



Electronic Outlook Report from the Economic Research Service

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Sugar and Sweeteners Outlook

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U.S. Sugar July 2012

On July 11, 2012, the U.S. Department of Agriculture (USDA) released its latest U.S. and Mexico sugar supply and use estimates for fiscal year (FY) 2012 and projections for FY 2013 in the World Agricultural Supply and Demand Estimates (WASDE) report.

On June 29, 2012, the National Agricultural Statistics Service (NASS) published 2012/13 forecasts of area planted and harvested for sugarbeets and of area harvested for sugarcane for sugar and seed. Sugarbeet area planted is forecast at 1.244 million acres, close to prospective sugarbeet plantings of 1.241 acres predicted by NASS in March. Although total sugarbeet area planted is forecast up 0.9 percent compared with last year, the forecast for total area harvested at 1.216 million acres is practically the same as last year. NASS forecasts sugarcane area harvested at 892,000 acres, an increase of 2.2 percent over last year. Area is forecast up in Florida—13,000 acres and 3.3 percent—and also in Louisiana, at 10,000 acres and 2.4 percent.

Based on the NASS report, the USDA increased beet sugar production for FY 2013 by 60,000 STRV to 5.105 million STRV. The USDA adopted Florida sugarcane processors' forecast of FY 2013 production at 1.890 million STRV and also increased Louisiana's cane sugar forecast to 1.425 million due to NASS's projected area-harvested increase.

The USDA made small adjustments to imports for both FY 2012 and FY 2013 and made no changes to sugar use for either FY 2012 or FY 2013. Ending stocks for FY 2012 are estimated at 1.809 million STRV, implying a small 0.1 percentage point decrease in the stocks-to-use ratio to 15.4 percent. Ending stocks for FY 2013 are projected at 1.748 million STRV. The implied ending stocks-to-use ratio is 14.7 percent, up from 13.1 percent projected last month.

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The next release is
August 15, 2012.

Approved by the World
Agricultural Outlook Board.

Final 2011/12 sugar production in Mexico is estimated at 5.048 million metric tons (mt). No changes from last month were made to trade or deliveries, implying an increase in ending stocks of 23,000 mt to 823,000 mt. No changes were made to 2012/13 projections of production, deliveries, or ending stocks. The increase in beginning stocks of 23,000 mt is assumed to flow into increased exports, now projected at 1.149 million mt.

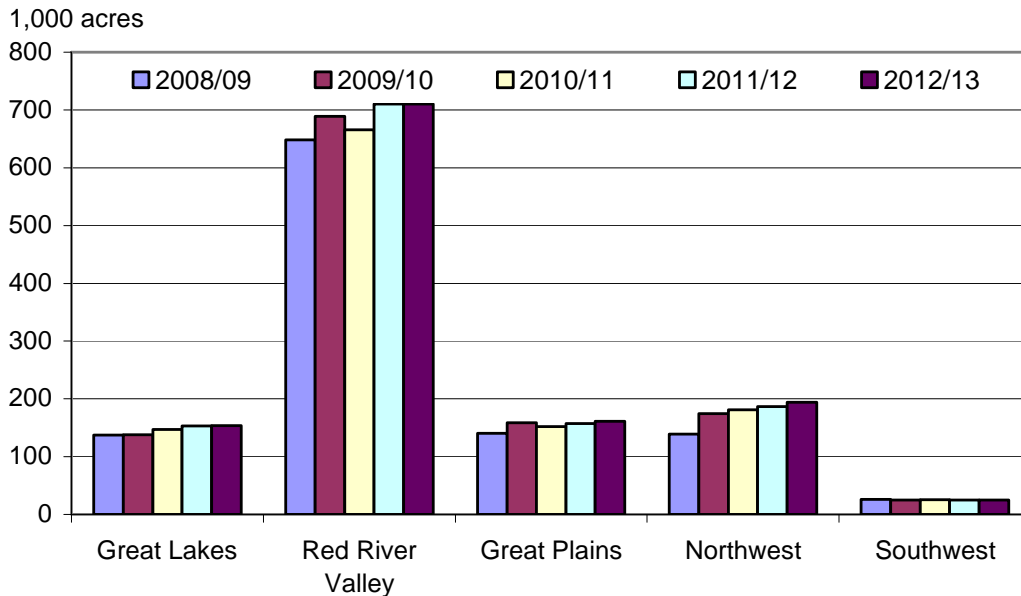
Sugar and Sweeteners in the North American Free Trade Area

On July 11, 2012, the U.S. Department of Agriculture (USDA) released its latest U.S. and Mexico sugar supply and use estimates for fiscal year (FY) 2012 and projections for FY 2013 in the *World Agricultural Supply and Demand Estimates* (WASDE) report.

U.S. Sugar Production for 2012/13

On June 29, 2012, the National Agricultural Statistics Service (NASS) published 2012/13 forecasts of area planted and harvested for sugarbeets and of area harvested for sugarcane for sugar and seed. Sugarbeet area planted is forecast at 1.244 million acres, close to prospective sugarbeet plantings of 1.241 acres predicted by NASS in March. Figure 1 shows sugarbeet forecasts for these regions: Great Lakes (Michigan), Red River Valley (Minnesota, North Dakota), Great Plains (Colorado, Montana, Nebraska, Wyoming), Northwest (Idaho, Oregon), and the Southwest (California). Area planted is up from last year by small percentages in Great Lakes, Great Plains, and the Northwest. There is no forecast growth in the Red River Valley or in California. Although total sugarbeet area planted is forecast up 0.9 percent compared with last year, the forecast for total area harvested at 1.216 million acres is practically the same as last year.

Figure 1
Sugarbeet area planted, by region, 2008/09-2012/13



Source: USDA, NASS, *Acreage*.

NASS forecasts sugarcane area harvested at 892,000 acres, an increase of 2.2 percent over last year. Figure 2 shows sugarcane area forecasts by State. Area is forecast up in Florida—13,000 acres, 3.3 percent, and also in Louisiana—10,000 acres, 2.4 percent.

