



**UNIVERSITY OF ARKANSAS**  
**DIVISION OF AGRICULTURE**  
**Cooperative Extension Service**

**Estimating 2007 Costs of Production**  
**Rice, Silt Loam Soils, Eastern Arkansas**

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**Brad Watkins, Extension Economist**  
**Jason Hill, Program Associate**

**Charles E. Wilson, Jr., Extension Agronomist - Rice**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
GIN/DRY					
Dry Rice	bu	0.30	150.0000	45.00	_____
Rice Checkoff	bu	0.01	150.0000	2.03	_____
FERTILIZERS					
0-60-90	acre	34.21	1.0000	34.21	_____
Urea, Solid (46% N)	lb	0.13	333.0000	43.29	_____
FUNGICIDES					
Foliar Fungicide	acre	23.54	0.3000	7.06	_____
HERBICIDES					
Command 3ME	pt	11.54	0.8000	9.23	_____
Propanil 4E	pt	2.57	6.0000	15.45	_____
Permit 75	oz	15.85	1.0000	15.86	_____
Facet 75DF	lb	48.37	0.2500	12.09	_____
2,4-D Amine	pt	1.77	0.2000	0.35	_____
INSECTICIDES					
Insecticide-StinkBug	acre	4.89	0.1000	0.49	_____
IRRIGATION SUPPLIES					
Levee Gates-Contour	acre	1.50	1.0000	1.50	_____
CROP SEED					
Rice Seed	lb	0.17	84.0000	14.93	_____
Fungicide Seed Trt	lbseed	0.04	84.0000	3.36	_____
Release - Seed Trt	lbseed	0.03	84.0000	3.27	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	5.00	1.0000	5.00	_____
Cstm Ap Grd. Herb	acre	5.00	1.0000	5.00	_____
Survey Levee-Contour	acre	4.00	1.0000	4.00	_____
Cstm Ap Air Fert	lb	0.05	333.0000	18.65	_____
Cstm Ap Air Herb	acre	5.60	1.0000	5.60	_____
Cstm Spray Levee,ATV	acre	1.75	1.0000	1.75	_____
Cstm Ap Air Fung	acre	5.60	0.3000	1.68	_____
Cstm Ap Air Insect	acre	5.60	0.1000	0.56	_____
Cstm Haul Rice	bu	0.15	150.0000	22.50	_____
OPERATOR LABOR					
Tractors	hour	9.00	0.8315	7.50	_____
Harvesters	hour	9.00	0.2538	2.28	_____
IRRIGATION LABOR					
Flood Irr - Rice	hour	7.80	0.4525	3.53	_____
HAND LABOR					
Implements	hour	7.80	0.1692	1.33	_____
DIESEL FUEL					
Tractors	gal	2.22	7.3946	16.42	_____
Harvesters	gal	2.22	3.5919	7.97	_____
Flood Irr - Rice	gal	2.22	30.0001	66.60	_____
REPAIR & MAINTENANCE					
Implements	acre	5.69	1.0000	5.69	_____
Tractors	acre	2.85	1.0000	2.85	_____
Harvesters	acre	4.94	1.0000	4.94	_____
Flood Irr - Rice	ac-in	0.11	30.0000	3.50	_____
INTEREST ON OP. CAP.	acre	19.44	1.0000	19.44	_____
TOTAL DIRECT EXPENSES				414.91	_____
FIXED EXPENSES					
Implements	acre	15.57	1.0000	15.57	_____
Tractors	acre	22.03	1.0000	22.03	_____
Harvesters	acre	23.68	1.0000	23.68	_____
Flood Irr - Rice	well	3038.56	0.0083	25.32	_____
TOTAL FIXED EXPENSES				86.60	_____
TOTAL SPECIFIED EXPENSES				501.51	_____

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**Table 2. Estimated resource use and costs for field operations, per acre, Rice, Silt Loam Soils, Eastern Arkansas, 2007**

