

ECONOMIC IMPORTANCE OF LOUISIANA SUGARCANE PRODUCTION IN 2009

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Overview

Louisiana is a major sugar producing state, accounting for approximately 42% of total cane sugar production and 19% of total sugar production in the United States. In 2009, sugarcane was grown on 417,869 acres (an increase of 16,434 acres or 4 percent above the 2008 crop) by 495 producers (a decrease of 31 producers or 6 percent) in 22 Louisiana parishes. An estimated 390,708 acres (an increase of 15,366 acres or 4 percent) were available for harvest for sugar, assuming 6.5 percent of the total acres were used for seed cane purposes. The 11 operating factories in the state processed nearly 14 million tons of cane (an increase of 1.7 million tons or 14 percent greater than 2008 levels). In total, the state's sugar factories produced 1.48 million short tons of sugar (96 pol), which was an increase of 100,000 tons or 8 percent.

The gross farm value of the 2009 sugarcane crop was \$447 million for sugar and molasses (an increase of \$89.4 million or 25 percent greater than the 2008 crop). The gross farm value reported above represents 60 percent of the value of the sugar and molasses produced, with the remaining 40 percent for processing and marketing, which amounted to \$305.1 million. Therefore, the total value of the sugarcane crop to Louisiana producers, processors and landlords at the first processing level actually was \$752 million, an increase of \$150.3 million or 25 percent when compared to the 2008 crop. The value ranks sugarcane as the leading agricultural row crop produced in Louisiana in terms of total crop market value. Using an economic multiplier in the range of 2.5-3.0, the sugarcane industry in 2009 has an estimated total impact on the state's economy of \$1.880 to \$2.256 billion.

Louisiana's Rank in Total U.S. Sugar Production

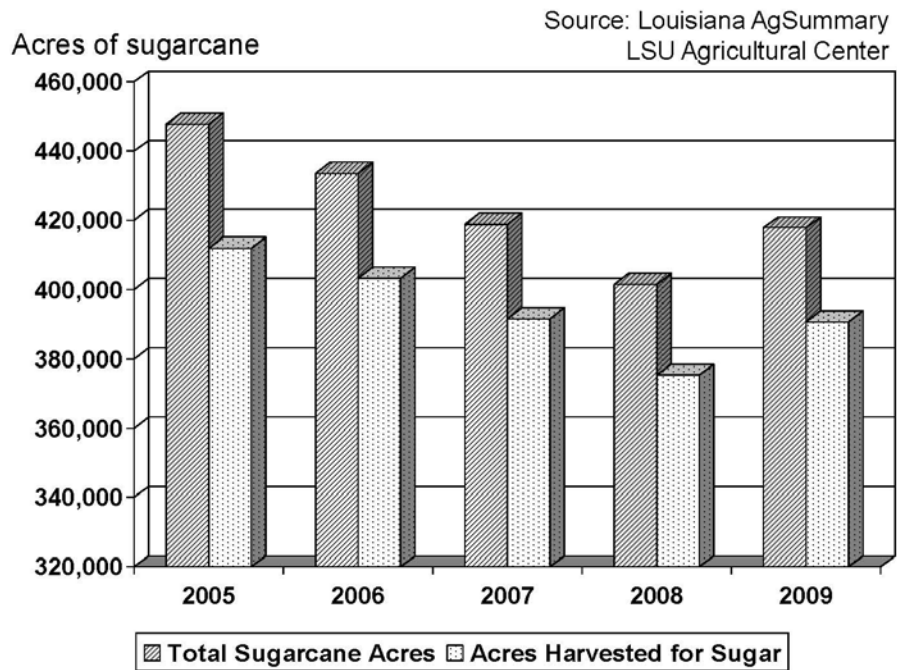
Refined white sugar in the United States is produced from two sources. Sugarbeets are processed directly into refined sugar, while sugarcane is first processed into raw sugar before being refined into white sugar. In 2009, 56.7 percent of total U.S. sugar production came from sugarbeets and 43.3 percent came from sugarcane. For the 2009/10 fiscal year, Louisiana accounted for approximately 43.8 percent of total U.S. cane sugar production and 18.9 percent of total U.S. sugar production.

