

The following pages represent a single crop budget but at 3 levels of detail and for 3 planning yield levels

Abstract level budget - The most summarized version of a budget. (e.g., a single line represents all fertilizer costs)

Summary level budget - A more detailed crop budget. (e.g., Fertilizer is broken out into N, P, K)

Detailed level budget - All the detail for producing a crop. (e.g., The specific fertilizers are listed).

Middle yield - The basic crop budget for a region and crop.

A detailed, summary, and abstract level budget are included for the middle yield.

Low and High yield - Budgets based on the middle yield but with a lower/higher yield goal (and irrigation level).

These high and low yield level budgets only include the abstract level budgets.

The 2 tables below are sensitivity tables that show the returns over direct costs and the returns over total costs

The tables have the basic budget price in the middle column

On either side of the base price are potential prices 5% and 10% above and below this base price

For irrigated budgets the 3 yield levels are also associated with different irrigation levels

8.0 inches of water for LOW yields

10.0 inches of water for MIDDLE yields

12.0 inches of water for HIGH yields

TABLE 1. RETURNS OVER DIRECT COSTS

		Prices					
		\$17.10	\$18.05	\$19.00	\$19.95	\$20.90	
	18.0 ll	\$40	\$58	\$75	\$92	\$109	Low yield
Yields	24.0 ll	\$92	\$115	\$137	\$160	\$183	Middle yield
	30.0 ll	\$181	\$210	\$238	\$267	\$295	High yield

TABLE 2. RETURNS OVER TOTAL COSTS

		Prices					
		\$17.10	\$18.05	\$19.00	\$19.95	\$20.90	
	18.0 ll	-\$445	-\$428	-\$411	-\$394	-\$377	Low yield
Yields	24.0 ll	-\$394	-\$371	-\$348	-\$325	-\$302	Middle yield
	30.0 ll	-\$304	-\$276	-\$247	-\$219	-\$190	High yield

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Sunflower (oil-type) - Western KS	cwt	\$19.00	24.00	\$456.00	\$456.00	_____

--TOTAL INCOME--					\$456.00	_____
DIRECT EXPENSES						
Additional labor					\$0.74	_____
Crop consulting					\$7.57	_____
Crop insurance					\$23.50	_____
Custom Operations					\$18.18	_____
Diesel					\$19.03	_____
Fertilizers					\$53.23	_____
Herbicides					\$48.18	_____
Insecticides					\$17.90	_____
Irrigation energy (NG)					\$26.96	_____
Irrigation labor					\$6.80	_____
Miscellaneous					\$12.10	_____
Operator labor					\$8.91	_____
Repair & Maintenance					\$22.12	_____
Seeds					\$41.13	_____
Interest on operating capital		8% percent on direct expenses			\$12.25	_____

--TOTAL DIRECT EXPENSES--					\$318.59	_____
-----Total direct expenses per cwt \$13.27						
FIXED EXPENSES						
Cash rent					\$178.00	_____
Capital recovery (depreciation + interest)					\$307.32	_____

--TOTAL FIXED EXPENSES--					\$485.32	_____
-----Total expenses per cwt \$33.5						
RETURNS ABOVE DIRECT EXPENSES					\$137.41	=====
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$347.91	
<p>10 acre-inches of water applied 300 foot well depth \$ 2.7 fuel cost per acre-inch of water applied .71 Mcf of natural gas per acre-inch of water applied \$ 3.78 per Mcf for cost of natural gas 7.13 Mcf of fuel used in total</p>						

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Sunflower (oil-type) - Western KS	cwt	\$19.00	24.00	\$456.00	\$456.00	_____

