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# **Sugarcane Economics: *Land, Crop and Equipment Costs***



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**Louisiana State University Agricultural Center**  
Louisiana Cooperative Extension Service / Louisiana Agricultural Experiment Station

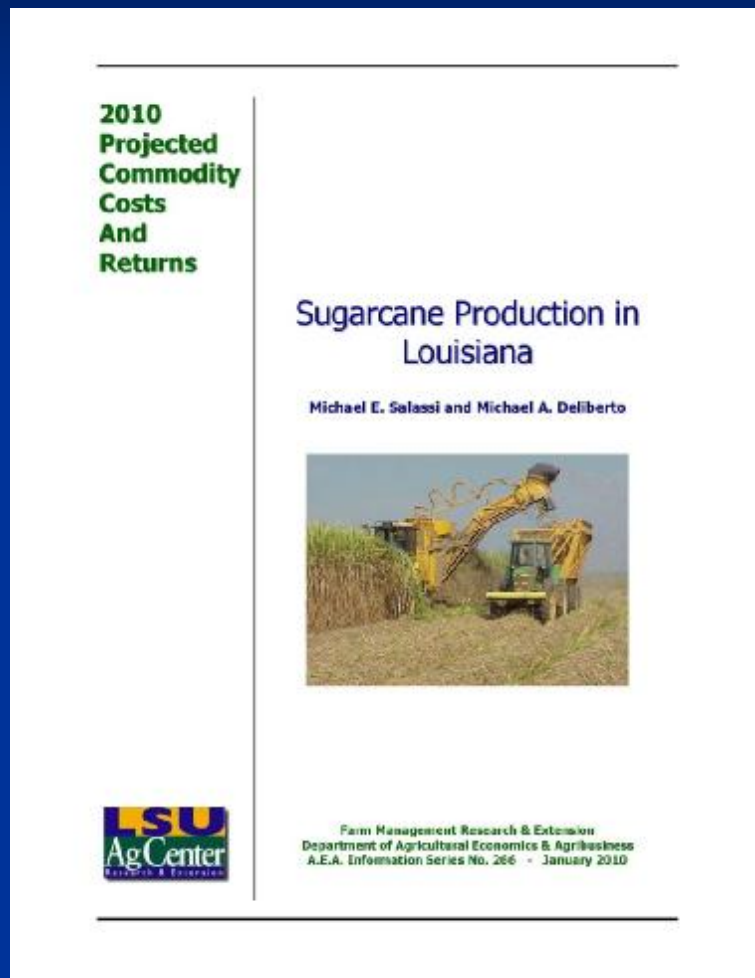
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# Sugarcane Economics - Topics

- Projected Sugarcane Production Costs
- Projected Sugarcane Farm Costs and Returns Model
- Allocated Sugarcane Planting Costs
- Sugarcane Production Decisions for Older Stubble
- Precision Land Leveling Costs
- Current Raw Sugar Price Outlook

# 2010 Projected Sugarcane Production Costs



- § Fallow / seedbed preparation
- § Cultured seed cane
- § Wholestalk seed cane harvest
- § Billet seed cane harvest
- § Hand planting
- § Wholestalk mech. planting
- § Billet mech. Planting
- § Plant cane field operations
- § First stubble field operations
- § Older stubble field operations
- § Combine harvest
- § Wholestalk harvest

# Breakeven Sugar Yields to Cover 2010 Costs

*Average raw sugar yield per harvested acre*

Crop Share Rent:	Raw Sugar Price Level		
	\$0.22	\$0.23	\$0.24
One-fifth share:			
BE yield to cover direct costs	4,779 lbs	4,571 lbs	4,380 lbs
BE yield to cover total costs	6,883 lbs	6,584 lbs	6,309 lbs
One-sixth share:			
BE yield to cover direct costs	4,590 lbs	4,391 lbs	4,208 lbs
BE yield to cover total costs	6,612 lbs	6,325 lbs	6,061 lbs

Total costs include charges for direct costs, fixed costs and general farm overhead.

## Breakeven Sugar Prices to Cover 2010 Costs

*Average production costs per pound of sugar per harv. acre*

	Selected Yield Levels		
	(base yield per harv. acre $\pm$ 10%)		
	31.4 tons 6,596 lbs.	34.9 tons 7,329 lbs.	38.4 tons 8,062 lbs.
Crop Share Rent:			
One-fifth share:			
BE price to cover direct costs	15.5 ¢	14.4 ¢	13.4 ¢
BE price to cover total costs	21.3 ¢	19.6 ¢	18.2 ¢
One-sixth share:			
BE price to cover direct costs	14.9 ¢	13.8 ¢	12.9 ¢
BE price to cover total costs	20.5 ¢	18.8 ¢	17.4 ¢

Breakeven raw sugar prices include adjustments for mill share, landlord share and molasses payments.

