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Sugar and Sweeteners Outlook

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NAFTA Sugar July 2014

The next release is August 18, 2014

Approved by the World Agricultural Outlook Board.

The Mexico 2013/14 estimate for sugar production is reduced by 75,000 metric tons (mt) to 6.025 million, based on very close to end-of-harvest reporting from Mexican authorities. The 2013/14 estimate of exports is increased by 80,000 mt based on industry reporting of increased exports to non-U.S. destinations. Exports to the United States are left unchanged. Given that most of these U.S.-destined exports have already occurred, the pace through the rest of the year is expected to subside dramatically. No other changes were made, implying that ending stocks are estimated at 663,000 mt for a low stocks-to-consumption ratio of 15.4 percent.

The Mexico 2014/15 forecast of production is lowered to 6.140 million mt based on expected reduced harvested area and only average sugar yields. Imports are forecast to increase 224,000 mt to cover domestic consumption in that period before the harvest begins in late November. Because consumption and ending stocks forecasts are unchanged, exports are forecast 291,000 mt lower, at 1.616 million mt, to balance total use with the total supply reduction.

Recent Sugar and Sweeteners Outlook Special Articles

"Long-term Projection of U.S. and Mexico Sugar Supply and Use through 2024/25," pdf pages 3-17 of the *Sugar and Sweetener* report (http://www.ers.usda.gov/publications/sssm-sugar-and-sweeteners-outlook/sssm306.aspx)

"The Road to Forfeitures," pdf pages 12-17 of the *Sugar and Sweetener* report http://www.ers.usda.gov/publications/sssm-sugar-and-sweeteners-outlook/sssm303.aspx)

The U.S. 2013/14 beet sugar production is lowered by 50,000 short tons, raw value (STRV) to 4.750 million, based on an expected slow start of 2014/15 harvesting in September. Minor adjustments were made to cane sugar production based on final reporting. Imports are increased by 89,000 STRV due to the reallocation of the raw sugar tariff-rate quota by the U.S. Trade Representative. Deliveries are increased by 90,000 STRV: 100,000 for human consumption less 10,000 for reduced other uses. These events imply lower ending stocks, estimated at 1.808 million STRV for an ending stocks-to-use ratio of 14.5 percent.

The U.S. 2014/15 sugar production is forecast 130,000 STRV lower due to revised cane sugar processors' forecasts, with Louisiana's 140,000 decrease offset by a Florida increase of 10,000 STRV. With no change in beet sugar production, total production is forecast at 8.225 million STRV. Imports from Mexico are reduced to 1.877 million STRV, down 234,000 STRV. Deliveries for human consumption are increased by 50,000 STRV, based on modest growth from the previous year. Ending stocks are forecast residually at 1.447 million STRV for an ending stocks-to-use ratio of 11.9 percent.

Sugar and Sweeteners in the North American Free Trade Area

On July 11, 2014, 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 Mexico (table 1) and for the United States (table 2) for the October through September fiscal years 2013/14 and 2014/15.

Mexico Sugar

The USDA lowered its estimate of Mexico 2013/14 exports sugar production from last month by 75,000 metric tons (mt) to 6.025 million mt as output continues to lag well behind the pace forecast by Mexico's *Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar* (Conadesuca). Conadesuca estimates realized production through July 5 at 6.017 million mt, with only three factories remaining in operation and with production expected to cease by July 14. Area harvested through July 5 has amounted to 789,490 hectares, far below the 836,197 predicted by Conadesuca at the end of March. Although rainy and wet conditions prevailed in many growing areas throughout June, contributing to lower-than-expected production, the harvest pace had lagged far behind weekly expectations for most of the harvest season.

The USDA lowered its forecast of Mexico 2014/15 production to 6.140 million mt, down 360,000 from last month. Although there is no Conadesuca forecast available at this time, the USDA does not foresee harvested area greater than that harvested this year and expects sugar yields to be within historical norms, at about 7.768 mt per hectare.

The USDA increased its estimate of Mexico sugar exports by 80,000 mt to 1.458 million mt. As reported by reliable industry sources, the increase represents sugar already bound for delivery to non-U.S. destinations. Exports to the United States through the end of June have totaled 1.671 million mt, raw value or 92 percent of the amount forecast to enter the United States this year. With only 3 months remaining in the sugar year, sugar exports are expected to trail off dramatically.

