar yield | Tn/ha | 10.12 | 10.89 | 8.74 | 9.76 | 9.79 | 9.20 | 10.31 | 9.02 | 9.40 | 9.48 |
| South |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 6,161,435 | 6,361,737 | 6,342,370 | 6,404,263 | 5,776,882 | 5,678,293 | 6,229,105 | 6,105,416 | 7,214,967 | 6,902,308 |
| Area harvested | Has. | 89,392 | 92,293 | 93,493 | 96,855 | 98,688 | 97,973 | 96,876 | 102,533 | 111,392 | 108,888 |
| Sugar production | Tons | 634,322 | 691,367 | 663,111 | 653,491 | 615,587 | 646,108 | 679,415 | 674,319 | 762,532 | 753,954 |
| Refinado | Tons | 76,551 | 65,407 | 47,370 | 72,453 | 63,837 | 80,269 | 94,300 | 59,376 | 74,244 | 88,667 |
| Estandar | Tons | 557,771 | 625,960 | 615,741 | 581,038 | 551,750 | 565,838 | 585,114 | 594,079 | 659,883 | 592,502 |
| Other | Tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,864 | 28,405 | 72,785 |
| Sucrose recovery | Percent | 10.30 | 10.87 | 10.46 | 10.20 | 10.66 | 11.38 | 10.91 | 11.04 | 10.57 | 10.92 |
| Cane yield | Tn/Ha. | 68.93 | 68.93 | 67.84 | 66.12 | 58.54 | 57.96 | 64.30 | 59.55 | 64.77 | 63.39 |
| Sugar yield | Tn/ha | 7.10 | 7.49 | 7.09 | 6.75 | 6.24 | 6.59 | 7.01 | 6.58 | 6.85 | 6.92 |
| Mexico |  |  |  |  |  |  |  |  |  |  |  |
| Cane harvested | Tons | 45,461,842 | 50,892,643 | 47,290,409 | 49,025,124 | 48,405,473 | 42,526,838 | 43,368,387 | 44,131,570 | 46,231,229 | 49,858,533 |
| Area harvested | Has. | 612,354 | 656,415 | 659,029 | 674,694 | 683,005 | 662,700 | 647,575 | 670,667 | 703,765 | 719,605 |
| Sugar production | Tons | 5,024,076 | 5,796,439 | 5,282,088 | 5,314,084 | 5,520,690 | 4,962,495 | 4,825,560 | 5,183,500 | 5,057,833 | 5,668,060 |
| Refinado | Tons | 1,824,242 | 1,957,951 | 1,830,906 | 1,844,862 | 1,702,112 | 1,670,555 | 1,602,793 | 1,708,423 | 1,565,016 | 1,970,874 |
| Estandar | Tons | 3,199,251 | 3,837,613 | 3,432,726 | 3,467,460 | 3,806,104 | 3,252,633 | 3,221,942 | 3,242,232 | 3,236,971 | 3,396,232 |
| Other | Tons | 583 | 875 | 18,456 | 1,762 | 12,474 | 39,306 | 804 | 232,847 | 246,483 | 300,955 |
| Sugar production | Tons, raw value | 5,325,521 | 6,144,225 | 5,599,013 | 5,632,929 | 5,851,931 | 5,260,245 | 5,115,094 | 5,494,510 | 5,361,303 | 6,008,144 |
| Sucrose recovery | Percent | 11.05 | 11.39 | 11.17 | 10.84 | 11.41 | 11.67 | 11.13 | 11.75 | 10.94 | 11.37 |
| Cane yield | Tn/Ha. | 74.24 | 77.53 | 71.76 | 72.66 | 70.87 | 64.17 | 66.97 | 65.80 | 65.69 | 69.29 |
| Sugar yield | Tn/ha | 8.20 | 8.83 | 8.01 | 7.88 | 8.08 | 7.49 | 7.45 | 7.73 | 7.19 | 7.88 |

Figure 5
Mexico sugar area harvested and sugar yield, 1986/872012/13
hectares (ha)
metric tons (tel quel)/ha


Source: Conadesuca and Mexico Sugar Chamber.