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	4.17	4.34	1.15	3.03	0.14	1.26					13.95
Land Float	18'x50'	MFWD 190	0.071	2.00	Apr	3.65	4.18	0.24	0.79	0.14	1.29					10.15
Cstm Ap Grd Fert	acre			1.00	Apr								1.0000	5.00	5.00	5.00
0-60-90	acre												1.0000	34.21	34.21	34.21
Field Cultivate	32'	MFWD 225	0.046	1.00	Apr	1.39	1.44	0.31	1.64	0.04	0.42					5.20
Grain Drill	20'	2WD 170	0.094	1.00	Apr	2.10	2.10	1.12	2.69	0.18	1.59					9.60
Rice Seed	lb												75.0000	0.17	13.33	13.33
Fungicide Seed Trt	lbseed												75.0000	0.04	3.00	3.00
Release - Seed Trt	lbseed												75.0000	0.03	2.92	2.92
Roller	32' -12R30	2WD 150	0.046	1.00	Apr	0.92	0.91	0.12	0.84	0.04	0.42					3.21
Ditcher		MFWD 105	0.020	1.00	Apr	0.27	0.25	0.03	0.06	0.02	0.18					0.79
Cstm Ap Grd. Herb	acre			1.00	Apr								1.0000	5.00	5.00	5.00
Command 3ME	pt												0.8000	11.54	9.23	9.23
Survey Levee-Contour	acre			1.00	Apr								1.0000	4.00	4.00	4.00
Levee Disk	8 blade	MFWD 190	0.025	2.00	Apr	1.28	1.46	0.05	0.34	0.05	0.45					3.58
Levee Seeder	8 blade	MFWD 190	0.025	1.00	Apr	0.63	0.73	0.07	0.47	0.05	0.43					2.33
Rice Seed	lb												9.0000	0.17	1.60	1.60
Fungicide Seed Trt	lbseed												9.0000	0.04	0.36	0.36
Release - Seed Trt	lbseed												9.0000	0.03	0.35	0.35
Gate Installer		MFWD 105	0.025	1.00	Apr	0.34	0.31	0.11	0.48	0.07	0.62					1.86
Levee Gates-Contour	acre												1.0000	1.50	1.50	1.50
Blade-Scraper	8'-10'	MFWD 105	0.025	1.00	Apr	0.35	0.38	0.03	0.03	0.02	0.23					1.02
Cstm Ap Air Fert	lb			1.00	May								233.0000	0.05	13.05	13.05
Urea, Solid (46% N)	lb												233.0000	0.13	30.29	30.29
Cstm Ap Air Herb	acre			1.00	May								1.0000	5.60	5.60	5.60
Propanil 4E	pt												6.0000	2.57	15.45	15.45
Permit 75	oz												1.0000	15.85	15.86	15.86
Facet 75DF	lb												0.2500	48.37	12.09	12.09
Cstm Spray Levee,ATV	acre			1.00	Jul								1.0000	1.75	1.75	1.75
2,4-D Amine	pt												0.2000	1.77	0.35	0.35
Cstm Ap Air Fert	lb			1.00	Jul								100.0000	0.05	5.60	5.60
Urea, Solid (46% N)	lb												100.0000	0.13	13.00	13.00
Cstm Ap Air Fung	acre			0.30	Aug								0.3000	5.60	1.68	1.68
Foliar Fungicide	acre												0.3000	23.54	7.06	7.06
Cstm Ap Air Insect	acre			0.10	Aug								0.1000	5.60	0.56	0.56
Insecticide-StinkBug	acre												0.1000	4.89	0.49	0.49
Header - Rice	25' Rigid	275hp	0.253	1.00	Sep	12.91	23.68	1.43	2.68	0.25	2.28					42.98
Rice Cart (25')	700 Bu	MFWD 190	0.253	0.75	Sep	3.82	5.55	1.02	2.28	0.19	1.71					14.38
Dry Rice	bu			1.00	Sep								150.0000	0.30	45.00	45.00
Cstm Haul Rice	bu												150.0000	0.15	22.50	22.50
Rice Checkoff	bu												150.0000	0.01	2.03	2.03
Levee Splitter	2 blade	MFWD 105	0.025	1.00	Oct	0.35	0.38	0.01	0.24	0.02	0.23					1.21
Flood Irr - Rice	each			1.00	May				25.32				0.0083			25.32
Apply Water	ac-in							70.10		0.45	3.53		30.0000			73.63
TOTALS						32.18	45.71	75.79	40.89	1.70	14.64				272.86	482.07
INTEREST ON OPERATING CAPITAL																19.44
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																501.51

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, Silt Loam Soils, Eastern Arkansas, 2007**

Farm Owner							
BEY (bu/acre)	Crop Price (\$/bu)						
	2.97	3.30	3.63	3.96	4.29	4.62	4.95
	Net Returns above Variable Costs (\$/acre)						
77	-153	-127	-102	-76	-51	-25	0
83	-138	-110	-82	-55	-27	0	28
90	-119	-90	-60	-30	0	30	60
99	-98	-65	-33	0	33	65	98
109	-72	-36	0	36	72	108	144
122	-40	0	40	80	121	161	201
138	0	46	91	137	182	228	273

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	2.97	3.30	3.63	3.96	4.29	4.62	4.95
	Net Returns above Variable Costs (\$/acre)						
104	-155	-129	-103	-77	-52	-26	0
112	-139	-111	-84	-56	-28	0	28
122	-121	-91	-61	-30	0	30	61
134	-99	-66	-33	0	33	66	99
148	-73	-37	0	37	73	110	147
165	-41	0	41	82	123	164	205
188	0	46	93	139	186	232	279

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)						
	2.97	3.30	3.63	3.96	4.29	4.62	4.95
	Net Returns above Variable Costs (\$/acre)						
82	-81	-68	-54	-41	-27	-14	0
89	-73	-59	-44	-29	-15	0	15
97	-64	-48	-32	-16	0	16	32
106	-53	-35	-18	0	18	35	53
118	-39	-19	0	19	39	58	78
132	-22	0	22	44	65	87	109
151	0	25	50	75	99	124	149

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)						
	2.97	3.30	3.63	3.96	4.29	4.62	4.95
	Net Returns above Variable Costs (\$/acre)						
97	-154	-128	-103	-77	-51	-26	0
105	-139	-111	-83	-55	-28	0	28
114	-121	-90	-60	-30	0	30	60
125	-99	-66	-33	0	33	66	99
138	-73	-36	0	36	73	109	146
154	-41	0	41	82	122	163	204
175	0	46	92	139	185	231	277

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 20% of the Crop.