U.S. Sugar Production, 2008/09 and 2009/10

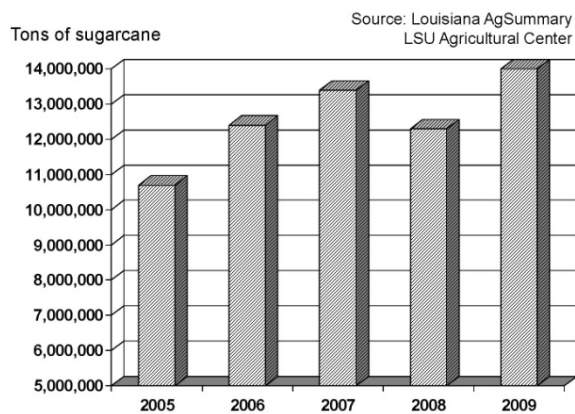
	2008/09	2009/10
	(1,000 short tons, raw value)	(1,000 short tons, raw value)
Beet sugar production	4,166	4,500
Cane sugar production	3,318	3,442
Florida	1,577	1,665
Hawaii	192	137
Louisiana	1,397	1,500
Texas	152	140
Total U.S. sugar production	7,484	7,942

Source: World Agricultural Outlook Board, U.S. Department of Agriculture, WASDE-480, March 2010.

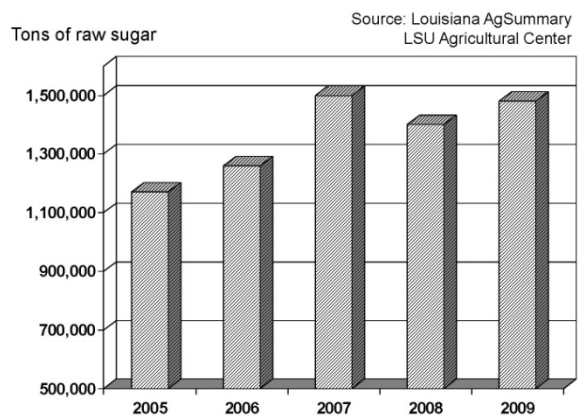
Louisiana Sugarcane Acreage, 2005-2009



Louisiana Sugarcane Production, 2005-2009



Louisiana Sugar Production, 2005-2009



2009 Louisiana Agricultural Summary Data for Sugarcane

Parish	Sugarcane Products	Total Producers	Units of Production (Yield per acre)	Total Production	Total Acres	Total Crop Value
Acadia	Raw sugar (lbs)	7	5,200	9,245,600	1,778	\$2,156,023
	Molasses (gal)		156	277,368		\$196,515
Ascension	Raw sugar (lbs)	16	6,900	98,863,200	14,328	\$23,054,354
	Molasses (gal)		207	2,965,896		\$2,101,340
Assumption	Raw sugar (lbs)	50	7,480	305,602,880	40,856	\$71,264,911
	Molasses (gal)		224	9,151,744		\$6,484,017
Avoyelles	Raw sugar (lbs)	12	6,430	51,054,200	7,940	\$11,905,559
	Molasses (gal)		193	1,532,420		\$1,085,721
Calcasieu	Raw sugar (lbs)	*	3,700	8,850,400	2,392	\$2,063,865
	Molasses (gal)		111	265,512		\$188,115
Evangeline	Raw sugar (lbs)	*	5,400	334,800	62	\$78,074
	Molasses (gal)		162	10,044		\$7,116
Iberia	Raw sugar (lbs)	85	6,900	397,964,400	57,676	\$92,803,109
	Molasses (gal)		207	11,938,932		\$8,458,742
Iberville	Raw sugar (lbs)	31	8,150	291,207,650	35,731	\$67,908,022
	Molasses (gal)		245	8,754,095		\$6,202,283
Jefferson Davis	Raw sugar (lbs)	*	4,995	36,538,425	7,315	\$8,520,560
	Molasses (gal)		150	1,097,250		\$777,402
Lafayette	Raw sugar (lbs)	25	7,200	79,704,000	11,070	\$18,586,534
	Molasses (gal)		216	2,391,120		\$1,694,110
Lafourche	Raw sugar (lbs)	32	7,072	195,045,760	27,580	\$45,483,598
	Molasses (gal)		212	5,846,960		\$4,142,576
Pointe Coupee	Raw sugar (lbs)	30	8,230	271,721,680	33,016	\$63,364,001
	Molasses (gal)		247	8,154,952		\$5,777,790
Rapides	Raw sugar (lbs)	20	7,020	68,178,240	9,712	\$15,898,791
	Molasses (gal)		211	2,049,232		\$1,451,882
St. Charles	Raw sugar (lbs)	*	6,7340	9,178,442	1,363	\$2,140,362
	Molasses (gal)		202	275,326		\$195,069
St. James	Raw sugar (lbs)	26	6,575	159,161,025	24,207	\$37,115,476
	Molasses (gal)		197	4,768,779		\$3,378,683
St. John	Raw sugar (lbs)	14	6,800	54,060,000	7,950	\$12,606,495
	Molasses (gal)		204	1,621,800		\$1,149,047
St. Landry	Raw sugar (lbs)	6	5,550	37,839,900	6,818	\$8,824,057
	Molasses (gal)		167	1,138,606		\$806,703
St. Martin	Raw sugar (lbs)	55	7,050	210,661,050	29,881	\$49,124,998
	Molasses (gal)		212	6,334,772		\$4,488,191
St. Mary	Raw sugar (lbs)	42	7,000	312,172,000	44,596	\$72,796,793
	Molasses (gal)		210	9,365,160		\$6,635,223
Terrebonne	Raw sugar (lbs)	11	6,807	66,810,705	9,815	\$15,579,889
	Molasses (gal)		204	2,002,360		\$1,418,674
Vermilion	Raw sugar (lbs)	26	6,106	180,957,416	29,636	\$42,198,274
	Molasses (gal)		183	5,423,388		\$3,842,474
West Baton Rouge	Raw sugar (lbs)	10	7,800	110,346,600	14,147	\$25,732,220
	Molasses (gal)		234	3,310,398		\$2,345,419
Total Sugarcane Crop Value						\$752,032,988

