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Sugar and Sweeteners Outlook

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U.S. Sugar November 2012

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The next release is December 17, 2012.

Approved by the World Agricultural Outlook Board.

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

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

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

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

Mexico Sugar and High Fructose Corn Syrup

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

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

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

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

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

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

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

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

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

Table 1 -- First revisec 2012/13 production forecast made by Comite Nacional Para El Desarrollo Sustentable de la Cana de Azucar (Conadesuca), by region.

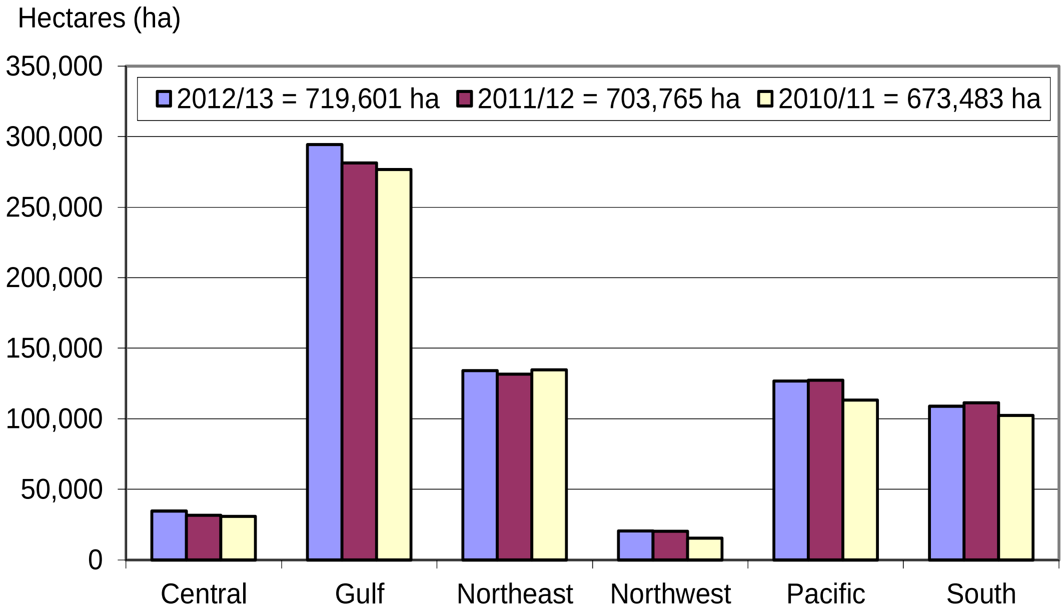
Region/Factories	Municipality	State	Owner	Area (Hectares)	Sugarcane (Metric tons)	Sugar (Metric tons)
Central Region - 4 factories						
ATENCINGO	Chietla	Puebla	FEESA	15,636	1,709,800	219,025
CALIPAM	Coxcatlán	Puebla	GARCIA GONZALEZ	1,974	190,853	18,540
CASASANO (LA ABEJA)	Cuautla	Morelos	FEESA	5,340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

Source: Comite Nacional Para El Desarrollo Sustentable de la Caña de Azucar (Conadesuca).

Note: On November 20, the owner of the San Nicolas mill was corrected to read American Sugar Refining, Inc.