NASS does not forecast sugar crop yields or production until August in *Crop Production*. Until then, the Interagency Commodity Estimates Committee (ICEC) for sugar forecasts sugar crop yield and production and the implications for sugar production. Table 1 details ICEC assumptions for sugarbeet and beet sugar production variables for 2012/13, along with a time series of the same variables covering the preceding 10 years. Sugarbeet yield for 2012/13 is a production-weighted average of regional yields. The key assumptions are a return to trend for the yield in the Red River Valley (forecast at 25.4 tons per acre, up from last year's 19.5 tons per acre) and the early-season plantings this year. According to NASS reporting of sugarbeet crop conditions through July 10 (table 2), favorable crop conditions have been maintained in the Great Plains and in Minnesota. There has been some crop condition deterioration in North Dakota in the latest July 10 report. The combined percentage of good and excellent conditions in North Dakota fell from 83 percent in the July 3 report to 66 percent in the July 10 report.

National sugar yield, forecast at a high 4.237 tons per ton, is a function of trend growth and the high sugarbeet yield forecast; see the equation in the table 1 footnote. Implied 2012/13 beet sugar production is 5.151 million short tons, raw value (STRV). Because the WASDE reports on an October-September fiscal year basis, beet sugar production for FY 2013 at 5.105 million STRV is somewhat less than the crop-year total.

Table 3 details ICEC assumptions for State-level sugarcane and cane sugar production variables for 2012/13, along with a time series of those same variables. For Florida, the ICEC has adopted the sugarcane processors' forecast parameters published in the May 2012 Sweetener Market Data report. The processors expect sugar per acre to be close to the 2011/12 level. With the expected increase in area harvested, production is forecast at 1.890 million STRV. Underlying Florida sugarcane production is forecast at 15.933 million STRV, implying a record sugarcane yield of 40.47 tons per acre.

For the other sugarcane-producing States, the ICEC uses trend parameter estimates and recent production performance to forecast cane sugar production. Because NASS does not forecast 2012/13 area harvested for seed until the December *Crop Production*, the ICEC assumes the same seed area percentage as in 2011/12. Louisiana cane sugar production is forecast at 1.425 million STRV, with a sugar yield just below that realized for 2011/12. Unlike the other cane producing States, Texas is expected to reduce area harvested by 4,000 acres. Offsetting this reduction, however, is an assumption that sugar yield will recover from 3 years of lower than average performance.

Table 1 -- USDA's Interagency Commodity Estimates Committee forecasts of 2012/13 U.S. sugarbeet and beet sugar production parameters and USDA estimates of the parameters since 2002/03, Sept - August crop year.

	Area planted (1,000 acres)	Area harvested (1,000 acres)	(Percent of planted)	Crop yield (Tons/acre)	Sugarbeet production (1,000 tons)	Beet sugar production (1,000 tons, raw value)	Sucrose recovery (percent)	Sugar yield (Tons,raw basis/acre)
2002/03	1427.3	1361.1	95.36	20.36	27,707	4,220	15.23	3.100
2003/04	1365.4	1347.8	98.71	22.79	30,710	4,912	15.99	3.644
2004/05	1345.6	1306.7	97.11	22.97	30,021	4,576	15.24	3.502
2005/06	1299.8	1242.9	95.62	22.07	27,433	4,299	15.67	3.459
2006/07	1366.2	1303.6	95.42	26.13	34,064	5,057	14.85	3.879
2007/08	1268.8	1246.9	98.27	25.53	31,834	4,846	15.22	3.886
2008/09	1090.7	1004.5	92.10	26.76	26,881	4,087	15.20	4.068
2009/10	1185.8	1148.5	96.85	25.93	29,783	4,457	14.97	3.881
2010/11	1171.9	1156.1	98.65	27.71	32,034	4,897	15.29	4.236
2011/12	1232.7	1213.1	98.41	23.76	28,828	4,525	15.70	3.730
2012/13	1244.1	1215.9	97.73	27.19	33,065	5,151	15.58	4.237 1/

1/ Forecast equation: Sugar yield = 0.021785*Trend[2012/13=32] +0.130165*Sugarbeet yield; Adj R2 = 0.956; sample: 1980/81 - 2011/12
Source: Historical data - USDA, NASS, *Crop Report*; USDA, FSA, *Sweetener Market Data*; Forecast - USDA, ICEC for sugar.

Table 2 -- Sugarbeet crop conditions in various States, 2012/13.

State	Date	Very poor	Poor	Fair	Good	Excellent
		----- Percent -----				
Colorado	07/10/12	4	7	34	44	11
	07/03/12	1	8	36	40	15
	06/26/12	0	9	33	48	10
	06/19/12	0	8	25	57	10
	06/12/12	0	6	17	61	16
	06/05/12	0	6	24	56	14
Minnesota	07/10/12	1	2	19	66	12
	07/03/12	1	2	19	64	14
	06/26/12	0	2	21	66	11
	06/19/12	1	2	21	67	9
	06/12/12	1	2	20	68	9
	06/05/12	1	4	25	63	7
North Dakota	07/10/12	3	4	27	55	11
	07/03/12	0	1	16	67	16
	06/26/12	0	1	11	65	23
	06/19/12	0	1	15	64	20
	06/12/12	0	2	20	67	11
	06/05/12	NA	NA	NA	NA	NA
Wyoming	07/10/12	0	1	43	50	6
	07/03/12	0	1	43	50	6
	06/26/12	0	1	43	50	6
	06/19/12	0	0	45	49	6
	06/12/12	0	0	42	56	2
	06/05/12	0	0	40	58	2

Source: USDA, NASS, *Weekly Weather and Crop Bulletin State Stories*.

Hawaii sugar production for calendar year 2012 is projected at 170,000 STRV. Most of 2012/13 production takes place in 2013, for which there are no NASS forecasts. The ICEC assumes slightly improved performance in 2013 to arrive at a projected 2012/13 production of 180,000 STRV.