Conadesuca reports that sugar consumption through May has amounted to 2.865 million mt and that high fructose corn syrup consumption has totaled 927,000 mt, dry weight. If consumption of both products continues at this pace for the rest of the year, current estimates of 4.306 million mt for sugar and 1.360 million mt for HFCS should be easily met. The USDA expects more HFCS consumption in 2014/15 at 1.419 million mt because of lower prices relative to sugar but expects 2014/15 sugar consumption at the same level as in 2013/14, or 4.306 million mt. These 2014/15 sweetener consumption levels represent no per capita consumption growth or decline.

Ending sugar stocks for 2013/14 are estimated at 663,000 mt, or only 15.4 percent of estimated sugar for human consumption. If monthly sugar consumption averages out to 359,000 mt, then this ending stocks amount would only provide for 1.85 months of consumption. Because ending stocks are meant to meet domestic consumption requirements until sustained sugar production in the next marketing year, usually the middle of December, the currently estimated stocks would be inadequate and more sugar would have to be procured. For this reason, the USDA increased its projection of 2014/15 sugar imports for consumption from 10,000 mt to 234,000 mt. These imports plus beginning stocks represent 2.5 months of consumption. Total 2014/15 imports are projected at 450,000 mt because 216,000 mt of sugar is assumed to be imported for Mexico's sugar product export program (IMMEX), the same amount as estimated for 2013/14.

For the out year, the USDA usually forecasts ending stocks as a percentage of consumption. Historically, a 22-percent ratio has been considered optimal, but sometimes market conditions in both Mexico and the United States indicate levels either higher or lower than the optimum. For the July forecast made 3 months before the start of 2014/15, the USDA decided to use the optimal 22 percentage amount to forecast 2014/15 ending stocks at 947,000 STRV.

The USDA forecasts Mexico sugar exports at 1.616 million mt. Most (1.606 million mt), if not all, of this sugar is forecast for shipment to the United States where market returns are greatest. Exports to third countries had been forecast at 100,000 mt when it was thought that logistical constraints would string out those exports in 2013/14 into 2014/15. As explained above, sources indicate only nominal exports for the remainder of this year, meaning that overflow into the next year is unlikely.

U.S. Sugar: 2013/14

The USDA estimates total 2013/14 U.S. beet sugar production to decrease by 50,000 short tons, raw value (STRV), to 4.750 million STRV. Because the sugarbeet crop year runs from September through next year's August, there is a portion of 2013/14 sugar production occurring in the August/September period that is recorded in the previous year's beet sugar production total. The USDA estimates that this amount will be below average because of late planting and generally wetter than normal conditions in Minnesota and North Dakota in the early growing season.

Acres 1.200.000 Sugarbeet planting in 2014 lags previous years' pace 1,000,000 _____2013 800.000 600,000 400,000 200,000 Apr 27 May 4 Apr 13 Apr 20 May 11 May 18 May 25 June 1 Source: USDA, NASS, Crop Progress.

Figure 1 Cumulative 4-State sugarbeet area planted: actual pace compared with planting rates in 2013 and average 2009-13

States: Idaho, Michigan, Minnesota, North Dakota

Figure 1 shows the percentage of the crop planted in the four largest sugarbeet producing States of Minnesota, North Dakota, Idaho, and Michigan for the 2014/15 year compared with last year and the previous 5 years. The pace of the planting for 2014/15 has been far below average. As of mid-May, only 31 percent of the intended planting area had actually been planted, the lowest since 2000/01. Areas planted in Minnesota and North Dakota were only at the 8 to 9-percent level in mid-May. Therefore, the USDA expects lower than -average production in September and has reduced the 2013/14 total accordingly.

Minor adjustments were made to cane sugar production based on final reporting. U.S. sugar production for 2013/14 is estimated at 8.442 million STRV, a decrease of about 48,000 STRV.

