

Electronic Outlook Report from the Economic Research Service
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# Sugar and Sweeteners Outlook 

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## U.S. Sugar December 2012

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The next release is January 17, 2013.

Approved by the World Agricultural Outlook Board.
U.S. sugar supply for fiscal year (FY) 2012/13 is projected at 13.816 million short tons, raw value (STRV), a decrease of 265,181 STRV from last month. The decrease is due to lower beginning stocks ( 1.983 million STRV, lower by 23,635 STRV) and lower imports ( 2.913 million STRV, lower by 336,546 STRV). These decreases combine to more than offset higher production ( 8.920 million STRV, increased by 95,000 STRV). The 2012/13 production increase is attributed to higher expected beet sugar production of 5.200 million STRV, increased because of the strong start at the beginning of 2012/13. Projections of imports of sugar under the re-export programs were lowered because of the narrow gap between U.S. and world-traded sugar prices. Exports were projected to decline because of increased competition from Mexican production in supplying the Mexican product re-export program. Imports from Mexico were decreased in line with reduced Mexican supplies from projected reductions in their sugar imports and beginning stocks.

## World Sugar

On November 20, 2012, the Foreign Agricultural Service (FAS) of the U.S. Department of Agriculture released its latest version of the World Centrifugal Sugar Production, Supply and Distribution (PSD), with updates for the 2010/11, 2011/12, and 2012/13 marketing years (table 1). World sugar surplus, defined as the difference between total production less total consumption (sum of human domestic consumption and other disappearance), is estimated as follows for the corresponding marketing years: 6.249 million metric tons, raw value (MTRV) for 2010/11 (an increase of 1.373 million MTRV from the May 2012 FAS release version); 12.014 million MTRV for 2011/12 (an increase of 2.012 million MTRV from May); and 8.696 million MTRV for 2012/13 (a decrease of 1.996 million MTRV from May). These surpluses for 3 consecutive years follow 2 years of deficits, one of which, 2008/09, was at a record level (fig. 1). The deficit that year was largely unexpected and caused a prolonged spike in world prices. Only now are prices reaching lower levels consistent with world sugar surpluses for the last 2 years and the one projected for this year.

Figure 2 highlights the sources of the differences between surpluses in 2012/13 and 2011/12. The South American surplus gain is largely anchored by increased production in Brazil and steady aggregate disappearance. The major offset (deficit) occurs in Asia and Oceania. While production gains (China, Australia, Pakistan, Indonesia, and the Philippines) are countered by losses (India and Thailand), disappearance increases, especially in the major Indian and Chinese consuming markets. Also significant is the increased deficit for Western Europe, which is largely a result of unfavorable weather causing production in the European Union that was lower than originally expected.

World sugar stocks in 2011/12 and 2012/13 are projected to grow to much higher levels, both with respect to the 3 preceding years and to forecasts made for 2011/12 and 2012/13 in May 2012. 2011/12 world stocks estimated at 36.208 million MTRV are 6.140 million higher than the $2010 / 11$ level, and 2012/13 stocks projected at 38.298 million MTRV are 8.230 million MTRV higher than 2010/12. The corresponding stocks-to-disappearance ratios are 19.3 percent for 2010/11, 22.6 percent for $2011 / 12$, and 23.4 percent for 2012/13 (fig. 3).

The ratios forecast in May were considerably lower for both 2011/12 at 19.6 percent and 2012/13 at 20.2 percent. In terms of volume, world stocks are estimated 4.597 million MTRV higher than in May for 2011/12 and 5.216 million MTRV higher for 2012/13. Stocks are forecast significantly higher in India (for 2011/12), the European Union, and the combined United States and Mexico North American Free Trade Area (NAFTA) market, China, and Thailand in 2012/13.

Sugar developments in important sugar producing and trading countries are detailed below. Materials are sourced from individual country sugar semiannual reports issued by FAS through its Global Agricultural Information Network (GAIN).

## Brazil

Brazil's 2012/13 sugarcane production is forecast at 570 million metric tons ( mt ), up 5 million mt from the May USDA forecast. Production in Center/South (C/S) Brazil is forecast at 518 million mt, up 18 million mt from May. Steady rainfall during April-June contributed to higher expected yields. Also important for yield was a higher proportion of plant cane, about 20 percent of the total, due to increased plantings. The harvest is expected to end in December, and about 8 million mt may be left in the field for harvest next year. Production in Brazil's Northeast $(\mathrm{NE})$ is projected at 60 million mt . The NE harvest is expected to continue through March 2013.

| Country mktg year | Beginning stocks Total sugar production | Total imports | Total supply | Total exports | Total use | Ending stocks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sugar - North America