In October, the Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca) in Mexico revised its first forecast of Mexican sugarcane and sugar production for the upcoming 2012/13 crop year.
Conadesuca also released complete-year supply and use data for 2011/12.
Figure 5 summarizes underlying production trends in Mexico sugar since 1986/87. Essentially, area harvested has been increasing, especially since the 1991/92 low of 481,685 hectares. The other production statistic is sugar per hectare; this is the multiplication of sugarcane yield and sucrose recovery, and it reflects gains in productivity. The trend here is decidedly less uniform. There was significant growth from 1986/87 up to the record of 8.83 mt per ha in 2004/05. The average since 2004/05 ( 7.69 mt per ha) more closely resembles the 7.63 mt per ha average of the period 1991/92 through 1999/2000. Clearly, any gains in Mexico sugar production have been the result of area expansion, with productivity lagging.

## Mexico Sweetener Supply and Use for 2011/12

Conadesuca recently released complete-year supply and use data for the October 2011-September 2012 marketing year. There were no changes to either beginning stocks of $759,906 \mathrm{mt}$ or production at 5.048 million mt . Imports for consumption are estimated at $236,717 \mathrm{mt}$, most of which came to Mexico through tariff-rate quotas (TRQs) established by Mexico prior to the 2011/12 marketing year but extending into it. Conadesuca estimates that 25,086 mt were imported outside the TRQ for consumption. All, or nearly all, of this amount probably came from the United States. Although not a part of their supply and use balance, Conadesuca made available to the USDA estimates of imports for Mexico's sugar-containing product export program, commonly referred to as IMMEX. These imports totaled $239,662 \mathrm{mt}$, most of which, $217,343 \mathrm{mt}$, came from the United States.

Conadesuca estimates 2011/12 sugar deliveries for human consumption at 4,135,434 mt and high fructose corn syrup (HFCS) deliveries at $1,720,655 \mathrm{mt}$, dry weight. Both of these estimates are very close to longstanding USDA projections. Figure 6 shows delivery comparisons with 2009/10 and 2010/11. Overall, 2011/12 sweetener deliveries overcame the slump in 2010/11 deliveries, with 2011/12 deliveries 4.85 percent higher than last year and 1.47 percent higher than 2009/10. The HFCS proportion of sweetener use for 2011/12 is estimated at 29.4 percent, about the same as the 29.3 percent in 2010/11 but higher than 24.6 percent in 2009/10. HFCS growth is, therefore, largely attributable to growth in demand for sweeteners, with almost none of the substitution for sugar that was evident in the preceding marketing years.

Conadesuca estimates IMMEX deliveries from domestic production at 104,223 mt. Combining this estimate with that for IMMEX imports produces an IMMEX total of $343,884 \mathrm{mt}$. As is well known, most IMMEX products that contain sugar are destined for export to the United States.

Conadesuca estimates 2011/12 sugar exports at $836,924 \mathrm{mt}^{2}$ Almost all of this sugar, or $836,706 \mathrm{mt}$, was exported to the United States. Rather than accepting this estimate in its Mexico supply and use balance, the USDA records Mexico exports to the United States as the amount reported by the U.S. Census Bureau as sugar imported from Mexico during 2011/12. This estimate, released by the U.S. Census Bureau on November 8, is $919,163 \mathrm{mt}$. Although Conadesuca estimates exports to non-U.S. destinations at only 218 mt , the USDA projects these exports at $10,000 \mathrm{mt}$ until complete-year Mexico exports are published by Mexico's Secretary of Economy, or Economia. Currently, these export estimates are only available through August and total only 21 mt . When Economia releases the full-year estimate, this total will be added to the U.S. Census Mexico sugar import estimate to produce the Mexico sugar export estimate. It would seem very likely that non-U.S. exports will be very small. Until then, however, the USDA estimate of Mexico's total sugar exports is $929,163 \mathrm{mt}$.