On July 3, 2014, the U.S. Trade Representative (USTR) announced country-specific reallocations of the 2013/14 raw sugar tariff-rate quota (TRQ). Based on consultations with quota holding countries, USTR reallocated 99,290 metric tons, raw value (MTRV), of the original TRQ away from countries that have indicated that they will be unable to fill previously allocated 2013/14 TRQ quantities. ¹ The USDA predicts that TRQ imports will increase by 89,350 STRV as a result of the reallocation.

Sugar imports from Mexico for 2013/14 are estimated at 1.842 million STRV through the end of June. Although they represent 92 percent of the amount expected to enter for the entire 2013/14 year with 3 months to go, the USDA made no change to the total because it believes that these imports will fall to very low levels from July to September. No other import category was changed, so total imports are increased by the 89,350 STRV to 1.458 million STRV.

Deliveries for human consumption have totaled 7.675 million STRV through the end of May, about 2.7 percent more than the delivery level for the same period last year. The USDA increased its estimate for the 2013/14 by 100,000 STRV to 11.700 million STRV. The USDA also reduced its estimate of sugar for livestock feed and polyhydric alcohol producers by 10,000 STRV, also based on pace to date. There was no change for exports, still estimated at 325,000 STRV.

The USDA estimates ending stocks as the difference between total supply (14.274 million STRV) and total use (12.466 million STRV), or 1.808 million STRV. This estimate is about 49,000 STRV less than last month's estimate. The implied stocks-to-use ratio is 14.50 percent, about half a percentage point less than last month.

U.S. Sugar: 2014/15

On June 30, 2014, the USDA released its forecast for 2014/15 of area planted for U.S. sugarbeets and of area harvested for sugarbeets and sugarcane. Planted sugarbeet area is forecast at 1.162 million acres, down 36,000 acres from last year but 7,500 acres more than forecast in the March's Prospective Plantings. All but 4,000 acres of the area decline from last year is taking place in the largest producing States of Minnesota and North Dakota (fig. 2). Both these States have experienced significant planting delays through the beginning of June. Sugarbeet harvested area is forecast at 1.134 million acres, down just

¹ See: http://www.ustr.gov/about-us/press-office/press-releases/2014/July/USTR-Announce-Reallocation-Unused-2014-WTO-TariffRate-Quota-Volume-Raw-Cane-Sugar

19,900 acres from last year. Total sugarcane area is forecast at 879,000 acres, down 31,800 acres (3.5 percent) from last year.

The USDA forecasts U.S. 2014/15 sugar production down 130,000 STRV to 8.225 million STRV due to revised cane sugar processors' forecasts, with Louisiana's decrease of 140,000 STRV partially offset by a Florida increase of 10,000 STRV. In Louisiana, processors expect a 10.4 percent reduction in sugarcane for sugar area and a 1.2 percent reduction in yield. Their production is forecast at 1.380 million STRV. Florida processors are predicting an early start in September 2015 for their 2015/16 sugarcane crop and increased their fiscal year 2014/15 projection by about 8,300 STRV, rounded up to 10,000 STRV by the USDA.