Figure 1

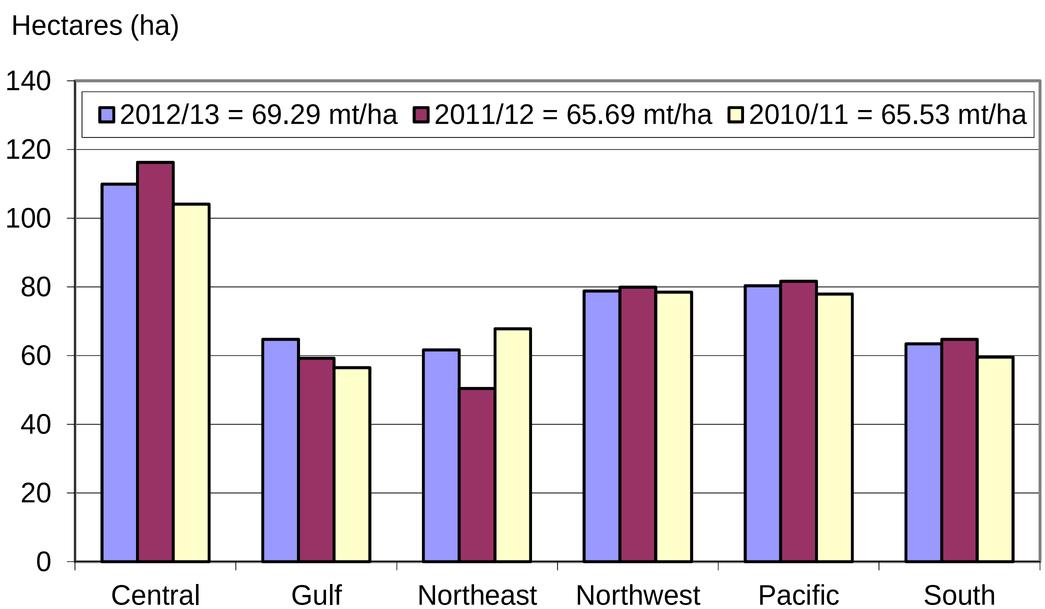
Mexico sugarcane area: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region



Source: Conadesuca.

Figure 2

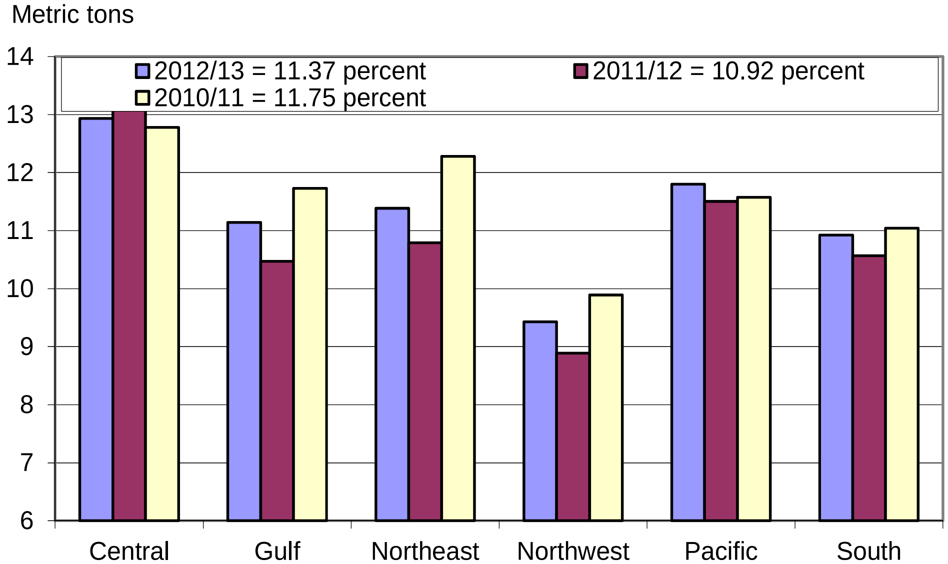
Mexico sugarcane yield: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region



Source: Conadesuca.

Figure 3

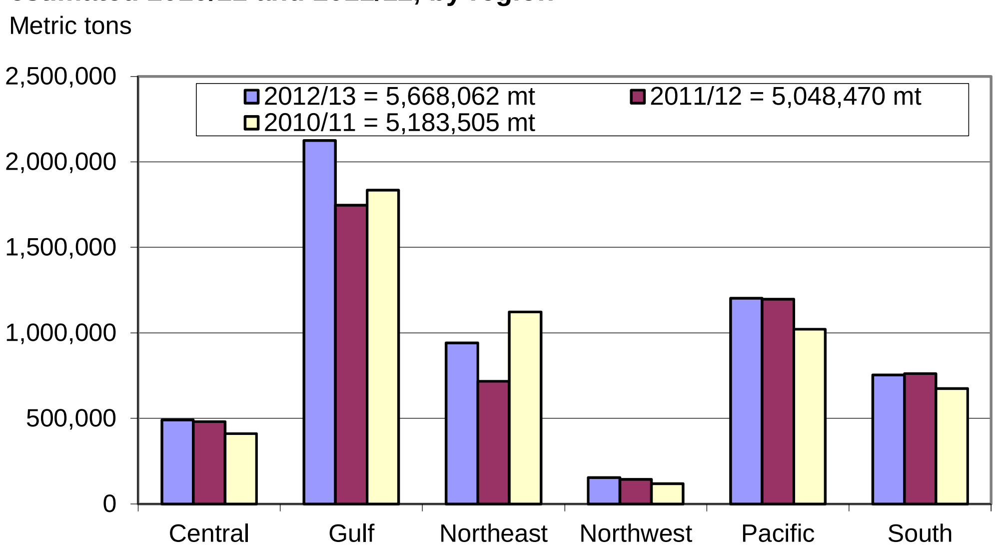
Mexico sugar recovery: 2012/13 forecast compared with estimated 2010/11 and 2011/12, by region



