

Estimating 2008 Costs of Production
Rice, Hybrid, Silt Loam Soils,
Eastern Arkansas

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ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
GIN/DRY					
Dry Rice	bu	0.30	170.0000	51.00	_____
Rice Checkoff	bu	0.01	170.0000	2.30	_____
FERTILIZERS					
0-60-90	acre	52.59	1.0000	52.59	_____
Urea, Solid (46% N)	lb	0.20	267.0000	53.40	_____
HERBICIDES					
Command 3ME	pt	11.22	0.8000	8.98	_____
Propanil 4E	pt	2.64	6.0000	15.84	_____
Permit 75	oz	16.36	1.0000	16.36	_____
Facet 75DF	lb	45.69	0.2500	11.42	_____
2,4-D Amine	pt	1.79	0.2000	0.36	_____
INSECTICIDES					
Insecticide-StinkBug	acre	4.98	0.1000	0.50	_____
IRRIGATION SUPPLIES					
Levee Gates	acre	1.50	1.0000	1.50	_____
CROP SEED					
Rice - Hybrid	lb	2.60	33.8000	87.88	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	4.92	1.0000	4.92	_____
Cstm Ap Grd. Herb	acre	5.02	1.0000	5.02	_____
Survey Levee	acre	4.00	1.0000	4.00	_____
Cstm Ap Air Fert	lb	0.05	267.0000	14.95	_____
Cstm Ap Air Herb	acre	5.95	1.0000	5.95	_____
Cstm Spray Levee,ATV	acre	4.00	1.0000	4.00	_____
Cstm Ap Air Insect	acre	5.00	0.1000	0.50	_____
Cstm Haul Rice	bu	0.15	170.0000	25.50	_____
OPERATOR LABOR					
Tractors	hour	9.45	0.8188	7.75	_____
Harvesters	hour	9.45	0.2538	2.40	_____
IRRIGATION LABOR					
Flood Irr - Rice	hour	8.19	0.4525	3.71	_____
HAND LABOR					
Implements	hour	8.19	0.1192	0.97	_____
DIESEL FUEL					
Tractors	gal	2.33	7.9360	18.48	_____
Harvesters	gal	2.33	3.5919	8.37	_____
Flood Irr - Rice	gal	2.33	30.0001	69.90	_____
REPAIR & MAINTENANCE					
Implements	acre	5.43	1.0000	5.43	_____
Tractors	acre	3.04	1.0000	3.04	_____
Harvesters	acre	5.03	1.0000	5.03	_____
Flood Irr - Rice	ac-in	0.16	30.0000	4.84	_____
INTEREST ON OP. CAP.	acre	25.50	1.0000	25.50	_____

TOTAL DIRECT EXPENSES				522.39	_____
FIXED EXPENSES					
Implements	acre	14.88	1.0000	14.88	_____
Tractors	acre	23.16	1.0000	23.16	_____
Harvesters	acre	23.80	1.0000	23.80	_____
Flood Irr - Rice	each	2993.11	0.0083	24.84	_____

TOTAL FIXED EXPENSES				86.68	_____

TOTAL SPECIFIED EXPENSES				609.07	=====

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Table 2. Estimated resource use and costs for field operations, per acre, Rice, Hybrid, Silt Loam Soils, Eastern Arkansas, 2008