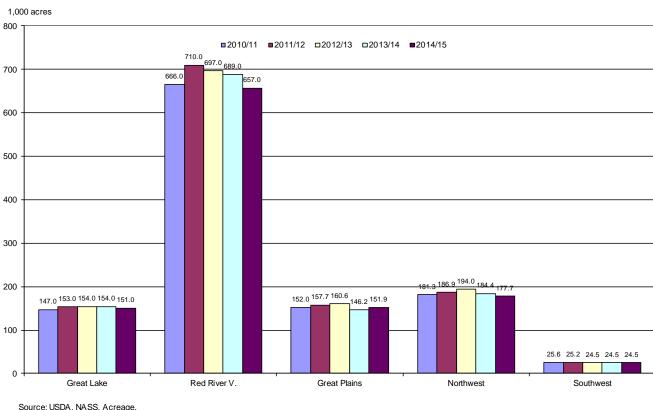


Figure 2 Sugarbeet area planted, by region, 2010/11-2014/15

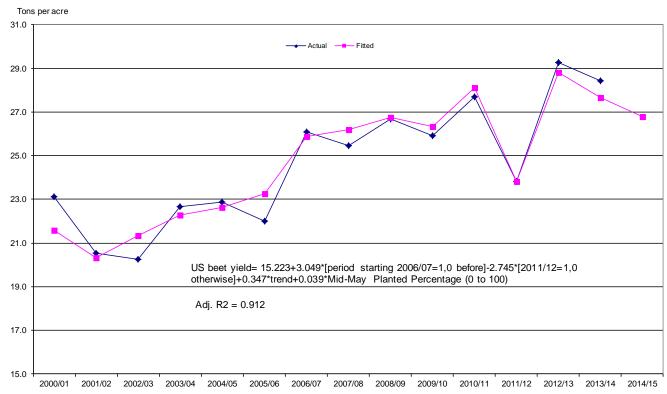
The USDA did not change its forecast of beet sugar production of 4.750 million STRV. Figure 2 shows a U.S. sugarbeet yield equation that incorporates the effect of early and late planting. The model uses the percentage of the crop planted by mid-May, as discussed above. The model also incorporates the jump in yields in 2006/07 corresponding to the widespread use of better seeds in that and subsequent years and also allows for estimated trends. The model forecasts a national sugarbeet yield of 26.97 tons/acre, lower than last year's crop year estimate of 28.43 tons and the record 29.25 tons of 2012/13. The 2014/15 forecast level is used in the national beet sugar yield model shown in figure 3. The 2014/15 beet sugar yield is 4.186 STRV/acre. Production is the product of this yield forecast times the NASS area harvested forecast, rounded to 4.750 million STRV. Next month, NASS makes its first sugarbeet yield forecast for 2014/15.

The USDA reduced its forecast of sugar imports by 234,000 STRV to 1.877 million STRV, as discussed earlier. Because the Secretary of Agriculture has not announced the 2014/15 sugar TRQ, it is held

unchanged at last month's minimum access level. No change was made to other import categories or to exports. Deliveries for human consumption are increased by 50,000 STRV to 11.750 million STRV, based on modest growth from the 2013/14 fiscal year.

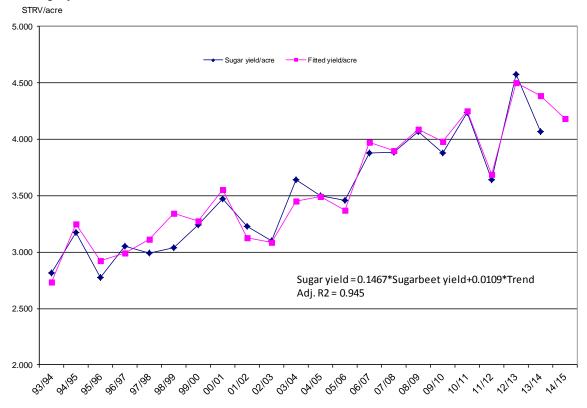
Ending stocks as the difference between total supply and use are forecast at 1.447 million STRV, a reduction of 463,000 STRV. The reduction is the result of fewer imports from Mexico (234,000 STRV – 50.5 percent of the decrease), less production (130,000 STRV – 28.1 percent), more consumption (50,000 STRV – 10.8 percent), and fewer beginning stocks (49,000 STRV – 10.6 percent). The ending stocks-to-use ratio is 11.92 percent. This is 3.88 percentage points lower than last month and is an indication of a tightening 2014/15 U.S. market.

Figure 3
Comparison of beet yield fitted values with actual yields



Source: USDA, NASS, Crop Report (data); USDA, OCE.

Figure 4 Beet sugar yield forecast



Source: USDA.

Table 1 -- Mexico sugar supply and use, 2012/13 - 2013/14 and projected 2014/15, July 2014