Figure 6


Source: Conadesuca.

Conadesuca estimates ending-year stocks at $968,256 \mathrm{mt}$. This estimate is the result of physical audits performed at each of the 57 sugar factories producing sugar in Mexico. The implied sugar-to-consumption ratio is calculated at 23.4 percent. This is above the commonly accepted 22 percent as the optimal ratio at the end of September. Some in Mexico would term this as an indicator of excess supply. This abundance of sugar, plus the recent drop in world sugar prices, may help account for 35 percent year-over-year decline in estandar sugar prices and 20 percent decline in refinado sugar prices for September in
Mexico City.
The USDA accounting includes a miscellaneous category that acts as a residual to balance total use with total supply. It is estimated at negative $91,983 \mathrm{mt}$. This difference reflects the differing methods of estimating exports by the United States and Mexico.

## Mexico Sweetener Supply and Use for 2012/13

The USDA projects Mexico's sugar supply at 6.834 million mt, about $495,000 \mathrm{mt}$ more than last month. This reflects higher projected production of $418,000 \mathrm{mt}$ and higher beginning stocks of $77,000 \mathrm{mt}$. Projected imports of $198,000 \mathrm{mt}$ did not change from last month. All these imports are assumed to be for the IMMEX program, i.e., none for consumption; and all of them are assumed to be from the United States.

Projected sugar deliveries for human consumption at 4.200 million mt and HFCS consumption at 1.683 million mt , dry weight, are unchanged from last month. Deliveries to the IMMEX program are projected at $340,000 \mathrm{mt}$, an increase of $29,000 \mathrm{mt}$ from last month. This increase is projected to come from domestic production.

Ending stocks are projected to be above optimal levels for a second year in a row. They are projected at 23.8 percent of domestic sugar consumption, slightly higher than the 2011/12 level at 1.000 million mt. Exports are projected at 1.294 million mt . At this level, total Mexico sugar use balances with total supply. All but $10,000 \mathrm{mt}$ are assumed to be exported to the United States. ${ }^{3}$

[^0]Table 3 -- Mexico: sugar production and supply, and sugar and HFCS utilization


## U.S. Sugar

On November 9, 2012, the National Agricultural Statistics Service (NASS) published forecasts of sugar crop area, yields, and production for 2012/13 in its Crop Production report. Also on November 9, 2012, the USDA published in the World Agricultural Supply and Demand Estimates (WASDE) its latest supply and use estimates/projections for U.S. sugar.

## U.S. Production

The U.S. sugarbeet harvest is mostly complete in the major reporting States-91 percent of sugarbeet area was estimated as harvested by NASS as of November 4. The harvest was largely over in Minnesota, North Dakota, and Idaho. Only Michigan still had significant area to be harvested.

NASS estimates the 2012/13 sugarbeet crop at 34.946 million tons, a 1.8 percent reduction from last month. The largest reduction occurred in Minnesota, where the crop was estimated 473,000 tons less than last month at 12.298 million tons. This reduction was due to freezes during harvest, not to plowing the crop under, which had been seen as a possibility because of processing constraints. The sugarbeet crop in the Great Plains States (Colorado, Montana, Nebraska, and Wyoming) is estimated lower as well: 4.578 million tons, a reduction of 4.6 percent from last month.

The early start to the sugarbeet harvest has resulted in record beet sugar production for the combined months of August and September. Beet sugar production from sugarbeet slicing is estimated at 641,602 short tons, raw value (STRV). This amount, plus sugar produced from molasses desugaring, pushed the fiscal year (FY) 2012 beet sugar production to 4.894 million STRV. The projection for FY 2013 remains at 5.105 million STRV.