| Canada |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 206 | 61 | 962 | 1,229 | 58 | 968 | 203 |
| 2009/10 | 203 | 70 | 1,169 | 1,442 | 84 | 1,158 | 200 |
| 2010/11 | 200 | 94 | 1,256 | 1,550 | 49 | 1,266 | 235 |
| 2011/12 | 235 | 130 | 1,148 | 1,513 | 81 | 1,179 | 253 |
| 2012/13 | 253 | 135 | 1,150 | 1,538 | 80 | 1,210 | 248 |
| Mexico |  |  |  |  |  |  |  |
| 2008/09 | 1,975 | 5,260 | 160 | 7,395 | 1,378 | 5,394 | 623 |
| 2009/10 | 623 | 5,115 | 861 | 6,599 | 751 | 4,875 | 973 |
| 2010/11 | 973 | 5,495 | 306 | 6,774 | 1,558 | 4,410 | 806 |
| 2011/12 | 806 | 5,351 | 505 | 6,662 | 985 | 4,651 | 1,026 |
| 2012/13 | 1,026 | 6,008 | 210 | 7,244 | 1,372 | 4,812 | 1,060 |
| United States |  |  |  |  |  |  |  |
| 2008/09 | 1,510 | 6,833 | 2,796 | 11,139 | 123 | 9,624 | 1,392 |
| 2009/10 | 1,392 | 7,224 | 3,010 | 11,626 | 192 | 10,075 | 1,359 |
| 2010/11 | 1,359 | 7,104 | 3,391 | 11,854 | 225 | 10,379 | 1,250 |
| 2011/12 | 1,250 | 7,695 | 3,294 | 12,239 | 244 | 10,174 | 1,821 |
| 2012/13 | 1,821 | 8,006 | 2,947 | 12,774 | 249 | 10,515 | 2,010 |
| Total Sugar - North America |  |  |  |  |  |  |  |
| 2008/09 | 3,691 | 12,154 | 3,918 | 19,763 | 1,559 | 15,986 | 2,218 |
| 2009/10 | 2,218 | 12,409 | 5,040 | 19,667 | 1,027 | 16,108 | 2,532 |
| 2010/11 | 2,532 | 12,693 | 4,953 | 20,178 | 1,832 | 16,055 | 2,291 |
| 2011/12 | 2,291 | 13,176 | 4,947 | 20,414 | 1,310 | 16,004 | 3,100 |
| 2012/13 | 3,100 | 14,149 | 4,307 | 21,556 | 1,701 | 16,537 | 3,318 |

Sugar - Caribbean

| Cuba |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 135 | 1,340 | 24 | 1,499 | 727 | 670 | 102 |
| 2009/10 | 102 | 1,250 | 0 | 1,352 | 563 | 675 | 114 |
| 2010/11 | 114 | 1,150 | 0 | 1,264 | 530 | 675 | 59 |
| 2011/12 | 59 | 1,400 | 0 | 1,459 | 670 | 680 | 109 |
| 2012/13 | 109 | 1,420 | 0 | 1,529 | 700 | 680 | 149 |
| Dominican Republic |  |  |  |  |  |  |  |
| 2008/09 | 35 | 510 | 12 | 557 | 217 | 330 | 10 |
| 2009/10 | 10 | 520 | 70 | 600 | 250 | 332 | 18 |
| 2010/11 | 18 | 510 | 49 | 577 | 208 | 335 | 34 |
| 2011/12 | 34 | 553 | 48 | 635 | 212 | 380 | 43 |
| 2012/13 | 43 | 555 | 48 | 646 | 215 | 380 | 51 |
| Other Sugar - Caribbean |  |  |  |  |  |  |  |
| 2008/09 | 132 | 233 | 452 | 817 | 203 | 478 | 136 |
| 2009/10 | 136 | 166 | 453 | 755 | 143 | 471 | 141 |
| 2010/11 | 141 | 186 | 423 | 750 | 151 | 471 | 128 |
| 2011/12 | 128 | 200 | 435 | 763 | 160 | 480 | 123 |
| 2012/13 | 123 | 200 | 446 | 769 | 160 | 481 | 128 |
| Total Sugar - Caribbean |  |  |  |  |  |  |  |
| 2008/09 | 302 | 2,083 | 488 | 2,873 | 1,147 | 1,478 | 248 |
| 2009/10 | 248 | 1,936 | 523 | 2,707 | 956 | 1,478 | 273 |
| 2010/11 | 273 | 1,846 | 472 | 2,591 | 889 | 1,481 | 221 |
| 2011/12 | 221 | 2,153 | 483 | 2,857 | 1,042 | 1,540 | 275 |
| 2012/13 | 275 | 2,175 | 494 | 2,944 | 1,075 | 1,541 | 328 |


| Country Mktg Year | Beginning stocks | Total sugar production | Total imports | Total supply | Total exports | Total use | Ending stocks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sugar - Central America

| Guatemala |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 609 | 2,381 | 0 | 2,990 | 1,654 | 744 | 592 |
| 2009/10 | 592 | 2,340 | 0 | 2,932 | 1,815 | 735 | 382 |
| 2010/11 | 382 | 2,048 | 0 | 2,430 | 1,544 | 759 | 127 |
| 2011/12 | 127 | 2,402 | 0 | 2,529 | 1,675 | 759 | 95 |
| 2012/13 | 95 | 2,474 | 0 | 2,569 | 1,725 | 750 | 94 |
| Other Sugar - Central America |  |  |  |  |  |  |  |
| 2008/09 | 436 | 2,024 | 0 | 2,460 | 939 | 1,100 | 421 |
| 2009/10 | 421 | 2,185 | 138 | 2,744 | 1,027 | 1,148 | 569 |
| 2010/11 | 569 | 2,120 | 0 | 2,689 | 976 | 1,146 | 567 |
| 2011/12 | 567 | 2,386 | 0 | 2,953 | 1,164 | 1,229 | 560 |
| 2012/13 | 560 | 2,432 | 0 | 2,992 | 1,168 | 1,262 | 562 |
| Total Sugar- Central America |  |  |  |  |  |  |  |
| 2008/09 | 1,045 | 4,405 | 0 | 5,450 | 2,593 | 1,844 | 1,013 |
| 2009/10 | 1,013 | 4,525 | 138 | 5,676 | 2,842 | 1,883 | 951 |
| 2010/11 | 951 | 4,168 | 0 | 5,119 | 2,520 | 1,905 | 694 |
| 2011/12 | 694 | 4,788 | 0 | 5,482 | 2,839 | 1,988 | 655 |
| 2012/13 | 655 | 4,906 | 0 | 5,561 | 2,893 | 2,012 | 656 | Sugar - South America