# 2010 Projected Farm Costs and Returns Model

## Excel based farm decision tool and users guide

Worksheet Page	Title / Information
1	Index
2	Costs and Returns Summary
3	Breakeven Analysis
	Breakeven Raw Sugar Prices
	Breakeven Sugarcane Yields
	Breakeven Sugar Recovery Rates
4	Fallow & Seed Cane
	Fallow Expenses
	Purchased Seed Cane Expenses
	Wholestalk Seed Cane Harvest Expenses
	Billet Seed Cane Harvest Expenses
5	Planting Operations
	Hand Planting - 1-Row Wholestalk
	Mechanical Planting - 1-Row Wholestalk
	Mechanical Planting - 1-Row Billet
6	Field Operations
	Plant Cane Field Operations
	First Stubble Field Operations
	Second Stubble Field Operations
	Third Stubble and Older Field Operations
7	Harvest Operations
	Harvest Expenses - 1-Row Combine Harvester
	Harvest Expenses - 2-Row Wholestalk Harvester

Staff Report No. 2010-01

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### 2010 Projected Sugarcane Production Farm Costs and Returns Model

A Farm Planning/Decision Tool for Louisiana Sugarcane Growers



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The 2010 Projected Sugarcane Farm Costs and Returns Model was developed to assist sugarcane producers in planning for the 2010 crop year. The model is an Excel spreadsheet which allows sugarcane producers to enter projected sugarcane acreage of plant cane, first stubble, second stubble, and third stubble; associated projected yield levels per acre (tons); raw sugar and molasses price for the new crop year; and production cost data for 2010 to estimate net returns above variable and total production costs and to easily evaluate the impact of changing sugarcane yields, input prices, and input application rates on net returns per acre. The primary purpose of this model is to serve as a producer farm planning and decision tool to project and evaluate the impact on net returns above variable and total production costs from sugarcane production for the 2010 crop year. Calculations for the weighted average of yield, mill share, and land rent are provided within the model so that producers can assess an overall average economic performance for the farm.

The model also includes entry cells for whole farm fixed expenses to estimate projected net returns above all sugarcane farm production costs. This model can be used in conjunction with the 2010 Projected Sugarcane Costs and Returns published by the LSU Agricultural Center. Both serve as farm management tools that allow producers to document their management strategies and production goals by providing a detailed economic analysis of how those strategies can be better managed to increase farm profitability.

#### Worksheet # 1: Projected Sugarcane Farm Costs and Returns Model Index

Worksheet page one of this Excel model serves as an index or table of contents to identify the production, income and expense worksheet pages included in the model. Pages within model allow for entry of sugarcane production expenses for fallow land, purchased seed cane, farm propagated seed cane, planting operations (hand, mechanical, wholestalk, billet), field operations for plant cane and stubble cane, and harvest operations (billet or wholestalk). Titles on expense worksheet tables match those used in the 2010 Projected Sugarcane Costs and Returns published by the LSU Agricultural Center A.E.A. Publication No. 386, which is available via the LSU Agricultural Center or via the internet at:

[http://www.lsuagcenter.com/en/money\\_business/farm\\_business/budgets](http://www.lsuagcenter.com/en/money_business/farm_business/budgets)  
 or  
[http://www.lsuagcenter.com/en/crops\\_livestock/crop/sugarcane/economics](http://www.lsuagcenter.com/en/crops_livestock/crop/sugarcane/economics)

Projected production cost estimates from the 2010 projected costs and returns report are already entered into the model. On each worksheet, the producer can change information, in cells that are highlighted in blue (blue text font), to more closely match an individual farm operation. Those production economic estimates, along with acreage values and yield projections, are then automatically incorporated into calculations of farm costs and returns for an instant determination of overall projected farm profitability (Worksheet # 2) and breakeven production and price values (Worksheet # 3).

<sup>1</sup> Dr. Michael E. Salassi, Professor, and Michael A. Delberts, Research Associate, Department of Agricultural Economics and Agribusiness, LSU Agricultural Center, Baton Rouge, Louisiana



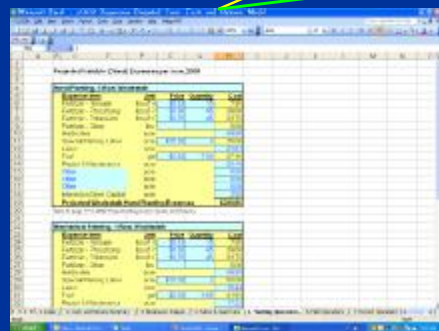
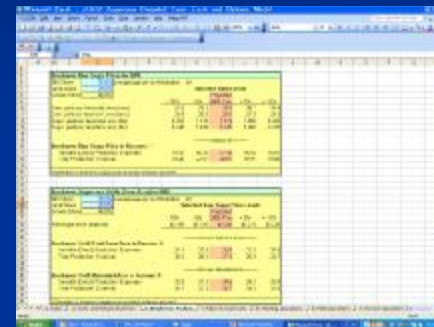
# 2010 Projected Farm Costs and Returns Model

## *Excel based farm decision tool and users guide*

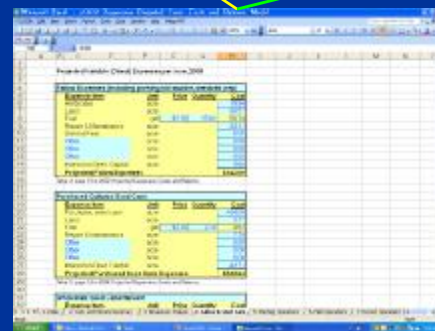
Projected whole farm  
income and expense  
statement