Source: Conadesuca.

Figure 4

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



Source: Conadesuca.

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

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

Source: Mexico Sugar Chamber (CNIAA); Conadesuca.

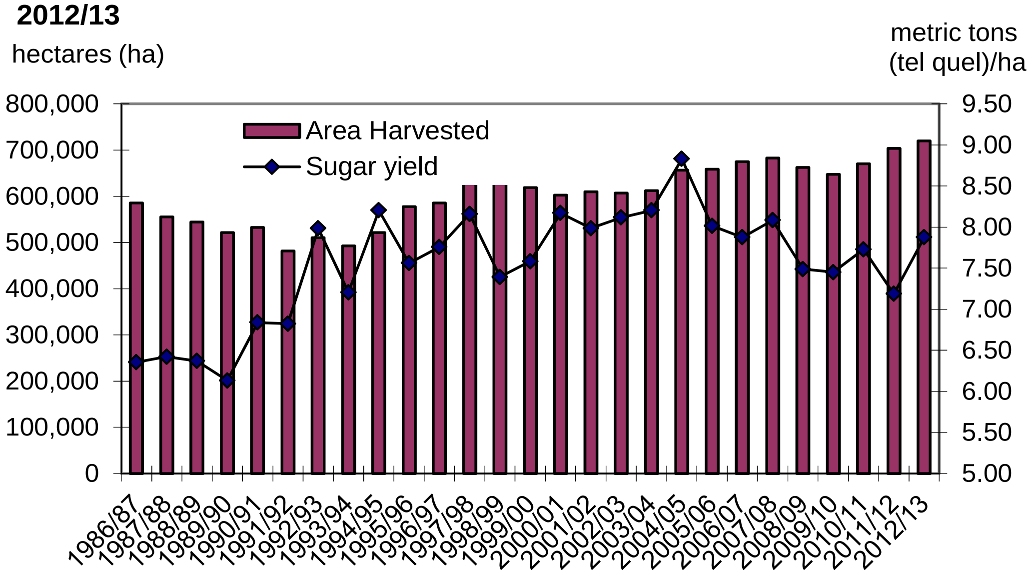
Table 2 -- Mexico sugarcane, area harvested, sugar, by region, 2003/04-2011/12 and projected 2012/13 - continued

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

Source: Mexico Sugar Chamber (CNIAA); Conadesuca.

Figure 5

Mexico sugar area harvested and sugar yield, 1986/87 - 2012/13



Source: Conadesuca and Mexico Sugar Chamber.

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

Figure 5 summarizes underlying production trends in Mexico sugar since 1986/87. Essentially, area harvested has been increasing, especially since the 1991/92 low of 481,685 hectares. The other production statistic is sugar per hectare; this is the multiplication of sugarcane yield and sucrose recovery, and it reflects gains in productivity. The trend here is decidedly less uniform. There was significant growth from 1986/87 up to the record of 8.83 mt per ha in 2004/05. The average since 2004/05 (7.69 mt per ha) more closely resembles the 7.63 mt per ha average of the period 1991/92 through 1999/2000. Clearly, any gains in Mexico sugar production have been the result of area expansion, with productivity lagging.

