
**2012
Projected
Commodity
Costs
And
Returns**

**Sugarcane Production in
Louisiana**

Michael E. Salassi and Michael A. Deliberto



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PROJECTED COSTS AND RETURNS - SUGARCANE LOUISIANA, 2012

by

Michael E. Salassi and Michael Deliberto



Louisiana State University Agricultural Center,
William B. Richardson, Chancellor

Louisiana Agricultural Experiment Station,
John S. Russin, Vice-Chancellor and Director

Department of Agricultural Economics and Agribusiness
Gail L. Cramer, Head

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INTERNET ACCESS

This publication, along with 2012 projected costs and returns for other commodities as well as other farm management publications, is available on the Internet on the LSU Ag Center web page under "Money and Business - Farm and Business - Budgets". This publication is also available on the LSU Ag Center web page under "Crops and Livestock - Sugarcane - Economics." The web address for the LSU Ag Center is: **www.lsuagcenter.com**

PROJECTED COSTS AND RETURNS -- SUGARCANE, LOUISIANA, 2012

by

Michael E. Salassi and Michael Deliberto¹

INTRODUCTION

This report presents estimates of costs and returns associated with sugarcane production practices in Louisiana for 2012. It is part of a continuing effort to provide farmers, researchers, extension personnel, lending agencies and others working in agriculture and/or agribusiness timely planning information. Sugarcane production is unique in that it is a perennial crop grown in a rotation; processing, storage and marketing services are provided by a single entity and payments for said services are "in kind." Further, the large majority of growers are tenants, paying approximately 20 percent of the "after milling crop proceeds" (12.2% of gross production) for land. Returns shown in Table 1A-3C and in the whole farm analysis in Appendix A reflect returns to management and risk. No charges for family living expenses or management are included as a cost in this analysis.

SUGARCANE BUDGETS

The enterprise budgets for tenant-operators producing sugarcane are presented in two formats. One format is a summary of costs and returns for a particular phase of sugarcane production. This format presents costs by broad categories such as fertilizer, herbicides, insecticides, labor, fuel and repairs, etc. The other format presents a detailed listing of the operations, the equipment size and the associated power unit along with the date performed and the associated costs for tractor, machinery and materials. Together these budget formats provide the detailed information necessary to adjust the sugarcane budgets to individual situations. In addition, the appendix to this report contains detailed cost estimates for an extensive list of equipment and operating inputs. These may be used to modify budgets contained in this report or construct new enterprise budgets.

¹ Professor and Research Associate, Department of Agricultural Economics and Agribusiness, Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center, Baton Rouge, Louisiana.

This report presents 2012 projected costs and returns associated with the various phases of sugarcane production using three row machinery and the production practices followed by most growers in the main sugarcane producing area of the state (see figure on page G-6). Fertilizer and chemical rates were based on recommendations of the LSU Agricultural Center.^{2,3} Only tenant-operator budgets are presented in this report, reflecting the predominant share rent land tenure situation. Most growers pay 1/5 of the crop harvested for sugar after the "in kind" mill payment has been made. The landlord does not share in any of the production expenses other than seed cane (in the form of reduced current year income) and provides little assistance in maintaining or improving farm housing, drainage, and roads.

Determination of costs associated with sugarcane is not a straight forward process. The uniqueness of the production rotation normally associated with sugarcane coupled with the fact that a portion of the rotation is non-income generating creates some difficulty. Thus, the sugarcane budgets presented in this report reflect costs per acre of land. Returns are based on pounds of raw sugar and gallons of molasses per acre of land harvested. Yield information used in estimating income in these budgets is based on typical yield levels per harvested acre. These typical yield levels reflect the approximate state-level sugarcane yield per acre harvested for sugar. Grower income reflects the usual disposition of raw sugar and molasses between the grower, landlord and mill.⁴

Projections of harvest costs are included for 1 and 2-row wholestalk (soldier) harvesters. The harvest budgets (Tables 14 and 15) includes the costs of hauling cane directly from the field to the mill (direct haul) with tractors using two 10-ton cane wagons. Under this scenario, the hauling rebate from the mill would be paid to the producer.

Projected total costs and returns for sugarcane production on a representative 1000 acre farm are shown in Table 1A, 2A, and 3A. Table 1A uses a 4-year land rotation with 250 acres each of plantcane, first stubble, second stubble, and fallow/plant. Table 2A uses a 5-year rotation with 200 acres of plantcane, first stubble, second stubble, third stubble and fallow/plant. Table 3A uses a 6-year rotation with 167 acres of plantcane, first stubble, second stubble, third stubble, fourth stubble, and fallow/plant. Gross value of production is shown, along with estimated mill and land charges, as well as producer income and expenses for each scenario. Net returns to management and risk are estimated. No charges for management, risk or family living expenses are included.

Projected output per rotational acre and its distribution between the grower and suppliers of land and milling services is presented in Table 1B, 2B and 3B. Table 1B reflects the output distribution associated with a 4-year sugarcane rotation and approximates the projected average yield levels in 2012 for established producers. Sugarcane land under a standard rotation is

² "Sugarcane Fertilization," *Sugarcane Production Handbook – 2001*, Louisiana State University Agricultural Center, Baton Rouge, LA, Pub. No. 2859.

³ "Controlling Weeds in Sugarcane," *Sugarcane Production Handbook – 2001*, Louisiana State University Agricultural Center, Baton Rouge, LA, Pub. No. 2859.

⁴ Sugar mills normally retain approximately 39 percent of the raw sugar and slightly more than 50 percent of the molasses to cover hauling and processing of sugarcane and storage and marketing of raw sugar. Landlords normally retain 20 percent of the remaining raw sugar and molasses for land rent.

assumed to have 25 percent each of land in plant cane, first stubble, second stubble, and fallow/plant. Sugar output per rotational for land under an extended 5-year and 6-year rotation, with harvest through third stubble and fourth stubble, respectively, are shown in Tables 2B and 3B. Sugar yields for plantcane and stubble crops presented in this report are based on research results from outfield variety trials for commercial varieties of sugarcane currently grown in Louisiana, adjusted to reflect average producer yields.⁵

Tables 1C, 2C and 3C presents breakeven raw sugar selling prices required to cover production costs for selected yield levels and rental arrangements. Base yield level reflects budgeted yields included in Tables 1A, 2A and 3A. Distribution shares of sugar production to mill, landlord, and grower, in pounds of sugar per rotational acre, are shown for a 1/5 and a 1/6 share rent arrangement. Breakeven prices per pound of raw sugar are calculated by dividing grower's share of production into direct costs, total specified costs, and total specified costs plus overhead expenses.

PROCEDURE

Survey data collected from sugarcane producers provided basic production practice, equipment and input information. The survey indicated that farm size was increasing. Producer's complement of tractors were larger, and the use of high clearance tractors with mechanical front wheel drive was common. Producers are cultivating both fallow and cane crops more. Nearly all producers use cultured seed cane in their clean seed program. They were or intended on keeping some stubble beyond the standard 4 year rotations.

Current estimates of machinery and other input costs were used in conjunction with the production practices and input data to estimate costs of production for sugarcane. Input price data were collected in late 2010 from farm suppliers throughout the sugarcane producing area to provide a basis for estimating projected 2011 budgets. Machinery price data were obtained from machinery dealers in 2009. Detailed machinery cost data are shown in the Appendix.

The general procedure used in this report was to apply current machinery and other input price data to the production practices noted above. Production practice data were based on a sample of sugarcane farms randomly drawn by size of farm and area. In an effort to simplify the budgets, individual budgets for separate production areas and soil types were eliminated. The costs associated with operations specific to certain areas or situations can be added to any budget to more accurately match a specific farm situation.

Sugarcane budgets presented in this report were developed using a microcomputer enterprise budget generator program. The budget generator is a computer program that specifies a system of sequential computational procedures for calculating costs and returns associated with the production of a specific agricultural commodity. It also includes report writing features for printing the final budget(s) in standardized terminology. The user specifies the data requirements essential for preparation of a particular budget (e.g. field operations, input quantities and prices, interest rates, fuel consumption, etc.). The user dictates the computations to be made and data sets used for the selected computations to be made. Functions, such as repair costs, depreciation and performance rates for machinery and equipment are specified by the user of the budget generator. While selected data sets may be stored in the system, the user has the prerogative of substituting

⁵ "Sugarcane Outfield Variety Trials," *Sugarcane Research, Annual Progress Report – 2009*, Louisiana State University Agricultural Center, Baton Rouge, LA.

data. The responsibility for selection of appropriate data sets used in the program rests with the user. The program includes standardized procedures for developing estimates for selected data elements for users with limited information.

Budget information is presented for ten activity sets, an overhead budget, and projected revenues. The activities include breaking stubble and fallow operations, seedbed preparation, cutting and planting seed cane (propagated and field run), cultural regimes for the plant cane and first stubble, second stubble and older and succession planting on a per acre of land basis. An individual may select those budgets that fit his "unique" situation to develop cost and return estimates reflecting his land situation and production activities.

Machinery Costs

Machinery cost data for implements were obtained from annual surveys of machinery dealers. In addition, these data were supplemented with data from a recent issue of Official Guide, Tractors and Farm Equipment.⁶ Purchase prices for machinery items used in this report may be found in the Appendix. Purchase prices for tractors and harvesting equipment were updated in 2012. Appendix Tables 1-4 provide pertinent information used to compute direct and fixed costs per acre and per hour for new powered and towed machines. Machinery performance rates are based on survey data collected from sugarcane producers. These tables are the basis for all machinery costs shown in the budgets and accompanying tables.

Price Data

Input price data reflect current quotes obtained from suppliers of agricultural chemicals and services in the area, Appendix Tables 1 and 5. These data were used as a basis for estimating input costs for 2012. Chemical weed control practices are identified as individual operations within the production sequence. Materials are designated by common name and reflect recommended rates. Chemical names are for identification purposes only and do not constitute endorsement of these products.

Regular hired farm labor was charged at \$9.60 per hour. This wage rate includes a \$7.50 per hour basic wage rate plus additional costs (27.65%) for social security, Medicare, and workman's compensation (6.2%, 1.45%, 20%). Operator labor was charged at \$15.30 per hour, which includes a basic wage rate of \$12.00 per hour plus (27.65%) for social security, Medicare, and workman's compensation (6.2%, 1.45%, 20%). Labor charged at the lower rate includes time spent operating tractors as well as time spent in direct support of any field operation, while labor charged at the higher rate reflects only the time required for operating self-propelled (harvest) machines. It is recognized that full time labor is not generally available on an hourly basis. However, for a single enterprise, the hourly charge represents a practical approach for charging the enterprise for labor necessary to produce that enterprise.

Interest on operating capital was charged at 4.25 percent. Operating capital was assumed borrowed only for the length of time necessary to secure inputs in a timely fashion. Diesel fuel was priced at \$3.50 per gallon and regular gasoline at \$3.50 per gallon. Variable costs for operating tractors and self-propelled machines include fuel, lubrication and repairs. Variable costs for

⁶ *Official Guide Tractors and Farm Equipment*. St. Louis: National Farm and Power Services, Inc., Fall 1993.

machinery items include lubrication and repairs. The "sequence of operations" tables for each production activity show both variable and fixed costs per acre for performing each machine operation. The non-land capital or intermediate term interest rate was charged at a historical real rate of 5.25 percent.

Product price projections were made in January 2012, based primarily upon existing supply and use and government program information. Price forecasting at this time has a low degree of reliability since most factors affecting both supply and demand cannot be ascertained at this time. However, the product price estimates are made for the primary purpose of making comparative evaluations among alternative sugarcane production systems or across alternative crops. Return estimates in this report are computed using a \$0.340 per pound raw sugar market price and a selling price for molasses of \$0.60 per gallon.

Overhead Costs

Overhead costs reflect significant expenses associated with the operation of the entire farm business, but are not necessarily attributable to a specific enterprise. Examples of farm overhead costs include tax services, record keeping, utilities, farmstead maintenance, and insurance and property taxes where applicable.