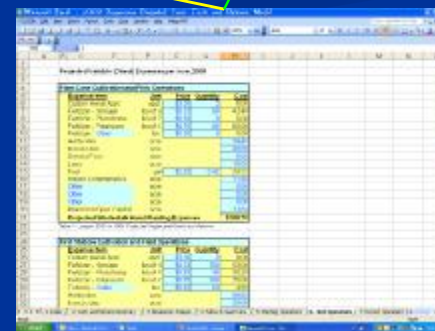
Breakeven calculations  
for price, tonnage and  
sugar recovery



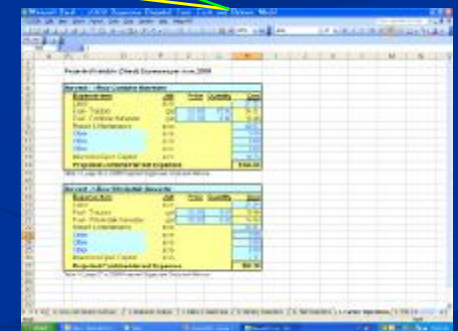
Fallow & seed cane  
expense budgets



Mechanical & hand  
planting expense budgets



Plant cane and stubble  
cultivation expense budgets



Wholestalk & billet  
harvest expense budgets

# 2010 Projected Farm Costs and Returns Model

## Excel based farm decision tool and users guide

Projected Whole Farm Sugarcane Costs and Returns for the 2010 Crop Year									
Total Farm Acres									
		1,000.0							
Total Acres Harvested for Sugar		760.6							
Raw Sugar Price per Pound		\$0.230							
Molasses Price per Gallon		\$0.70							
<b>Total Sugarcane Production (tons) =</b>									26,542
<b>Total Raw Sugar Production (lbs) =</b>									5,573,862
				(\$/acre)	(acre)			(\$)	(\$/acre) (\$/lb of sugar)
<b>Gross Value of Production:</b>									
<b>Sugar:</b>									
	tons/acre	sugar/ton	sugar/acre						
Plant Cane	37.0	210	7,770	1,787.10	160.6	287,008	287.01	0.230	
1st Stubble	36.0	210	7,560	1,738.80	200.0	347,760	347.76	0.230	
2nd Stubble	34.0	210	7,140	1,642.20	200.0	328,440	328.44	0.230	
3rd Stubble	33.0	210	6,930	1,593.90	200.0	318,780	318.78	0.230	
Older Stubble	0.0	0	0	0.00	0.0	0	0.00	0.000	
					760.6				
<b>Total Market Value of Sugar Production</b>						<b>\$1,281,988</b>	<b>\$1,281.99</b>	<b>\$0.230</b>	
<b>Molasses:</b>									
	Gal.	Mol./Cwt. Sugar							
Gallons of Molasses		3.0	167,216	--	--	\$117,051	\$117.05	\$0.021	
<b>Total Market Value of Sugar &amp; Molasses</b>						<b>\$1,399,039</b>	<b>\$1,399.04</b>	<b>\$0.251</b>	
<b>Mill Charge</b>									
				Dollars Per Acre	Number of Acres	Total Dollar Value	Dollar Value Per Acre	Value Per Pound of Sugar	
Sugar	Cane Share	39.0%		--	--	499,975	499.98	0.090	
Molasses	Molasses Share	50.0%		--	--	58,526	58.53	0.011	
<b>Total Mill Charge</b>						<b>\$558,501</b>	<b>\$558.50</b>	<b>\$0.100</b>	
<b>Net Returns to Land and Producer</b>						<b>\$840,538</b>	<b>\$840.54</b>	<b>\$0.151</b>	



# 2010 Projected Farm Costs and Returns Model

## *Excel based farm decision tool and users guide*

<b>Producer Income</b>					
Sugar and Molasses	--	--	672,431	672.43	0.121
Other Income	--	--	0		
Other Income	--	--	0		
Other Income	--	--	0		
<b>Total Producer Income</b>			<b>\$672,431</b>	<b>\$672.43</b>	<b>\$0.121</b>
<b>Variable Production Expenses:</b>					
Fallow Field & Seedbed Preparation Operations	\$144.27	200.0	28,855		
Cultured Seed Cane	\$522.23	3.3	1,723		
Hand Planting Seed Cane	\$258.43	3.3	853		
Harvesting Wholestalk Seed Cane	\$68.58	39.4	2,702		
Harvesting Billet Seed Cane	\$89.33	0.0	0		
Mechanical Planting Wholestalk Seed Cane	\$226.54	196.7	44,559		
Mechanical Planting BilletSeed Cane	\$200.42	0.0	0		
Plant Cane Field Operations	\$265.20	200.0	53,039		
1st Stubble Field Operations	\$375.23	200.0	75,046		
2nd Stubble Field Operations	\$319.81	200.0	63,962		
3rd Stubble Field Operations	\$319.80	200.0	63,960		
Older Stubble Field Operations	\$319.80	0.0	0		
Combine Harvest for Sugar	\$142.35	760.6	108,272		
Wholestalk Harvest for Sugar	\$97.61	0.0	0		
Other Expenses	\$0.00	0.0	0		
Other Expenses	\$0.00	0.0	0		
<b>Total Variable Production Expenses</b>			<b>\$442,971</b>	<b>\$442.97</b>	<b>\$0.079</b>
<b>Net Returns Above Variable Production Expenses</b>			<b>\$229,459</b>	<b>\$229.46</b>	<b>\$0.041</b>
<b>Fixed Expenses (total from table below)</b>			<b>\$55,000</b>	<b>\$55.00</b>	<b>\$0.010</b>
<b>Net Returns Above Total Production Expenses</b>			<b>\$174,459</b>	<b>\$174.46</b>	<b>\$0.031</b>

# Allocation of Sugarcane Planting Costs in 2010

## Planting cost allocation for cane planted in 2009

§ Allocation of planting costs for cane planted in 2009 as of January 1, 2010:

§ Cultured seed cane hand plt.

