

**RICE  
2016  
PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2015-04**

**October 2015**



## Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2016 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

## Acknowledgments

A list of individuals who contributed to the development of the agricultural enterprise budgets follows this acknowledgment. The administrative committee structure and enterprise committees have shown a spirit of cooperation seldom found when so many work together. A team effort has led to many improvements in the budgets over the years.

Special appreciation is expressed to producers who provided information on crop practices used. Appreciation also is expressed to farm supply dealers, equipment dealers, custom operators, and chemical companies who provided prices for crop production inputs. The Mississippi Agricultural Statistics Service is commended for its excellence in collecting price and production practice data.

Acknowledgment is made to the Mississippi State University Extension Service, the Mississippi Agricultural and Forestry Experiment Station, and the United States Agricultural Research Service staffs for the excellent cooperation that made this report possible.

The mention in this report of any commercial product does not imply its endorsement by MSU-ES, MAFES, or USDA over other products not named nor does the omission imply they are not satisfactory.

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# 2016 Planning Budgets

## Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for a major crop produced by Mississippi farmers. A multidisciplinary approach involving researchers and extension personnel was used to determine production practices and input quantities, and to estimate costs and returns for each enterprise (14). The purpose of this section is to present the methods and procedures used to calculate costs and returns for each budget included in this publication.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the food and fiber industry. They are used:

- by farmers for planning,
- by extension personnel in providing educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform non-farmers of the costs incurred by farmers in the production of food and fiber crops.

A budget should be prepared with a specific objective in mind. The budgets in this report were prepared to provide general information for several different uses. They provide information concerning general levels of costs and returns which will need to be adjusted for specific situations. Most users should think of these budgets as a first approximation and then make appropriate adjustments using the "Your Farm" column provided on each budget to add, delete, or change costs or incomes to reflect their specific situations.

## Methods and Procedures

### Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the collective judgment of the committee members. Quantities of materials and individual production practices budgeted are based on survey data from producers and/or generally accepted recommendations by committee members.

### Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2015. (Appendix Tables 1, 2, and 3).

A performance rate reflects the time required to perform a given task or operation and is expressed as that part of an hour per acre. Previous studies and expert knowledge of the equipment committee members are used to estimate performance rates for new and larger equipment (1, 4, 5, 6, 7, 9, and 13).

The hours of annual use have been modified based on information collected from the cited studies (3, 4, 6, and 7).

Repairs and maintenance as a percentage of new cost are estimated for the life of the equipment and include oil and lubricants (1, 4, and 6).

### Estimates of Direct Costs

Direct costs include estimated costs of repairs and maintenance (R&M) for all machinery and include fuel costs for powered machinery (Appendix Tables 1, 2, and 3). Direct costs are estimated on an hourly basis and are then converted to a per-acre basis using the performance rate for the particular operation. R&M costs for towed equipment and powered equipment are estimated as follows:

$$RPH = \frac{RLC \times RP}{THL}$$

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use  
 RLC = Replacement cost of machine  
 RP = R&M percentage (percent of RLC)  
 THL = Total hours of machine life  
 RPA = R&M cost per acre  
 PR = Performance rate

Direct costs include an estimate of fuel cost based on average fuel consumption per hour of use for the power unit. Other components of direct costs include quantities of materials used in production multiplied by the price per unit of these inputs, custom rates, hourly wage rates, and interest charges on operating capital (Appendix Tables 4, 5, and 6).

The labor wage rate per hour includes social security, accident and unemployment insurance, and some prerequisites (11). Labor costs are estimated for four labor categories: operator labor, hand labor, irrigation labor, and unallocated labor. Operator labor and hand labor represent estimates of labor required to

perform the in-field tasks. Operator labor is that labor required to operate all power-driven equipment. Irrigation labor is used to perform tasks associated with an irrigation system. Unallocated labor is an estimate of labor that is not used directly in producing the enterprise. Its cost is estimated as a percentage of operator labor (11). The percentages used for the various crop enterprises are listed in Appendix Table 6.

Interest on operating capital is determined by using a short-term interest rate obtained from agricultural lenders and making a charge against capital outflows as the production process takes place. Interest is accumulated until the crop is harvested.

### Estimates of Fixed Costs

Annual fixed cost estimates for machinery are based on a budgeting technique which computes the annual capital recovery charge (2, p. 143). When a combination of machines or equipment is required to perform a single operation, the total cost per acre for all equipment used in the operation is estimated. The fixed cost of machinery ownership is calculated by first computing the capital recovery factor and then using it to estimate the annual capital recovery charge.

$$CRF = \frac{IIR}{1 - (1 + IIR)^{-TYL}}$$

where:

CRF = Capital recovery factor  
 IIR = Intermediate-term interest rate  
 TYL = Total years of life

$$CRCPY = [(RLC - SV) \times CRF] + (SV \times IIR)$$

where:

CRCPY = Capital recovery charge per year  
 RLC = Replacement cost  
 SV = Salvage value (at end of useful life)



This value is then converted to its per-hour and per-acre equivalent values:

$$\text{CRCPH} = \frac{\text{CRCPY}}{\text{HAU}}$$

$$\text{CRCPA} = \text{CRCPH} \times \text{PR}$$

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

### Estimates of Returns

It is difficult to estimate crop yields that may be expected for a particular production system in a given year. Crop yields used in the budgets are representative of historical yields modified to match the production system used to produce the yield. All yields including conventional, no-tillage, irrigation, and double-cropping are tempered with unpublished research and judgments of the commodity committees. Producers should use yield estimates that are reflective of their own operations.

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2015 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

The futures price for an appropriate contract month is determined by averaging the closing prices for the month of September. The basis is determined by subtracting the average daily cash price for the month of September from the average daily closing price of the specified harvest month futures contract.. These average futures prices and the basis adjustments are presented in Appendix Table 7.

A special table is presented to illustrate the effects of alternative levels of yields and prices on net returns. The budgeted yield and the budgeted price are used as base values (100 percent). Yields are then varied from 50 to 150 percent of the base yield while prices are varied from 75 to 125 percent of the base price. Net returns are computed for each combination of yield and price.

### Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8, 9, 10, and 11.

### Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.



## Enterprise Budgets

Table 1.A Estimated costs per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Regiment 80WP	oz	43.75	0.6000	26.25	_____
Facet L	pt	14.60	2.6900	39.27	_____
Permit 75 DF	oz	20.73	0.7500	15.55	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.43	80.0000	34.40	_____
Cruiser Maxx Rice	lbseed	0.13	93.6000	12.17	_____
Rice Seed (Levees)	lb	0.43	13.6000	5.85	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.00	1.5000	4.50	_____
Dyne-A-Pak	pt	5.51	0.5000	2.76	_____
Crop Oil Conc. (Pet.)	pt	3.86	0.4000	1.54	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.5475	7.35	_____
Harvesters	hour	13.40	0.2030	2.72	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	13.42	0.5633	7.56	_____
DIESEL FUEL					
Tractors	gal	2.00	5.9002	11.79	_____
Harvesters	gal	2.00	3.3975	6.80	_____
Flood Irr.	gal	2.00	26.8827	53.76	_____
REPAIR & MAINTENANCE					
Implements	acre	8.24	1.0000	8.24	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	11.95	1.0000	11.95	_____
TOTAL DIRECT EXPENSES				746.57	_____
FIXED EXPENSES					
Implements	acre	17.63	1.0000	17.63	_____
Tractors	acre	22.18	1.0000	22.18	_____
Harvesters	acre	27.71	1.0000	27.71	_____
Flood Irr.	acre	39.73	1.0000	39.73	_____
TOTAL FIXED EXPENSES				107.25	_____
TOTAL SPECIFIED EXPENSES				853.82	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.B Summary of estimated costs and returns per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.50	1.0000	39.50	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	146.22	1.0000	146.22	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	52.42	1.0000	52.42	_____
ADJUVANTS	acre	10.68	1.0000	10.68	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.40	0.7506	10.07	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.42	0.5633	7.56	_____
DIESEL FUEL	gal	2.00	36.1805	72.35	_____
REPAIR & MAINTENANCE	acre	31.47	1.0000	31.47	_____
INTEREST ON OP. CAP.	acre	11.95	1.0000	11.95	_____
				-----	
TOTAL DIRECT EXPENSES				746.57	_____
RETURNS ABOVE DIRECT EXPENSES				95.83	_____
TOTAL FIXED EXPENSES				107.25	_____
				-----	
TOTAL SPECIFIED EXPENSES				853.82	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-11.42	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.C Estimated resource use for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment 80WP	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit 75 DF	oz					0.7500				
Crop Oil Conc.(Pet.	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.D Estimated costs for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.01	3.31	3.31
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92	6.92
2,4-D Amine 4	pt	4.88						0.15	5.03	5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04
Rice Seed Conv.	lb	34.40						0.77	35.17	35.17
Cruiser Maxx Rice	lbseed	10.40						0.23	10.63	10.63
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Command 3ME	pt	19.38						0.44	19.82	19.82
Sharpen	oz	12.14						0.27	12.41	12.41
SuperMax AMS	pt	1.34						0.03	1.37	1.37
MSO	pt	1.50						0.03	1.53	1.53
Seed Levees										
Rice Seed (Levees)	lb	5.85						0.13	5.98	5.98
Cruiser Maxx Rice	lbseed	1.77						0.04	1.81	1.81
Rice Consultant	acre	8.00						0.15	8.15	8.15
App Fert by Air	cwt	7.00						0.13	7.13	7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79	8.79
DAP	cwt	14.08						0.26	14.34	14.34
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Regiment 80WP	oz	26.25						0.49	26.74	26.74
Dyne-A-Pak	pt	2.76						0.05	2.81	2.81
App Fert by Air	cwt	17.50						0.33	17.83	17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06	53.06
NBPT	pt	7.41						0.14	7.55	7.55
Rice Management										
RICE MGT. LABOR	hour				2.72			0.05	2.77	2.77
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Facet L	pt	39.27						0.74	40.01	40.01
Permit 75 DF	oz	15.55						0.29	15.84	15.84
Crop Oil Conc.(Pet.)	pt	1.54						0.03	1.57	1.57
App by Air ( 5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.55						0.26	17.81	17.81
MSO	pt	3.00						0.05	3.05	3.05
Rice Management										
RICE MGT. LABOR	hour				4.53			0.07	4.60	4.60
App Fert by Air	cwt	10.50						0.16	10.66	10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71	31.71
Rice Management										
RICE MGT. LABOR	hour				4.53			0.05	4.58	4.58
App by Air ( 5 gal)	appl	6.50						0.07	6.57	6.57
Stratego 250EC	pt	30.38						0.34	30.72	30.72
Surfactant	pt	0.54						0.01	0.55	0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79	3.79
Karate Z	oz	4.20						0.05	4.25	4.25
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (CL)	25' Rigid		6.80	9.71	5.17			0.16	21.84	31.91
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.41	55.01	55.01
Dry Rice	bu	62.40						0.47	62.87	62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21
Flood Irr.	acre	4.50	55.76	13.36	33.64			1.82	109.08	43.74
TOTALS		564.64	72.35	31.47	66.16	0.00	11.95	746.57	107.25	853.82

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.E Estimated monthly income and expense flows per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	36.00	81.07	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.42	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.84	4.30	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	15.69	9.52	11.33	11.33	11.06	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	14.05	14.66	14.66	14.66	7.75	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	4.83	7.01	2.13	2.13	10.12	3.17
INTEREST ON OP. CAP.	0.38	0.00	0.00	0.00	0.54	0.00	3.07	4.57	1.41	0.83	1.10	0.05
TOTAL DIRECT EXPENSES	8.89	0.00	0.00	0.00	18.64	0.00	139.90	248.83	95.07	74.32	147.03	13.89
NET INCOME	-8.89	0.00	0.00	0.00	-18.64	0.00	-139.90	-248.83	-95.07	-74.32	695.37	-13.89
NET INCOME TO DATE	-8.89	-8.89	-8.89	-8.89	-27.53	-27.53	-167.43	-416.26	-511.33	-585.65	109.72	95.83

