

Date: Nov-01-2023

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

TABLE 1. RETURNS OVER DIRECT COSTS

		Prices					
		\$4.59	\$4.84	\$5.10	\$5.35	\$5.60	
	75.0 ll	\$112	\$131	\$150	\$169	\$188	Low yield
Yields	85.0 ll	\$149	\$171	\$192	\$214	\$236	Middle yield
	95.0 ll	\$186	\$210	\$234	\$259	\$283	High yield

TABLE 2. RETURNS OVER TOTAL COSTS

		Prices					
		\$4.59	\$4.84	\$5.10	\$5.35	\$5.60	
	75.0 ll	-\$17	\$2	\$21	\$40	\$59	Low yield
Yields	85.0 ll	\$20	\$42	\$63	\$85	\$107	Middle yield
	95.0 ll	\$57	\$81	\$105	\$130	\$154	High yield

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest Kansas - MIDDLE YIELDS

Budget abstract

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - Southwest KS	bu	\$5.10	85.00	\$433.09	\$433.09	_____

--TOTAL INCOME--					\$433.09	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.89	_____
Crop insurance	-----				\$26.71	_____
Diesel	-----				\$13.17	_____
Fertilizers	-----				\$61.85	_____
Herbicides	-----				\$92.40	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$6.16	_____
Repair & Maintenance	-----				\$13.48	_____
Seeds	-----				\$10.20	_____
Interest on operating capital		8% percent on direct expenses			\$9.26	_____

--TOTAL DIRECT EXPENSES--					\$240.77	
-----Total direct expenses per bu \$2.83						
FIXED EXPENSES						
Cash rent	-----				\$76.50	_____
Capital recovery (depreciation + interest)	-----				\$52.56	_____

--TOTAL FIXED EXPENSES--					\$129.06	
-----Total expenses per bu \$4.35						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$192.32	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$63.26	

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest Kansas - MIDDLE YIELDS

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - Southwest KS	bu	\$5.10	85.00	\$433.09	\$433.09	_____

--TOTAL INCOME--					\$433.09	_____
DIRECT EXPENSES						
Additional labor						
Fertilizer application				\$0.14		
Planting				\$0.49		
Spraying				\$0.26	\$0.89	_____
Crop insurance						
-----				\$26.71	\$26.71	_____
Diesel						
Fertilizer application				\$0.84		
Harvesting				\$5.63		
Hauling				\$3.29		
Planting				\$1.26		
Spraying				\$2.15	\$13.17	_____
Fertilizers						
Nitrogen	lbs	\$0.63	65.00	\$40.69		
Phosphorus	lbs	\$0.64	33.00	\$21.16		
Potassium	lbs	\$0.00	0.00	\$0.00		
Lime	lbs	\$0.00	0.00	\$0.00	\$61.85	_____
Herbicides						
Burndown				\$52.63		
Post-emergence				\$3.29		
Pre-emergence				\$36.49	\$92.40	_____
Miscellaneous						
-----				\$6.65	\$6.65	_____
Operator labor						
Fertilizer application				\$0.44		
Harvesting				\$2.04		
Hauling				\$2.04		
Planting				\$0.79		
Spraying				\$0.85	\$6.16	_____
Repair & Maintenance						
Fertilizer application				\$1.43		
Harvesting				\$6.15		
Hauling				\$2.16		
Planting				\$2.82		
Spraying				\$0.92	\$13.48	_____
Seeds						
-----				\$10.20	\$10.20	_____
Interest on operating capital		8% percent on direct expenses		\$9.26	\$9.26	_____

--TOTAL DIRECT EXPENSES--					\$240.77	_____
-----Total direct expenses per bu \$2.83						
FIXED EXPENSES						
Cash rent						
-----				\$76.50	\$76.50	_____

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest Kansas

----- MIDDLE YIELDS

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Capital recovery (depreciation + interest)						
Fertilizer application	-----			\$3.68		
Harvesting	-----			\$25.37		
Hauling	-----			\$8.35		
Planting	-----			\$7.97		
Spraying	-----			\$7.18	\$52.56	_____
--TOTAL FIXED EXPENSES--					\$129.06	
-----Total expenses per bu \$4.35						
RETURNS ABOVE DIRECT EXPENSES					=====	\$192.32
RETURNS ABOVE TOTAL SPECIFIED EXPENSES						\$63.26