NASS forecasts 2012/13 sugarcane production at 32.120 million tons, an increase of 2.7 percent over last month's forecast. The gain resulted from better expected yields in Louisiana - up to 32 tons per acre from last month's 30 tons per acre. Louisiana production is forecast at 13.600 million tons, an increase of 850,000 tons, or 6.7 percent. Due to these better crop forecasts, the USDA increased its Louisiana cane sugar production forecast by 75,000 STRV to 1.500 million STRV. Cane sugar production forecasts in other producing States were unchanged. The total cane sugar production for FY 2013 is forecast at 3.720 million STRV.

Total U.S. sugar production for FY 2013 is forecast at 8.825 million STRV. If realized, this would be the largest production total since FY 2000's 9.050 million STRV.

## Sugar Trade

The USDA revised FY 2012 sugar trade estimates after the U.S. Census Bureau released September 2012 trade on November 8 and after the release of Sweetener Market Data (SMD). Table 4 shows the sugar import components for FY 2012, with full fiscal year estimates and changes from last month. Imports from Mexico totaled 1,071,291 STRV, an increase of almost 45,000 STRV over last month. High-tier tariff imports totaled 13,217 STRV, less than expected last month. In total, FY 2012 imports are estimated at $3,632,063$ STRV. The USDA sources sugar exports estimates from SMD. The estimate for FY 2012 is 269,411 STRV, about 5,600 STRV less than last month's estimate.

Table 5 shows sugar import projections for FY 2013. Total imports are increased by 233,735 STRV to 3,248,089 STRV. As discussed in the Mexico chapter, sugar imports from Mexico are expected to be large at 1.500 million STRV. The increase of 332,351 from last month is mostly the result of increased sugar production in Mexico. Partially offsetting the Mexican imports is the USDA increase of the raw sugar TRQ shortfall of 99,653 STRV to 265,000 STRV. This shortfall forecast is not predominantly linked to imports from specific countries; rather, the increase was made on the basis of the low margin through October and November between the U.S. raw sugar price (nearby No. 16 ICE contract) and the world raw sugar price (nearby No. 11 contract). The margin for October was 3.50 cents and has been less than that through the first week of November. This thin a margin is likely unsustainable,

|  | Metric tons, raw value (MTRV) |  | Short tons, raw value (STRV) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Oct. forecast | Change from Sept. | Oct. forecast | Change from Sept. |
| Raw sugar TRQ | 1,117,195 | 0 | 1,231,497 | 0 |
| Less other shortfall | -235,129 | 0 | -259,185 | 0 |
| Plus FY 2011 TRQ entries in Oct. and Nov. 2011 | 79,906 | 0 | 88,081 | 0 |
| Less FY 2012 TRQ entries in September 2011 | -20,062 | 0 | -22,115 | 0 |
| Plus April 2012 increase | 381,018 | 0 | 420,000 | 0 |
| Total raw sugar TRQ | 1,322,928 | 0 |  | 0 |
| Refined sugar TRQ |  |  |  |  |
| Allocation to Canada | 12,050 | 0 | 13,283 | 0 |
| FY 2011 Canada sugar to enter FY 2012 | 17,535 | 0 | 19,329 | 0 |
| Allocation to Mexico <br> Less Mexican shortfall 1/ |  |  |  |  |
| Global | 8,294 | 0 | 9,143 | 0 |
| FY 2011 Global sugar to enter FY 2012 | 111,078 | 0 | 122,443 | 0 |
| Specialty |  |  |  |  |
| Base | 1,656 | 0 | 1,825 | 0 |
| Additional | 84,151 | -6,567 | 92,761 | -7,239 |
| Total refined sugar TRQ | 234,764 | -6,567 | 258,783 | -7,239 |
| CAFTAIDR TRQ - calendar 2012 | 116,820 | 0 | 128,772 | 0 |
| CAFTA/DR FY 2011, likely to enter in FY 2012 | 31,543 | 0 | 34,770 | 0 |
| CAFTA/DR FY 2012, forecast to enter in FY 2013 Other: | -27,352 | 0 | -30,150 | 0 |
| Singapore, Bahrain, Jordan | 22 | 0 | 24 | 0 |
| Peru | 0 | 0 | 0 | 0 |
| Colombia | 50,000 | 0 | 55,116 | 0 |
| Colombia CY 2011, entered Oct-Dec 2011 | 0 | 0 | 0 | 0 |
| Colombia CY 2012, forecast to enter Oct-Dec 2012 | -20,105 | 0 | -22,162 | 0 |
| Total estimate TRQ entries | 1,708,620 | -6,567 | 1,883,431 | -7,239 |
| Mexico | 971,859 | 40,539 | 1,071,291 | 44,687 |
| Re-export program imports | 602,484 | 0 | 664,125 | 0 |
| Sugar syrups, high-tier | 11,990 | -754 | 13,217 | -831 |
| Total projected imports | 3,294,953 | 33,218 | 3,632,063 | 36,616 |