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

\* Lease costs are based on hourly usage costs



Table 1.F Estimated returns for various price/yield combinations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-371 -478	-350 -457	-329 -436	-308 -415	-287 -394	-266 -373	-245 -352	-224 -331	-203 -310	-182 -289	-161 -268
60	93.60	bu	-320 -427	-295 -402	-269 -377	-244 -351	-219 -326	-193 -301	-168 -275	-143 -250	-118 -225	-92 -200	-67 -174
70	109.20	bu	-268 -376	-239 -346	-209 -317	-180 -287	-151 -258	-121 -228	-92 -199	-62 -169	-33 -140	-3 -110	25 -81
80	124.80	bu	-217 -324	-183 -291	-150 -257	-116 -223	-82 -190	-49 -156	-15 -122	18 -88	52 -55	85 -21	119 12
90	140.40	bu	-166 -273	-128 -235	-90 -197	-52 -159	-14 -121	23 -83	61 -45	99 -8	137 29	175 67	212 105
100	156.00	bu	-114 -222	-72 -179	-30 -137	11 -95	53 -53	95 -11	137 30	180 72	222 114	264 157	306 199
110	171.60	bu	-63 -170	-17 -124	29 -77	75 -31	121 14	168 61	214 107	260 153	307 200	353 246	399 292
120	187.20	bu	-11 -119	38 -68	89 -18	139 32	190 82	240 133	291 184	341 234	392 285	442 335	493 386
130	202.80	bu	39 -67	94 -13	148 41	203 96	258 151	313 205	367 260	422 315	477 370	532 424	586 479
140	218.40	bu	90 -16	149 42	208 101	267 160	326 219	385 278	444 337	503 396	562 455	621 514	680 573
150	234.00	bu	142 34	205 98	268 161	331 224	394 287	458 350	521 414	584 477	647 540	710 603	773 666

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 2.A Estimated costs per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Regiment 80WP	oz	43.75	0.6000	26.25	_____
Facet L	pt	14.60	2.6900	39.27	_____
Permit 75 DF	oz	20.73	0.7500	15.55	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.43	80.0000	34.40	_____
Cruiser Maxx Rice	lbseed	0.13	93.6000	12.17	_____
Rice Seed (Levees)	lb	0.43	13.6000	5.85	_____
ADJUVANTS					
MSO	pt	3.00	1.5000	4.50	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	5.51	0.5000	2.76	_____
Crop Oil Conc. (Pet.)	pt	3.86	0.4000	1.54	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.4999	6.70	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	5.5050	11.01	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	21.9949	43.98	_____
REPAIR & MAINTENANCE					
Implements	acre	7.82	1.0000	7.82	_____
Tractors	acre	3.32	1.0000	3.32	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	11.57	1.0000	11.57	_____
TOTAL DIRECT EXPENSES				711.91	_____
FIXED EXPENSES					
Implements	acre	16.71	1.0000	16.71	_____
Tractors	acre	20.89	1.0000	20.89	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.64	1.0000	63.64	_____
TOTAL FIXED EXPENSES				125.26	_____
TOTAL SPECIFIED EXPENSES				837.17	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 2.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.50	1.0000	39.50	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	146.22	1.0000	146.22	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	52.42	1.0000	52.42	_____
ADJUVANTS	acre	10.68	1.0000	10.68	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.40	0.6759	9.06	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	30.4445	60.88	_____
REPAIR & MAINTENANCE	acre	29.94	1.0000	29.94	_____
INTEREST ON OP. CAP.	acre	11.57	1.0000	11.57	_____
				-----	
TOTAL DIRECT EXPENSES				711.91	_____
RETURNS ABOVE DIRECT EXPENSES				130.49	_____
TOTAL FIXED EXPENSES				125.26	_____
				-----	
TOTAL SPECIFIED EXPENSES				837.17	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				5.23	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 2.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment 80WP	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit 75 DF	oz					0.7500				
Crop Oil Conc. (Pet.	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 2.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.15	3.45	3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92	6.92
2,4-D Amine 4	pt	4.88						0.15	5.03	5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04
Rice Seed Conv.	lb	34.40						0.77	35.17	35.17
Cruiser Maxx Rice	lbseed	10.40						0.23	10.63	10.63
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Command 3ME	pt	19.38						0.44	19.82	19.82
Sharpen	oz	12.14						0.27	12.41	12.41
MSO	pt	1.50						0.03	1.53	1.53
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed (Levees)	lb	5.85						0.13	5.98	5.98
Cruiser Maxx Rice	lbseed	1.77						0.04	1.81	1.81
Rice Consultant	acre	8.00						0.15	8.15	8.15
App Fert by Air	cwt	7.00						0.13	7.13	7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79	8.79
DAP	cwt	14.08						0.26	14.34	14.34
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Regiment 80WP	oz	26.25						0.49	26.74	26.74
Dyne-A-Pak	pt	2.76						0.05	2.81	2.81
App Fert by Air	cwt	17.50						0.33	17.83	17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06	53.06
NBPT	pt	7.41						0.14	7.55	7.55
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Facet L	pt	39.27						0.74	40.01	40.01
Permit 75 DF	oz	15.55						0.29	15.84	15.84
Crop Oil Conc.(Pet.)	pt	1.54						0.03	1.57	1.57
App by Air ( 5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.55						0.26	17.81	17.81
MSO	pt	3.00						0.05	3.05	3.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.16	10.66	10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71	31.71
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57	6.57
Stratego 250EC	pt	30.38						0.34	30.72	30.72
Surfactant	pt	0.54						0.01	0.55	0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79	3.79
Karate Z	oz	4.20						0.05	4.25	4.25
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.41	55.01	55.01
Dry Rice	bu	62.40						0.47	62.87	62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21
Flood Irr.	acre	2.25	45.20	13.12	22.55			1.42	84.54	66.00
TOTALS		562.39	60.88	29.94	47.13	0.00	11.57	711.91	125.26	837.17

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 2.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	36.00	81.07	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.42	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.84	4.30	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	11.70	5.44	6.34	6.34	10.08	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	13.58	11.40	11.40	11.40	6.53	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	4.99	6.91	2.03	2.03	8.73	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	2.93	4.43	1.29	0.73	1.08	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	133.21	241.25	86.60	65.87	143.42	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-133.21	-241.25	-86.60	-65.87	698.98	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-164.19	-405.44	-492.04	-557.91	141.07	130.49

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 2.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-337 -462	-316 -441	-294 -420	-273 -399	-252 -378	-231 -357	-210 -335	-189 -314	-168 -293	-147 -272	-126 -251
60	93.60	bu	-285 -410	-260 -385	-235 -360	-209 -335	-184 -309	-159 -284	-134 -259	-108 -234	-83 -208	-58 -183	-32 -158
70	109.20	bu	-234 -359	-204 -330	-175 -300	-145 -271	-116 -241	-86 -212	-57 -182	-27 -153	1 -123	31 -94	60 -64
80	124.80	bu	-182 -308	-149 -274	-115 -240	-81 -207	-48 -173	-14 -139	19 -105	52 -72	86 -38	120 -4	154 28
90	140.40	bu	-131 -256	-93 -218	-55 -180	-17 -143	20 -105	58 -67	95 -29	133 8	171 46	209 84	247 122
100	156.00	bu	-80 -205	-37 -163	4 -121	46 -79	88 -36	130 5	172 47	214 89	256 131	298 173	341 215
110	171.60	bu	-28 -153	17 -107	63 -61	110 -14	156 31	202 77	249 124	295 170	341 216	388 263	434 309
120	187.20	bu	22 -102	73 -52	123 -1	174 49	224 99	275 150	325 200	376 251	427 301	477 352	528 402
130	202.80	bu	74 -51	128 3	183 58	238 113	293 167	347 222	402 277	457 332	512 386	566 441	621 496
140	218.40	bu	125 0	184 59	243 118	302 177	361 236	420 295	479 354	538 412	597 471	656 530	715 589
150	234.00	bu	176 51	240 114	303 177	366 241	429 304	492 367	555 430	619 493	682 557	745 620	808 683

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 3.A Estimated costs per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Regiment 80WP	oz	43.75	0.6000	26.25	_____
Facet L	pt	14.60	2.6900	39.27	_____
Permit 75 DF	oz	20.73	0.7500	15.55	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.43	80.0000	34.40	_____
Cruiser Maxx Rice	lbseed	0.13	93.6000	12.17	_____
Rice Seed (Levees)	lb	0.43	13.6000	5.85	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.00	1.5000	4.50	_____
Dyne-A-Pak	pt	5.51	0.5000	2.76	_____
Crop Oil Conc. (Pet.	pt	3.86	0.5000	1.93	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.5281	7.08	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	5.6932	11.39	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	18.7364	37.49	_____
REPAIR & MAINTENANCE					
Implements	acre	7.88	1.0000	7.88	_____
Tractors	acre	3.41	1.0000	3.41	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	11.49	1.0000	11.49	_____
TOTAL DIRECT EXPENSES				703.90	_____
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	_____
Tractors	acre	21.40	1.0000	21.40	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.36	1.0000	63.36	_____
TOTAL FIXED EXPENSES				125.94	_____
TOTAL SPECIFIED EXPENSES				829.84	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 3.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.50	1.0000	39.50	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	146.22	1.0000	146.22	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	52.42	1.0000	52.42	_____
ADJUVANTS	acre	11.07	1.0000	11.07	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.40	0.7041	9.44	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	27.3742	54.77	_____
REPAIR & MAINTENANCE	acre	29.77	1.0000	29.77	_____
INTEREST ON OP. CAP.	acre	11.49	1.0000	11.49	_____
				-----	
TOTAL DIRECT EXPENSES				703.90	_____
RETURNS ABOVE DIRECT EXPENSES				138.50	_____
TOTAL FIXED EXPENSES				125.94	_____
				-----	
TOTAL SPECIFIED EXPENSES				829.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.56	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment 80WP	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit 75 DF	oz					0.7500				
Crop Oil Conc. (Pet.	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.15	3.45	3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92	6.92
2,4-D Amine 4	pt	4.88						0.15	5.03	5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	14.12
Rice Seed Conv.	lb	34.40						0.77	35.17	35.17
Cruiser Maxx Rice	lbseed	10.40						0.23	10.63	10.63
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	5.59
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Command 3ME	pt	19.38						0.44	19.82	19.82
Sharpen	oz	12.14						0.27	12.41	12.41
SuperMax AMS	pt	1.34						0.03	1.37	1.37
MSO	pt	1.50						0.03	1.53	1.53
Seed Levees										
Rice Seed (Levees)	lb	5.85						0.13	5.98	5.98
Cruiser Maxx Rice	lbseed	1.77						0.04	1.81	1.81
Rice Consultant	acre	8.00						0.15	8.15	8.15
App Fert by Air	cwt	7.00						0.13	7.13	7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79	8.79
DAP	cwt	14.08						0.26	14.34	14.34
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Regiment 80WP	oz	26.25						0.49	26.74	26.74
Dyne-A-Pak	pt	2.76						0.05	2.81	2.81
App Fert by Air	cwt	17.50						0.33	17.83	17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06	53.06
NBPT	pt	7.41						0.14	7.55	7.55
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air ( 5 gal)	appl	6.50						0.12	6.62	6.62
Facet L	pt	39.27						0.74	40.01	40.01
Permit 75 DF	oz	15.55						0.29	15.84	15.84
Crop Oil Conc.(Pet.)	pt	1.93						0.04	1.97	1.97
App by Air ( 5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.55						0.26	17.81	17.81
MSO	pt	3.00						0.05	3.05	3.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.16	10.66	10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71	31.71
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57	6.57
Stratego 250EC	pt	30.38						0.34	30.72	30.72
Surfactant	pt	0.54						0.01	0.55	0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79	3.79
Karate Z	oz	4.20						0.05	4.25	4.25
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	46.59
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	1.41
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.41	55.01	55.01
Dry Rice	bu	62.40						0.47	62.87	62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	21.79
Flood Irr.	acre	10.83	39.09	12.95	11.93			1.33	76.13	142.81
TOTALS		571.36	54.77	29.77	36.51	0.00	11.49	703.90	125.94	829.84

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	36.00	81.07	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	52.42	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.84	4.69	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	9.51	2.72	3.62	3.62	9.81	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	12.25	9.78	9.78	9.78	6.61	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	5.00	6.84	1.96	1.96	8.76	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	3.04	4.36	1.23	0.68	1.07	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	138.39	237.16	82.13	61.41	143.25	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-138.39	-237.16	-82.13	-61.41	699.15	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-169.37	-406.53	-488.66	-550.07	149.08	138.50

Note: Cost of production estimates are based on 2015 input prices

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 3.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-329 -455	-308 -433	-286 -412	-265 -391	-244 -370	-223 -349	-202 -328	-181 -307	-160 -286	-139 -265	-118 -244
60	93.60	bu	-277 -403	-252 -378	-227 -353	-201 -327	-176 -302	-151 -277	-126 -251	-100 -226	-75 -201	-50 -176	-24 -150
70	109.20	bu	-226 -352	-196 -322	-167 -293	-137 -263	-108 -234	-78 -204	-49 -175	-19 -145	9 -116	39 -86	68 -57
80	124.80	bu	-174 -300	-141 -267	-107 -233	-73 -199	-40 -166	-6 -132	27 -98	60 -64	94 -31	128 2	162 36
90	140.40	bu	-123 -249	-85 -211	-47 -173	-9 -135	28 -97	66 -59	103 -21	141 15	179 53	217 91	255 129
100	156.00	bu	-72 -198	-29 -155	12 -113	54 -71	96 -29	138 12	180 54	222 96	264 138	306 181	349 223
110	171.60	bu	-20 -146	25 -100	71 -53	118 -7	164 38	210 85	257 131	303 177	349 224	396 270	442 316
120	187.20	bu	30 -95	81 -44	131 5	182 56	232 106	283 157	333 208	384 258	435 309	485 359	536 410
130	202.80	bu	82 -43	136 10	191 65	246 120	301 175	355 229	410 284	465 339	520 394	574 448	629 503
140	218.40	bu	133 7	192 66	251 125	310 184	369 243	428 302	487 361	546 420	605 479	664 538	723 597
150	234.00	bu	184 58	248 122	311 185	374 248	437 311	500 374	563 438	627 501	690 564	753 627	816 690

