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**Trends in Net Returns for
Arkansas Field Crops, 2007-2012**

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Trends in Net Returns for Arkansas Field Crops, 2007-2012

Increasing commodity prices in recent years have increased farm profitability during a period of increasing input costs. All Arkansas field crops have 2012 production input costs at least 45% greater than 2006 levels (University of Arkansas 2012). This report presents estimates of net returns per acre for typical Arkansas methods of crop production for 2007-2012.

Net Returns

Crop enterprise budgets developed by the University of Arkansas include estimated costs per acre for field crops (University of Arkansas 2011.) 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 2012 production functions are developed for field crops as weighted averages of crop enterprise budgets. Input price changes since December 2011 are applied so that costs are representative of the spring 2012 planting period (USDA-NASS 2012a). 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 2012b).

Table 1. Weighted Average Net Returns, per Acre, Arkansas Field Crops, 2012

Revenue and Expenses	Cotton	Corn	Soybean	Rice	Sorghum	Wheat
Average Yield: Cotton (lbs.), Other (bu.)	1,083	178	43	166	84	55
Price Received	0.664	6.95	14.40	6.39	6.22	6.95
Sell Seed	130.74					
Operating Costs ¹	500.17	573.20	285.69	676.62	283.12	271.66
Returns to Operating Costs	218.94	663.90	333.51	384.12	239.02	110.59
Fixed Costs	125.69	72.54	54.83	97.49	52.91	40.93
Total Costs ²	625.86	645.74	340.52	774.11	336.03	312.59
Net Returns to Land & Management	93.25	591.36	278.68	286.63	186.11	69.66

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 \$591.36 per acre. Rice and soybeans are commonly produced in rotation. Rice has the second greatest net returns with \$286.63 per acre and soybean net returns are \$278.68 per acre. Net returns for grain sorghum are \$186.11 per acre. Net returns to land and management for cotton are \$93.25 per acre. Wheat net returns are \$69.66 per acre.

Appendixes 1 through Appendix 6 are average net returns for each field crop during 2007-2012. Trends in net returns from these appendixes are presented in Figure 1. Rice has the greatest net returns during 2007-2009. Subsequently, rice net returns decreased as net returns for all other crops increased in 2010. For 2012, net returns for corn are more than twice the returns of any other crop.

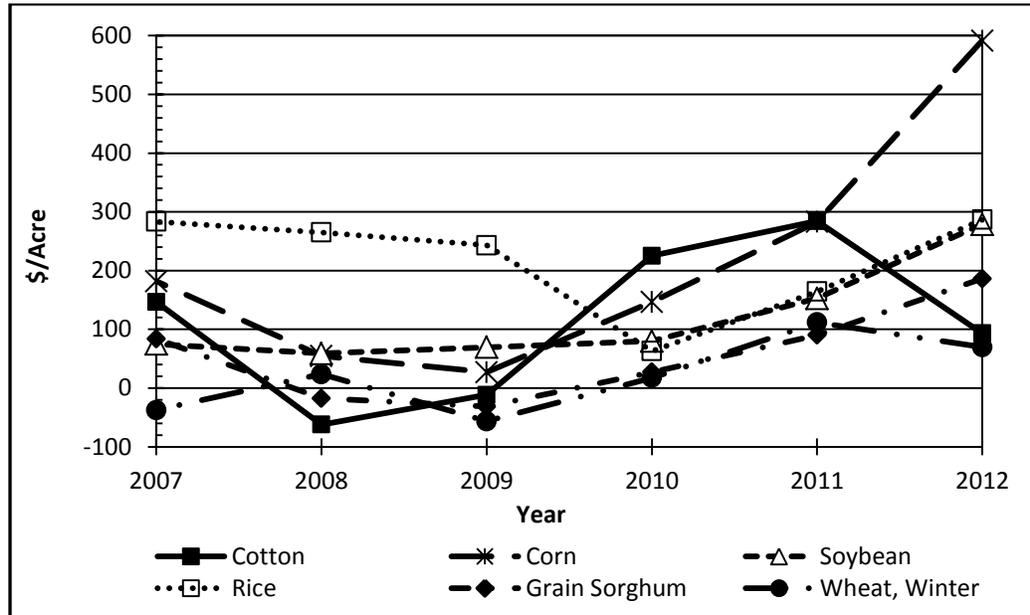


Figure 1. Net Returns per Acre, Arkansas Field Crops, 2007-2012

References

USDA-National Agricultural Statistics Service (NASS). 2012a. *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). 2012b. *Quick Stats*, USDA-NASS, Washington, DC. Available online at http://www.nass.usda.gov/Quick_Stats/

University of Arkansas. 2012. "Input Costs Trends for Arkansas Field Crops, 2006-2012" AG-1277, Division of Agriculture, Cooperative Extension Service, Little Rock, AR, June 2012.

