

Projected Costs and Returns Crop Enterprise Budgets for Rice Production in Louisiana, 2016

Michael A. Deliberto, Brian M. Hilbun, and Michael E. Salassi



**Farm Management Research & Extension
Department of Agricultural Economics & Agribusiness
Louisiana State University Agricultural Center
A.E.A. Information Series No. 313 - January 2016**

January 2016

A.E.A. Information Series No. 313

**PROJECTED COSTS AND RETURNS
CROP ENTERPRISE BUDGETS
FOR RICE PRODUCTION IN LOUISIANA, 2016**

by

Michael A. Deliberto, Brian M. Hilbun, and Michael E. Salassi



**Department of Agricultural Economics & Agribusiness
Louisiana State University Agricultural Center
www.lsuagcenter.com**

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Procedure	1
Expected Crop Yields and Market Prices	2
Direct Production Costs	2
Farm Machinery Costs	2
Overhead Costs	2
Land and Management Charges	3
Acknowledgements.....	3
Internet Access	3

RICE ENTERPRISE BUDGETS:

Table

(1) Rice - Conventional Variety, Water Planted, Conventional Tillage, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	4
Estimated Costs for Field Operations	5
Estimated Net Returns above Specified Costs – Owner Operator	6
Estimated Net Returns above Specified Costs – Tenant Operator	7
(2) Rice - Clearfield Variety, Water Planted, Conventional Tillage, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	8
Estimated Costs for Field Operations	9
Estimated Net Returns above Specified Costs – Owner Operator	10
Estimated Net Returns above Specified Costs – Tenant Operator	11
(3) Rice - Conventional Variety, Drill Planted, Conventional Tillage, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	12
Estimated Costs for Field Operations	13
Estimated Net Returns above Specified Costs – Owner Operator	14
Estimated Net Returns above Specified Costs – Tenant Operator	15
(4) Rice - Clearfield Variety, Drill Planted, Conventional Tillage, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	16
Estimated Costs for Field Operations	17
Estimated Net Returns above Specified Costs – Owner Operator	18
Estimated Net Returns above Specified Costs – Tenant Operator	19

	<u>Page</u>
(5) Rice - Clearfield Hybrid Variety, Drill Planted, Conventional Tillage, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	20
Estimated Costs for Field Operations	21
Estimated Net Returns above Specified Costs – Owner Operator	22
Estimated Net Returns above Specified Costs – Tenant Operator	23
(6) Rice - Ratoon Crop, Southwest Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	24
Estimated Costs for Field Operations	25
Estimated Net Returns above Specified Costs – Owner Operator	26
Estimated Net Returns above Specified Costs – Tenant Operator	27
(7) Rice - Conventional Variety, Drill Planted, Conventional Tillage, Northeast Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	28
Estimated Costs for Field Operations	29
Estimated Net Returns above Specified Costs – Owner Operator	30
Estimated Net Returns above Specified Costs – Tenant Operator	31
(8) Rice - Clearfield Variety, Drill Planted, Conventional Tillage, Northeast Louisiana, 2016	
Estimated Direct and Fixed Costs per Acre	32
Estimated Costs for Field Operations	33
Estimated Net Returns above Specified Costs – Owner Operator	34
Estimated Net Returns above Specified Costs – Tenant Operator	35
Appendices	36
<u>Appendix Tables</u>	
1 Rice Irrigation System 1 Costs, Water Planted, Southwest Louisiana, 2016	36
2 Rice Irrigation System 2 Costs, Drill Planted, Southwest Louisiana, 2016	36
3 Rice Irrigation System 3 Costs, Ratoon Crop, Southwest Louisiana, 2016	36
4 Rice Irrigation System 5 Costs, Drill Planted, Northeast Louisiana, 2016	36
5 Operating Inputs, Estimated Prices, Louisiana, 2016	37
6 Tractors, Performance Rates and Costs, Louisiana, 2016	38
7 Self-propelled Machines, Performance Rates and Costs, Louisiana, 2016	39
8 Implements, Performance Rates and Costs, Louisiana, 2016	40

PROJECTED COSTS AND RETURNS CROP ENTERPRISE BUDGETS FOR RICE PRODUCTION IN LOUISIANA, 2016

by

Michael A. Deliberto, Brian M. Hilbun, and Michael E. Salassi¹

¹ Assistant Professor-Research, Research Associate, and Department Head and Professor
Department of Agricultural Economics and Agribusiness, LSU Agricultural Center, Baton Rouge, LA.

Introduction

This publication presents estimates of projected costs and returns for rice production in Louisiana for the 2016 crop year. Crop producers are annually faced with critical management decisions that impact the employment of production inputs for various crop enterprises and the combination of crops that will be assembled into a cropping system. The need for reliable information is crucial if sound production decisions are to be made. Planning information plays a pivotal role in the development of annual crop production plans by producers and is important in supporting their efforts to secure the necessary resources to carry out their plans. In addition, information regarding production alternatives and costs and returns for major crop enterprises is needed by extension personnel, researchers, lending institutions, and others involved in agriculture or agribusiness. The purpose of this report is to provide planning information regarding crop production costs and market returns for the 2016 crop year.

Crop enterprise budgets in this report are presented in two budget formats. The first budget format (table A) is a summary of costs and returns for the crop enterprise. The second budget format (table B) provides a table listing the sequence of production operations, indicating the equipment and implements used, month of operation, labor required, machine time required, and materials used. Labor costs, material costs, custom costs, and direct and fixed costs for tractors and equipment are also included for each operation. All costs are

summed giving the total cost per operation or practice.

Procedure

The general procedure used in this study was to project machinery and other input price data and apply these data to the production practice data for crop enterprises produced in Louisiana. Input prices were obtained from surveys of farm suppliers, machinery dealers, and aerial applicators to provide a basis for estimating 2016 planning budgets. Machinery and other input cost data are presented in the Appendix.

The budgets included in this report are categorized by per acre total direct expenses and per acre total fixed expenses for a production season. Within these two broad categories, the various inputs are itemized with their respective costs. Although a particular enterprise budget is presented on a per acre basis, some individual cost items are specified on an hourly or price per unit basis. Direct expenses include such cost items as seed, fertilizer, chemicals, fuel, labor, repairs, and irrigation. Fixed expenses include such items as depreciation and interest on investment which are generally incurred during the production period.

Due to the detailed nature of the cost computations, a computerized budget generator procedure was utilized. The Mississippi State Budget Generator Program, developed at Mississippi State University, is utilized by the LSU Agricultural Center in developing these crop enterprise costs and returns budgets. The budget generator provides a standard format for crop and livestock budgets and this

computational procedure is widely accepted for estimating projected commodity costs and returns information for upcoming crop year planning purposes.

Expected Crop Yields and Market Prices

Projected crop enterprise budgets in this report include a calculation of expected market returns for the crop. Expected crop yields and market prices are selected at the beginning of the crop year. Projected crop yields are determined based on recent production history for expected yield given normal weather conditions. Projected market prices are specified as expected marketing year average prices for the commodity, based on harvest time futures price quotes as well as other market information at the beginning of the crop year. No estimate of income from farm program participation or crop insurance is included in this budgets due to the wide variety of farm program and crop insurance choices available to producers.

Direct Production Costs

Direct or variable production costs were estimated by utilizing updated crop production input price data. Input price data for various crop production inputs were updated by obtaining prices from farm input suppliers in the fall and winter prior to the crop year. Herbicide, fertilizer, and insecticide expenditures for each enterprise budget are based upon the types of chemicals producers generally reported using for that situation. Suggested prices for selected farm inputs and aerial application rates are presented in the appendix.

Hired labor was charged at \$9.60 per hour for all classes of labor except for harvest machinery and laser leveling operator labor. This wage rate include a basic wage rate plus additional costs for social security, Medicare, and workman's compensation. Operator labor was charged at \$15.30 per hour, which includes a basic wage rate plus additional costs for social security, Medicare, and workman's compensation. The higher wage rate was charged for these classes of operators because of

the relatively higher skills required to run these types of machinery and the general consensus that these operators are generally twelve month (salaried) employees i.e. foremen. Farm labor may not be generally available on an hourly basis; however, an hourly charge represents a practical method for charging labor to the respective crop enterprises on a per acre basis.

Interest on operating capital (short term) was charged at a nominal rate of 4.50% per year. Operating capital was assumed to be borrowed in a manner consistent with timely acquisition of inputs. Fuel prices for diesel and gasoline were \$2.00 per gallon and \$2.25 per gallon, respectively. Variable costs for tractors, self-propelled machinery, and irrigation machinery include the cost of fuel, lubrication, and repair.

The intermediate term interest rate was charged at an historical real rate of 5.00%. The reasoning behind the difference in short and intermediate term rates is that longer term nominal rates are highly variable and closely follow the trend set by the rate of inflation. Intermediate term interest rates above the real rate of interest can overstate true interest costs because they overlook the value gained by an asset due solely to inflation.

Farm Machinery Costs

Machinery cost data were obtained from a sample of machinery dealers. New machinery prices were used to reflect the economic cost of acquiring and maintaining capital assets in current dollar values. Purchase prices for selected power and machinery items included in this report are presented in the appendix. Other data included in the appendix indicate hours of annual use and years of life for each selected machinery item. Fuel consumption, accumulated repair costs, and other machinery performance data are based on ASAE standards. Machinery fixed costs are calculated using the capital recovery method which includes estimates of both annual depreciation and interest on investment.

Overhead Costs

Overhead costs reflect significant expenses associated with the operation of the entire farm business, but are not necessarily attributable to a specific crop enterprise. Examples of farm overhead costs include tax services, record keeping, utilities, farmstead maintenance, and insurance and property taxes where applicable. General farm overhead costs can vary greatly from farm to farm based on many factors including farm size, land tenure and crop production technology utilized. As the primary purpose of this report is to estimate production costs associated with a specific commodity, no charges for general farm overhead are included.

Land and Management Charges

The estimated production expenses included in this report include only direct and fixed expenses associated with the production of the specific crop enterprise. Labor charges included in the enterprise budgets only include charges for field labor. No charges for management are included. In addition, no charges for land are included in the enterprise cost tables. Following each set of enterprise cost tables, two sets of net return tables are included. One set, representing owner operators, includes estimates of net returns above direct and total specified costs, which would represent returns to land, management and general farm overhead. Another set, representing tenant operators, includes estimates net returns above direct and total specified costs with a crop share taken out of revenue, representing net returns to management and general farm overhead.

Acknowledgments

Several individuals were instrumental in making this report possible. The authors are particularly indebted to Louisiana crop producers and LSU Agricultural Center Extension Service agents and Experiment Station scientists for their cooperation and assistance in providing specific production practice information, as well as farm suppliers and agribusiness firms for supplying input price information.

Internet Access

This publication, along with projected costs and returns reports for other major agricultural crop commodities produced in Louisiana, as well as other farm management publications, are available on the Internet on the LSU AgCenter web page under the “*Extension and Outreach*” section of the Department of Agricultural Economics and Agribusiness web page. These projected costs and returns reports are also available on the LSU Ag Center crop commodities web pages. The web address for the LSU AgCenter is: www.lsuagcenter.com

Table 1.A Estimated costs per acre,
Rice, Conventional Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	9.0000	3.15	_____
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
GIN/DRY					
LARice Dry	cwt	0.90	77.7000	69.93	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	130.0000	55.90	_____
LA Phosphate	lb	0.54	40.0000	21.60	_____
LA Potash	lb	0.35	60.0000	21.00	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Facet 75DF	lb	50.00	0.5000	25.00	_____
Londax 60DF	oz	17.13	1.0000	17.13	_____
2,4-D Amine 4	pt	1.85	2.5000	4.63	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	120.0000	45.60	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.8000	26.60	_____
CUSTOM PLANT					
LARice Air Plant SW	cwt	5.60	1.2000	6.72	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	70.0000	21.00	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.8574	8.72	_____
LA Irrigation Labor					
Irrigation System 1	hour	10.18	0.2153	2.20	_____
DIESEL FUEL					
Tractors	gal	2.00	10.5417	21.10	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 1	gal	2.00	32.8389	65.68	_____
REPAIR & MAINTENANCE					
Implements	acre	3.51	1.0000	3.51	_____
Tractors	acre	5.82	1.0000	5.82	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 1	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	9.31	1.0000	9.31	_____
TOTAL DIRECT EXPENSES				534.93	_____
FIXED EXPENSES					
Implements	acre	7.78	1.0000	7.78	_____
Tractors	acre	36.41	1.0000	36.41	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 1	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				98.60	_____
TOTAL SPECIFIED EXPENSES				633.53	_____

Table 1.B Estimated resource use and costs for field operations, per acre, Rice, Conventional Variety, Water Plant, Conventional Tillage, (In Rotation), Southwest Louisiana, 2016.

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-----				
Disk Harrow	32'	4WD 225	0.061	2.00	Nov	3.40	3.55	1.82	3.85	0.12	1.25					13.87
LA Rice Levee Plow	8 ft	4WD 300	0.050	2.00	Nov	3.97	5.55	0.15	0.37	0.10	1.02					11.06
Blade-Scraper	10'	MFWD 150	1.176	0.09	Nov	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Feb	1.85	2.59	0.46	1.93	0.04	0.47					7.30
App Fert by Air	cwt				Feb							1.5000	7.00	10.50		10.50
LA Nitrogen	lb											70.0000	0.43	30.10		30.10
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App Fert by Air	cwt			1.00	Feb							1.0000	7.00	7.00		7.00
LA Phosphate	lb											40.0000	0.54	21.60		21.60
LA Potash	lb											60.0000	0.35	21.00		21.00
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
Ditcher		MFWD 150	0.020	1.00	Feb	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Feb	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Rice Gates	each			1.00	Feb							1.0000	3.65	3.65		3.65
LA Rice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Feb	0.51	0.70	0.13	0.18	0.02	0.25					1.77
LA Rice Water Level	24 ft	4WD 300	0.149	2.00	Feb	11.90	16.64	0.46	0.96	0.29	3.05					33.01
LA Rice Air Plant SW	cwt			1.00	Apr							1.2000	5.60	6.72		6.72
Rice Seed Conv.	lb											120.0000	0.38	45.60		45.60
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Pacet 75DF	lb											0.5000	50.00	25.00		25.00
Londax 60DF	oz											1.0000	17.13	17.13		17.13
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
2,4-D Amine 4	pt											2.5000	1.85	4.63		4.63
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10		9.10
LA Nitrogen	lb											60.0000	0.43	25.80		25.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Quadris	oz											10.0000	2.34	23.40		23.40
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05					43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12					0.87
LA Rice Haul	cwt			1.00	Aug							70.0000	0.30	21.00		21.00
LA Rice Dry	cwt			1.00	Aug							77.7000	0.90	69.93		69.93
Irrigation System 1	acre				Mar							1.0000				105.96
TOTALS						45.30	56.49	72.94	42.11	1.40	15.97				391.41	624.22
INTEREST ON OPERATING CAPITAL																9.31
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																633.53

Table 1.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Conventional Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2015.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	20	49	78	107	136	165	194	224	253
85%	59.5	54	85	116	147	178	210	241	272	3063
90%	63.0	88	121	154	187	220	254	287	320	353
95%	66.5	121	156	192	227	262	298	333	368	404
100%	70.0	155	192	230	267	304	342	379	417	454
105%	73.5	188	228	267	307	346	386	425	465	505
110%	77.0	222	264	305	347	388	430	472	513	555
115%	80.5	256	299	343	387	430	474	518	562	605
120%	84.0	289	335	381	427	472	518	564	610	656

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 1.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Conventional Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-78	-49	-20	9	38	67	96	125	154
85%	59.5	-45	-14	18	49	80	111	142	173	204
90%	63.0	-11	22	55	89	122	155	188	222	255
95%	66.5	23	58	93	129	164	199	234	270	305
100%	70.0	56	94	131	168	206	243	281	318	356
105%	73.5	90	129	169	208	248	287	327	366	406
110%	77.0	123	165	207	248	290	331	373	415	456
115%	80.5	157	201	244	288	332	376	419	463	507
120%	84.0	191	236	282	328	374	420	465	511	557

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 1.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Conventional Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-53	-33	-13	8	28	48	69	89	109
85%	59.5	-30	-8	14	36	57	79	101	123	145
90%	63.0	-6	17	40	64	87	110	133	157	180
95%	66.5	17	42	67	91	116	141	166	190	215
100%	70.0	41	67	93	119	146	172	198	224	250
105%	73.5	64	92	120	147	175	203	230	258	286
110%	77.0	88	117	146	175	204	234	263	292	321
115%	80.5	111	142	173	203	234	264	295	326	356
120%	84.0	135	167	199	231	263	295	327	359	391

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 1.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Conventional Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-118	-77	-97	-57	-36	-16	4	25	45
85%	59.5	-94	-50	-72	-29	-7	15	37	58	80
90%	63.0	-71		-47	-1	23	46	69	92	116
95%	66.5	-47		-22	27	52	77	101	126	151
100%	70.0	-23		3	55	81	108	134	160	186
105%	73.5	0		28	83	111	138	166	194	221
110%	77.0	24		53	111	140	169	198	228	257
115%	80.5	47		78	139	170	200	231	261	292
120%	84.0	71		103	167	199	231	263	295	327

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 2.A Estimated costs per acre,
Rice, Clearfield Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	9.0000	3.15	_____
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
GIN/DRY					
LARice Dry	cwt	0.90	77.7000	69.93	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	130.0000	55.90	_____
LA Phosphate	lb	0.54	40.0000	21.60	_____
LA Potash	lb	0.35	60.0000	21.00	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Newpath 2SL	oz	3.68	8.0000	29.44	_____
Aim 2EC	oz	7.19	1.6000	11.50	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Clearfield 161	lb	1.05	100.0000	105.00	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.8000	26.60	_____
CUSTOM PLANT					
LARice Air Plant SW	cwt	5.60	1.0000	5.60	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	70.0000	21.00	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.8574	8.72	_____
LA Irrigation Labor					
Irrigation System 1	hour	10.18	0.2153	2.20	_____
DIESEL FUEL					
Tractors	gal	2.00	11.0156	22.05	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 1	gal	2.00	32.8389	65.68	_____
REPAIR & MAINTENANCE					
Implements	acre	3.51	1.0000	3.51	_____
Tractors	acre	6.34	1.0000	6.34	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 1	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	10.20	1.0000	10.20	_____
TOTAL DIRECT EXPENSES				589.75	_____
FIXED EXPENSES					
Implements	acre	7.78	1.0000	7.78	_____
Tractors	acre	39.67	1.0000	39.67	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 1	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				101.86	_____
TOTAL SPECIFIED EXPENSES				691.61	_____

Table 2.B Estimated resource use and costs for field operations, per acre, Rice, Clearfield Variety, Water Plant, Conventional Tillage, (In Rotation), Southwest Louisiana, 2016.