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 4.A Estimated costs per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Regiment 80WP	oz	43.75	0.6000	26.25	_____
Facet L	pt	14.60	2.6900	39.27	_____
Permit 75 DF	oz	20.73	0.7500	15.55	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.43	80.0000	34.40	_____
Cruiser Maxx Rice	lbseed	0.13	80.0000	10.40	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.00	1.5000	4.50	_____
Dyne-A-Pak	pt	5.51	0.5000	2.76	_____
Crop Oil Conc. (Pet.	pt	3.86	0.5000	1.93	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.4228	5.67	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	4.8970	9.79	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	15.4779	30.97	_____
REPAIR & MAINTENANCE					
Implements	acre	7.72	1.0000	7.72	_____
Tractors	acre	3.01	1.0000	3.01	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____
TOTAL DIRECT EXPENSES				671.72	_____
FIXED EXPENSES					
Implements	acre	16.27	1.0000	16.27	_____
Tractors	acre	18.97	1.0000	18.97	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				122.35	_____
TOTAL SPECIFIED EXPENSES				794.07	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.B Summary of estimated costs and returns per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.50	1.0000	39.50	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	146.22	1.0000	146.22	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	44.80	1.0000	44.80	_____
ADJUVANTS	acre	11.07	1.0000	11.07	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.40	0.5988	8.03	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	23.3194	46.65	_____
REPAIR & MAINTENANCE	acre	27.21	1.0000	27.21	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____
				-----	
TOTAL DIRECT EXPENSES				671.72	_____
RETURNS ABOVE DIRECT EXPENSES				170.68	_____
TOTAL FIXED EXPENSES				122.35	_____
				-----	
TOTAL SPECIFIED EXPENSES				794.07	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				48.33	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.C Estimated resource use for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment 80WP	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit 75 DF	oz					0.7500				
Crop Oil Conc. (Pet.	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05
TOTALS							0.59	0.59	2.67	0.53

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 4.D Estimated costs for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.15	3.45		3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92		6.92
2,4-D Amine 4	pt	4.88						0.15	5.03		5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04	14.12
Rice Seed Conv.	lb	34.40						0.77	35.17		35.17
Cruiser Maxx Rice	lbseed	10.40						0.23	10.63		10.63
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53	5.59
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Command 3ME	pt	19.38						0.44	19.82		19.82
Sharpen	oz	12.14						0.27	12.41		12.41
SuperMax AMS	pt	1.34						0.03	1.37		1.37
MSO	pt	1.50						0.03	1.53		1.53
Rice Consultant	acre	8.00						0.15	8.15		8.15
App Fert by Air	cwt	7.00						0.13	7.13		7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79		8.79
DAP	cwt	14.08						0.26	14.34		14.34
App by Air ( 5 gal)	appl	6.50						0.12	6.62		6.62
Regiment 80WP	oz	26.25						0.49	26.74		26.74
Dyne-A-Pak	pt	2.76						0.05	2.81		2.81
App Fert by Air	cwt	17.50						0.33	17.83		17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06		53.06
NBPT	pt	7.41						0.14	7.55		7.55
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	6.50						0.12	6.62		6.62
Facet L	pt	39.27						0.74	40.01		40.01
Permit 75 DF	oz	15.55						0.29	15.84		15.84
Crop Oil Conc. (Pet.)	pt	1.93						0.04	1.97		1.97
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.55						0.26	17.81		17.81
MSO	pt	3.00						0.05	3.05		3.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	10.50						0.16	10.66		10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71		31.71
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57		6.57
Stratego 250EC	pt	30.38						0.34	30.72		30.72
Surfactant	pt	0.54						0.01	0.55		0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79		3.79
Karate Z	oz	4.20						0.05	4.25		4.25
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66	46.59
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68	1.41
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.41	55.01		55.01
Dry Rice	bu	62.40						0.47	62.87		62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21	21.79
Flood Irr.	acre		30.97	10.39	9.53			0.85	51.74	63.09	114.83
TOTALS			552.91	46.65	27.21	34.11	0.00	10.84	671.72	122.35	794.07

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.E Estimated monthly income and expense flows per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	36.00	81.07	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	44.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.84	4.69	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	6.70	3.18	4.08	4.08	8.84	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	9.49	8.15	8.15	8.15	6.14	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	4.12	6.33	1.45	1.45	8.61	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	2.48	4.33	1.19	0.67	1.06	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	112.93	235.45	80.41	59.72	141.65	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-112.93	-235.45	-80.41	-59.72	700.75	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-143.91	-379.36	-459.77	-519.49	181.26	170.68

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-296 -419	-275 -398	-254 -377	-233 -356	-212 -334	-191 -313	-170 -292	-149 -271	-128 -250	-107 -229	-86 -208
60	93.60	bu	-245 -367	-220 -342	-194 -317	-169 -292	-144 -266	-119 -241	-93 -216	-68 -190	-43 -165	-18 -140	7 -115
70	109.20	bu	-194 -316	-164 -286	-135 -257	-105 -227	-76 -198	-46 -169	-17 -139	12 -110	41 -80	71 -51	100 -21
80	124.80	bu	-142 -265	-109 -231	-75 -197	-41 -163	-7 -130	25 -96	59 -62	93 -29	126 4	160 38	194 71
90	140.40	bu	-91 -213	-53 -175	-15 -137	22 -99	60 -62	98 -24	136 13	174 51	211 89	249 127	287 165
100	156.00	bu	-39 -162	2 -120	44 -78	86 -35	128 6	170 48	212 90	254 132	297 174	339 216	381 258
110	171.60	bu	11 -110	57 -64	104 -18	150 28	196 74	243 120	289 167	335 213	382 259	428 306	474 352
120	187.20	bu	62 -59	113 -8	163 41	214 92	265 142	315 193	366 243	416 294	467 344	517 395	568 445
130	202.80	bu	114 -8	169 46	223 101	278 156	333 210	388 265	442 320	497 375	552 429	607 484	661 539
140	218.40	bu	165 43	224 102	283 161	342 220	401 279	460 338	519 397	578 456	637 515	696 574	755 632
150	234.00	bu	217 94	280 157	343 221	406 284	469 347	532 410	596 473	659 536	722 600	785 663	848 726

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 5.A Estimated costs per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.75	1.0000	8.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Clearpath	lb	55.90	0.5000	27.95	_____
Newpath 2SL	oz	3.68	6.0000	22.08	_____
Aim 2EC	oz	5.46	1.5000	8.19	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	70.0000	73.50	_____
Cruiser Maxx Rice	lbseed	0.13	82.0000	10.66	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.00	1.5000	4.50	_____
Crop Oil Conc. (Pet.	pt	3.86	4.0000	15.44	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.5757	7.73	_____
Harvesters	hour	13.40	0.2030	2.72	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.41	0.5887	7.90	_____
DIESEL FUEL					
Tractors	gal	2.00	6.2269	12.44	_____
Harvesters	gal	2.00	3.3975	6.80	_____
Flood Irr.	gal	2.00	26.8827	53.76	_____
REPAIR & MAINTENANCE					
Implements	acre	8.48	1.0000	8.48	_____
Tractors	acre	3.72	1.0000	3.72	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	13.10	1.0000	13.10	_____
TOTAL DIRECT EXPENSES				784.54	_____
FIXED EXPENSES					
Implements	acre	17.92	1.0000	17.92	_____
Tractors	acre	23.45	1.0000	23.45	_____
Harvesters	acre	27.71	1.0000	27.71	_____
Flood Irr.	acre	39.73	1.0000	39.73	_____
TOTAL FIXED EXPENSES				108.81	_____
TOTAL SPECIFIED EXPENSES				893.35	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.B Summary of estimated costs and returns per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	123.37	1.0000	123.37	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	96.76	1.0000	96.76	_____
ADJUVANTS	acre	21.82	1.0000	21.82	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.40	0.7788	10.45	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.41	0.5887	7.90	_____
DIESEL FUEL	gal	2.00	36.5072	73.00	_____
REPAIR & MAINTENANCE	acre	31.91	1.0000	31.91	_____
INTEREST ON OP. CAP.	acre	13.10	1.0000	13.10	_____
				-----	
TOTAL DIRECT EXPENSES				784.54	_____
RETURNS ABOVE DIRECT EXPENSES				57.86	_____
TOTAL FIXED EXPENSES				108.81	_____
				-----	
TOTAL SPECIFIED EXPENSES				893.35	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-50.95	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air ( 5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.	pt					2.0000				
Aim 2EC	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
<b>TOTALS</b>							<b>0.77</b>	<b>0.77</b>	<b>6.14</b>	<b>0.58</b>

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.D Estimated costs for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.15	3.45		3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92		6.92
2,4-D Amine 4	pt	4.88						0.15	5.03		5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04	14.12
Rice Clearfield	lb	73.50						1.65	75.15		75.15
Cruiser Maxx Rice	lbseed	9.10						0.20	9.30		9.30
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53	5.59
Spray (Broadcast)	60'		0.65	0.44	0.85			0.04	1.98	1.56	3.54
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Command 3ME	pt	19.38						0.44	19.82		19.82
Sharpen	oz	12.14						0.27	12.41		12.41
SuperMax AMS	pt	1.34						0.03	1.37		1.37
MSO	pt	1.50						0.03	1.53		1.53
Seed Levees											
Rice Seed CF(Levees)	lb	12.60						0.28	12.88		12.88
Cruiser Maxx Rice	lbseed	1.56						0.04	1.60		1.60
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	27.95						0.63	28.58		28.58
Crop Oil Conc.(Pet.	pt	7.72						0.17	7.89		7.89
App Fert by Air	cwt	7.00						0.13	7.13		7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79		8.79
DAP	cwt	14.08						0.26	14.34		14.34
Rice Consultant	acre	8.00						0.15	8.15		8.15
App Fert by Air	cwt	17.50						0.33	17.83		17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06		53.06
NBPT	pt	7.41						0.14	7.55		7.55
App by Air (10 gal)	appl	8.75						0.16	8.91		8.91
Newpath 2SL	oz	22.08						0.41	22.49		22.49
Crop Oil Conc.(Pet.	pt	7.72						0.14	7.86		7.86
Aim 2EC	oz	8.19						0.15	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				2.72			0.05	2.77		2.77
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.55						0.26	17.81		17.81
MSO	pt	3.00						0.05	3.05		3.05
Rice Management											
RICE MGT. LABOR	hour				4.53			0.07	4.60		4.60
App Fert by Air	cwt	10.50						0.16	10.66		10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71		31.71
Rice Management											
RICE MGT. LABOR	hour				4.53			0.05	4.58		4.58
App by Air ( 5 gal)	appl	6.50						0.07	6.57		6.57
Stratego 250EC	pt	30.38						0.34	30.72		30.72
Surfactant	pt	0.54						0.01	0.55		0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79		3.79
Karate Z	oz	4.20						0.05	4.25		4.25
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		6.80	9.71	5.17			0.16	21.84	31.91	53.75
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68	1.41
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.41	55.01		55.01
Dry Rice	bu	62.40						0.47	62.87		62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21	21.79
Flood Irr.	acre	4.50	55.76	13.36	33.64			1.82	109.08	43.74	152.82
TOTALS		599.52	73.00	31.91	67.01	0.00	13.10	784.54	108.81	893.35	

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.E Estimated monthly income and expense flows per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.75	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	63.95	30.27	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.76	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.56	7.72	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	16.54	9.52	11.33	11.33	11.06	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	14.70	14.66	14.66	14.66	7.75	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	5.27	7.01	2.13	2.13	10.12	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	5.06	3.59	1.41	0.83	1.10	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	230.34	196.22	95.07	74.32	147.03	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-230.34	-196.22	-95.07	-74.32	695.37	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-261.32	-457.54	-552.61	-626.93	68.44	57.86

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs



Table 5.F Estimated returns for various price/yield combinations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2016

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-409 -518	-388 -497	-367 -476	-346 -455	-325 -434	-304 -413	-283 -392	-262 -371	-241 -350	-220 -328	-199 -307
60	93.60	bu	-358 -467	-333 -441	-307 -416	-282 -391	-257 -366	-231 -340	-206 -315	-181 -290	-156 -264	-130 -239	-105 -214
70	109.20	bu	-306 -415	-277 -386	-247 -356	-218 -327	-188 -297	-159 -268	-130 -238	-100 -209	-71 -179	-41 -150	-12 -120
80	124.80	bu	-255 -364	-221 -330	-188 -296	-154 -263	-120 -229	-87 -195	-53 -162	-19 -128	14 -94	47 -61	81 -27
90	140.40	bu	-204 -312	-166 -275	-128 -237	-90 -199	-52 -161	-14 -123	23 -85	61 -47	99 -9	137 28	174 66
100	156.00	bu	-152 -261	-110 -219	-68 -177	-26 -135	15 -93	57 -50	99 -8	142 33	184 75	226 117	268 159
110	171.60	bu	-101 -210	-55 -163	-8 -117	37 -71	83 -24	130 21	176 67	222 114	269 160	315 206	361 253
120	187.20	bu	-49 -158	0 -108	51 -57	101 -7	152 43	202 93	253 144	303 195	354 245	404 296	455 346
130	202.80	bu	1 -107	56 -52	110 2	165 56	220 111	275 166	329 221	384 275	439 330	494 385	548 440
140	218.40	bu	52 -55	111 2	170 61	229 120	288 179	347 238	406 297	465 356	524 415	583 474	642 533
150	234.00	bu	104 -4	167 58	230 121	293 184	356 248	420 311	483 374	546 437	609 500	672 564	736 627

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices..