University of Arkansas. 2011. "2012 Crop Enterprise Budgets," AG-1272, Division of Agriculture, Cooperative Extension Service, Little Rock, AR, December 2011.

Appendixes

Appendix 1. Weighted Average Net Returns, per Acre, Arkansas Cotton, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (lbs.)	1,083	929	1,045	818	1,012	1,071
Price Received	0.664	0.947	0.735	0.630	0.520	0.578
Sell Seed	130.74	113.46	126.52	98.61	121.44	128.83
Operating Costs ¹	500.17	473.84	426.29	414.33	482.56	375.65
Returns to Operating Costs	218.94	405.93	341.79	101.01	43.68	243.39
Fixed Costs	125.69	121.70	116.63	112.57	105.98	96.85
Total Costs ²	625.86	595.54	542.92	526.90	588.54	472.50
Net Returns to Land & Management	93.25	284.23	225.16	-11.56	-62.30	146.54

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, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	178.0	142.0	150.0	148.0	155.0	169.0
Price Received	6.95	6.27	4.55	3.79	4.42	3.80
Operating Costs	573.20	537.11	468.63	469.12	569.34	404.43
Returns to Operating Costs	663.90	353.23	213.87	91.80	115.76	237.77
Fixed Costs	72.54	70.23	67.31	64.97	61.16	55.89
Total Costs ¹	645.74	607.35	535.94	534.09	630.50	460.32
Net Returns to Land & Management	591.36	282.99	146.56	26.83	54.60	181.88

¹Does not include land costs.

Appendix 3. Weighted Average Net Returns, per Acre, Arkansas Soybean, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	43.0	38.5	35.0	37.5	38.0	36.0
Price Received	14.40	12.30	10.90	9.66	9.64	9.02
Operating Costs	285.69	275.53	258.06	250.82	267.81	213.64
Returns to Operating Costs	333.51	198.02	123.44	111.43	98.51	111.08
Fixed Costs	54.83	45.36	43.47	41.96	39.50	36.10
Total Costs ¹	340.52	320.89	301.53	292.77	307.31	249.73
Net Returns to Land & Management	278.68	152.66	79.97	69.48	59.01	74.99

¹Does not include land costs.

Appendix 4. Weighted Average Net Returns, per Acre, Arkansas Rice, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	166.0	150.4	144.0	151.1	148.0	160.7
Price Received	6.39	6.03	5.09	6.03	6.75	5.45
Operating Costs	676.62	648.60	578.94	580.86	651.68	516.32
Returns to Operating Costs	384.12	258.58	153.30	330.34	347.32	358.51
Fixed Costs	97.49	94.39	90.46	87.31	82.20	75.12
Total Costs ¹	774.11	742.99	669.40	668.18	733.88	591.44
Net Returns to Land & Management	286.63	164.19	62.84	243.02	265.12	283.39

¹Does not include land costs.

Appendix 5. Weighted Average Net Returns, per Acre, Arkansas Grain Sorghum, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	84.0	72.0	77.0	79.0	88.0	96.0
Price Received	6.22	5.71	4.00	3.23	3.88	3.44
Operating Costs	283.12	270.00	231.56	239.40	314.33	206.09
Returns to Operating Costs	239.02	141.27	76.31	15.87	27.18	124.53
Fixed Costs	52.91	51.23	49.09	47.39	44.61	40.77
Total Costs ¹	336.03	321.23	280.65	286.78	358.94	246.86
Net Returns to Land & Management	186.11	90.04	27.22	-31.52	-17.43	83.76

¹Does not include land costs.

Appendix 6. Weighted Average Net Returns, per Acre, Arkansas Wheat, 2007-2012

Revenue and Expenses	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	55.0	58.0	54.0	44.0	57.0	41.0
Price Received	6.95	7.19	5.26	4.86	5.88	4.72
Operating Costs	271.66	265.72	228.54	233.64	276.98	199.60
Returns to Operating Costs	110.59	151.30	55.50	-19.80	58.18	-6.08
Fixed Costs	40.93	39.63	37.98	36.66	34.51	31.54
Total Costs ¹	312.59	305.35	266.52	270.30	311.49	231.14
Net Returns to Land & Management	69.66	111.67	17.52	-56.46	23.67	-37.62

¹Does not include land costs.