Overhead cost projections presented in this report are based on the 2000 ERS survey of overhead costs. This survey is conducted every three to eight years. Methodology and detailed information can be found on the ERS website at <http://www.ers.usda.gov>. Forecasts for general farm overhead, and taxes and insurance for corn, soybeans, cotton and rice for regions that include Louisiana for 2005 were averaged. The percentage difference between 2005 and the projected costs for 2012 for each crop national average was calculated and these were averaged. The 2005 regional average was then increased by this average to produce the figure used in this report.

Projected enterprise budgets for sugarcane production included in this report incorporate the variable and fixed cost overhead components as a single lump sum. The total overhead costs for a farm firm are related to tenure and size of business. The overhead costs included in this report were estimated on a per acre basis, and thus are included on a per acre of land use basis.

Machinery Size

The budgets in this report are based on typical size machines for performing each of the various operations. Appendix Tables 2 and 3 present information for each of the machines used in the budgets found in this report. This machinery information (Appendix Tables 2 and 3) can be used to adjust machinery costs and labor requirements for budgets presented in this report to fit a particular farm situation.

Louisiana Sugarcane Producing Areas



Table 1A. Projected Costs and Returns on 1,000 Acres of Sugarcane, 4-Year Rotation, Harvest through 2nd stubble, Tenant-Operator, Louisiana, 2012.

Item	Dollars Per Acre	Number of Acres	Total Dollar Value	Per Acre Dollar Value 6/	Per Pound of Sugar Value 7/
	(\$/acre)	(acres)	(\$)	(\$/acre)	(\$/lb)
GROSS VALUE OF PRODUCTION: 1/					
Sugar: (\$0.340/lb; 5,366,228 lbs.)					
Plantcane (7,955 lbs/acre)	2,704.70	201.6	545,268		
1st stubble (7,740 lbs/acre)	2,631.60	250.0	657,900		
2nd stubble (7,310 lbs/acre)	2,485.40	250.0	621,350		
Total sugar			1,824,518	1,824.52	0.340
Molasses: (\$0.60/gal; 160,987 gallons)	--	--	96,592		
TOTAL GROSS VALUE			1,921,110	1,921.11	0.358
MILL CHARGE (Payment in kind):					
Sugar (39%)	--	--	711,562		
Molasses	--	--	53,126		
Total mill charge			764,687	764.69	0.143
NET RETURNS TO LAND AND PRODUCER			1,156,422	1,156.42	0.216
LAND RENT (Payment in kind):					
Sugar (20% after mill charge)	--	--	222,591		
Molasses(20% after mill charge)	--	--	8,693		
Total land charge			231,284	231.28	0.043
PRODUCER INCOME					
Sugar and Molasses	--	--	925,138	925.14	0.172
ASCL Check Off (\$0.14 /ton)	--	--	(3,756)		
Total Income			921,381	921.38	0.172
VARIABLE PRODUCTION EXPENSES: 3/					
Fallow Field & Seedbed Preparation	154.92	250.0	38,730		
Cultured Seed Cane	523.62	4.1	2,142		
Hand Planting	298.98	4.1	1,223		
Wholestalk Seedcane Harvest	80.89	49.2	3,980		
Mechanical Planting - Wholestalk	264.68	245.9	65,085		
Plant Cane Field Operations	295.97	250.0	73,993		
1st Stubble Field Operations	376.88	250.0	94,220		
2nd Stubble Field Operations	373.84	250.0	93,460		
Harvest for Sugar 4/	172.91	700.8	121,175		
Total variable expenses			494,007	494.01	0.092
RETURNS ABOVE VARIABLE PRODUCTION EXPENSES			427,374	427.37	0.080
FIXED PRODUCTION EXPENSES 5/		1,000.0	139,400	139.40	0.026
RETURNS ABOVE TOTAL PRODUCTION EXPENSES			287,974	287.97	0.054
FARM OVERHEAD EXPENSES		1,000.0	30,000	30.00	0.006
NET RETURNS TO MANAGEMENT AND RISK			257,974	257.97	0.048

- 1/ Gross value of production is determined using estimated production from 1000 acres of sugarcane land in a standard 4 year rotation (fallow/plant, plantcane, 1st stubble, and 2nd stubble). Raw sugar is valued at 34.0 cents per pound and molasses at 60.0 cents per gallon.
- 2/ Harvested sugarcane is assumed to be transloaded to custom truck and trailer. Hauling costs from farm to mill and hauling rebate are excluded.
- 3/ Each category of production expense listed includes all variable costs associated with the specified operations including cost of inputs, labor, fuel, repairs, and interest on operating capital.
- 4/ Harvest costs are estimated assuming 100% of sugarcane is harvested with a combine harvester.
- 5/ Fixed expenses includes depreciation and interest charges on equipment used in production.
- 6/ Per acre dollar value is calculated by dividing total dollar value by total farm acreage.
- 7/ Per pound of sugar value is calculated by dividing total dollar value by total sugar production over 1,000 farm acres (5,366,228 pounds of sugar from 24,959 tons of cane).

Table 1B. Expected Sugar Yield per Rotational Acre of Sugarcane, 4-Year Rotation, Harvest through 2nd stubble, Tenant-Operator, Louisiana, 2012.

	Land Use (%)	Sugar yield			Rotational Acre
		Plantcane	1st stubble	2nd stubble	
Sugar Yield per Acre Harvested for Sugar		7995	7740	7310	
Sugar Yield per Rotational Acre 1/:					
Plantcane	25.00%	1989	--	--	
Plantcane used for seed 2/	4.92%	391	--	--	
1st Stubble	25.00%	--	1935	--	
2nd Stubble	25.00%	--	--	1828	
Fallow/plant	25.00%	--	--	--	
Total Raw Sugar per Rotational Acre		1597	1935	1828	5360
Mill/Landlord Share:					
Mill share	39%	623	755	713	2090
Landlord share (1/5 share)	12.2%	195	236	223	654
Grower's Share:					
Tenant	48.8%	780	944	892	2616

- 1/ Assumes a standard rotation of 25% each of plantcane, 1st stubble, 2nd stubble, and fallow/plant.
- 2/ Assumes .409 acres of disease-free cultured seed planted annually with two expansions of plant cane and first stubble cultured seed cane crops, using a 5:1 planting ratio, for every 25 acres planted each year. Plantcane cut for seed (4.92 acres) will plant 24.6 acres, plus .409 acres planted in cultured seed, yields 25 acres planted.
- 3/ Landlord share is 20 percent of after milling crop proceeds.
- 4/ Grower's share is total raw sugar less amount taken for mill and land share.

Table 1C. Breakeven Selling Prices for Raw Sugar for Selected Yields and Rental Arrangements, 4-Year Rotation, Harvest through 2nd stubble, Tenant-Operators, Louisiana, 2012.

	Selected Yield Levels				
	-20%	-10%	Base	+10%	+20%
Cane yield per harvested acre (tons) 1/	28.5	32.0	35.6	39.2	42.7
Sugar yield per harvested acre (lbs) 2/	6123	6889	7654	8419	9185
Sugar yield per rotational acre (lbs) 3/	4288	4824	5360	5896	6432
ONE-FIFTH LAND SHARE RENT	Breakeven price to recover: 4/ cents per pound of sugar				
Direct costs	22.4	20.4	18.9	17.6	16.5
Total specified costs	29.1	26.4	24.2	22.4	20.9
Total costs plus overhead	30.5	27.6	25.3	23.5	21.9
ONE-SIXTH LAND SHARE RENT:	Breakeven price to recover: 4/ cents per pound of sugar				
Direct costs	21.5	19.6	18.1	16.9	15.8
Total specified costs	27.9	25.3	23.2	21.5	20.1
Total costs plus overhead	29.3	26.5	24.3	22.5	21.0

- 1/ Average farm yield across harvested acreage of plantcane, 1st stubble and 2nd stubble.
- 2/ Average yield in tons per acre multiplied by a 215 CRS.
- 3/ Assumes a standard land rotation of 25% each of plantcane, 1st stubble, 2nd stubble, and fallow/plant.
- 4/ Breakeven prices are calculated by dividing grower's share of production (48.8% for 1/5 share, 50.8% for 1/6 share) into direct costs, total specified costs, and total specified costs plus overhead. Breakeven sugar price excludes adjustment for molasses payment. Mill share assumed to be 39%.

Table 1D. Breakeven Raw Sugar Yields for Selected Yields and Rental Arrangements, 4-Year Rotation, Harvest through 2nd stubble, Tenant-Operators, Louisiana, 2012.

	Selected Price Levels				
	-1.0	-0.5	Base	+0.5	+1.0
Raw sugar price (cents per pound)	33.0	33.5	34.0	34.5	35.0
ONE-FIFTH LAND SHARE RENT	Breakeven yield to recover: 1/ pounds of sugar per harvested acre				
Direct costs	4,376	4,331	4,247	4,186	4,126
Total specified costs	5,661	5,527	5,446	5,367	5,290
Total costs plus overhead	5,877	5,789	5,704	5,621	5,541
ONE-SIXTH LAND SHARE RENT:	Breakeven yield to recover: 1/ pounds of sugar per harvested acre				
Direct costs	4,204	4,141	4,080	4,021	3,964
Total specified costs	5,390	5,310	5,231	5,156	5,082
Total costs plus overhead	5,645	5,561	5,479	5,400	5,323

- 1/ Breakeven sugar yield per harvested acre to recover direct costs, total specified costs, and total costs plus overhead. Breakeven sugar yield excludes adjustment for molasses payment.

Table 2A. Projected Costs and Returns on 1,000 Acres of Sugarcane, 5-Year Rotation, Harvest through 3rd stubble, Tenant-Operator, Louisiana, 2012.

Item	Dollars Per Acre	Number of Acres	Total Dollar Value	Per Acre Dollar Value 6/	Per Pound of Sugar Value 7/
	(\$/acre)	(acres)	(\$)	(\$/acre)	(\$/lb)
GROSS VALUE OF PRODUCTION: 1/					
Sugar: (\$0.340/lb; 5,706,573 lbs)					
Plantcane (7,995 lbs/acre)	2,704.70	160.6	434,375		
1st stubble (7,740 lbs/acre)	2,631.60	200.0	526,320		
2nd stubble (7,310 lbs/acre)	2,485.40	200.0	497,080		
3rd stubble (7,095 lbs/acre)	2,412.30	200.0	482,460		
Total sugar			1,940,235	1,940.23	0.340
Molasses (\$0.60/gal; 171,197 gallons)	--	--	102,718		
TOTAL GROSS VALUE			2,042,953	2,042.95	0.358
MILL CHARGE (Payment in kind):					
Sugar (39%)	--	--	756,692		
Molasses	--	--	56,495		
Total mill charge			813,187	813.19	0.143
NET RETURNS TO LAND AND PRODUCER			1,229,766	1,229.77	0.216
LAND RENT (Payment in kind):					
Sugar (20% after mill charge)	--	--	236,709		
Molasses(20% after mill charge)	--	--	9,245		
Total land charge			245,953	245.95	0.043
PRODUCER INCOME					
Sugar and Molasses	--	--	983,813	983.81	0.172
ASCL Check Off (\$0.14 /ton)	--	--	(3,995)		
Total Income			979,819	979.82	0.172
VARIABLE PRODUCTION EXPENSES: 3/					
Fallow Field & Seedbed Preparation	154.92	200.0	30,984		
Cultured Seed Cane	523.62	3.3	1,728		
Hand Planting	298.98	3.3	987		
Harvesting Wholestalk Seedcane	80.89	39.4	3,187		
Mechanical Planting - Wholestalk	264.68	196.7	52,063		
Plant Cane Field Operations	295.97	200.0	59,194		
1st Stubble Field Operations	376.88	200.0	75,376		
2nd Stubble Field Operations	373.84	200.0	74,768		
3rd Stubble Field Operations	373.84	200.0	74,768		
Harvest for Sugar 4/	172.91	760.6	131,515		
Total variable expenses			504,570	504.57	0.088
RETURNS ABOVE VARIABLE PRODUCTION EXPENSES			475,249	475.25	0.083
FIXED PRODUCTION EXPENSES 5/		1000.0	139,660	139.66	0.024
RETURNS ABOVE TOTAL PRODUCTION EXPENSES			335,589	335.59	0.059
FARM OVERHEAD EXPENSES		1000.0	30,000	30.00	0.005
NET RETURNS TO MANAGEMENT AND RISK			305,589	305.59	0.054

- 1/ Gross value of production is determined using estimated production from 1000 acres of sugarcane land in an extended 5 year rotation (fallow/plant, plantcane, 1st stubble, 2nd stubble and 3rd stubble). Raw sugar is valued at 34.0 cents per pound and molasses at 60.0 cents per gallon.
- 2/ Harvested sugarcane is assumed to be transloaded to custom truck and trailer. Hauling costs from farm to mill and hauling rebate are excluded.
- 3/ Each category of production expense listed includes all variable costs associated with the specified operations including cost of inputs, labor, fuel, repairs, and interest on operating capital.
- 4/ Harvest costs are estimated assuming 100% of sugarcane is harvested with a combine harvester.
- 5/ Fixed expenses includes depreciation and interest charges on equipment used in production.
- 6/ Per acre dollar value is calculated by dividing total dollar value by total farm acreage.
- 7/ Per pound of sugar value is calculated by dividing total dollar value by total sugar production over 1000 farm acres (5,706,573 pounds of sugar from 26,542 tons of cane).