VC = \$976 TC = \$1,172

§ Propagated seed cane hand plt.

VC = \$599 TC = \$816

§ Propagated seed cane mech plt.

VC = \$677 TC = \$895

§ Wholestalk plant cane hand plt.

VC = \$551 TC = \$771

§ Wholestalk plant cane mech plt.

VC = \$614 TC = \$837

§ Billet planted plant cane

VC = \$774 TC = \$1,051



**ALLOCATION OF LOUISIANA SUGARCANE  
PLANTING COSTS IN 2010**

Michael E. Salassi and Michael A. Delberto<sup>1</sup>  
Department of Agricultural Economics & Agrubusiness

Staff Paper No. 2009-22 October 2009



Sugarcane in Louisiana is a perennial crop which provides for three or more years of harvest before being replanted. Planting costs associated with sugarcane are generally allocated over the years of harvest. This report provides estimates of allocated sugarcane planting costs applicable to 2010. It is generally accepted that sugarcane goes through three stages prior to having the first acre of harvestable cane for delivery to the mills for processing. The first step is to plant cultured seed cane. The second step is to harvest cultured seed cane and plant it as propagated seed cane in the following year. The third step is to harvest the propagated seed cane and plant it as plant cane, which is then harvested the following year and sent to the mills for processing into raw sugar. Each stage has associated costs that must be considered. However, given that each harvested acre of cultured seed cane will provide several acres of propagated seed cane which, in turn, provides several acres of plant cane, many of the costs associated with each stage must be spread across several acres rather than simply one acre.

Sugarcane planting ratio, the number of acres of sugarcane which can be planted from one harvested acre of seed cane, varies by sugarcane variety and planting method. Sugarcane varieties impact planting ratios due to differences in stalk population per acre. Currently, three types of planting methods are utilized: hand planted, laser, and mechanical. Laser and mechanical planting utilize planting methods such as planting, and mechanical belt planting. For purposes of this report, the following planting ratios will be used to estimate total allocated planting cost per acre of plant cane obtained: 1) hand planting of whole stalk cane = 2.71; 2) laser and mechanical planting of whole stalk cane = 5.7; and 3) laser and mechanical planting of billet seed cane = 3.14.

Even the assumptions table above state that the LSU AgCenter Department for Cane & Agriculture Systems & Agrubusiness believes this report provides appropriate estimates for the planting, it does not guarantee the accuracy of the information contained within. The authors do not assume responsibility for the use of the information contained in this report. These estimates are for informational purposes only and are not intended to be used for any other purpose. The authors do not assume any liability for any loss or damage caused by the use of the information contained in this report. The authors do not assume any liability for any loss or damage caused by the use of the information contained in this report.

The estimates of allocated costs are presented in this report. Total variable planting costs and total planting costs. Total variable costs include primarily planting expenses for purchased seed cane as well as fuel, labor and repair expenses for field operators. Total planting costs include variable costs plus fixed expenses on equipment.

Table 1 presents total estimated allocated planting cost per acre of cultured seed cane. This value represents the total estimated planting cost invested in an acre of cultured seed cane planted in the previous year. Table 2 and 3 present total estimated allocated planting cost per acre associated with propagated seed cane. These total values represent planting costs invested in propagated seed cane planted last year. Table 2 reports planting cost estimates associated with hand planting wholestalk seed

<sup>1</sup>Michael E. Salassi, Professor, and Michael A. Delberto, Research Associate, Department of Agricultural Economics and Agrubusiness, LSU Agricultural Center, Baton Rouge, Louisiana.

# Prorated Allocated Sugarcane Planting Costs - 2010

## *Prorate planting cost for standing cane in 2010*



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### Prorated Allocated Planting Costs of Sugarcane: Plantcane, First-, Second- and Third-Year Stubble, Crop Year – 2010\*

The remaining, unrecovered planting cost of plantcane and stubble cane sugarcane crops are affected by the cost in the year planted. The costs of planting will vary from year-to-year depending upon many factors to include cost of seed cane, fuel, etc. Therefore, the estimated cost in the year the cane was planted is the basis for prorating costs over the life of the crop cycle.

The estimated costs of planting are prorated by age based on remaining production. For this example, it is assumed that the producer will have a 4-year crop cycle. The rule of thumb is that plantcane will have its full production potential remaining, first-year stubble will have 75% of its full production potential remaining, second-year stubble will have 50% of its full production potential remaining and third-year stubble will have 25% of its full production potential remaining. (Note: production practices and seasons re-seed may alter this scored.) The estimated prorated planting costs per acre in the 2010 crop year, based upon estimated planting costs in the year of planting, include a summary table as shown in Table 1.