--TOTAL INCOME--					\$456.00	_____
DIRECT EXPENSES						
Irrigation	-----					_____
Additional labor						
Planting	-----				\$0.47	
Spraying	-----				\$0.26	\$0.74 _____
Crop consulting	-----				\$7.57	\$7.57 _____
Crop insurance	-----				\$23.50	\$23.50 _____
Custom Operations						
Fertilizer application	-----				\$18.18	\$18.18 _____
Diesel						
Harvesting	-----				\$5.63	
Hauling	-----				\$3.89	
Planting	-----				\$1.21	
Spraying	-----				\$2.15	
Tillage	-----				\$6.15	\$19.03 _____
Fertilizers						
Side-dressed	-----				\$34.83	
Nitrogen	lbs	\$0.50	76.00	\$38.02		
Phosphorus	lbs	\$0.63	24.00	\$15.21		
Potassium	lbs	\$0.00	0.00	\$0.00		
Lime	lbs	\$0.00	0.00	\$0.00	\$53.23	_____
Herbicides						
Post-emergence	-----				\$15.46	
Pre-emergence	-----				\$32.72	\$48.18 _____
Insecticides	-----				\$17.90	\$17.90 _____
Irrigation energy (NG)						
Irrigation	-----				\$26.96	\$26.96 _____
Irrigation labor						
Irrigation	-----				\$6.80	\$6.80 _____
Miscellaneous	-----				\$12.10	\$12.10 _____
Operator labor						
Harvesting	-----				\$2.04	
Hauling	-----				\$2.04	
Planting	-----				\$0.75	
Spraying	-----				\$0.85	
Tillage	-----				\$3.23	\$8.91 _____
Repair & Maintenance						

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Harvesting	-----			\$7.64		
Hauling	-----			\$2.35		
Irrigation	-----			\$3.60		
Planting	-----			\$2.42		
Spraying	-----			\$0.92		
Tillage	-----			\$5.18	\$22.12	_____
Seeds	-----			\$41.13	\$41.13	_____
Interest on operating capital		8% percent on direct expenses		\$12.25	\$12.25	_____
--TOTAL DIRECT EXPENSES--					\$318.59	
-----Total direct expenses per cwt \$13.27						
FIXED EXPENSES						
Cash rent	-----			\$178.00	\$178.00	_____
Capital recovery (depreciation + interest)						
Harvesting	-----			\$28.08		
Hauling	-----			\$9.79		
Irrigation	-----			\$234.04		
Planting	-----			\$6.99		
Spraying	-----			\$7.18		
Tillage	-----			\$21.24	\$307.32	_____
--TOTAL FIXED EXPENSES--					\$485.32	
-----Total expenses per cwt \$33.5						
RETURNS ABOVE DIRECT EXPENSES					\$137.41	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$347.91	
10 acre-inches of water applied						
300 foot well depth						
\$ 2.7 fuel cost per acre-inch of water applied						
.71 Mcf of natural gas per acre-inch of water applied						
\$ 3.78 per Mcf for cost of natural gas						
7.13 Mcf of fuel used in total						

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Detailed budget page(s)

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Sunflower (oil-type) - Western KS	cwt	\$19.00	24.00	\$456.00	\$456.00	_____
Other						
Govt payments, indemnity payments, etc.						_____
--TOTAL INCOME--					\$456.00	_____
DIRECT EXPENSES						
Irrigation						
	hour		?			_____
Additional labor						
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	hour	\$15.00	0.03	\$0.47		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$15.00	0.02	\$0.26	\$0.74	_____
Crop consulting						

Sunflower-oil_West_Irr	acre	\$7.57	1.00	\$7.57	\$7.57	_____
Crop insurance						

Sunflower-oil_West_Irr	acre	\$23.50	1.00	\$23.50	\$23.50	_____
Custom Operations						
Fertilizer application						
Application of Anhydrous Ammonia	acre	\$18.18	1.00	\$18.18	\$18.18	_____
Diesel						
Harvesting						
Header - Corn_12R-30 with Combine (300-349 hp)	gal	\$3.95	1.42	\$5.63		
Hauling						
Grain Cart Corn_1000 bu with Tractor(200-249hp)CB	gal	\$3.95	0.99	\$3.89		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	gal	\$3.95	0.31	\$1.21		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	gal	\$3.95	0.54	\$2.15		
Tillage						
Chisel Plow-Folding_32' with Tractor(200-249hp)CB	gal	\$3.95	0.67	\$2.64		
Disk Harrow_42' with Tractor(200-249hp)CB	gal	\$3.95	0.54	\$2.14		
Field Cultivate Fld_50' with Tractor(200-249hp)CB	gal	\$3.95	0.35	\$1.37	\$19.03	_____
Fertilizers						
Side-dressed						
Anhydrous	lb	\$0.41	86.00	\$34.83		
with planter						
MAP (11-52-0)	lb	\$0.40	46.00	\$18.40	\$53.23	_____
- - - ACTUAL POUNDS - 76 lb - N, 24 lb - P, 0 lb - K						
Herbicides						
Post-emergence						
Beyond	oz	\$3.86	4.00	\$15.46		
Pre-emergence						
Prowl H2O	oz	\$0.42	48.00	\$20.30		
Spartan Charge	oz	\$2.48	5.00	\$12.42	\$48.18	_____
Insecticides						