Mexico Sweetener Supply and Use for 2011/12

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

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

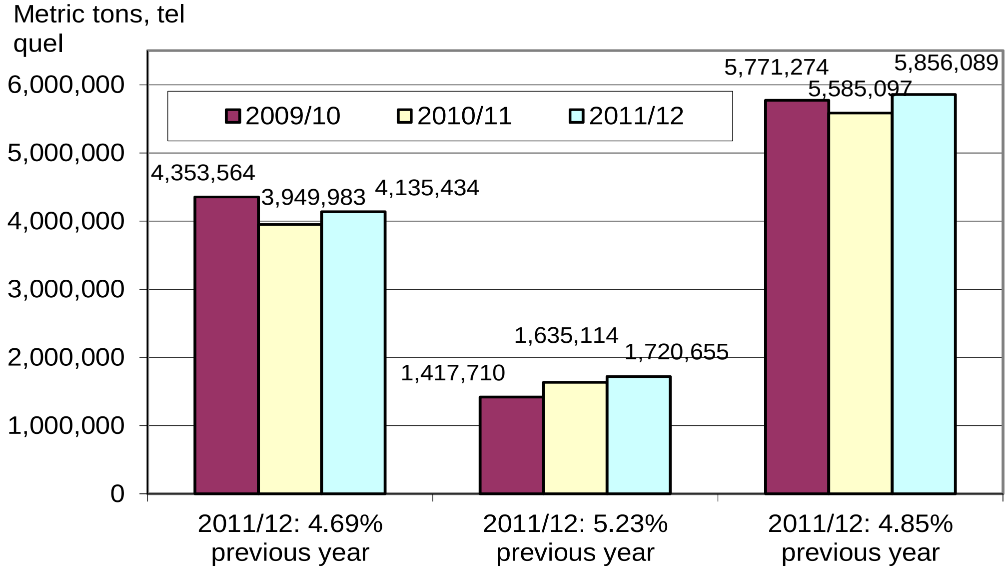
Conadesuca estimates IMMEX deliveries from domestic production at 104,223 mt. Combining this estimate with that for IMMEX imports produces an IMMEX total of 343,884 mt. As is well known, most IMMEX products that contain sugar are destined for export to the United States.

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

2 Although excluded here, the Conadesuca terms deliveries to the IMMEX program as exports because the sugar is supposed to be exported in product form. The USDA does not follow this accounting procedure, either in the U.S. or Mexico supply and use balances.

Figure 6

Sweetener consumption in Mexico, 2009/10 -- 2011/12



Source: Conadesuca.

Conadesuca estimates ending-year stocks at 968,256 mt. This estimate is the result of physical audits performed at each of the 57 sugar factories producing sugar in Mexico. The implied sugar-to-consumption ratio is calculated at 23.4 percent. This is above the commonly accepted 22 percent as the optimal ratio at the end of September. Some in Mexico would term this as an indicator of excess supply. This abundance of sugar, plus the recent drop in world sugar prices, may help account for 35 percent year-over-year decline in estandar sugar prices and 20 percent decline in refinado sugar prices for September in
Mexico City.

The USDA accounting includes a miscellaneous category that acts as a residual to balance total use with total supply. It is estimated at negative 91,983 mt. This difference reflects the differing methods of estimating exports by the United States and Mexico.

Mexico Sweetener Supply and Use for 2012/13

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

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

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

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

Table 3 -- 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	968
Production	5,184	5,048	5,668
Imports	289	476	198
Imports for consumption	107	237	0
Imports for sugar-containing product exports (IMMEX) 2/	182	240	198
Total Supply	6,391	6,285	6,834
Disappearance			
Human consumption	3,950	4,135	4,200
For sugar-containing product exports (IMMEX)	293	344	340
Miscellaneous	-81	-92	
Total	4,161	4,387	4,540
Exports	1,469	929	1,294
Exports to the United States & Puerto Rico	1,432	919	1,284
Exports to other countries	38	10	10
Total Use	5,631	5,317	5,834
Ending Stocks	760	968	1,000
		1,000 metric tons, raw value	
Beginning Stocks	973	806	1,026
Production	5,495	5,351	6,008
Imports	307	505	210
Imports for consumption	114	251	0
Imports for sugar-containing product exports (IMMEX)	193	254	210
Total supply	6,774	6,662	7,244
Disappearance			
Human consumption	4,187	4,384	4,452
For sugar-containing product exports (IMMEX)	310	365	360
Miscellaneous	-86	-98	
Total	4,411	4,651	4,812
Exports	1,558	985	1,372
Exports to the United States & Puerto Rico	1,518	974	1,361
Exports to other countries	40	11	11
Total use	5,969	5,635	6,184
Ending stocks	806	1,026	1,060
Stocks-to-Human Consumption (percent)	19.2	23.4	23.8
Stocks-to-Use (percent)	13.5	18.2	17.1
High Fructose Corn Syrup (HFCS) Consumption (dry weight)	1,635	1,721	1,683

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

U.S. Sugar

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

U.S. Production

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

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

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

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

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

Sugar Trade

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

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

Table 4 -- November 2012 USDA estimate of sugar imports in FY 2012

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

1/ Total entries from Mexico, quota and non-quota, reflected below.