1/ Total entries from Mexico, quota and non-quota, reflected below.
Source: US Department of Agriculture, Foreign Agricultural Service, Sugar Monthly Import and Re-Export Data Report, November 2012.

Table 5 -- November 2012 USDA estimate of sugar imports in FY 2013

| Table 5 -- November 2012 USDA estimate of sugar imports in FY 2013 |  |  |
| :--- | :---: | :---: |
| Metric tons, raw value (MTRV) <br> Oct. forecast | Short tons, raw value (STRV) <br> Change from Sept. <br> Oct. forecast | Change from Sept. |
| Raw sugar TRQ | $1,117,195$ | 0 |

## Refined sugar TRQ

| Allocation to Canada | 12,050 |  | 0 | 13,283 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Global | 8,294 |  | 0 | 9,143 | 0 |
| Specialty 1/ |  |  |  |  |  |
| Base | 1,656 |  | 0 | 1,825 | 0 |
| Additional | 95,254 |  | 0 | 105,000 | 0 |
| Total refined sugar TRQ | 117,254 | $\cdots$ | 0 | 129,250 | 0 |
| CAFTAIDR TRQ - calendar 2013 | 121,740 |  | 0 | 134,195 | 0 |
| CAFTA/DR CY 2012, likely to enter in FY 2013 | 27,352 |  | 0 | 30,150 | 0 |
| CAFTA/DR CY 2013, forecast to enter in FY 2014 Other: | -27,352 |  | 0 | -30,150 | 0 |
| Singapore, Bahrain, Jordan | 0 |  | -59 | 0 | -65 |
| Peru | 2,000 |  | 0 | 2,205 | 0 |
| Colombia | 50,750 |  | 0 | 55,942 | 0 |
| Colombia CY 2012, forecast to enter Oct-Dec 2012 | 20,105 |  | 0 | 22,162 | 0 |
| Colombia CY 2013, forecast to enter Jan-Sept 2013 | -20,105 |  | 0 | -22,162 | 0 |
| Panama | 6,620 |  |  | 7,297 |  |
| Less shortfall | -5,620 |  |  | -6,195 |  |
| Total estimate TRQ entries | 1,169,535 |  | $-89,463$ | 1,288,089 | -98,616 |
| Mexico | 1,360,777 |  | 301,504 | 1,500,000 | 332,351 |
| Re-export program imports | 408,233 |  | 0 | 450,000 | 0 |
| Sugar syrups, high-tier | 9,072 |  | 0 | 10,000 | 0 |
| Total projected imports | 2,947,617 | $\checkmark$ | 212,041 | 3,248,089 | 233,735 |


| 1/ The tranches of the FY 2013 specialty sugar TRQ open as follows: in MTRV: | MTRV | STRV |
| :--- | ---: | ---: |
| Tranche 1 - Oct. 12, 2012 | 1,656 | 3,825 |
| Tranche 2 - Oct. 26, 2012 | 35,245 | 22,051 |
| Tranche 3 - Jan. 11, 2013 | 20,003 | 22,050 |
| Tranche 4 - Apr. 11, 2013 | 20,003 | 22,050 |
| Tranche 5 - July 11, 2013 | 20,003 | 106,825 |

Source: US Depatment of Agriculture, Foreign Agricultural Service, Sugar Monthly Import and Re-Export Data Report, November 2012.