| Brazil |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 215 | 31,850 | 0 | 32,065 | 21,550 | 11,650 | -1,135 |
| 2009/10 | -1,135 | 36,400 | 0 | 35,265 | 24,300 | 11,800 | -835 |
| 2010/11 | -835 | 38,350 | 0 | 37,515 | 25,800 | 12,000 | -285 |
| 2011/12 | -285 | 36,150 | 0 | 35,865 | 24,650 | 11,500 | -285 |
| 2012/13 | -285 | 37,500 | 0 | 37,215 | 25,000 | 11,700 | 515 |
| Colombia |  |  |  |  |  |  |  |
| 2008/09 | 170 | 2,277 | 138 | 2,585 | 584 | 1,585 | 416 |
| 2009/10 | 416 | 2,294 | 189 | 2,899 | 1,019 | 1,475 | 405 |
| 2010/11 | 405 | 2,280 | 176 | 2,861 | 814 | 1,657 | 390 |
| 2011/12 | 390 | 2,310 | 322 | 3,022 | 876 | 1,771 | 375 |
| 2012/13 | 375 | 2,310 | 330 | 3,015 | 875 | 1,805 | 335 |
| Argentina |  |  |  |  |  |  |  |
| 2008/09 | 105 | 2,420 | 21 | 2,546 | 581 | 1,739 | 226 |
| 2009/10 | 226 | 2,230 | 23 | 2,479 | 751 | 1,740 | -12 |
| 2010/11 | -12 | 2,030 | 52 | 2,070 | 196 | 1,790 | 84 |
| 2011/12 | 84 | 2,150 | 3 | 2,237 | 172 | 1,810 | 255 |
| 2012/13 | 255 | 2,090 | 2 | 2,347 | 220 | 1,830 | 297 |
| Other Sugar - South America |  |  |  |  |  |  |  |
| 2008/09 | 1,231 | 3,315 | 1,448 | 5,994 | 523 | 4,049 | 1,422 |
| 2009/10 | 1,422 | 2,984 | 1,720 | 6,126 | 494 | 4,390 | 1,242 |
| 2010/11 | 1,242 | 3,287 | 1,842 | 6,371 | 509 | 4,444 | 1,418 |
| 2011/12 | 1,418 | 3,370 | 1,731 | 6,519 | 487 | 4,529 | 1,503 |
| 2012/13 | 1,503 | 3,469 | 1,569 | 6,541 | 509 | 4,543 | 1,489 |
| Total Sugar - South America |  |  |  |  |  |  |  |
| 2008/09 | 1,721 | 39,862 | 1,607 | 43,190 | 23,238 | 19,023 | 929 |
| 2009/10 | 929 | 43,908 | 1,932 | 46,769 | 26,564 | 19,405 | 800 |
| 2010/11 | 800 | 45,947 | 2,070 | 48,817 | 27,319 | 19,891 | 1,607 |
| 2011/12 | 1,607 | 43,980 | 2,056 | 47,643 | 26,185 | 19,610 | 1,848 |
| 2012/13 | 1,848 | 45,369 | 1,901 | 49,118 | 26,604 | 19,878 | 2,636 |


| Country mktg year | Beginning stocks Total sugar production | Total imports | Total supply | Total exports |
| :--- | :--- | :--- | :--- | :--- | Total use $\quad$ Ending stocks

Sugar - Western Europe

| EU-27 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 3,130 | 14,014 | 3,180 | 20,324 | 1,332 | 16,760 | 2,232 |
| 2009/10 | 2,232 | 16,687 | 2,561 | 21,480 | 2,647 | 17,400 | 1,433 |
| 2010/11 | 1,433 | 15,699 | 3,755 | 20,887 | 1,113 | 17,800 | 1,974 |
| 2011/12 | 1,974 | 18,251 | 3,800 | 24,025 | 2,388 | 18,000 | 3,637 |
| 2012/13 | 3,637 | 16,390 | 3,850 | 23,877 | 1,500 | 18,000 | 4,377 |
| Other Sugar - Western Europe |  |  |  |  |  |  |  |
| 2008/09 | 335 | 275 | 377 | 987 | 45 | 626 | 316 |
| 2009/10 | 316 | 305 | 378 | 999 | 4 | 633 | 362 |
| 2010/11 | 362 | 240 | 357 | 959 | 45 | 618 | 296 |
| 2011/12 | 296 | 250 | 367 | 913 | 50 | 628 | 235 |
| 2012/13 | 235 | 275 | 388 | 898 | 50 | 633 | 215 |
| Total Sugar - Western Europe |  |  |  |  |  |  |  |
| 2008/09 | 3,465 | 14,289 | 3,557 | 21,311 | 1,377 | 17,386 | 2,548 |
| 2009/10 | 2,548 | 16,992 | 2,939 | 22,479 | 2,651 | 18,033 | 1,795 |
| 2010/11 | 1,795 | 15,939 | 4,112 | 21,846 | 1,158 | 18,418 | 2,270 |
| 2011/12 | 2,270 | 18,501 | 4,167 | 24,938 | 2,438 | 18,628 | 3,872 |
| 2012/13 | 3,872 | 16,665 | 4,238 | 24,775 | 1,550 | 18,633 | 4,592 |