U.S. Sugar Production for 2011/12

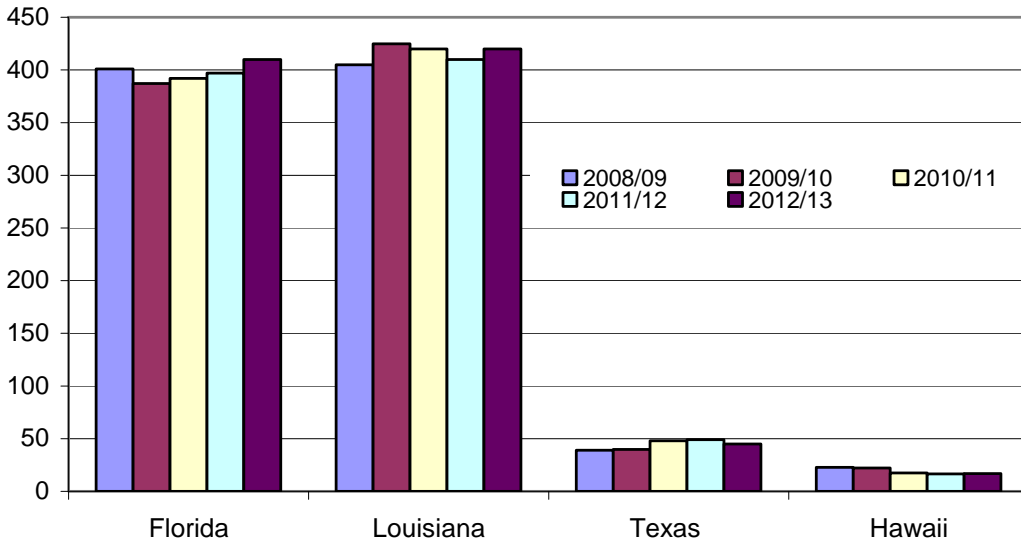
The USDA did not make any changes to 2011/12 production in the WASDE. It should be noted, however, that beet sugar production in May amounted to only 68,036 STRV. The Sugar and Sweetener Outlook has been assuming that September-August crop-year beet sugar production would come to 4.525 million STRV. To reach this total, production in the next 3 months would have to exceed 211,439 STRV. It is unusual for production in any of the 3 months after May to exceed the amount produced in May. By this reckoning, reaching the crop year estimate may be difficult unless there is early current-crop production in August (i.e., crop planted in the spring of 2012 but harvested before September 1), as was the case with the 2010/11 sugarbeet crop. Also, early-season production occurring in September could help to achieve the fiscal year estimate of 4.750 million STRV. There will be continuing attention paid to the progress of the 2012/13 crop and the prospect for an early start to the harvest.

Other WASDE Changes Affecting U.S. Sugar

The USDA reduced estimated tariff-rate quota (TRQ) imports for 2011/12 by 16,536 STRV. The new estimate is 2.1 million STRV. It is now expected that this amount of sugar entering from Colombia and Central American countries under the calendar year Free Trade Agreements TRQs will enter in the 3 months after the end of the current fiscal year. The USDA also increased imports expected to enter from Mexico in 2012/13 by 27,420 STRV. The new total is projected at 1.331 million STRV.

There were no changes made to sugar use for either 2011/12 or 2012/13. Last month there was some concern regarding the pace of 2011/12 sugar deliveries for human consumption. However, since then, the Farm Service Agency has made revisions to *Sweetener Market Data* for direct consumption imports that put the delivery pace in line to achieve the 11.3 million STRV estimate in the WASDE.

Figure 2
Sugarcane area harvested, by region, 2008/09-2012/13
 1,000 acres

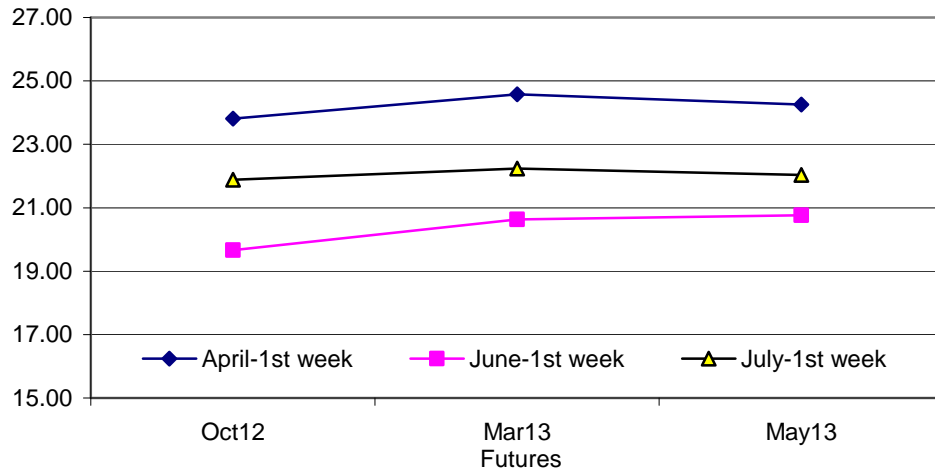


Source: USDA, NASS, *Acreage*.

Figure 3

Raw sugar futures prices

U.S.
cents/pound



Source: Intercontinental Exchange, No11 raw sugar contract.

Table 3 -- USDA's Interagency Commodity Estimates Committee forecasts of 2012/13 U.S. sugarcane and cane sugar production parameters and USDA estimates of the parameters since 2002/03.

