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**Trends in Net Returns for
Arkansas Field Crops, 2006-2011**

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Table of Contents

Section	Page
Introduction	1
Net Returns	1
References	2
Appendix 1	3
Appendix 2	3
Appendix 3	4
Appendix 4	4
Appendix 5	5
Appendix 6	5

Trends in Net Returns for Arkansas Field Crops, 2006-2011

Increasing commodity prices in recent years have increased farm profitability during a period of increasing input costs. All Arkansas field crops have 2011 production input costs at least 40% greater than 2006 levels (University of Arkansas 2011). This report presents estimates of net returns per acre for typical Arkansas methods of crop production for 2006-2011.

Net Returns

Crop enterprise budgets developed by the University of Arkansas include estimated costs per acre for field crops (University of Arkansas 2010.) Input prices applied to field rates of usage determine production costs. Budget costs represent the most generalized production practices for three irrigation scenarios: 1) surface, 2) center pivot, and 3) non-irrigated. For this report, aggregated 2011 production functions are developed for field crops as weighted averages of crop enterprise budgets. Input price changes since December 2010 are applied so that costs are representative of the spring 2011 planting period (USDA-NASS 2011a). Irrigation energy costs are weighted by irrigation type, as well as diesel or electric power source (USDA-NASS 2010; USDA-NASS 2009). Rice weights are percentages of seed type planted based on information from Extension specialists. Table 1 presents average net returns with state average yields and commodity prices received (USDA-NASS 2011b).

Table 1. Weighted Average Net Returns, per Acre, Arkansas Field Crops, 2011

Expense	Cotton	Corn	Soybean	Rice	Sorghum	Wheat
Average Yield: Cotton (lbs.), Other (bu.)	938.0	140.0	37.0	152.2	74.0	61.0
Price Received	0.93	6.20	12.00	6.08	5.71	7.35
Sell Seed	115.37	0.00	0.00	0.00	0.00	0.00
Operating Costs ¹	485.69	523.68	258.49	613.81	273.91	266.17
Returns to Operating Costs	387.59	344.32	185.51	310.81	148.77	182.18
Fixed Costs	128.64	72.36	55.34	99.20	51.01	39.30
Total Costs ²	614.32	596.05	313.82	713.01	324.93	305.47
Net Returns to Land & Management	258.96	271.95	130.18	211.60	97.76	142.88

¹Value of cottonseed sold deducted from cotton post-harvest expenses.

²Does not include land costs.

Net returns to land and management are greatest for corn with \$271.95 per acre. Cotton has the second greatest net returns with \$258.96 per acre. Rice and soybeans are commonly produced in rotation. Rice has net returns of \$211.60 per acre and soybean net returns are \$130.18 per acre. Wheat net returns are \$142.88 per acre. Net returns for grain sorghum are \$97.76 per acre.

Appendixes 1 through Appendix 6 are average net returns for each field crop during 2006-2011. Trends in net returns from these appendixes are presented in Figure 1. Rice has increasing net returns during early years of the time period due to increasing price received. Increases in net returns for other crops occur after 2009.