Sugar - Eastern Europe

| Russia |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 550 | 3,481 | 2,150 | 6,181 | 200 | 5,500 | 481 |
| 2009/10 | 481 | 3,444 | 2,223 | 6,148 | 34 | 5,715 | 399 |
| 2010/11 | 399 | 2,996 | 2,510 | 5,905 | 17 | 5,538 | 350 |
| 2011/12 | 350 | 5,500 | 750 | 6,600 | 300 | 5,900 | 400 |
| 2012/13 | 400 | 4,850 | 900 | 6,150 | 300 | 5,555 | 295 |
| Ukraine |  |  |  |  |  |  |  |
| 2008/09 | 580 | 1,710 | 78 | 2,368 | 37 | 2,100 | 231 |
| 2009/10 | 231 | 1,382 | 346 | 1,959 | 1 | 1,878 | 80 |
| 2010/11 | 80 | 1,540 | 293 | 1,913 | 1 | 1,860 | 52 |
| 2011/12 | 52 | 2,300 | 48 | 2,400 | 33 | 2,000 | 367 |
| 2012/13 | 367 | 2,360 | 15 | 2,742 | 35 | 2,000 | 707 |
| Other Sugar - Eastern Europe |  |  |  |  |  |  |  |
| 2008/09 | 756 | 1,425 | 1,210 | 3,391 | 829 | 1,857 | 705 |
| 2009/10 | 705 | 1,501 | 1,413 | 3,619 | 990 | 1,894 | 735 |
| 2010/11 | 735 | 1,505 | 1,302 | 3,542 | 917 | 1,905 | 720 |
| 2011/12 | 720 | 1,575 | 1,176 | 3,471 | 880 | 1,913 | 678 |
| 2012/13 | 678 | 1,547 | 1,237 | 3,462 | 897 | 1,934 | 631 |
| Total Sugar - Eastern Europe |  |  |  |  |  |  |  |
| 2008/09 | 1,886 | 6,616 | 3,438 | 11,940 | 1,066 | 9,457 | 1,417 |
| 2009/10 | 1,417 | 6,327 | 3,982 | 11,726 | 1,025 | 9,487 | 1,214 |
| 2010/11 | 1,214 | 6,041 | 4,105 | 11,360 | 935 | 9,303 | 1,122 |
| 2011/12 | 1,122 | 9,375 | 1,974 | 12,471 | 1,213 | 9,813 | 1,445 |
| 2012/13 | 1,445 | 8,757 | 2,152 | 12,354 | 1,232 | 9,489 | 1,633 |

Sugar - Africa

| South Africa |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 227 | 2,350 | 168 | 2,745 | 1,185 | 1,530 | 30 |
| 2009/10 | 30 | 2,265 | 200 | 2,495 | 830 | 1,595 | 70 |
| 2010/11 | 70 | 1,985 | 200 | 2,255 | 415 | 1,665 | 175 |
| 2011/12 | 175 | 1,885 | 115 | 2,175 | 255 | 1,705 | 215 |
| 2012/13 | 215 | 2,255 | 130 | 2,600 | 500 | 1,745 | 355 |
| Other Sugar - Africa |  |  |  |  |  |  |  |
| 2008/09 | 2,508 | 5,932 | 6,728 | 15,168 | 2,618 | 10,212 | 2,338 |
| 2009/10 | 2,338 | 5,893 | 7,406 | 15,637 | 2,440 | 10,886 | 2,311 |
| 2010/11 | 2,311 | 6,180 | 7,698 | 16,189 | 3,151 | 10,775 | 2,263 |
| 2011/12 | 2,263 | 6,291 | 7,749 | 16,303 | 2,788 | 11,225 | 2,290 |
| 2012/13 | 2,290 | 6,349 | 7,968 | 16,607 | 2,911 | 11,396 | 2,300 |
| Total Sugar - Africa |  |  |  |  |  |  |  |
| 2008/09 | 2,735 | 8,282 | 6,896 | 17,913 | 3,803 | 11,742 | 2,368 |
| 2009/10 | 2,368 | 8,158 | 7,606 | 18,132 | 3,270 | 12,481 | 2,381 |
| 2010/11 | 2,381 | 8,165 | 7,898 | 18,444 | 3,566 | 12,440 | 2,438 |
| 2011/12 | 2,438 | 8,176 | 7,864 | 18,478 | 3,043 | 12,930 | 2,505 |
| 2012/13 | 2,505 | 8,604 | 8,098 | 19,207 | 3,411 | 13,141 | 2,655 |

Country mktg year $\quad$ Beginning stocks Total sugar production Total imports $\quad$ Total supply Total exports $\quad$ Total use Ending stocks

| Turkey |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008/09 | 405 | 2,100 | 5 | 2,510 | 5 | 2,000 | 505 |
| 2009/10 | 505 | 2,530 | 5 | 3,040 | 41 | 2,450 | 549 |
| 2010/11 | 549 | 2,274 | 5 | 2,828 | 65 | 2,300 | 463 |
| 2011/12 | 463 | 2,300 | 5 | 2,768 | 70 | 2,350 | 348 |
| 2012/13 | 348 | 2,300 | 5 | 2,653 | 60 | 2,350 | 243 |
| Egypt |  |  |  |  |  |  |  |
| 2008/09 | 544 | 1,612 | 1,382 | 3,538 | 100 | 2,748 | 690 |
| 2009/10 | 690 | 1,820 | 978 | 3,488 | 330 | 2,629 | 529 |
| 2010/11 | 529 | 1,830 | 1,120 | 3,479 | 550 | 2,800 | 129 |
| 2011/12 | 129 | 1,980 | 1,480 | 3,589 | 389 | 2,850 | 350 |
| 2012/13 | 350 | 2,010 | 1,150 | 3,510 | 400 | 2,950 | 160 |
| Other Sugar - MiddleEast |  |  |  |  |  |  |  |
| 2008/09 | 2,736 | 714 | 7,578 | 11,028 | 1,325 | 8,209 | 1,494 |
| 2009/10 | 1,494 | 1,232 | 8,317 | 11,043 | 1,775 | 7,608 | 1,660 |
| 2010/11 | 1,660 | 1,081 | 7,897 | 10,638 | 1,983 | 6,551 | 2,104 |
| 2011/12 | 2,104 | 1,156 | 8,381 | 11,641 | 1,673 | 7,890 | 2,078 |
| 2012/13 | 2,078 | 1,160 | 8,550 | 11,788 | 1,645 | 8,023 | 2,120 |
| Total Sugar - MiddleEast |  |  |  |  |  |  |  |
| 2008/09 | 3,685 | 4,426 | 8,965 | 17,076 | 1,430 | 12,957 | 2,689 |
| 2009/10 | 2,689 | 5,582 | 9,300 | 17,571 | 2,146 | 12,687 | 2,738 |
| 2010/11 | 2,738 | 5,185 | 9,022 | 16,945 | 2,598 | 11,651 | 2,696 |
| 2011/12 | 2,696 | 5,436 | 9,866 | 17,998 | 2,132 | 13,090 | 2,776 |
| 2012/13 | 2,776 | 5,470 | 9,705 | 17,951 | 2,105 | 13,323 | 2,523 |