	Area harvested for seed and sugar	Area harvested for seed	Seed area as percent of total	Area harvested for sugar	Sugarcane yield	Sugarcane production	Sucrose recovery	Sugar production	Sugar yield
Florida									
2002/03	461.0	19.0	4.12	442.0	38.30	16,929	12.58	2,129	4.82
2003/04	438.0	19.0	4.34	419.0	39.30	16,467	13.08	2,154	5.14
2004/05	406.0	21.0	5.17	385.0	34.90	13,437	12.59	1,692	4.40
2005/06	401.0	25.0	6.23	376.0	31.40	11,806	11.58	1,367	3.64
2006/07	400.0	18.0	4.50	382.0	35.80	13,676	12.57	1,719	4.50
2007/08	393.0	18.0	4.58	375.0	36.00	13,500	12.19	1,645	4.39
2008/09	401.0	17.0	4.24	384.0	32.90	12,634	12.48	1,577	4.11
2009/10	387.0	17.0	4.39	370.0	35.90	13,283	12.39	1,646	4.45
2010/11	392.0	18.0	4.59	374.0	32.70	12,230	11.71	1,433	3.83
2011/12	397.0	17.0	4.28	380.0	37.80	14,364	12.72	1,828	4.81
2012/13	410.0	16.4	3.99	393.6	40.47	15,933	11.86	1,890	4.80
Louisiana									
2002/03	495.0	30.0	6.06	465.0	28.30	13,160	10.39	1,367	2.94
2003/04	490.0	40.0	8.16	450.0	26.20	11,790	11.68	1,377	3.06
2004/05	465.0	35.0	7.53	430.0	23.80	10,234	11.30	1,157	2.69
2005/06	455.0	35.0	7.69	420.0	22.90	9,618	12.37	1,190	2.83
2006/07	435.0	30.0	6.90	405.0	27.30	11,057	11.94	1,320	3.26
2007/08	420.0	30.0	7.14	390.0	30.40	11,856	12.20	1,446	3.71
2008/09	405.0	25.0	6.17	380.0	28.30	10,754	12.99	1,397	3.68
2009/10	425.0	35.0	8.24	390.0	32.20	12,558	11.70	1,469	3.77
2010/11	420.0	30.0	7.14	390.0	27.80	10,842	13.02	1,411	3.62
2011/12	410.0	25.0	6.10	385.0	27.61	10,630	13.17	1,400	3.64
2012/13	420.0	25.6	6.10	394.4	27.30	10,767	13.24	1,425	3.61
Texas									
2002/03	44.5	0.9	2.02	43.6	39.11	1,705	11.20	191	4.38
2003/04	43.0	1.3	3.02	41.7	39.69	1,655	10.58	175	4.20
2004/05	44.0	1.3	2.95	42.7	37.31	1,593	9.92	158	3.70
2005/06	42.4	1.9	4.48	40.5	38.30	1,551	11.31	175	4.33
2006/07	40.7	1.5	3.69	39.2	41.20	1,615	10.98	177	4.53
2007/08	43.7	1.2	2.75	42.5	33.51	1,424	11.07	158	3.71
2008/09	39.2	2.0	5.10	37.2	35.51	1,321	11.50	152	4.08
2009/10	39.7	3.0	7.56	36.7	35.99	1,321	8.45	112	3.04
2010/11	48.1	2.3	4.78	45.8	30.48	1,396	10.44	146	3.18
2011/12	49.0	2.0	4.08	47.0	33.51	1,575	9.26	146	3.10
2012/13	45.0	1.8	4.08	43.2	32.35	1,396	10.74	150	3.48
Hawaii 1/									
2002	22.7	1.4	6.17	21.3	99.01	2,109	12.79	270	12.66
2003	21.3	1.4	6.57	19.9	102.01	2,030	12.86	261	13.12
2004	23.2	1.4	6.03	21.8	90.78	1,979	13.03	258	11.83
2005	23.5	1.8	7.66	21.7	80.78	1,753	14.39	252	11.63
2006	22.0	1.6	7.27	20.4	79.12	1,614	13.21	213	10.45
2007	22.9	2.5	10.92	20.4	73.19	1,493	13.80	206	10.10
2008	22.8	2.4	10.53	20.3	70.05	1,422	13.02	185	9.12
2009	22.2	1.9	8.56	20.3	65.62	1,332	13.23	176	8.68
2010	17.4	1.9	10.92	15.5	77.10	1,195	14.37	172	11.08
2011	16.6	1.5	9.04	15.1	85.23	1,287	14.20	183	12.11
2012	17.0	1.5	9.04	15.5	83.15	1,286	13.22	170	10.99

1/ The Hawaii crop year is the same as the calendar year. The WASDE reports cane sugar production the fiscal year cane

Source: Historical data - USDA, NASS, *Crop Report*; USDA, FSA, *Sweetener Market Data*; Forecast - USDA, ICEC for sugar.

U.S. Sugar Prices

Since August 2009, monthly world sugar prices (average of Intercontinental Exchange (ICE) nearby no. 11 raw sugar contract) have been above the U.S. sugar loan rate (18.00-18.75 cents per pound) except for a short 4-month period in 2010. These higher world prices have helped to keep U.S. prices (nearby ICE no.16 contract) above the average range of 20-23 cents per pound that was characteristic of the period between FY 1983 and FY 2009. In addition to world price levels, there is now more attention focused on the relationship between sugar availability in the United States and the margin between world and U.S. raw sugar prices.

World sugar prices have been on down-trend since July 2011 (30.51 cents per pound) through last month (20.44 cents per pound). As detailed last month in the *Sugar and Sweetener Outlook*, the USDA estimates 2011/12 world sugar in surplus at 10.002 million metric tons, raw value (MTRV) and projects a 2012/13 surplus of 10.692 million MTRV. These surpluses, plus a depreciation of the Brazilian real currency unit by 12.9 percent since January 2012, have put a downward expectation of world raw sugar prices through 2013. All else constant, lower world raw sugar prices translate into lower U.S. raw sugar prices.

In spite the downward trend, world sugar prices started increasing in mid-June from their May-through-first-half-of-June low points (which ranged from 18.90 to 21.05 cents per pound). Figure 3 shows first-week averages of the October 2012, March 2013, and May 2013 no. 11 contracts for April, June, and July. First-week June averages for the three contracts were decidedly below the averages of 2 months earlier, but the first-week-July averages increased to about midway between the April and June averages. LMC International has pointed to several weather-related events to explain the recent increases since early June: wet weather in Center/South Brazil and Australia affecting production and exports, a slow start to the monsoon rains in India, and the possibility of a return of El Niño weather pattern in the second half of 2012. It is far from certain that these concerns will continue into the remainder of 2012 and 2013.

The margin between world and U.S. raw sugar prices averaged 11.13 cents per pound for October 2011 through March 2012. The average for April-June has been 8.39 cents per pound, a reduction of 24.6 percent from the earlier period.

