

PROJECT FINAL REPORT
ARKANSAS CORN/GRAIN SORHUM PROMOTION BOARD 2012-2013 CROP YEAR

Title: Corn and Grain Sorghum Production Economics for Optimal Farm Management

Investigator: Dr. Archie Flanders
Assistant Professor - Economics

Status: Proposed Year 2 of 3 Years

Stated Goal: The goal of this project is to provide crop enterprise budgets for corn and grain sorghum that are flexible for representing alternative production practices of Arkansas producers. Crop enterprise budgets are developed with methods that are consistent over all field crops.

Accomplishments for Current Year:

The budget program has been utilized for economic analysis of the 2012 corn and grain sorghum research verification data.

Crop enterprise budgets for 2013 were released in December 2012.

The crop enterprise budgets are applied to develop weighted average production functions for corn and grain sorghum. Table 1 presents costs and returns for corn during 2007-2012. Table 2 presents costs and returns for grain sorghum during 2007-2012. Yields and prices received for 2012 are based on preliminary data.

For corn, costs of production are higher in 2012 than any other year during 2007-2012. Corn yield and price for 2012 are high by historical standards. The result is that net returns to land and management in 2012 are projected to be over twice the returns in 2011. Returns to operating costs in 2012 are \$340/acre greater than returns in 2011.

For grain sorghum, costs of production are higher in 2012 than any other year during 2007-2012. During 2007-2012, sorghum yields were greatest in 2007. Good yields in 2012 coupled with a price of \$6.25/bu. result in projected returns to operating costs that are \$100/acre greater than returns in 2011.

Table 1. Weighted Average Net Returns, per Acre, Arkansas Corn, 2007-2012

Costs and Returns	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	177.0	142.0	150.0	148.0	155.0	169.0
Price Received	7.10	6.20	4.55	3.79	4.42	3.80
Operating Costs	588.55	552.14	479.63	481.49	587.80	413.49
Returns to Operating Costs	668.15	328.26	202.87	79.43	97.30	228.71
Fixed Costs	71.21	68.95	66.07	63.77	60.04	54.87
Total Costs ¹	659.75	621.08	545.71	545.27	647.84	468.36
Net Returns to Land & Management	596.95	259.32	136.79	15.65	37.26	173.84

¹Does not include land cost.

Table 2. Weighted Average Net Returns, per Acre, Arkansas Grain Sorghum, 2007-2012

Costs and Returns	2012	2011	2010	2009	2008	2007
Average Yield (bu.)	84.0	72.0	77.0	79.0	88.0	96.0
Price Received	6.25	5.71	3.99	3.23	3.88	3.44
Operating Costs	296.57	282.86	241.45	250.04	329.99	213.81
Returns to Operating Costs	228.43	128.40	65.78	5.23	11.52	116.81
Fixed Costs	52.91	51.23	49.09	47.39	44.61	40.77
Total Costs ¹	349.48	334.09	290.54	297.42	374.60	254.58
Net Returns to Land & Management	175.52	77.18	16.69	-42.16	-33.09	76.04

¹Does not include land cost.