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-----			
Disk Harrow	32'	4WD 300	0.061	2.00	Nov	4.87	6.81	1.82	3.85	0.12	1.25				18.60
LA Rice Levee Plow	8 ft	4WD 300	0.050	2.00	Nov	3.97	5.55	0.15	0.37	0.10	1.02				11.06
Blade-Scraper	10'	MFWD 150	1.176	0.09	Nov	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Feb	1.85	2.59	0.46	1.93	0.04	0.47				7.30
App Fert by Air	cwt				Feb							1.5000	7.00	10.50	10.50
LA Nitrogen	lb											70.0000	0.43	30.10	30.10
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Feb							1.0000	7.00	7.00	7.00
LA Phosphate	lb											40.0000	0.54	21.60	21.60
LA Potash	lb											60.0000	0.35	21.00	21.00
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
Ditcher		MFWD 150	0.020	1.00	Feb	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Feb	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Rice Gates	each			1.00	Feb							1.0000	3.65	3.65	3.65
LA Rice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Feb	0.51	0.70	0.13	0.18	0.02	0.25				1.77
LA Rice Water Level	24 ft	4WD 300	0.149	2.00	Feb	11.90	16.64	0.46	0.96	0.29	3.05				33.01
Irrigation System 1					Mar										
LA Rice Air Plant SW	cwt			1.00	Apr							1.0000	5.60	5.60	5.60
Rice Clearfield 161	lb											100.0000	1.05	105.00	105.00
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Newpath 2SL	oz											4.0000	3.68	14.72	14.72
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Newpath 2SL	oz											4.0000	3.68	14.72	14.72
Aim 2EC	oz											1.6000	7.19	11.50	11.50
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10	9.10
LA Nitrogen	lb											60.0000	0.43	25.80	25.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Quadris	oz											10.0000	2.34	23.40	23.40
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05				43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12				0.87
LA Rice Haul	cwt			1.00	Aug							70.0000	0.30	21.00	21.00
LA Rice Dry	cwt			1.00	Aug							77.7000	0.90	69.93	69.93
Irrigation System 1	acre				Mar			69.43	34.33	0.21	2.20				105.96
TOTALS						46.77	59.75	72.94	42.11	1.40	15.97			443.87	681.41
INTEREST ON OPERATING CAPITAL															10.20
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															691.61

Table 2.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Clearfield Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	56.0	-34	-5	24	53	82	111	140	169	198
85%	59.5	-1	30	61	92	124	155	186	217	248
90%	63.0	33	66	99	132	166	199	232	265	299
95%	66.5	66	102	137	172	208	243	278	314	349
100%	70.0	10	137	175	212	250	287	324	362	399
105%	73.5	134	173	213	252	292	331	371	410	450
110%	77.0	167	209	250	292	334	375	417	458	500
115%	80.5	201	244	288	332	376	419	463	507	551
120%	84.0	234	280	326	372	418	463	509	555	601

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 2.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Clearfield Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	56.0	-136	-107	-78	-49	-20	9	38	67	96
85%	59.5	-103	-72	-40	-9	22	53	84	115	146
90%	63.0	-69	-36	-3	31	64	97	130	163	197
95%	66.5	-36	0	35	70	106	141	176	212	247
100%	70.0	-2	35	73	110	148	185	223	260	297
105%	73.5	32	71	111	150	190	229	269	308	348
110%	77.0	65	107	149	190	232	273	315	357	398
115%	80.5	99	143	186	230	274	317	361	405	449
120%	84.0	132	178	224	270	316	362	407	453	499

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 2.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Clearfield Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-108	-88	-67	-47	-27	-7	14	34	54
85%	59.5	-85	-63	-41	-19	3	24	46	68	90
90%	63.0	-61	-38	-15	9	32	55	78	102	125
95%	66.5	-38	-13	12	37	61	86	111	136	160
100%	70.0	-14	12	38	65	91	117	143	169	196
105%	73.5	10	37	65	93	120	148	175	203	231
110%	77.0	33	62	91	120	150	179	208	237	266
115%	80.5	57	87	118	148	179	210	240	271	301
120%	84.0	80	112	144	176	208	240	273	305	337

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 2.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Clearfield Variety, Water Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-176	-155	-135	-115	-94	-74	-54	-33	-13
85%	59.5	-152	-130	-109	-87	-65	-43	-21	0	22
90%	63.0	-129	-105	-82	-59	-36	-12	11	34	57
95%	66.5	-105	-80	-56	-31	-6	19	43	68	93
100%	70.0	-82	-55	-29	-3	23	49	76	102	128
105%	73.5	-58	-30	-3	25	53	80	108	136	163
110%	77.0	-35	-5	24	53	82	111	140	1699	199
115%	80.5	-11	20	50	81	111	142	173	203	234
120%	84.0	13	45	77	109	141	173	205	237	269

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 3.A Estimated costs per acre,
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	7.0000	2.45	_____
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
GIN/DRY					
LARice Dry	cwt	0.90	77.7000	69.93	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	130.0000	55.90	_____
LA Phosphate	lb	0.54	40.0000	21.60	_____
LA Potash	lb	0.35	60.0000	21.00	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Command 3ME	pt	18.50	0.8000	14.80	_____
Permit 75DF	oz	11.56	1.0000	11.56	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	90.0000	34.20	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.8000	26.60	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	70.0000	21.00	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.7118	7.24	_____
LA Irrigation Labor					
Irrigation System 2	hour	10.18	0.2074	2.10	_____
DIESEL FUEL					
Tractors	gal	2.00	7.5765	15.18	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 2	gal	2.00	35.4660	70.94	_____
REPAIR & MAINTENANCE					
Implements	acre	4.54	1.0000	4.54	_____
Tractors	acre	4.42	1.0000	4.42	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 2	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.35	1.0000	8.35	_____
TOTAL DIRECT EXPENSES				486.35	_____
FIXED EXPENSES					
Implements	acre	9.58	1.0000	9.58	_____
Tractors	acre	27.35	1.0000	27.35	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 2	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				91.34	_____
TOTAL SPECIFIED EXPENSES				577.69	_____

Table 3.B Estimated resource use and costs for field operations, per acre, Rice, Conventional Variety, Drill Plant, Conventional Tillage, (In Rotation), Southwest Louisiana, 2016.

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-----				
Disk Harrow	32'	4WD 300	0.061	2.00	Nov	4.87	6.81	1.82	3.85	0.12	1.25					18.60
LA Rice Levee Plow	8 ft	4WD 300	0.050	2.00	Nov	3.97	5.55	0.15	0.37	0.10	1.02					11.06
Blade-Scraper	10'	MFWD 150	1.176	0.09	Nov	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Feb	1.85	2.59	0.46	1.93	0.04	0.47					7.30
App Fert by Air	cwt			1.00	Feb							1.5000	7.00	10.50		10.50
LA Nitrogen	lb											70.0000	0.43	30.10		30.10
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App Fert by Air	cwt			1.00	Feb							1.0000	7.00	7.00		7.00
LA Phosphate	lb											40.0000	0.54	21.60		21.60
LA Potash	lb											60.0000	0.35	21.00		21.00
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
Grain Drill	20'	MFWD 150	0.094	1.00	Apr	1.90	2.64	1.36	2.61	0.18	1.81					10.32
Rice Seed Conv.	lb											90.0000	0.38	34.20		34.20
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Apr	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Rice Gates	each			1.00	Apr							1.0000	3.65	3.65		3.65
LA Rice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Apr	0.51	0.70	0.13	0.18	0.02	0.25					1.77
LA Boom Sprayer	30 ft	MFWD 150	0.059	1.00	Apr	1.21	1.68	0.13	0.15	0.05	0.61					3.78
Command 3ME	pt											0.8000	18.50	14.80		14.80
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Permit 75DF	oz											1.0000	11.56	11.56		11.56
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10		9.10
LA Nitrogen	lb											60.0000	0.43	25.80		25.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Quadris	oz											10.0000	2.34	23.40		23.40
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LA Rice GPS Charge-SW acre												1.0000	0.35	0.35		0.35
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05					43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12					0.87
LA Rice Haul	cwt			1.00	Aug							70.0000	0.30	21.00		21.00
LA Rice Dry	cwt			1.00	Aug							77.7000	0.90	69.93		69.93
Irrigation System 2	acre				Mar			74.55	34.33	0.20	2.10	1.0000				110.98
TOTALS						37.98	47.43	79.09	43.91	1.34	15.24			345.69		569.34
INTEREST ON OPERATING CAPITAL																8.35
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																577.69

Table 3.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	69	98	127	156	185	214	243	272	301
85%	59.5	103	134	165	196	227	258	289	320	652
90%	63.0	136	169	203	236	269	302	335	369	402
95%	66.5	170	205	240	276	311	346	382	417	452
100%	70.0	203	241	278	316	353	390	428	465	503
105%	73.5	237	276	316	355	395	435	474	514	553
110%	77.0	271	312	354	395	437	479	520	562	604
115%	80.5	304	348	392	435	479	523	566	610	654
120%	84.0	338	384	429	475	521	567	613	658	704

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 3.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-22	7	36	65	94	123	152	181	210
85%	59.5	11	42	73	105	136	167	198	229	260
90%	63.0	45	78	111	144	178	211	244	277	311
95%	66.5	78	114	149	184	220	255	290	326	361
100%	70.0	112	149	187	224	262	299	337	374	411
105%	73.5	146	185	225	264	304	343	383	422	462
110%	77.0	179	221	262	304	346	387	429	471	512
115%	80.5	213	257	300	344	388	431	475	519	563
120%	84.0	246	292	338	384	430	476	521	567	613

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 3.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	1	21	41	62	82	102	122	143	163
85%	59.5	24	46	68	89	111	133	155	177	198
90%	63.0	48	71	94	117	141	164	187	210	234
95%	66.5	71	96	121	145	170	195	219	244	269
100%	70.0	95	121	147	173	199	226	252	278	304
105%	73.5	118	146	173	201	229	256	284	312	339
110%	77.0	142	171	200	229	258	287	316	346	375
115%	80.5	165	196	226	257	288	318	349	379	410
120%	84.0	189	221	253	285	317	349	381	413	445

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 3.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-56	-25	-16	5	25	45	65	86	106
85%	59.5	-33	-11	11	32	54	76	98	120	141
90%	63.0	-9	14	37	60	84	107	130	153	177
95%	66.5	14	39	64	88	113	138	162	187	212
100%	70.0	38	64	90	116	142	169	195	221	247
105%	73.5	61	89	116	144	172	199	227	255	282
110%	77.0	85	114	143	172	201	230	259	289	318
115%	80.5	108	139	169	200	231	261	292	322	353
120%	84.0	132	164	196	228	260	292	324	356	388

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 4.A Estimated costs per acre,
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	8.0000	2.80	_____
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
GIN/DRY					
LARice Dry	cwt	0.90	77.7000	69.93	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	130.0000	55.90	_____
LA Phosphate	lb	0.54	40.0000	21.60	_____
LA Potash	lb	0.35	60.0000	21.00	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Newpath 2SL	oz	3.68	8.0000	29.44	_____
Aim 2EC	oz	7.19	1.6000	11.50	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Clearfield 161	lb	1.05	75.0000	78.75	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.8000	26.60	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	70.0000	21.00	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.6518	6.63	_____
LA Irrigation Labor					
Irrigation System 2	hour	10.18	0.2074	2.10	_____
DIESEL FUEL					
Tractors	gal	2.00	7.2104	14.44	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 2	gal	2.00	35.4660	70.94	_____
REPAIR & MAINTENANCE					
Implements	acre	4.41	1.0000	4.41	_____
Tractors	acre	4.19	1.0000	4.19	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 2	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	9.45	1.0000	9.45	_____
TOTAL DIRECT EXPENSES				551.72	_____
FIXED EXPENSES					
Implements	acre	9.43	1.0000	9.43	_____
Tractors	acre	26.11	1.0000	26.11	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 2	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				89.95	_____
TOTAL SPECIFIED EXPENSES				641.67	_____

Table 4.B Estimated resource use and costs for field operations, per acre, Rice, Clearfield Variety, Drill Plant, Conventional Tillage, (In Rotation), Southwest Louisiana, 2016.

