

SUGARCANE ECONOMIC RESEARCH IN 2009

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Projected costs and returns for the various stages of sugarcane production in Louisiana were estimated for the 2009 crop year. Production and tillage practices, as well as application rates for fertilizer, herbicides and insecticides were updated. Input suppliers and equipment dealers were surveyed in 2008 for current input prices. Specific operations for which production costs were estimated included field operations on fallow land, seedbed preparation, cutting and planting heat treated seedcane, planting cultured seedcane, field operations on plantcane, first stubble, second stubble, and third stubble, succession planting, as well as the costs of harvesting with wholestalk and combine harvesters. Costs and returns were estimated for tenant-operators, reflecting the predominant land tenure situation, and reflect a mill payment of 39 percent of production and a land rent payment of one-fifth and one-sixth shares of the "after milling crop" proceeds. Total costs of production plus overhead for crop cycles through harvest of second, third and fourth stubble were estimated and breakeven prices to cover direct and total specified production costs were estimated for one-fifth and one-sixth share rental arrangements. Summary breakeven prices to cover production costs through harvest of 3rd stubble for alternative yield levels are shown in Table 1. These values also represent production costs per pound of sugar produced at assumed yield levels. Breakeven raw sugar yield per acre of sugarcane harvested are presented in Table 2 for a selected range of raw sugar prices.

Allocated (unrecovered) sugarcane planting cost estimates were estimated for sugarcane planted in 2009. Published estimates for allocation of total planting costs as of January 1, 2010, for sugarcane planted the previous year, were as follows: cultured seed cane - \$1,172 per acre, propagated seed cane - \$816 per acre, machine planted whole stalk plantcane - \$836 per acre and machine planted billet plantcane - \$1,051 per acre. These estimates serve as a basis for the determination of sugarcane crop value associated with changes in land ownership or tenant arrangements.

Several other economic research projects were started in 2009. Those projects included work on estimating current costs of precision laser land leveling on sugarcane fields, evaluation of optimal crop cycle lengths for major sugarcane varieties produced in the state, a survey of typical crop rental arrangements being utilized in the state's sugarcane industry, estimating the cost of alternative fallow programs, the impact of planting methods and planting ratios on farm costs and returns, and the estimated costs of raw sugar manufacturing losses.

Table 1. Projected breakeven selling prices for raw sugar for selected yield levels, Arrangements, harvest through third stubble, tenant-operators, Louisiana, 2009

	Selected Yield Levels				
	-20%	-10%	Base	+10%	+20%
Cane yield per harvested acre ¹ (tons)	27.9	31.4	34.9	38.4	41.9
Sugar yield per harvested acre ² (lbs)	6,003	6,753	7,504	8,254	9,004
Sugar yield per rotational (farm) ³ acre ³	4,576	5,148	5,720	6,293	6,865
One-Fifth Land Share Rent:					
	-----cents per pound of sugar-----				
Breakeven price to recover ⁴ :					
Direct costs	19.3	17.6	16.2	15.1	14.2
Total specified costs	26.2	23.7	21.7	20.1	18.8
Total costs plus overhead	27.5	24.9	22.8	21.1	19.7
One-Sixth Land Share Rent:					
	-----cents per pound of sugar-----				
Breakeven price to recover ⁴ :					
Direct costs	18.5	16.9	15.6	14.5	13.6
Total specified costs	25.1	22.8	20.9	19.3	18.0
Total costs plus overhead	26.4	23.9	21.9	20.3	18.9

¹ Average farm yield across harvested acreage of plantcane, 1st stubble, 2nd stubble, and 3rd stubble (base yield of 36 tons plantcane, 37 tons 1st stubble, 34 tons 2nd stubble, 33 tons 3rd stubble).

² Average yield in tons per acre multiplied by a 215 CRS.

³ Assumes standard land rotation of 20% each of fallow, plantcane, 1st stubble, 2nd stubble and 3rd stubble.

⁴ Breakeven prices are calculated by dividing grower's share of production into direct costs, total specified costs, and total specified costs plus overhead.

Table 2. Projected breakeven raw sugar yields for selected raw sugar price levels, harvest through third stubble, tenant-operators, Louisiana, 2009

	Selected Raw Sugar Price Levels				
	-1.0	-0.5	Base	+0.5	+1.0
Raw sugar price (cents per pound)	19.5	20.0	20.5	21.0	21.5
One-Fifth Land Share Rent:					
	-----pounds of sugar per harv. acre-----				
Breakeven yield to recover:					
Direct costs	6,248	6,092	5,943	5,802	5,667
Total specified costs	8,379	8,170	7,970	7,781	7,600
Total costs plus overhead	8,793	8,574	8,365	8,165	7,975
One-Sixth Land Share Rent:					
	-----pounds of sugar per harv. acre-----				
Breakeven yield to recover:					
Direct costs	6,002	5,852	5,709	5,573	5,444
Total specified costs	8,049	7,848	7,657	7,474	7,301
Total costs plus overhead	8,447	8,236	8,035	7,844	7,661