Wheat Cost-Return Budget in Southeast Kansas

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Although Kansas is commonly referred to as the "wheat state," wheat acreage in southeast Kansas will vary greatly from year to year as producers consider a variety of factors. Wet weather in the fall can inhibit planting. Also, the price per bushel of wheat, relative to other crops, will usually enter into the decision. Producers also typically consider the agronomic benefits of using wheat as a rotation crop that breaks up weed cycles and the possibility of using the long growing season to double crop soybeans or annual lespedeza in the wheat stubble for additional income. Acreage is not the only aspect of wheat production that varies in southeast Kansas, wet weather and/or high humidity can have a drastic impact on wheat yields, making this one of the most variable crops grown in southeast Kansas. The following budget outlines the expected costs and returns for wheat in southeast 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 — Wheat*

	Yield Level (bu)			
Item	36	44	52	
Seed, lbs	90	90	90	$0.08/lb
Fertilizer:				
N (anhydrous)	0	0	0	$0.16/lb
N	50	65	80	$0.23/lb
P	35	35	35	$0.21/lb
K	30	30	30	$0.14/lb
Lime	500	500	500	$0.01/lb
Herbicide				
Glean	0.17	0.17	0.17	$16.00/oz
Insecticide / Fungicide				

Table 2. *Machinery and Land Resources — Wheat*

	Yield Level (bu)			
ITEM	36	44	52	
Tillage/Planting/Chemical Applications:				
Chisel	0	0	0	$8.36/ac
Disk	1	1	1	$6.21/ac
Field cultivate	1	1	1	$5.92/ac
Drill	1	1	1	$6.39/ac
Anhydrous application	0	0	0	$5.97/ac
Fertilizer application	1	1	1	$3.55/ac
Herbicide application	1	1	1	$3.81/ac
Insecticide / fungicide application	0	0	0	$4.00/ac
Harvest				
Base charge	1	1	1	$15.71/ac
Extra charge for yields exceeding	23	23	23	$0.122/bu
Hauling	36	44	52	$0.122/bu
Non-machinery labor	1.25	1.25	1.25	$10.00/hr
Irrigation labor	0.00	0.00	0.00	$10.00/hr
Land value/acre	$646	$808	$970	6.00%
Interest on capital				8.0%

Price per bushel represents an expected harvest price in Emporia, Kan. Producers in other regions of southeast 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, MPCI 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 wheat. Each tillage, planting, and harvest operation is identified. Table 2 outlines the machinery and land re-

COST-RETURN PROJECTION — WHEAT — SOUTHEAST KANSAS

	Yield Level (bu)			Your
	36	**44**	**52**	**Farm**
INCOME PER ACRE				
A. Yield per acre	36	44	52	
B. Price per bushel	$ 3.04	$ 3.04	$ 3.04	
C. Net government payment	$ 9.13	$ 9.92	$ 10.72	
D. Indemnity payments	$	$	$	
E. Miscellaneous income	$	$	$	
F. Returns/acre ((A × B) + C + D + E)	$ 118.57	$ 143.68	$ 168.80	
COSTS PER ACRE				
1. Seed	$ 7.20	$ 7.20	$ 7.20	
2. Herbicide	2.72	2.72	2.72	
3. Insecticide / Fungicide				
4. Fertilizer and Lime	28.05	31.50	34.95	
5. Crop Consulting				
6. Crop Insurance				
7. Drying				
8. Miscellaneous	7.00	7.00	7.00	
9. Custom Hire / Machinery Expense	47.58	49.54	51.50	
10. Non-machinery Labor	12.50	12.50	12.50	
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	38.76	48.48	58.20	
G. SUB TOTAL	$ 143.81	$ 158.94	$ 174.07	
13. Interest on 1/2 Nonland Costs	4.20	4.42	4.63	
H. TOTAL COSTS	$ 148.02	$ 163.36	$ 178.70	
I. RETURNS OVER COSTS (F - H)	$ –29.45	$ –19.68	$ –9.91	
J. TOTAL COSTS/BUSHEL (H ÷ A)	$ 4.11	$ 3.71	$ 3.44	
K. RETURN TO ANNUAL COST (I + 13) ÷ G	–17.55%	–9.60%	–3.03%	

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