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

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

	Metric tons, raw value (MTRV)		Short tons, raw value (STRV)	
	Oct. forecast	Change from Sept.	Oct. forecast	Change from Sept.
Raw sugar TRQ	1,117,195	0	1,231,497	0
Less other shortfall	-240,404	-90,404	-265,000	-99,653
Additional Quota	0	0	0	0
Total raw sugar TRQ	**876,791**	-90,404	**966,497**	-99,653
Refined sugar TRQ				
Allocation to Canada	12,050	0	13,283	0
Global	8,294	0	9,143	0
Specialty 1/				
Base	1,656	0	1,825	0
Additional	95,254	0	105,000	0
Total refined sugar TRQ	**117,254**	0	**129,250**	0
CAFTA/DR TRQ - calendar 2013	**121,740**	0	**134,195**	0
CAFTA/DR CY 2012, likely to enter in FY 2013	27,352	0	30,150	0
CAFTA/DR CY 2013, forecast to enter in FY 2014	-27,352	0	-30,150	0
Other:				
Singapore, Bahrain, Jordan	0	-59	0	-65
Peru	2,000	0	2,205	0
Colombia	50,750	0	55,942	0
Colombia CY 2012, forecast to enter Oct-Dec 2012	20,105	0	22,162	0
Colombia CY 2013, forecast to enter Jan-Sept 2013	-20,105	0	-22,162	0
Panama	6,620		7,297	
Less shortfall	-5,620		-6,195	
Total estimate TRQ entries	**1,169,535**	-89,463	**1,288,089**	-98,616
Mexico	**1,360,777**	301,504	**1,500,000**	332,351
Re-export program imports	**408,233**	0	**450,000**	0
Sugar syrups, high-tier	**9,072**	0	**10,000**	0
Total projected imports	**2,947,617**	212,041	**3,248,089**	233,735

1/ The tranches of the FY 2013 specialty sugar TRQ open as follows: in MTRV:

	MTRV	STRV
Tranche 1 - Oct. 12, 2012	1,656	1,825
Tranche 2 - Oct. 26, 2012	35,245	38,851
Tranche 3 - Jan. 11, 2013	20,003	22,050
Tranche 4 - Apr. 11, 2013	20,003	22,050
Tranche 5 - July 11, 2013	20,003	22,050
Total	96,910	106,825

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

Table 6 -- Monthly sugar deliveries for human consumption: Sweetener Market Data (SMD) estimates for 2011/12 and ERS Sugar and Sweetener Outlook projections for 2012/13, including Sugar and Sweetener Outlook projections model

Units = short tons, raw value (STRV)

2011/12: Sweetener Market Data (SMD) estimates of monthly deliveries: total, beet sugar, cane sugar, and direct consumption imports (short tons, raw value).

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

2012/13: Sugar and Sweetener Outlook projections of monthly deliveries: total, beet sugar, cane sugar, and direct consumption imports (short tons, raw value).

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

Sugar and Sweetener Outlook model coefficients used to make 2012/13 projections

	Symbols	Total deliveries (I)	Beet deliveries (II)	Cane deliveries (III)	Direct Cons. Imports
Constant	A	783,475	405,104	552,826	Residual calculation = I - (II+III)
Shifter	B	-88,054	0	30,398	
Trend (value in FY 2013)	C	341,938	0	0	
Beet deliveries	D	0	0	-0.2037	
Oct	E	0	0	0	
Nov	F	-92,879	-41,379	-26,788	
Dec	G	-186,005	-82,078	-90,766	
Jan	H	-191,887	-63,375	-104,450	
Feb	I	-197,095	-65,253	-104,044	
Mar	J	-61,054	-21,252	-19,536	
Apr	K	-125,219	-40,509	-64,574	
May	L	-81,467	-17,623	-35,544	
Jun	M	-57,262	0	-19,353	
Jul	N	-72,618	-18,077	-35,603	
Aug	O	0	0	0	
Sept	P	0	0	0	

