

# Southeast Missouri Corn Planning Budget

Using this planning budget, corn producers may estimate their costs and returns for 2025. Table 1 presents estimates for GMO furrow-irrigated corn grain production in southeast Missouri. Assumptions were based on price forecasts as of October 2024. Detailed prices and practices are summarized in Tables 2 and 3. The production practices used to develop these cost estimates are common for southeast Missouri farms. Use the “Your estimate” column to plan your operation’s costs and returns for 2025.

**Table 1. Southeast Missouri corn (furrow-irrigated) planning budget for 2025.**

	Dollars per acre <sup>1</sup>	Your estimate
<b>Income</b>		
Grain sales	989.00	
Government payments	20.00	
Total income	1,009.00	
<b>Operating costs</b>		
Seed	119.25	
Fertilizer and soil amendments	242.40	
Crop protection chemicals	101.00	
Irrigation <sup>2</sup>	119.22	
Crop supplies, storage, and marketing	8.00	
Crop consulting and insurance	32.00	
Custom hire and rental	22.04	
Operator labor and management	49.74	
Machinery fuel and grain drying energy	113.85	
Machinery repairs and maintenance	50.00	
Operating interest	33.23	
Total operating costs	890.73	
<b>Ownership costs</b>		
Farm business overhead	10.09	
Machinery ownership	94.34	
Real estate charge	225.00	
Total ownership costs	329.43	
Total costs	1,220.16	
<b>Income over operating costs</b>	<b>118.27</b>	
<b>Income over total costs</b>	<b>-211.16</b>	
<b>Return to land and management</b>	<b>44.11</b>	
	Operating costs per bushel	3.87
	Ownership costs per bushel	1.43
	Total costs per bushel	5.31

1. Totals may not sum due to rounding.

2. Irrigation costs are explained in detail on page 2.

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Irrigation costs in Table 1 include fuel, labor and any leveling, ditching or leveeing required for irrigation; and ownership costs for the pumping engine and aboveground irrigation systems.

Table 2 shows input assumptions for the corn budget. Price estimates reflect harvest time prices. Costs or returns from storage or other marketing methods are not included. Farm business overhead includes liability insurance, utilities, accounting, etc. Real estate charge is an estimated rental rate for above average land.

Table 3 details the field activities assumed in this budget and their machinery costs. Machinery costs were estimated using typical life (years), use (hours) and performance (fuel and labor) factors for each power unit and implement used.

Producers can customize this budget using the Southeast Missouri Crop Budget spreadsheet, which can be downloaded from the [Missouri Crop and Livestock Enterprise Budgets webpage](https://extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets) (extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets).

**Table 2. Input assumptions used in Southeast Missouri corn (irrigated) planning budget for 2025.**

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Yield, bushels	230	Corn market price, per bushel	4.30
Seeding rate, count	36,000	Seed, per 80,000 seed bag	265.00
Nitrogen rate (urea), pounds	250	Nitrogen (urea), per pound N	0.60
Phosphorus rate, pounds P <sub>2</sub> O <sub>5</sub>	95	Phosphorus, per pound P <sub>2</sub> O <sub>5</sub>	0.45
Potassium rate, pounds K <sub>2</sub> O	60	Potassium, per pound K <sub>2</sub> O	0.38
Other nutrients, pounds (S, B)	12.5	Other nutrients, average price per pound	0.71
Lime rate, tons	0.60	Lime, per ton	30.00
Sum of allocated labor, hours	0.97	Skilled labor, per hour	20.00
Irrigation water, acre-inches applied	18.0	Irrigation water applied, cost per acre-inch	6.62
Operating interest, annual percentage	7.75	Farm diesel, per gallon	3.25

**Table 3. Machinery assumptions used in Southeast Missouri corn (irrigated) planning budget for 2025, on a per acre basis.**

Machine activity (not custom fieldwork)	Trips across field	Labor (hours)	Fuel (gallons)	Operating costs <sup>1</sup> (dollars)	Ownership costs <sup>2</sup> (dollars)	Total costs (dollars)
Subsoiler (20 feet), 340 HP MFWD	1/3 <sup>3</sup>	0.04	0.54	3.35	4.46	7.81
Disk bedder (36 feet), 280 HP MFWD	1	0.06	0.74	4.88	6.65	11.53
Bed leveler (36 feet), 340 HP MFWD	1	0.06	0.90	5.56	7.48	13.05
Row crop planter (40 feet), 280 HP MFWD	1	0.05	0.66	8.71	16.60	25.31
Self-propelled boom sprayer (120 feet), 275 HP	3	0.03	0.33	16.74	4.33	21.08
Corn head (36 feet), 440 HP combine	1	0.07	1.22	18.68	18.16	36.83
Grain cart (1,000 bushel), 280 HP MFWD		0.07	0.74	6.86	9.70	16.56
Grain trailer (1,000 bushel), 475 HP road tractor		0.25	1.64	15.30	7.50	22.80
Grain auger (13 inch), 130 HP MFWD		0.04	0.17	1.97	1.97	3.94
Tandem disk (32 feet), 310 HP MFWD	1	0.05	0.80	6.92	13.19	20.11
Pickup (1 ton), 4WD		0.25	0.75	8.09	4.30	12.39
Dry fertilizer application, custom charge	2					14.04
Aerially apply chemicals, custom charge	1					8.00
<b>Total<sup>4</sup></b>		<b>0.97</b>	<b>8.49</b>	<b>97.07</b>	<b>94.34</b>	<b>213.45</b>

1. Machinery operating cost is the sum of fuel, repairs, maintenance, and the value of labor.

2. Machinery ownership cost is the sum of machinery overhead and depreciation.

3. One pass every three years.

4. Totals may not sum due to rounding.

Abbreviations: 4WD = 4-wheel drive tractor or truck; HP = horsepower; MFWD = mechanical front-wheel drive tractor



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