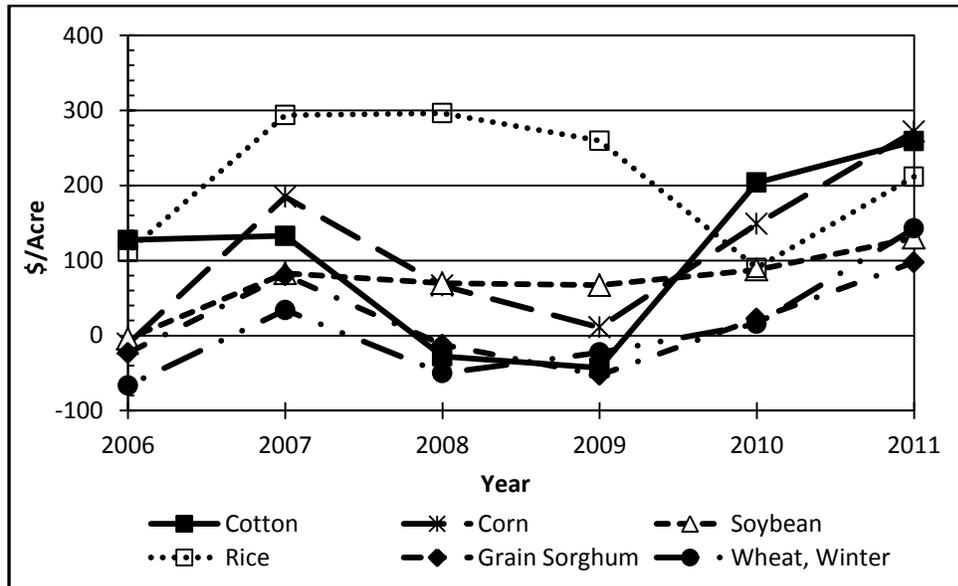


Figure 1. Net Returns per Acre, Arkansas Field Crops, 2006-2011

References

- USDA-National Agricultural Statistics Service (NASS). 2011a. *Agricultural Prices*, USDA-NASS, Washington, DC. Available online at <http://www.nass.usda.gov/>
- USDA-National Agricultural Statistics Service (NASS). 2010. *2008 Farm and Ranch Irrigation Survey*, USDA-NASS, Washington, DC. Available online at <http://www.nass.usda.gov/>
- USDA-National Agricultural Statistics Service (NASS). 2009. *2007 Census of Agriculture Report*, USDA-NASS, Washington, DC. Available online at <http://www.nass.usda.gov/>
- USDA-National Agricultural Statistics Service (NASS). 2011b. *U.S. & All States Data-Crops*, USDA-NASS, Washington, DC. Available online at <http://www.nass.usda.gov/>
- University of Arkansas. 2011. "Input Costs Trends for Arkansas Field Crops, 2006-2011" AG-1269, Division of Agriculture, Cooperative Extension Service, Little Rock, AR, October 2011.
- University of Arkansas. 2010. "2011 Crop Enterprise Budgets," AG-1262, Division of Agriculture, Cooperative Extension Service, Little Rock, AR, December 2010.

Appendixes

Appendix 1. Weighted Average Net Returns, per Acre, Arkansas Cotton, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (lbs.)	938.0	1,045.0	818.0	1,012.0	1,071.0	1,045.0
Price Received	0.931	0.735	0.630	0.560	0.578	0.560
Sell Seed	115.37	128.54	100.61	124.48	131.73	128.54
Operating Costs ¹	485.69	440.50	438.92	481.90	383.31	359.94
Returns to Operating Costs	387.59	327.58	76.42	84.82	235.72	225.26
Fixed Costs	128.64	123.79	119.49	112.49	102.80	97.96
Total Costs ²	614.32	564.29	558.41	594.39	486.11	457.90
Net Returns to Land & Management	258.96	203.78	-43.07	-27.67	132.92	127.30

¹Value of cottonseed sold deducted from cotton post-harvest expenses.

²Does not include land costs.

Appendix 2. Weighted Average Net Returns, per Acre, Arkansas Corn, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (bu.)	140.0	150.0	148.0	155.0	169.0	146.0
Price Received	6.20	4.55	3.79	4.42	3.80	2.73
Operating Costs	523.68	464.16	482.67	555.27	399.64	354.47
Returns to Operating Costs	344.32	218.34	78.25	129.83	242.56	44.11
Fixed Costs	72.36	69.64	67.22	63.28	57.83	55.10
Total Costs ¹	596.05	533.79	549.88	618.55	457.47	409.58
Net Returns to Land & Management	271.95	148.71	11.04	66.55	184.73	-11.00

¹Does not include land costs.

Appendix 3. Weighted Average Net Returns, per Acre, Arkansas Soybean, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (bu.)	37.0	35.0	37.5	38.0	36.0	35.0
Price Received	12.00	10.90	9.66	9.64	9.02	6.41
Operating Costs	258.49	240.53	243.70	248.29	197.71	186.40
Returns to Operating Costs	185.51	140.97	118.55	118.03	127.01	37.95
Fixed Costs	55.34	53.25	51.40	48.39	44.22	42.14
Total Costs ¹	313.82	293.79	295.10	296.68	241.93	228.54
Net Returns to Land & Management	130.18	87.71	67.15	69.64	82.79	-4.19

¹Does not include land costs.

Appendix 4. Weighted Average Net Returns, per Acre, Arkansas Rice, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (bu.)	152.2	144.0	151.1	148.0	160.7	153.3
Price Received	6.08	5.09	6.03	6.75	5.40	4.24
Operating Costs	613.81	546.71	559.47	616.02	494.58	463.49
Returns to Operating Costs	310.81	185.53	351.73	382.98	373.02	187.18
Fixed Costs	99.20	95.47	92.15	86.75	79.28	75.54
Total Costs ¹	713.01	642.18	651.62	702.77	573.86	539.04
Net Returns to Land & Management	211.60	90.06	259.58	296.23	293.74	111.63

¹Does not include land costs.

Appendix 5. Weighted Average Net Returns, per Acre, Arkansas Grain Sorghum, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (bu.)	74.0	77.0	79.0	88.0	96.0	85.0
Price Received	5.71	4.00	3.23	3.88	3.44	2.42
Operating Costs	273.91	236.31	260.59	309.14	209.48	190.06
Returns to Operating Costs	148.77	71.57	-5.33	32.37	121.14	15.57
Fixed Costs	51.01	49.09	47.38	44.61	40.77	38.84
Total Costs ¹	324.93	285.40	307.97	353.75	250.25	228.90
Net Returns to Land & Management	97.76	22.48	-52.71	-12.24	80.38	-23.27

¹Does not include land costs.

Appendix 6. Weighted Average Net Returns, per Acre, Arkansas Wheat, 2006-2011

Expense	2011	2010	2009	2008	2007	2006
Average Yield (bu.)	61.0	54.0	54.0	44.0	57.0	41.0
Price Received	7.35	5.26	4.86	5.88	4.72	3.52
Operating Costs	266.17	230.62	248.45	274.38	203.57	181.12
Returns to Operating Costs	182.18	53.42	13.99	-15.66	65.47	-36.80
Fixed Costs	39.30	37.82	36.50	34.37	31.41	29.93
Total Costs ¹	305.47	268.43	284.95	308.74	234.98	211.04
Net Returns to Land & Management	142.88	15.61	-22.51	-50.02	34.06	-66.72

¹Does not include land costs.