



DIVISION OF AGRICULTURE

RESEARCH & EXTENSION

University of Arkansas System

**Trends in Net Returns for
Arkansas Field Crops, 2007-2013**

AG -1298

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February 2014

AG-1298

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Trends in Net Returns for Arkansas Field Crops, 2007-2013

Increasing commodity price trends in recent years have increased farm profitability during a period of increasing input costs. Productivity increases resulting in improved crop yields generate more revenue per unit of input. Thus, increases in agricultural productivity contribute to greater net returns for Arkansas producers. This report presents estimates of net returns per acre for typical Arkansas methods of crop production during 2007-2013.

Net Returns

Crop enterprise budgets developed by the University of Arkansas include estimated costs per acre for field crops (University of Arkansas 2012.) 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 2013 production functions are developed for field crops as weighted averages of crop enterprise budgets. Input price changes since December 2012 are applied so that costs are representative of the spring 2013 planting period (USDA-NASS 2013). 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 2014).

Table 1. Weighted Average Net Returns, per Acre, Arkansas Field Crops, 2013

Revenue and Expenses	Cotton	Corn	Soybean	Rice	Sorghum	Wheat
Average Yield: Cotton (lbs.), Other (bu.)	1,149	187	44	168	102	62
Price Received	0.800	5.20	13.10	6.98	4.96	6.95
Sell Seed	138.91					
Operating Costs ¹	520.95	573.46	300.35	671.36	310.74	279.16
Returns to Operating Costs	398.25	398.94	269.50	501.28	195.18	151.74
Fixed Costs	133.84	80.23	63.83	98.15	59.45	42.58
Total Costs ²	654.79	653.69	364.18	769.51	370.19	321.74
Net Returns to Land & Management	264.41	318.71	205.67	403.13	135.73	109.16

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

²Does not include land costs.

Net returns to land and management in 2013 are greatest for rice with \$403.13 per acre. Corn has the second greatest net returns with \$318.71 per acre and cotton net returns are \$264.41 per acre. Net returns for grain sorghum are \$135.73 per acre. Wheat net returns are \$109.16 per acre.

Appendixes 1 through Appendix 6 are average net returns for each field crop during 2007-2013. 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. After 2010, all crops have increasing trends in net returns.