Sugar - Asia - Oceania


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| Country mktg year | Beginning stocks Total sugar production | Total imports | Total supply | Total exports | Total use | Ending stocks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Source: USDA, Foreign Agricultural Service, PSD online.

Figure 1
World sugar surplus, 1999/00-2012/13
1,000 metric
tons, raw value


Source: USDA, Foreign Agricultural Service, PSD database (Nov. 2012).

Figure 2
USDA forecast of 2012/13 and 2011/12 world sugar surplus, by region


Source: USDA, Foreign Agricultural Service, PSD database (Nov. 2012).

Figure 3
World sugar stocks-to-consumption ratio, 1999/00-2012/13
Percent


Source: USDA, Foreign Agricultural Service, PSD database (Nov. 2012).

Total reducing sugars are forecast at 135 kilograms per cane mt, down about 1.6 kilograms from last year because of the above-average second-quarter rainfall. The split of total reducing sugars between sugar and ethanol is expected to be 49.10 percent sugar and 50.90 percent ethanol. Sugar's share is up from last year's 48.07 percent because of higher expected returns for the sugar export market relative to the domestic ethanol market.

Sugar production is forecast at 37.5 million MTRV, up 1.35 million MTRV from last year. Sugar exports are forecast at 25 million MTRV, split between 19.65 million MTRV of raw sugar and 5.35 million MTRV of refined. Brazil's share of total world sugar exports is projected at 45.3 percent, up from 43.9 percent estimated for 2011/12 but below the 46.9-percent average for 2008/09-2010/11.

Ethanol production is forecast about the same as last year at 22.3 billion liters: 8.9 billion liters for anhydrous ethanol and 13.4 billion liters for hydrous. Ethanol exports are projected to total 2.5 billion liters, about 585 million liters more than last year, with exports to the United States expected to increase as well. Ethanol imports are forecast to decline to 250 million liters as available supply from the United States has decreased. These reduced imports contrast with 2011/12 when imports totaled about 1.4 billion liters.

## South Africa

South Africa's 2012/13 sugar production is forecast to recover from the previous 2 years' poor results. Production is forecast at 2.255 million MTRV, up from 1.885 million MTRV in 2011/12 and 1.985 million MTRV in 2010/11. The return of adequate rainfall helped reverse the effects of prolonged drought and associated sugarcane disease problems. Exports are forecast at 500,000 MTRV, a large recovery from 2011/12 exports of only 250,757 MTRV.

Other problems have plagued South African sugar production over the longer term. Area has contracted about 13 percent over the last 10 years. The number of large-scale producers has decreased by about 20 percent and of smaller scale producers by 47 percent. The last 2 years of drought have accelerated the exit of producers. Production is threatened by land reform uncertainty, urbanization, high crime levels, and binding infrastructure constraints.

In response to these problems, the South African Government's Department of Trade and Industry is reviewing the 1978 Sugar Act. The goal of new legislation would be to help establish a more competitive environment for domestic producers, while at the same time providing an enhanced legal framework for Government intervention to counteract distortions in the world sugar market. Growers are reportedly supportive of this type of reform, which would be expected to be in place in time for the 2014/15 season.

## India

Indian sugar production for 2012/13 is forecast at 25.63 million MTRV, down from the 2012/13 USDA forecast made in May of 29.75 million MTRV and last year's 28.80 million MTRV. Although area at 5.1 million hectares is forecast at about the same level as last year, low rainfall in the first half of the June-September monsoon- 65 percent of normal amounts-led to a 7-percent area reduction in the prime growing States of Maharashtra and Karnataka. Maharashtra has faced acute water shortages since January 2012, affecting forage for cattle and forcing area for sugarcane to be diverted for additional forage. Some sugarcane was directly diverted to cattle feed as well. Compensating somewhat is a 7.5 -percent increase in sugarcane area in Uttar Pradesh in the North, due to more normal rainfall during the monsoon period and strong sugarcane prices.

Sugar consumption in 2012/13 is forecast at 25.0 million MTRV, up about 1.0 million MTRV from last year but lower than the 26.5 million MTRV forecast by USDA in May for 2012/13. The Indian Government has acted to allow additional quota sales to moderate higher consumer prices stemming from reduced domestic production.

Sugar exports for 2012/13 are forecast at 2.2 million MTRV, much lower than the 2011/12 estimate of 3.5 million MTRV. Raw sugar imports may rise to 500,000 MTRV due to world raw sugar prices falling below domestic prices
and an appreciation of India's rupee currency. Additional raw sugar imports are expected to help refiners in the production-short States of Maharashtra and Karnataka. Ending year stocks are forecast at 7.0 million MTRV, at the optimal level corresponding to about 3 months of consumption.