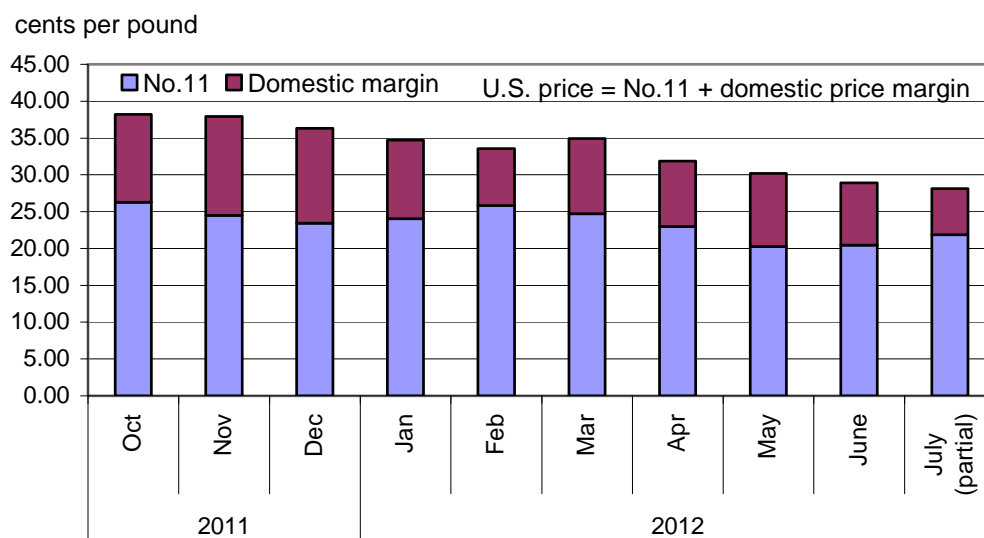
For the period of October 2011 through March 2012, the ending FY 2012 stocks-to-use ratio in the WASDE ranged between 5.3 and 10.4 percent. On April 19, 2012 (after the publication of the April WASDE), the Secretary of Agriculture increased the FY 2012 sugar TRQ and the U.S. Trade Representative reallocated the existing the TRQ away from countries that could not fulfill their originally allocated TRQ. At the time, it was expected that an additional 450,000 STRV would enter into the United States as a result. Also since April, there has been greater certainty about potential sugar imports from Mexico. In the April WASDE, these imports were projected at 730,000 STRV and are now estimated in the July WASDE at 1.139 million STRV. The stocks-to-use ratio in the July WASDE is at 15.4 percent. The average ratio since May has been about 15.0 percent.

Figure 4 shows average monthly U.S. raw sugar prices since October 2011 as a combination of world sugar prices and the U.S.-world price margins. The world price has decreased from an October high of 26.30 cents per pound to 21.89 cents for the first week of July. The margin proportion of the U.S. price has decreased to about 22 percent in July. With the stocks-to-use ratio for FY 2013 projected at 14.7 percent, the U.S.-world raw sugar margins may well be less than they have averaged in the recent past. If world raw sugar prices resume their month-earlier downward trend, the outlook for U.S. raw sugar prices would be lower as well.

Sugar in Mexico

Sugar production through the end of June has amounted to 5.048 million metric tons (mt). Unless earlier data is revised, this total should be the final estimate for the 2011/12 production season. Figure 5 compares the geographical distribution of production for 2011/12 with that of 2010/11. Production this year exceeded that of last year in Central, Northwest, Pacific (mainly Jalisco), and South regions. Production in the Gulf region, mainly Veracruz, recovered in the latter part of the season and finished only about 5 percent below last year. Production in the

Figure 4
U.S. and world raw sugar prices, fiscal year 2012 through mid-July



Northeast, as predicted by the Comité Nacional Para El Desarrollo Sustentable de la Cana de Azúcar (CNDSCA), was far below last year's production level. Although there are not yet any official CNDSCA forecasts for 2012/13, growing conditions have been favorable in most regions. The USDA projects 2012/13 production at 5.3 million mt.

Figures 6 and 7 show Sugar and Sweetener Outlook estimates of Mexico sugar net returns and their price and cost components since 2000/01. Net returns before the full implementation of the North American Free Trade Agreement (NAFTA) averaged about 56 percent above production costs. Relative to the 2000/01 base, production-cost growth was exceeded by increases in market prices through 2006/07. The first 2 years of the implementation of the NAFTA sweetener provisions saw a lowering of net revenue and increased production costs. The net return fell 59 percent relative to the pre-NAFTA average and was negative in 2008/09. For the last 3 years, prices have been higher as sugar prices became more strongly correlated with those in the United States. Production costs in 2009/10 and 2010/11 were less than in 2008/09. These costs are projected to have risen in 2011/12, lowering the net return to about 60 percent.

The USDA did not change its estimate of 2011/12 consumption or exports. According to CNDSCA data through the end of May, domestic sugar deliveries have totaled 2.785 million mt, about 4.27 percent above deliveries for the same period last year. The USDA is projecting a year-over-year increase of 3.8 percent. Deliveries of high fructose corn syrup (HFCS) have been strong as well—1.127 million mt, dry basis or 7.11 percent ahead of last year. HFCS deliveries as a proportion of combined sugar and HFCS deliveries stand at 28.8 percent through May.

The USDA increased its estimate of 2011/12 ending stocks by the amount of the production increase relative to last month's estimate. It is now estimated at 759,900 mt. For 2012/13, the USDA kept projections of production, deliveries, and ending stocks at the same levels projected last month and allowed the increase in beginning stocks (equal to the ending stocks of 2011/12) to flow into increased exports. The exports are projected at 1.149 million mt. All but 10,000 mt are projected to be exported to the United States.

¹ As discussed earlier, this was the period when U.S. sugar prices became more strongly influenced by the rise in world sugar prices.

Table 4 -- U.S. sugar: supply and use, by fiscal year (Oct./Sept.)

