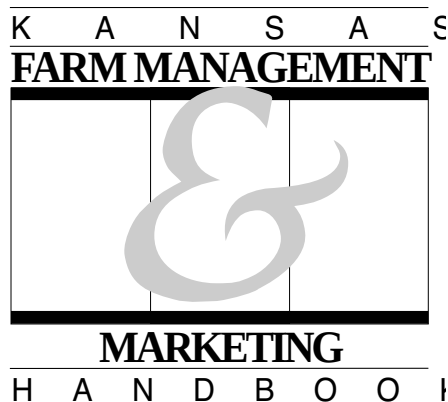




Double-Crop Sunflowers Cost-Return Budget in North Central and Eastern Kansas

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Cost-Return Projections

Sunflowers are becoming a popular cash crop in north central and eastern Kansas. The purpose of this projection is to provide estimated costs and returns for forward farm planning.

Costs and returns are estimated for double-crop (after small grain) sunflowers. In eastern and especially south-eastern Kansas, full season sunflowers are not recommended because of insect problems. Another important factor in sunflower production is the limited markets available for selling sunflowers. Marketing arrangements should be made before planting.

Yield Level

Costs per hundredweight (cwt) and net returns in crop production are highly dependent on yields. The following estimated budget includes three different yield levels. Yield levels vary for a number of reasons including soil type or land quality, weather, input levels, and management. The three yield levels reflect variability due to input levels and management as opposed to land quality since land values are held constant. Budgeting at multiple yield levels can help producers examine the financial risk of a crop enterprise that is directly related to production risk.

Variable and Fixed Costs

Table 1 shows some of the assumptions used to develop this budget. Note the lime amount assumes that one ton of ECC is applied every five years. See MF-942, *Cost-Return Budgets—Nonirrigated Crops*, for herbicide, insecticide, and seed usage.

Variable costs, such as fertilizer, repairs, and fuel-oil, are costs that vary with the level of production. Interest on variable costs is calculated for six months.

Fixed costs do not vary with the level of production and are incurred by virtue of owning assets such as land and machinery. Land costs for double-crop sunflowers are charged to the main crop.

Machinery investment was estimated for an average-size farm to meet tillage, planting, and harvest requirements. Salvage value of machinery was assumed to be 35 percent of the initial investment. Interest on machinery was calculated on one-half the average investment [(initial investment + salvage value) ÷ 2].

Profit and Return Factors

Net return on investment is the percentage return on investment. This measure enables comparisons to be made among other enterprises and investment alternatives. Asset turnover is the percentage of investment recovered by total returns. Inverting this measure allows different enterprises to be compared on the basis of capital required to generate a dollar of gross income.

Table 1. Factors Used for Cost-Return Budget

Item	Yield Level (cwt)			
	8	10	12	
Fertilizer:				
N (Anhy.)	0	0	0	\$0.17/lb
N (Dry)	40	40	60	\$0.30/lb
P	0	0	0	\$0.28/lb
K	0	0	0	\$0.13/lb
Lime	400	400	400	\$0.005/lb
Seed, seeds/acre	23,400	23,400	23,400	
Seed price,				
\$/1,000 seeds	\$0.495	\$0.550	\$0.605	
Labor hours	1.25	1.25	1.25	
Labor price/hour				\$9.00
Land value/acre				\$0.00
Land interest rate				6.00%
Land real estate tax rate				0.50%
Machinery investment				\$60
Machinery life				10 yrs
Salvage value				35.00%
Interest rate on machinery				10.00%
Insurance rate on machinery				0.25%
Interest on variable costs				10.00%

COST-RETURN PROJECTION — SUNFLOWERS — NORTH CENTRAL AND EASTERN KANSAS

	Yield Level (cwt)			Your Farm
	8	10	12	
VARIABLE COSTS PER ACRE: ¹				
1. Labor	\$ 11.25	\$ 11.25	\$ 11.25	
2. Seed	11.58	12.87	14.16	
3. Herbicide	9.89	9.89	9.89	
4. Insecticide	12.58	12.58	12.58	
5. Fertilizer and Lime	14.00	14.00	20.00	
6. Fuel and Oil	5.40	5.50	5.60	
7.				
8. Machinery and Equipment Repairs	8.85	8.85	8.85	
9.				
10. Crop Insurance				
11. Drying	2.40	3.00	3.60	
12. Custom Hire				
13. Crop Consulting				
14. Miscellaneous	2.55	2.55	2.55	
15. Interest on 1/2 Variable Costs	3.93	4.02	4.42	
A. TOTAL VARIABLE COSTS	\$ 82.43	\$ 84.51	\$ 92.90	
FIXED COSTS PER ACRE: ¹				
16. Real Estate Taxes				
17 Interest on Land ²				
18. Rent for Rented Land				
19. Depreciation on Crop Machinery	3.90	3.90	3.90	
20. Interest on Crop Machinery ³	4.05	4.05	4.05	
21.				
22.				
23. Insurance on Machinery	0.15	0.15	0.15	
B. TOTAL FIXED COSTS	\$ 8.10	\$ 8.10	\$ 8.10	
C. TOTAL COSTS (A + B)	\$ 90.53	\$ 92.61	\$ 101.00	
D. YIELD PER ACRE	8	10	12	
E. PRICE PER CWT ⁴	\$ 12.48	\$ 12.48	\$ 12.48	
F. NET GOVERNMENT PAYMENT ⁴				
G. RETURNS PER ACRE [(D × E) + F]	\$ 99.84	\$ 124.80	\$ 149.76	
H. RETURNS OVER VARIABLE COSTS (G-A)	\$ 17.41	\$ 40.29	\$ 56.86	
I. RETURNS OVER TOTAL COSTS (G-C)	\$ 9.31	\$ 32.19	\$ 48.76	
J. VARIABLE COSTS PER CWT (A ÷ D)	\$ 10.30	\$ 8.45	\$ 7.74	
K. FIXED COSTS PER CWT (B ÷ D)	\$ 1.01	\$ 0.81	\$ 0.68	
L. TOTAL COSTS PER CWT (C ÷ D)	\$ 11.32	\$ 9.26	\$ 8.42	
M. ASSET TURNOVER (G ÷ INVESTMENT) ⁵	166.40%	208.00%	249.60%	
N. NET RETURN ON INVESTMENT [(I+15+17+20) ÷ INVESTMENT] ⁵	28.81%	67.10%	95.39%	

¹Totals were derived using information listed in Table 1.²Assumes interest rate shown in Table 1.³Assumes one-half the average investment [(initial investment + salvage value) ÷ 2] at the interest rate shown in Table 1.⁴See MF-1013 "Prices for Crop and Livestock Cost-Return Budgets and MF-2236 "Government Program Payments for Crop Cost Return Budgets" for additional information on crop prices and program payments.⁵Investment equals total value of all fixed assets shown in Table 1.**COOPERATIVE EXTENSION SERVICE, MANHATTAN, KANSAS**

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