Table 1. Total Prorated Allocated Planting Costs of Plantcane, First-, Second- and Third-Year Stubble Cane in the 2010 Crop Year.

Crop Stage (Planting in the 2010 Crop Year)	Local Allocated Planting Cost Per Acre Year of Planting	Prorated Planting Cost Per Acre in 2010
<b>PLANTCANE CROP</b>		
HAND PLANT CULTURED SEED CANE (2009)	\$1,172.00	\$1,172.00
HAND PLANT PROPAGATED SEED CANE (2009)	\$815.08	\$815.08
HAND PLANT FIELD RUN SEED CANE (2009)	\$775.74	\$775.74
MACHINE PLANT PROPAGATED SEED CANE (2009)	\$894.73	\$894.73
MACHINE PLANT FIELD RUN SEED CANE (2009)	\$755.65	\$755.65
MACHINE PLANT BILLET CANE (2009)	\$105.10	\$105.10
<b>FIRST-YEAR STUBBLE*</b>		
HAND PLANT CULTURED SEED CANE (2009)	\$1,172.00	\$879.00
HAND PLANT PROPAGATED SEED CANE (2009)	\$815.08	\$611.31
HAND PLANT FIELD RUN SEED CANE (2009)	\$775.74	\$581.80
MACHINE PLANT PROPAGATED SEED CANE (2009)	\$894.73	\$670.55
MACHINE PLANT FIELD RUN SEED CANE (2009)	\$755.65	\$566.74
MACHINE PLANT BILLET CANE (2009)	\$894.73	\$670.55

§ Prorated planting costs for plant cane and stubble cane in 2010 planted in previous years:

- § Hand planted cultured seed cane
- § Hand planted propagated seed cane
- § Hand planted field run seed cane
- § Machine planted propagated seed cane
- § Machine planted field run seed cane
- § Billet planted seed cane

# LSU AgCenter Sugarcane Economics Web Page

[www.lsuagcenter.com/crops&livestock/crops/sugarcane/economics](http://www.lsuagcenter.com/crops&livestock/crops/sugarcane/economics)

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## Economics

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### Prorated Allocated Planting Costs of Sugarcane in 2010

This report presents estimates of prorated (unrecovered) planting costs for sugarcane in production for the 2010 crop year, including plant cane planted in 2009, first stubble planted in 2008, second stubble planted in 2007, and third stubble planted in 2006.

### 2010 Projected Louisiana Sugarcane Production Costs

This report presents projected cost estimates for sugarcane production in Louisiana for the 2010 crop year. Cost estimates are included for all phases of sugarcane production, including seedbed preparation, planting, plant-cane and stubble-crop field operations and harvest. Whole-farm projected income and expense statements also are included for harvest of sugarcane through second-, third- and fourth-stubble crops.

### 2010 Projected Sugarcane Farm Costs and Returns Model

The 2010 Projected Sugarcane Farm Costs and Returns Model was developed as a farm planning decision tool for Louisiana sugarcane producers. The model is an Excel spreadsheet that allows sugarcane producers to project sugarcane net returns for the coming year and to evaluate the impact of changes in yields, sugar prices, input prices and other factors on farm returns and breakeven values.

### Allocation of Louisiana Sugarcane Planting Costs in 2010

This report presents estimates of the planting costs of sugarcane planted in 2009 as well as the allocation of those costs to plant cane and stubble cane crops in 2010.

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## Sugarcane Acreage Distribution by Crop Age

### *Statewide Percentages for 2000-2009*

Crop Year	Sugarcane Crop Age			
	Plant cane	First stubble	Second stubble	Third stubble
2000	27.8%	29.5%	25.2%	17.5%
2001	23.6%	28.8%	28.5%	19.1%
2002	25.7%	25.7%	26.6%	22.0%
2003	23.7%	24.6%	24.8%	26.9%
2004	27.3%	25.7%	24.3%	22.7%
2005	29.6%	27.5%	22.9%	20.0%
2006	29.8%	28.4%	25.1%	16.7%
2007	31.3%	30.3%	27.3%	11.1%
2008	31.2%	31.9%	26.9%	10.0%
2009	27.8%	31.9%	29.5%	10.8%



# Keeping Older Stubble in Production

## *Impact on Total Farm Costs and Returns*

### § Rotation through 2<sup>nd</sup> stubble

Fallow / plant	25.0%
Harvest for seed	4.9%
Harvest for sugar	70.1%

### Rotation through 3<sup>rd</sup> stubble

Fallow / plant	20.0%
Harvest for seed	3.9%
Harvest for sugar	76.1%

### § **Less sugarcane acres being planted each year:**

- § Lower expenses for seed cane purchase
- § Lower expenses for fallow field operations
- § Lower expenses for planting

### § **More sugarcane acres in production each year:**

- § Greater expenses for cultural practices (fertilizer, herbicides, etc.)
- § Greater expenses for harvest
- § Greater total gross returns (more acres harvested)
- § Lower average gross returns per harv. acre (lower avg. yield per harv. acre)



# Keeping Older Stubble in Production

## *Impact on Total Farm Costs and Returns*

§ Base Scenario: \$0.23 sugar price, 5:1 mechanical planting ratio, 39% mill share, 10.2% landlord share (1/6), 50.8% grower share

Grower Revenue, Variable Cost, Net Return	Harvest through 2 <sup>nd</sup> stubble crop		Harvest through 3 <sup>rd</sup> stubble crop	
Plant cane yield/harv. acre	7,500		7,500	
1 <sup>st</sup> stubble yield/harv. acre (95%)*	7,125		7,125	
2 <sup>nd</sup> stubble yield/harv. acre (83%)*	6,225		6,225	
<b>BE 3<sup>rd</sup> stubble yield/harv. acre (75.8%)**</b>	--		<b>5,270</b>	
Revenue / total farm acre	\$566		\$576	
Variable cost / total farm acre	\$470		\$479	
Net return / total farm acre	\$96		\$97	

\* 1<sup>st</sup> and 2<sup>nd</sup> stubble yield as percent of plant cane yield.