Table 2B. Expected Sugar Yield per Rotational Acre of Sugarcane, 5-Year Rotation, Harvest through 3rd stubble, Tenant-Operator, Louisiana, 2012.

	Land Use (%)	Sugar yield				Rotational Acre
		Plantcane	1st stubble	2nd stubble	3rd stubble	
Sugar Yield per Acre Harvested for Sugar		7955	7740	7310	7095	
Sugar Yield per Rotational Acre 1/:						
Plantcane	20.00%	1591	--	--	--	
Plantcane used for seed 2/	3.94%	313	--	--	--	
1st Stubble	20.00%	--	1548	--	--	
2nd Stubble	20.00%	--	--	1462	--	
3rd Stubble	20.00%	--	--	--	1419	
Fallow/plant	20.00%	--	--	--	--	
Total Raw Sugar per Rotational Acre		1278	1548	1462	1419	5707
Mill/Landlord Share:						
Mill share	39%	498	604	570	553	2226
Landlord share (1/5 share)	12.2%	156	189	178	173	696
Grower's Share:						
Tenant	48.8%	623	755	713	692	2785

- 1/ Assumes an extended 5 year rotation with 20.00% each of plantcane, 1st stubble 2nd stubble, 3rd stubble, and fallow.
2/ Assumes .330 acres of disease-free cultured seed planted annually with two expansions of plant cane and first stubble cultured seed cane crops, using a 5:1 planting ratio, for every 20.00 acres planted each year. Plantcane cut for seed (3.94 acres) will plant 19.70 acres, plus .330 acres planted in cultured seed, yields 20.00 acres planted.

Table 2C. Breakeven Selling Prices for Raw Sugar for Selected Yields and Rental Arrangements, 5-Year Rotation, Harvest through 3rd stubble, Tenant-Operators, Louisiana, 2012.

	Selected Yield Levels				
	-20%	-10%	Base	+10%	+20%
Cane yield per harvested acre (tons) 1/	27.9	31.4	34.9	38.4	41.9
Sugar yield per harvested acre (lbs) 2/	6003	6753	7504	8254	9004
Sugar yield per rotational acre (lbs) 3/	4565	5136	5707	6277	6848
ONE-FIFTH LAND SHARE RENT					
Breakeven price to recover: 4/	-----cents per pound of sugar-----				
Direct costs	21.5	19.6	18.1	16.9	15.9
Total specified costs	27.7	25.2	23.1	21.5	20.1
Total costs plus overhead	29.1	26.4	24.2	22.4	21.0
ONE-SIXTH LAND SHARE RENT:					
Breakeven price to recover: 4/	-----cents per pound of sugar-----				
Direct costs	20.6	18.8	17.4	16.2	15.3
Total specified costs	26.6	24.2	22.2	20.6	19.3
Total costs plus overhead	27.9	25.3	23.2	21.5	20.1

- 1/ Average farm yield across harvested acreage of plantcane, 1st stubble, 2nd stubble and 3rd stubble.
2/ Average yield in tons per acre multiplied by a 215 CRS.
3/ Assumes a standard land rotation of 20.00% each of plantcane, 1st stubble, 2nd stubble, 3rd stubble, and fallow/plant.
4/ Breakeven prices are calculated by dividing grower's share of production (48.8% for 1/5 share, 50.8% for 1/6 share) into direct costs, total specified costs, and total specified costs plus overhead. Breakeven sugar price excludes adjustment for molasses payment. Mill share assumed to be 39%.

Table 2D. Breakeven Raw Sugar Yields for Selected Yields and Rental Arrangements, 5-Year Rotation, Harvest through 3rd stubble, Tenant-Operators, Louisiana, 2012.

	Selected Price Levels				
	-1.0	-0.5	Base	+0.5	+1.0
Raw sugar price (cents per pound)	33.0	33.5	34.0	34.5	35.0
ONE-FIFTH LAND SHARE RENT					
Breakeven yield to recover: 1/	-----pounds of sugar per harvested acre-----				
Direct costs	4,117	4,056	3,996	3,938	3,882
Total specified costs	5,257	5,178	5,102	5,028	4,956
Total costs plus overhead	5,502	5,419	5,340	5,262	5,187
ONE-SIXTH LAND SHARE RENT:					
Breakeven yield to recover: 1/	-----pounds of sugar per harvested acre-----				
Direct costs	3,955	3,896	3,839	3,783	3,729
Total specified costs	5,050	4,974	4,901	4,830	4,761
Total costs plus overhead	5,285	5,206	5,130	5,055	4,983

- 1/ Breakeven sugar yield per harvested acre to recover direct costs, total specified costs, and total costs plus overhead. Breakeven sugar yield excludes adjustment for molasses payment.

Table 3A. Projected Costs and Returns on 1,000 Acres of Sugarcane, 6-Year Rotation, Harvest through 4th stubble, Tenant-Operator, Louisiana, 2012.

Item	Dollars Per Acre	Number of Acres	Total Dollar Value	Per Acre Dollar Value 6/	Per Pound of Sugar Value 7/
	(\$/acre)	(acres)	(\$)	(\$/acre)	(\$/lb)
GROSS VALUE OF PRODUCTION: 1/					
Sugar: (\$0.340/lb; 5,903,642 lbs.)					
Plantcane (7,955 lbs/acre)	2,704.70	133.9	362,159		
1st stubble (7,740 lbs/acre)	2,631.60	166.7	438,688		
2nd stubble (7,310 lbs/acre)	2,485.40	166.7	414,316		
3rd stubble (7,095 lbs/acre)	2,412.30	166.7	402,130		
4th stubble (6,880 lbs/acre)	2,339.20	166.7	389,945		
Total sugar			2,007,238	2,007.24	0.340
Molasses (\$0.60/gal, 177,109 gallons)	--	--	106,266		
TOTAL GROSS VALUE			2,113,504	2,113.50	0.358
MILL CHARGE (Payment in kind):					
Sugar (39%)	--	--	782,823		
Molasses	--	--	58,446		
Total mill charge			841,269	841.27	0.143
NET RETURNS TO LAND AND PRODUCER			1,272,235	1,272.23	0.216
LAND RENT (Payment in kind):					
Sugar (20% after mill charge)	--	--	244,883		
Molasses(20% after mill charge)	--	--	9,564		
Total land charge			254,447	254.45	0.043
PRODUCER INCOME					
Sugar and Molasses	--	--	1,017,788	1,017.75	0.172
ASCL Check Off (\$0.14 /ton)	--	--	(4,133)		
Total Income			1,013,655	1,013.66	0.172
VARIABLE PRODUCTION EXPENSES: 3/					
Fallow Field & Seedbed Preparation	154.92	166.7	25,825		
Cultured Seed Cane	523.62	2.7	1,414		
Hand Planting	298.98	2.7	807		
Wholestalk Seedcane Harvest	80.89	32.8	2,653		
Mechanical Planting - Wholestalk	264.68	164.0	43,408		
Plant Cane Field Operations	295.97	166.7	49,338		
1st Stubble Field Operations	376.88	166.7	62,826		
2nd Stubble Field Operations	373.84	166.7	62,319		
3rd Stubble Field Operations	373.84	166.7	62,319		
4th Stubble Field Operations	373.84	166.7	62,319		
Harvest for Sugar 4/	172.91	800.7	138,449		
Total variable expenses			511,677	511.68	0.087
RETURNS ABOVE VARIABLE PRODUCTION EXPENSES			501,978	501.98	0.085
FIXED PRODUCTION EXPENSES 5/		1000.0	139,861	139.86	0.024
RETURNS ABOVE TOTAL PRODUCTION EXPENSES			362,117	362.12	0.061
FARM OVERHEAD EXPENSES		1000.0	30,000	30.00	0.005
NET RETURNS TO MANAGEMENT AND RISK			332,117	332.12	0.056

- 1/ Gross value of production is determined using estimated production from 1000 acres of sugarcane land in an extended 6 year rotation (fallow/plant, plantcane, 1st stubble, 2nd stubble, 3rd stubble and 4th stubble). Raw sugar is valued at 34.0 cents per pound and molasses at 60.0 cents per gallon.
- 2/ Harvested sugarcane is assumed to be transloaded to custom truck and trailer. Hauling costs from farm to mill and hauling rebate are excluded.
- 3/ Each category of production expense listed includes all variable costs associated with the specified operations including cost of inputs, labor, fuel, repairs, and interest on operating capital.
- 4/ Harvest costs are estimated assuming 100% of sugarcane is harvested with a combine harvester.
- 5/ Fixed expenses includes depreciation and interest charges on equipment used in production.
- 6/ Per acre dollar value is calculated by dividing total dollar value by total farm acreage.
- 7/ Per pound of sugar value is calculated by dividing total dollar value by total sugar production over 1000 farm acres (5,903,642 pounds of sugar from 27,459 tons of cane).

Table 3B. Expected Sugar Yield per Rotational Acre of Sugarcane, 6-Year Rotation, Harvest through 4th stubble, Tenant-Operator, Louisiana, 2012.

	Land Use (%)	Sugar yield					Rotational Acre
		Plant cane	1st stubble	2nd stubble	3rd stubble	4th stubble	
Sugar Yield per Acre Harvested for Sugar		7955	7740	7310	7095	6880	
Sugar Yield per Rotational Acre 1/:							
Plantcane	16.67%	1326	--	--	--	--	
Plantcane used for seed 2/	3.28%	261	--	--	--	--	
1st Stubble	16.67%	--	1290	--	--	--	
2nd Stubble	16.67%	--	--	1219	--	--	
3rd Stubble	16.67%	--	--	--	1183	--	
4th Stubble	16.67%	--	--	--	--	1147	
Fallow/plant	16.67%	--	--	--	--	--	
Total Raw Sugar per Rotational Acre		1065	1290	1219	1183	1147	5904
Mill/Landlord Share:							
Mill share	39%	415	503	475	461	447	2302
Landlord share (1/5 share)	12.2%	130	157	149	144	140	720
Grower's Share:							
Tenant	48.8%	520	630	595	577	560	2881

- 1/ Assumes an extended 6 year rotation with 16.67% each of plantcane, 1st stubble 2nd stubble, 3rd stubble, 4th stubble and fallow.
 2/ Assumes .273 acres of disease-free cultured seed planted annually with two expansions of plant cane and first stubble cultured seed cane crops, using a 5:1 planting ratio, for every 16.67 acres planted each year. Plantcane cut for seed (3.28 acres) will plant 16.40 acres, plus .273 acres planted in cultured seed, yields 16.67 acres planted.

