

Estimating 2007 Costs of Production Full Season, Flood Irrigation, Conventional

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ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
0-18-36	lb	0.12	200.0000	24.50	_____
HERBICIDES					
Dual Magnum	pt	12.66	1.5000	18.99	_____
Canopy SP	oz	1.39	3.0000	4.17	_____
Storm	pt	10.52	1.0000	10.52	_____
Select 2EC	oz	1.46	4.0000	5.84	_____
INSECTICIDES					
Methyl Parathion 4EC	pt	4.26	1.0000	4.26	_____
CROP SEED					
Soybean Seed Private	lb	0.38	45.0000	17.10	_____
ADJUVANTS					
Surfactant (80-20)	pt	1.25	0.4000	0.50	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	5.00	1.0000	5.00	_____
Cstm Ap Grd. Herb	acre	5.00	1.0000	5.00	_____
Cstm Ap Air Insect	acre	5.60	1.0000	5.60	_____
Cstm Ap Air Herb	acre	5.60	1.0000	5.60	_____
Cstm Haul Soybeans	bu	0.15	45.0000	6.75	_____
OPERATOR LABOR					
Tractors	hour	9.00	0.5500	4.96	_____
Harvesters	hour	9.00	0.1021	0.92	_____
IRRIGATION LABOR					
Flood Irr. - Soybean	hour	7.80	0.1176	0.91	_____
HAND LABOR					
Implements	hour	7.80	0.1190	0.93	_____
DIESEL FUEL					
Tractors	gal	2.22	5.8295	12.89	_____
Harvesters	gal	2.22	1.4457	3.21	_____
Flood Irr. - Soybean	gal	2.22	13.0000	28.86	_____
REPAIR & MAINTENANCE					
Implements	acre	3.59	1.0000	3.59	_____
Tractors	acre	2.10	1.0000	2.10	_____
Harvesters	acre	1.99	1.0000	1.99	_____
Flood Irr. - Soybean	ac-in	0.25	13.0000	3.25	_____
INTEREST ON OP. CAP.	acre	6.81	1.0000	6.81	_____
TOTAL DIRECT EXPENSES				184.25	_____
FIXED EXPENSES					
Implements	acre	10.40	1.0000	10.40	_____
Tractors	acre	16.31	1.0000	16.31	_____
Harvesters	acre	9.53	1.0000	9.53	_____
Flood Irr. - Soybean	each	3038.56	0.0083	25.32	_____
TOTAL FIXED EXPENSES				61.56	_____
TOTAL SPECIFIED EXPENSES				245.81	_____

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Table 2. Estimated resource use and costs for field operations, per acre, Full Season, Soybeans, Flood Irrigation, Conventional, 2007

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-----			
Disk Harrow	28'	MFWD 225	0.070	2.00	Apr	4.17	4.34	1.15	3.03	0.14	1.26				13.95
Cstm Ap Grd Fert	acre			1.00	May							1.0000	5.00	5.00	5.00
0-18-36	lb											200.0000	0.12	24.50	24.50
Field Cult & Inc	32'	MFWD 225	0.049	1.00	May	1.47	1.53	0.40	2.09	0.07	0.64				6.13
Dual Magnum	pt											1.5000	12.66	18.99	18.99
Canopy SP	oz											3.0000	1.39	4.17	4.17
Plant - Rigid	8R-30	MFWD 170	0.094	1.00	May	2.17	2.61	0.79	1.91	0.18	1.59				9.07
Soybean Seed Private	lb											45.0000	0.38	17.10	17.10
Ditcher		MFWD 105	0.020	0.10	May	0.02	0.03		0.01	0.00	0.02				0.08
Cstm Ap Grd. Herb	acre			1.00	Jun							1.0000	5.00	5.00	5.00
Storm	pt											1.0000	10.52	10.52	10.52
Surfactant (80-20)	pt											0.4000	1.25	0.50	0.50
Cultivate	8R-30	MFWD 190	0.103	1.00	Jul	2.63	3.01	0.42	1.39	0.10	0.93				8.38
Land Float	18'x50'	MFWD 225	0.071	2.00	Jul	4.25	4.43	0.24	0.79	0.14	1.29				11.00
Levee Disk (SL)	8 blade	MFWD 190	0.012	0.15	Jul	0.05	0.05		0.01	0.00	0.02				0.13
Blade-Scraper	8'-10'	MFWD 105	0.025	0.05	Jul	0.01	0.02			0.00	0.01				0.04
Levee Splitter (SL)	2 blade	MFWD 105	0.012	0.10	Jul	0.01	0.02		0.01	0.00	0.01				0.05
Cstm Ap Air Insect	acre			1.00	Jul							1.0000	5.60	5.60	5.60
Methyl Parathion 4EC	pt											1.0000	4.26	4.26	4.26
Levee Disk (SL)	8 blade	MFWD 190	0.012	0.15	Aug	0.05	0.05		0.01	0.00	0.02				0.13
Blade-Scraper	8'-10'	MFWD 105	0.025	0.05	Aug	0.01	0.02			0.00	0.01				0.04
Levee Splitter (SL)	2 blade	MFWD 105	0.012	0.10	Aug	0.01	0.02		0.01	0.00	0.01				0.05
Cstm Ap Air Herb	acre			1.00	Aug							1.0000	5.60	5.60	5.60
Select 2EC	oz											4.0000	1.46	5.84	5.84
Levee Disk (SL)	8 blade	MFWD 190	0.012	0.15	Aug	0.05	0.05		0.01	0.00	0.02				0.13
Blade-Scraper	8'-10'	MFWD 105	0.025	0.05	Aug	0.01	0.02			0.00	0.01				0.04
Levee Splitter (SL)	2 blade	MFWD 105	0.012	0.10	Sep	0.01	0.02		0.01	0.00	0.01				0.05
Levee Disk (SL)	8 blade	MFWD 190	0.012	0.15	Sep	0.05	0.05		0.01	0.00	0.02				0.13
Blade-Scraper	8'-10'	MFWD 105	0.025	0.05	Sep	0.01	0.02			0.00	0.01				0.04
Levee Splitter (SL)	2 blade	MFWD 105	0.012	0.10	Sep	0.01	0.02		0.01	0.00	0.01				0.05
Header - Soybean	25' Flex	275hp	0.102	1.00	Oct	5.20	9.53	0.59	1.10	0.10	0.92				17.34
Cstm Haul Soybeans	bu			1.00	Oct							45.0000	0.15	6.75	6.75
Flood Irr. - Soybean	each			1.00	Jul							0.0083			25.32
Application 1	ac-in			1.00	Jul				9.88	0.03	0.28	4.0000			10.16
Application 2	ac-in			1.00	Aug				7.41	0.02	0.21	3.0000			7.62
Application 3	ac-in			1.00	Aug				7.41	0.02	0.21	3.0000			7.62
Application 4	ac-in			1.00	Sep				7.41	0.02	0.21	3.0000			7.62
TOTALS						20.19	25.84	35.70	35.72	0.88	7.72			113.83	239.00
INTEREST ON OPERATING CAPITAL															6.81
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															245.81

