

# Double-Crop Soybean Cost-Return Budget in Central and Eastern Kansas



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## Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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Soybeans are a very popular crop in southeast Kansas and as much as thirty percent of the soybean acres in some counties may be double-cropped following wheat. Planted in late June, these soybeans can respond to rainfall in September and produce good yields. Since the primary production costs are planting, seed, and herbicide, out-of-pocket costs are lower for this than for other crops. The practice of double cropping soybeans is slowly moving north into east central Kansas where performance remains strong. Roundup Ready soybean varieties have solved some of the weed control problems that have plagued double crop soybeans in the past. For that reason, this budget assumes the use of Roundup Ready technology. The following budget outlines the expected costs and returns for double crop soybeans in central and eastern Kansas.

### Income per Acre

Crop production costs per unit are highly dependent on yields. The following estimated budget includes three different yield levels which are intended to represent expected yields for land of varying quality for a given level of management. Alternative expected yields can help producers compare the profitability of crop enterprises on farmland tracts with varying yield potentials. Land values and government payments have been adjusted for alternative yield levels in this budget. In customizing this budget to your farm, attention should be given to using land values representative of your farm's production capacity.

**Table 1. Production Inputs — Double-Crop Soybean**

Item	Yield Level (bu)			
	15	20	35	
Seed, 1,000/a*	150	150	150	\$0.31/1,000
Fertilizer:**				
N (anhydrous)	0	0	0	\$0.44/lb
N	0	0	0	\$0.68/lb
P	20	20	20	\$0.80/lb
K	20	20	20	\$0.55/lb
Lime	0	0	0	\$0.01/lb
Herbicide				
Glyphosate	32.0	32.0	32.0	\$0.09/oz
+ Ammonium Sulfate	3.0	3.0	3.0	\$0.34/lb
Glyphosate	32.0	32.0	32.0	\$0.09/oz
+ Ammonium Sulfate	3.0	3.0	3.0	\$0.34/lb

\*Roundup Ready

\*\* Fertilizer is applied on wheat crop.

**Table 2. Machinery and Land Resources — Double-Crop Soybean**

Item	Yield Level (bu)			Custom Rate
	15	20	35	
Tillage/Planting/Chemical Applications:				
Chisel	0	0	0	\$11.56/a
Disk	0	0	0	\$9.89/a
Field cultivate	0	0	0	\$9.49/a
No-till plant	1	1	1	\$15.96/a
Anhydrous application	0	0	0	\$10.89/a
Fertilizer application	0	0	0	\$5.36/a
Herbicide application	2	2	2	\$5.47/a
Insecticide / fungicide application	0	0	0	\$5.54/a
Harvest				
Base charge	1	1	1	\$26.24/a
Extra charge for yields exceeding	28	28	28	\$0.199/bu
Hauling	15	20	35	\$0.179/bu
Non-machinery labor	0.49	0.49	0.53	\$13.00/hr
Land charge/rent	\$0.00	\$0.00	\$0.00	
Interest on capital				6.5%

Price per bushel represents an expected harvest price in Emporia, Kan. Producers in other regions of eastern and central Kansas should account for local basis (cash price – futures price) when making their own price forecasts.

Crop insurance was not included as an input expense in this budget because yields reflect an average of all years (good and bad). If crop insurance is included as an input expense, then an expected value for indemnity payments should be included in the returns section. Historically, MPCCI indemnity payments have exceeded premiums due to government subsidies.

### Costs per Acre

Production costs at the three production levels are shown on lines 1 through 13. Kansas Custom Rates for specific field operations are used to represent fuel and labor costs as well as machinery repair, depreciation, and interest expenses in these budgets. Table 1 identifies the typical seed, fertilizer, herbicide, and insecticide requirements (rate and cost/unit) for no-till double-crop soybeans. Each tillage, planting, and harvest operation is identified. Table 2 outlines the machinery and land resources used for no-till double-crop soybeans. Each tillage, planting, and harvest operation is identified.

## COST-RETURN PROJECTION — DOUBLE-CROP SOYBEANS — CENTRAL AND EASTERN KANSAS

	Yield Level (bu)			Your Farm
	15	20	35	
<b>INCOME PER ACRE</b>				
A. Yield per acre.....	15	20	35	
B. Price per bushel.....	\$ 11.43	\$ 11.43	\$ 11.43	
C. Net government payment.....	\$	\$	\$	
D. Indemnity payments.....	\$	\$	\$	
E. Miscellaneous income.....	\$	\$	\$	
F. Returns/acre ((A × B) + C + D + E).....	\$ 171.38	\$ 228.50	\$ 399.88	
<b>COSTS PER ACRE</b>				
1. Seed.....	\$ 46.50	\$ 46.50	\$ 46.50	
2. Herbicide.....	7.80	7.80	7.80	
3. Insecticide / Fungicide.....				
4. Fertilizer and Lime.....	27.00	27.00	27.00	
5. Crop Consulting.....				
6. Crop Insurance.....				
7. Drying.....				
8. Miscellaneous.....	6.81	6.81	6.81	
9. Custom Hire / Machinery Expense.....	55.83	56.72	60.80	
10. Non-machinery Labor.....	6.31	6.41	6.87	
11. Irrigation				
a. Labor.....				
b. Fuel and Oil.....				
c. Repairs and Maintenance.....				
d. Depreciation on Equipment and Well.....				
e. Interest on Equipment.....				
12. Land Charge / Rent.....				
G.SUB TOTAL.....	\$ 150.25	\$ 151.24	\$ 155.78	
13. Interest on ½ Nonland Costs.....	4.88	4.92	5.06	
H. TOTAL COSTS.....	\$ 155.13	\$ 156.16	\$ 160.84	
I. RETURNS OVER COSTS (F - H).....	\$ 16.25	\$ 72.34	\$ 239.03	
J. TOTAL COSTS/BUSHEL (H ÷ A).....	\$ 10.34	\$ 7.81	\$ 4.60	
K. RETURN TO ANNUAL COST (I + 13) ÷ G.....	14.06%	51.08%	156.69%	

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