## Pakistan

Sugarcane production for 2012/13 is forecast at 61.0 million mt , an increase of 9.7 percent over the USDA May forecast and 4.0 percent more than 2011/12. Plentiful rainfall has served to increase yields. The rainfall has also helped to stem the tide of the disease "Sugar Pirella," which would have required chemical treatments that would have reduced yields. Sugar from the crop (and also a small amount from domestically grown sugarbeets) totals 4.65 million MTRV. With consumption projected at 4.4 million MTRV, sugar imports are not expected this year. Sugar exports, mainly to United Arab Emirates, Bangladesh, Iran, Sri Lanka, and Yemen, are expected to total about 300,000 MTRV.

## Australia

Sugarcane production in 2012/13 is projected at 31.5 million mt, up 12.5 percent from last year's 28.0 million mt. The crop was aided by early season rainfall and by unharvested sugarcane from the previous year. Sugar production for 2012/13 is projected at 4.3 million MTRV, up from last year's 3.9 million MTRV but down from USDA's May forecast due to lower than expected sugar content in the crop. Exports are projected at 3.1 million MTRV, up from the $2011 / 12$ total of 2.85 million MTRV but still lower than the 10 -year average of 3.52 million MTRV.

## China

Chinese sugar production for 2012/13 is projected at 14.6 million MTRV, up 18 percent from last year. About 91 percent of this production total is cane sugar, projected at 13.3 million MTRV. Reacting to strong prices, producers switched from alternative crops such as cassava to expand sugarcane area by 3 percent to 1.79 million hectares. Adequate rainfall led to good sugarcane yields, resulting in a sugarcane crop of 130 million $\mathrm{mt}, 14$ percent higher than in 2011/12. Beet sugar production is projected at 1.26 million MTRV from a good sugarbeet crop of 12.3 million mt . Unlike for sugarcane, there are no provincial guidance purchase prices for beet sugar, but strong market prices led producers to expand area by 14.5 percent to 300,000 hectares.

Sugar consumption is projected at 15.3 million MTRV. Higher domestic production is expected to moderate sugar consumer prices, discouraging the trend toward increased consumption of starch-based sugar (e.g., high fructose syrup).

2012 sugar imports are projected at only 1.0 million MTRV, in contrast to the 4.2 million MTRV imported in 2011/12. Part of the World Trade Organization (WTO) tariff-rate quota of 1.95 million MTRV is assigned to Stateowned enterprises that are expected to reduce imports to support domestic sugarcane processors.

Ending stocks are projected at 4.3 million MTRV, about 236,000 MTRV higher than beginning stocks. The large growth in stocks occurred in 2011/12 and was augmented by imports entering directly into State reserves. The Chinese Government also intervenes to purchase sugar for stocks to prevent financial losses at sugarcane mills. Purchases of 500,000 MTRV occurred in both March and September 2012. At other times, the Chinese Government releases stocks into the market when consumer prices are high as an aid to maintaining consumption.

In recent years, starch-based sugars have become increasingly competitive with cane- and beet-based sugar in reaction to higher cane and beet sugar prices. According to the China Fermentation Association, 2012 starch-based sugar production has risen 10 percent from 2011 levels. The corresponding annual growth was 36 percent for 2011 and 26 percent for 2010. High fructose syrup (HFS) production in 2012 will amount to 2.36 million mt. About 1.0 million mt of this amount is constituted by HFS-55. Total HFCS production capacity is estimated at 4.5 million mt in 2012, up from 3.5 million mt in 2011.

## Thailand

Thailand's sugarcane production for 2012/13 is projected between $95-96$ million mt , down about 3 percent from 2011/12. The decrease is attributable to a lack of rain during the June-August plant growing period in all producing regions. Sugar production is expected to be 9.9 million MTRV, down by about the same percentage as the sugarcane. Better weather during the cane ripening stage helped to keep sucrose levels at about the same level as in 2011/12. Exports are expected to decrease about 500,000 MTRV from 2011/12 to 8.5 million MTRV. This forecast is 800,000 MTRV less than the USDA May forecast.

Operations are expected to start at four sugarcane mills that received government licenses in 2010/11, making a total of 51 mills in the country. This is expected to bring total sugarcane crushing capacity up to 1.0 million mt per day from 0.9 million mt . Because of the need for additional sugarcane to serve the mills, growers are supporting a new proposed Thai Government soft-loan program to provide funds for the purchase of cane-harvesting equipment. This program-would follow a program covering 2010-12 that provided 2 billion baht ( $\$ 66$ million) for the same type of purchases. The loan amount for the new program is expected to be about 3 billion baht.

Thai Government involvement in the sugar industry runs deep. The Government sets domestic wholesale and retail prices apart from market conditions. The wholesale price is 19 baht per kilogram, or about 29 cents per pound. (This amount excludes a 7-percent value-added tax that funds producer support and direct payments.) The retail price of white sugar is 21.85 baht per kilogram ( 33 cents per pound) and 22.85 baht per kilogram ( 35 cents per pound) for refined sugar. The Government also sets the sugarcane support price, expected to be over 1,000 baht per mt in 2012/13 (about $\$ 32.50$ per mt).

## Russia

Although Russia's 2012/13 sugarbeet crop is expected to be 11 percent less than last year's crop, expected production at 42.5 million metric tons (mt) is still large compared with earlier years. Sugarbeet returns have remained high, but some planted area was reduced because of last year's shortage of sugarbeet storage facilities and inadequate processing capacity. These conditions led to a high proportion of the previous year's crop being wasted with respect to sugar production. This year also, saw cold weather hampering planting in the South. Dry summer conditions resulted in poorer than expected yields in the same area.