Table 3C. Breakeven Selling Prices for Raw Sugar for Selected Yields and Rental Arrangements, 6-Year Rotation, Harvest through 4th stubble, Tenant-Operators, Louisiana, 2012.

	Selected Yield Levels				
	-20%	-10%	Base	+10%	+20%
Cane yield per harvested acre (tons) 1/	27.4	30.9	34.3	37.7	41.2
Sugar yield per harvested acre (lbs) 2/	5900	6637	7375	8112	8849
Sugar yield per rotational acre (lbs) 3/	4723	5313	5904	6494	7084
ONE-FIFTH LAND SHARE RENT					
Breakeven price to recover: 4/	-----cents per pound of sugar-----				
Direct costs	21.0	19.2	17.8	16.6	15.6
Total specified costs	27.1	24.6	22.6	21.0	19.6
Total costs plus overhead	28.4	25.8	23.7	21.9	20.5
ONE-SIXTH LAND SHARE RENT:					
Breakeven price to recover: 4/	-----cents per pound of sugar-----				
Direct costs	20.2	18.4	17.0	15.9	15.0
Total specified costs	26.0	23.6	21.7	20.2	18.9
Total costs plus overhead	27.2	24.7	22.7	21.1	19.7

- 1/ Average farm yield across harvested acreage of plantcane and stubble crops (1st, 2nd, 3rd and 4th).
 2/ Average yield in tons per acre multiplied by a 215 CRS.
 3/ Assumes a standard land rotation of 16.67% each of plantcane, 1st stubble, 2nd stubble, 3rd stubble, and fallow/plant.
 4/ Breakeven prices are calculated by dividing grower's share of production (48.8% for 1/5 share, 50.8% for 1/6 share) into direct costs, total specified costs, and total specified costs plus overhead. Breakeven sugar price excludes adjustment for molasses payment. Mill share assumed to be 39%.

Table 3D. Breakeven Raw Sugar Yields for Selected Yields and Rental Arrangements, 6-Year Rotation, Harvest through 4th stubble, Tenant-Operators, Louisiana, 2012.

	Selected Price Levels				
	-1.0	-0.5	Base	+0.5	+1.0
Raw sugar price (cents per pound)	33.0	33.5	34.0	34.5	35.0
ONE-FIFTH LAND SHARE RENT					
Breakeven yield to recover: 1/	-----pounds of sugar per harvested acre-----				
Direct costs	3,967	3,908	3,850	3,794	3,740
Total specified costs	5,051	4,976	4,902	4,831	4,762
Total costs plus overhead	5,284	5,205	5,128	5,054	4,982
ONE-SIXTH LAND SHARE RENT:					
Breakeven yield to recover: 1/	-----pounds of sugar per harvested acre-----				
Direct costs	3,811	3,754	3,698	3,645	3,593
Total specified costs	4,852	4,780	4,709	4,641	4,575
Total costs plus overhead	5,076	5,000	4,926	4,855	4,786

- 1/ Breakeven sugar yield per harvested acre to recover direct costs, total specified costs, and total costs plus overhead. Breakeven sugar yield excludes adjustment for molasses payment.

Table 4.A Estimated costs per acre, Breaking stubble, fallow activities & seedbed preparation, Sugarcane, Louisiana 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HERBICIDES					
Roundup Power Max	pt	2.28	2.7500	6.27	_____
SERVICE FEE					
Crop Consultant	acre	5.00	1.0000	5.00	_____
LA Hired Labor					
Tractors	hour	9.60	3.0827	29.59	_____
DIESEL FUEL					
Tractors	gal	3.50	24.8144	86.83	_____
REPAIR & MAINTENANCE					
Implements	acre	13.00	1.0000	13.00	_____
Tractors	acre	10.98	1.0000	10.98	_____
INTEREST ON OP. CAP.	acre	3.24	1.0000	3.24	_____
TOTAL DIRECT EXPENSES				154.92	_____
FIXED EXPENSES					
Implements	acre	17.98	1.0000	17.98	_____
Tractors	acre	68.27	1.0000	68.27	_____
TOTAL FIXED EXPENSES				86.25	_____
TOTAL SPECIFIED EXPENSES				241.17	_____

Table 4.B Estimated resource use and costs for field operations, per acre Breaking stubble, fallow activities & seedbed preparation, Sugarcane, Louisiana 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
SC Disk	20 ft	MFWD 190	0.100	2.00	Mar	7.65	5.10	1.54	2.16	0.20	1.92				18.37	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81	
SC Chisel Plow	13 ft	MFWD 190	0.219	1.00	Mar	8.40	5.60	0.97	1.21	0.21	2.11				18.29	
SC Land Plane	15 ft	MFWD 150	0.300	2.00	Apr	18.52	14.02	1.32	2.81	0.60	5.77				42.44	
SC Chisel Plow	13 ft	MFWD 190	0.219	1.00	Apr	8.40	5.60	0.97	1.21	0.21	2.11				18.29	
SC Disk	20 ft	MFWD 190	0.100	1.00	Apr	3.82	2.55	0.77	1.08	0.10	0.96				9.18	
SC Disk	20 ft	MFWD 190	0.100	1.00	Apr	3.82	2.55	0.77	1.08	0.10	0.96				9.18	
SC 3Row (Marker)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.59	0.70	0.12	1.15				8.94	
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	2.00	May	7.41	5.60	1.37	1.68	0.24	2.30				18.36	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	May	1.18	0.60	0.13	0.13	0.08	0.77				2.81	
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Jun	3.70	2.80	0.26	0.29	0.12	1.15				8.20	
Roundup Power Max	pt											1.3750	2.28	3.14	3.14	
SC 3Row Plow	18 ft	MFWD 190	0.120	1.00	Jul	4.59	3.06	1.11	1.36	0.12	1.15				11.27	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Jul	1.18	0.60	0.13	0.13	0.08	0.77				2.81	
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Aug	3.70	2.80	0.26	0.29	0.12	1.15				8.20	
Roundup Power Max	pt											1.3750	2.28	3.14	3.14	
SC 3Row (Hipper)	18 ft	MFWD 190	0.120	1.00	Aug	4.59	3.06	0.69	0.84	0.12	1.15				10.33	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Aug	1.18	0.60	0.13	0.13	0.08	0.77				2.81	
Crop Consultant	acre			1.00	Sep							1.0000	5.00	5.00	5.00	
TOTALS						97.81	68.27	13.00	17.98	3.08	29.59				11.28	237.93
INTEREST ON OPERATING CAPITAL															3.24	
UNALLOCATED LABOR															0.00	
TOTAL SPECIFIED COST															241.17	

Table 5.A Estimated costs per acre,
Cultured seed cane,
Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
SEED/PLANTS					
SC Cultured seedcane	acre	484.00	1.0000	484.00	_____
LA Hired Labor					
Self-Propelled	hour	9.60	0.3303	3.17	_____
DIESEL FUEL					
Self-Propelled	gal	3.50	2.1021	7.36	_____
REPAIR & MAINTENANCE					
Self-Propelled	acre	7.74	1.0000	7.74	_____
INTEREST ON OP. CAP.	acre	21.35	1.0000	21.35	_____

TOTAL DIRECT EXPENSES				523.62	_____
FIXED EXPENSES					
Self-Propelled	acre	13.06	1.0000	13.06	_____

TOTAL FIXED EXPENSES				13.06	_____

TOTAL SPECIFIED EXPENSES				536.68	_____

Table 5.B Estimated resource use and costs for field operations, per acre
Cultured seed cane,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
SC Cultured seedcane	acre			1.00	Sep	-----dollars-----						dollars			484.00
SC Loader 2Rw		12 ft	0.300	1.00	Sep	15.10	13.06			0.33	3.17	1.0000	484.00	484.00	31.33
TOTALS						15.10	13.06	0.00	0.00	0.33	3.17			484.00	515.33
INTEREST ON OPERATING CAPITAL															21.35
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															536.68

Table 6.A Estimated costs per acre,
Wholestalk seedcane harvest,
Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.4268	6.53	_____
LA Hired Labor					
Tractors	hour	9.60	0.6300	6.05	_____
Self-Propelled	hour	9.60	0.3303	3.17	_____
DIESEL FUEL					
Tractors	gal	3.50	4.5553	15.94	_____
Self-Propelled	gal	3.50	5.2061	18.22	_____
REPAIR & MAINTENANCE					
Implements	acre	0.76	1.0000	0.76	_____
Tractors	acre	2.20	1.0000	2.20	_____
Self-Propelled	acre	24.72	1.0000	24.72	_____
INTEREST ON OP. CAP.	acre	3.30	1.0000	3.30	_____
TOTAL DIRECT EXPENSES				80.89	_____
FIXED EXPENSES					
Implements	acre	1.01	1.0000	1.01	_____
Tractors	acre	13.44	1.0000	13.44	_____
Self-Propelled	acre	35.11	1.0000	35.11	_____
TOTAL FIXED EXPENSES				49.56	_____
TOTAL SPECIFIED EXPENSES				130.45	_____

Table 6.B Estimated resource use and costs for field operations, per acre
Wholestalk seedcane harvest,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
SC Harvester 2Rw		12 ft	0.388	1.00	Sep	27.84	22.05			0.42	6.53				56.42
SC Loader 2Rw		12 ft	0.300	1.00	Sep	15.10	13.06			0.33	3.17				31.33
SC Cane Wagon 10T	10 Ton	MFWD 150	0.500	1.00	Sep	16.96	12.84	0.63	0.88	0.55	5.28				36.59
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77				2.81
TOTALS						61.08	48.55	0.76	1.01	1.38	15.75			0.00	127.15
INTEREST ON OPERATING CAPITAL															3.30
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															130.45

Table 7.A Estimated costs per acre,
Billet seedcane harvest,
Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.7700	11.78	_____
LA Hired Labor					
Tractors	hour	9.60	0.7400	7.11	_____
DIESEL FUEL					
Tractors	gal	3.50	5.4046	18.92	_____
Self-Propelled	gal	3.50	8.4000	29.40	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	2.62	1.0000	2.62	_____
Self-Propelled	acre	27.07	1.0000	27.07	_____
INTEREST ON OP. CAP.	acre	4.35	1.0000	4.35	_____
TOTAL DIRECT EXPENSES				106.71	_____
FIXED EXPENSES					
Implements	acre	4.25	1.0000	4.25	_____
Tractors	acre	16.00	1.0000	16.00	_____
Self-Propelled	acre	32.93	1.0000	32.93	_____
TOTAL FIXED EXPENSES				53.18	_____
TOTAL SPECIFIED EXPENSES				159.89	_____

Table 7.B Estimated resource use and costs for field operations, per acre
Billet seedcane harvest,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
						-----dollars-----				dollars		-----dollars-----		
SC Billet Harvester	6 ft	0.700	1.00	Sep	56.47	32.93	5.33	4.12	0.77	11.78				101.18
SC Cane Wgn Billt HD 10Ton	MFWD 150	0.600	1.00	Sep	20.36	15.40	0.13	0.13	0.66	6.34				51.55
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77			2.81
TOTALS						78.01	48.93	5.46	4.25	1.51	18.89		0.00	155.54
INTEREST ON OPERATING CAPITAL														4.35
UNALLOCATED LABOR														0.00
TOTAL SPECIFIED COST														159.89