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Detailed budget page(s)

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm

Lorsban 4E	oz	\$0.45	24.00	\$10.87		
Warrior 1EC	oz	\$3.51	2.00	\$7.03	\$17.90	_____
Irrigation energy (NG)						
Irrigation						
Well, pump, and gearhead	ac-in	\$2.70	10.00	\$26.96	\$26.96	_____
Irrigation labor						
Irrigation						
Well, pump, and gearhead	hour	\$17.00	0.40	\$6.80	\$6.80	_____
Miscellaneous						

Sunflower-oil_West_Irr	acre	\$12.10	1.00	\$12.10	\$12.10	_____
Operator labor						
Harvesting						
Header - Corn_12R-30 with Combine (300-349 hp)	hour	\$20.00	0.10	\$2.04		
Hauling						
Grain Cart Corn_1000 bu with Tractor(200-249hp)CB	hour	\$20.00	0.10	\$2.04		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	hour	\$20.00	0.04	\$0.75		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$20.00	0.04	\$0.85		
Tillage						
Chisel Plow-Folding_32' with Tractor(200-249hp)CB	hour	\$20.00	0.07	\$1.39		
Disk Harrow_42' with Tractor(200-249hp)CB	hour	\$20.00	0.06	\$1.12		
Field Cultivate Fld_50' with Tractor(200-249hp)CB	hour	\$20.00	0.04	\$0.72	\$8.91	_____
Repair & Maintenance						
Harvesting						
Header - Corn_12R-30 with Combine (300-349 hp)	Hour	\$89.75	0.09	\$7.64		
Hauling						
Grain Cart Corn_1000 bu with Tractor(200-249hp)CB	Hour	\$27.57	0.09	\$2.35		
Irrigation						
	ac-in	?	10.00			
Well, pump, and gearhead	ac-in	\$0.36	10.00	\$3.60		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$77.10	0.03	\$2.42		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$104.79	0.01	\$0.92		
Tillage						
Chisel Plow-Folding_32' with Tractor(200-249hp)CB	Hour	\$33.82	0.06	\$1.95		
Disk Harrow_42' with Tractor(200-249hp)CB	Hour	\$49.24	0.05	\$2.30		
Field Cultivate Fld_50' with Tractor(200-249hp)CB	Hour	\$31.08	0.03	\$0.93	\$22.12	_____
Seeds						

Sunflowers - Oil-Type	1K seeds	\$1.75	23.50	\$41.13	\$41.13	_____
Interest on operating capital						
				8% percent on direct expenses	\$12.25	_____
--TOTAL DIRECT EXPENSES--						
					\$318.59	_____
-----Total direct expenses per cwt					\$13.27	
FIXED EXPENSES						
Cash rent						

All crops_West_irr	acre	\$178.00	1.00	\$178.00	\$178.00	_____

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Detailed budget page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Capital recovery (depreciation + interest)						
Harvesting						
Header - Corn_12R-30 with Combine (300-349 hp)	Hour	\$329.79	0.09	\$28.08		
Hauling						
Grain Cart Corn_1000 bu with Tractor(200-249hp)CB	Hour	\$115.06	0.09	\$9.79		
Irrigation						
Irrigation - Center Pivot	acre	\$89.25	1.00	\$89.25		
Power unit	acre	\$31.29	1.00	\$31.29		
Well, pump, and gearhead	acre	\$113.49	1.00	\$113.49		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$222.52	0.03	\$6.99		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$814.87	0.01	\$7.18		
Tillage						
Chisel Plow-Folding_32' with Tractor(200-249hp)CB	Hour	\$128.54	0.06	\$7.43		
Disk Harrow_42' with Tractor(200-249hp)CB	Hour	\$177.70	0.05	\$8.31		
Field Cultivate Fld_50' with Tractor(200-249hp)CB	Hour	\$184.27	0.03	\$5.50	\$307.32	

