

Estimating 2009 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					
FERTILIZERS					
0-60-90	acre	147.51	1.0000	147.51	_____
Urea, Solid (46% N)	lb.	0.30	267.0000	80.10	_____
Agrotain	lburea	0.02	167.0000	4.01	_____
HERBICIDES					
Command 3ME	pt	12.93	0.8000	10.34	_____
Propanil	pt	3.75	7.6000	28.50	_____
Permit 75 DF	oz	18.07	1.0000	18.07	_____
Facet 75DF	lb	52.09	0.2500	13.02	_____
Grandstand R	pt	11.30	0.0670	0.76	_____
INSECTICIDES					
Insecticide-StinkBug	acre	4.83	0.1000	0.48	_____
IRRIGATION SUPPLIES					
Levee Gates	acre	1.95	1.0000	1.95	_____
CROP SEED					
Rice Hybrid	lbseed	3.20	33.8000	108.16	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	6.00	1.0000	6.00	_____
Cstm Ap Grd. Herb	acre	6.00	1.0000	6.00	_____
Survey Levees	acre	7.50	1.0000	7.50	_____
Cstm Ap Air Fert	lb	0.07	267.0000	20.02	_____
Cstm Ap Air Herb	acre	7.50	1.0000	7.50	_____
Cstm Spray Levee,ATV	acre	6.00	1.0000	6.00	_____
Cstm Ap Air Insect	acre	7.50	0.1000	0.75	_____
Haul Rice	bu	0.22	170.0000	37.40	_____
GIN/DRY					
Dry Rice	bu	0.35	170.0000	59.50	_____
Rice Checkoff	bu	0.01	170.0000	2.30	_____
OPERATOR LABOR					
Tractors	hour	9.92	0.9146	9.08	_____
Harvesters	hour	9.92	0.2538	2.52	_____
IRRIGATION LABOR					
Flood Irr - Rice	hour	8.60	0.4525	3.89	_____
HAND LABOR					
Implements	hour	8.60	0.1692	1.47	_____
DIESEL FUEL					
Tractors	gal	2.60	8.7724	22.81	_____
Harvesters	gal	2.60	3.5919	9.34	_____
Flood Irr - Rice	gal	2.60	30.0001	78.00	_____
REPAIR & MAINTENANCE					
Implements	acre	6.02	1.0000	6.02	_____
Tractors	acre	3.35	1.0000	3.35	_____
Harvesters	acre	5.15	1.0000	5.15	_____
Flood Irr - Rice	ac-in	0.17	30.0000	5.17	_____
INTEREST ON OP. CAP.	acre	22.58	1.0000	22.58	_____
TOTAL DIRECT EXPENSES				735.26	_____
FIXED EXPENSES					
Implements	acre	15.80	1.0000	15.80	_____
Tractors	acre	24.56	1.0000	24.56	_____
Harvesters	acre	23.39	1.0000	23.39	_____
Flood Irr - Rice	each	3058.64	0.0083	25.39	_____
TOTAL FIXED EXPENSES				89.14	_____
TOTAL SPECIFIED EXPENSES				824.40	_____