Source: 2009 Louisiana Summary of Agriculture and Natural Resources, LSU Agricultural Center.

SUGARCANE SUMMARY FOR CROP YEAR 2009

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In 2009, sugarcane was grown on 417,869 acres (an increase of 16,434 acres or 4.1% when compared to the 2008 crop) by 495 producers (a decrease of 31 producers or 5.9%) in 22 Louisiana parishes (counties). An estimated 390,708 acres (an increase of 15,366 acres or 4.1%) were available for harvest for sugar, assuming 6.5% of the total acres were used for seed cane purposes.

The 11 operating factories processed 13,976,970 tons of cane (an increase of 1,717,132 tons or 14.0% when compared to 2008). This is a decrease of one factory that operated in 2008 with the closure of the St. James facility operated by Louisiana Green Fuels. Further, the Lacassine syrup factory, also operated by Louisiana Green Fuels, did not operate in 2009. All total, the 11 factories produced 1,477,749 short tons of sugar (96 pol)(an increase of 104,710 tons or 7.6%). Accordingly, the average yield of cane produced per total acre was 33.4 tons (an increase of 2.9 tons or 9.5%). The average yield of cane produced from each harvested acre amounted to 35.8 tons (an increase of 3.1 tons or 9.5%). The average sugar recovery at the 11 factories was 10.2% or 204 pounds of sugar (96 pol) per ton of cane; this was a decrease of 20 pounds of sugar per ton of cane or a decrease of 8.9% when compared to the 2008 crop. The yield of commercially recoverable sugar produced per total acre averaged 6,814 pounds (a decrease of 18 pounds or 0.2%). And the yield of commercially recoverable sugar produced per harvested acre was approximately 7,303 pounds (a decrease of 22 pounds or 0.3%).

The gross farm value of the 2009 sugarcane crop was \$446,973,544 for sugar and molasses (an increase of \$74,178,970 or 19.9 % when compared to the 2008 crop). The gross farm value reported above represents 60% of the value of the sugar and molasses produced, with the remaining 40% for processing and marketing which amounted to \$297,982,362. Therefore, the total value of the sugarcane crop to Louisiana producers, processors and landlords at the first processing level was actually \$744,955,906, an increase of \$123,631,616 or 19.9% when compared to the 2008 crop. Sugarcane still ranks first in value amongst the State's row crops. Although overall yield of sugar per acre was, undoubtedly, impacted as a result of the wet harvest, the lower than expected yield of recoverable sugar per ton of cane was partially offset by the tremendous increase in the yield of cane per acre. The 35.8-ton cane yield was the second best in the State's history and the yield of sugar per acre was third best. Further, the total tons processed and the total amount of sugar produced were both fifth best in the State's history even though the total number of acres harvested in those years was mostly more than harvested in 2009. There has been a gradual trend each year towards fewer acres planted to sugarcane in Louisiana since 2000 when there were approximately 496,000 acres; however, the overall acreage has been fairly stable for the past three years. The acreage figures reported by USDA-FSA were slightly higher in 2009 as compared to 2008 because of a new GPS mapping system. Notwithstanding, the fewer acres reported in recent years can be attributed to urban encroachment, a switch to other crops, especially grain in the Northern region of the sugarcane belt due to higher commodity prices for grain. However, with increased sugar prices, there is the

possibility that some of these acres lost to grain crops might return to producing cane; only time will tell.