Table 6 - Monthly sugar deliveries for human consumption: Sweetener Market Data (SMD) estimates for 2011/12 and ERS Sugar and Sweetener Outlook projections for 2012/13, including Sugar and Sweetener Outlook projections model
Units $=$ short tons, raw value (STRV)

| Delivery months | Source/Formula | Total deliveries | Beet deliveries | Cane deliveries | Direct Cons. Imports |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Oct | SMD | 1,091,585 | 381,153 | 511,466 | 198,966 |
| Nov | SMD | 787,865 | 361,345 | 476,042 | -49,522 |
| Dec | SMD | 836,589 | 320,535 | 421,698 | 94,356 |
| Jan | SMD | 782,658 | 351,813 | 405,220 | 25,625 |
| Feb | SMD | 889,192 | 365,106 | 432,432 | 91,654 |
| Mar | SMD | 957,438 | 397,538 | 498,295 | 61,605 |
| Apr | SMD | 829,305 | 356,491 | 419,957 | 52,857 |
| May | SMD | 1,015,650 | 405,421 | 488,270 | 121,959 |
| Jun | SMD | 1,032,081 | 396,974 | 477,517 | 157,590 |
| Jul | SMD | 935,052 | 406,026 | 508,207 | 20,819 |
| Aug | SMD | 995,155 | 401,316 | 520,748 | 73,091 |
| Sept | SMD | 988,221 | 400,750 | 448,856 | 138,615 |
| Total estimated deliveries | Sum | 11,140,791 | 4,544,468 | 5,608,708 | 987,615 |


| Delivery months | Formula from model 1/ | Total deliveries (l) | Beet deliveries (II) | Cane deliveries (III) | Direct Cons. Imports (IV) $2 /$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Oct | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{E}$ | 1,037,359 | 405,104 | 500,688 | 131,567 |
| Nov | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{F}$ | 944,480 | 363,725 | 482,331 | 98,424 |
| Dec | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{G}$ | 851,353 | 323,025 | 426,645 | 101,683 |
| Jan | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{H}$ | 845,472 | 341,729 | 409,151 | 94,592 |
| Feb | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{ll})+\mathrm{J}$ | 840,264 | 339,851 | 409,939 | 90,474 |
| Mar | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{J}$ | 976,304 | 383,852 | 485,482 | 106,971 |
| Apr | $A+B+C+D^{*}(I)+\mathrm{K}$ | 912,139 | 364,595 | 444,368 | 103,177 |
| May | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{L}$ | 955,892 | 387,481 | 468,735 | 99,676 |
| Jun | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{ll})+\mathrm{M}$ | 980,097 | 405,104 | 481,335 | 93,658 |
| Jul | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{N}$ | 964,741 | 387,027 | 468,768 | 108,946 |
| Aug | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{O}$ | 1,037,359 | 405,104 | 500,688 | 131,567 |
| Sept | $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{P}$ | 1,037,359 | 405,104 | 500,688 | 131,567 |
| Total projected deliveries | Sum | 11,382,818 | 4,511,700 | 5,578,818 | 1,292,300 |