Beet sugar production for $2012 / 13$ is forecast at 4.85 million MTRV, down 11.8 percent from last year's 5.50 million MTRV, but still far above the meager 2.996 million MTRV produced in 2010/11. Because of reduced 2012/13 production, raw sugar imports are expected to increase to 700,000 MTRV, up from last year's 500,000 MTRV. Even so, the high level of production compared with 2010/11 and earlier years, along with white sugar imports from Belarus, keeps raw sugar imports well below the 2.926 million MTRV average for the period 2001/022010/11.

## European Union

Foreign Agricultural Service reporting normally only covers sugar produced for the European Union (EU) regulated market for food uses. It excludes sugarbeet production for ethanol and other fermentation uses and also out-of-quota sugar for industrial (nonfood) uses. 2012/13 production is forecast at 16.4 million MTRV. This amount includes 290,000 MTRV of cane sugar produced in French overseas territories. Although European sugarbeet area had increased by 20,000 hectares to 1.7 million hectares, production is forecast about 10 percent lower than in 2011/12. Wet and cold conditions in northwestern Europe during the spring and summer, as well as drought conditions in southeastern Europe, decreased overall yields. Sucrose levels, however, were close to normal due to improved weather during the period of sugarbeet maturation.

Contributing to the production total is 900,000 MTRV of unsold out-of-quota sugar for industrial use from 2011/12 that is carried over into $2012 / 13$. It is counted against $2012 / 13$ production quotas and is available for food use.

EU sugar imports have a detailed and complicated structure, covering agreements with former colonies, preferential access to Balkan countries, and pre-existing quotas that accompanied new member States when they joined the EU. The last couple of years have seen extraordinary sugar import tenders at reduced duty levels to supply EU sugar refineries with raw sugar. Overall, sugar imports for 2012/13 are projected at 3.9 million MTRV. This total could rise by an additional 264,000 MTRV if certain Free Trade Agreements with Colombia, Peru, and other Central American countries are ratified during the year. EU refined sugar exports are projected at 1.5 million MTRV, a maximum amount bound by the World Trade Organization (WTO). (These exports in 2011/12, at 2.4 million MTRV, exceeded the maximum because the EU dubiously claimed unused quantities from the previous 2010/11 WTO notification year.)

2011/12 ending stocks (beginning stocks for 2012/13) are estimated at 3.6 million MTRV, an increase of 1.663 million MTRV over the previous year. These stocks include the 900,000 MTRV of unsold out-of-quota carried-over from 2011/12. Other factors contributing to the buildup included out-of-quota releases into the domestic food market and exceptional sugar import tenders during 2011/12. Ending stocks for 2012/13 are forecast at 4.4 million MTRV, with 2012/13 production and imports outweighing expected consumption of 18.0 million MTRV and WTOconstrained exports.

## Sugar and Sweeteners in the North American Free Trade Area

On December 11, 2012, the U.S. Department of Agriculture (USDA) published in the World Agricultural Supply and Demand Estimates (WASDE), its latest sugar supply and use estimates/projections for the United States and Mexico.

For fiscal year (FY) 2012, the USDA made certain revisions based on updates to the Farm Service Agency's Sweetener Market Data (SMD). Production was increased by 4,200 short tons, raw value (STRV) based on a larger estimate of beet sugar production ( 4.899 million STRV, up 4,900 STRV) and a small reduction to Louisiana cane sugar production. Ending stocks were reduced by 23,635 STRV to 1.983 million STRV, based on revisions made by a cane sugar refiner.

For FY 2013, the USDA increased its projection of beet sugar production by 95,000 STRV to 5.200 million STRV. This increase was made on the basis of the strong start to the 2012/13 beet sugar production cycle, along with supporting sugarbeet production data published by the National Agricultural Statistics Service (NASS) last month. The forecast assumes that production next September from the 2013/14 sugarbeet crop will be close to historical norms.

The USDA reduced its projection of imports for USDA's re-export programs by half to 225,000 STRV. Margins between the U.S. raw sugar price (the nearby Intercontinental Exchange (ICE) No. 16 Contract) and the world raw sugar price (nearby ICE No. 11 Contract) have averaged only between $3.0-3.5$ cents per pound for the past $2-1 / 2$ months. The incentive to import is essentially stalled until the margins widen to more normal levels. All else constant, the narrow margin would be expected to encourage refiners to use domestic sugar for increased exports, obtain export credits issued by the Foreign Agricultural Service (FAS) under USDA's re-export program, and then use those credits to import world-priced sugar when the U.S.-world sugar margins increase later on. The expectation would be that low per unit losses on current exports could be more than covered by future purchases of world-priced raw sugar and resale of the refined product into the domestic market. Currently low interest rates only make this type of transaction more attractive.

The USDA projects lower sugar imports from Mexico. These imports are projected to fall by 112,000 STRV to 1.388 million STRV. With Mexico's large projected sugar production, it is expected that processors will deliver more of their domestic production into Mexico's sugar-containing re-export product program (IMMEX). Lower returns from export sales to the U.S. market highlight transport cost advantages of delivering the sugar to domestic sweetener-product manufacturers who participate in the IMMEX program and export their product, mainly to the United States.

The USDA reduced its projection of sugar exports by 100,000 STRV to 175,000 STRV. Because most U.S. refined sugar exports are destined for Mexican sweetener product manufacturers under IMMEX, these exports are projected to be displaced by deliveries of Mexican-produced sugar, as outlined above. Basic to this scenario is that overall IMMEX demand for sugar is about 340,000 metric tons. Also, in aggregate U.S. cane refiners have negative license account balances that lessen the requirement to export in the near term, which the program would require if those balances were positive.