Table 8.A Estimated costs per acre,
Hand planting, 1-Row Wholestalk,
Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
LA Nitrogen	lb	0.63	15.0000	9.45	_____
LA Phosphate	lb	0.70	45.0000	31.50	_____
LA Potash	lb	0.51	45.0000	22.95	_____
HERBICIDES					
Sencor DF	lb	14.85	1.5000	22.28	_____
Prowl 3.3 EC	pt	4.29	7.2000	30.89	_____
LA SC Planting Labor					
Special Labor	acre	25.00	3.0000	75.00	_____
LA Hired Labor					
Tractors	hour	9.60	2.2505	21.61	_____
DIESEL FUEL					
Tractors	gal	3.50	17.0264	59.57	_____
REPAIR & MAINTENANCE					
Implements	acre	16.37	1.0000	16.37	_____
Tractors	acre	8.00	1.0000	8.00	_____
INTEREST ON OP. CAP.	acre	1.36	1.0000	1.36	_____
TOTAL DIRECT EXPENSES				298.98	_____
FIXED EXPENSES					
Implements	acre	25.26	1.0000	25.26	_____
Tractors	acre	49.25	1.0000	49.25	_____
TOTAL FIXED EXPENSES				74.51	_____
TOTAL SPECIFIED EXPENSES				373.49	_____

Table 8.B Estimated resource use and costs for field operations, per acre
Hand planting, 1-Row Wholestalk,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST
						-----dollars-----				dollars		-----dollars-----			
SC Rototiller	18 ft	MFWD 190	0.219	1.00	Sep	8.40	5.60	3.52	3.61	0.21	2.11			23.24	
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.69	0.84	0.12	1.15			9.18	
LA Nitrogen	lb											15.0000	0.63	9.45	
LA Phosphate	lb											45.0000	0.70	31.50	
LA Potash	lb											45.0000	0.51	22.95	
SC 3Row (Opener)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.47	0.58	0.12	1.15			8.70	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77			2.81	
SC Cane Planters Aid	6 ft	MFWD 150	1.000	1.00	Sep	30.83	23.34	8.44	17.78	1.00	9.60			89.99	
LA SC Planting Labor	acre									3.00	75.00			75.00	
SC 3Row (Cover)	18 ft	2WD 170	0.120	1.00	Sep	4.14	2.87	1.44	0.46	0.12	1.16			10.07	
SC Flat Roller	18 ft	MFWD 150	0.190	1.00	Sep	5.86	4.44	0.47	0.47	0.19	1.83			13.07	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77			2.81	
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.26	0.29	0.12	1.15			8.20	
Sencor DF	lb											1.5000	14.85	22.28	
Prowl 3.3 EC	pt											7.2000	4.29	30.89	
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Oct	3.70	2.80	0.69	0.84	0.12	1.15			9.18	
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Oct	1.18	0.60	0.13	0.13	0.08	0.77			2.81	
TOTALS						67.57	49.25	16.37	25.26	5.25	96.61			117.07	372.13
INTEREST ON OPERATING CAPITAL															1.36
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															373.49

Table 9.A Estimated costs per acre,
Mechanical planting, 1-Row
Wholestalk, Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
LA Nitrogen	lb	0.63	15.0000	9.45	_____
LA Phosphate	lb	0.70	45.0000	31.50	_____
LA Potash	lb	0.51	45.0000	22.95	_____
HERBICIDES					
Sencor DF	lb	14.85	1.5000	22.28	_____
Prowl 3.3 EC	pt	4.29	7.2000	30.89	_____
LA SC Planting Labor					
Special Labor	acre	25.00	2.0000	50.00	_____
LA Hired Labor					
Tractors	hour	9.60	1.9205	18.44	_____
DIESEL FUEL					
Tractors	gal	3.50	14.3544	50.23	_____
REPAIR & MAINTENANCE					
Implements	acre	11.62	1.0000	11.62	_____
Tractors	acre	6.75	1.0000	6.75	_____
INTEREST ON OP. CAP.	acre	10.57	1.0000	10.57	_____

TOTAL DIRECT EXPENSES				264.68	_____
FIXED EXPENSES					
Implements	acre	15.24	1.0000	15.24	_____
Tractors	acre	41.49	1.0000	41.49	_____

TOTAL FIXED EXPENSES				56.73	_____

TOTAL SPECIFIED EXPENSES				321.41	_____

Table 9.B Estimated resource use and costs for field operations, per acre
Mechanical planting, 1-Row Wholestalk,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
SC Rototiller	18 ft	MFWD 190	0.219	1.00	Sep	8.40	5.60	3.52	3.61	0.21	2.11				23.24
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.69	0.84	0.12	1.15				9.18
LA Nitrogen	lb											15.0000	0.63	9.45	9.45
LA Phosphate	lb											45.0000	0.70	31.50	31.50
LA Potash	lb											45.0000	0.51	22.95	22.95
SC 3Row (Opener)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.47	0.58	0.12	1.15				8.70
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Cane Plt-Whlstalk	6 ft	MFWD 150	0.670	1.00	Sep	20.66	15.64	3.69	7.76	0.67	6.43				54.18
LA SC Planting Labor	acre									2.00	50.00				50.00
SC 3Row (Cover)	18 ft	MFWD 150	0.120	1.00	Sep	3.72	2.81	1.44	0.46	0.12	1.16				9.59
SC Flat Roller	18 ft	MFWD 150	0.190	1.00	Sep	5.86	4.44	0.47	0.47	0.19	1.83				13.07
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Oct	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Sencor DF	lb											1.5000	14.85	22.28	22.28
Prowl 3.3 EC	pt											7.2000	4.29	30.89	30.89
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Nov	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Nov	1.18	0.60	0.13	0.13	0.08	0.77				2.81
TOTALS						56.98	41.49	11.62	15.24	3.92	68.44			117.07	310.84
INTEREST ON OPERATING CAPITAL															10.57
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															321.41

Table 10.A Estimated costs per acre,
Mechanical planting, 1-Row Billet,
Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
LA Nitrogen	lb	0.63	15.0000	9.45	_____
LA Phosphate	lb	0.70	45.0000	31.50	_____
LA Potash	lb	0.51	45.0000	22.95	_____
HERBICIDES					
Sencor DF	lb	14.85	1.5000	22.28	_____
Prowl 3.3 EC	pt	4.29	7.2000	30.89	_____
LA SC Planting Labor					
Special Labor	acre	25.00	1.0000	25.00	_____
LA Hired Labor					
Tractors	hour	9.60	1.9205	18.44	_____
DIESEL FUEL					
Tractors	gal	3.50	14.3544	50.23	_____
REPAIR & MAINTENANCE					
Implements	acre	11.62	1.0000	11.62	_____
Tractors	acre	6.75	1.0000	6.75	_____
INTEREST ON OP. CAP.	acre	9.50	1.0000	9.50	_____
TOTAL DIRECT EXPENSES				238.61	_____
FIXED EXPENSES					
Implements	acre	15.24	1.0000	15.24	_____
Tractors	acre	41.49	1.0000	41.49	_____
TOTAL FIXED EXPENSES				56.73	_____
TOTAL SPECIFIED EXPENSES				295.34	_____

Table 10.B Estimated resource use and costs for field operations, per acre
Mechanical planting, 1-Row Billet,
Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----		-----dollars-----		dollars		-----dollars-----			
SC Rototiller	18 ft	MFWD 190	0.219	1.00	Sep	8.40	5.60	3.52	3.61	0.21	2.11				23.24
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.69	0.84	0.12	1.15				9.18
LA Nitrogen	lb											15.0000	0.63	9.45	9.45
LA Phosphate	lb											45.0000	0.70	31.50	31.50
LA Potash	lb											45.0000	0.51	22.95	22.95
SC 3Row (Opener)	18 ft	MFWD 150	0.120	1.00	Sep	3.70	2.80	0.47	0.58	0.12	1.15				8.70
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Cane Plt-1R Bille	1 row	MFWD 150	0.670	1.00	Sep	20.66	15.64	3.69	7.76	0.67	6.43				54.18
LA SC Planting Labor	acre									1.00	25.00				25.00
SC 3Row (Cover)	18 ft	MFWD 150	0.120	1.00	Sep	3.72	2.81	1.44	0.46	0.12	1.16				9.59
SC Flat Roller	18 ft	MFWD 150	0.190	1.00	Sep	5.86	4.44	0.47	0.47	0.19	1.83				13.07
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Sep	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Oct	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Sencor DF	lb											1.5000	14.85	22.28	22.28
Prowl 3.3 EC	pt											7.2000	4.29	30.89	30.89
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Nov	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Nov	1.18	0.60	0.13	0.13	0.08	0.77				2.81
TOTALS						56.98	41.49	11.62	15.24	2.92	43.44			117.07	285.84
INTEREST ON OPERATING CAPITAL															9.50
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															295.34

Table 11.A Estimated costs per acre,
 Plant cane field operations,
 Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (2 gal)	appl	3.75	2.0000	7.50	_____
FERTILIZERS					
LA Nitrogen	lb	0.63	80.0000	50.40	_____
LA Potash	lb	0.51	80.0000	40.80	_____
HERBICIDES					
Sencor DF	lb	14.85	0.7500	11.14	_____
Prowl 3.3 EC	pt	4.29	3.6000	15.44	_____
LA Weedmaster	qt	7.50	0.7500	5.63	_____
LA Asulox/Asulam	gal	39.00	0.5000	19.50	_____
Treflan HFP	pt	3.12	4.0000	12.48	_____
Atrazine 4L	pt	2.04	4.0000	8.16	_____
INSECTICIDES					
Confirm 2F	oz	1.68	16.0000	26.88	_____
SERVICE FEE					
Crop Consultant	acre	5.00	1.0000	5.00	_____
ADJUVANTS					
Surfactant	pt	2.62	3.2000	8.38	_____
LA Hired Labor					
Tractors	hour	9.60	1.9381	18.60	_____
DIESEL FUEL					
Tractors	gal	3.50	13.4200	46.93	_____
REPAIR & MAINTENANCE					
Implements	acre	6.70	1.0000	6.70	_____
Tractors	acre	6.39	1.0000	6.39	_____
INTEREST ON OP. CAP.	acre	6.04	1.0000	6.04	_____
TOTAL DIRECT EXPENSES				295.97	_____
FIXED EXPENSES					
Implements	acre	8.53	1.0000	8.53	_____
Tractors	acre	38.88	1.0000	38.88	_____
TOTAL FIXED EXPENSES				47.41	_____
TOTAL SPECIFIED EXPENSES				343.38	_____

Table 11.B Estimated resource use and costs for field operations, per acre
 Plant cane field operations,
 Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
SC 3Row (Offbar)	18 ft	MFWD 150	0.120	1.00	Feb	3.70	2.80	0.69	0.85	0.12	1.15				9.19
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Feb	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Sencor DF	lb											0.7500	14.85	11.14	11.14
Prowl 3.3 EC	pt											3.6000	4.29	15.44	15.44
LA Weedmaster	qt											0.7500	7.50	5.63	5.63
SC Fert 3Row Lq App	18 ft	MFWD 150	0.130	1.00	Mar	4.01	3.03	0.36	0.56	0.13	1.25				9.21
LA Nitrogen	lb											80.0000	0.63	50.40	50.40
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	2.00	Mar	7.41	5.60	1.37	1.68	0.24	2.30				18.36
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Fert DrySlingApp	42 ft	MFWD 150	0.059	1.00	Apr	1.85	1.40	0.23	0.32	0.05	0.58				4.38
LA Potash	lb											80.0000	0.51	40.80	40.80
Disk Bed (Hipper)	4R-38	MFWD 150	0.147	1.00	Apr	4.55	3.45	0.29	0.79	0.14	1.42				10.50
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Apr	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Apr	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.26	0.29	0.12	1.15				8.20
LA Asulox/Asulam	gal											0.5000	39.00	19.50	19.50
Surfactant	pt											1.6000	2.62	4.19	4.19
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	May	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Treflan HFP	pt											4.0000	3.12	12.48	12.48
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Atrazine 4L	pt											4.0000	2.04	8.16	8.16
Surfactant	pt											1.6000	2.62	4.19	4.19
App by Air (2 gal)	appl			1.00	Jun							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
App by Air (2 gal)	appl			1.00	Jul							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
Crop Consultant	acre			1.00	Aug							1.0000	5.00	5.00	5.00
TOTALS						53.32	38.88	6.70	8.53	1.93	18.60			211.31	337.34
INTEREST ON OPERATING CAPITAL															6.04
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															343.38