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
						1,000 short tons, raw value							
Beginning stocks	2,216	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,498	1,472	1,809
Total production	8,769	7,900	8,426	8,649	7,876	7,399	8,445	8,152	7,531	7,963	7,831	8,298	8,750
Beet sugar	4,680	3,915	4,462	4,692	4,611	4,444	5,008	4,721	4,214	4,575	4,659	4,750	5,105
Cane sugar	4,089	3,985	3,964	3,957	3,265	2,955	3,438	3,431	3,317	3,387	3,172	3,548	3,645
Florida	2,057	1,980	2,129	2,154	1,693	1,367	1,719	1,645	1,577	1,646	1,433	1,828	1,890
Louisiana	1,585	1,580	1,367	1,377	1,157	1,190	1,320	1,446	1,397	1,469	1,411	1,400	1,425
Texas	206	174	191	175	158	175	177	158	152	112	146	150	150
Hawaii	241	251	276	251	258	223	222	182	192	161	182	170	180
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0
Total imports	1,590	1,535	1,730	1,750	2,100	3,443	2,080	2,620	3,082	3,320	3,738	3,799	3,074
Tariff-rate quota imports	1,277	1,158	1,210	1,226	1,408	2,588	1,624	1,354	1,370	1,854	1,721	2,100	1,283
Other Program Imports	238	296	488	464	500	349	390	565	308	448	291	550	450
Non-program imports	76	81	32	60	192	506	66	701	1,404	1,017	1,726	1,149	1,341
Mexico							60	694	1,402	807	1,708	1,139	1,331
Total Supply	12,575	11,615	11,684	12,070	11,873	12,174	12,223	12,571	12,277	12,817	13,067	13,569	13,633
Total exports	141	137	142	288	259	203	422	203	136	211	248	250	250
Miscellaneous	123	-24	161	23	94	-67	-132	0	0	-45	-22	0	0
Deliveries for domestic use	10,132	9,974	9,711	9,862	10,188	10,340	10,135	10,704	10,607	11,152	11,368	11,510	11,635
Transfer to sugar-containing products for exports under reexport program	98	156	183	142	121	106	169	141	120	201	196	180	180
Transfer to polyhydric alcohol, feed	33	33	24	41	48	51	53	61	46	35	33	30	30
Deliveries for domestic food and beverage use 1/	10,000	9,785	9,504	9,678	10,019	10,184	9,913	10,501	10,441	10,917	11,139	11,300	11,425
Total Use	10,395	10,087	10,014	10,172	10,542	10,476	10,424	10,907	10,743	11,319	11,595	11,760	11,885
Ending stocks	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,498	1,472	1,809	1,748
Privately owned	1,395	1,316											
CCC	784	212											
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.24	12.70	15.38	14.71

1/ For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and WASDE imports.

Source: USDA, WASDE.

NOTE: Numbers may not add due to rounding.

Table 5 -- U.S. sugar: supply and use (including Puerto Rico), fiscal years (Oct./Sept.), metric tons

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
1,000 metric tons, raw value													
Beginning stocks	2,010	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,359	1,336	1,641
Total production	7,955	7,167	7,644	7,846	7,145	6,712	7,662	7,396	6,832	7,224	7,104	7,527	7,938
Beet sugar	4,245	3,552	4,048	4,257	4,183	4,032	4,543	4,283	3,822	4,151	4,227	4,309	4,631
Cane sugar	3,710	3,615	3,596	3,590	2,962	2,681	3,119	3,113	3,009	3,073	2,877	3,218	3,307
Florida	1,866	1,796	1,932	1,954	1,536	1,240	1,559	1,492	1,431	1,493	1,300	1,658	1,715
Louisiana	1,438	1,433	1,240	1,249	1,049	1,079	1,198	1,312	1,267	1,332	1,280	1,270	1,293
Texas	187	158	173	159	143	159	161	143	138	101	132	136	136
Hawaii	219	227	251	228	234	202	201	165	174	146	165	154	163
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0
Total imports	1,443	1,393	1,570	1,588	1,905	3,124	1,887	2,377	2,796	3,012	3,391	3,446	2,789
Tariff-rate quota imports	1,158	1,051	1,098	1,113	1,277	2,348	1,473	1,228	1,243	1,682	1,561	1,905	1,164
Other Program Imports	216	269	443	421	454	317	354	513	279	407	264	499	408
Non-program imports	69	73	29	54	174	459	60	636	1,274	923	1,566	1,042	1,217
Mexico	0	0	0	0	0	0	54	630	1,272	732	1,549	1,033	1,208
Total Supply	11,408	10,537	10,599	10,949	10,771	11,044	11,088	11,404	11,138	11,627	11,854	12,309	12,368
Total exports	128	125	129	261	235	184	383	184	123	191	225	227	227
Miscellaneous	112	-22	146	20	85	-61	-120	0	0	-41	-20	0	0
Deliveries for domestic use	9,191	9,048	8,810	8,946	9,243	9,381	9,194	9,710	9,623	10,117	10,313	10,442	10,555
Transfer to sugar-containing products for exports under reexport program	89	141	166	129	110	96	153	128	109	183	178	163	163
Transfer to polyhydric alcohol, feed	30	30	22	38	44	46	48	56	42	31	30	27	27
Deliveries for domestic food and beverage use 1/	9,072	8,877	8,622	8,780	9,089	9,239	8,993	9,527	9,472	9,903	10,105	10,251	10,365
Total Use	9,431	9,151	9,084	9,228	9,563	9,504	9,457	9,895	9,746	10,268	10,519	10,668	10,782
Ending stocks	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,359	1,336	1,640	1,586
Privately owned	1,266	1,194	0	0	0	0	0	0	0	0	0	0	0
CCC	711	192	0	0	0	0	0	0	0	0	0	0	0
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.24	12.70	15.38	14.71

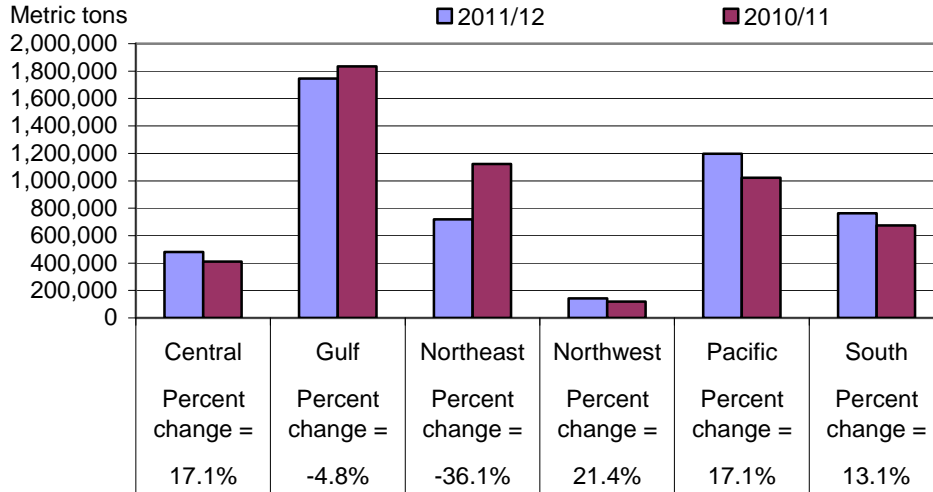
1/ For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and WASDE imports.