As mentioned earlier, narrow margins between U.S. and world sugar prices would be expected to encourage more exports so that export credits could be accumulated for future use when margins widen. The problem is that the market for U.S.-sourced sugar is limited. Almost all refined sugar importers outside of North America cannot accept U.S. sugar that is shipped either in bulk or in 50 -pound bags. The international norm is 50 -kilogram bags that U.S. refiners are not set up to provide. Therefore, the ability to transfer export sugar displaced from Mexico is limited. Price competition with Mexican producers for IMMEX share would only make those exports less remunerative, both presently and for future re-export imports when margins have widened.

The USDA made no other changes to sugar use. SMD October sugar deliveries of 1.035 million STRV were in line with USDA expectations.

The USDA projects ending year stocks as the difference between total supply and total use at 2.051 million STRV. This stocks level implies an ending stocks-to-use ratio of 17.4 percent, down from last month's 18.7 percent.

For Mexico, the USDA reduced its projection of imports by 85,585 metric tons to 112,417 metric tons. This reduction matches the U.S. export reduction. The Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca) expects that 22,601 metric tons of these imports will be for consumption. Although not part of the WASDE accounting, the Economic Research Service supply and use table incorporates the Conadesuca import partition. The USDA reduced its projection of beginning stocks in Mexico to 957,809 metric tons based on the Conadesuca revision to its data.

The USDA projects that the supply reductions will flow through to a reduction in exports, keeping ending stocks the same as last month at 1.000 million metric tons. Both the U.S. and Mexican supplies are assumed to remain in approximate oversupply status. Exports are, therefore, projected at 1.198 million mt. All but 10,000 metric tons are assumed to go to the U.S. market. ${ }^{1}$

[^0]Table 2 -- Mexico: sugar production and supply, and sugar and HFCS utilization

| Fiscal Year (Oct./Sept.) | 2010/11 | 2011/12 | 2012/13 | 1/ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1,000 metric tons, actual weight |  |  |
| Beginning Stocks | 918 | 760 | 958 |  |
| Production | 5,184 | 5,048 | 5,668 |  |
| Imports | 289 | 476 | 112 |  |
| Imports for consumption | 107 | 237 | 23 |  |
| Imports for sugar-containing product exports (IMMEX) $2 /$ | 182 | 240 | 90 |  |
| Total Supply | 6,391 | 6,285 | 6,738 |  |
| Disappearance |  |  |  |  |
| Human consumption | 3,950 | 4,135 | 4,200 |  |
| For sugar-containing product exports (IMMEX) | 293 | 344 | 340 |  |
| Miscellaneous | -81 | -82 |  |  |
| Total | 4,161 | 4,398 | 4,540 |  |
| Exports | 1,469 | 929 | 1,198 |  |
| Exports to the United States \& Puerto Rico | 1,432 | 919 | 1,188 |  |
| Exports to other countries | 38 | 10 | 10 |  |
| Total Use | 5,631 | 5,317 | 5,738 |  |
| Ending Stocks | 760 | 958 | 1,000 |  |
|  |  | 1,000 metric tons, raw value |  |  |
| Beginning Stocks | 973 | 806 | 1,015 |  |
| Production | 5,495 | 5,351 | 6,008 |  |
| Imports | 307 | 505 | 210 |  |
| Imports for consumption | 114 | 251 | 24 |  |
| Imports for sugar-containing product exports (IMMEX) | 193 | 254 | 95 |  |
| Total supply | 6,774 | 6,662 | 7,233 |  |
| Disappearance |  |  |  |  |
| Human consumption | 4,187 | 4,384 | 4,452 |  |
| For sugar-containing product exports (IMMEX) | 310 | 365 | 360 |  |
| Miscellaneous | -86 | -86 |  |  |
| Total | 4,411 | 4,662 | 4,812 |  |
| Exports | 1,558 | 985 | 1,270 |  |
| Exports to the United States \& Puerto Rico | 1,518 | 974 | 1,260 |  |
| Exports to other countries | 40 | 11 | 11 |  |
| Total use | 5,969 | 5,647 | 6,083 |  |
| Ending stocks | 806 | 1,015 | 1,060 |  |
| Stocks-to-Human Consonsumption (percent) | 19.2 | 23.2 | 23.8 |  |
| Stocks-to-Use (percent) | 13.5 | 18.0 | 17.4 |  |
| High Fructose Corn Syrup (HFCS) Consumption (dry weight) | 1,635 | 1,721 | 1,635 |  |

1/ Forecast.
2/ IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.
Source: USDA, WASDE and ERS, Sugar and Sweeteners Outlook.

Table 3 -- 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 | 481,783 | 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 | 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 |
| Northe ast |  |  |  |  |  |  |  |  |  |  |  |
| 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 |

Table 3 -- 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 | $\mathrm{Tn} / \mathrm{ha}$ | 8.20 | 8.83 | 8.01 | 7.88 | 8.08 | 7.49 | 7.45 | 7.73 | 7.19 | 7.88 |

# Managing Risk CENTURY 

February 21-22, 2013
Crystal Gateway Marriott Hotel Arlington, Virginia

## www.usda.gov/oce/forum



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## 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

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[^0]:    ${ }^{1}$ Table 2 in the November 2012 Sugar and Sweetener Outlook had an error that is corrected in this issue. Table 2 on page 7 reported the same continuation table data that was on page 8 - the first part of the table was missing. In this report, the correct data is reported as table 3.