Table 12.A Estimated costs per acre,
 First Stubble field operations,
 Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (2 gal)	appl	3.75	3.0000	11.25	_____
FERTILIZERS					
LA Nitrogen	lb	0.63	100.0000	63.00	_____
LA Phosphate	lb	0.70	40.0000	28.00	_____
LA Potash	lb	0.51	100.0000	51.00	_____
Sulfur	lb	0.30	24.0000	7.20	_____
HERBICIDES					
Sencor DF	lb	14.85	0.7500	11.14	_____
Prowl 3.3 EC	pt	4.29	3.6000	15.44	_____
LA Weedmaster	qt	7.50	0.7500	5.63	_____
LA Asulox/Asulam	gal	39.00	0.5000	19.50	_____
Treflan HFP	pt	3.12	4.0000	12.48	_____
Atrazine 4L	pt	2.04	4.0000	8.16	_____
INSECTICIDES					
Confirm 2F	oz	1.68	16.0000	26.88	_____
GROWTH REGULATORS					
LA Polado	oz	0.38	8.0000	3.04	_____
SERVICE FEE					
Crop Consultant	acre	5.00	1.0000	5.00	_____
ADJUVANTS					
Surfactant	pt	2.62	4.8000	12.58	_____
LA Hired Labor					
Tractors	hour	9.60	2.1506	20.63	_____
DIESEL FUEL					
Tractors	gal	3.50	15.0607	52.67	_____
REPAIR & MAINTENANCE					
Implements	acre	8.06	1.0000	8.06	_____
Tractors	acre	7.21	1.0000	7.21	_____
INTEREST ON OP. CAP.	acre	8.02	1.0000	8.02	_____
TOTAL DIRECT EXPENSES				376.88	_____
FIXED EXPENSES					
Implements	acre	9.74	1.0000	9.74	_____
Tractors	acre	43.83	1.0000	43.83	_____
TOTAL FIXED EXPENSES				53.57	_____
TOTAL SPECIFIED EXPENSES				430.45	_____

Table 12.B Estimated resource use and costs for field operations, per acre
 First Stubble field operations,
 Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
SC 3Row (Offbar)	18 ft	MFWD 150	0.120	2.00	Feb	7.41	5.60	1.38	1.70	0.24	2.30				18.39
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Feb	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Sencor DF	lb											0.7500	14.85	11.14	11.14
Prowl 3.3 EC	pt											3.6000	4.29	15.44	15.44
LA Weedmaster	qt											0.7500	7.50	5.63	5.63
SC Fert 3Row Lq App	18 ft	MFWD 150	0.130	1.00	Mar	4.01	3.03	0.36	0.56	0.13	1.25				9.21
LA Nitrogen	lb											100.0000	0.63	63.00	63.00
SC 3Row (Offbar)	18 ft	MFWD 150	0.120	2.00	Mar	7.41	5.60	1.38	1.70	0.24	2.30				18.39
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Fert DrySlingApp	42 ft	MFWD 150	0.059	1.00	Mar	1.85	1.40	0.23	0.32	0.05	0.58				4.38
LA Phosphate	lb											40.0000	0.70	28.00	28.00
LA Potash	lb											100.0000	0.51	51.00	51.00
Sulfur	lb											24.0000	0.30	7.20	7.20
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Surfactant	pt											1.6000	2.62	4.19	4.19
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Apr	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.26	0.29	0.12	1.15				8.20
LA Asulox/Asulam	gal											0.5000	39.00	19.50	19.50
Surfactant	pt											1.6000	2.62	4.19	4.19
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	May	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Treflan HPP	pt											4.0000	3.12	12.48	12.48
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Atrazine 4L	pt											4.0000	2.04	8.16	8.16
Surfactant	pt											1.6000	2.62	4.19	4.19
App by Air (2 gal)	appl			1.00	Jun							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
App by Air (2 gal)	appl			1.00	Jul							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
App by Air (2 gal)	appl			1.00	Sep							1.0000	3.75	3.75	3.75
LA Polado	oz											8.0000	0.38	3.04	3.04
Crop Consultant	acre			1.00	Sep							1.0000	5.00	5.00	5.00
TOTALS						59.88	43.83	8.06	9.74	2.15	20.63			280.29	422.43
INTEREST ON OPERATING CAPITAL															8.02
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															430.45

Table 13.A Estimated costs per acre,
 Second Stubble and older field operations,
 Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (2 gal)	appl	3.75	3.0000	11.25	_____
FERTILIZERS					
LA Nitrogen	lb	0.63	110.0000	69.30	_____
LA Phosphate	lb	0.70	40.0000	28.00	_____
LA Potash	lb	0.51	100.0000	51.00	_____
Sulfur	lb	0.30	24.0000	7.20	_____
HERBICIDES					
Sencor DF	lb	14.85	0.7500	11.14	_____
Prowl 3.3 EC	pt	4.29	3.6000	15.44	_____
LA Weedmaster	qt	7.50	0.7500	5.63	_____
LA Asulox/Asulam	gal	39.00	0.5000	19.50	_____
Treflan HFP	pt	3.12	4.0000	12.48	_____
Atrazine 4L	pt	2.04	4.0000	8.16	_____
INSECTICIDES					
Confirm 2F	oz	1.68	16.0000	26.88	_____
GROWTH REGULATORS					
LA Polado	oz	0.38	8.0000	3.04	_____
SERVICE FEE					
Crop Consultant	acre	5.00	1.0000	5.00	_____
ADJUVANTS					
Surfactant	pt	2.62	3.2000	8.38	_____
LA Hired Labor					
Tractors	hour	9.60	2.0306	19.48	_____
DIESEL FUEL					
Tractors	gal	3.50	14.1338	49.43	_____
REPAIR & MAINTENANCE					
Implements	acre	7.80	1.0000	7.80	_____
Tractors	acre	6.75	1.0000	6.75	_____
INTEREST ON OP. CAP.	acre	7.98	1.0000	7.98	_____
TOTAL DIRECT EXPENSES				373.84	_____
FIXED EXPENSES					
Implements	acre	9.45	1.0000	9.45	_____
Tractors	acre	41.03	1.0000	41.03	_____
TOTAL FIXED EXPENSES				50.48	_____
TOTAL SPECIFIED EXPENSES				424.32	_____

Table 13.B Estimated resource use and costs for field operations, per acre
 Second Stubble and older field operations,
 Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
SC 3Row (Offbar)	18 ft	MFWD 150	0.120	2.00	Feb	7.41	5.60	1.38	1.70	0.24	2.30				18.39
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Feb	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Fert 3Row Lq App	18 ft	MFWD 150	0.130	1.00	Mar	4.01	3.03	0.36	0.56	0.13	1.25				9.21
LA Nitrogen	lb											110.0000	0.63	69.30	69.30
SC 3Row (Offbar)	18 ft	MFWD 150	0.120	2.00	Mar	7.41	5.60	1.38	1.70	0.24	2.30				18.39
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Fert DrySlingApp	42 ft	MFWD 150	0.059	1.00	Mar	1.85	1.40	0.23	0.32	0.05	0.58				4.38
LA Phosphate	lb											40.0000	0.70	28.00	28.00
LA Potash	lb											100.0000	0.51	51.00	51.00
Sulfur	lb											24.0000	0.30	7.20	7.20
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Mar	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Mar	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Sencor DF	lb											0.7500	14.85	11.14	11.14
Prowl 3.3 EC	pt											3.6000	4.29	15.44	15.44
LA Weedmaster	qt											0.7500	7.50	5.63	5.63
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	Apr	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	Apr	3.70	2.80	0.26	0.29	0.12	1.15				8.20
LA Asulox/Asulam	gal											0.5000	39.00	19.50	19.50
Surfactant	pt											1.6000	2.62	4.19	4.19
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Drain Cleaner	6 ft	MFWD 75	0.080	1.00	May	1.18	0.60	0.13	0.13	0.08	0.77				2.81
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Treflan HPP	pt											4.0000	3.12	12.48	12.48
SC 3Row (Hipper)	18 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.69	0.84	0.12	1.15				9.18
SC Boom Sprayer	16 ft	MFWD 150	0.120	1.00	May	3.70	2.80	0.26	0.29	0.12	1.15				8.20
Atrazine 4L	pt											4.0000	2.04	8.16	8.16
Surfactant	pt											1.6000	2.62	4.19	4.19
App by Air (2 gal)	appl			1.00	Jun							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
App by Air (2 gal)	appl			1.00	Jul							1.0000	3.75	3.75	3.75
Confirm 2F	oz											8.0000	1.68	13.44	13.44
App by Air (2 gal)	appl			1.00	Aug							1.0000	3.75	3.75	3.75
LA Polado	oz											8.0000	0.38	3.04	3.04
Crop Consultant	acre			1.00	Sep							1.0000	5.00	5.00	5.00
TOTALS						56.18	41.03	7.80	9.45	2.03	19.48			282.40	416.34
INTEREST ON OPERATING CAPITAL															7.98
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															424.32

Table 14.A Estimated costs per acre,
Harvest-1R Combine Harvester, 10-Ton High Dump wagons,
Custom truck/trailer haul, Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.7700	11.78	_____
LA Hired Labor					
Tractors	hour	9.60	2.0600	19.79	_____
DIESEL FUEL					
Tractors	gal	3.50	15.5962	54.60	_____
Self-Propelled	gal	3.50	8.4000	29.40	_____
REPAIR & MAINTENANCE					
Implements	acre	16.12	1.0000	16.12	_____
Tractors	acre	7.66	1.0000	7.66	_____
Self-Propelled	acre	27.07	1.0000	27.07	_____
INTEREST ON OP. CAP.	acre	6.49	1.0000	6.49	_____
TOTAL DIRECT EXPENSES				172.91	_____
FIXED EXPENSES					
Implements	acre	12.49	1.0000	12.49	_____
Tractors	acre	46.80	1.0000	46.80	_____
Self-Propelled	acre	32.93	1.0000	32.93	_____
TOTAL FIXED EXPENSES				92.22	_____
TOTAL SPECIFIED EXPENSES				265.13	_____

Table 14.B Estimated resource use and costs for field operations, per acre
Harvest-1R Combine Harvester, 10-Ton High Dump wagons,
Custom truck/trailer haul, Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
						-----dollars-----				dollars		-----dollars-----		
SC Billet Harvester	6 ft	0.700	1.00	Nov	56.47	32.93			0.77	11.78				101.18
SC Cane Wgn Billt HD 10Ton	MFWD 150	0.600	1.00	Nov	20.36	15.40	5.33	4.12	0.66	6.34				51.55
SC Cane Wgn Billt HD 10Ton	MFWD 150	0.600	1.00	Nov	20.36	15.40	5.33	4.12	0.66	6.34				51.55
SC Cane Wgn Billt HD 10Ton	MFWD 150	0.600	1.00	Nov	20.36	15.40	5.33	4.12	0.66	6.34				51.55
SC Drain Cleaner	6 ft	0.080	1.00	Nov	1.18	0.60	0.13	0.13	0.08	0.77				2.81
TOTALS					118.73	79.73	16.12	12.49	2.83	31.57			0.00	258.64
INTEREST ON OPERATING CAPITAL														6.49
UNALLOCATED LABOR														0.00
TOTAL SPECIFIED COST														265.13