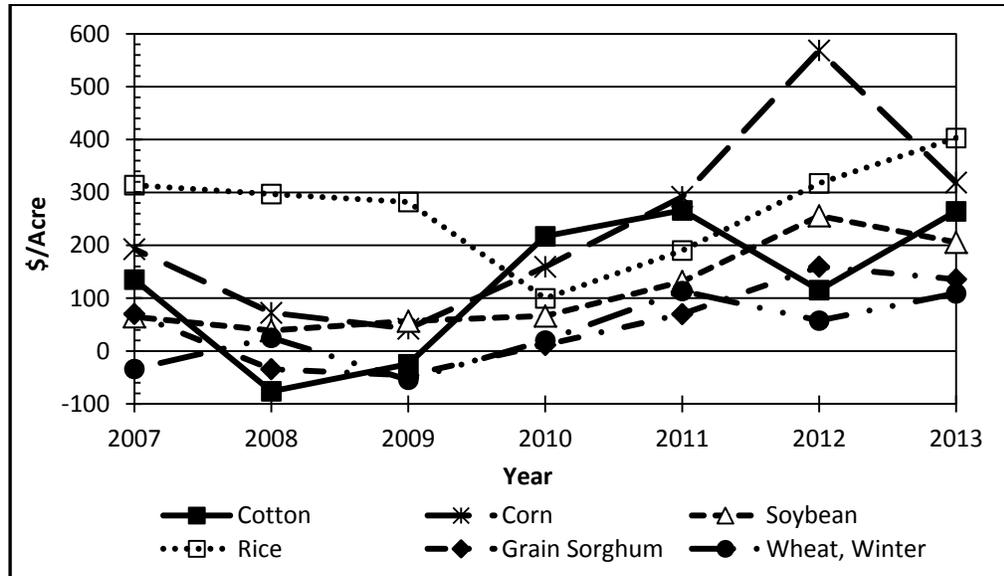


Figure 1. Net Returns per Acre, Arkansas Field Crops, 2007-2013

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Appendixes

Appendix 1. Weighted Average Net Returns, per Acre, Arkansas Cotton, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (lbs.)	1,149.0	1,064.0	929.0	1,045.0	818.0	1,012.0	1,071.0
Price Received	0.800	0.720	0.950	0.740	0.630	0.520	0.578
Sell Seed	138.91	128.64	112.32	126.34	98.90	122.35	129.48
Operating Costs ¹	520.95	519.37	491.72	438.72	426.76	495.63	386.19
Returns to Operating Costs	398.25	246.71	390.83	334.58	88.58	30.61	232.85
Fixed Costs	133.84	131.29	124.65	117.50	113.41	106.77	97.57
Total Costs ²	654.79	650.66	616.37	556.22	540.17	602.39	483.76
Net Returns to Land & Management	264.41	115.42	266.18	217.08	-24.83	-76.15	135.27

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, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	187.0	178.0	142.0	150.0	148.0	155.0	169.0
Price Received	5.20	6.81	6.27	4.55	3.79	4.42	3.80
Operating Costs	573.46	565.12	523.83	452.86	450.59	548.72	391.03
Returns to Operating Costs	398.94	647.06	366.51	229.64	110.33	136.38	251.17
Fixed Costs	80.23	78.70	74.72	70.43	67.98	64.00	58.49
Total Costs ¹	653.69	643.82	598.55	523.30	518.58	612.72	449.52
Net Returns to Land & Management	318.71	568.36	291.79	159.20	42.34	72.38	192.68

¹Does not include land costs.

Appendix 3. Weighted Average Net Returns, per Acre, Arkansas Soybean, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	43.5	43.0	38.5	35.0	37.5	38.0	36.0
Price Received	13.10	14.30	12.30	10.90	9.66	9.64	9.02
Operating Costs	300.35	296.56	282.60	259.12	251.48	276.70	213.53
Returns to Operating Costs	269.50	318.34	190.95	122.38	110.77	89.62	111.19
Fixed Costs	63.83	62.61	59.45	56.04	54.09	50.92	46.53
Total Costs ¹	364.18	359.17	342.04	315.16	305.56	327.61	260.06
Net Returns to Land & Management	205.67	255.73	131.51	66.34	56.69	38.71	64.66

¹Does not include land costs.

Appendix 4. Weighted Average Net Returns, per Acre, Arkansas Rice, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	168.0	166.0	150.0	144.0	151.0	148.0	160.7
Price Received	6.98	6.44	6.03	5.09	6.03	6.75	5.45
Operating Costs	671.36	655.47	622.98	546.46	545.45	623.67	489.38
Returns to Operating Costs	501.28	413.57	281.52	185.78	365.08	375.33	385.45
Fixed Costs	98.15	96.28	91.41	86.16	83.17	78.30	71.55
Total Costs ¹	769.51	751.74	714.38	632.62	628.62	701.97	560.93
Net Returns to Land & Management	403.13	317.30	190.12	99.62	281.91	297.03	313.90

¹Does not include land costs.

Appendix 5. Weighted Average Net Returns, per Acre, Arkansas Grain Sorghum, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	102.0	84.0	72.0	77.0	79.0	88.0	96.0
Price Received	4.96	6.22	5.71	4.00	3.23	3.88	3.44
Operating Costs	310.74	304.31	285.93	244.06	250.69	328.35	217.01
Returns to Operating Costs	195.18	217.83	125.34	63.81	4.58	13.16	113.61
Fixed Costs	59.45	58.31	55.36	52.19	50.37	47.42	43.34
Total Costs ¹	370.19	362.62	341.29	296.25	301.06	375.77	260.35
Net Returns to Land & Management	135.73	159.52	69.97	11.63	-45.79	-34.26	70.28

¹Does not include land costs.

Appendix 6. Weighted Average Net Returns, per Acre, Arkansas Wheat, 2007-2013

Expense	2013	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	62.0	55.0	58.0	54.0	44.0	57.0	41.0
Price Received	6.95	6.84	7.19	5.26	4.86	5.88	4.72
Operating Costs	279.16	276.79	263.91	226.74	232.20	276.05	196.25
Returns to Operating Costs	151.74	99.41	153.11	57.30	-18.36	59.11	-2.73
Fixed Costs	42.58	41.77	39.65	37.38	36.08	33.97	31.04
Total Costs ¹	321.74	318.55	303.57	264.12	268.27	310.02	227.29
Net Returns to Land & Management	109.16	57.65	113.45	19.92	-54.43	25.14	-33.77

¹Does not include land costs.