Table 6.A Estimated costs per acre  
Clearfield straight levee rice  
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.75	1.0000	8.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Clearpath	lb	55.90	0.5000	27.95	_____
Newpath 2SL	oz	3.68	6.0000	22.08	_____
Aim 2EC	oz	5.46	1.5000	8.19	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	70.0000	73.50	_____
Cruiser Maxx Rice	lbseed	0.13	82.0000	10.66	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.00	1.5000	4.50	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.	pt	3.86	4.0000	15.44	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.5281	7.08	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5643	7.57	_____
DIESEL FUEL					
Tractors	gal	2.00	5.8317	11.66	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	21.9949	43.98	_____
REPAIR & MAINTENANCE					
Implements	acre	8.06	1.0000	8.06	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	12.58	1.0000	12.58	_____
TOTAL DIRECT EXPENSES				749.74	_____
FIXED EXPENSES					
Implements	acre	17.00	1.0000	17.00	_____
Tractors	acre	22.16	1.0000	22.16	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.64	1.0000	63.64	_____
TOTAL FIXED EXPENSES				126.82	_____
TOTAL SPECIFIED EXPENSES				876.56	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 6.B Summary of estimated costs and returns per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	123.37	1.0000	123.37	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	96.76	1.0000	96.76	_____
ADJUVANTS	acre	21.82	1.0000	21.82	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.40	0.7041	9.44	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5643	7.57	_____
DIESEL FUEL	gal	2.00	30.7712	61.53	_____
REPAIR & MAINTENANCE	acre	30.38	1.0000	30.38	_____
INTEREST ON OP. CAP.	acre	12.58	1.0000	12.58	_____
				-----	
TOTAL DIRECT EXPENSES				749.74	_____
RETURNS ABOVE DIRECT EXPENSES				92.66	_____
TOTAL FIXED EXPENSES				126.82	_____
				-----	
TOTAL SPECIFIED EXPENSES				876.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-34.16	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 6.C Estimated resource use for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air ( 5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.	pt					2.0000				
Aim 2EC	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.70	0.70	4.12	0.56

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 6.D Estimated costs for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.15	3.45		3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92		6.92
2,4-D Amine 4	pt	4.88						0.15	5.03		5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04	14.12
Rice Clearfield	lb	73.50						1.65	75.15		75.15
Cruiser Maxx Rice	lbseed	9.10						0.20	9.30		9.30
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53	5.59
Spray (Broadcast)	60'		0.65	0.44	0.85			0.04	1.98	1.56	3.54
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Command 3ME	pt	19.38						0.44	19.82		19.82
Sharpen	oz	12.14						0.27	12.41		12.41
MSO	pt	1.50						0.03	1.53		1.53
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CF(Levees)	lb	12.60						0.28	12.88		12.88
Cruiser Maxx Rice	lbseed	1.56						0.04	1.60		1.60
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	27.95						0.63	28.58		28.58
Crop Oil Conc.(Pet.	pt	7.72						0.17	7.89		7.89
App Fert by Air	cwt	7.00						0.13	7.13		7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79		8.79
DAP	cwt	14.08						0.26	14.34		14.34
Rice Consultant	acre	8.00						0.15	8.15		8.15
App Fert by Air	cwt	17.50						0.33	17.83		17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06		53.06
NBPT	pt	7.41						0.14	7.55		7.55
App by Air (10 gal)	appl	8.75						0.16	8.91		8.91
Newpath 2SL	oz	22.08						0.41	22.49		22.49
Crop Oil Conc.(Pet.	pt	7.72						0.14	7.86		7.86
Aim 2EC	oz	8.19						0.15	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.55						0.26	17.81		17.81
MSO	pt	3.00						0.05	3.05		3.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	10.50						0.16	10.66		10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71		31.71
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57		6.57
Stratego 250EC	pt	30.38						0.34	30.72		30.72
Surfactant	pt	0.54						0.01	0.55		0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79		3.79
Karate Z	oz	4.20						0.05	4.25		4.25
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66	46.59
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68	1.41
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.41	55.01		55.01
Dry Rice	bu	62.40						0.47	62.87		62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21	21.79
Flood Irr.	acre	2.25	45.20	13.12	22.55			1.42	84.54	66.00	150.54
TOTALS		597.27	61.53	30.38	47.98	0.00	12.58	749.74	126.82	876.56	

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 6.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.75	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	63.95	30.27	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.76	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.56	7.72	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	12.55	5.44	6.34	6.34	10.08	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	14.23	11.40	11.40	11.40	6.53	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	5.43	6.91	2.03	2.03	8.73	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	4.92	3.45	1.29	0.73	1.08	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	223.65	188.64	86.60	65.87	143.42	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-223.65	-188.64	-86.60	-65.87	698.98	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-254.63	-443.27	-529.87	-595.74	103.24	92.66

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-374 -501	-353 -480	-332 -459	-311 -438	-290 -417	-269 -396	-248 -375	-227 -354	-206 -333	-185 -312	-164 -291
60	93.60	bu	-323 -450	-298 -425	-272 -399	-247 -374	-222 -349	-197 -323	-171 -298	-146 -273	-121 -248	-96 -222	-70 -197
70	109.20	bu	-272 -398	-242 -369	-213 -339	-183 -310	-154 -281	-124 -251	-95 -222	-65 -192	-36 -163	-6 -133	22 -104
80	124.80	bu	-220 -347	-187 -313	-153 -280	-119 -246	-85 -212	-52 -179	-18 -145	15 -111	48 -77	82 -44	116 -10
90	140.40	bu	-169 -296	-131 -258	-93 -220	-55 -182	-17 -144	20 -106	58 -68	96 -30	133 7	171 45	209 82
100	156.00	bu	-117 -244	-75 -202	-33 -160	8 -118	50 -76	92 -34	134 7	176 50	219 92	261 134	303 176
110	171.60	bu	-66 -193	-20 -147	26 -100	72 -54	118 -8	165 38	211 84	257 130	304 177	350 223	396 269
120	187.20	bu	-15 -141	35 -91	85 -40	136 9	187 60	237 110	288 161	338 211	389 262	439 312	490 363
130	202.80	bu	36 -90	90 -35	145 18	200 73	255 128	310 183	364 237	419 292	474 347	529 402	583 456
140	218.40	bu	87 -39	146 19	205 78	264 137	323 196	382 255	441 314	500 373	559 432	618 491	677 550
150	234.00	bu	139 12	202 75	265 138	328 201	391 264	454 328	518 391	581 454	644 517	707 580	770 644

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 7.A Estimated costs per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.75	1.0000	8.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Clearpath	lb	55.90	0.5000	27.95	_____
Newpath 2SL	oz	3.68	6.0000	22.08	_____
Aim 2EC	oz	5.46	1.5000	8.19	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	70.0000	73.50	_____
Cruiser Maxx Rice	lbseed	0.13	82.0000	10.66	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.00	1.5000	4.50	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.	pt	3.86	4.0000	15.44	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.5281	7.08	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	5.6932	11.39	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	18.7364	37.49	_____
REPAIR & MAINTENANCE					
Implements	acre	7.88	1.0000	7.88	_____
Tractors	acre	3.41	1.0000	3.41	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	12.45	1.0000	12.45	_____
TOTAL DIRECT EXPENSES				739.35	_____
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	_____
Tractors	acre	21.40	1.0000	21.40	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.36	1.0000	63.36	_____
TOTAL FIXED EXPENSES				125.94	_____
TOTAL SPECIFIED EXPENSES				865.29	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 7.B Summary of estimated costs and returns per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	123.37	1.0000	123.37	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	96.76	1.0000	96.76	_____
ADJUVANTS	acre	21.82	1.0000	21.82	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.40	0.7041	9.44	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	27.3742	54.77	_____
REPAIR & MAINTENANCE	acre	29.77	1.0000	29.77	_____
INTEREST ON OP. CAP.	acre	12.45	1.0000	12.45	_____
				-----	
TOTAL DIRECT EXPENSES				739.35	_____
RETURNS ABOVE DIRECT EXPENSES				103.05	_____
TOTAL FIXED EXPENSES				125.94	_____
				-----	
TOTAL SPECIFIED EXPENSES				865.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-22.89	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 7.C Estimated resource use for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.	pt					2.0000				
Aim 2EC	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
<b>TOTALS</b>							<b>0.70</b>	<b>0.70</b>	<b>2.89</b>	<b>0.53</b>

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 7.D Estimated costs for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.15	3.45	3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92	6.92
2,4-D Amine 4	pt	4.88						0.15	5.03	5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	14.12
Rice Clearfield	lb	73.50						1.65	75.15	75.15
Cruiser Maxx Rice	lbseed	9.10						0.20	9.30	9.30
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	5.59
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Command 3ME	pt	19.38						0.44	19.82	19.82
Sharpen	oz	12.14						0.27	12.41	12.41
MSO	pt	1.50						0.03	1.53	1.53
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CF (Levees)	lb	12.60						0.28	12.88	12.88
Cruiser Maxx Rice	lbseed	1.56						0.04	1.60	1.60
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Clearpath	lb	27.95						0.63	28.58	28.58
Crop Oil Conc. (Pet.	pt	7.72						0.17	7.89	7.89
App Fert by Air	cwt	7.00						0.13	7.13	7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79	8.79
DAP	cwt	14.08						0.26	14.34	14.34
Rice Consultant	acre	8.00						0.15	8.15	8.15
App Fert by Air	cwt	17.50						0.33	17.83	17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06	53.06
NBPT	pt	7.41						0.14	7.55	7.55
App by Air (10 gal)	appl	8.75						0.16	8.91	8.91
Newpath 2SL	oz	22.08						0.41	22.49	22.49
Crop Oil Conc. (Pet.	pt	7.72						0.14	7.86	7.86
Aim 2EC	oz	8.19						0.15	8.34	8.34
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.55						0.26	17.81	17.81
MSO	pt	3.00						0.05	3.05	3.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.16	10.66	10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71	31.71
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57	6.57
Stratego 250EC	pt	30.38						0.34	30.72	30.72
Surfactant	pt	0.54						0.01	0.55	0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79	3.79
Karate Z	oz	4.20						0.05	4.25	4.25
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.41	55.01	55.01
Dry Rice	bu	62.40						0.47	62.87	62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21
Flood Irr.	acre	10.83	39.09	12.95	11.93			1.33	76.13	66.68
TOTALS		605.85	54.77	29.77	36.51	0.00	12.45	739.35	125.94	865.29

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 7.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.75	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	63.95	30.27	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.76	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.56	7.72	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	9.51	2.72	3.62	3.62	9.81	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	12.25	9.78	9.78	9.78	6.61	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	5.00	6.84	1.96	1.96	8.76	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	4.99	3.37	1.23	0.68	1.07	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	226.85	184.15	82.13	61.41	143.25	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-226.85	-184.15	-82.13	-61.41	699.15	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-257.83	-441.98	-524.11	-585.52	113.63	103.05