Table 15.A Estimated costs per acre,
Harvest-2-row Wholestalk, 10-ton transfer wagons,
Custom truck/trailer haul, Sugarcane, Louisiana, 2012.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.4268	6.53	_____
LA Hired Labor					
Tractors	hour	9.60	1.2499	12.00	_____
Self-Propelled	hour	9.60	0.6053	5.81	_____
DIESEL FUEL					
Tractors	gal	3.50	9.0717	31.75	_____
Self-Propelled	gal	3.50	6.3811	22.33	_____
REPAIR & MAINTENANCE					
Implements	acre	1.51	1.0000	1.51	_____
Tractors	acre	4.42	1.0000	4.42	_____
Self-Propelled	acre	28.47	1.0000	28.47	_____
INTEREST ON OP. CAP.	acre	4.39	1.0000	4.39	_____
TOTAL DIRECT EXPENSES				117.21	_____
FIXED EXPENSES					
Implements	acre	2.18	1.0000	2.18	_____
Tractors	acre	27.02	1.0000	27.02	_____
Self-Propelled	acre	41.87	1.0000	41.87	_____
TOTAL FIXED EXPENSES				71.07	_____
TOTAL SPECIFIED EXPENSES				188.28	_____

Table 15.B Estimated resource use and costs for field operations, per acre
Harvest-2R Wholestalk, 10-ton transfer wagons,
Custom truck/trailer haul, Sugarcane, Louisiana, 2012.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
SC Harvester 2Rw		12 ft	0.388	1.00	Nov	27.84	22.05			0.42	6.53			56.42
SC Burning Unit	18 ft	MFWD 75	0.149	1.00	Nov	2.25	1.34	0.25	0.42	0.14	1.44			5.70
SC Loader 2Rw		12 ft	0.300	1.00	Nov	15.10	13.06			0.33	3.17			31.33
SC Cane Wagon 10T	10 Ton	MFWD 150	0.500	1.00	Nov	16.96	12.84	0.63	0.88	0.55	5.28			36.59
SC Cane Wagon 10T	10 Ton	MFWD 150	0.500	1.00	Nov	16.96	12.84	0.63	0.88	0.55	5.28			36.59
SC Transloader			0.250	1.00	Nov	7.86	6.76			0.27	2.64			17.26
TOTALS						86.97	68.89	1.51	2.18	2.28	24.34		0.00	183.89
INTEREST ON OPERATING CAPITAL														4.39
UNALLOCATED LABOR														0.00
TOTAL SPECIFIED COST														188.28

APPENDIX A

PROCEDURE FOR USING BUDGETS TO ESTIMATE COSTS AND RETURNS

Select the appropriate budgets to reflect your farm situation. This typically includes a cost budget for fallow activities and seedbed preparation, cultured and propagated seedcane, planting seed cane (hand or mechanical), cultural practices for each sugarcane crop (i.e., plantcane, first stubble, second stubble and older, and succession plant as applicable), specified harvest activities, and overhead costs. Income budgets are required for each sugarcane crop producing income.

The situation in this illustration assumes a 1,000 acre sugarcane farm which employs new 3-row equipment and has implemented a cultured seedcane program. The illustration assumes an extended 5 year rotation scheme (harvest through third stubble crop) presented in Table 2A. Its structure contains 20 percent plantcane, 20 percent first stubble, 20 percent second stubble, 20 percent 3rd stubble and 20 percent fallow/plant. Purchased cultured seedcane is expanded twice before being planted as millable cane (plantcane only used for seed), with its first and second stubble being grown for sugar. One acre of propagated seed cane is harvested and used for seed for each five acres to be planted. The cost and yield information used in the illustration comes from tables 4, 5, 6, 8, 9, 11, 12, 13, and 14.

The mill charge is assumed to be payment-in-kind, 39 percent of the total value of raw sugar output. This percentage represents approximately the average share of the sugarcane crop taken by the mill as payment for processing. The illustration assumes a tenant-operator situation, where land cost is 20 percent (one-fifth share) of the raw sugar output remaining after mill charges are removed (12.2% of total production). For illustrative purposes, a selling price of raw sugar of 34.0 cents per pound and a molasses price of 60.0 cents per gallon are used in calculating returns.

COST CALCULATION

Total specified cost per acre presented in each of the budget tables is multiplied by the appropriate number of acres to give total farm cost.

Crop	Total Specified Cost per Acre	Acres	Total Farm Cost
	(dollars/acre)	(acres)	(dollars)
Fallow Field and Seedbed Preparation	241.17	200.00	48,234.00
Cultured Seed Cane	536.68	3.30	1,771.04
Hand Planting Seedcane	373.49	3.30	1,232.52
Wholestalk Seedcane Harvest	130.45	39.40	5,139.73
Mechanical Planting Seedcane	321.41	196.70	63,221.35
Plant Cane Field Operations	343.38	200.00	68,676.00
1st Stubble Field Operations	430.45	200.00	86,090.00
2nd Stubble Field Operations	424.32	200.00	84,864.00
3rd Stubble Field Operations	424.32	200.00	84,864.00
Harvest for Sugar	263.13	760.60	200,136.68
Overhead	30.00	1000.00	30,000.00
			=====
Total Specified Expenses			674,229.32

OUTPUT CALCULATIONS

RAW SUGAR

Total raw sugar output is determined by multiplying the raw sugar yield per acre for each crop by the number of acres of each crop.

Crop	Tons of Cane per Acre	CRS	Raw Sugar per Acre	Acres	Total Raw Sugar
	(tons/acre)	(lbs/ton)	(cwt/acre)	(acres)	(cwt)
Plantcane	37.0	215.00	79.55	160.60	12,775.73
1st Stubble	36.0	215.00	77.40	200.00	15,480.00
2nd Stubble	34.0	215.00	73.10	200.00	14,620.00
3rd Stubble	33.0	215.00	70.95	200.00	14,190.00
Total					57,065.73

MOLASSES

The total molasses output is determined by multiplying the total raw sugar output for each crop by the molasses-to-raw sugar ratio, (assumed to be 3.0 gallons of molasses per cwt. of raw sugar).

Crop	Total Raw Sugar	Molasses/Sugar Ratio	Total Molasses
	(cwt)	(gallons/cwt)	(gallons)
Plantcane	12,775.73	3.0	38,327.19
1st Stubble	15,480.00	3.0	46,440.00
2nd Stubble	14,620.00	3.0	43,860.00
3rd Stubble	14,190.00	3.0	42,570.00
Total			171,191.19

ADJUSTMENT FOR MILL CHARGE AND LAND RENT

Total raw sugar output is reduced by the mill share and the landlord share (39% and 12.2% respectively) to determine the portion of output available to a tenant grower to cover production costs.

Commodity	Total Output	Mill Share	Landlord Share	Grower Share	
	----- (cwt) -----				
Sugar	57,065.73	(22,255.63)	(6,962.02)	27,848.08	"one-fifth share rent"
	57,065.73	(22,255.63)	(5,802.84)	29,007.25	"one-sixth share rent"

The returns from molasses are typically shared between the mill, the landlord and the grower. Mill share of molasses arrangements vary from mill to mill. In this example, the mill receives the first six cents of the selling price per gallon and one half of the remaining value. The portion going to the grower (and landlord) is called the molasses bonus. The landlord receives 20 percent of molasses bonus, after mill share is deducted.

Commodity	Total Output	Mill Share	Landlord Share	Grower Share
	----- (dollars) -----			
Molasses	102,718.31	(56,495.07)	(9,244.65)	36,978.59

RETURN CALCULATIONS

Net returns to cover cost are calculated by summing income generated by the net output of raw sugar to cover production cost, the molasses bonus, and subtracting the American Sugar Cane League checkoff.

Commodity	Unit	Quantity	Unit Price	Net Returns to Cover Costs
Sugar	cwt.	27,848.08	34	946,834.59
Hauling Rebate	tons	19,942.20	0.00	0.00
Molasses bonus	gal.	61,630.99	0.60	36,978.59
ASCL checkoff	tons	26,542.20	-0.14	(3,715.91)
Total				980,097.28

ECONOMIC ANALYSIS

The information resulting from the calculations above can be used to determine total cost per acre and other relevant cost measures per unit of raw sugar.

TOTAL COST PER ACRE

Total cost per acre is simply total farm cost divided by the total acres.

Total Farm Cost	Total Acres	Total Farm Cost per Acre
(dollars)	(acres)	(dollars/acre)
674,229	1,000	674.23

PRODUCTION COST PER UNIT OF OUTPUT AVAILABLE TO COVER PRODUCTION COST

Production cost per unit of output is calculated by dividing total farm cost by the value of the producer's share of total sugar output to arrive at a production cost value per pound of raw sugar produced.

Total Farm Cost	Pounds of Sugar to Cover Cost	Total Farm Cost per Pound of Sugar Produced
(dollars)	(lbs)	(dollars/lb)
<u>Direct Costs</u> 504,570	2,784,808	0.181
<u>Direct and Fixed Costs</u> 644,229	2,784,808	0.231
<u>Direct, Fixed and Overhead Costs</u> 674,229	2,784,808	0.242

Appendix Table 1 Estimated fuel prices, labor wage rates, and interest rates, Louisiana 2012

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	3.50
Gasoline	gal	3.50
LABOR TYPES		
Operator	hour	15.30
Hired	hour	9.60
Special	acre	25.00
INTEREST RATES		
Short-term	%	4.25
Intermediate-term	%	5.25

Appendix Table 2. Tractors: estimated useful life, annual use, purchase price, repair cost, fuel consumption rate, and direct and fixed cost per hour, Louisiana 2012

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hr-----					
Tractor(40-59hp)Cab	2WD 50	31,500	600	8	2.57	9.60	9.00	0.98	19.59	6.02	25.61
Tractor(40-59hp)Cab	MFWD 50	32,900	600	8	2.57	9.60	9.00	1.02	19.63	6.29	25.92
Tractor(40-59hp)RB	2WD 50	25,500	600	8	2.57	9.60	9.00	0.79	19.40	4.87	24.28
Tractor(40-59hp)RB	MFWD 50	30,100	600	8	2.57	9.60	9.00	0.94	19.54	5.75	25.30
Tractor(60-89hp)CAB	2WD 75	42,100	600	8	3.86	9.60	13.51	1.31	24.42	8.05	32.48
Tractor(60-89hp)CAB	MFWD 75	46,600	600	8	3.86	9.60	13.51	1.45	24.56	8.91	33.48
Tractor(60-89hp)RB	2WD 75	35,600	600	8	3.86	9.60	13.51	1.11	24.22	6.80	31.03
Tractor(60-89hp)RB	MFWD 75	39,300	600	8	3.86	9.60	13.51	1.22	24.33	7.51	31.85
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	9.60	18.91	2.04	30.55	12.49	43.04
Tractor(90-119hp)CB	MFWD 105	69,600	600	8	5.40	9.60	18.91	2.17	30.69	13.31	44.00
Tractor(90-119hp)RB	2WD 105	52,700	600	8	5.40	9.60	18.91	1.64	30.16	10.08	40.24
Tractor(90-119hp)RB	MFWD 105	55,500	600	8	5.40	9.60	18.91	1.73	30.25	10.61	40.86
Tractor(120-139hp)CB	2WD 130	97,500	600	8	6.69	9.60	23.41	3.04	36.06	18.65	54.71
Tractor(120-139hp)CB	MFWD 130	98,000	600	8	6.69	9.60	23.41	3.06	36.08	18.74	54.82
Tractor(140-159hp)CB	2WD 150	113,000	600	8	7.72	9.60	27.02	3.53	40.15	21.61	61.77
Tractor(140-159hp)CB	MFWD 150	122,000	600	8	7.72	9.60	27.02	3.81	40.43	23.33	63.77
Tractor(160-179hp)CB	2WD 170	119,000	600	8	8.75	9.60	30.62	3.71	43.94	23.79	67.73
Tractor(160-179hp)CB	MFWD 170	135,000	600	8	8.75	9.60	30.62	4.21	44.44	26.99	71.43
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	9.60	32.42	4.45	46.48	28.53	75.02
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	9.60	34.22	4.46	48.29	28.59	76.88
Tractor(180-199hp)CB	MFWD 190	127,500	600	8	9.77	9.60	34.22	3.98	47.81	25.49	73.30
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	9.60	40.53	4.59	54.73	29.40	84.13
Tractor(200-249hp)CB	MFWD 225	191,000	600	8	11.58	9.60	40.53	5.96	56.10	38.18	94.29
Tractor(200-249hp)CB	Track 225	212,000	600	8	11.58	9.60	40.53	6.62	56.75	42.38	99.14
Tractor(250-349hp)CB	4WD 300	211,000	600	8	15.44	9.60	54.04	6.59	70.24	42.18	112.42
Tractor(250-349hp)CB	Track 300	225,000	600	8	15.44	9.60	54.04	7.03	70.67	44.98	115.66
Tractor(350-449hp)CB	4WD 400	245,000	600	8	20.58	9.60	72.06	7.65	89.31	48.98	138.30
Tractor(350-449hp)CB	Track 400	305,000	600	8	20.58	9.60	72.06	9.53	91.19	60.98	152.17
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	9.60	85.57	8.74	103.91	55.95	159.87