\*\* Breakeven 3<sup>rd</sup> stubble yield as percent of simple average of plant cane, 1<sup>st</sup> and 2<sup>nd</sup> stubble yields.

# Sugarcane Farm Acreage Distribution

## *Crop Cycles Through Harvest of 2<sup>nd</sup> and 3<sup>rd</sup> Stubble*

Farm acreage crop phase	Harvest through 2 <sup>nd</sup> stubble crop		Harvest through 3 <sup>rd</sup> stubble crop	
Cultured seed cane planted	4.1		3.3	
1 <sup>st</sup> seed cane expansion planted	41.0		32.8	
2 <sup>nd</sup> seed cane expansion planted	205.0		164.0	
Plant cane harvested for seed	45.0		36.1	
Plant cane harvested for sugar	205.0		164.0	
1 <sup>st</sup> stubble harvested for seed	4.1		3.3	
1 <sup>st</sup> stubble harvested for sugar	245.9		196.7	
2 <sup>nd</sup> stubble harvested for sugar	250.0		200.0	
3 <sup>rd</sup> stubble harvested for sugar	--		200.0	
Fallow / plant	250.0		200.0	
Harvest for seed	49.2		39.4	
Harvest for sugar	700.9		760.7	
Total farm acres	1,000.1		1,000.1	

# Sugarcane Precision Land Leveling Costs

## *Estimated Costs per Hour of Operation*

Prorated Costs per Hour, Costs per Acre and Costs per Cubic Yard,  
Sugarcane Land Leveling Equipment Estimations, Louisiana, 2010

	TRACTOR <sup>1/</sup> large 4 wd 300 hp	SCRAPER <sup>2/</sup> 18 cu. yd.	LASER EQUIPMENT <sup>3/</sup>	LABOR	TOTAL COSTS
Purchase Price (\$)	\$ 191,494	\$ 74,159	\$ 19,575	--	--
Expected Life (years)	8	15	10	--	--
Salvage Value (\$)	\$ 67,023	\$ 7,416	\$ 1,958	--	--
[Percent of Purchase Price]	35%	10%	10%	--	--
Annual Use (Hours)	1200	417	417	--	--
Land Leveling (Hours)	417	417	417	417	--
Repair Cost (% of Purchase Price)	96.0%	66.0%	20.0%	--	--
Fuel Consumption (gals per hr)	15.44			--	--
<b>OPERATING COSTS PER HOUR</b>					
Fuel Costs (\$2.30/gal)	\$ 35.51				\$ 35.51
Repair Cost (\$)	\$ 19.15	\$ 7.83	\$ 0.94		\$ 27.92
Labor Costs (\$15.30 per hour)				15.30	\$ 15.30
<b>Total Operating Costs per Hour</b>	<b>\$ 54.66</b>	<b>\$ 7.83</b>	<b>\$ 0.94</b>	<b>\$ 15.30</b>	<b>\$ 78.73</b>
<b>FIXED COSTS PER HOUR</b>					
Depreciation	\$ 12.97	\$ 10.68	\$ 4.23		\$ 27.87
Interest on Investment (10%)	\$ 6.46	\$ 5.87	\$ 1.55		\$ 13.89
<b>Total Fixed Costs per Hour</b>	<b>\$ 19.43</b>	<b>\$ 16.55</b>	<b>\$ 5.78</b>		<b>\$ 41.76</b>
<b>TOTAL COSTS PER HOUR</b>	<b>\$ 74.09</b>	<b>\$ 24.38</b>	<b>\$ 6.72</b>	<b>\$ 15.30</b>	<b>\$ 120.49</b>

# Sugarcane Precision Land Leveling Costs

## *Estimated Costs per Acre and per Cubic Yard*

### OPERATING PARAMETERS:

Cycles per Hour	8
Cubic Yards per Cycle	18
Cubic Yards per Hour	144
Cubic Yards per Acre	300
Hours per Acre	2.1
Acres Leveled per Year	200
Annual Land Leveling Hours	417

### COSTS PER ACRE

Operating Costs	\$	113.88	\$	16.31	\$	1.96	\$	31.88	\$	164.03
Fixed Costs	\$	40.48	\$	34.48	\$	12.04	\$	-	\$	87.00
<b>Total Costs</b>	<b>\$</b>	<b>154.35</b>	<b>\$</b>	<b>50.80</b>	<b>\$</b>	<b>14.00</b>	<b>\$</b>	<b>31.88</b>	<b>\$</b>	<b>251.02</b>