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC HOURS	LABOR COST	OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED			AMOUNT	PRICE	COST	
						dollars				dollars			dollars		
Disk Harrow	28'	MFWD 225	0.070	2.00	Apr	4.41	4.72	1.17	3.06	0.14	1.33				14.69
Land Plane	50'x16'	MFWD 190	0.151	2.00	Apr	8.04	8.63	0.43	1.40	0.30	2.87				21.37
Cstm Ap Grd Fert	acre			1.00	Apr								1.0000	4.92	4.92
0-60-90	acre												1.0000	52.59	52.59
Field Cultivate Fld	32'	MFWD 190	0.046	1.00	Apr	1.23	1.33	0.33	1.72	0.04	0.44				5.05
Grain Drill	20'	MFWD 170	0.094	1.00	Apr	2.25	2.55	1.14	2.72	0.18	1.66				10.32
Rice - Hybrid	lb											30.0000	2.60	78.00	78.00
Roller	32'-12R30	MFWD 170	0.046	1.00	Apr	1.12	1.26	0.12	0.84	0.04	0.44				3.78
Ditcher		2WD 130	0.020	1.00	Apr	0.36	0.36	0.03	0.06	0.02	0.19				1.00
Cstm Ap Grd. Herb	acre			1.00	Apr								1.0000	5.02	5.02
Command 3ME	pt												0.8000	11.22	8.98
Survey Levee	acre			1.00	Apr								1.0000	4.00	4.00
Levee Disk	8 blade	MFWD 190	0.025	2.00	Apr	1.33	1.42	0.05	0.34	0.05	0.47				3.61
Levee Seeder	8 blade	MFWD 190	0.025	1.00	Apr	0.66	0.71	0.07	0.46	0.05	0.44				2.34
Rice - Hybrid	lb											3.8000	2.60	9.88	9.88
Gate Installer		MFWD 105	0.025	1.00	Apr	0.35	0.27	0.11	0.47	0.02	0.24				1.44
Levee Gates	acre												1.0000	1.50	1.50
Blade-Scraper	8'-10'	2WD 50		1.00	Apr										
Cstm Ap Air Fert	lb			1.00	May								167.0000	0.05	9.35
Urea, Solid (46% N)	lb												167.0000	0.20	33.40
Cstm Ap Air Herb	acre			1.00	May								1.0000	5.95	5.95
Propanil 4E	pt												6.0000	2.64	15.84
Permit 75	oz												1.0000	16.36	16.36
Facet 75DF	lb												0.2500	45.69	11.42
Cstm Spray Levee,ATV	acre			1.00	Jul								1.0000	4.00	4.00
2,4-D Amine	pt												0.2000	1.79	0.36
Cstm Ap Air Fert	lb			1.00	Jul								100.0000	0.05	5.60
Urea, Solid (46% N)	lb												100.0000	0.20	20.00
Cstm Ap Air Insect	acre			1.00	Aug								0.1000	5.00	0.50
Insecticide-StinkBug	acre												0.1000	4.98	0.50
Header - Rice	25' Rigid	275hp	0.253	1.00	Sep	13.40	23.80	1.61	2.97	0.25	2.40				44.18
Rice Grain Cart	700 Bu	MFWD 190	0.063	1.00	Sep	1.69	1.81	0.37	0.81	0.06	0.60				5.28
Dry Rice	bu			1.00	Sep								170.0000	0.30	51.00
Cstm Haul Rice	bu												170.0000	0.15	25.50
Rice Checkoff	bu												170.0000	0.01	2.30
Levee Splitter (1/80	8 blade	MFWD 150	0.004	1.00	Oct	0.08	0.10		0.03	0.00	0.04				0.25
Flood Irr - Rice	each			1.00	May				24.84				0.0083		24.84
Apply Water	ac-in							74.74		0.45	3.71		30.0000		78.45
TOTALS						34.92	46.96	80.17	39.72	1.64	14.83			366.97	583.57
INTEREST ON OPERATING CAPITAL															25.50
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															609.07

Information presented in this document is prepared solely as a general guide and is not intended to recognize or predict the costs and returns from any one particular farm operation. The mention of any commercial product in this analysis does not imply its endorsement by the University of Arkansas Cooperative Extension Service over other products not named, nor does the omission imply that they are not satisfactory. This budget does not include costs for land, overhead, or management.

Table 3. Break-even Yields (BEY) Required to cover Direct Expenses and Net Returns above Direct Expenses at Price/Yield Combinations for Select Land Tenure Arrangements, per acre.

Rice, Hybrid, Silt Loam Soils, Eastern Arkansas, 2008

Farm Owner							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.33	3.70	4.07	4.44	4.81	5.18	5.55
	Net Returns above Variable Costs (\$/acre)						
87	-194	-162	-129	-97	-65	-32	0
94	-174	-140	-105	-70	-35	0	35
102	-151	-114	-76	-38	0	38	76
112	-124	-83	-41	0	41	83	124
123	-91	-46	0	46	91	137	182
137	-51	0	51	102	152	203	254
155	0	57	115	172	229	286	344

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.33	3.70	4.07	4.44	4.81	5.18	5.55
	Net Returns above Variable Costs (\$/acre)						
118	-196	-163	-131	-98	-65	-33	0
127	-176	-141	-106	-71	-35	0	35
138	-153	-115	-77	-38	0	38	77
151	-126	-84	-42	0	42	84	126
167	-92	-46	0	46	92	139	185
186	-52	0	52	103	155	206	258
210	0	58	117	175	233	291	350

Landowner Receives 25% of the Crop.

Tenant pays 100% of Hauling Crop to Grain Elevator

Landowner Pays Drying Expenses on 25% of the Crop

Tenant 50-50 Cost-Share

Tenant 50-50 Cost-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.33	3.70	4.07	4.44	4.81	5.18	5.55
	Net Returns above Variable Costs (\$/acre)						
91	-101	-84	-67	-50	-34	-17	0
98	-91	-72	-54	-36	-18	0	18
107	-79	-59	-39	-20	0	20	39
117	-65	-43	-22	0	22	43	65
129	-48	-24	0	24	48	72	96
145	-27	0	27	54	80	107	134
164	0	30	61	91	122	152	182

Landowner Receives 50% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 50% of the Crop.

Landowner Pays 100% of Irrigation Expenses (Except Labor).

Landowner Pays 50% of:

Seed, Fertilizer, Herbicides, Fungicides, Insecticides, and

Aerial Application Costs.

Tenant 80-20 Crop-Share

Tenant 80-20 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	3.33	3.70	4.07	4.44	4.81	5.18	5.55
	Net Returns above Variable Costs (\$/acre)						
110	-196	-163	-130	-98	-65	-33	0
119	-176	-141	-105	-70	-35	0	35
129	-153	-115	-76	-38	0	38	76
141	-125	-83	-42	0	42	83	125
156	-92	-46	0	46	92	138	184
173	-51	0	51	103	154	205	257
196	0	58	116	174	232	290	348

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 20% of the Crop.