|  | Symbols | Total deliveries (1) | Beet deliveries (II) | Cane deliveries (III) | Direct Cons. Imports |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Constant | A | 783,475 | 405,104 | 552,826 | Residual calculation $=1-(\mathrm{ll}+\mathrm{ll\mid})$ |
| Shifter | B | -88,054 | 0 | 30,398 |  |
| Trend (value in FY 2013) | C | 341,938 | 0 | 0 |  |
| Beet deliveries | D | 0 | 0 | -0.2037 |  |
| Oct | E | 0 | 0 | 0 |  |
| Nov | F | -92,879 | -41,379 | -26,788 |  |
| Dec | G | -186,005 | -82,078 | -90,766 |  |
| Jan | H | -191,887 | -63,375 | -104,450 |  |
| Feb | 1 | -197,095 | -65,253 | -104,044 |  |
| Mar | J | -61,054 | -21,252 | -19,536 |  |
| Apr | K | -125,219 | -40,509 | -64,574 |  |
| May | L | -81,467 | -17,623 | -35,544 |  |
| Jun | M | -57,262 | 0 | -19,353 |  |
| Jul | N | -72,618 | -18,077 | -35,603 |  |
| Aug | 0 | 0 | 0 | 0 |  |
| Sept | P | 0 | 0 | 0 |  |
| 1/ Example for October: $\mathrm{A}+\mathrm{B}+\mathrm{C}+\mathrm{D}^{*}(\mathrm{II})+\mathrm{E}$ |  |  |  |  |  |
| Total deliveries $=783,475[\mathrm{~A}]-88,054[\mathrm{~B}]+341,938[\mathrm{C}]+0[\mathrm{E}]=1,037,359$ STRV |  |  |  |  |  |
| Beet deliveries $=405,104[\mathrm{~A}]+0[\mathrm{~B}]+0[\mathrm{C}]+0[\mathrm{E}]=405,104$ STRV |  |  |  |  |  |
| Cane deliveries $=552,826[\mathrm{~A}]+30,398[\mathrm{~B}]+0[\mathrm{C}]+(-0.2037[\mathrm{D}])^{*}(405,104(\mathrm{II}))+0$ [E] $=500,688$ STRV |  |  |  |  |  |
| Direct consumption imports $=1,037,359(\mathrm{I})-(405,104(\mathrm{II})+500,688(\mathrm{III}))=131,567$ STRV |  |  |  |  |  |
| 2/ Calculated as a residual. |  |  |  |  |  |
| Source: US Department of Agriculture, Economic Research Service, Sugar and Sweetener Outlook. |  |  |  |  |  |

given that many countries week of November. This thin a margin is likely unsustainable, given that many countries exporting sugar to the United States through the raw sugar TRQ would find more profitable destinations because of lower transport to those countries. The margin would then be expected to widen.

## Sugar Deliveries

The USDA estimates FY 2012 sugar deliveries for human consumption at 11.141 million STRV. This estimate is 159,000 below the estimate of 11.300 million STRV that USDA had been maintaining since May. Most of the reduction was due to a series of reporting errors by a U.S. sugar refiner that were uncovered by USDA's Farm Service Agency (FSA). The refiner had been listing certain intermediate sales as deliveries for human consumption when, in fact, those sales resulted in shipments to other refiners. This led to double-counting of deliveries byl10-120 STRV. The other event that led to fewer deliveries than expected was a dramatic decline in cane sugar deliveries in September from the amount forecast by about 55,000 STRV.

Deliveries for human consumption in FY 2013 are projected at 11.380 million STRV, a reduction of 45,000 STRV from last month. Table 6 shows results of an ERS sugar delivery model for FY 2013. Model details are provided in the bottom panel. The model itself assumes that the same trends affecting deliveries for the last few years continue into FY 2013. Projections for beet sugar and cane sugar deliveries are not too far different than those that resulted in FY 2012. Direct consumption imports by entities that do not report to the USDA are projected at 1.292 million STRV, an increase of 304,685 STRV over the estimate for FY 2012.

## Ending Stocks

Ending FY 2012 sugar stocks held by processors and refiners are estimated at 2.007 million STRV. The implied stocks-to-use ratio is 17.48 percent, the highest level since FY 2004.

Stocks held by U.S. cane sugar processors and refiners totaled 1.168 million STRV, about 314,000 STRV more than the corresponding average stock levels of FY 2010 and FY 2011. Cane sugar stocks also grew over 280,000 STRV from the end of August to the end of September. Refining losses for September are estimated at a high absolute level of negative 57,798 STRV. The negative factor for the loss indicates an addition to cane sugar supply of that high, unexplained amount. Refined sugar imports by cane refiners in September of 47,014 STRV are 33,454 STRV above the average for the preceding 11 months. Recorded net receipts of sugar by refiners exceeded recorded net sales of cane processors by 33,264 STRV in September. Also contributing was the drop in expected cane sugar deliveries in September of about 55,000 STRV.