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2016

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-364 -490	-343 -469	-322 -448	-301 -427	-280 -406	-259 -385	-238 -364	-217 -343	-196 -321	-174 -300	-153 -279
60	93.60	bu	-313 -439	-287 -413	-262 -388	-237 -363	-212 -337	-186 -312	-161 -287	-136 -262	-110 -236	-85 -211	-60 -186
70	109.20	bu	-261 -387	-232 -358	-202 -328	-173 -299	-143 -269	-114 -240	-84 -210	-55 -181	-25 -151	3 -122	33 -92
80	124.80	bu	-210 -336	-176 -302	-142 -268	-109 -235	-75 -201	-41 -167	-8 -134	25 -100	59 -66	92 -33	126 0
90	140.40	bu	-158 -284	-121 -246	-83 -209	-45 -171	-7 -133	30 -95	68 -57	106 -19	144 18	182 56	220 94
100	156.00	bu	-107 -233	-65 -191	-23 -149	18 -107	60 -65	103 -22	145 19	187 61	229 103	271 145	313 187
110	171.60	bu	-56 -182	-9 -135	36 -89	82 -43	129 3	175 49	221 95	268 142	314 188	360 234	407 281
120	187.20	bu	-4 -130	45 -80	96 -29	146 20	197 71	247 122	298 172	349 223	399 273	450 324	500 374
130	202.80	bu	46 -79	101 -24	156 30	210 84	265 139	320 194	375 249	429 303	484 358	539 413	594 468
140	218.40	bu	98 -27	156 31	215 90	274 148	333 207	392 266	451 325	510 384	569 443	628 502	687 561
150	234.00	bu	149 23	212 86	275 149	338 213	402 276	465 339	528 402	591 465	654 528	718 592	781 655

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 8.A Estimated costs per acre  
Clearfield straight levee-zero grade rice  
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.75	1.0000	8.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	4.0000	83.32	_____
NBPT	pt	9.88	0.7500	7.41	_____
FUNGICIDES					
Stratego 250EC	pt	25.58	1.1875	30.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Clearpath	lb	55.90	0.5000	27.95	_____
Newpath 2SL	oz	3.68	6.0000	22.08	_____
Aim 2EC	oz	5.46	1.5000	8.19	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	70.0000	73.50	_____
Cruiser Maxx Rice	lbseed	0.13	82.0000	10.66	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.00	1.5000	4.50	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.	pt	3.86	4.0000	15.44	_____
Surfactant	pt	5.35	0.1000	0.54	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.4228	5.67	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	4.8970	9.79	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	15.4779	30.97	_____
REPAIR & MAINTENANCE					
Implements	acre	7.72	1.0000	7.72	_____
Tractors	acre	3.01	1.0000	3.01	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	11.97	1.0000	11.97	_____
TOTAL DIRECT EXPENSES				714.96	_____
FIXED EXPENSES					
Implements	acre	16.27	1.0000	16.27	_____
Tractors	acre	18.97	1.0000	18.97	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				122.35	_____
TOTAL SPECIFIED EXPENSES				837.31	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 8.B Summary of estimated costs and returns per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	156.0000	842.40	_____
				-----	
TOTAL INCOME				842.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	113.44	1.0000	113.44	_____
FUNGICIDES	acre	30.38	1.0000	30.38	_____
HERBICIDES	acre	123.37	1.0000	123.37	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	96.76	1.0000	96.76	_____
ADJUVANTS	acre	21.82	1.0000	21.82	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.40	0.5988	8.03	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	23.3194	46.65	_____
REPAIR & MAINTENANCE	acre	27.21	1.0000	27.21	_____
INTEREST ON OP. CAP.	acre	11.97	1.0000	11.97	_____
				-----	
TOTAL DIRECT EXPENSES				714.96	_____
RETURNS ABOVE DIRECT EXPENSES				127.44	_____
TOTAL FIXED EXPENSES				122.35	_____
				-----	
TOTAL SPECIFIED EXPENSES				837.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				5.09	_____

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 8.C Estimated resource use for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF (Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc. (Pet.	pt					2.0000				
Aim 2EC	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego 250EC	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

Note: Cost of production estimates are based on 2015 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 8.D Estimated costs for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.15	3.45		3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92		6.92
2,4-D Amine 4	pt	4.88						0.15	5.03		5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04	14.12
Rice Clearfield	lb	73.50						1.65	75.15		75.15
Cruiser Maxx Rice	lbseed	9.10						0.20	9.30		9.30
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53	5.59
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Command 3ME	pt	19.38						0.44	19.82		19.82
Sharpen	oz	12.14						0.27	12.41		12.41
MSO	pt	1.50						0.03	1.53		1.53
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CF (Levees)	lb	12.60						0.28	12.88		12.88
Cruiser Maxx Rice	lbseed	1.56						0.04	1.60		1.60
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	27.95						0.63	28.58		28.58
Crop Oil Conc. (Pet.	pt	7.72						0.17	7.89		7.89
App Fert by Air	cwt	7.00						0.13	7.13		7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79		8.79
DAP	cwt	14.08						0.26	14.34		14.34
Rice Consultant	acre	8.00						0.15	8.15		8.15
App Fert by Air	cwt	17.50						0.33	17.83		17.83
Urea, Solid (46% N)	cwt	52.08						0.98	53.06		53.06
NBPT	pt	7.41						0.14	7.55		7.55
App by Air (10 gal)	appl	8.75						0.16	8.91		8.91
Newpath 2SL	oz	22.08						0.41	22.49		22.49
Crop Oil Conc. (Pet.	pt	7.72						0.14	7.86		7.86
Aim 2EC	oz	8.19						0.15	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.55						0.26	17.81		17.81
MSO	pt	3.00						0.05	3.05		3.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	10.50						0.16	10.66		10.66
Urea, Solid (46% N)	cwt	31.24						0.47	31.71		31.71
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 5 gal)	appl	6.50						0.07	6.57		6.57
Stratego 250EC	pt	30.38						0.34	30.72		30.72
Surfactant	pt	0.54						0.01	0.55		0.55
App by Air ( 3 gal)	appl	3.75						0.04	3.79		3.79
Karate Z	oz	4.20						0.05	4.25		4.25
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66	46.59
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68	1.41
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.41	55.01		55.01
Dry Rice	bu	62.40						0.47	62.87		62.87
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21	21.79
Flood Irr.	acre		30.97	10.39	9.53			0.85	51.74	63.09	114.83
TOTALS		595.02	46.65	27.21	34.11	0.00	11.97	714.96	122.35	837.31	

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 8.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	842.40	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.75	3.25	10.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.20	31.24	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.38	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	63.95	30.27	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.76	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.56	7.72	3.00	0.54	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	6.70	3.18	4.08	4.08	8.84	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	9.49	8.15	8.15	8.15	6.14	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	4.12	6.33	1.45	1.45	8.61	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	4.60	3.34	1.19	0.67	1.06	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	209.18	182.44	80.41	59.72	141.65	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-209.18	-182.44	-80.41	-59.72	700.75	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-240.16	-422.60	-503.01	-562.73	138.02	127.44

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
			dollars										
PERCENT	YIELD	UNIT											
50	78.00	bu	-340 -462	-319 -441	-298 -420	-276 -399	-255 -378	-234 -357	-213 -336	-192 -315	-171 -293	-150 -272	-129 -251
60	93.60	bu	-288 -411	-263 -385	-238 -360	-212 -335	-187 -309	-162 -284	-137 -259	-111 -234	-86 -208	-61 -183	-36 -158
70	109.20	bu	-237 -359	-207 -330	-178 -300	-148 -271	-119 -241	-89 -212	-60 -182	-30 -153	-1 -123	28 -94	57 -64
80	124.80	bu	-185 -308	-152 -274	-118 -240	-84 -207	-51 -173	-17 -139	16 -106	49 -72	83 -38	117 -5	151 28
90	140.40	bu	-134 -256	-96 -218	-58 -181	-20 -143	17 -105	54 -67	92 -29	130 8	168 46	206 84	244 122
100	156.00	bu	-83 -205	-41 -163	1 -121	43 -79	85 -37	127 5	169 47	211 89	253 131	295 173	338 215
110	171.60	bu	-31 -154	14 -107	60 -61	107 -15	153 31	199 77	246 123	292 170	338 216	385 262	431 309
120	187.20	bu	19 -102	70 -52	120 -1	171 48	221 99	272 149	322 200	373 251	423 301	474 352	525 402
130	202.80	bu	71 -51	125 3	180 58	235 112	290 167	344 222	399 277	454 331	509 386	563 441	618 496
140	218.40	bu	122 0	181 59	240 117	299 176	358 235	417 294	476 353	535 412	594 471	653 530	712 589
150	234.00	bu	173 51	236 114	300 177	363 240	426 304	489 367	552 430	616 493	679 556	742 620	805 683

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 9.A Estimated costs per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.75	1.0000	8.75	_____
App by Air ( 3 gal)	appl	5.00	0.7500	3.75	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	0.5000	8.63	_____
DAP	cwt	28.15	0.5000	14.08	_____
Urea, Solid (46% N)	cwt	20.83	3.6700	76.45	_____
NBPT	pt	9.88	0.8000	7.90	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.44	2.0000	4.88	_____
Command 3ME	pt	19.38	1.0000	19.38	_____
Sharpen	oz	6.07	2.0000	12.14	_____
Clearpath	lb	55.90	0.5000	27.95	_____
Newpath 2SL	oz	3.68	6.0000	22.08	_____
Aim 2EC	oz	5.46	1.5000	8.19	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Karate Z	oz	2.80	1.5000	4.20	_____
SEED/PLANTS					
Rice Clearfield Hyb	lb	5.82	25.0000	145.50	_____
Cruiser Maxx Rice	lbseed	0.13	29.2500	3.80	_____
Rice Seed CFH (Levee)	lb	5.82	4.2500	24.74	_____
ADJUVANTS					
MSO	pt	3.00	1.5000	4.50	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.	pt	3.86	4.0000	15.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.40	0.4999	6.70	_____
Harvesters	hour	13.40	0.1760	2.36	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.41	0.5389	7.23	_____
DIESEL FUEL					
Tractors	gal	2.00	5.5050	11.01	_____
Harvesters	gal	2.00	2.9444	5.89	_____
Flood Irr.	gal	2.00	21.9949	43.98	_____
REPAIR & MAINTENANCE					
Implements	acre	7.82	1.0000	7.82	_____
Tractors	acre	3.32	1.0000	3.32	_____
Harvesters	acre	6.09	1.0000	6.09	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	13.82	1.0000	13.82	_____
TOTAL DIRECT EXPENSES				790.71	_____
FIXED EXPENSES					
Implements	acre	16.71	1.0000	16.71	_____
Tractors	acre	20.89	1.0000	20.89	_____
Harvesters	acre	24.02	1.0000	24.02	_____
Flood Irr.	acre	63.64	1.0000	63.64	_____
TOTAL FIXED EXPENSES				125.26	_____
TOTAL SPECIFIED EXPENSES				915.97	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.B Summary of estimated costs and returns per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.40	170.0000	918.00	_____
				-----	
TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.25	1.0000	35.25	_____
FERTILIZERS	acre	107.06	1.0000	107.06	_____
HERBICIDES	acre	123.37	1.0000	123.37	_____
INSECTICIDES	acre	4.20	1.0000	4.20	_____
SEED/PLANTS	acre	174.04	1.0000	174.04	_____
ADJUVANTS	acre	21.28	1.0000	21.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.40	0.6759	9.06	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.41	0.5389	7.23	_____
DIESEL FUEL	gal	2.00	30.4445	60.88	_____
REPAIR & MAINTENANCE	acre	29.94	1.0000	29.94	_____
INTEREST ON OP. CAP.	acre	13.82	1.0000	13.82	_____
				-----	
TOTAL DIRECT EXPENSES				790.71	_____
RETURNS ABOVE DIRECT EXPENSES				127.29	_____
TOTAL FIXED EXPENSES				125.26	_____
				-----	
TOTAL SPECIFIED EXPENSES				915.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				2.03	_____