Source: USDA, WASDE.

NOTE: Numbers may not add due to rounding.

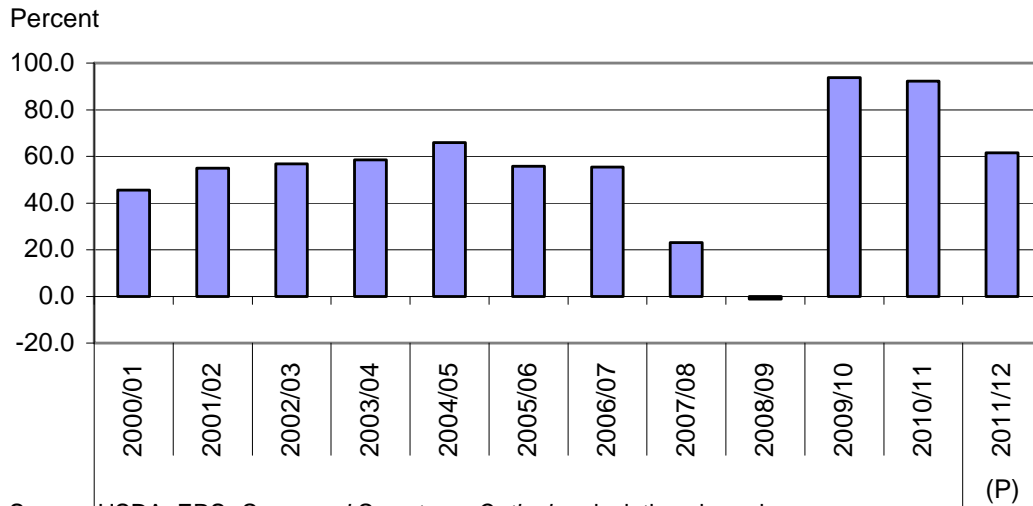
Figure 5

**Mexico sugar production: 2011/12 compared with 2010/11,
by region**



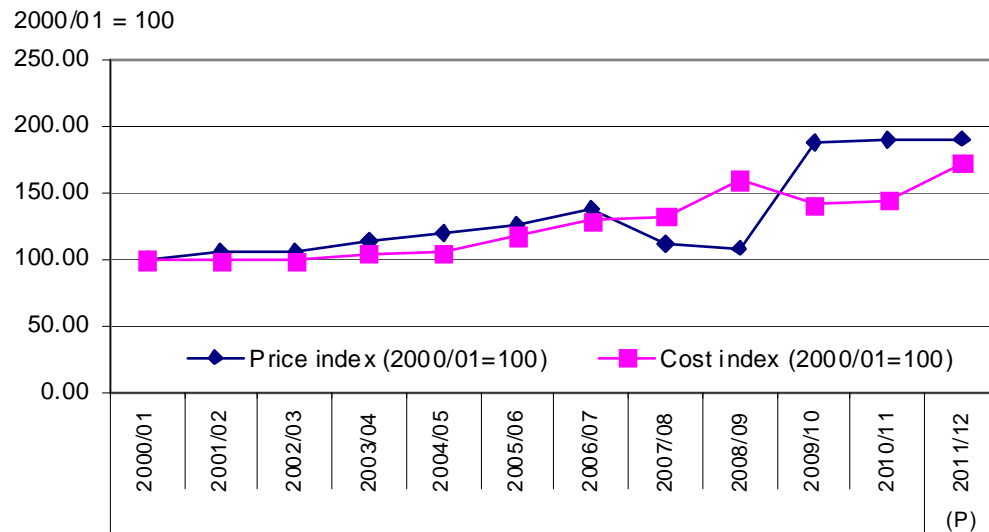
Source: CNDSCA.

Figure 6
Percent return above production costs for Mexican sugar, 2000/01-2011/12



Source: USDA, ERS, *Sugar and Sweetener Outlook* calculations based on production cost data from LMC International and prices from www.economia-sniim.gob.mx.

Figure 7
Evolution of sugar prices and sugar production costs in Mexico



Source: SNIIM, LMC International.

Table 6 -- Mexico: sugar production, supply, and sugar and HFCS utilization

Fiscal Year (Oct/Sept)	2010/11	2011/12 1/	2012/13 1/
	1,000 metric tons, raw value		
Beginning stocks	973	806	872
Production	5,495	5,351	5,618
Imports	307	405	192
Imports for consumption	114	224	0
Imports for other uses (includes IMMEX)	193	181	192
Total supply	6,774	6,562	6,682
Disappearance			
Human consumption	4,187	4,346	4,322
Other deliveries (IMMEX)	310	300	300
Miscellaneous	-86		
Total	4,411	4,646	4,622
Exports	1,558	1,043	1,218
Exports to the United States & Puerto Rico	1,518	1,032	1,207
Exports to other countries	40	11	11
Total use	5,969	5,689	5,840
Ending stocks	806	872	843
	1,000 metric tons, actual weight		
Beginning stocks	918	760	823
Production	5,184	5,048	5,300
Imports	289	383	181
Imports for consumption	107	211	0
Imports for other uses (includes IMMEX)	182	171	181
Total supply	6,391	6,191	6,304
Disappearance			
Human consumption	3,950	4,100	4,077
Other deliveries (IMMEX)	293	283	283
Miscellaneous	-81		
Total	4,161	4,383	4,360
Exports	1,469	984	1,149
Exports to the United States & Puerto Rico	1,432	974	1,139
Exports to other countries	38	10	10
Total use	5,631	5,368	5,509
Ending stocks	760	823	795
Stocks-to-Human Cons. (percent)	19.2	20.1	19.5
Stocks-to-Use (percent)	13.5	15.3	14.4
HFCS Cons. (dry weight)	1,635	1,720	1,806

1/ Forecast.

Source: USDA, WASDE and ERS, MTED, *Sugar and Sweeteners Outlook*.

Maple Syrup

After rising 43 percent in 2011, U.S. production of maple syrup dropped 32 percent in 2012 as yield per tree tap fell 33 percent. Despite a 2-percent rise in the number of taps, the domestic maple syrup season in 2012 was characterized by mild winter temperatures and a short maple-tapping season. There were an average of only 24 tapping days in 2012 compared to with 32 days last year. New England States had 27 tapping days, on average. All commercial maple regions and States in the country had fewer tapping days in 2012. States in the Midwest had the least number of tapping days only at 18 days, almost 40 percent fewer than in 2011.