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-----			
Disk Harrow	32'	4WD 300	0.061	2.00	Nov	4.87	6.81	1.82	3.85	0.12	1.25				18.60
LARice Levee Plow	8 ft	4WD 300	0.050	2.00	Nov	3.97	5.55	0.15	0.37	0.10	1.02				11.06
Blade-Scraper	10'	MFWD 150	1.176	0.09	Nov	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Feb	1.85	2.59	0.46	1.93	0.04	0.47				7.30
App Fert by Air	cwt			1.00	Feb							1.5000	7.00	10.50	10.50
LA Nitrogen	lb											70.0000	0.43	30.10	30.10
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Feb							1.0000	7.00	7.00	7.00
LA Phosphate	lb											40.0000	0.54	21.60	21.60
LA Potash	lb											60.0000	0.35	21.00	21.00
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
Irrigation System 2					Mar										
Grain Drill	20'	MFWD 170	0.094	1.00	Apr	2.14	3.08	1.36	2.61	0.18	1.81				11.00
Rice Clearfield 161	lb											75.0000	1.05	78.75	78.75
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Apr	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Rice Gates	each			1.00	Apr							1.0000	3.65	3.65	3.65
LARice Backhoe-Rxmnt	2 ft	MFWD 150	0.500	0.05	Apr	0.51	0.70	0.13	0.18	0.02	0.25				1.77
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Newpath 2SL	oz											4.0000	3.68	14.72	14.72
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Newpath 2SL	oz											4.0000	3.68	14.72	14.72
Aim 2EC	oz											1.6000	7.19	11.50	11.50
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10	9.10
LA Nitrogen	lb											60.0000	0.43	25.80	25.80
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Quadris	oz											10.0000	2.34	23.40	23.40
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LARice GPS Charge-SW acre												1.0000	0.35	0.35	0.35
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05				43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12				0.87
LARice Haul	cwt			1.00	Aug							70.0000	0.30	21.00	21.00
LARice Dry	cwt			1.00	Aug							77.7000	0.90	69.93	69.93
Irrigation System 2	acre				Mar							1.0000			110.98
TOTALS						37.01	46.19	78.96	43.76	1.28	14.63			411.67	632.22
INTEREST ON OPERATING CAPITAL															9.45
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															641.67

Table 4.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	56.0	4	33	62	91	120	149	178	207	236
85%	59.5	37	68	99	131	162	193	224	255	286
90%	63.0	71	104	137	170	204	237	270	303	337
95%	66.5	104	140	175	210	246	281	316	352	387
100%	70.0	138	175	213	250	288	325	362	400	437
105%	73.5	172	211	251	290	330	369	409	448	488
110%	77.0	205	247	288	330	372	413	455	497	538
115%	80.5	239	282	326	370	414	457	501	545	589
120%	84.0	272	318	364	410	456	501	547	593	639

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 4.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	56.0	-86	-57	-28	1	30	59	88	117	146
85%	59.5	-53	-22	9	41	72	103	134	165	196
90%	63.0	-19	14	47	80	114	147	180	213	247
95%	66.5	14	50	85	120	156	191	226	262	297
100%	70.0	48	85	123	160	198	235	273	310	347
105%	73.5	82	121	161	200	240	279	319	358	398
110%	77.0	115	157	198	240	282	323	365	407	448
115%	80.5	149	193	236	280	324	367	411	455	499
120%	84.0	182	228	274	320	366	412	457	503	549

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 4.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-65	-44	-24	-4	16	37	57	77	98
85%	59.5	-41	-19	2	24	46	68	89	111	133
90%	63.0	-18	5	29	52	75	99	122	145	168
95%	66.5	6	30	55	80	105	129	154	179	204
100%	70.0	29	55	82	108	134	160	186	213	239
105%	73.5	53	80	108	136	163	191	219	246	274
110%	77.0	76	105	135	164	193	222	251	280	309
115%	80.5	100	130	161	192	222	253	283	314	345
120%	84.0	123	155	188	220	252	284	316	348	380

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 4.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	56.0	-120	-100	-80	-59	-39	-19	1	22	42
85%	59.5	-97	-75	-53	-32	-10	12	34	56	77
90%	63.0	-73	-50	-27	-4	20	43	66	89	113
95%	66.5	-50	-25	0	24	49	74	98	123	148
100%	70.0	-26	0	26	52	78	105	131	157	183
105%	73.5	-3	25	53	80	108	136	163	191	218
110%	77.0	21	50	79	108	137	166	196	225	254
115%	80.5	44	75	105	136	167	197	228	258	289
120%	84.0	68	100	132	164	196	228	260	292	324

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 5.A Estimated costs per acre,
Rice, Hybrid Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW	acre	0.35	7.0000	2.45	_____
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
GIN/DRY					
LARice Dry	cwt	0.90	88.8000	79.92	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	150.0000	64.50	_____
LA Phosphate	lb	0.54	40.0000	21.60	_____
LA Potash	lb	0.35	60.0000	21.00	_____
FUNGICIDES					
Stratego	pt	25.00	0.7100	17.75	_____
HERBICIDES					
Command 3ME	pt	18.50	0.8000	14.80	_____
Permit 75DF	oz	11.56	1.0000	11.56	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
LA Hybrid Rice Seed	acre	138.00	1.0000	138.00	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.8000	26.60	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	80.0000	24.00	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.6505	6.61	_____
LA Irrigation Labor					
Irrigation System 2	hour	10.18	0.2074	2.10	_____
DIESEL FUEL					
Tractors	gal	2.00	6.6287	13.29	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 2	gal	2.00	35.4660	70.94	_____
REPAIR & MAINTENANCE					
Implements	acre	3.63	1.0000	3.63	_____
Tractors	acre	3.88	1.0000	3.88	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 2	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	12.86	1.0000	12.86	_____
TOTAL DIRECT EXPENSES				606.63	_____
FIXED EXPENSES					
Implements	acre	7.66	1.0000	7.66	_____
Tractors	acre	23.95	1.0000	23.95	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 2	acre	34.33	1.0000	34.33	_____
TOTAL FIXED EXPENSES				86.02	_____
TOTAL SPECIFIED EXPENSES				692.65	_____

Table 5.B Estimated resource use and costs for field operations, per acre, Rice, Hybrid Variety, Drill Planted, (In Rotation), Southwest Louisiana, 2016.

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-----			
Disk Harrow	32'	4WD 300	0.061	1.00	Nov	2.44	3.41	0.91	1.93	0.06	0.62				9.31
LA Hybrid Rice Seed	acre											1.0000	138.00	138.00	138.00
LARice Levee Plow	8 ft	4WD 300	0.050	2.00	Nov	3.97	5.55	0.15	0.37	0.10	1.02				11.06
Blade-Scraper	10'	MFWD 150	1.176	0.09	Nov	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Feb	1.85	2.59	0.46	1.93	0.04	0.47				7.30
App Fert by Air	cwt			1.00	Feb							1.5000	7.00	10.50	10.50
LA Nitrogen	lb											75.0000	0.43	32.25	32.25
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Feb							1.0000	7.00	7.00	7.00
LA Phosphate	lb											40.0000	0.54	21.60	21.60
LA Potash	lb											60.0000	0.35	21.00	21.00
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
Grain Drill	20'	MFWD 150	0.094	1.00	Apr	1.90	2.64	1.36	2.61	0.18	1.81				10.32
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20				1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Apr	2.13	2.97	0.17	0.13	0.10	1.08				6.48
Rice Gates	each			1.00	Apr							1.0000	3.65	3.65	3.65
LARice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Apr	0.51	0.70	0.13	0.18	0.02	0.25				1.77
LA Boom Sprayer	30 ft	MFWD 150	0.059	1.00	Apr	1.21	1.68	0.13	0.15	0.05	0.61				3.78
Command 3ME	pt											0.8000	18.50	14.80	14.80
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Permit 75DF	oz											1.0000	11.56	11.56	11.56
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10	9.10
LA Nitrogen	lb											75.0000	0.43	32.25	32.25
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50	6.50
Stratego	pt											0.7100	25.00	17.75	17.75
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50	6.50
Karate Z	oz											2.0000	3.40	6.80	6.80
LARice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05				43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12				0.87
LARice Haul	cwt			1.00	Aug							80.0000	0.30	24.00	24.00
LARice Dry	cwt			1.00	Aug							88.8000	0.90	79.92	79.92
Irrigation System 2	acre				Mar					0.20	2.10	1.0000			110.98
TOTALS						35.55	44.03	78.18	41.99	1.28	14.61			465.43	679.79
INTEREST ON OPERATING CAPITAL															12.86
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															692.65

Table 5.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Hybrid Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	64.0	28	61	94	127	161	194	227	260	293
85%	68.0	66	102	138	173	209	244	280	315	651
90%	72.0	105	143	181	219	257	295	333	371	409
95%	76.0	143	187	224	264	305	345	385	426	466
100%	80.0	182	224	267	310	353	395	438	481	524
105%	84.0	220	265	310	355	401	446	491	536	581
110%	88.0	258	306	354	401	449	496	544	591	639
115%	92.0	297	347	397	447	497	547	597	647	697
120%	96.0	335	388	440	492	545	597	649	702	754

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 5.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Hybrid Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	64.0	-58	-25	8	41	75	108	141	174	207
85%	68.0	-20	16	51	87	123	158	194	229	265
90%	72.0	19	57	95	133	171	209	247	285	323
95%	76.0	57	98	138	178	219	259	299	340	380
100%	80.0	96	138	181	224	267	309	352	395	438
105%	84.0	134	179	224	269	315	360	405	450	495
110%	88.0	172	220	267	315	363	410	458	505	553
115%	92.0	211	261	311	361	411	461	511	561	611
120%	96.0	249	302	354	406	459	511	563	616	668

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 5.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Hybrid Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	64.0	-60	-37	-14	9	33	56	79	102	125
85%	68.0	-33	-9	16	41	66	91	116	141	166
90%	72.0	-7	20	47	73	100	126	153	180	206
95%	76.0	20	49	77	105	133	162	190	218	246
100%	80.0	47	77	107	137	167	197	227	257	287
105%	84.0	74	106	137	169	201	232	264	295	327
110%	88.0	101	134	168	201	234	267	301	334	367
115%	92.0	128	163	198	233	268	303	338	373	408
120%	96.0	155	191	228	265	301	338	375	411	448

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 5.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Hybrid Variety, Drill Planted, Conventional Tillage,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	64.0	-112	-89	-66	-42	-19	4	27	51	74
85%	68.0	-85	-60	-35	-10	14	39	64	89	114
90%	72.0	-58	-32	-5	22	48	75	101	128	154
95%	76.0	-31	-3	25	53	82	110	138	166	195
100%	80.0	-4	25	55	85	115	145	175	205	235
105%	84.0	22	54	86	117	149	181	212	244	275
110%	88.0	49	83	116	149	182	216	249	282	316
115%	92.0	76	111	146	181	216	251	286	321	356
120%	96.0	103	140	176	213	250	286	323	360	396

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 6.A Estimated costs per acre,
Rice, Ratoon Crop,
Southwest Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge-SW acre		0.35	1.0000	0.35	_____
GIN/DRY					
LARice Dry	cwt	0.90	25.5000	22.95	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	55.0000	23.65	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	1.2000	8.40	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	23.0000	6.90	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.0820	0.84	_____
LA Irrigation Labor					
Irrigation System 3	hour	10.18	0.0861	0.87	_____
DIESEL FUEL					
Tractors	gal	2.00	0.6332	1.27	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 3	gal	2.00	13.1355	26.27	_____
REPAIR & MAINTENANCE					
Implements	acre	0.18	1.0000	0.18	_____
Tractors	acre	0.38	1.0000	0.38	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
INTEREST ON OP. CAP.	acre	1.47	1.0000	1.47	_____
TOTAL DIRECT EXPENSES				116.96	_____
FIXED EXPENSES					
Implements	acre	0.22	1.0000	0.22	_____
Tractors	acre	2.30	1.0000	2.30	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
TOTAL FIXED EXPENSES				22.60	_____
TOTAL SPECIFIED EXPENSES				139.56	_____

Table 6.B Estimated resource use and costs for field operations, per acre, Rice, Ratoon Crop, Southwest Louisiana, 2016.

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-----			
Blade-Scraper	10'	MFWD 150	1.176	0.06	Aug	1.42	1.98	0.11	0.09	0.07	0.72				4.32
Irrigation System 3					Aug										
App Fert by Air	cwt			1.00	Aug							1.2000	7.00	8.40	8.40
LA Nitrogen	lb											55.0000	0.43	23.65	23.65
LA Rice GPS Charge-SW	acre											1.0000	0.35	0.35	0.35
LA Rice Combine-2	25 ft		0.300	1.00	Oct	18.38	20.08			0.33	5.05				43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Oct	0.23	0.32	0.07	0.13	0.01	0.12				0.87
LA Rice Haul	cwt			1.00	Oct							23.0000	0.30	6.90	6.90
LA Rice Dry	cwt			1.00	Nov							25.5000	0.90	22.95	22.95
Irrigation System 3	acre				Aug			26.27		0.08	0.87	1.0000			27.14
TOTALS						20.03	22.38	26.45	0.22	0.49	6.76				138.09
INTEREST ON OPERATING CAPITAL															1.47
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															139.56

Table 6.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Ratoon Crop,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	18.4	65	75	85	94	104	113	123	132	142
85%	19.6	77	87	97	107	117	128	138	148	158
90%	20.7	88	98	109	120	131	142	153	164	175
95%	21.9	99	110	122	133	145	157	168	180	191
100%	23.0	110	122	134	147	159	171	183	196	208
105%	24.2	121	134	147	160	173	186	199	212	225
110%	25.3	132	145	159	173	186	200	214	227	241
115%	26.5	143	157	171	186	200	215	229	243	258
120%	27.6	154	169	184	199	214	229	244	259	274

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 6.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Ratoon Crop,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	18.4	43	52	62	71	81	91	100	110	119
85%	19.6	54	64	74	85	95	105	115	125	136
90%	20.7	65	76	87	98	109	120	130	141	152
95%	21.9	76	88	99	111	122	134	146	157	169
100%	23.0	87	99	112	124	136	149	161	173	185
105%	24.2	98	111	124	137	150	163	176	189	202
110%	25.3	109	123	136	150	169	177	191	205	219
115%	26.5	120	135	149	163	178	192	206	221	235
120%	27.6	131	146	161	176	191	206	222	237	252

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 6.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Ratoon Crop,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	18.4	46	53	59	66	73	79	86	93	99
85%	19.6	54	61	68	75	82	89	97	104	111
90%	20.7	61	69	77	84	92	100	107	115	123
95%	21.9	69	77	85	94	102	110	118	126	134
100%	23.0	77	85	94	103	111	120	129	137	146
105%	24.2	85	94	103	112	121	130	139	148	157
110%	25.3	92	102	111	121	131	140	150	159	169
115%	26.5	100	110	120	130	140	150	160	170	180
120%	27.6	108	118	129	139	150	160	171	182	192

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 6.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Ratoon Crop,
Southwest Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	18.4	23	30	37	43	50	57	63	70	77
85%	19.6	31	38	45	53	60	67	74	81	88
90%	20.7	39	46	54	62	69	77	85	92	100
95%	21.9	47	55	63	71	79	87	95	103	112
100%	23.0	54	63	71	80	89	97	106	115	123
105%	24.2	62	71	80	89	98	107	117	126	135
110%	25.3	70	79	89	98	108	118	127	137	146
115%	26.5	77	88	98	108	118	128	138	148	158
120%	27.6	85	96	106	117	127	138	148	159	169

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 7.A Estimated costs per acre,
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge_NE	acre	0.25	7.0000	1.75	_____
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
GIN/DRY					
LARice Dry	cwt	0.90	78.0000	70.20	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	170.0000	73.10	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Command 3ME	pt	18.50	0.8000	14.80	_____
Permit 75DF	oz	11.56	1.0000	11.56	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	90.0000	34.20	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.7000	25.90	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	71.0000	21.30	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.8249	8.39	_____
LA Irrigation Labor					
Irrigation System 5	hour	10.18	0.4361	4.45	_____
DIESEL FUEL					
Tractors	gal	2.00	7.9039	15.83	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 5	gal	2.00	28.5331	57.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.64	1.0000	5.64	_____
Tractors	acre	4.62	1.0000	4.62	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 5	acre	2.17	1.0000	2.17	_____
INTEREST ON OP. CAP.	acre	6.24	1.0000	6.24	_____

TOTAL DIRECT EXPENSES				448.13	_____
FIXED EXPENSES					
Implements	acre	12.11	1.0000	12.11	_____
Tractors	acre	28.60	1.0000	28.60	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 5	acre	13.33	1.0000	13.33	_____

TOTAL FIXED EXPENSES				74.12	_____

TOTAL SPECIFIED EXPENSES				522.25	_____

Table 7.B Estimated resource use and costs for field operations, per acre, Rice, Conventional Variety, Drill Plant, Conventional Tillage, (In Rotation), Northeast Louisiana, 2016.