Appendix Table 3. Self-propelled machines: estimated performance rate, useful life, annual use, purchase price, repair cost, fuel consumption rate, and direct and fixed cost per hour and per acre, Louisiana 2012

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
LA Pickup Truck	1/2 ton	25,000	800	5	2.50	1.000	9.60	8.75	2.81	21.16	6.70	27.86
SC Billet Harvester	6 ft	290,000	750	10	12.00	0.700	11.78	29.40	27.06	68.24	32.92	101.17
SC Harvester 1Rw	6 ft	115,000	400	12	6.80	0.875	14.72	20.82	20.96	56.51	27.22	83.74
SC Harvester 2Rw	12 ft	210,000	400	12	8.00	0.388	6.53	10.86	16.97	34.36	22.04	56.41
SC Loader 1Rw	6 ft	85,000	425	10	5.10	0.598	6.32	10.68	8.74	25.75	14.75	40.51
SC Loader 2Rw	12 ft	150,000	425	10	7.00	0.300	3.17	7.35	7.73	18.26	13.06	31.32
SC Transloader		30,000	120	12	4.70	0.250	2.64	4.11	3.75	10.50	6.76	17.26
SC Truck&Trailer	30 Ton	45,000	400	10	7.00	1.000	10.56	24.50	7.87	42.93	13.86	56.79
Sprayer(300-450Gal)	60'	98,100	350	8	5.66	0.017	0.28	0.34	0.09	0.72	0.61	1.34
Sprayer(300-450Gal)	80'	102,000	350	8	5.66	0.013	0.21	0.26	0.07	0.54	0.48	1.02
Sprayer(600-750Gal)	60'	154,000	350	8	10.29	0.017	0.28	0.63	0.14	1.06	0.97	2.03
Sprayer(600-825Gal)	80'	154,000	350	8	10.29	0.013	0.21	0.47	0.10	0.79	0.72	1.52
Sprayer(600-825Gal)	90'	223,000	350	8	10.29	0.011	0.18	0.42	0.14	0.75	0.93	1.69
Sprayer(1000-1400Gal)	90'	256,000	350	8	14.15	0.014	0.22	0.69	0.19	1.11	1.29	2.41
Sprayer(1200PlusGal)	120'	266,000	350	8	15.44	0.008	0.14	0.47	0.12	0.74	0.83	1.58

Appendix Table 4. Implements: estimated performance rate, useful life, annual use, purchase price, repair cost, and direct and fixed cost per hour and per acre, Louisiana 2012.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Total Imp. P.U. Direct		--Fixed--- Total Imp. P.U. Cost			
			dollars	hours	years	hr/ac	-----\$/acre-----							
SC 3Row (Cover)	18 ft	MFWD 150	10,750	200	9	0.120	1.15	3.25	1.43	0.45	6.31	0.45	2.81	9.57
SC 3Row (Hipper)	18 ft	MFWD 150	10,500	200	9	0.120	1.15	3.24	0.68	0.45	5.54	0.84	2.80	9.18
SC 3Row (Marker)	18 ft	MFWD 150	8,800	200	9	0.120	1.15	3.24	0.58	0.45	5.44	0.70	2.80	8.94
SC 3Row (Offbar)	18 ft	MFWD 150	11,500	200	10	0.120	1.15	3.24	0.69	0.45	5.54	0.85	2.80	9.19
SC 3Row (Opener)	18 ft	MFWD 150	7,800	200	10	0.120	1.15	3.24	0.46	0.45	5.32	0.57	2.80	8.70
SC 3Row Plow	18 ft	MFWD 190	17,000	200	9	0.120	1.15	4.10	1.11	0.47	6.85	1.36	3.06	11.27
SC Blade	8 ft	MFWD 150	3,500	100	12	0.877	8.42	23.70	2.55	3.34	38.02	2.25	20.47	60.75
SC Boom Sprayer	16 ft	MFWD 150	2,900	150	10	0.120	1.15	3.24	0.25	0.45	5.10	0.28	2.80	8.19
SC Burning Unit	18 ft	2WD 105	1,300	85	6	0.149	1.43	2.83	0.24	0.30	4.82	0.42	1.87	7.12
SC Cane Planters Aid	6 ft	MFWD 150	4,500	20	20	1.000	9.60	27.02	8.43	3.81	48.87	17.77	23.33	89.98
SC Cane Plt-1R Bille	1 row	MFWD 150	22,000	150	20	0.670	6.43	18.10	3.68	2.55	30.77	7.76	15.63	54.17
SC Cane Plt-3R Bille	3 row	2WD 50	34,000	50	20	0.200	1.92	1.80	5.10	0.15	8.98	10.74	0.97	20.70
SC Cane Plt-Whlstalk	6 ft	MFWD 150	22,000	150	20	0.670	6.43	18.10	3.68	2.55	30.77	7.76	15.63	54.17
SC Cane Wagon 10T	10 Ton	MFWD 150	7,500	400	15	0.500	5.28	14.86	0.62	2.09	22.86	0.87	11.66	35.40
SC Cane Wgn Billt HD	10Ton	MFWD 150	40,000	750	9	0.600	6.33	17.83	5.33	2.51	32.02	4.12	14.00	50.14
SC Chisel Plow	13 ft	MFWD 190	6,000	200	6	0.219	2.10	7.52	0.96	0.87	11.47	1.21	5.60	18.29
SC Chisel Plow	23 ft	MFWD 190	12,000	200	6	0.120	1.15	4.10	0.49	0.47	6.23	1.32	3.06	10.61
SC Cultimulcher	12 ft	2WD 105	5,500	120	15	0.110	1.05	2.08	0.29	0.22	3.65	0.47	1.37	5.50
SC Cultivate + Post	6 Row	2WD 170	8,200	200	10	0.110	1.05	3.36	0.39	0.40	5.23	0.55	2.61	8.40
SC Cultivator	30" 6 Row	2WD 150	5,350	200	10	0.140	1.34	3.78	0.32	0.49	5.95	0.46	3.02	9.44
SC Disk	12 ft	2WD 50	8,500	200	10	0.149	1.43	1.35	0.56	0.11	3.46	0.78	0.73	4.98
SC Disk	20 ft	MFWD 190	17,500	200	10	0.100	0.96	3.42	0.77	0.39	5.55	1.07	2.54	9.17
SC Disk	26 ft	2WD 170	21,000	200	10	0.069	0.67	2.14	0.64	0.26	3.72	0.90	1.66	6.29
SC Disk + Pre	6 row	2WD 170	9,250	200	10	0.100	0.96	3.06	0.40	0.37	4.80	0.56	2.37	7.75
SC Drain Cleaner	6 ft	MFWD 75	3,750	300	9	0.080	0.76	1.08	0.13	0.09	2.08	0.13	0.60	2.81
SC Fert 3Row Lq App	18 ft	MFWD 150	7,000	200	10	0.130	1.24	3.51	0.36	0.49	5.62	0.56	3.03	9.21
SC Fert DrySlingApp	42 ft	MFWD 150	6,500	150	10	0.059	0.57	1.62	0.22	0.22	2.65	0.32	1.39	4.37
SC Flat Roller	18 ft	MFWD 150	1,400	75	9	0.190	1.82	5.13	0.47	0.72	8.16	0.47	4.43	13.07
SC Hauling Hitch	6 ft	4WD 225	1,000	500	15	1.000	9.60	40.53	0.13	4.59	54.86	0.18	29.40	84.45
SC Land Plane	15 ft	MFWD 150	10,000	200	15	0.300	2.88	8.11	0.66	1.14	12.80	1.40	7.00	21.21
SC Rotary Ditcher	6 ft	MFWD 150	12,500	100	10	0.250	2.40	6.75	3.12	0.95	13.23	3.85	5.83	22.91
SC Rotary Hoe	18 ft	2WD 130	4,500	75	12	0.080	0.76	1.87	0.41	0.24	3.29	0.51	1.49	5.30
SC Rotary Mower	13.1 ft	MFWD 75	7,000	150	10	0.250	2.40	3.37	0.51	0.30	6.59	1.43	1.87	9.91
SC Rototiller	18 ft	MFWD 190	20,000	150	10	0.219	2.10	7.52	3.51	0.87	14.02	3.61	5.60	23.23
SC Tractor Blade	6 ft	2WD 105	3,500	100	15	1.000	9.60	18.91	0.86	2.04	31.42	3.27	12.49	47.18
SC Tractor Spreader	20 ft	2WD 105	700	150	10	0.110	1.05	2.08	0.04	0.22	3.40	0.06	1.37	4.84
SC Trailer Utility	10 ft	2WD 130	2,000	200	15	1.000	9.60	23.41	0.23	3.04	36.30	0.93	18.65	55.88

Appendix Table 5. Operating inputs: estimated prices, Louisiana 2012.

ITEM NAME	UNIT	PRICE	ITEM	UNIT	PRICE
		dollars			dollars
ADJUVANTS					
Crop Oil (Seed Oil)	pt	3.36	Basagran	pt	11.69
Crop Oil (Petroleum)	pt	1.55	Command 3ME	pt	14.75
Surfactant	pt	2.62	Direx 4L	pt	3.00
CUSTOM FERT/LIME			Direx 80 DF	lb	7.37
App Fert by Air	cwt	6.25	Gramoxone Max	pt	5.46
App Fert by Air(Min)	appl	6.25	Karmex DF	lb	6.50
Custom Spread(Truc)	appl	4.50	LA Asulox	gal	39.00
Lime (Spread)	ton	44.00	LA Weedmaster	qt	7.50
CUSTOM SPRAY			Prowl 3.3 EC	pt	4.29
App by Air (2 gal)	appl	3.75	Roundup Original	pt	6.00
App by Air (3 gal)	appl	4.50	Roundup Original Max	oz	0.38
App by Air (5 gal)	appl	5.75	Roundup Power MAX	pt	2.28
App by Air (10 gal)	appl	7.75	Roundup WeatherMax	oz	0.21
FERTILIZERS			Sencor 4F	pt	14.74
Amm Nitrate (34% N)	cwt	20.58	Sencor DF	lb	14.85
Amm Sulfate (21% N)	cwt	18.90	Treflan HFP	pt	3.12
Fert 10-34-0	cwt	29.25	INSECTICIDES		
Fert 41-0-0-4	cwt	21.88	Asana .66 XL	oz	0.68
LA Nitrogen	lb	0.63	Baythroid 2	oz	2.19
LA Phosphate	lb	0.70	Confirm 2F	oz	1.68
LA Potash	lb	0.51	Fury 1.5 EC	oz	1.30
Phosphorus(46% P2O5)	cwt	28.65	Karate Z	oz	2.73
Potash (60% K2O)	cwt	29.19	Mustang Max	oz	1.43
UAN (32% N)	cwt	18.54	Thimet 20-G	lb	3.10
Urea, Solid (46% N)	cwt	22.29	RIPENER		
HERBICIDES			Polado	oz	0.38
2,4-D Amine 4	pt	2.01	SEED CANE		
Atrazine 4L	pt	2.04	Cultured seedcane	acre	484.00
Atrazine 90DF	lb	4.25			