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. Breakeven Yields (BEY) Required to Cover Direct Expenses and Net Returns above Direct Expenses for Price/Yield Combinations and Select Land Tenure Arrangements, per acre.

Soybean, Full Season, Flood Irrigated, Conventional, 2007

Farm Owner

BEY (bu/acre)	Crop Price (\$/bu)						
	4.55	5.20	5.85	6.50	7.15	7.80	8.45
	Returns above Variable Costs (\$/Acre)						
21	-83	-70	-56	-42	-28	-14	0
23	-75	-60	-45	-30	-15	0	15
25	-66	-49	-33	-16	0	16	33
28	-55	-36	-18	0	18	36	55
31	-40	-20	0	20	40	61	81
35	-23	0	23	46	69	91	114
40	0	26	52	79	105	131	157

Farm Owner is assumed to have 100% Equity in Land

Tenant 75-25 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	4.55	5.20	5.85	6.50	7.15	7.80	8.45
	Returns above Variable Costs (\$/Acre)						
29	-84	-70	-56	-42	-28	-14	0
31	-76	-61	-46	-30	-15	0	15
34	-66	-50	-33	-17	0	17	33
38	-55	-37	-18	0	18	37	55
42	-41	-20	0	20	41	61	82
47	-23	0	23	46	69	92	115
54	0	27	53	80	106	133	159

Landowner Receives 25% of the Crop.

Tenant pays 100% of Hauling Crop to Grain Elevator

Landowner Pays 100% of Fixed Irrigation Expenses

Tenant 90-10 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	4.55	5.20	5.85	6.50	7.15	7.80	8.45
	Returns above Variable Costs (\$/Acre)						
24	-84	-70	-56	-42	-28	-14	0
26	-76	-60	-45	-30	-15	0	15
28	-66	-50	-33	-17	0	17	33
31	-55	-36	-18	0	18	36	55
35	-41	-20	0	20	41	61	81
39	-23	0	23	46	69	92	115
45	0	26	53	79	105	132	158

Landowner Receives 10% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays 100% of Fixed Irrigation Expenses

Tenant 80-20 Crop-Share

BEY (bu/acre)	Crop Price (\$/bu)						
	4.55	5.20	5.85	6.50	7.15	7.80	8.45
	Returns above Variable Costs (\$/Acre)						
27	-84	-70	-56	-42	-28	-14	0
29	-76	-61	-45	-30	-15	0	15
32	-66	-50	-33	-17	0	17	33
35	-55	-37	-18	0	18	37	55
39	-41	-20	0	20	41	61	82
44	-23	0	23	46	69	92	115
51	0	26	53	79	106	132	159

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays 100% of Fixed Irrigation Expenses