The 2009 sugarcane variety census showed that Louisiana producers continued to switch to the newer varieties, namely HoCP 96-540 (50% of the planted area), L 97-128 (17%), L 99-226 (11%) and L 99-233 (6%) while dramatically decreasing the area planted to LCP 85-384 (91% in 2004 to only 6% in 2009). For the most part, producers were very satisfied with the performance of the newer varieties, especially HoCP 96-540, L 97-128 and HoCP 00-950. Although it was expected that cane tonnage would be disappointing in 2009 because of the late planting of the crop in 2008 and the early summer drought, in reality, average cane tonnage exceeded all expectations. In fact, the 35.8-ton average yield per harvested acre was second only to the 37.0-ton average yield obtained in 1999. Undoubtedly, the dry harvest conditions of 2008 and the warmer than average winter helped to establish good stubble cane stands in the spring of 2009. Weather records showed that the average temperatures across the sugarcane belt were average to above average for every month of the year with the exception of November and December (Louisiana Office of State Climatology). On the other hand, rainfall was below average for seven months and above average for five months. Rainfall during the period October through December when most of the crop is harvested was over 10 in. above normal which made for a very difficult harvest. Sugar yield at the beginning of the harvest was considerably lower than expected due to the excessive rainfall which increased extraneous matter, to include field soil (mud), in the harvested sugarcane. For every one percent increase in extraneous matter there is a corresponding loss of three pounds of sugar per ton of cane. The situation only worsened in December when rainfall amounts throughout the sugarcane belt exceeded record levels. It was reported that one factory had to cease milling operations because of more than a foot of water inside the mill caused by more than 10 in of rainfall during a six-hour period.

Although rainfall was mostly deficient from January through July, the cane responded to late summer and early fall rains to produce one of the best crops on record, tonnage-wise. For the most part, there was above normal rainfall during the harvest season that reduced the overall quality of harvested cane. With the above normal rainfall in October and the heavier than expected cane tonnage, the cane in many fields was lodged (recumbent). The late growth and lodged conditions lead to later maturity and lower sucrose content at the start of the harvest although the maturity of the crop improved during the harvest. The usage of the chemical ripener glyphosate was, undoubtedly, reduced because of the lodged conditions of the crop; however, it was reported by the factories that cane treated with ripener was superior in yield of recoverable sugar per ton of cane than cane not treated with ripener. In many cases, producers that treated cane with ripener on clay (heavy) soils had to delay the harvest in those areas until later in the crop when drier conditions prevailed. The only window of drier weather generally occurred from early to mid November.

Most of the 11 factories processed record cane tonnages during the 2009 harvest which meant that all operated into January 2010. From January 5 through January 14, most weather stations in south Louisiana reported night temperatures below freezing and on January 9 through January 12 the low temperatures recorded were 20°F or below at several reporting stations (Louisiana Office of State Climatology). Fortunately, most of the cane had been harvested by January 12. It was noted that freeze cracks occurred in most cane remaining in the field during

this period which would normally mean that significant deterioration in cane quality would have occurred within one week following such a freeze.

Because of the high cost of fertilizer in general, many producers used less nitrogen in 2009 than was used in past years although recommendations have stressed that maximum yields of sugar per ton of cane and per acre could be achieved with lower rates of nitrogen. Undoubtedly, the lower rates of nitrogen helped to improve the maturity of the crop even though cane continued to grow into October and ultimately increased the yield of recoverable sugar per ton of cane later in the harvest. Producers also continued to apply less phosphorus and potassium in 2009 due to the high costs. Research data have shown that little or no response in yield of cane or sugar per acre could be expected when used even though soil tests indicated that there was an insufficient level of these nutrients in their soils.

Although the pricing period is not completed for the 2009 crop, sugar prices have risen sharply in recent months with the average predicted value for raw sugar at \$23.10/cwt (an increase of \$2.90/cwt or 14.4% when compared to the 2008 crop). Molasses prices have remained high and should average about \$120/short ton at 79.5 Brix or \$0.7018/gal (an increase of \$0.023/gal or 4% when compared to the 2008 crop).

PLANT COMMODITIES - 2009

<u>Commodity</u>	<u>Gross Farm Income</u>	<u>Value Added</u>	<u>Total Value</u>
Sugarcane ¹	\$446,973,544	\$297,982,362	\$744,955,906

¹ Includes raw sugar and molasses