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-----				
Disk Harrow	32'	4WD 300	0.061	1.00	Nov	2.44	3.41	0.91	1.93	0.06	0.62					9.31
Ditcher		MFWD 150	0.020	2.00	Nov	0.81	1.12	0.08	0.10	0.04	0.41					2.52
Disk Harrow	28'	MFWD 190	0.070	2.00	Mar	3.53	4.97	1.94	4.10	0.14	1.43					15.97
Irrigation System 5					Mar											
Ditcher		MFWD 150	0.020	1.00	Mar	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Field Cultivate	32'	4WD 300	0.046	1.00	Mar	1.85	2.59	0.46	1.93	0.04	0.47					7.30
LARice Levee Plow	8 ft	MFWD 190	0.050	4.00	Mar	5.04	7.08	0.31	0.75	0.20	2.04					15.22
App Fert by Air	cwt			1.00	Apr							0.4000	7.00	2.80		2.80
LA Nitrogen	lb											20.0000	0.43	8.60		8.60
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
Grain Drill	20'	MFWD 150	0.094	1.00	Apr	1.90	2.64	1.36	2.61	0.18	1.81					10.32
Rice Seed Conv.	lb											90.0000	0.38	34.20		34.20
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Blade-Scraper	10'	MFWD 150	1.176	0.09	Apr	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Rice Gates	each			1.00	Apr							1.0000	3.65	3.65		3.65
LARice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Apr	0.51	0.70	0.13	0.18	0.02	0.25					1.77
LA Boom Sprayer	30 ft	MFWD 150	0.059	1.00	Apr	1.21	1.68	0.13	0.15	0.05	0.61					3.78
Command 3ME	pt											0.8000	18.50	14.80		14.80
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	May							1.0000	6.50	6.50		6.50
Permit 75DF	oz											1.0000	11.56	11.56		11.56
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
App Fert by Air	cwt			1.00	May							2.0000	7.00	14.00		14.00
LA Nitrogen	lb											90.0000	0.43	38.70		38.70
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10		9.10
LA Nitrogen	lb											60.0000	0.43	25.80		25.80
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Quadris	oz											10.0000	2.34	23.40		23.40
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LARice GPS Charge_NE	acre											1.0000	0.25	0.25		0.25
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05					43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12					0.87
LARice Haul	cwt			1.00	Aug							71.0000	0.30	21.30		21.30
LARice Dry	cwt			1.00	Aug							78.0000	0.90	70.20		70.20
Irrigation System 5	acre				Mar							1.0000				77.00
TOTALS						38.83	48.68	64.86	25.44	1.68	18.74			319.46		516.01
INTEREST ON OPERATING CAPITAL																6.24
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																522.25

Table 7.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	59.2	134	165	196	226	257	288	318	349	380
85%	62.9	170	203	236	268	301	334	367	400	433
90%	66.6	205	240	276	311	346	381	416	451	486
95%	70.3	241	278	315	353	390	428	465	502	540
100%	74.0	276	316	355	395	435	474	514	553	593
105%	77.7	312	354	395	437	479	521	563	604	646
110%	81.4	347	391	435	479	523	567	611	655	699
115%	85.1	383	429	475	522	568	614	660	706	753
120%	88.8	418	467	515	564	612	661	709	757	806

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 7.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2015.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	59.2	60	91	121	152	183	214	244	275	306
85%	62.9	96	129	161	194	227	260	293	326	359
90%	66.6	131	166	201	237	272	307	342	377	412
95%	70.3	167	204	241	279	316	353	391	428	465
100%	74.0	202	242	281	321	360	400	440	479	519
105%	77.7	238	280	321	363	405	447	488	530	572
110%	81.4	273	317	361	405	449	493	537	581	625
115%	85.1	309	355	401	447	494	540	586	632	679
120%	88.8	344	393	441	490	538	586	635	683	732

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 7.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	59.2	44	66	87	108	130	151	173	194	216
85%	62.9	69	92	115	138	161	184	207	230	253
90%	66.6	94	118	143	168	192	217	241	266	290
95%	70.3	119	145	171	197	223	249	275	302	328
100%	74.0	143	171	199	227	254	282	310	337	365
105%	77.7	168	198	227	256	285	315	344	373	402
110%	81.4	193	224	255	286	316	347	378	409	440
115%	85.1	218	250	283	315	348	380	412	445	477
120%	88.8	243	277	311	345	379	412	446	480	514

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 7.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Conventional Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	59.2	-17	5	26	48	69	91	112	134	155
85%	62.9	8	31	54	77	100	123	146	169	192
90%	66.6	33	58	82	107	131	156	180	205	230
95%	70.3	58	84	110	136	162	189	215	241	267
100%	74.0	83	110	138	166	193	221	249	277	304
105%	77.7	108	137	166	195	225	254	283	312	342
110%	81.4	132	163	194	225	256	286	317	348	379
115%	85.1	157	190	222	254	287	319	351	384	416
120%	88.8	182	216	250	284	318	352	386	420	453

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 8.A Estimated costs per acre,
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
LARice GPS Charge_NE	acre	0.25	8.0000	2.00	_____
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
GIN/DRY					
LARice Dry	cwt	0.90	82.1000	73.89	_____
FERTILIZERS					
LA Nitrogen	lb	0.43	170.0000	73.10	_____
FUNGICIDES					
Quadris	oz	2.34	10.0000	23.40	_____
HERBICIDES					
Newpath 2SL	oz	3.68	8.0000	29.44	_____
Aim 2EC	oz	7.19	1.6000	11.50	_____
INSECTICIDES					
Karate Z	oz	3.40	4.0000	13.60	_____
IRRIGATION SUPPLIES					
Rice Gates	each	3.65	1.0000	3.65	_____
SEED/PLANTS					
Rice Clearfield 161	lb	1.05	75.0000	78.75	_____
CUSTOM FERT/LIME					
App Fert by Air	cwt	7.00	3.7000	25.90	_____
CUSTOM HARVEST/HAUL					
LARice Haul	cwt	0.30	74.0000	22.20	_____
HAND LABOR					
Implements	hour	9.06	0.0942	0.85	_____
LA OPERATOR LABOR					
Self-Propelled	hour	15.30	0.3303	5.05	_____
LA Hired Labor					
Tractors	hour	10.18	0.7537	7.66	_____
LA Irrigation Labor					
Irrigation System 5	hour	10.18	0.4361	4.45	_____
DIESEL FUEL					
Tractors	gal	2.00	6.7604	13.53	_____
Self-Propelled	gal	2.00	2.5825	5.17	_____
Irrigation System 5	gal	2.00	28.5331	57.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.53	1.0000	5.53	_____
Tractors	acre	3.94	1.0000	3.94	_____
Self-Propelled	acre	13.21	1.0000	13.21	_____
Irrigation System 5	acre	2.17	1.0000	2.17	_____
INTEREST ON OP. CAP.	acre	7.34	1.0000	7.34	_____

TOTAL DIRECT EXPENSES				515.88	_____
FIXED EXPENSES					
Implements	acre	12.03	1.0000	12.03	_____
Tractors	acre	24.49	1.0000	24.49	_____
Self-Propelled	acre	20.08	1.0000	20.08	_____
Irrigation System 5	acre	13.33	1.0000	13.33	_____

TOTAL FIXED EXPENSES				69.93	_____

TOTAL SPECIFIED EXPENSES				585.81	_____

Table 8.B Estimated resource use and costs for field operations, per acre, Rice, Clearfield Variety, Drill Plant, Conventional Tillage, (In Rotation), Northeast Louisiana, 2016.

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-----				
Disk Harrow	28'	MFWD 190	0.070	1.00	Nov	1.76	2.48	0.97	2.05	0.07	0.71					7.97
Ditcher		MFWD 150	0.020	1.00	Nov	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Disk Harrow	28'	MFWD 190	0.070	2.00	Mar	3.53	4.97	1.94	4.10	0.14	1.43					15.97
Irrigation System 5					Mar											
Ditcher		MFWD 150	0.020	1.00	Mar	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Field Cultivate	32'	MFWD 190	0.046	1.00	Mar	1.17	1.65	0.46	1.93	0.04	0.47					5.68
LARice Levee Plow	8 ft	MFWD 190	0.050	4.00	Mar	5.04	7.08	0.31	0.75	0.20	2.04					15.22
App Fert by Air	cwt			1.00	Apr							0.4000	7.00	2.80		2.80
LA Nitrogen	lb											20.0000	0.43	8.60		8.60
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
Grain Drill	20'	MFWD 150	0.094	1.00	Apr	1.90	2.64	1.36	2.61	0.18	1.81					10.32
Rice Clearfield 161	lb											75.0000	1.05	78.75		78.75
Blade-Scraper	10'	MFWD 150	1.176	0.09	Apr	2.13	2.97	0.17	0.13	0.10	1.08					6.48
Ditcher		MFWD 150	0.020	1.00	Apr	0.40	0.56	0.04	0.05	0.02	0.20					1.25
Rice Gates	each			1.00	Apr							1.0000	3.65	3.65		3.65
LARice Backhoe-Rrmnt	2 ft	MFWD 150	0.500	0.05	Apr	0.51	0.70	0.13	0.18	0.02	0.25					1.77
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Newpath 2SL	oz											4.0000	3.68	14.72		14.72
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	Apr							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	May							1.0000	6.50	6.50		6.50
Newpath 2SL	oz											4.0000	3.68	14.72		14.72
Aim 2EC	oz											1.6000	7.19	11.50		11.50
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App Fert by Air	cwt			1.00	May							2.0000	7.00	14.00		14.00
LA Nitrogen	lb											90.0000	0.43	38.70		38.70
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App Fert by Air	cwt			1.00	Jun							1.3000	7.00	9.10		9.10
LA Nitrogen	lb											60.0000	0.43	25.80		25.80
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	Jun							1.0000	6.50	6.50		6.50
Quadris	oz											10.0000	2.34	23.40		23.40
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
App by Air (5 gal)	appl			1.00	Jul							1.0000	6.50	6.50		6.50
Karate Z	oz											2.0000	3.40	6.80		6.80
LARice GPS Charge_NE acre												1.0000	0.25	0.25		0.25
LA Rice Combine	25 ft		0.300	1.00	Aug	18.38	20.08			0.33	5.05					43.51
Rice Grain Cart	500 Bu	MFWD 150	0.057	0.20	Aug	0.23	0.32	0.07	0.13	0.01	0.12					0.87
LARice Haul	cwt			1.00	Aug							74.0000	0.30	22.20		22.20
LARice Dry	cwt			1.00	Aug							82.1000	0.90	73.89		73.89
Irrigation System 5	acre				Mar							1.0000				77.00
TOTALS						35.85	44.57	64.75	25.36	1.61	18.01			389.93		578.47
INTEREST ON OPERATING CAPITAL																7.34
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																585.81

Table 8.C1 Estimated Net Returns above Direct Costs for an Owner Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	59.2	72	102	133	164	194	225	256	286	317
85%	62.9	107	140	173	206	239	272	305	338	370
90%	66.6	143	178	213	248	283	318	353	389	424
95%	70.3	178	216	253	290	328	365	402	440	477
100%	74.0	214	253	293	332	372	412	451	491	530
105%	77.7	249	291	333	375	416	458	500	542	584
110%	81.4	285	329	373	417	461	505	549	593	637
115%	85.1	320	367	413	459	505	551	598	644	690
120%	88.8	356	404	453	501	550	598	647	695	743

Net returns above direct costs for an owner operator is calculated here as market revenue less direct production costs. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses.

Table 8.C2 Estimated Net Returns above Total Specified Costs for an Owner Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield		Rice Market Price (\$/cwt)								
Percent	(cwt.)	\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
----- (\$/acre) -----										
80%	59.2	1	32	63	93	124	155	185	216	247
85%	62.9	37	70	102	135	168	201	234	267	300
90%	66.6	72	107	142	178	213	248	283	318	353
95%	70.3	108	145	182	220	257	294	332	369	406
100%	74.0	143	183	222	262	301	341	381	420	460
105%	77.7	179	221	262	304	346	388	429	471	513
110%	81.4	214	258	302	346	390	434	478	522	566
115%	85.1	250	296	342	388	435	481	527	573	620
120%	88.8	285	334	382	431	479	528	576	624	673

Net returns above total specified costs for an owner operator is calculated here as market revenue less total specified costs. Specified costs include charges for direct costs and fixed machinery costs but excludes charges for land, general farm overhead and management expenses.

Table 8.D1 Estimated Net Returns above Direct Costs for a Tenant Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield	Rice Market Price (\$/cwt)									
Percent (cwt.)		\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	59.2	-18	3	24	46	67	89	110	132	153
85%	62.9	6	29	52	75	98	122	145	168	191
90%	66.6	31	56	80	105	130	154	179	203	228
95%	70.3	56	82	108	135	161	187	213	239	265
100%	74.0	81	109	136	164	192	219	247	275	302
105%	77.7	106	135	164	194	223	252	281	311	340
110%	81.4	131	161	192	223	254	285	315	346	377
115%	85.1	156	188	220	253	285	317	350	382	414
120%	88.8	180	214	248	282	316	350	384	418	452

Net returns above direct costs for a tenant operator is calculated here as the grower's share of market revenue less direct production costs paid by the grower. Direct costs include charges for variable production costs for items such as seed, fertilizer, chemicals, fuel, labor, repair and custom application expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Table 8.D2 Estimated Net Returns above Total Specified Costs for a Tenant Operator
Rice, Clearfield Variety, Drill Planted, Conventional Tillage,
Northeast Louisiana, 2016.

		Percent								
		80%	85%	90%	95%	100%	105%	110%	115%	120%
Yield	Rice Market Price (\$/cwt)									
Percent (cwt.)		\$9.60	\$10.20	\$10.80	\$11.40	\$12.00	\$12.60	\$13.20	\$13.80	\$14.40
		----- (\$/acre) -----								
80%	59.2	-76	-54	-33	-11	10	32	53	75	96
85%	62.9	-51	-28	-5	18	41	64	87	110	133
90%	66.6	-26	-1	23	48	72	97	122	146	171
95%	70.3	-1	25	51	77	103	130	156	182	208
100%	74.0	24	51	79	107	135	162	190	218	245
105%	77.7	49	78	107	136	166	195	224	253	283
110%	81.4	73	104	135	166	197	227	258	289	320
115%	85.1	98	131	163	195	228	260	292	325	357
120%	88.8	123	157	191	225	259	293	327	361	394

Net returns above total specified costs for a tenant operator is calculated here as the grower's share of market revenue less total specified costs paid by the grower. Specified costs include charges for direct costs and fixed machinery costs but exclude charges for general farm overhead and management expenses. The land rental arrangement charge represented here is a 30% crop share with the landlord paying variable and fixed irrigation pumping costs.

Appendix Table 1. Rice Irrigation System 1 Costs, Water Planted, Southwest Louisiana, 2016.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Underground Pipe 1	each								10.91	10.91
Gearhead 1	each								2.08	2.08
Engine 1	each								8.02	8.02
Application 1	Ac-in		10.51	0.60	0.35		0.43	11.89		11.89
Application 2	Ac-in		10.51	0.60	0.35		0.39	11.85		11.85
Application 3	Ac-in		13.14	0.75	0.44		0.43	14.76		14.76
Application 4	Ac-in		15.76	0.90	0.53		0.45	17.64		17.64
Application 5	Ac-in		15.76	0.90	0.53		0.39	17.58		17.58
Well 1	each								6.78	6.78
Pump 1	each								6.54	6.54
TOTALS		0.00	65.68	3.75	2.20	0.00	2.09	73.72	34.33	108.05

Note: Total irrigation application of 25 acre-inches.

Appendix Table 2. Rice Irrigation System 2 Costs, Drill Planted, Southwest Louisiana, 2016.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Pump 2	each								6.54	6.54
Gearhead 2	each								2.08	2.08
Engine 2	each								8.02	8.02
Application 1	Ac-in		7.88	0.40	0.23		0.32	8.83		8.83
Application 2	Ac-in		7.88	0.40	0.23		0.32	8.83		8.83
Application 3	Ac-in		13.14	0.67	0.39		0.48	14.68		14.68
Application 4	Ac-in		13.14	0.67	0.39		0.43	14.63		14.63
Application 5	Ac-in		15.76	0.80	0.47		0.45	17.48		17.48
Application 6	Ac-in		13.14	0.67	0.39		0.32	14.52		14.52
Well 2	each								6.78	6.78
Underground Pipe 2	each								10.91	10.91
TOTALS		0.00	70.94	3.61	2.10	0.00	2.32	78.97	34.33	113.30

Note: Total irrigation application of 28 acre-inches.

Appendix Table 3. Rice Irrigation System 3 Costs, Ratoon Crop, Southwest Louisiana, 2016.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Engine 1a	each									
Application 1	Ac-in		18.39		0.61		0.36	19.36		19.36
Application 2	Ac-in		7.88		0.26		0.12	8.26		8.26
TOTALS		0.00	26.27	0.00	0.87	0.00	0.48	27.62	0.00	27.62

Note: Total irrigation application of 10 acre-inches.

Appendix Table 4. Rice Irrigation System 5 Costs, Drill Planted, Northeast Louisiana, 2016.

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Engine 4	each								4.02	4.02
Application 1	Ac-in		9.20	0.34	0.72		0.35	10.61		10.61
Application 2	Ac-in		9.20	0.34	0.72		0.35	10.61		10.61
Application 3	Ac-in		9.20	0.34	0.72		0.27	10.53		10.53
Application 4	Ac-in		18.41	0.67	1.43		0.46	20.97		20.97
Application 5	Ac-in		9.20	0.34	0.72		0.19	10.45		10.45
Gearhead 4	each								1.09	1.09
Pump 4	each								3.45	3.45
Well 4	each								2.26	2.26
Underground Pipe 4	each								2.73	2.73
TOTALS		0.00	55.21	2.03	4.31	0.00	1.62	63.17	13.55	76.72

Note: Total irrigation application of 31 acre-inches

Appendix Table 5. Operating Inputs: Estimated Prices for 2016.

