

**Estimating 2007 Costs of Production**  
**Early Season, Center Pivot, Roundup Ready**

AG-1000-12-06

**C. Robert Stark, Jr., Associate Professor-Agriculture Economics**  
**UA Cooperative Extension Service/UAM Division of Agriculture**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
0-18-36	lb	0.12	200.0000	24.50	_____
HERBICIDES					
Glyphosate Plus	pt	1.97	3.0000	5.91	_____
INSECTICIDES					
Methyl Parathion 4EC	pt	4.26	1.0000	4.26	_____
CROP SEED					
Soybean Seed RR	lb	0.64	60.0000	38.40	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	5.00	1.0000	5.00	_____
Cstm Ap Grd. Herb	acre	5.00	2.0000	10.00	_____
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	0.3064	2.76	_____
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	0.0942	0.74	_____
DIESEL FUEL					
Tractors	gal	2.22	3.3665	7.47	_____
Harvesters	gal	2.22	1.4457	3.21	_____
Center pivot Irr.	gal	2.22	14.0000	31.08	_____
REPAIR & MAINTENANCE					
Implements	acre	3.09	1.0000	3.09	_____
Tractors	acre	1.21	1.0000	1.21	_____
Harvesters	acre	1.99	1.0000	1.99	_____
Center pivot Irr.	ac-in	1.09	7.0000	7.70	_____
INTEREST ON OP. CAP.	acre	5.35	1.0000	5.35	_____
TOTAL DIRECT EXPENSES				166.37	_____
FIXED EXPENSES					
Implements	acre	9.95	1.0000	9.95	_____
Tractors	acre	9.27	1.0000	9.27	_____
Harvesters	acre	9.53	1.0000	9.53	_____
Center pivot Irr.	each	9000.94	0.0083	75.01	_____
TOTAL FIXED EXPENSES				103.76	_____
TOTAL SPECIFIED EXPENSES				270.13	_____

Visit our web site at: <http://www.uaex.edu>

View or print all of the Arkansas crop budgets at <http://www.aragriculture.org/farmplanning/budgets/default.asp>

University of Arkansas, United States Department of Agriculture and County Governments Cooperating

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.

**Table 2. Estimated resource use and costs for field operations, per acre, Early Season, Soybeans, Center Pivot, Roundup Ready, 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
Field Cultivate	32'	MFWD 225	0.046	1.00	Apr	1.39	1.44	0.31	1.64	0.04	0.42				5.20
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 RR	lb											60.0000	0.64	38.40	38.40
Ditcher		MFWD 105	0.020	0.10	Apr	0.02	0.03		0.01	0.00	0.02				0.08
Cstm Ap Grd. Herb	acre			1.00	May							1.0000	5.00	5.00	5.00
Glyphosate Plus	pt											1.5000	1.97	2.96	2.96
Field Cultivate	32'	MFWD 225	0.046	1.00	May	1.39	1.44	0.31	1.64	0.04	0.42				5.20
Cstm Ap Grd. Herb	acre			1.00	Jun							1.0000	5.00	5.00	5.00
Glyphosate Plus	pt											1.5000	1.97	2.96	2.96
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	Jun					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						13.88	18.80	41.87	84.96	0.55	4.84			100.43	264.78
INTEREST ON OPERATING CAPITAL															5.35
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															270.13

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, Early Season, Center Pivot Irrigated, Roundup Ready, 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)						
19	-75	-63	-50	-38	-25	-13	0
21	-68	-54	-41	-27	-14	0	14
23	-59	-44	-30	-15	0	15	30
25	-49	-33	-16	0	16	33	49
28	-36	-18	0	18	36	55	73
32	-21	0	21	41	62	82	103
36	0	24	47	71	94	118	141

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)						
26	-75	-63	-50	-38	-25	-13	0
28	-68	-55	-41	-27	-14	0	14
31	-60	-45	-30	-15	0	15	30
34	-49	-33	-16	0	16	33	49
38	-37	-18	0	18	37	55	73
43	-21	0	21	42	62	83	104
49	0	24	48	72	95	119	143

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)						
21	-75	-63	-50	-38	-25	-13	0
23	-68	-54	-41	-27	-14	0	14
25	-59	-45	-30	-15	0	15	30
28	-49	-33	-16	0	16	33	49
31	-37	-18	0	18	37	55	73
35	-21	0	21	41	62	82	103
40	0	24	47	71	95	118	142

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)						
24	-75	-63	-50	-38	-25	-13	0
26	-68	-55	-41	-27	-14	0	14
29	-60	-45	-30	-15	0	15	30
32	-49	-33	-16	0	16	33	49
35	-37	-18	0	18	37	55	73
40	-21	0	21	41	62	83	103
46	0	24	48	71	95	119	143

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Grain Elevator.

Landowner Pays 100% of Fixed Irrigation Expenses