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.C Estimated resource use for field operations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield Hyb	lb					25.0000				
Cruiser Maxx Rice	lbseed					25.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc. (Pet.	pt					2.0000				
Aim 2EC	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			0.75	Jul	0.7500				
Karate Z	oz					1.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.D Estimated costs for field operations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.15	3.45		3.45
Field Cultivate Fld	32'		2.16	1.57	2.38			0.27	6.38	8.05	14.43
Harrow - Folding	40'		0.90	0.51	0.99			0.11	2.51	2.09	4.60
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Glyphosate 3lbs a.e	oz	6.72						0.20	6.92		6.92
2,4-D Amine 4	pt	4.88						0.15	5.03		5.03
Grain Drill	24'		1.82	2.39	2.71			0.16	7.08	7.04	14.12
Rice Clearfield Hyb	lb	145.50						3.27	148.77		148.77
Cruiser Maxx Rice	lbseed	3.25						0.07	3.32		3.32
Roller/Cultipacker	30'		1.15	0.57	1.27			0.07	3.06	2.53	5.59
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Command 3ME	pt	19.38						0.44	19.82		19.82
Sharpen	oz	12.14						0.27	12.41		12.41
MSO	pt	1.50						0.03	1.53		1.53
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CFH (Levee)	lb	24.74						0.56	25.30		25.30
Cruiser Maxx Rice	lbseed	0.55						0.01	0.56		0.56
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	27.95						0.63	28.58		28.58
Crop Oil Conc. (Pet.)	pt	7.72						0.17	7.89		7.89
App Fert by Air	cwt	7.00						0.13	7.13		7.13
Amm Sulfate (21% N)	cwt	8.63						0.16	8.79		8.79
DAP	cwt	14.08						0.26	14.34		14.34
Rice Consultant	acre	8.00						0.15	8.15		8.15
App Fert by Air	cwt	18.69						0.35	19.04		19.04
Urea, Solid (46% N)	cwt	55.62						1.04	56.66		56.66
NBPT	pt	7.90						0.15	8.05		8.05
App by Air (10 gal)	appl	8.75						0.16	8.91		8.91
Newpath 2SL	oz	22.08						0.41	22.49		22.49
Crop Oil Conc. (Pet.)	pt	7.72						0.14	7.86		7.86
Aim 2EC	oz	8.19						0.15	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.55						0.26	17.81		17.81
MSO	pt	3.00						0.05	3.05		3.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	20.83						0.31	21.14		21.14
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 3 gal)	appl	3.75						0.04	3.79		3.79
Karate Z	oz	4.20						0.05	4.25		4.25
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.89	8.42	4.48			0.14	18.93	27.66	46.59
Grain Cart Rice	700 bu		0.25	0.19	0.28			0.01	0.73	0.68	1.41
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.45	59.95		59.95
Dry Rice	bu	68.00						0.51	68.51		68.51
Disk Heavy	28'		3.51	3.17	3.86			0.04	10.58	11.21	21.79
Flood Irr.	acre	2.25	45.20	13.12	22.55			1.42	84.54	66.00	150.54
TOTALS			638.94	60.88	29.94	47.13	0.00	13.82	790.71	125.26	915.97

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.E Estimated monthly income and expense flows per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.75	3.25	3.75	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.23	20.83	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.60	0.00	63.95	30.27	17.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	174.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.56	7.72	3.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.37	0.00	0.00	0.00	0.00	0.00	11.70	5.44	6.34	6.34	10.08	3.86
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.06	0.00	0.00	0.00	0.00	0.00	13.58	11.40	11.40	11.40	6.53	3.51
REPAIR & MAINTENANCE	2.08	0.00	0.00	0.00	0.00	0.00	4.99	6.91	2.03	2.03	8.73	3.17
INTEREST ON OP. CAP.	0.53	0.00	0.00	0.00	0.54	0.00	6.62	3.54	1.08	0.31	1.16	0.04
TOTAL DIRECT EXPENSES	12.34	0.00	0.00	0.00	18.64	0.00	300.69	193.95	72.48	28.03	154.00	10.58
NET INCOME	-12.34	0.00	0.00	0.00	-18.64	0.00	-300.69	-193.95	-72.48	-28.03	764.00	-10.58
NET INCOME TO DATE	-12.34	-12.34	-12.34	-12.34	-30.98	-30.98	-331.67	-525.62	-598.10	-626.13	137.87	127.29

Note: Cost of production estimates are based on 2015 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 9.F Estimated returns for various price/yield combinations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2016

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-382 -507	-359 -484	-336 -461	-313 -438	-290 -415	-267 -392	-244 -369	-221 -346	-198 -323	-175 -300	-152 -277
60	102.00	bu	-326 -451	-298 -423	-271 -396	-243 -368	-216 -341	-188 -313	-160 -286	-133 -258	-105 -231	-78 -203	-50 -176
70	119.00	bu	-270 -395	-238 -363	-205 -331	-173 -299	-141 -266	-109 -234	-77 -202	-45 -170	-13 -138	18 -106	51 -74
80	136.00	bu	-214 -339	-177 -302	-140 -266	-104 -229	-67 -192	-30 -155	6 -119	42 -82	79 -45	116 -8	152 27
90	153.00	bu	-158 -283	-116 -242	-75 -200	-34 -159	7 -118	48 -76	89 -35	130 5	172 47	213 88	254 129
100	170.00	bu	-102 -227	-56 -181	-10 -135	35 -89	81 -43	127 2	173 47	219 93	264 139	310 185	356 231
110	187.00	bu	-46 -171	4 -120	54 -70	105 -19	155 30	206 80	256 131	307 181	357 232	408 282	458 333
120	204.00	bu	9 -115	64 -60	119 -5	175 49	230 104	285 159	340 215	395 270	450 325	505 380	560 435
130	221.00	bu	65 -59	125 0	185 59	244 119	304 179	364 238	423 298	483 358	543 417	602 477	662 537
140	238.00	bu	121 -3	186 60	250 125	314 189	378 253	443 317	507 382	571 446	635 510	700 574	764 639
150	255.00	bu	177 52	246 121	315 190	384 259	453 327	522 396	590 465	659 534	728 603	797 672	866 741

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

## APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 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 (250-299 hp)	265 hp	315,000	300	8	13.64	13.40	27.28	32.81	73.49	129.47	202.96
Combine (300-349 hp)	325 hp	332,000	300	8	16.73	13.40	33.46	34.58	81.44	136.45	217.90
Combine (350-399 hp)	355 hp	332,000	300	8	18.27	13.40	36.54	34.58	84.52	136.45	220.98
Combine (400-449 hp)	425 hp	407,000	300	8	21.87	13.40	43.75	42.39	99.54	167.28	266.83
Combine (450-499hp)	475 hp	414,000	300	8	24.44	13.40	48.89	43.12	105.42	170.16	275.58
Tractor( 20-39hp)CB	MFWD 30	31,000	600	8	1.54	13.40	3.08	0.96	17.45	5.82	23.28
Tractor( 20-39hp)RB	MFWD 30	19,900	600	8	1.54	13.40	3.08	0.62	17.10	3.74	20.85
Tractor( 40-59hp)CB	2WD 50	31,100	600	8	2.57	13.40	5.14	0.97	19.51	5.84	25.36
Tractor( 40-59hp)CB	MFWD 50	38,100	600	8	2.57	13.40	5.14	1.19	19.73	7.16	26.90
Tractor( 40-59hp)RB	2WD 50	18,500	600	8	2.57	13.40	5.14	0.57	19.12	3.47	22.60
Tractor( 40-59hp)RB	MFWD 50	23,600	600	8	2.57	13.40	5.14	0.73	19.28	4.43	23.72
Tractor( 60-89hp)CB	2WD 75	47,700	600	8	3.86	13.40	7.72	1.49	22.61	8.97	31.58
Tractor( 60-89hp)CB	MFWD 75	49,300	600	8	3.86	13.40	7.72	1.54	22.66	9.27	31.93
Tractor( 60-89hp)RB	2WD 75	37,000	600	8	3.86	13.40	7.72	1.15	22.27	6.95	29.23
Tractor( 60-89hp)RB	MFWD 75	37,800	600	8	3.86	13.40	7.72	1.18	22.30	7.10	29.41
Tractor( 90-119hp)CB	2WD 105	65,300	600	8	5.40	13.40	10.80	2.04	26.24	12.28	38.52
Tractor( 90-119hp)CB	MFWD 105	78,300	600	8	5.40	13.40	10.80	2.44	26.65	14.72	41.38
Tractor( 90-119hp)RB	2WD 105	59,900	600	8	5.40	13.40	10.80	1.87	26.08	11.26	37.34
Tractor( 90-119hp)RB	MFWD 105	60,300	600	8	5.40	13.40	10.80	1.88	26.09	11.33	37.43
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	13.40	13.38	3.00	29.79	18.10	47.90
Tractor(120-139hp)CB	MFWD 130	116,000	600	8	6.69	13.40	13.38	3.62	30.40	21.81	52.22
Tractor(140-159hp)CB	2WD 150	108,000	600	8	7.72	13.40	15.44	3.37	32.21	20.30	52.52
Tractor(140-159hp)CB	MFWD 150	149,000	600	8	7.72	13.40	15.44	4.65	33.49	28.02	61.51
Tractor(160-179hp)CB	MFWD 170	166,000	600	8	8.75	13.40	17.50	5.18	36.08	32.66	68.75
Tractor(180-199hp)CB	MFWD 190	180,000	600	8	9.77	13.40	19.55	5.62	38.58	35.42	74.00
Tractor(200-249hp)CB	MFWD 225	228,000	600	8	11.58	13.40	23.16	7.12	43.68	44.86	88.55
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	13.40	23.16	8.65	45.21	54.50	99.72
Tractor(250-349hp)CB	4WD 300	282,000	600	8	15.44	13.40	30.88	8.81	53.09	55.49	108.58
Tractor(250-349hp)CB	MFWD 300	287,000	600	8	15.44	13.40	30.88	8.96	53.25	56.47	109.72
Tractor(250-349hp)CB	Track 300	289,000	600	8	15.44	13.40	30.88	9.03	53.31	56.86	110.18
Tractor(350-449hp)CB	4WD 400	341,000	600	8	20.58	13.40	41.17	10.65	65.23	67.10	132.33
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	13.40	41.17	11.37	65.95	71.62	137.58
Tractor(450-550hp)CB	4WD 500	383,000	600	8	25.73	13.40	51.47	11.96	76.84	75.36	152.20
Tractor(450-550hp)CB	Track 500	423,000	600	8	25.73	13.40	51.47	13.21	78.09	83.23	161.32
Utility Vehicle	900 CC	12,200	200	8	1.00	13.40	2.25	1.90	17.55	7.52	25.07
Utility Vehicle	800 CC	9,900	200	8	0.70	13.40	1.57	1.54	16.52	6.10	22.62
Utility Vehicle-mule	600 CC	7,000	200	8	0.50	13.40	1.12	1.09	15.61	4.31	19.93

## Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 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-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.78	6.63	10.79	23.21	42.59	65.81
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.78	9.28	14.13	29.21	55.78	84.99
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.87	6.20	9.61	19.69	37.92	57.61
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.90	7.97	15.85	28.73	62.56	91.30
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.87	6.29	12.51	22.68	49.39	72.08
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.78	10.61	21.58	37.99	85.18	123.17
Cotton Picker/Modu	6R-30 (500)	727,000	200	8	25.73	0.218	4.90	11.23	24.79	40.92	97.82	138.75
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.87	7.09	14.43	25.39	56.94	82.33
Cotton Picker/Module	6R-38 (500)	727,000	200	8	25.73	0.172	3.87	8.86	19.57	32.31	77.23	109.54
Dry Applicator SP	70'300cuft	293,000	350	8	16.98	0.015	0.27	0.51	0.23	1.02	1.55	2.58
Sprayer 600-750gal	60' 175hp	174,000	350	8	9.00	0.017	0.31	0.31	0.16	0.79	1.08	1.87
Sprayer 600-825gal	80' 175hp	180,000	350	8	11.81	0.013	0.23	0.31	0.12	0.67	0.83	1.51
Sprayer 600-825gal	90' 250hp	255,000	350	8	12.73	0.011	0.21	0.29	0.16	0.67	1.05	1.72
Sprayer 800gal	100' 250hp	257,000	350	8	14.15	0.010	0.18	0.29	0.14	0.63	0.95	1.59
Sprayer 800gal	80' 250hp	212,000	350	8	12.86	0.013	0.23	0.34	0.15	0.72	0.98	1.71
Sprayer 1000-1400gal	90' 275hp	297,000	350	8	14.15	0.010	0.18	0.29	0.16	0.65	1.10	1.76
Sprayer 1000gal	100' 300hp	301,000	350	8	15.44	0.010	0.18	0.32	0.17	0.68	1.12	1.80
Sprayer 1200+gal	120' 300hp	336,000	350	8	15.44	0.008	0.15	0.27	0.15	0.58	1.04	1.63

## Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.













Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		--Fixed--		Total Cost	
									Imp.	P.U.	Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----							
Spray (Pull Type)	120'	MFWD 225	75,800	200	8	0.014	0.25	0.32	0.50	0.10	1.18	0.60	0.63	2.41
Spray (Ropewick)	20'	MFWD 190	3,440	200	8	0.084	1.51	1.65	0.13	0.47	3.78	0.16	2.99	6.94
Spray (Spot)	27'	MFWD 170	5,390	200	8	0.062	1.12	1.09	0.15	0.32	2.70	0.19	2.04	4.94
Spray (Spot)	40'	MFWD 170	7,700	200	8	0.042	0.75	0.74	0.15	0.21	1.87	0.18	1.38	3.43
Spray (Spot)	50'	MFWD 170	6,800	200	8	0.033	0.60	0.59	0.10	0.17	1.48	0.12	1.10	2.71
Spray (Spot)	53'	MFWD 170	9,300	200	8	0.031	0.57	0.55	0.13	0.16	1.43	0.16	1.04	2.64
Spray (Spot)	60'	MFWD 225	18,400	200	8	0.028	0.50	0.65	0.24	0.20	1.60	0.29	1.26	3.16
Stalk Shredder	14'	MFWD 150	13,100	200	10	0.117	1.57	1.81	1.35	0.54	5.29	0.81	3.30	9.41
Stalk Shredder Flex	20'	MFWD 150	30,200	200	10	0.082	1.10	1.27	2.18	0.38	4.94	1.31	2.31	8.57
Stalk Shredder-Flail	12'	MFWD 150	15,100	200	10	0.137	1.84	2.12	1.81	0.64	6.42	1.09	3.85	11.37
Stalk Shredder-Flail	15'	MFWD 150	20,200	200	10	0.110	1.47	1.69	1.94	0.51	5.62	1.17	3.08	9.88
Stalk Shredder-Flail	18'	MFWD 150	25,800	200	10	0.091	1.22	1.41	2.06	0.42	5.14	1.24	2.56	8.95
Stalk Shredder-Flail	20'	MFWD 150	27,300	200	10	0.082	1.10	1.27	1.97	0.38	4.73	1.18	2.31	8.23
Stalk Shredder-Flail	25'	MFWD 150	38,700	200	10	0.066	0.88	1.01	2.23	0.30	4.44	1.34	1.84	7.64
Strip Till	8R-38	MFWD 225	27,200	150	10	0.061	0.82	1.42	0.72	0.43	3.41	1.18	2.76	7.36
Strip Till	12R-30	MFWD 225	47,500	150	10	0.061	0.82	1.42	1.26	0.43	3.96	2.06	2.76	8.78
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.61	1.07	1.17	0.32	3.19	1.90	2.07	7.16
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.73	3.99	0.24	1.14	8.12	0.59	7.23	15.96
Subsoiler	4 shank	MFWD 225	8,330	100	15	0.153	2.05	3.55	0.42	1.09	7.13	1.05	6.89	15.08
Subsoiler	5 shank	MFWD 225	13,800	100	15	0.122	1.63	2.83	0.56	0.87	5.90	1.39	5.48	12.79
Subsoiler low-till	4 shank	MFWD 225	12,000	100	15	0.153	2.05	3.55	0.61	1.09	7.32	1.51	6.89	15.73
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.36	2.36	0.56	0.72	5.02	1.39	4.58	11.01
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	1.02	1.77	0.56	0.54	3.90	1.40	3.43	8.74

## Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2016 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS					
Crop Oil Conc. (Pet.)	pt	3.86			
Crop Oil Conc. (Veg.)	pt	4.44			
Drift/Defoamer	pt	2.13	Dithane F-45	qt	8.52
Dyne-A-Pak	pt	5.51	Dithane Rainshield	pt	3.96
MSO	pt	3.00	Enable 2F	oz	2.02
Spreader Sticker	pt	3.54	Headline EC	oz	3.79
Surfactant	pt	5.35	Headline SC	oz	3.69
CLEANING					
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	4.81
CROP CONSULTANT					
Corn Consultant	acre	7.00	Moncut 70 DF	lb	33.30
Cotton Consultant	acre	8.00	Prevail	lb	28.50
Rice Consultant	acre	8.00	Propimax EC	pt	11.94
Soybeans Consultant	acre	7.00	Prosaro	oz	2.77
Wheat Consultant	acre	5.00	Provost	oz	2.34
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	Quadris	oz	3.05
App Fert by Air (Mi)	appl	7.00	Quadris Top	oz	2.16
Custom Apply Fert	acre	7.00	Quilt	pt	23.79
CUSTOM LIME					
Lime (Spread)	ton	46.00	Quilt XCEL	pt	31.47
CUSTOM PLANT					
Custom Plant	acre	13.00	Ridomil Gold	oz	6.41
Custom Plant Air	cwt	7.00	Ridomil Gold PC GR	lb	5.30
CUSTOM SPRAY					
App by Air ( 2 gal)	appl	4.00	Rovral 4F	pt	11.14
App by Air ( 3 gal)	appl	5.00	Stiletto	oz	0.58
App by Air ( 5 gal)	appl	6.50	Stratego 250EC	pt	25.58
App by Air (10 gal)	appl	8.75	Stratego YLD	oz	5.04
Custom Spray Ground	acre	7.50	Tilt 3.6 EC	oz	0.86
Custom Spray Self Pr	acre	6.25	Tilt/ Bravo SE	oz	0.38
Custom Spray Tractor	acre	7.75	Uniform	oz	4.89
DRYING					
Dry Corn	bu	0.19	Vitavax RTU-Thiram	oz	0.40
Dry Grain Sorghum	cwt	0.25	GINNING		
Dry Peanuts	ton	24.00	Gin & Haul	lb	0.11
Dry Rice	bu	0.40	GROWTH REGULATORS		
ERADICATION FEE					
Eradication	acre	1.00	Early Harvest PGR	oz	1.55
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	Mepex	oz	0.10
Boron Plus	pt	4.24	Mepex Gin Out	oz	0.12
Fert 10-34-0	cwt	32.50	Mepichlor 4.2%	oz	0.11
Fert 41-0-0-4	cwt	20.50	Mepiquat	oz	0.11
Lime	ton	36.00	Mepiquat Extra	oz	0.11
NBPT	pt	9.88	Pentia	pt	5.94
Phosphorus (46% P2O5)	cwt	25.00	Pix Plus	oz	0.19
Potash (60% K2O)	cwt	21.27	Stance	oz	1.18
Sulfur 90%	lb	0.34	HARVEST AIDS		
Sulfur Plus	pt	2.62	Adios	oz	1.27
SuperMax AMS	pt	2.67	Aim 2EC	oz	5.46
UAN (32% N)	cwt	15.95	Ammonium Sulfate	lb	0.24
UAN + Sulfur (28%)	cwt	16.33	CottonQuik	pt	5.01
UAN 1%	pt	0.00	Def 6	pt	8.25
Urea, Solid (46% N)	cwt	20.83	Def/Folex	pt	9.99
Zinc Plus	pt	3.00	Defol 3	gal	3.45
FUNGICIDES					
Abound	pt	32.53	Defol 5	gal	6.55
Alfa Guard	lb	1.62	Dropp SC	oz	1.60
Allegiance Flowable	pt	55.70	ET	pt	23.98
Apron Maxx RTA	oz	0.86	Ethephon 6E	pt	4.69
Apron Maxx RTA+Moly	pt	16.84	Finish 6	pt	8.93
Apron XL LS	oz	6.98	First Pick	pt	3.99
Artisan	oz	1.02	Flash	pt	4.68
Bravo Ultrex	lb	6.93	Folex 6EC	pt	9.92
Bravo Weather Stick	pt	5.27	Freefall SC	oz	1.30
Captan 50 WP	lb	4.03	Ginstar EC	pt	30.60
Cotton Seed Trt.	acre	20.00	Gramoxone SL	oz	0.31
CruiserMaxx	oz	4.44	Paraquat	oz	0.27
			Prep	pt	3.32
			Sharpen	oz	6.23
			Sodium Chlorate 3L	gal	3.50
			Sodium Chlorate 5L	gal	5.57
			TDZ SC	oz	0.79
			Thidiazuron 4lb	oz	0.79
			Tribufos 6lb	pt	9.90
			Vacate	oz	1.17
			HAULING		
			Haul Corn	bu	0.23

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2016(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Haul Peanuts	ton	14.50	Guardsman Max	pt	7.22
Haul Rice	bu	0.35	Halex GT	pt	7.22
Haul Sorghum	bu	0.25	Halomax	oz	19.26
Haul Soybeans	bu	0.27	Harmony Extra SG TS	oz	29.95
Haul Wheat	bu	0.26	Harmony Extra TotSol	oz	13.51
HERBICIDES			Harness XTRA	pt	6.59
2,4-D Amine 4	pt	2.44	Ignite 280	pt	8.93
2,4-D Weedar 64	pt	2.44	Impact	oz	23.92
AAtrex 4L	pt	2.46	Karmex XP	lb	6.05
AAtrex NINE-O	lb	3.60	Lariat	qt	7.58
Accent Q	oz	32.40	Laudis	oz	5.74
Aim 2EC	oz	5.46	Layby Pro	qt	14.18
Assure II	oz	0.75	Leadoff	oz	5.73
Atrazine 4L	pt	2.03	Lexar	pt	7.56
Atrazine 90DF	lb	3.60	Liberty 280	oz	0.68
Axial XL	oz	1.10	Linex 4L	pt	10.56
Axiom 68DF	oz	0.23	Londax 60DF	oz	17.13
Banvel	pt	11.98	Lorox 50DF	lb	23.52
Basagran	pt	12.90	Metribuzin 75	lb	13.38
Basis	oz	12.93	MSMA 6.6	pt	3.38
Beyond	oz	4.43	MSMA6 Plus	pt	3.23
Bicep II Magnum	qt	10.37	Newpath 2SL	oz	3.68
Bicep Lite Magnum	pt	6.88	Osprey	oz	3.47
Blazer Ultra	pt	9.79	Outlook	pt	16.80
Bolero 8EC	pt	7.67	Paraquat	oz	0.31
Boundary 6.5 EC	pt	10.18	Parazone 3SL	oz	0.28
Bullet	pt	3.79	Parrot 4L	pt	2.74
Butyrac 175 (2,4-D)	pt	3.11	Peak Accu Pak	oz	15.75
Butyrac 200 (2,4-DB)	pt	4.05	Permit 75 DF	oz	20.73
Cadre	oz	4.21	Poast 1.53	pt	12.41
Callisto 4SC	oz	6.02	Poast Plus	pt	8.60
Canopy 75%	oz	2.70	PowerFlex HL	lb	115.78
Canopy EX	oz	7.97	Prefix	pt	5.81
Caparol 4L	pt	4.02	Prowl 3.3 EC	pt	5.62
Capreno	oz	6.73	Prowl H20	pt	5.95
Clarity	pt	12.89	Pursuit 2S	oz	3.40
Classic	oz	16.85	Python WDG	oz	13.56
Clearpath	lb	55.90	Quinstar	lb	49.16
Clincher SF	oz	2.34	Raptor	oz	4.37
Cobra 2EC	oz	1.68	RealmQ	oz	5.00
Command 3ME	pt	19.38	Reflex 2LC	pt	6.30
Corvus	oz	6.82	Regiment 80WP	oz	43.75
Cotoran 4L	pt	5.99	Remedy Ultra	pt	9.10
Cotton Pro	pt	3.53	Resolve SG	oz	8.58
Credit Extra	pt	2.07	Resource .86EC	pt	29.40
Dicamba	pt	10.83	Ricebeaux	pt	5.53
Direx 4L	pt	4.41	RicePro	pt	4.87
Diuron 4L	pt	4.15	Riceshot	pt	4.14
Diuron 80 DF	lb	6.20	Ricestar HT	pt	23.54
Diuron 80%	lb	6.20	Roundup Power Max	oz	0.19
Dual II Magnum	pt	13.99	Roundup PowerMax	pt	2.99
Dual Magnum	pt	13.49	Roundup WeatherMax	oz	0.27
Duet	pt	5.09	Roundup WeatherMax	pt	4.33
Envoke	oz	96.59	Salvo	pt	5.13
Evik DF 80W	lb	11.22	Scepter 70 DG	oz	4.52
Expert	pt	4.19	Select Max	pt	12.35
Facet L	pt	14.60	Sequence	pt	5.87
Finesse	oz	15.66	Sharpen	oz	6.07
First Rate	oz	41.50	Simazine 4L	pt	3.17
Flexstar	pt	8.30	Stalwart	pt	6.39
Fultime	pt	5.25	Stam 80 EDF	lb	9.50
Fusilade DX	oz	1.08	Stam M4	qt	7.78
Fusion	pt	26.89	Staple LX	oz	8.83
Glyphos	pt	1.80	Steadfast	oz	12.32
Glyphos Xtra	pt	2.25	Storm	pt	11.88
Glyphosate 3lbs a.e	pt	2.26	Strada WG	oz	6.91
Glyphosate 3lbs a.e	oz	0.14	Strongarm	oz	51.19
Glystar Plus	pt	2.45	Superwham	qt	9.18
Goal 2XL	pt	9.83	Suprend	lb	13.49
Gramoxone SL 2.0	oz	0.31	Surpass EC	qt	28.06
Grandstand R	qt	29.47			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2016 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Synchrony XP	oz	12.49	Montana	oz	1.00
Touchdown Total	qt	7.13	Mustang Max	oz	1.45
Treflan 4D	pt	3.40	Nuprid 4F	oz	0.51
Tricor DF	lb	15.55	Oberon 4 SC	pt	59.84
Trifluralin 4EC	pt	3.60	Orthene 97S	lb	9.10
Valor SX	oz	7.10	PennCap-M	pt	6.71
Valor XLT	oz	5.11	Pounce 25WP	lb	15.16
Verdict	oz	1.77	Prevathon	oz	1.25
Zorial Rapid 80DF	lb	14.10	Prolex	oz	2.62
INOCULANT			Provoke	oz	1.75
Optimize LIFT	oz	0.54	Radiant	oz	6.73
Vault	oz	1.73	Respect .8EC	pt	34.00
INSECTICIDES			Sevin 4F	pt	5.89
Abamectin .15EC	oz	0.72	Sevin 80S	lb	7.40
Acephate 90%	lb	7.45	Sevin XLR Plus	qt	12.50
Acephate 90SP	lb	7.45	Sivanto	oz	2.40
Acramite-4SC	oz	1.88	Steward	pt	36.33
Admire Pro	oz	2.95	Thimet 20-G Lock N L	lb	3.65
Asana .66 XL	oz	0.57	Thionex 3 EC	pt	4.17
Aztec 2.1% G	lb	3.77	Thionex 50W	lb	10.45
Baythroid XL	oz	2.55	Tracer 4SC	oz	9.73
Bidrin 8WM	oz	1.09	Transform WG	oz	7.74
Bidrin XP	oz	1.05	Vydate C-LV	oz	0.93
Bifenthrin	oz	0.89	Zeal Miticid I	oz	15.89
Bifenture 2EC	pt	16.10	Zephyr	oz	0.85
Brigade EC	pt	16.12	IRRIGATION SUPPLIES		
Brigade WSB	lb	22.47	Roll-Out Pipe	ft	0.26
Capture LFR	oz	2.53	SEED/PLANTS		
Carbaryl 4L	pt	5.28	Corn Seed B2RR	thous	3.27
Carbine 50WG	oz	5.93	Corn Seed Conv.	thous	2.61
Centric 40WG	oz	4.95	Corn Seed LLRRBT	thous	3.64
Comite 1l	pt	8.98	Corn Seed RR2	thous	3.02
Confirm 2F	oz	2.11	Corn Seed VT3	thous	3.52
Counter 15G	lb	4.51	Corn Seed VT3Pro	thous	3.52
Cruiser Maxx Rice	lbseed	0.13	Cotton Seed B2RF	thous	0.72
Curacron 8E	pt	10.75	Cotton Seed LLB2	thous	1.25
Cypermethrin	oz	0.55	Cotton Seed W	thous	0.74
Denim 0.16 EC	pt	32.63	Cotton Seed WRF	thous	0.86
Diamond .83EC	pt	21.28	Peanut Seed	lb	0.70
Diamond .83EC	oz	1.33	Rice Clearfield	lb	1.05
Dimethoate 4E	pt	6.51	Rice Clearfield Hyb	lb	5.82
Dimilin 2L	oz	2.22	Rice Conv. Hybrid	lb	5.91
Dipel DF	lb	15.09	Rice Seed (Levees)	lb	0.43
Dipel ES	pt	5.42	Rice Seed CF (Levees)	lb	1.05
Discipline 2 EC	oz	0.98	Rice Seed CFH (Levee)	lb	5.82
Endigo ZC	pt	27.76	Rice Seed Conv.	lb	0.43
Epi-Mek	pt	15.41	Sorghum Concept	lb	2.29
Fanfare 2EC	oz	0.93	Sorghum Concept+ Po	lb	3.60
Force 3G	lb	6.90	Soybean Seed LL	lb	1.15
Gaucho 600	oz	5.26	Soybean Seed RR2	lb	1.13
Hero	pt	25.34	Wheat Seed Private	lb	0.38
Imidan 70 WSB	oz	0.75	SOIL TEST		
Incidental Pest Trt	acre	12.00	Soil Test	acre	10.00
Incidental Pest Trt	acre	8.00	SURVEY & MARK LEVEES		
Intrepid 2F	oz	2.01	Survey & Mark Levees	acre	4.50
Intruder 70WSP	oz	9.83	TECHNOLOGY FEE		
Karate Z	oz	2.80	B2 Cot Tech Fee	thous	0.76
Kelthane MF 4EC	pt	5.00	B2 Cot Tech Fee	cap/ac	31.91
Lambda	oz	1.13	B2EF Cot Tech Fee	thous	1.63
Lannate LV	pt	11.08	B2EF Cot Tech Fee	cap/ac	68.62
Lannate SP	oz	2.13	B2RF Cot Tech Fee	thous	1.49
Larvin 3.2	oz	0.63	B2RF Cot Tech Fee	cap/ac	62.69
Leverage 2.7	oz	2.12	LLB2 Cot Tech Fee	thous	0.76
Lorsban 15G	lb	2.35	RF Cot Tech Fee	thous	1.04
Lorsban 4E	pt	6.02	RF Cot Tech Fee	cap/ac	43.66
Macho	oz	1.03	WRF Cot Tech Fee	thous	1.45
Malathion 5E	pt	4.54	WS Cot Tech Fee	thous	0.41
Malathion 8E	pt	5.33	WS Cotton Tech Fee	cap/ac	24.00
Monitor 4	pt	16.50			