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			GIN/DRY		
Crop Oil (Seed Oil)	pt	4.44	Dry Rice (cwt)	cwt	0.90
Crop Oil (Petroleum)	pt	3.86	HERBICIDES		
Surfactant	pt	5.35	2,4-D Amine 4	pt	1.85
CUSTOM FERT/LIME			Aim 2EC	oz	7.19
App Fert by Air	cwt	7.00	Aim DF	oz	9.65
App Fert by Air(Min)	appl	7.00	Arrosolo	qt	7.88
Custom Apply Fert	acre	7.00	Basagran	pt	12.90
Custom Spread(Truc	appl	4.50	Beyond	oz	4.43
Lime (Spread)	ton	46.00	Blazer Ultra	pt	9.79
CUSTOM HARVEST/HAUL			Bolero 8EC	pt	7.67
Haul Rice	bu	0.35	Clincher EC	oz	2.30
Haul Rice (cwt)	cwt	0.25	Command 3ME	pt	18.50
Haul Sorghum	bu	0.25	Facet 75DF	lb	50.00
Haul Soybeans	bu	0.27	Gramoxone Max	pt	5.46
Haul Wheat	bu	0.26	Grandstand R	qt	29.47
LA Haul Rice	cwt	0.30	Londax 60DF	oz	17.13
CUSTOM PLANT			Newpath 2SL	oz	3.68
LARice Air Plant NE	cwt	5.50	Ordram 15-G	lb	1.34
LARice Air Plant SW	cwt	5.60	Ordram 8-E	pt	9.42
CUSTOM SPRAY			Pendimax 3.3	pt	2.47
App by Air (2 gal)	appl	4.00	Permit 75DF	oz	11.56
App by Air (3 gal)	appl	5.00	Propanil 4E	qt	5.15
App by Air (5 gal)	appl	6.50	Prowl 3.3 EC	pt	5.62
App by Air (10 gal)	appl	8.75	Regiment 80WP	oz	4.38
LARice GPS Charge-SW	acre	0.35	Ricestar	pt	23.54
LARice GPS Charge_NE	acre	0.25	Roundup Original Max	oz	0.38
FERTILIZERS			Roundup Ultra MAX	pt	5.97
Amm Nitrate (34% N)	cwt	22.50	Roundup WeatherMax	oz	0.08
Amm Sulfate (21% N)	cwt	17.25	Stam 4E	qt	5.12
Fert 10-34-0	cwt	32.50	Stam 80 EDF	lb	9.50
Fert 41-0-0	cwt	20.50	Treflan HFP	pt	2.90
LA Nitrogen	lb	0.43	Valor WP	oz	4.23
LA Phosphate	lb	0.54	INSECTICIDES		
LA Potash	lb	0.35	Dimilin 2L	oz	2.22
Phosphorus(46% P2O5)	cwt	25.00	Karate Z	oz	3.40
Potash (60% K2O)	cwt	21.27	Methyl Parathion	pt	5.79
Sulfur	lb	0.34	Mustang Max	oz	1.48
UAN (32% N)	cwt	15.95	Penncap M	pt	6.71
UAN + Sulfur (28% N)	cwt	16.33	Sevin 80S	lb	7.40
Urea, Solid (46% N)	cwt	20.83	Sevin XLR Plus	qt	12.50
Zinc	lb	0.50	SEED/PLANTS		
FUNGICIDES			Rice Clearfield 161	lb	1.05
Benlate 50 WP	lb	15.95	Rice Seed (Levees)	lb	0.43
Gem 25 WG	oz	3.70	Rice Seed CF(Levees)	lb	1.05
Manzate 75 DF	lb	4.81	Rice Seed Conv.	lb	0.38
Manzate Flowable	pt	4.60	LA Hybrid Rice Seed	ac	138.00
Moncut 70 DF	lb	33.30	Sorghum Concept	lb	2.29
Quadris	oz	2.66	Sorghum NonConcept	lb	1.18
Rovral 4F	pt	11.14	Soybean Seed Private	lb	0.38
Stratego	pt	25.00	Soybean Seed RR	lb	1.13
Tilt 3.6 EC	oz	0.86	Wheat Seed Private	lb	0.38

Appendix Table 6. Tractors: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Louisiana 2016.

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	-----\$/hour-----					
Combine (170-199 hp)	190hp	0	300	8	9.78	13.40	19.56	0.00	32.96	0.00	32.96
Combine (200-249 hp)	240hp	161,548	300	8	12.35	13.40	24.70	16.82	54.92	66.39	121.32
Combine (225-274 hp)	Track250hp	0	300	8	12.87	13.40	25.74	0.00	39.14	0.00	39.14
Combine (250-299 hp)	275hp	315,000	300	8	14.15	13.40	28.30	32.81	74.51	129.47	203.98
Combine (250-299hp)	Grass295hp	218,222	300	8	15.18	13.40	30.36	22.73	66.49	89.69	156.18
Combine (275-299 hp)	Track290hp	0	300	8	14.93	13.40	29.86	0.00	43.26	0.00	43.26
Combine (300-349 hp)	325hp	332,000	300	8	16.73	13.40	33.46	34.58	81.44	136.45	217.90
Combine (300-349hp)	Track320hp	0	300	8	16.47	13.40	32.94	0.00	46.34	0.00	46.34
Combine (350-379 hp)	370hp	344,000	300	8	19.04	13.40	38.08	35.83	87.31	141.39	228.70
Combine (350-379 hp)	Track365hp	0	300	8	18.79	13.40	37.58	0.00	50.98	0.00	50.98
Cotton Stripper	173hp	170,000	200	8	8.08	13.40	16.16	26.56	56.12	104.80	160.93
Tractor(40-59hp)Cab	2WD 50	31,100	600	8	2.57	10.18	5.14	0.97	16.29	5.84	22.14
Tractor(40-59hp)Cab	MFWD 50	38,100	600	8	2.57	10.18	5.14	1.19	16.51	7.16	23.68
Tractor(40-59hp)RB	2WD 50	18,500	600	8	2.57	10.18	5.14	0.57	15.90	3.47	19.38
Tractor(40-59hp)RB	MFWD 50	23,600	600	8	2.57	10.18	5.14	0.73	16.06	4.43	20.50
Tractor(60-89hp)CAB	2WD 75	47,700	600	8	3.86	10.18	7.72	1.49	19.39	8.97	28.36
Tractor(60-89hp)CAB	MFWD 75	49,300	600	8	3.86	10.18	7.72	1.54	19.44	9.27	28.71
Tractor(60-89hp)RB	2WD 75	37,000	600	8	3.86	10.18	7.72	1.15	19.05	6.95	26.01
Tractor(60-89hp)RB	MFWD 75	37,800	600	8	3.86	10.18	7.72	1.18	19.08	7.10	26.19
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	10.18	10.80	2.04	23.02	12.28	35.30
Tractor(90-119hp)CB	MFWD 105	78,300	600	8	5.40	10.18	10.80	2.44	23.43	14.72	38.16
Tractor(90-119hp)RB	2WD 105	59,900	600	8	5.40	10.18	10.80	1.87	22.86	11.26	34.12
Tractor(90-119hp)RB	MFWD 105	60,300	600	8	5.40	10.18	10.80	1.88	22.87	11.33	34.21
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	10.18	13.38	3.00	26.57	18.10	44.68
Tractor(120-139hp)CB	MFWD 130	116,000	600	8	6.69	10.18	13.38	3.62	27.18	21.81	49.00
Tractor(140-159hp)CB	2WD 150	108,000	600	8	7.72	10.18	15.44	3.37	28.99	20.30	49.30
Tractor(140-159hp)CB	MFWD 150	149,000	600	8	7.72	10.18	15.44	4.65	30.27	28.02	58.29
Tractor(160-179hp)CB	2WD 170	156,000	600	8	8.75	10.18	17.50	4.87	32.55	30.69	63.25
Tractor(160-179hp)CB	MFWD 170	166,000	600	8	8.75	10.18	17.50	5.18	32.86	32.66	65.53
Tractor(160-199hp)CB	Track 180	142,710	600	8	9.26	10.18	18.53	4.45	33.16	28.08	61.25
Tractor(180-199hp)CB	2WD 190	143,000	600	8	9.77	10.18	19.55	4.46	34.20	28.13	62.34
Tractor(180-199hp)CB	MFWD 190	180,000	600	8	9.77	10.18	19.55	5.62	35.36	35.42	70.78
Tractor(200-249hp)CB	4WD 225	147,066	600	8	11.58	10.18	23.16	4.59	37.93	28.93	66.87
Tractor(200-249hp)CB	MFWD 225	228,000	600	8	11.58	10.18	23.16	7.12	40.46	44.86	85.33
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	10.18	23.16	8.65	41.99	54.50	96.50
Tractor(250-349hp)CB	4WD 300	282,000	600	8	15.44	10.18	30.88	8.81	49.87	55.49	105.36
Tractor(250-349hp)CB	Track 300	289,000	600	8	15.44	10.18	30.88	9.03	50.09	56.86	106.96
Tractor(350-449hp)CB	4WD 400	341,000	600	8	20.58	10.18	41.17	10.65	62.01	67.10	129.11
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	10.18	41.17	11.37	62.73	71.62	134.36
Tractor(450-uphp)CB	TRACK-475	279,879	600	8	24.44	10.18	48.89	8.74	67.82	55.07	122.89

Appendix Table 7. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Louisiana 2016.

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-----					
ATV - 4 Wheeler	12'	0	100	8	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
ATV - 4 Wheeler	20'	8,750	100	8	1.00	0.200	2.68	0.45	0.43	3.56	2.06	5.63
LA Pickup Truck	1/2 ton	25,000	800	5	2.50	1.000	10.18	5.62	2.81	18.61	6.65	25.26
LA Rice Combine	25 ft	165,000	300	10	8.60	0.300	5.05	5.16	13.21	23.43	20.07	43.50
LA Rice Combine-2	25 ft	165,000	300	10	8.60	0.300	5.05	5.16	13.21	23.43	20.07	43.50
LARice Combine Med	20 ft	150,000	300	10	7.10	0.210	3.53	2.98	8.40	14.92	12.76	27.69
Levee Sprayer	27'	30,768	350	8	2.57	0.038	0.68	0.19	0.06	0.94	0.41	1.36
Sprayer(300-450Gal)	47'	0	350	8	5.40	0.022	0.40	0.24	0.00	0.64	0.00	0.64
Sprayer(300-450Gal)	60'	103,000	350	8	5.66	0.017	0.31	0.19	0.09	0.61	0.63	1.25
Sprayer(300-450Gal)	80'	103,000	350	8	5.66	0.013	0.23	0.14	0.07	0.45	0.47	0.93
Sprayer(600-750Gal)	60'	174,000	350	8	10.29	0.017	0.31	0.36	0.16	0.84	1.08	1.92
Sprayer(600-825Gal)	80'	180,000	350	8	10.29	0.013	0.23	0.27	0.12	0.63	0.83	1.47
Sprayer(600-825Gal)	90'	255,000	350	8	10.29	0.011	0.21	0.24	0.16	0.61	1.05	1.66
Sprayer(1000-1400Gal)	90'	297,000	350	8	14.15	0.014	0.25	0.39	0.22	0.87	1.47	2.35
Sprayer(1200PlusGal)	120'	336,000	350	8	15.44	0.008	0.15	0.27	0.15	0.58	1.04	1.63

Appendix Table 8. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	\$/acre							
Blade-Box	6'	2WD 130	1,100	200	20	0.020	0.20	0.26	0.01	0.06	0.54	0.00	0.36	0.91
Blade-Box	10'	2WD 50	4,200	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	14'	2WD 50	7,060	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'	2WD 50	1,150	200	20	1.176	11.97	6.05	0.64	0.68	19.35	0.51	4.09	23.95
Blade-Scraper	10'	2WD 50	3,340	200	20	1.176	11.97	6.05	1.86	0.68	20.57	1.48	4.09	26.15
Blade-Scraper	14'	2WD 50	6,700	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chisel Plow(Folding)	16'	2WD 130	22,500	150	12	0.115	1.17	1.54	0.93	0.34	4.00	1.62	2.09	7.73
Chisel Plow(Folding)	24'	MFWD 190	38,100	150	12	0.076	0.77	1.49	1.05	0.43	3.75	1.82	2.70	8.28
Chisel Plow(Folding)	32'	MFWD 225	49,100	150	12	0.057	0.58	1.33	1.02	0.41	3.36	1.77	2.59	7.73
Chisel Plow(Folding)	42'	MFWD 225	55,700	150	12	0.044	0.44	1.01	0.88	0.31	2.66	1.53	1.97	6.17
Chisel Plow(Rigid)	15'	2WD 130	11,400	150	12	0.123	1.25	1.64	0.50	0.37	3.78	0.88	2.23	6.89
Chisel Plow(Rigid)	24'	MFWD 190	13,200	150	12	0.077	0.78	1.50	0.36	0.43	3.09	0.63	2.72	6.45
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	0.89	1.72	0.39	0.39	3.40	0.68	2.47	6.57
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.69	1.58	0.34	0.48	3.11	0.60	3.07	6.79
Colter-Chisel-Harrow	21 shank	2WD 190	19,200	150	12	0.088	0.89	1.72	0.61	0.39	3.62	1.05	2.47	7.15
Colter-Chisel-Harrow	27 shank	MFWD 225	24,000	150	12	0.068	0.69	1.58	0.59	0.48	3.36	1.02	3.07	7.46
Corn Grain Cart 8R30	500 bu	MFWD 190	23,700	200	12	0.031	0.32	0.62	0.20	0.17	1.33	0.35	1.13	2.82
Corn Grain Cart 8R40	700bu	MFWD 190	36,600	200	12	0.025	0.25	0.48	0.24	0.14	1.13	0.42	0.88	2.44
Cult & Post	4R-38	2WD 105	17,200	150	10	0.173	2.64	1.87	0.79	0.32	5.63	2.09	1.95	9.68
Cult & Post	6R-30	MFWD 150	21,600	150	10	0.146	4.47	2.26	0.84	0.68	8.27	2.23	4.10	14.61
Cult & Post	6R-38	MFWD 150	21,900	150	10	0.115	1.76	1.78	0.67	0.53	4.77	1.78	3.24	9.80
Cult & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.67	2.15	0.75	0.61	5.20	2.00	3.89	11.11
Cult & Post	8R-38	MFWD 190	26,600	150	10	0.086	1.32	1.70	0.61	0.48	4.13	1.62	3.08	8.84
Cult & Post	8R-38 2x1	MFWD 190	37,900	150	10	0.057	0.88	1.13	0.58	0.32	2.92	1.54	2.05	6.52
Cult & Post	10R-30	MFWD 225	31,400	150	10	0.088	1.34	2.03	0.73	0.62	4.74	1.94	3.94	10.64
Cult & Post	10R-38	MFWD 225	0	150	10	0.065	0.99	1.50	0.00	0.46	2.96	0.00	2.91	5.88
Cult & Post	12R-30	MFWD 225	40,700	150	10	0.073	1.11	1.69	0.79	0.52	4.13	2.10	3.29	9.52
Cult & Post	12R-38	MFWD 225	44,800	150	10	0.057	0.88	1.34	0.69	0.41	3.32	1.82	2.59	7.75
Cultipacker	12'	2WD 130	4,846	300	12	0.124	1.26	1.66	0.14	0.37	3.44	0.19	2.25	5.89
Cultipacker	20'	MFWD 150	15,200	300	12	0.074	0.76	1.15	0.26	0.34	2.52	0.36	2.09	4.98
Cultivate	4R-38	2WD 105	11,800	150	10	0.162	1.65	1.75	0.51	0.30	4.22	1.34	1.82	7.40
Cultivate	6R-30	MFWD 150	15,900	150	10	0.137	1.39	2.12	0.58	0.64	4.74	1.53	3.85	10.13
Cultivate	6R-38	MFWD 150	16,500	150	10	0.108	1.10	1.67	0.47	0.50	3.76	1.26	3.04	8.06
Cultivate	8R-30	MFWD 190	20,500	150	10	0.103	1.04	2.01	0.56	0.58	4.21	1.48	3.65	9.35
Cultivate	8R-38	MFWD 190	21,200	150	10	0.081	0.82	1.59	0.46	0.45	3.34	1.21	2.88	7.44
Cultivate	8R-38 2x1	MFWD 190	37,100	150	10	0.054	0.55	1.06	0.53	0.30	2.45	1.41	1.92	5.79
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	0.83	1.91	0.62	0.58	3.95	1.63	3.70	9.29
Cultivate	10R-38	MFWD 225	0	150	10	0.065	0.66	1.50	0.00	0.46	2.63	0.00	2.91	5.55
Cultivate	12R-30	MFWD 225	35,300	150	10	0.068	0.69	1.59	0.64	0.48	3.42	1.70	3.08	8.22
Cultivate	12R-38	MFWD 225	37,100	150	10	0.054	0.55	1.25	0.53	0.38	2.73	1.41	2.43	6.58
Disk & Incorporate	14'	2WD 130	29,500	200	10	0.149	2.28	2.00	1.32	0.45	6.06	2.33	2.71	11.10
Disk & Incorporate	24'	MFWD 190	44,500	200	10	0.087	1.33	1.70	1.16	0.49	4.69	2.05	3.09	9.84
Disk & Incorporate	32'	4WD 225	58,900	200	10	0.068	1.04	1.59	1.21	0.31	4.17	2.13	1.98	8.30
Disk & Incorporate	42'	MFWD 225	30,542	200	10	0.049	0.74	1.13	0.44	0.34	2.68	0.79	2.20	5.68
Disk Bed (Hipper)	4R-38	MFWD 150	8,380	160	10	0.147	1.50	2.27	0.30	0.68	4.77	0.81	4.13	9.73
Disk Bed (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.27	2.18	0.47	0.64	4.58	1.24	4.08	9.90
Disk Bed (Hipper)	6R-38	MFWD 170	15,100	160	10	0.098	1.00	1.72	0.37	0.51	3.61	0.98	3.22	7.82
Disk Bed (Hipper)	8R-30	MFWD 190	18,100	160	10	0.093	0.95	1.83	0.42	0.52	3.73	1.12	3.32	8.18
Disk Bed (Hipper)	8R-38 2x1	MFWD 190	31,200	160	10	0.049	0.50	0.96	0.38	0.27	2.12	1.01	1.74	4.89
Disk Bed (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.76	1.73	0.37	0.53	3.40	0.98	3.36	7.75
Disk Bed (Hipper)	10R-38	MFWD 225	23,000	160	10	0.059	0.60	1.37	0.34	0.42	2.73	0.89	2.65	6.28
Disk Bed (Hipper)	12R-30	MFWD 225	31,300	160	10	0.062	0.63	1.44	0.48	0.44	3.01	1.29	2.80	7.11
Disk Bed (Hipper)	12R-38	MFWD 225	34,200	160	10	0.049	0.50	1.14	0.42	0.35	2.41	1.11	2.21	5.74
Disk Bed (Hipper)Fld	8R-38	MFWD 190	20,000	160	10	0.074	0.75	1.44	0.37	0.41	2.99	0.97	2.62	6.59
Disk Bed (Hipper)Rdg	8R-38	MFWD 190	18,700	160	10	0.074	0.75	1.44	0.34	0.41	2.96	0.91	2.62	6.50
Disk Bed w/roller	8R-30	2WD 190	28,600	160	10	0.093	0.95	1.83	0.67	0.41	3.87	1.77	2.63	8.28
Disk Bed w/roller	12R-30	MFWD 225	46,700	160	10	0.062	0.63	1.44	0.72	0.44	3.25	1.92	2.80	7.99
Disk Harrow	14'	2WD 130	24,100	180	10	0.140	1.42	1.87	0.93	0.42	4.66	1.98	2.54	9.19
Disk Harrow	24'	MFWD 190	44,500	180	10	0.081	0.83	1.60	1.01	0.46	3.90	2.13	2.89	8.94
Disk Harrow	28'	MFWD 225	49,800	180	10	0.070	0.71	1.62	0.97	0.49	3.80	2.05	3.14	9.00
Disk Harrow	32'		53,500	180	10	0.061	0.82	0.00	0.91	0.00	0.00	1.92	0.00	0.00
Disk Harrow	42'	MFWD 225	98,500	180	10	0.046	0.47	1.08	1.27	0.33	3.17	2.70	2.09	7.97
Ditcher		2WD 130	4,900	200	10	0.020	0.20	0.26	0.03	0.06	0.57	0.05	0.36	0.98
Ditcher (1m/160a)		2WD 130	4,900	200	10	0.009	0.09	0.12	0.01	0.02	0.26	0.02	0.16	0.46
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.36	2.38	1.39	0.72	6.86	1.57	4.33	12.76
Fert Appl (Liquid)	6R-30	MFWD 170	11,200	150	8	0.130	1.99	2.29	0.97	0.67	5.94	1.10	4.27	11.32
Fert Appl (Liquid)	6R-38	MFWD 170	12,200	150	8	0.103	1.57	1.80	0.84	0.53	4.76	0.94	3.37	9.09
Fert Appl (Liquid)	8R-30	MFWD 190	12,200	150	8	0.098	1.49	1.92	0.79	0.55	4.77	0.90	3.47	9.15
Fert Appl (Liquid)	8R-38	MFWD 190	14,900	150	8	0.077	1.18	1.51	0.77	0.43	3.91	0.87	2.75	7.53
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,500	150	8	0.051	0.78	1.01	0.60	0.29	2.69	0.68	1.83	5.20
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.19	1.81	0.97	0.55	4.55	1.09	3.52	9.17
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	0.94	1.43	0.83	0.44	3.66	0.94	2.77	7.38
Fert Appl (Liquid)	12R-30	MFWD 225	17,900	150	8	0.078	1.19	1.81	0.93	0.55	4.51	1.05	3.52	9.10
Fert Appl (Liquid)	12R-38	MFWD 225	17,500	150	8	0.051	0.78	1.19	0.60	0.36	2.95	0.68	2.31	5.95
Field Cult & Inc	12'	2WD 150	13,605	100	10	0.132	2.01	2.04	0.44	0.44	4.95	1.90	2.68	9.54
Field Cult & Inc	24'	MFWD 170	24,679	100	10	0.066	1.00	1.15	0.40	0.34	2.91	1.72	2.15	6.80
Field Cultivate	12'	2WD 150	16,600	100	10	0.124	1.26	1.92	0.51	0.41	4.12	2.18	2.52	8.83
Field Cultivate	24'	MFWD 170	32,100	100	10	0.062	0.63	1.08	0.49	0.32	2.54	2.11	2.03	6.68