1/ Example for October: A+B+C+D*(II)+E

Total deliveries = 783,475 [A] - 88,054 [B] + 341,938 [C] + 0 [E] = 1,037,359 STRV

Beet deliveries = 405,104 [A] + 0 [B] + 0 [C] + 0 [E] = 405,104 STRV

Cane deliveries = 552,826 [A] + 30,398 [B] + 0 [C] + (-0.2037 [D])*(405,104 (II)) + 0 [E] = 500,688 STRV

Direct consumption imports = 1,037,359 (I) - (405,104 (II) + 500,688 (III)) = 131,567 STRV

2/ Calculated as a residual.

Source: US Department of Agriculture, Economic Research Service, *Sugar and Sweetener Outlook*.

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

Sugar Deliveries

The USDA estimates FY 2012 sugar deliveries for human consumption at 11.141 million STRV. This estimate is 159,000 below the estimate of 11.300 million STRV that USDA had been maintaining since May. Most of the reduction was due to a series of reporting errors by a U.S. sugar refiner that were uncovered by USDA's Farm Service Agency (FSA). The refiner had been listing certain intermediate sales as deliveries for human consumption when, in fact, those sales resulted in shipments to other refiners. This led to double-counting of deliveries by110-120 STRV. The other event that led to fewer deliveries than expected was a dramatic decline in cane sugar deliveries in September from the amount forecast by about 55,000 STRV.

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

Ending Stocks

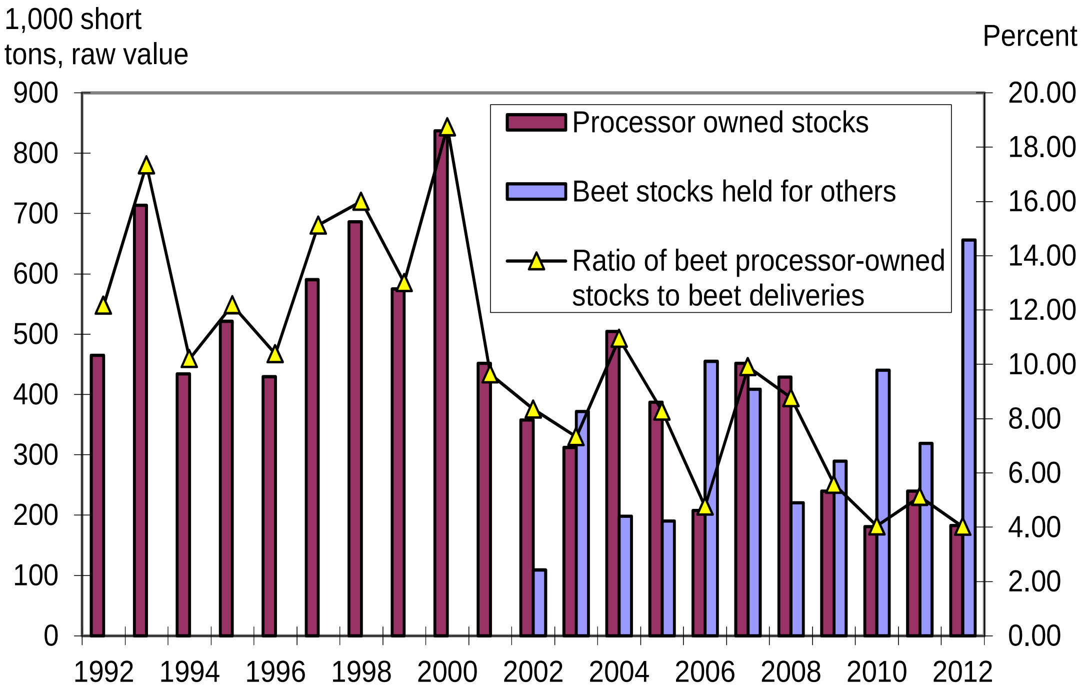
Ending FY 2012 sugar stocks held by processors and refiners are estimated at 2.007 million STRV. The implied stocks-to-use ratio is 17.48 percent, the highest level since FY 2004.

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

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

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

Figure 7
Sugarbeet processor ending fiscal year stocks



Source: USDA, FSA, Sweetwener Market Data.

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

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

Contacts and Links

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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
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