Appendix Table 5. Estimated fuel prices  
and interest rates, Mississippi, 2016

ITEM NAME	UNIT	PRICE
		dollars
Diesel Fuel (DI) Price . . . . .	(\$/gal):	2.00
Gasoline (GA) Price. . . . .	(\$/gal):	2.25
LP Gas (LP) Price. . . . .	(\$/gal):	1.70
Short-term Interest Rate . . . . .	(%):	4.50
Intermediate-term Interest Rate. . . . .	(%):	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor  
multipliers for crop enterprises, Mississippi, 2016

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.40
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2016

Crop	uni	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
Corn	bu	Dec '16	4.15	-0.27	3.88	2.10	3.88
Cotton Lint	lb	Dec '16	0.6198	-0.0233	0.596 <sup>c</sup>	0.52	0.60
Cottonseed	lb						0.114 <sup>f</sup>
Grain Sorghum	bu				3.69	2.02	3.69
Peanuts	ton				375.00	355.00	375.00
Soybeans	bu	Nov '16	8.91	+0.07	8.98	5.21	8.98
Rice	bu	Nov '16	5.94	-0.54	5.40	2.98	5.40
Wheat	bu	Jul '16	5.31	-0.20	5.11	2.72	5.11

<sup>a</sup> Average of the daily closing futures contract prices during first six trading days in October 2015 for the stated contract months.

<sup>b</sup> Basis is the Greenville, MS cash price minus the futures contract price for the stated contract. The reported basis is a daily average from 2009 to 2015.

All basis values are composed of the typical harvest timeframe for each crop according to USDA, progress reports.

Sources: Arkansas Farm Bureau Commodity Report and Daily Grain Report, Mississippi Department of Ag-USDA Market News.

<sup>c</sup> The forward contract price for cotton, soybeans, corn, wheat, and rice is the futures contract price. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The price for peanuts is estimated from a poll of industry peanut buyers.

<sup>d</sup> Average Mississippi loan rate for the 2015 crop year for soybeans, corn, grain sorghum, and wheat. Loan rate for cotton. 2015 Mississippi farm stored loan rate for long grain rice. 2015 national average loan rate for peanuts.

<sup>e</sup> Price used in the 2016 MAFES Planning Budgets.

<sup>f</sup> Cottonseed price is the marketing year average price averaged over the years 2011-2015.

Appendix Table 8. Estimated costs for field operations, per acre  
 Contour levee rice flood irrigation system  
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.28	0.10	0.22			0.01	0.61	0.64
Survey & Mark Levees	acre	4.50						0.10	4.60	4.60
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.75	0.28	0.57			0.04	1.64	1.73
Butt Levees										
Blade-Box	6'-7'		0.27	0.07	0.27			0.01	0.62	0.37
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				2.72			0.06	2.78	2.78
Apply Water										
IRRIGATE LABOR	hour				6.80			0.15	6.95	6.95
Apply Water										
IRRIGATE LABOR	hour				6.80			0.13	6.93	6.93
Apply Water										
IRRIGATE LABOR	hour				6.80			0.10	6.90	6.90
Apply Water										
IRRIGATE LABOR	hour				6.80			0.08	6.88	6.88
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.51	0.16	0.45			0.01	1.13	0.93
Tear Down Levees										
Levee Splitter (1/80	32"		0.19	0.06	0.17				0.42	0.34
Land Forming (\$113)	each									8.02
Levee Gates	each									0.55
Well & Pump, Flood	each			4.88				0.09	4.97	14.41
Engine, Rice CL, 75	each									16.75
May Irrigation	ac-in		9.78	1.42				0.25	11.45	11.45
June Irrigation	ac-in		14.66	2.13				0.31	17.10	17.10
July Irrigation	ac-in		14.66	2.13				0.25	17.04	17.04
August Irrigation	ac-in		14.66	2.13				0.19	16.98	16.98
TOTALS		4.50	55.76	13.36	33.64	0.00	1.82	109.08	43.74	152.82

Note: Cost of production estimates are based on 2015 input prices.



Appendix Table 9. Estimated costs for field operations, per acre  
 Straight levee rice flood irrigation system  
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.56	0.22	0.43			0.03	1.24	1.29
Butt Levees										
Blade-Box	6'-7'		0.27	0.07	0.27			0.01	0.62	0.37
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				4.53			0.10	4.63	4.63
Apply Water										
IRRIGATE LABOR	hour				4.53			0.08	4.61	4.61
Apply Water										
IRRIGATE LABOR	hour				4.53			0.07	4.60	4.60
Apply Water										
IRRIGATE LABOR	hour				4.53			0.05	4.58	4.58
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.39	0.12	0.33			0.01	0.85	0.70
Land Forming (\$390)	each									31.93
Levee Gates	each									0.55
Well & Pump, Flood	each			4.88				0.09	4.97	14.41
Engine, Rice SL, 75	each									16.75
May Irrigation	ac-in		9.78	1.74				0.26	11.78	11.78
June Irrigation	ac-in		11.40	2.03				0.25	13.68	13.68
July Irrigation	ac-in		11.40	2.03				0.20	13.63	13.63
August Irrigation	ac-in		11.40	2.03				0.15	13.58	13.58
TOTALS		2.25	45.20	13.12	22.55	0.00	1.42	84.54	66.00	150.54

Note: Cost of production estimates are based on 2015 input prices.

Appendix Table 10. Estimated costs for field operations, per acre  
 Straight levee rice multi inlet flood irrigation system  
 80-acre system, 23 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.56	0.22	0.43			0.03	1.24	1.29
Butt Levees										
Blade-Box	6'-7'		0.27	0.07	0.27			0.01	0.62	0.37
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Ditcher (1m/160a)			0.13	0.05	0.13			0.01	0.32	0.19
Roll-Out Pipe	ft	8.58						0.19	8.77	8.77
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.07	0.40			0.01	0.65	0.52
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.02	1.83	1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45				0.45	0.45
Tear Down Levees										
Levee Splitter (1/80)	32"		0.39	0.12	0.33			0.01	0.85	0.70
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.08	0.03	0.19				0.30	0.25
Land Forming (\$390)	each									31.93
Levee Gates	each									0.27
Well & Pump, Flood	each			4.88				0.09	4.97	14.41
Engine, Mult In Rice	each									16.75
May Irrigation	ac-in		8.15	1.63				0.22	10.00	10.00
June Irrigation	ac-in		9.78	1.96				0.22	11.96	11.96
July Irrigation	ac-in		9.78	1.96				0.18	11.92	11.92
August Irrigation	ac-in		9.78	1.96				0.13	11.87	11.87
TOTALS		10.83	39.09	12.95	11.93	0.00	1.33	76.13	66.68	142.81

Note: Cost of production estimates are based on 2015 input prices.

Appendix Table 11. Estimated costs for field operations, per acre  
 Straight levee rice - zero grade flood irrigation  
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2016

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.05	2.32	2.32	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.04	2.31	2.31	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30	
Land Forming (\$390)	each							31.93	31.93	
Well & Pump, Flood	each			4.88			0.09	4.97	14.41	
Engine, Rice SL, 75	each							16.75	16.75	
May Irrigation	ac-in		6.52	1.16			0.17	7.85	7.85	
June Irrigation	ac-in		8.15	1.45			0.18	9.78	9.78	
July Irrigation	ac-in		8.15	1.45			0.14	9.74	9.74	
August Irrigation	ac-in		8.15	1.45			0.11	9.71	9.71	
TOTALS		0.00	30.97	10.39	9.53	0.00	0.85	51.74	63.09	114.83

Note: Cost of production estimates are based on 2015 input prices.



## Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968. "
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2015 Planning Budgets." Budget Report No. 2014-03, Department of Agricultural Economics, Mississippi State University, October 2014.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2015 Planning Budgets." Budget Report No. 2014-01, Department of Agricultural Economics, Mississippi State University, October 2014.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2015 Planning Budgets." Budget Report No. 2014-04, Department of Agricultural Economics, Mississippi State University, October 2014.
17. "Soybeans 2015 Planning Budgets." Budget Report No. 2014-02, Department of Agricultural Economics, Mississippi State University, October 2014.
18. "Vegetables 2015 Planning Budgets." Budget Report No. 2014-08, Department of Agricultural Economics, Mississippi State University December 2014.
19. "Peanuts 2015 Planning Budgets." Budget Report No. 2014-07, Department of Agricultural Economics, Mississippi State University, October 2014.







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