Beet sugar stocks are estimated at 838,719 STRV. This large total results from the much higher level of beet sugar production in August and September. Beet sugar sold in September is estimated at 1,049,408 STRV, but September deliveries for human consumption from sugar sold this year and last are estimated at 400,750 STRV. Sold but undelivered beet sugar is 653,921 STRV. When combined with previously sold but undelivered sugar held before September, beet sugar stocks held by processors but not owned by them are estimated at 655,741 STRV. Beet sugar owned by processors is estimated at only 182,977 STRV.

Figure 7 shows the ownership components of ending-year beet sugar stocks since 1992. Before the marketing allotments were instituted by the 2002 Farm Act, beet sugar processors' ending stocks averaged 551,000 STRV, or about 13.0 percent of total-year beet sugar deliveries. In 2002 (immediately prior to marketing allotments instituted in October 2002, the first month of FY 2003) and all years since, beet sugar processors' owned stocks have averaged 313,600 STRV, or about 6.9 percent of average annual beet sugar deliveries.

Figure 7
Sugarbeet processor ending fiscal year stocks


Processors sell sugar in September that gets assigned to unused, available marketing allotment quantities in the current marketing year, although the sugar is not to be delivered until the next fiscal year. This started at the end of FY 2002 before marketing allotments were put into place and has rolled on ever since. Beet processors are able to remain below effective constraints meant to restrict their sales to their share of the overall allotment quantity set by the USDA for any given year. Because sugar forfeitures are considered to be marketings by the USDA, having unused allotment at the end of the year because delivered quantities at the beginning of year were assigned to the previous year's allotment quantity increases the likelihood of beet sugar forfeitures and U.S. Federal Government budget expense, all else constant.

For FY 2013, ending sugar stocks are projected as the difference between total supply and total use, or 2.216 million STRV. The implied stocks-to-use ratio is 18.68 percent.

## Contacts and Links

## Contact Information

Stephen Haley, (202) 694-5247, shaley@ers.usda.gov (coordinator)
Erma J. McCray, (202) 694-5306, ejmccray@ers.usda.gov (web publishing)

## Subscription Information

Subscribe to ERS' e-mail notification service at http://www.ers.usda.gov/subscribe-to-ers-e-newsletters.aspx to receive timely notification of newsletter availability. Printed copies can be purchased from the USDA Order Desk by calling 1 -800-363-2068 (specify the issue number).

## Data

Tables from the Sugar and Sweeteners Yearbook are available in the Sugar and Sweeteners Topic Room at http://www.ers.usda.gov/topics/crops/sugar-sweeteners.aspx. They contain the latest data and historical information on the production, use, prices, imports, and exports of sugar and sweeteners.

## Related Websites

Sugar and Sweeteners Outlook http://www.ers.usda.gov/publications/sssm-sugar-and-sweeteners-outlook.aspx WASDE http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentedID=1194
Sugar Topic Room, http://www.ers.usda.gov/topics/crops/sugar-sweeteners.aspx

## E-mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.
- Receive weekly notification (on Friday afternoon) via the ERS website. Go to http://www.ers.usda.gov/Updates/ and follow the instructions to receive notices about ERS outlook reports, Amber Waves magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to http://www.ers.usda.gov/rss/ to get started.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.


[^0]:    3 Some observers have suggested that with the current slim margin between U.S. (No. 16 Intercontinental Exchange (ICE) contract) and world raw sugar prices (No. 11 ICE contract),
    Mexico may be tempted to export significant quantities of sugar into the world market. There may be a free-on-board (FOB) pricing advantage from the No. 11 ICE contract for
    Mexican third-party exports compared with the Cost, Insurance, Freight (CIF) No. 16 reference price base for exports to the United States.