Significantly lower yields, except in Maine, were attributed to above-normal temperatures that resulted in syrup production levels comparable to the low levels in 2010. The average yield of 0.15 gallon of syrup per tap in the Midwest matched the lowest yield in the region over the past dozen years in 2005. The syrup yield in Wisconsin was lowest this year at 0.083 gallon per tap, a 65-percent drop from 2011. The total of 9,771,000 tree taps in 2012 is actually a record for the past dozen seasons. Total taps in the New England States as a group, and in New York and Pennsylvania, have all been record numbers since at least 2001.

Given that the average retail price of domestic maple syrup remained at nearly \$41 per gallon in 2011, the average U.S. household spent about \$2 for the 6.7 ounces of syrup it consumed. The \$37.90 price for all syrup sales (retail, wholesale, and bulk) in 2011 was only 1 percent higher than in 2010. Due to the 43-percent production increase in 2011, the value of syrup output was up 44 percent. For New York and Pennsylvania, the combined value of production was up 87 percent.

All States experienced gains in both total value of production in 2011 and the value per tap in 2011. Indeed, the average value per tap of \$11 was a record and was 39 percent higher than the preceding year's value of \$7.94 per tap. New England States reaped an average \$11.40 per tap last year, which is 28 percent more higher than in 2010, and is higher than the value per tap in New York and Pennsylvania and as well as that of the Midwestern States. Nevertheless however, the percentage gains in value per tap in New York, Pennsylvania, and States in the Midwest were greater than New England's as a region in 2011.

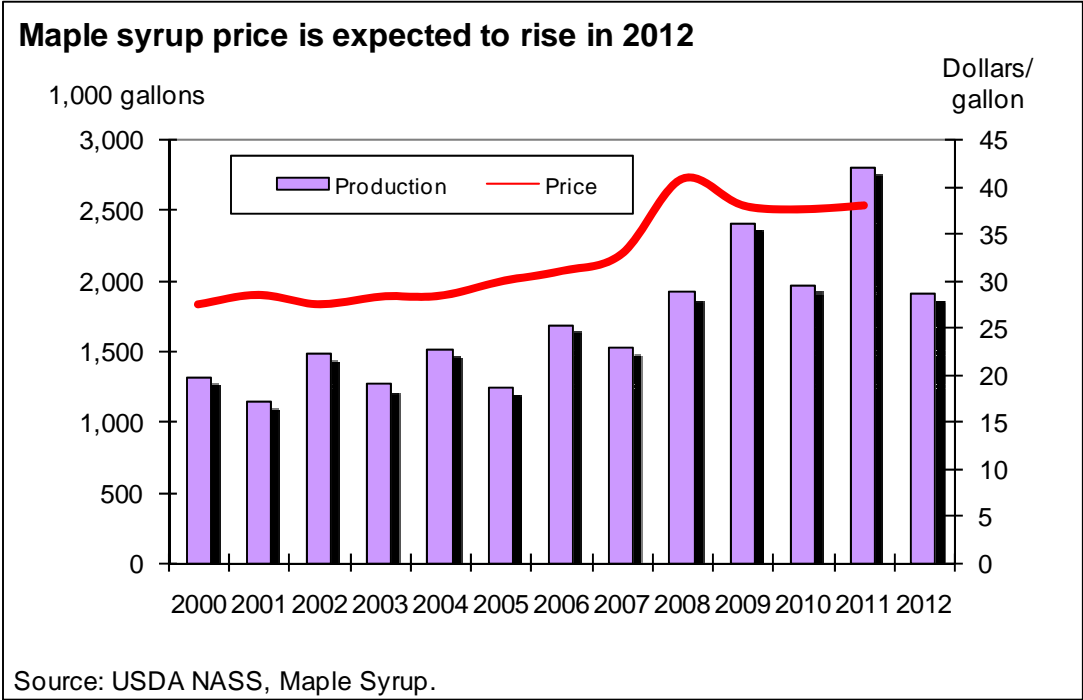
Despite 3 percent more imported shipments of maple syrup in 2011, the share of imports in the volume of consumption is down to 73 percent from 82 percent in 2010. The import share of 94 percent in 2005 remains the highest level thus far. Although the domestic supply of maple syrup was up 15 percent in 2011, it remains lower than supply levels from 2006 to 2009. Thus, per capita consumption of 2.5 ounces in 2011 is lower than the average 2.75 ounces from 2006 to 2009.

The value of 2011's record production was boosted by higher average prices, especially with respect to bulk sales, which accounted for 65 percent of all U.S. sales in 2011. Since 2000, the share of bulk syrup sales has been steadily rising at the expense of both retail and wholesale sales. Fifty-nine percent of bulk syrup sales in 2011 were from New England States. And 74 percent of New England's sales in 2011 were in bulk form compared with 54 percent for New York and Pennsylvania and 46 percent for Midwestern States.

The average bulk sale price received by New England States remained at around \$30 per gallon in 2011, about equal to prices in 2010 and 2009, but about \$1 higher than in the other regions. Average retail prices for New England syrup were at a record high at more than \$47 per gallon in 2011, which accounted in part for New England's declining share of U.S. retail sales from 46 percent in 2000 to 26 percent in 2011. The share of New England's sales via retail outlets declined from 44 percent in 2000 to 19 percent in 2011. Retail prices in New York and Pennsylvania averaged \$44 per gallon and \$42 in the Midwest. Only 10 percent of U.S. syrup sales last year were wholesale, down from 18 percent in 2000.

U.S. production of maple syrup was only 27 percent of Canadian production and only 21 percent of total North American production. In fact, U.S. production is only 30 percent of Quebec Province's 2011 output. U.S. syrup

imports from Canada are 58 percent more than domestic production; thus, 61 percent of the U.S. domestic supply is imported. That is, nearly 5 ounces of the average 6.7 ounces of syrup consumption per U.S. household in 2011 are imported.



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Data

Tables from the *Sugar and Sweeteners Yearbook* are available in the Sugar and Sweeteners Briefing 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?documented=1194>
Sugar Topic Room, <http://www.ers.usda.gov/topics/crops/sugar-sweeteners.aspx>

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