### COSTS PER CUBIC YARD

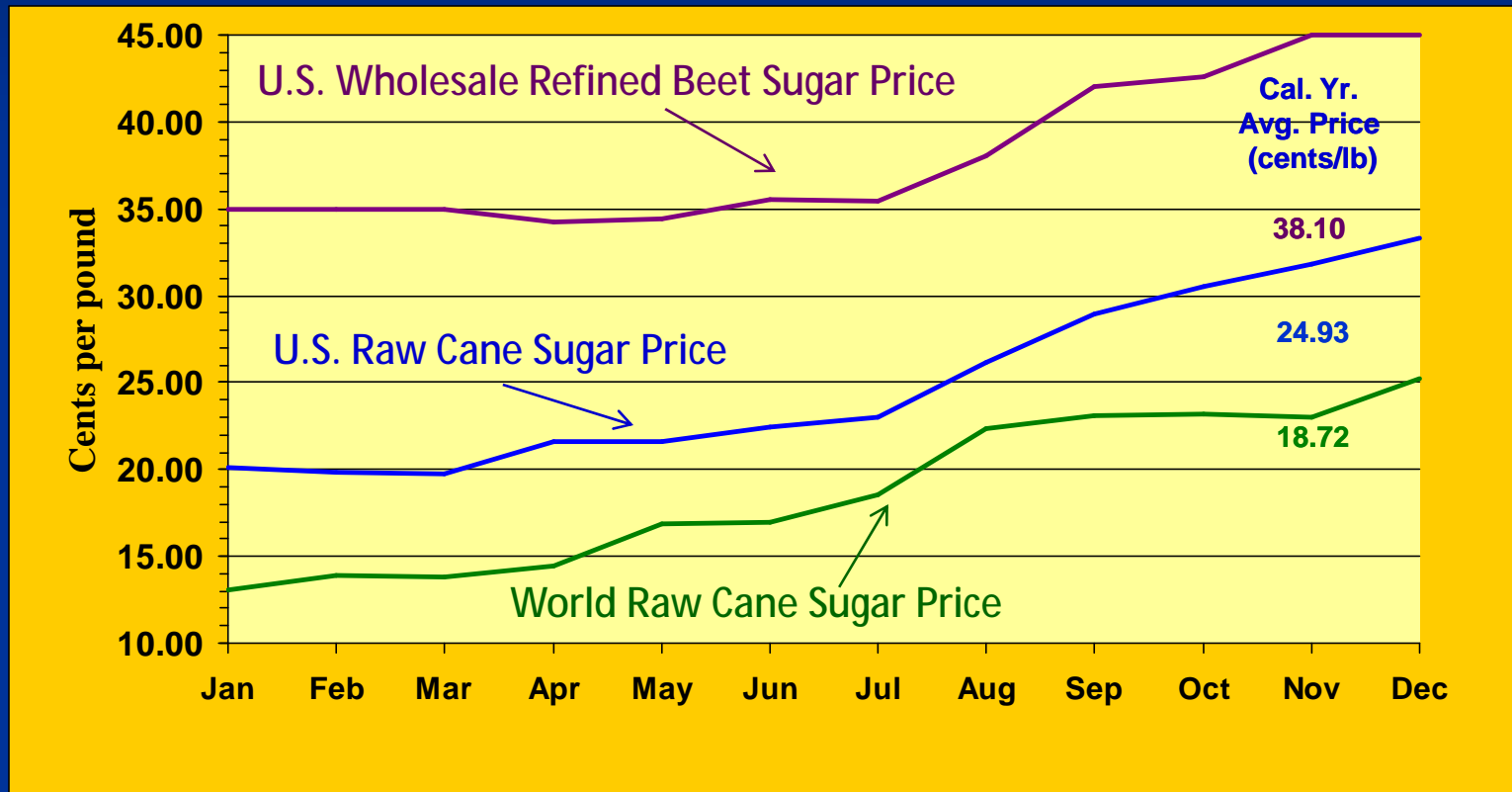
Operating Costs	\$	0.38	\$	0.05	\$	0.01	\$	0.11	\$	0.55
Fixed Costs	\$	0.13	\$	0.11	\$	0.04	\$	-	\$	0.29
<b>Total Costs</b>	<b>\$</b>	<b>0.51</b>	<b>\$</b>	<b>0.17</b>	<b>\$</b>	<b>0.05</b>	<b>\$</b>	<b>0.11</b>	<b>\$</b>	<b>0.84</b>

## U.S. Sugar Supply and Use (1,000 short tons, raw value)

Item	2007/08	2008/09	2009/10 Feb. Proj.
Beginning stocks	1,799	1,660	1,451
Production	8,152	7,484	7,972
Imports	2,620	3,082	2,157
Total Supply	12,571	12,226	11,580
Exports	203	137	150
Deliveries	10,708	10,638	10,375
Total Use	10,911	10,775	10,525
Ending stocks	1,660	1,451	1,055
Stocks/use ratio	15.2	13.5	10.0