Appendix Table 8. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
										\$/acre-				
Field Cultivate	32'	MFWD 190	39,100	100	10	0.046	0.47	0.91	0.45	0.26	2.10	1.92	1.65	5.68
Field Cultivate	42'	MFWD 225	55,300	100	10	0.035	0.36	0.82	0.49	0.25	1.93	2.07	1.59	5.60
Field Cultivate	50'	MFWD 225	64,300	100	10	0.029	0.30	0.69	0.48	0.21	1.68	2.02	1.33	5.05
Gate Installer		2WD 130	2,960	10	10	0.020	0.40	0.26	0.17	0.06	0.91	0.60	0.36	1.87
Grain Drill	12'	2WD 130	23,500	150	8	0.157	3.19	2.10	1.38	0.47	7.16	2.64	2.84	12.65
Grain Drill	15'	MFWD 150	32,000	150	8	0.125	2.55	1.94	1.50	0.58	6.59	2.88	3.52	13.00
Grain Drill	20'	MFWD 170	38,600	150	8	0.094	1.91	1.65	1.36	0.48	5.42	2.61	3.08	11.11
Grain Drill	24'	MFWD 190	62,200	150	8	0.078	1.59	1.53	1.83	0.44	5.41	3.50	2.78	11.69
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.27	1.45	1.44	0.44	4.62	2.76	2.82	10.21
Grain Drill & Pre	12'	2WD 130	28,900	150	8	0.169	3.44	2.26	1.83	0.50	8.05	3.50	3.06	14.62
Grain Drill & Pre	15'	MFWD 150	37,400	150	8	0.135	2.75	2.09	1.89	0.63	7.37	3.63	3.79	14.80
Grain Drill & Pre	20'	MFWD 170	44,000	150	8	0.101	2.06	1.77	1.67	0.52	6.04	3.20	3.31	12.56
Grain Drill & Pre	24'	MFWD 190	67,600	150	8	0.084	1.72	1.65	2.14	0.47	5.99	4.10	2.99	13.09
Grain Drill & Pre	30'	MFWD 225	78,000	150	8	0.067	1.37	1.56	1.97	0.48	5.40	3.78	3.03	12.23
Harrow	13'	2WD 130	4,360	200	10	0.119	1.21	1.59	0.18	0.35	3.35	0.27	2.16	5.79
Harrow	21'	2WD 150	6,390	200	10	0.073	0.75	1.14	0.16	0.24	2.30	0.24	1.50	4.06
Harrow	40'	MFWD 190	17,000	200	10	0.038	0.39	0.75	0.23	0.21	1.60	0.34	1.37	3.32
Harrow	47'	MFWD 190	22,600	200	10	0.033	0.33	0.64	0.26	0.18	1.42	0.39	1.17	2.99
Header - Corn	4R-38	240hp	25,147	300	8	0.201	2.69	4.96	1.26	3.38	12.31	1.90	13.35	27.56
Header - Corn	6R30"	240hp	45,500	300	8	0.170	2.28	4.20	1.93	2.86	11.29	2.91	11.30	25.51
Header - Corn	6R38"	240hp	46,300	300	8	0.134	1.80	3.32	1.55	2.26	8.93	2.34	8.92	20.20
Header - Corn	8R-30	240hp	58,100	300	8	0.127	1.71	3.15	1.85	2.14	8.86	2.79	8.47	20.14
Header - Corn	8R-38	275hp	59,200	300	8	0.100	1.35	2.85	1.49	3.31	9.01	2.24	13.07	24.33
Header - Corn	12R-20	275hp	77,300	300	8	0.127	1.71	3.61	2.46	4.19	11.98	3.71	16.53	32.23
Header - Corn	12R-30	275hp	90,900	300	8	0.085	1.14	2.40	1.93	2.79	8.27	2.91	11.02	22.21
Header - Rice (CL)	22' Rigid	240hp	21,887	300	8	0.288	3.86	7.12	1.57	4.85	17.42	2.37	19.15	38.95
Header - Rice (CL)	25' Rigid	240hp	64,400	300	8	0.253	3.40	6.27	4.08	4.27	18.03	6.14	16.85	41.03
Header - Rice (CL)	30' Rigid	275hp	74,100	300	8	0.211	2.83	5.98	3.91	6.94	19.68	5.89	27.38	52.96
Header - Rice (SL)	22' Rigid	240hp	21,887	300	8	0.250	3.35	6.17	1.36	4.20	15.09	2.05	16.59	33.75
Header - Rice (SL)	25' Rigid	240hp	64,400	300	8	0.220	2.94	5.43	3.54	3.70	15.62	5.32	14.60	35.56
Header - Rice (SL)	30' Rigid	275hp	74,100	300	8	0.183	2.45	5.18	3.39	6.01	17.05	5.10	23.73	45.90
Header - Soybean	15' Flex	240hp	0	300	8	0.170	2.28	4.20	0.00	2.86	9.35	0.00	11.30	20.65
Header - Soybean	18' Flex	240hp	20,309	300	8	0.141	1.90	3.50	0.72	2.38	8.51	1.08	9.42	19.02
Header - Soybean	22' Flex	240hp	31,300	300	8	0.116	1.55	2.86	0.90	1.95	7.28	1.36	7.70	16.36
Header - Soybean	25' Flex	275hp	34,400	300	8	0.102	1.36	2.89	0.87	3.35	8.49	1.32	13.22	23.04
Header - Soybean	30' Flex	275hp	30,200	300	8	0.085	1.14	2.40	0.64	2.79	6.98	0.96	11.02	18.97
Header Wheat/Sorghum	18' Rigid	240hp	19,069	300	8	0.141	1.90	3.50	0.67	2.38	8.47	1.01	9.42	18.91
Header Wheat/Sorghum	22' Rigid	240hp	18,200	300	8	0.116	1.55	2.86	0.52	1.95	6.90	0.79	7.70	15.40
Header Wheat/Sorghum	25' Rigid	240hp	28,100	300	8	0.102	1.36	2.52	0.71	1.71	6.32	1.07	6.78	14.19
Header Wheat/Sorghum	30' Rigid	275hp	31,000	300	8	0.085	1.14	2.40	0.65	2.79	7.00	0.99	11.02	19.01
Heavy Disk	14'	MFWD 150	24,100	180	10	0.145	1.48	2.25	0.97	0.67	5.39	2.06	4.08	11.55
Heavy Disk	21'	MFWD 170	39,600	180	10	0.097	0.99	1.70	1.07	0.50	4.26	2.26	3.17	9.70
Heavy Disk	27'	MFWD 190	49,800	180	10	0.075	0.77	1.48	1.04	0.42	3.72	2.21	2.68	8.61
LA Boom Sprayer	30 ft	MFWD 150	3,000	150	10	0.059	0.61	0.92	0.13	0.27	1.94	0.14	1.68	3.77
Land Plane	40'x10'	MFWD 190	6,020	200	10	0.242	2.47	4.74	0.29	1.36	8.87	0.77	8.59	18.23
Land Plane	50'x16'	MFWD 190	14,600	200	10	0.151	1.54	2.96	0.44	0.85	5.80	1.16	5.37	12.34
LARice Backhoe-Rrmnt	2 ft	MFWD 150	6,000	100	10	0.500	5.09	7.72	2.64	2.32	17.77	3.64	14.01	35.43
LARice Land Level	13 ft	MFWD 150	7,500	200	15	0.190	1.93	2.93	0.15	0.88	5.91	0.65	5.32	11.89
LARice Levee Plow	8 ft	4WD 300	4,600	150	10	0.050	0.50	1.54	0.07	0.44	2.57	0.18	2.77	5.53
LARice Water Level	24 ft	4WD 300	3,500	100	15	0.149	1.52	4.63	0.23	1.32	7.70	0.48	8.31	16.50
Levee Splitter (1/80	2 blade	2WD 150	3,280	50	10	0.004	0.04	0.06	0.00	0.01	0.12	0.02	0.08	0.23
Lo-Till & Bed	4R-38	MFWD 190	5,100	150	12	0.145	1.48	2.84	0.26	0.81	5.41	0.48	5.15	11.05
Middle Buster	6R-38	MFWD 150	12,800	160	8	0.120	1.22	1.85	0.36	0.55	4.00	1.13	3.36	8.50
Middle Buster	8R-30	MFWD 190	20,800	160	8	0.114	1.16	2.23	0.55	0.64	4.59	1.75	4.04	10.39
Middle Buster	8R-38	MFWD 190	18,100	160	8	0.090	0.91	1.76	0.38	0.50	3.57	1.20	3.19	7.97
Middle Buster	8R-40 2x1	MFWD 190	29,200	160	8	0.060	0.61	1.17	0.41	0.33	2.53	1.29	2.12	5.96
Middle Buster	10R-30	MFWD 225	29,300	160	8	0.091	0.92	2.11	0.62	0.65	4.32	1.97	4.09	10.39
Middle Buster	10R-38	MFWD 225	32,100	160	8	0.072	0.73	1.66	0.54	0.51	3.45	1.70	3.23	8.39
Middle Buster	12R-38	MFWD 225	29,200	160	8	0.060	0.61	1.39	0.41	0.42	2.84	1.29	2.69	6.83
Mulcher Plow	30'	MFWD 225	0	100	10	0.068	0.69	1.57	0.00	0.48	2.75	0.00	3.05	5.81
NT Grain Drill	12'	2WD 130	41,600	150	8	0.163	3.33	2.19	2.55	0.49	8.56	4.88	2.96	16.41
NT Grain Drill	15'	MFWD 150	49,000	150	8	0.130	2.66	2.02	2.40	0.60	7.70	4.60	3.66	15.97
NT Grain Drill	20'	MFWD 170	65,200	150	8	0.098	1.99	1.71	2.40	0.50	6.62	4.59	3.20	14.43
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.66	1.60	2.52	0.46	6.25	4.83	2.89	13.99
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.33	1.51	2.31	0.46	5.62	4.42	2.93	12.99
NT Grain Drill & Pre	12'	2WD 130	47,000	150	8	0.176	3.58	2.35	3.10	0.53	9.58	5.94	3.19	18.72
NT Grain Drill & Pre	15'	MFWD 150	54,400	150	8	0.141	2.87	2.17	2.87	0.65	8.58	5.50	3.95	18.03
NT Grain Drill & Pre	20'	MFWD 170	70,600	150	8	0.105	2.15	1.85	2.80	0.54	7.35	5.35	3.45	16.16
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.79	1.72	2.90	0.49	6.91	5.55	3.12	15.58
NT Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.070	1.43	1.63	2.69	0.50	6.26	5.15	3.16	14.59
NT Plant&Pre-Folding	8R-38	MFWD 170	51,600	150	8	0.083	1.70	1.46	1.61	0.43	5.21	3.09	2.73	11.04
NT Grain Drill & Pre	15'	MFWD 150	54,400	150	8	0.141	2.87	2.17	2.87	0.65	8.58	5.50	3.95	18.03
NT Grain Drill & Pre	20'	MFWD 170	70,600	150	8	0.105	2.15	1.85	2.80	0.54	7.35	5.35	3.45	16.16
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.79	1.72	2.90	0.49	6.91	5.55	3.12	15.58