Items	2012/13	2013/14	2014/15
1,0	00 metric tons, actual weight		
Beginning Stocks	966	1,460	663
Production	6,975	6,025	6,140
Imports	217	226	450
Imports for consumption	9	10	234
Imports for sugar-containing product exports (IMMEX) 1/	207	216	216
Total Supply	8,157	7,711	7,253
Disappearance			
Human consumption	4,287	4,306	4,306
For sugar-containing product exports (IMMEX)	384	384	384
Statistical adjustment	53	0	0
Total	4,724	4,690	4,690
Exports	1,973	2,358	1,616
Exports to the United States & Puerto Rico	1,818	1,708	1,606
Exports to other countries	155	650	10
Total Use	6,697	7,048	6,306
Ending Stocks	1,460	663	947
1	,000 metric tons, raw value		
Beginning Stocks	1,024	1,548	703
Production	7,393	6,387	6,508
Imports	230	240	477
Imports for consumption	10	11	248
Imports for sugar-containing product exports (IMMEX)	220	229	229
Total Supply	8,646	8,174	7,688
Disappearance			
Human consumption	4,544	4,564	4,564
For sugar-containing product exports (IMMEX)	407	407	407
Statistical adjustment	56	0	0
Total	5,007	4,971	4,971
Exports	2,091	2,499	1,713
Exports to the United States & Puerto Rico	1,927	1,810	1,702
Exports to other countries	164	689	11
Total Use	7,099	7,471	6,684
Ending Stocks	1,548	703	1,004
Stocks-to-Human Cons. (percent)	34.1	15.4	22.0
Stocks-to-Use (percent)	21.8	9.4	15.0
High Fructose Corn Syrup (HFCS) Consumption (dry weight)	1,567	1,360	1,419
Source: USDA, WASDE and ERS, Sugar and Sweeteners Outlook; Conade		*	· · ·

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

Table 2 -- U.S. sugar; supply and use, by fiscal year (Oct./Sept.), July 2014

Table 2 U.S. sugar: supply and use, by fiscal year (Oct./Sept.), Items	2012/13	2013/14	2013/14	2011/12	2012/13	2013/14
				1,000 metric tons, raw value		
Beginning stocks	1,979	2,158	1,808	1,796	1,958	1,641
Total production	8,981	8,442	8,225	8,148	7,658	7,462
Beet sugar	5,076	4,750	4,750	4,605	4,309	4,309
Cane sugar	3,905	3,692	3,475	3,543	3,349	3,152
Florida	1,867	1,759	1,780	1,694	1,595	1,615
Louisiana	1,686	1,600	1,380	1,530	1,451	1,252
Texas	173	143	135	157	130	122
Hawaii	179	190	180	163	172	163
Total imports	3,224	3,674	3,549	2,925	3,333	3,220
Tariff-rate quota imports	957	1,458	1,262	868	1,323	1,145
Other Program Imports	136	210	400	124	191	363
Non-program imports	2,131	2,006	1,887	1,933	1,820	1,712
Mexico	2,124	1,996	1,877	1,927	1,811	1,703
Total Supply	14,185	14,275	13,582	12,868	12,950	12,321
Total exports	274	325	250	249	295	227
Miscellaneous	-24	0	0	-22	0	0
Deliveries for domestic use Transfer to sugar-containing products	11,776	12,141	11,885	10,683	11,014	10,782
for exports under reexport program	80	100	100	73	91	91
Transfer to polyhydric alcohol, feed, other alcohol	32	25	35	29	23	32
Commodity Credit Corporation (CCC) sale for ethanol, other	153	316	0	139	287	0
Deliveries for domestic food and beverage use	11,511	11,700	11,750		10,614	10,659
Deliveries for domestic food and beverage use	11,511	11,700	11,750	10,442	10,614	10,659
Total Use	12,025	12,466	12,135	10,909	11,309	11,009
Ending stocks	2,160	1,808	1,447	1,959	1,641	1,312
Private	1,844	1,808	1,447	1,672	1,641	1,312
Commodity Credit Corporation (CCC)	316	0	0	287	0	0
Stocks-to-use ratio	17.96	14.51	11.92	17.96	14.51	11.92

Source: USDA, ERS, Sugar and Sweetener Outlook.

Maple Syrup

U.S. production of maple syrup declined 10 percent in 2014 to 3.167 million gallons from a record 3.523 million gallons in 2013. Except for Pennsylvania, all major producing States suffered production declines as their syrup yields per tree tap fell after collectively rising nearly 60 percent last year. Although the total number of tree taps hardly changed from last year, the length of the tapping season was cut by 8 days, or 22 percent, compared with 2013. Colder daytime temperatures reduced sap flow and shortened the harvest season from 37 days last year to 29 days this year. The shorter tapping season, however, raised average syrup production per tap per day to 1.23 ounces (after the tree sap is boiled for to evaporate the water), or 15 percent, from 1.1 ounces last year.