--TOTAL FIXED EXPENSES--					\$485.32	
-----Total expenses per cwt \$33.5						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$137.41	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$347.91	

10 acre-inches of water applied
 300 foot well depth
 \$ 2.7 fuel cost per acre-inch of water applied
 .71 Mcf of natural gas per acre-inch of water applied
 \$ 3.78 per Mcf for cost of natural gas
 7.13 Mcf of fuel used in total

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - LOW YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Sunflower (oil-type) - Western KS	cwt	\$19.00	18.00	\$342.00	\$342.00	_____

--TOTAL INCOME--					\$342.00	_____
DIRECT EXPENSES						
Additional labor					\$0.74	_____
Crop consulting					\$7.57	_____
Crop insurance					\$23.50	_____
Custom Operations					\$0.00	_____
Diesel					\$19.03	_____
Fertilizers					\$39.92	_____
Herbicides					\$48.18	_____
Insecticides					\$17.90	_____
Irrigation energy (NG)					\$21.57	_____
Irrigation labor					\$5.44	_____
Miscellaneous					\$12.10	_____
Operator labor					\$8.91	_____
Repair & Maintenance					\$21.40	_____
Seeds					\$30.84	_____
Interest on operating capital		8% percent on direct expenses			\$10.28	_____

--TOTAL DIRECT EXPENSES--					\$267.38	_____
-----Total direct expenses per cwt \$14.85						
FIXED EXPENSES						
Cash rent					\$178.00	_____
Capital recovery (depreciation + interest)					\$307.32	_____

--TOTAL FIXED EXPENSES--					\$485.32	_____
-----Total expenses per cwt \$41.82						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$74.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$410.70	_____

8 acre-inches of water applied
 300 foot well depth
 \$ 2.7 fuel cost per acre-inch of water applied
 .71 Mcf of natural gas per acre-inch of water applied
 \$ 3.78 per Mcf for cost of natural gas
 5.71 Mcf of fuel used in total

2024 Irrigated Oil-Type Sunflowers (Center-Pivot) Cost-Return Budget

-----Western Kansas - HIGH YIELDS

Gregg Ibendahl, Daniel O'Brien, Lucas Haag, Sarah Lancaster, and John Holman

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Sunflower (oil-type) - Western KS	cwt	\$19.00	30.00	\$570.00	\$570.00	_____

--TOTAL INCOME--					\$570.00	_____
DIRECT EXPENSES						
Additional labor					\$0.74	_____
Crop consulting					\$7.57	_____
Crop insurance					\$23.50	_____
Custom Operations					\$0.00	_____
Diesel					\$19.03	_____
Fertilizers					\$66.54	_____
Herbicides					\$48.18	_____
Insecticides					\$17.90	_____
Irrigation energy (NG)					\$32.35	_____
Irrigation labor					\$8.16	_____
Miscellaneous					\$12.10	_____
Operator labor					\$8.91	_____
Repair & Maintenance					\$22.84	_____
Seeds					\$51.41	_____
Interest on operating capital		8% percent on direct expenses			\$12.77	_____

--TOTAL DIRECT EXPENSES--					\$331.99	_____
-----Total direct expenses per cwt \$11.07						
FIXED EXPENSES						
Cash rent					\$178.00	_____
Capital recovery (depreciation + interest)					\$307.32	_____

--TOTAL FIXED EXPENSES--					\$485.32	_____
-----Total expenses per cwt \$27.24						
RETURNS ABOVE DIRECT EXPENSES					\$238.01	=====
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$247.31	

12 acre-inches of water applied
 300 foot well depth
 \$ 2.7 fuel cost per acre-inch of water applied
 .71 Mcf of natural gas per acre-inch of water applied
 \$ 3.78 per Mcf for cost of natural gas
 8.56 Mcf of fuel used in total