Source: USDA WASDE Report, February 9, 2010

# U.S. and World Raw and Refined Sugar Prices January – December 2009

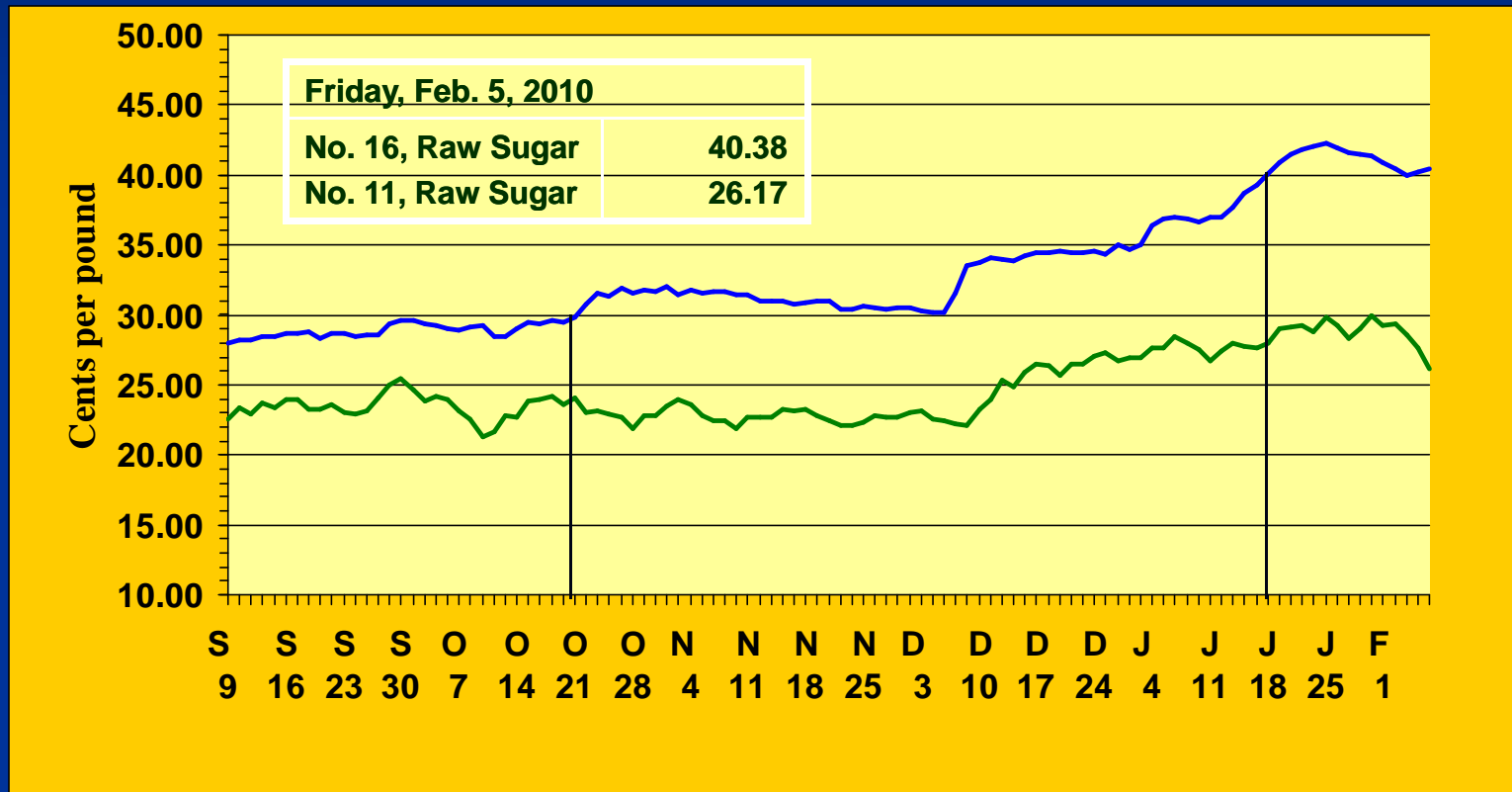


Source: Economic Research Service, USDA



# U.S. and World Raw Sugar Prices

## Sept. 9 – Feb. 5, 2010



Source: New York Board of Trade

# U.S. Raw Sugar Futures Prices

## March 2010 – January 2012

**SUGAR #16** Delayed Futures -14:30 - Monday, 8 February  
[\[ Go to Daily \]](#) [\[ Options Prices \]](#) [\[ Profile \]](#)

Contract	Last	Change	Open	High	Low	Prev. Stl.
Mar '10 (SDH10)	41.00s	+0.62	40.50	40.50	40.00	40.38
May '10 (SDK10)	39.75s	+0.42	0.00	39.75	39.75	39.33
Jul '10 (SDN10)	35.65s	-0.31	0.00	35.65	35.65	35.96
Sep '10 (SDU10)	35.50s	unch	0.00	35.50	35.50	35.50
Nov '10 (SDX10)	32.38s	+0.13	0.00	32.38	32.38	32.25
Jan '11 (SDF11)	30.00s	-0.13	0.00	30.00	30.00	30.13
Mar '11 (SDH11)	29.50s	unch	0.00	29.50	29.50	29.50
May '11 (SDK11)	28.85s	unch	0.00	28.85	28.85	28.85
Jul '11 (SDN11)	28.85s	unch	0.00	28.85	28.85	28.85
Sep '11 (SDU11)	28.85s	unch	0.00	28.85	28.85	28.85
Nov '11 (SDX11)	28.85s	unch	0.00	28.85	28.85	28.85
Jan '12 (SDF12)	28.85s	unch	0.00	28.85	28.85	28.85

Source: New York Board of Trade

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