Appendix Table 8. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	\$/acre-							
NT Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.070	1.43	1.63	2.69	0.50	6.26	5.15	3.16	14.59
NT Plant&Pre-Folding	8R-38	MFWD 170	51,600	150	8	0.083	1.70	1.46	1.61	0.43	5.21	3.09	2.73	11.04
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	84,200	150	8	0.055	1.13	0.97	1.75	0.28	4.15	3.36	1.81	9.33
NT Plant&Pre-Folding	10R-30	MFWD 190	57,555	150	8	0.084	1.72	1.65	1.82	0.47	5.68	3.49	2.99	12.17
NT Plant&Pre-Folding	10R-38	MFWD 190	52,893	150	8	0.066	1.35	1.30	1.32	0.37	4.36	2.53	2.36	9.25
NT Plant&Pre-Folding	12R-20	MFWD 190	73,000	150	8	0.105	2.15	2.06	2.89	0.59	7.71	5.53	3.74	16.99
NT Plant&Pre-Folding	12R-30	MFWD 190	75,900	150	8	0.070	1.43	1.37	2.00	0.39	5.21	3.83	2.49	11.55
NT Plant&Pre-Folding	12R-38	MFWD 190	84,200	150	8	0.055	1.13	1.08	1.75	0.31	4.29	3.36	1.97	9.62
NT Plant&Pre-Folding	16R-30	MFWD 190	102,000	150	8	0.052	1.07	1.03	2.02	0.29	4.43	3.86	1.87	10.17
NT Plant&Pre-Folding	23R-15	MFWD 190	129,000	150	8	0.073	1.49	1.43	3.55	0.41	6.89	6.79	2.60	16.29
NT Plant&Pre-Folding	24R-20	MFWD 190	158,000	150	8	0.052	1.07	1.03	3.13	0.29	5.54	5.99	1.87	13.40
NT Plant&Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.035	0.71	0.68	2.44	0.19	4.05	4.67	1.24	9.97
NT Plant&Pre-Rigid	4R-30	2WD 130	27,100	150	8	0.211	4.30	2.83	2.14	0.63	9.92	4.11	3.83	17.86
NT Plant&Pre-Rigid	4R-38	2WD 130	29,700	150	8	0.166	3.39	2.22	1.85	0.50	7.97	3.54	3.01	14.54
NT Plant&Pre-Rigid	6R-30	MFWD 150	38,200	150	8	0.141	2.87	2.17	2.02	0.65	7.72	3.86	3.95	15.54
NT Plant&Pre-Rigid	6R-38	MFWD 150	34,200	150	8	0.111	2.26	1.71	1.42	0.51	5.93	2.73	3.11	11.78
NT Plant&Pre-Rigid	8R-22	MFWD 170	26,219	150	8	0.143	2.92	2.51	1.41	0.74	7.60	2.70	4.70	15.01
NT Plant&Pre-Rigid	8R-30	MFWD 170	43,600	150	8	0.105	2.15	1.85	1.72	0.54	6.28	3.30	3.45	13.04
NT Plant&Pre-Rigid	8R-38	MFWD 170	41,300	150	8	0.077	1.57	1.35	1.19	0.40	4.51	2.28	2.52	9.32
NT Plant&Pre-Rigid	10R-30	MFWD 190	49,000	150	8	0.084	1.72	1.65	1.55	0.47	5.40	2.97	2.99	11.37
NT Plant&Pre-Rigid	12R-20	MFWD 190	53,000	150	8	0.105	2.15	2.06	2.10	0.59	6.91	4.02	3.74	14.68
NT Plant&Pre-Rigid	12R-30	MFWD 190	69,300	150	8	0.070	1.43	1.37	1.83	0.39	5.04	3.50	2.49	11.04
Paratill & Bed	4R-30	MFWD 225	16,500	150	12	0.204	2.08	4.73	1.21	1.45	9.48	2.11	9.16	20.76
Paratill & Bed	4R-38	MFWD 225	15,200	150	12	0.160	1.63	3.72	0.88	1.14	7.39	1.53	7.21	16.14
Paratill & Bed	6R-30	MFWD 225	22,600	150	12	0.136	1.38	3.15	1.11	0.97	6.62	1.92	6.11	14.66
Paratill & Bed	6R-38	MFWD 225	20,300	150	12	0.107	1.09	2.49	0.78	0.76	5.14	1.36	4.82	11.33
Paratill & Bed	8R-30	MFWD 225	28,100	150	12	0.102	1.04	2.36	1.03	0.72	5.17	1.79	4.58	11.55
Paratill & Bed	8R382X1	MFWD 225	69,100	150	12	0.053	0.54	1.24	1.34	0.38	3.51	2.32	2.41	8.25
Paratill & Bed Fold.	8R-38	MFWD 225	54,400	150	12	0.080	0.82	1.87	1.58	0.57	4.85	2.75	3.62	11.23
Paratill & Bed Fold.	12R-38	MFWD 225	69,100	150	12	0.053	0.54	1.24	1.34	0.38	3.51	2.32	2.41	8.25
Paratill & Bed Rigid	8R-38	MFWD 225	24,900	150	12	0.080	0.82	1.87	0.72	0.57	3.99	1.25	3.62	8.87
Pipe Drag	30'	2WD 150	500	100	12	0.051	0.52	0.79	0.00	0.17	1.51	0.02	1.05	2.58
Pipe Spool 160ac	1/4m roll	2WD 130	3,640	15	12	0.003	0.08	0.04	0.00	0.00	0.14	0.07	0.05	0.27
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.17	0.05	0.00	0.01	0.23	0.00	0.06	0.30
Plant & Pre Folding	8R-38	MFWD 170	48,000	150	8	0.080	1.63	1.40	1.44	0.41	4.90	2.76	2.62	10.28
Plant & Pre Folding	8R38 2x1	MFWD 170	78,800	150	8	0.053	1.08	0.93	1.57	0.27	3.87	3.02	1.74	8.64
Plant & Pre Folding	10R-30	MFWD 190	52,920	150	8	0.081	1.65	1.58	1.61	0.45	5.31	3.08	2.87	11.27
Plant & Pre Folding	10R-38	MFWD 190	48,258	150	8	0.064	1.30	1.25	1.15	0.36	4.07	2.21	2.26	8.56
Plant & Pre Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.06	1.98	2.57	0.57	7.19	4.92	3.59	15.71
Plant & Pre Folding	12R-30	MFWD 190	70,500	150	8	0.067	1.37	1.32	1.78	0.38	4.87	3.42	2.39	10.69
Plant & Pre Folding	12R-38	MFWD 190	78,800	150	8	0.053	1.08	1.04	1.57	0.30	4.01	3.02	1.89	8.92
Plant & Pre Folding	16R-30	MFWD 190	95,100	150	8	0.050	1.03	0.99	1.81	0.28	4.12	3.46	1.79	9.38
Plant & Pre Folding	23R-15	MFWD 190	126,000	150	8	0.070	1.43	1.37	3.33	0.39	6.54	6.37	2.49	15.41
Plant & Pre Folding	24R-20	MFWD 190	147,000	150	8	0.050	1.03	0.99	2.79	0.28	5.11	5.35	1.79	12.26
Plant & Pre Folding	24R-30	MFWD 190	182,000	150	8	0.033	0.68	0.66	2.30	0.19	3.85	4.41	1.19	9.46
Plant & Pre Rigid	4R-30	2WD 130	25,300	150	8	0.203	4.13	2.71	1.92	0.61	9.39	3.68	3.67	16.75
Plant & Pre Rigid	4R-38	2WD 130	27,900	150	8	0.159	3.25	2.13	1.67	0.48	7.54	3.20	2.89	13.64
Plant & Pre Rigid	6R-30	MFWD 150	35,500	150	8	0.135	2.75	2.09	1.80	0.63	7.27	3.44	3.79	14.52
Plant & Pre Rigid	6R-38	MFWD 150	31,500	150	8	0.106	2.17	1.65	1.26	0.49	5.58	2.41	2.99	10.99
Plant & Pre Rigid	8R-22	MFWD 170	23,550	150	8	0.138	2.81	2.41	1.22	0.71	7.16	2.33	4.51	14.01
Plant & Pre Rigid	8R-30	MFWD 170	40,000	150	8	0.101	2.06	1.77	1.52	0.52	5.89	2.91	3.31	12.12
Plant & Pre Rigid	8R-38	MFWD 170	37,700	150	8	0.080	1.63	1.40	1.13	0.41	4.59	2.17	2.62	9.38
Plant & Pre Rigid	10R-30	MFWD 190	44,500	150	8	0.081	1.65	1.58	1.35	0.45	5.05	2.59	2.87	10.52
Plant & Pre Rigid	12R-20	MFWD 190	47,600	150	8	0.101	2.06	1.98	1.81	0.57	6.43	3.46	3.59	13.50
Plant & Pre Rigid	12R-30	MFWD 190	63,900	150	8	0.067	1.37	1.32	1.62	0.38	4.70	3.10	2.39	10.20
Plant - Folding	8R-38	MFWD 170	42,600	150	8	0.074	1.51	1.30	1.19	0.38	4.39	2.27	2.43	9.11
Plant - Folding	8R-38 2x1	MFWD 170	71,100	150	8	0.049	1.01	0.86	1.32	0.25	3.45	2.53	1.62	7.61
Plant - Folding	10R-30	MFWD 190	47,426	150	8	0.075	1.53	1.47	1.34	0.42	4.77	2.56	2.67	10.01
Plant - Folding	10R-38	MFWD 190	43,011	150	8	0.059	1.21	1.16	0.95	0.33	3.66	1.83	2.10	7.61
Plant - Folding	12R-20	MFWD 190	62,200	150	8	0.094	1.91	1.84	2.19	0.53	6.49	4.20	3.33	14.03
Plant - Folding	12R-30	MFWD 190	62,800	150	8	0.062	1.27	1.22	1.48	0.35	4.34	2.83	2.22	9.40
Plant - Folding	12R-38	MFWD 190	71,100	150	8	0.049	1.01	0.97	1.32	0.27	3.58	2.53	1.75	7.87
Plant - Folding	16R-30	MFWD 190	87,400	150	8	0.047	0.95	0.92	1.54	0.26	3.69	2.95	1.66	8.31
Plant - Folding	23R-15	MFWD 190	118,000	150	8	0.065	1.33	1.28	2.89	0.36	5.87	5.54	2.31	13.74
Plant - Folding	24R-20	MFWD 190	140,000	150	8	0.047	0.95	0.92	2.47	0.26	4.62	4.73	1.66	11.02
Plant - Folding	24R-30	MFWD 190	165,000	150	8	0.031	0.63	0.61	1.94	0.17	3.37	3.71	1.11	8.20
Plant - Rigid	4R-30	2WD 130	19,900	150	8	0.188	3.83	2.52	1.40	0.56	8.33	2.69	3.41	14.44
Plant - Rigid	4R-38	2WD 130	22,500	150	8	0.148	3.02	1.98	1.25	0.44	6.70	2.39	2.68	11.79
Plant - Rigid	6R-30	MFWD 150	30,100	150	8	0.125	2.55	1.94	1.41	0.58	6.50	2.71	3.52	12.74
Plant - Rigid	6R-38	MFWD 150	26,200	150	8	0.099	2.02	1.53	0.97	0.46	4.99	1.86	2.78	9.63
Plant - Rigid	8R-22	MFWD 170	18,473	150	8	0.127	2.60	2.23	0.88	0.66	6.39	1.69	4.17	12.26
Plant - Rigid	8R-30	MFWD 170	34,600	150	8	0.094	1.91	1.65	1.22	0.48	5.28	2.34	3.07	10.70
Plant - Rigid	8R-38	MFWD 170	32,300	150	8	0.074	1.51	1.30	0.90	0.38	4.11	1.72	2.43	8.27
Plant - Rigid	10R-30	MFWD 190	37,600	150	8	0.075	1.53	1.47	1.06	0.42	4.49	2.03	2.67	9.20
Plant - Rigid	12R-20	MFWD 190	42,200	150	8	0.094	1.91	1.84	1.49	0.53	5.78	2.85	3.33	11.97
Plant - Rigid	12R-30	MFWD 190	56,200	150	8	0.062	1.27	1.22	1.32	0.35	4.18	2.53	2.22	8.94
Plant - Rigid	15R-15	2WD 150	53,500	150	8	0.094	1.91	1.45	1.89	0.31	5.58	3.61	1.91	11.11
Pull Levee (1m/80a))	4 blade	2WD 50	3,180	100	10	0.003	0.03	0.01	0.00	0.00	0.05	0.01	0.01	0.08