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Table 2. Estimated resource use and costs for field operations, per acre, Rice, Hybrid, Silt Loam Soils, Eastern Arkansas, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC	LABOR	OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Disk Harrow	28'	MFWD 225	0.070	2.00	Apr	4.86	4.70	1.30	3.23	0.14	1.39					15.48
Land Plane	50'x16'	MFWD 190	0.151	2.00	Apr	8.83	8.21	0.45	1.41	0.30	3.01					21.91
Cstm Ap Grd Fert	acre			1.00	Apr							1.0000	6.00	6.00		6.00
0-60-90	acre											1.0000	147.51	147.51		147.51
Field Cultivate Fld	32'	MFWD 190	0.046	1.00	Apr	1.36	1.26	0.32	1.61	0.04	0.46					5.01
Grain Drill	20'	MFWD 170	0.094	1.00	Apr	2.49	2.52	1.12	2.55	0.18	1.75					10.43
Rice Hybrid	lbseed											30.0000	3.20	96.00		96.00
Roller	32'-12R30	MFWD 170	0.046	1.00	Apr	1.23	1.25	0.10	0.66	0.04	0.46					3.70
Cstm Ap Grd. Herb	acre			1.00	Apr							1.0000	6.00	6.00		6.00
Command 3ME	pt											0.8000	12.93	10.34		10.34
Survey Levees	acre			1.00	Apr							1.0000	7.50	7.50		7.50
Pull Levees	8 blade	MFWD 190	0.025	2.00	Apr	1.45	1.35	0.06	0.37	0.05	0.50					3.73
Levee Seeder	8 blade	MFWD 190	0.025	1.00	Apr	0.73	0.68	0.04	0.24	0.05	0.47					2.16
Rice Hybrid	lbseed											3.8000	3.20	12.16		12.16
Gate Installer		MFWD 105	0.025	1.00	Apr	0.39	0.25	0.13	0.51	0.05	0.47					1.75
Levee Gates	acre											1.0000	1.95	1.95		1.95
Blade-Box	6'-7'	2WD 130	0.020	1.00	Apr	0.40	0.34	0.01	0.01	0.02	0.20					0.96
Cstm Ap Air Fert	lb			1.00	May							167.0000	0.07	12.53		12.53
Urea, Solid (46% N)	lb.											167.0000	0.30	50.10		50.10
Agrotain	lburea											167.0000	0.02	4.01		4.01
Cstm Ap Air Herb	acre			1.00	May							1.0000	7.50	7.50		7.50
Propanil	pt											6.0000	3.75	22.50		22.50
Permit 75 DF	oz											1.0000	18.07	18.07		18.07
Facet 75DF	lb											0.2500	52.09	13.02		13.02
Cstm Spray Levee,ATV	acre			1.00	Jul							1.0000	6.00	6.00		6.00
Grandstand R	pt											0.0670	11.30	0.76		0.76
Propanil	pt											1.6000	3.75	6.00		6.00
Cstm Ap Air Fert	lb			1.00	Jul							100.0000	0.07	7.50		7.50
Urea, Solid (46% N)	lb.											100.0000	0.30	30.00		30.00
Cstm Ap Air Insect	acre			1.00	Aug							0.1000	7.50	0.75		0.75
Insecticide-StinkBug	acre											0.1000	4.83	0.48		0.48
Remove Gates		MFWD 105	0.025	1.00	Aug	0.39	0.25	0.13	0.51	0.05	0.47					1.75
Header - Rice	25' Rigid	275hp	0.253	1.00	Sep	14.49	23.39	1.87	3.30	0.25	2.52					45.57
Rice Grain Cart	700 Bu	MFWD 190	0.063	1.00	Sep	1.84	1.72	0.40	0.84	0.06	0.63					5.43
Dry Rice	bu			1.00	Sep							170.0000	0.35	59.50		59.50
Haul Rice	bu											170.0000	0.22	37.40		37.40
Rice Checkoff	bu											170.0000	0.01	2.30		2.30
Tear Down Levees	8 blade	MFWD 190	0.025	3.00	Oct	2.19	2.03	0.09	0.56	0.07	0.74					5.61
Flood Irr - Rice	each			1.00	May				25.39			0.0083				25.39
Apply Water	ac-in							83.17		0.45	3.89	30.0000				87.06
TOTALS						40.65	47.95	89.19	41.19	1.79	16.96			565.88		801.82
INTEREST ON OPERATING CAPITAL																22.58
TOTAL SPECIFIED COST																824.40

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, 2009

Farm Owner							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.65	5.95	6.25	6.55	6.84	7.14	7.44
	Net Returns above Variable Costs (\$/acre)						
101	-179	-150	-120	-90	-60	-30	0
105	-156	-125	-94	-63	-31	0	31
110	-131	-98	-65	-33	0	33	65
116	-103	-69	-34	0	34	69	103
122	-72	-36	0	36	72	109	145
128	-38	0	38	76	115	153	191
136	0	40	81	121	162	202	242

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.65	5.95	6.25	6.55	6.84	7.14	7.44
	Net Returns above Variable Costs (\$/acre)						
135	-181	-151	-121	-91	-60	-30	0
142	-158	-126	-95	-63	-32	0	32
148	-133	-99	-66	-33	0	33	66
156	-104	-70	-35	0	35	70	104
164	-73	-37	0	37	73	110	147
173	-39	0	39	77	116	155	193
184	0	41	82	123	164	205	246

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)						
	5.65	5.95	6.25	6.55	6.84	7.14	7.44
	Net Returns above Variable Costs (\$/acre)						
110	-99	-82	-66	-49	-33	-16	0
116	-86	-69	-52	-34	-17	0	17
121	-72	-54	-36	-18	0	18	36
128	-57	-38	-19	0	19	38	57
135	-40	-20	0	20	40	60	80
142	-21	0	21	42	64	85	106
151	0	22	45	67	90	112	135

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)						
	5.65	5.95	6.25	6.55	6.84	7.14	7.44
	Net Returns above Variable Costs (\$/acre)						
127	-181	-151	-121	-90	-60	-30	0
132	-158	-126	-95	-63	-32	0	32
139	-132	-99	-66	-33	0	33	66
146	-104	-69	-35	0	35	69	104
153	-73	-37	0	37	73	110	146
162	-39	0	39	77	116	154	193
172	0	41	82	123	163	204	245

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays Drying Expenses on 20% of the Crop.