

Estimating 2007 Costs of Production
Early Season, Center Pivot, Conventional

AG-1005-12-06

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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	_____
INSECTICIDES					
Methyl Parathion 4EC	pt	4.26	1.0000	4.26	_____
CROP SEED					
Soybean Seed Private	lb	0.38	60.0000	22.80	_____
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 Haul Soybeans	bu	0.15	45.0000	6.75	_____
OPERATOR LABOR					
Tractors	hour	9.00	0.2626	2.37	_____
Harvesters	hour	9.00	0.1021	0.92	_____
IRRIGATION LABOR					
Center pivot Irr.	hour	7.80	0.0568	0.42	_____
HAND LABOR					
Implements	hour	7.80	0.1190	0.93	_____
DIESEL FUEL					
Tractors	gal	2.22	2.8599	6.34	_____
Harvesters	gal	2.22	1.4457	3.21	_____
Center pivot Irr.	gal	2.22	14.0000	31.08	_____
REPAIR & MAINTENANCE					
Implements	acre	2.87	1.0000	2.87	_____
Tractors	acre	1.03	1.0000	1.03	_____
Harvesters	acre	1.99	1.0000	1.99	_____
Center pivot Irr.	ac-in	1.09	7.0000	7.70	_____
INTEREST ON OP. CAP.	acre	5.38	1.0000	5.38	_____
TOTAL DIRECT EXPENSES				172.33	_____
FIXED EXPENSES					
Implements	acre	8.76	1.0000	8.76	_____
Tractors	acre	7.92	1.0000	7.92	_____
Harvesters	acre	9.53	1.0000	9.53	_____
Center pivot Irr.	each	9000.94	0.0083	75.01	_____
TOTAL FIXED EXPENSES				101.22	_____
TOTAL SPECIFIED EXPENSES				273.55	_____

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Table 2. Estimated resource use and costs for field operations, per acre, Early Season, Soybeans, Center Pivot, 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		-----dollars-----			
Disk Harrow	28'	MFWD 225	0.070	1.00	Apr	2.08	2.17	0.57	1.51	0.07	0.63				6.96
Field Cultivate	32'	MFWD 225	0.046	1.00	Apr	1.39	1.44	0.31	1.64	0.04	0.42				5.20
Cstm Ap Grd Fert	acre			1.00	Apr							1.0000	5.00	5.00	5.00
0-18-36	lb											200.0000	0.12	24.50	24.50
Plant - Rigid	12R-20	MFWD 190	0.094	1.00	Apr	2.41	2.75	1.00	2.41	0.18	1.59				10.16
Soybean Seed Private	lb											60.0000	0.38	22.80	22.80
Ditcher		MFWD 105	0.020	0.10	Apr	0.02	0.03		0.01	0.00	0.02				0.08
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
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
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
Header - Soybean	25' Flex	275hp	0.102	1.00	Aug	5.20	9.53	0.59	1.10	0.10	0.92				17.34
Cstm Haul Soybeans	bu			1.00	Aug							45.0000	0.15	6.75	6.75
Center pivot Irr.	each			1.00	May				75.01			0.0083			75.01
Application 1	ac-in			1.00	May			5.54		0.00	0.06	1.0000			5.60
Application 2	ac-in			1.00	May			5.54		0.00	0.06	1.0000			5.60
Application 3	ac-in			1.00	Jun			5.54		0.00	0.06	1.0000			5.60
Application 4	ac-in			1.00	Jun			5.54		0.00	0.06	1.0000			5.60
Application 5	ac-in			1.00	Jun			5.54		0.00	0.06	1.0000			5.60
Application 6	ac-in			1.00	Jul			5.54		0.00	0.06	1.0000			5.60
Application 7	ac-in			1.00	Jul			5.54		0.00	0.06	1.0000			5.60
TOTALS						12.57	17.45	41.65	83.77	0.54	4.64			108.09	268.17
INTEREST ON OPERATING CAPITAL															5.38
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															273.55

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.

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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, Early Season, Center Pivot 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)						
20	-78	-65	-52	-39	-26	-13	0
22	-70	-56	-42	-28	-14	0	14
24	-62	-46	-31	-15	0	15	31
26	-51	-34	-17	0	17	34	51
29	-38	-19	0	19	38	57	76
33	-21	0	21	43	64	85	107
38	0	24	49	73	98	122	147

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)						
27	-78	-65	-52	-39	-26	-13	0
29	-71	-57	-42	-28	-14	0	14
32	-62	-46	-31	-15	0	15	31
35	-51	-34	-17	0	17	34	51
39	-38	-19	0	19	38	57	76
44	-22	0	22	43	65	86	108
51	0	25	49	74	99	124	148

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)						
22	-78	-65	-52	-39	-26	-13	0
24	-70	-56	-42	-28	-14	0	14
26	-62	-46	-31	-15	0	15	31
29	-51	-34	-17	0	17	34	51
32	-38	-19	0	19	38	57	76
37	-21	0	21	43	64	86	107
42	0	25	49	74	98	123	147

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)						
25	-78	-65	-52	-39	-26	-13	0
27	-71	-57	-42	-28	-14	0	14
30	-62	-46	-31	-15	0	15	31
33	-51	-34	-17	0	17	34	51
37	-38	-19	0	19	38	57	76
41	-21	0	21	43	64	86	107
47	0	25	49	74	99	123	148

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays 100% of Fixed Irrigation Expenses