

Crop Production Costs and Cash Rent

Brent Carpenter, Jan 2016

The most basic farm management tool is a crop budget. I use budgets almost daily to help advise owners and operators for a variety of business decisions. The best budgets depict actual costs for a specific cropping situation. In the absence of actual costs, estimates from MU Extension budgets can be useful.

Current cost estimates per acre and per bushel are shown in the table. In summary, overall operating costs are still at historically high levels, but projected slightly lower for 2016 due to the outlook for fertilizer and fuel prices. Costs of pest management continue to increase.

An important use of a crop budget is to estimate the expected return after expenses. Margins are tight, explaining the real pinch farmers are experiencing.

Compare expected market prices on line A with costs per bushel on lines B and C. The current outlook shows that the market is expected to offer prices that cover operating (variable) costs, but fall short of the total costs of production. On owned land there is an economic incentive to plant and target high yields in an attempt to recover at least a portion of the machinery and land ownership costs.

Table 1. Estimated Costs of Production for 2016 Crops in West Central Missouri.

	Dryland	Irrigated	Grain		
	Corn	Corn	Sorghum	Soybeans	Wheat
Budgeted yield, bushels	135 bu	185 bu	85 bu	45 bu	55 bu
A. Budgeted price, \$ per bu	\$3.70	\$3.70	\$3.50	\$9.15	\$5.05
Seed	99	106	14	62	34
Fertilizer	109	139	81	51	66
Crop protection chemicals	60	60	32	60	20
Crop insurance	22	22	14	12	13
Custom hire and rental	6	6	6	6	12
Energy: Machinery, drying, irrig.	34	80	13	11	9
Machinery repairs and maint.	16	49	12	12	10
Operator and hired labor	16	23	15	13	12
Operating interest	11	15	6	7	5
Operating costs per acre	\$372	\$499	\$192	\$235	\$182
Farm business overhead	5	5	3	5	4
Machinery overhead	26	48	22	18	14
Machinery depreciation	29	51	24	23	18
Real estate charge	140	175	123	140	123
Ownership costs per acre	\$200	\$279	\$172	\$187	\$159
Total costs per acre	\$573	\$779	\$365	\$423	\$342
B. Operating costs per bushel	2.76	2.70	2.27	5.24	3.33
C. Total costs per bushel	4.24	4.21	4.30	9.39	6.22
Operating costs per bushel if real					
D. estate charge above is cash rent payment.	3.79	3.64	3.70	8.33	5.54

On rented ground, however, land is effectively a cash operating cost and the incentive for the farmer is different. See line D where the real estate charge (\$140 for dryland corn and soybeans) is including in operating costs rather than ownership costs. For the cash rent tenant the market price falls short of even the operating costs. The implication is that based on current knowledge many farmers will likely experience a net negative return in 2016. The only economic incentive to farm rented ground is to retain rights in hopes this year or future years will generate more net income than currently projected.

It seems to be human nature to let history unduly color our view of what will happen in the future. Landowners and operators negotiating cash rental rates are best served by looking forward to the most likely returns. It is a mistake to set rental rates based on the boom years that are getting farther behind us or unrealistic expectations.