Appendix Table 8. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Rice Grain Cart	500 Bu	MFWD 190	23,700	200	12	0.057	0.58	1.11	0.36	0.32	2.38	0.63	2.02	5.04
Rice Grain Cart	700 Bu	MFWD 190	36,600	200	12	0.063	0.64	1.24	0.62	0.35	2.87	1.09	2.24	6.21
Roller	32'	MFWD 170	17,500	100	12	0.046	0.47	0.81	0.13	0.24	1.66	0.76	1.52	3.96
Rotary Cutter	7'	MFWD 130	4,100	185	10	0.168	1.71	2.25	0.55	0.61	5.13	0.39	3.67	9.20
Rotary Cutter	12'	2WD 150	12,000	185	10	0.098	0.99	1.51	0.95	0.33	3.80	0.67	1.99	6.47
Rotary Cutter	15'	MFWD 150	19,000	185	10	0.078	0.79	1.21	1.21	0.36	3.58	0.85	2.20	6.64
Row Cond & Inc	13'	2WD 130	13,100	100	10	0.137	2.10	1.84	0.45	0.41	4.81	1.90	2.49	9.22
Row Cond & Inc	21'	2WD 170	16,500	100	10	0.085	1.30	1.49	0.35	0.41	3.56	1.48	2.62	7.67
Row Cond & Inc	26'	MFWD 190	19,400	100	10	0.063	0.96	1.24	0.30	0.35	2.87	1.29	2.24	6.41
Row Cond & Inc	38'	MFWD 225	27,100	100	10	0.047	0.72	1.09	0.31	0.33	2.46	1.35	2.11	5.93
Row Cond & Inc	42'	MFWD 225	20,400	100	10	0.040	0.61	0.93	0.20	0.28	2.03	0.86	1.80	4.70
Row Cond (Harrow)	13'	2WD 130	7,300	100	10	0.114	1.16	1.53	0.20	0.34	3.26	0.88	2.08	6.22
Row Cond (Harrow)	21'	2WD 170	12,000	100	10	0.071	0.72	1.24	0.21	0.34	2.52	0.90	2.18	5.61
Row Cond (Harrow)	27'	MFWD 190	12,400	100	10	0.057	0.58	1.12	0.17	0.32	2.20	0.75	2.03	4.99
Row Cond (Harrow)	38'	MFWD 225	22,200	100	10	0.039	0.40	0.91	0.21	0.28	1.80	0.92	1.76	4.49
Row Cond (Harrow)	42'	MFWD 225	15,582	100	10	0.035	0.36	0.82	0.13	0.25	1.57	0.58	1.59	3.75
Row Cond (Plant)	13'	2WD 130	7,120	100	10	0.157	1.60	2.10	0.27	0.47	4.45	1.18	2.84	8.48
Row Cond (Plant)	21'	2WD 170	11,700	100	10	0.097	0.99	1.70	0.28	0.47	3.45	1.20	2.98	7.64
Row Cond (Plant)	27'	MFWD 190	12,400	100	10	0.078	0.80	1.53	0.24	0.44	3.02	1.02	2.78	6.83
Row Cond (Plant)	38'	MFWD 225	16,587	100	10	0.053	0.54	1.24	0.22	0.38	2.39	0.94	2.41	5.75
Row Cond (Plant)	42'	MFWD 225	15,582	100	10	0.048	0.49	1.12	0.18	0.34	2.15	0.80	2.18	5.14
RT Cult (Early)	8R-30	2WD 170	20,774	200	12	0.103	1.04	1.80	1.02	0.50	4.38	1.04	3.16	8.59
RT Cult (Early)	12R-30	2WD 190	29,998	200	12	0.068	0.69	1.34	0.98	0.30	3.34	1.00	1.93	6.27
RT Cult (Late)	8R-30	2WD 170	20,774	200	12	0.128	1.31	2.25	1.28	0.62	5.47	1.30	3.95	10.73
RT Cult (Late)	12R-30	2WD 190	29,998	200	12	0.085	0.87	1.68	1.23	0.38	4.17	1.25	2.41	7.84
RT Cult + PD (Early)	8R-30	2WD 150	26,264	200	12	0.110	1.67	1.69	1.38	0.37	5.13	1.40	2.23	8.77
RT Cult + PD (Early)	12R-30	MFWD 225	35,493	200	12	0.073	1.11	1.69	1.24	0.52	4.58	1.26	3.29	9.14
RT Cult + PD (Late)	8R-30	2WD 170	26,264	200	12	0.137	2.09	2.40	1.73	0.67	6.90	1.75	4.22	12.88
RT Cult + PD (Late)	12R-30	2WD 190	35,493	200	12	0.091	1.39	1.79	1.55	0.40	5.16	1.57	2.57	9.32
Spin Spreader	5 ton	MFWD 190	12,200	100	8	0.042	0.85	0.82	0.28	0.23	2.20	0.57	1.49	4.27
Spin Spreader	5 ton	MFWD 190	12,200	100	8	0.042	0.85	0.82	0.28	0.23	2.20	0.57	1.49	4.27
Spray (Band)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15	0.32	2.53	0.19	2.04	4.77
Spray (Band)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15	0.21	1.75	0.18	1.38	3.32
Spray (Band)	50'	MFWD 170	6,800	200	8	0.033	0.51	0.59	0.10	0.17	1.39	0.12	1.10	2.62
Spray (Band)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13	0.16	1.35	0.16	1.04	2.56
Spray (Band)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24	0.14	1.31	0.29	0.92	2.52
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,380	200	8	0.130	1.98	2.01	0.32	0.60	4.93	0.39	3.64	8.97
Spray (Bcast/HB)	20' Rigid	2WD 50	6,340	200	8	0.084	1.29	0.43	0.25	0.04	2.02	0.30	0.29	2.62
Spray (Bcast/HB)	27' Fold	MFWD 170	13,200	200	8	0.062	0.95	1.09	0.38	0.32	2.76	0.46	2.04	5.28
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,680	200	8	0.062	0.95	1.09	0.22	0.32	2.60	0.27	2.04	4.92
Spray (Bcast/HB)	30' Fold	MFWD 170	20,300	200	8	0.056	0.86	0.98	0.53	0.29	2.67	0.64	1.84	5.16
Spray (Bcast/HB)	40' Fold	MFWD 170	21,000	200	8	0.042	0.64	0.74	0.41	0.21	2.02	0.50	1.38	3.90
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	0.95	1.09	0.65	0.32	3.03	0.79	2.04	5.87
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.64	0.74	0.63	0.21	2.24	0.76	1.38	4.39
Spray (Broadcast)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15	0.32	2.53	0.19	2.04	4.77
Spray (Broadcast)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15	0.21	1.75	0.18	1.38	3.32
Spray (Broadcast)	50'	MFWD 170	6,800	200	8	0.033	0.51	0.59	0.10	0.17	1.39	0.12	1.10	2.62
Spray (Broadcast)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13	0.16	1.35	0.16	1.04	2.56
Spray (Broadcast)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24	0.14	1.31	0.29	0.92	2.52
Spray (Direct/Hood)	8R-30	MFWD 170	18,000	200	8	0.084	1.29	1.48	0.71	0.43	3.92	0.85	2.76	7.54
Spray (Direct/Hood)	8R-38	MFWD 170	24,900	200	8	0.066	1.02	1.17	0.78	0.34	3.31	0.93	2.18	6.44
Spray (Direct/Hood)	12R-30	MFWD 170	26,100	200	8	0.056	0.86	0.98	0.69	0.29	2.83	0.83	1.84	5.50
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.67	0.77	0.55	0.23	2.24	0.66	1.45	4.36
Spray (Direct/Layby)	8R-30	MFWD 170	9,000	200	8	0.084	1.29	1.48	0.35	0.43	3.56	0.42	2.76	6.76
Spray (Direct/Layby)	8R-38	MFWD 170	9,000	200	8	0.066	1.02	1.17	0.28	0.34	2.82	0.33	2.18	5.34
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	12,400	200	8	0.044	0.67	0.77	0.25	0.23	1.94	0.31	1.45	3.71
Spray (Direct/Layby)	10R-30	MFWD 170	12,200	200	8	0.067	1.03	1.18	0.38	0.35	2.95	0.46	2.21	5.63
Spray (Direct/Layby)	12R-30	MFWD 170	12,500	200	8	0.056	0.86	0.98	0.33	0.29	2.47	0.39	1.84	4.71
Spray (Direct/Layby)	12R-38	MFWD 170	12,400	200	8	0.044	0.67	0.77	0.25	0.23	1.94	0.31	1.45	3.71
Spray (Direct/Layby)	16R-20	MFWD 170	10,000	200	8	0.063	0.96	1.10	0.29	0.32	2.70	0.35	2.07	5.13
Spray (Spot)	27'	MFWD 170	5,390	200	8	0.062	0.95	1.09	0.15	0.32	2.53	0.19	2.04	4.77
Spray (Spot)	40'	MFWD 170	7,700	200	8	0.042	0.64	0.74	0.15	0.21	1.75	0.18	1.38	3.32
Spray (Spot)	50'	MFWD 170	7,420	200	8	0.033	0.51	0.59	0.11	0.17	1.40	0.14	1.10	2.65
Spray (Spot)	53'	MFWD 170	9,300	200	8	0.031	0.48	0.55	0.13	0.16	1.35	0.16	1.04	2.56
Spray (Spot)	60'	MFWD 170	18,400	200	8	0.028	0.43	0.49	0.24	0.14	1.31	0.29	0.92	2.52
Stalk Shredder	14'	MFWD 150	13,100	200	10	0.117	1.19	1.81	1.35	0.54	4.91	0.81	3.30	9.03
Stalk Shredder	20'	MFWD 150	30,200	200	10	0.082	0.83	1.27	2.18	0.38	4.67	1.31	2.31	8.30
Stalk Shredder-Flail	12'	MFWD 150	15,100	200	10	0.137	1.39	2.12	1.81	0.64	5.97	1.09	3.85	10.92
Stalk Shredder-Flail	20'	MFWD 150	27,300	200	10	0.082	0.83	1.27	1.97	0.38	4.46	1.18	2.31	7.97
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.08	3.99	0.24	1.14	7.46	0.59	7.23	15.30
Subsoiler	4 shank	MFWD 225	8,330	100	15	0.153	1.56	3.55	0.42	1.09	6.64	1.05	6.89	14.59
Subsoiler	5 shank	MFWD 225	13,800	100	15	0.122	1.24	2.83	0.56	0.87	5.51	1.39	5.48	12.39
Subsoiler low-till	4 shank	MFWD 225	12,000	100	15	0.153	1.56	3.55	0.61	1.09	6.83	1.51	6.89	15.24
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.04	2.36	0.56	0.72	4.69	1.39	4.58	10.68
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	0.77	1.77	0.56	0.54	3.66	1.40	3.43	8.49
TerraTill Bed w/roll	4R-38	MFWD 225	14,300	150	12	0.160	1.63	3.72	0.83	1.14	7.34	1.44	7.21	16.00

Appendix Table 8. Implements: estimated purchase price, annual use, useful life, performance rate, (Continued) and direct and fixed cost per acre, Louisiana 2016.

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
TerraTill Bed w/roll	6R-38	MFWD 225	19,400	150	12	0.107	1.09	2.49	0.75	0.76	5.10	1.30	4.82	11.23
TerraTill Bed w/roll	4R-30	MFWD 225	14,300	150	12	0.204	2.08	4.73	1.05	1.45	9.32	1.83	9.16	20.32
TerraTill Bed w/roll	6R-30	MFWD 225	15,310	150	12	0.136	1.38	3.15	0.75	0.97	6.26	1.30	6.11	13.68
Boll Buggy-1st Pick	2R38"157hp	MFWD 190	26,200	200	10	0.519	5.29	10.16	3.40	2.92	21.78	6.92	18.40	47.10
Boll Buggy-1st pick	4R2x1260hp	MFWD 190	30,500	200	10	0.172	1.75	3.37	1.31	0.96	7.40	2.67	6.10	16.18
Boll Buggy-1st pick	4R30"255hp	MFWD 190	26,200	200	10	0.327	3.33	6.40	2.14	1.84	13.72	4.36	11.59	29.67
Boll Buggy-1st pick	4R30"325hp	MFWD 190	30,600	200	10	0.327	3.33	6.40	2.50	1.84	14.08	5.09	11.59	30.77
Boll Buggy-1st pick	4R38"255hp	MFWD 190	30,600	200	10	0.257	2.62	5.04	1.97	1.45	11.08	4.01	9.13	24.22
Boll Buggy-1st pick	4R38"325hp	MFWD 190	30,500	200	10	0.257	2.62	5.04	1.96	1.45	11.08	3.99	9.13	24.20
Boll Buggy-1st pick	5R30"255hp	MFWD 190	30,600	200	10	0.261	2.66	5.12	2.00	1.47	11.26	4.07	9.27	24.61
Boll Buggy-1st pick	5R38"255hp	MFWD 190	30,600	200	10	0.207	2.10	4.05	1.58	1.16	8.91	3.22	7.33	19.47
Boll Buggy-1st pick	6R30"325hp	MFWD 190	30,500	200	10	0.218	2.22	4.26	1.66	1.22	9.38	3.38	7.73	20.49
Boll Buggy-1st pick	6R38"325hp	MFWD 190	30,500	200	10	0.172	1.75	3.37	1.31	0.96	7.40	2.67	6.10	16.18
Boll Buggy-2nd pick	2R38"157hp	MFWD 190	30,600	200	10	0.440	4.48	8.60	3.36	2.47	18.93	6.84	15.59	41.37
Boll Buggy-2nd pick	4R2x1260hp	MFWD 190	30,500	200	10	0.145	1.48	2.85	1.11	0.82	6.27	2.26	5.16	13.70
Boll Buggy-2nd pick	4R30"255hp	MFWD 190	30,600	200	10	0.277	2.82	5.42	2.12	1.55	11.92	4.31	9.82	26.06
Boll Buggy-2nd pick	4R30"325hp	MFWD 190	30,600	200	10	0.277	2.82	5.42	2.12	1.55	11.92	4.31	9.82	26.06
Boll Buggy-2nd pick	4R38"255hp	MFWD 190	30,500	200	10	0.218	2.22	4.27	1.66	1.22	9.38	3.38	7.73	20.50
Boll Buggy-2nd pick	4R38"325hp	MFWD 190	30,500	200	10	0.218	2.22	4.27	1.66	1.22	9.38	3.38	7.73	20.50
Boll Buggy-2nd pick	5R30"255hp	MFWD 190	30,600	200	10	0.221	2.25	4.33	1.69	1.24	9.54	3.45	7.85	20.85
Boll Buggy-2nd pick	5R38"255hp	MFWD 190	30,600	200	10	0.175	1.78	3.43	1.34	0.98	7.54	2.73	6.21	16.49
Boll Buggy-2nd pick	6R30"325hp	MFWD 190	30,500	200	10	0.184	1.88	3.61	1.40	1.03	7.94	2.86	6.54	17.36
Boll Buggy-2nd pick	6R38"325hp	MFWD 190	30,500	200	10	0.145	1.48	2.85	1.11	0.82	6.27	2.26	5.16	13.70
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,600	200	10	0.251	2.56	3.88	1.92	1.17	9.55	3.91	7.05	20.52
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,600	200	10	0.204	2.08	3.15	1.56	0.95	7.76	3.18	5.73	16.67
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,600	200	10	0.172	1.75	2.66	1.31	0.80	6.53	2.68	4.82	14.04
Boll Buggy-Stripper	4R30"2X1Br	MFWD 150	30,600	200	10	0.218	2.22	3.37	1.66	1.01	8.27	3.39	6.11	17.78
Boll Buggy-Stripper	4R30"Brush	MFWD 150	30,600	200	10	0.327	3.33	5.05	2.50	1.52	12.41	5.09	9.17	26.68
Boll Buggy-Stripper	4R38"2X1Br	MFWD 150	30,600	200	10	0.172	1.75	2.66	1.31	0.80	6.53	2.68	4.82	14.04
Boll Buggy-Stripper	4R38"Brush	MFWD 150	30,600	200	10	0.257	2.62	3.98	1.97	1.20	9.77	4.01	7.22	21.01
Boll Buggy-Stripper	5R30"Brush	MFWD 150	30,600	200	10	0.261	2.66	4.04	2.00	1.21	9.93	4.07	7.33	21.34
Boll Buggy-Stripper	5R38"Brush	MFWD 150	30,600	200	10	0.207	2.10	3.19	1.58	0.96	7.85	3.22	5.80	16.88
Boll Buggy-Stripper	6R30"Brush	MFWD 150	30,600	200	10	0.218	2.22	3.37	1.66	1.01	8.27	3.39	6.11	17.78
Module Builder-1st	2R-38(157)	MFWD 190	31,300	200	10	0.519	10.58	10.16	4.06	2.92	27.73	8.26	18.40	54.40
Module Builder-1st	4R-30(255)	MFWD 190	34,700	200	10	0.327	6.66	6.40	2.84	1.84	17.75	5.77	11.59	35.12
Module Builder-1st	4R-30(325)	MFWD 190	34,700	200	10	0.327	6.66	6.40	2.84	1.84	17.75	5.77	11.59	35.12
Module Builder-1st	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.24	5.04	2.23	1.45	13.97	4.54	9.13	27.65
Module Builder-1st	4R-38(325)	MFWD 190	34,700	200	10	0.257	5.24	5.04	2.23	1.45	13.97	4.54	9.13	27.65
Module Builder-1st	4R2x1260hp	MFWD 190	34,700	200	10	0.172	3.50	3.37	1.49	0.96	9.34	3.03	6.10	18.48
Module Builder-1st	5R-30(255)	MFWD 190	34,700	200	10	0.261	5.33	5.12	2.27	1.47	14.20	4.62	9.27	28.09
Module Builder-1st	5R-38(255)	MFWD 190	34,700	200	10	0.207	4.21	4.05	1.79	1.16	11.23	3.65	7.33	22.22
Module Builder-1st	6R-30(325)	MFWD 190	34,700	200	10	0.218	4.44	4.26	1.89	1.22	11.83	3.85	7.73	23.41
Module Builder-1st	6R-38(325)	MFWD 190	34,700	200	10	0.172	3.50	3.37	1.49	0.96	9.34	3.03	6.10	18.48
Module Builder-2nd	2R-38(157)	MFWD 190	34,700	200	10	0.440	8.96	8.60	3.81	2.47	23.86	7.76	15.59	47.22
Module Builder-2nd	4R-30(255)	MFWD 190	34,700	200	10	0.277	5.64	5.42	2.40	1.55	15.03	4.89	9.82	29.75
Module Builder-2nd	4R-30(325)	MFWD 190	34,700	200	10	0.277	5.64	5.42	2.40	1.55	15.03	4.89	9.82	29.75
Module Builder-2nd	4R-38(255)	MFWD 190	34,700	200	10	0.218	4.44	4.27	1.89	1.22	11.83	3.85	7.73	23.42
Module Builder-2nd	4R-38(325)	MFWD 190	34,700	200	10	0.218	4.44	4.27	1.89	1.22	11.83	3.85	7.73	23.42
Module Builder-2nd	4R2x1 255	MFWD 190	34,700	200	10	0.145	2.97	2.85	1.26	0.82	7.91	2.57	5.16	15.65
Module Builder-2nd	5R-30(255)	MFWD 190	34,700	200	10	0.221	4.51	4.33	1.92	1.24	12.02	3.91	7.85	23.80
Module Builder-2nd	5R-38(255)	MFWD 190	34,700	200	10	0.175	3.57	3.43	1.52	0.98	9.51	3.09	6.21	18.82
Module Builder-2nd	6R-30(325)	MFWD 190	34,700	200	10	0.184	3.76	3.61	1.60	1.03	10.02	3.26	6.54	19.83
Module Builder-2nd	6R-38(325)	MFWD 190	34,700	200	10	0.145	2.97	2.85	1.26	0.82	7.91	2.57	5.16	15.65
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	5.12	3.88	2.18	1.17	12.37	4.44	7.05	23.87
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.16	3.15	1.77	0.95	10.05	3.60	5.73	19.39
Module Builder-Strip	19' Brush	MFWD 150	34,700	200	10	0.172	3.50	2.66	1.49	0.80	8.46	3.03	4.82	16.33
Module Builder-Strip	4R-30	MFWD 150	34,700	200	10	0.327	6.66	5.05	2.84	1.52	16.08	5.77	9.17	31.03
Module Builder-Strip	4R-30 2X1	MFWD 150	34,700	200	10	0.218	4.44	3.37	1.89	1.01	10.72	3.85	6.11	20.68
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.24	3.98	2.23	1.20	12.66	4.54	7.22	24.43
Module Builder-Strip	4R-38 2X1	MFWD 150	34,700	200	10	0.172	3.50	2.66	1.49	0.80	8.46	3.03	4.82	16.33
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.33	4.04	2.27	1.21	12.86	4.62	7.33	24.82
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.21	3.19	1.79	0.96	10.18	3.65	5.80	19.64
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.44	3.37	1.89	1.01	10.72	3.85	6.11	20.68