The top syrup-producing State, Vermont, harvested 160,000 gallons less this year than in 2013, which constituted 45 percent of the national decline of 356,000 gallons. Although the number of taps in Vermont was up by 70,000 from last year, the sap yield per tap was down by more than 12 percent. The next two largest producers, New York and Maine, also experienced smaller sap harvests due to stingier yields per tap this year. Despite the 10-percent diminution of domestic syrup production in 2014, the total volume of 3.167 million gallons is still more than twice as much as the 1.5-million gallon output in 2007 and is the second highest level on record after 2013.

The record 2013 U.S. crop lowered the average price of maple syrup 4.3 percent to \$37.40 per gallon. Still, four States saw modest to moderate price hikes despite increased production levels last year. All producer States enjoyed double-digit production value boosts. Overall, total production value in 2013 jumped 77 percent to \$131.8 million from \$74.6 million in 2012. The biggest production-value increases were reaped by Midwest producers—Michigan, Ohio, and especially Wisconsin—raising their total syrup value by 131 percent. The average U.S. production value climbed sharply to \$11.6 per tree tap, up 52 percent from \$7.63 per tap in 2012. Wisconsin's value per tap soared 253 percent from \$3.80 to \$13.39 in 2013. Connecticut's \$18.21 value per tap topped all the other producer States. Nevertheless, Midwestern States enjoyed the highest average production value of \$13.68 per tap compared with the other States.

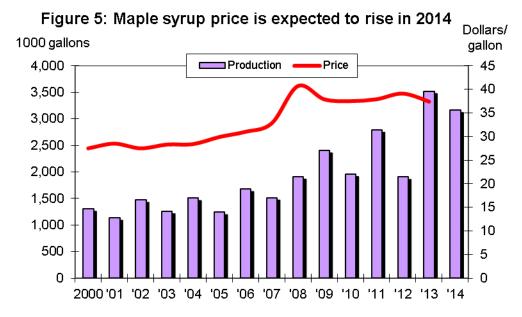
Prices for the 2013 syrup crop were all lower with respect to retail, wholesale, and bulk sales. The average price for bulk sales was \$29.47 per gallon, down from \$30.31 per gallon in 2012. Two-thirds of market sales by maple farmers were in bulk form, 10 percent wholesale and 22 percent retail in 2013. New England States, particularly Maine and Vermont, largely conduct syrup sales in bulk, with only tiny percentages in the wholesale or retail markets. Massachusetts and Connecticut, on the other hand, sell only a small portion of their crop in the bulk market.

Total bulk sales of maple syrup in 2013 amounted to \$90.2 million, a 90-percent surge from 2012, of which Vermont accounted for \$43 million or 48 percent. Maine's and New York's bulk sales were \$17.2 and \$13.3 million, respectively, the next largest. Last year, retail sales rose 50 percent and wholesale sales were up 61 percent, largely because syrup production, value and sales in 2012 were much lower. Since 2000, the share of bulk sales has increased relative to retail and wholesale sales, both of which have fallen.

With respect to the U.S. supply of maple syrup, the share of Canadian imports has risen in terms of value over the past two decades while both U.S. import value and volume have climbed. Two-thirds of the volume of syrup consumed or used domestically in 2013 was imported from Canada, down from around 84 percent on average in the past decade. Canadian syrup production was up 28 percent last year, which was partly offset by the 85-percent gain in U.S. production in supplying the domestic market. The U.S. syrup crop in 2013 was only 29 percent of the Canadian output but represented the highest ratio in the past

20 years. In production value, the U.S. syrup crop last year was only 31 percent of Canada's but has been above the 22-percent average ratio since 1992.

U.S. use of maple syrup in 2013 amounted to a record 7.6 ounces per household, up 33 percent from 2012 and 29 percent more than the 5.9-ounce average from 1992 to 2012. The value of this consumption quantity was a record \$2.30 on average per household last year, up 32 percent from \$1.74 in 2012. In per capita terms, the average 2.9 ounces consumed last year also represents a record amount and is 32 percent more than the average 2.2 ounces in the past 20 years. The 10 percent lower domestic production in 2014 is expected to reduce syrup consumption per household and raise prices.



Source: USDA NASS, Crop Production.

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