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Southeast Missouri Double-Crop Soybean Planning Budget

Using this planning budget, soybean producers may estimate their costs and returns for 2026. Table 1 presents estimates for GMO center-pivot-irrigated double-crop soybean production in southeast Missouri. Assumptions were based on price forecasts as of October 2025. 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 2026.

Table 1. Southeast Missouri soybean (irrigated, double-crop) planning budget for 2026.

	Dollars per acre	Your estimate
Income		
Grain sales	567.10	
Government payments	0.00	
Total income	567.10	
Operating costs		
Seed	66.43	
Fertilizer and soil amendments	71.45	
Crop protection chemicals	100.00	
Irrigation[2]	28.68	
Crop supplies, storage and marketing	8.50	
Crop consulting and insurance	21.00	
Custom hire and rental	19.97	
Operator labor and management	28.57	
Machinery fuel	11.67	
Machinery repairs and maintenance	25.32	
Operating interest	12.79	
Total operating costs[2]	394.38	
Ownership costs		
Farm business overhead	11.34	
Machinery and irrigation ownership	85.75	
Real estate charge	112.50	
Total ownership costs[3]	209.60	
Total costs[4]	603.98	
Income over operating costs	**172.72**	
Income over total costs	**–36.88**	
Return to land and management	**92.63**	

Note: Totals may not sum due to rounding.

1. Irrigation costs are explained in detail on Page 2.
2. Operating costs per bushel = $7.44
3. Ownership costs per bushel = $3.95
4. Total costs per bushel = $11.40

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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 soybean 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 and assumes double-crop soybeans are preceded by winter wheat.

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.

Table 2. Input assumptions used in southeast Missouri soybean (irrigated, double-crop) planning budget for 2026.

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Yield, bushels	53	Soybean market price, per bushel	10.70
Seeding rate, count	155,000	Seed, per 140,000 seed bag	60.00
Phosphorus rate, pounds P_2O_5	45	Phosphorus, per pound P_2O_5	0.73
Potassium rate, pounds K_2O	80	Potassium, per pound K_2O	0.42
Skilled operator labor, hours	0.51	Skilled operator labor, per hour	22.50
Irrigation water, acre-inches applied	12.0	Irrigation water applied, cost per acre-inch	2.39
Operating interest, annual percentage	7.25	Farm diesel, per gallon	2.90

Table 3. Machinery assumptions used in southeast Missouri soybean (irrigated, double-crop) planning budget for 2026, on a per acre basis.

Machine activity (not custom fieldwork)	Passes per acre	Fuel (gallons)	Labor (hours)	Operating costs[1] (dollars)	Ownership costs[2] (dollars)	Total costs (dollars)
Row crop planter (30 feet), 280 HP MFWD	1	0.82	0.07	11.17	16.02	27.19
Self-propelled boom sprayer (120 feet), 275 HP	2	0.25	0.02	5.62	3.20	8.82
Draper platform (45 feet), 450 HP combine	1	1.29	0.06	10.96	16.91	27.87
Grain trailer (1,000 bushel), 475 HP road tractor		0.43	0.07	4.37	2.27	6.64
Grain cart (1,000 bushel), 280 HP MFWD		0.37	0.03	3.23	3.98	7.21
Grain auger (13 inch), 130 HP MFWD		0.11	0.02	1.14	0.88	2.02
Pickup (1 ton), 4WD		0.75	0.25	12.05	4.96	17.01
Dry fertilizer application, custom charge	1					7.37
Aerially apply chemicals, custom charge	1					12.60
Total		**4.02**	**0.51**	**48.55**	**48.22**	**96.77**

Note: Totals may not sum due to rounding.

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

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.

Producers can customize this budget using the Southeast Missouri Crop Budgets workbook (XLSX) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/crop-budgets-semo.xlsx). Each crop budget has an accompanying sensitivity analysis so producers can see how their financial return to land and management varies with different crop yields and crop prices.

Check out the complete collection of Missouri crop and livestock enterprise budgets at muext.us/MissouriAgBudgets

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