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest Kansas - MIDDLE YIELDS

Detailed budget page(s)

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - Southwest KS	bu	\$5.10	85.00	\$433.09	\$433.09	_____
Other						
Govt payments, indemnity payments, etc.						_____
--TOTAL INCOME--					\$433.09	_____
DIRECT EXPENSES						
Additional labor						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	hour	\$15.00	0.01	\$0.14		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	hour	\$15.00	0.03	\$0.49		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$15.00	0.02	\$0.26	\$0.89	_____
Crop insurance						

Grain Sorghum_SW_Dry	acre	\$26.71	1.00	\$26.71	\$26.71	_____
Diesel						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	gal	\$3.95	0.21	\$0.84		
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	gal	\$3.95	1.42	\$5.63		
Hauling						
Grain Cart Wht/Sor_1000 bu with Tractor(180-199hp)CB	gal	\$3.95	0.83	\$3.29		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	gal	\$3.95	0.32	\$1.26		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	gal	\$3.95	0.54	\$2.15	\$13.17	_____
Fertilizers						
Pre-plant						
MAP (11-52-0)	lb	\$0.40	64.00	\$25.60		
Urea	lb	\$0.29	125.00	\$36.25	\$61.85	_____
- - - ACTUAL POUNDS - 65 lb - N, 33 lb - P, 0 lb - K						
Herbicides						
Burndown						
2,4-D LV Ester	oz	\$0.18	16.00	\$2.89		
Atrazine 4L	pt	\$2.73	2.00	\$5.45		
Dicamba	oz	\$0.69	24.00	\$16.66		
Glyphosate	oz	\$0.43	64.00	\$27.63		
Post-emergence						
Huskie	oz	\$0.82	4.00	\$3.29		
Pre-emergence						
Atrazine 4L	pt	\$2.73	0.87	\$2.37		
Bicep II Magnum	pt	\$5.73	2.10	\$12.04		
Lumax EZ	pt	\$8.18	2.70	\$22.08	\$92.40	_____
Miscellaneous						

Grain Sorghum_SW_Dry	acre	\$6.65	1.00	\$6.65	\$6.65	_____
Operator labor						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	hour	\$20.00	0.02	\$0.44		
Harvesting						

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest Kansas

Detailed budget page(s)

----- MIDDLE YIELDS

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Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Header Wheat/Sorghum_30' Rigid with Combine (300-349	hour	\$20.00	0.10	\$2.04		
Hauling						
Grain Cart Wht/Sor_1000 bu with Tractor(180-199hp)CB	hour	\$20.00	0.10	\$2.04		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	hour	\$20.00	0.04	\$0.79		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	hour	\$20.00	0.04	\$0.85	\$6.16	_____
Repair & Maintenance						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$77.85	0.02	\$1.43		
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	Hour	\$72.27	0.09	\$6.15		
Hauling						
Grain Cart Wht/Sor_1000 bu with Tractor(180-199hp)CB	Hour	\$25.32	0.09	\$2.16		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$86.10	0.03	\$2.82		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$104.79	0.01	\$0.92	\$13.48	_____
Seeds						

Milo - concep treated	lb	\$3.40	3.00	\$10.20	\$10.20	_____
Interest on operating capital						
				8% percent on direct expenses	\$9.26	_____
--TOTAL DIRECT EXPENSES--					\$240.77	
-----Total direct expenses per bu \$2.83						
FIXED EXPENSES						
Cash rent						

All crops_SW_Dry	acre	\$51.00	1.50	\$76.50	\$76.50	_____
Capital recovery (depreciation + interest)						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$200.66	0.02	\$3.68		
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	Hour	\$298.01	0.09	\$25.37		
Hauling						
Grain Cart Wht/Sor_1000 bu with Tractor(180-199hp)CB	Hour	\$98.13	0.09	\$8.35		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$243.59	0.03	\$7.97		
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$814.87	0.01	\$7.18	\$52.56	_____
--TOTAL FIXED EXPENSES--					\$129.06	
-----Total expenses per bu \$4.35						
RETURNS ABOVE DIRECT EXPENSES					\$192.32	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$63.26	

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest K

Budget abstract

----- - LOW YIELDS

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - Southwest KS	bu	\$5.10	75.00	\$382.14	\$382.14	_____

--TOTAL INCOME--					\$382.14	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.89	_____
Crop insurance	-----				\$26.71	_____
Diesel	-----				\$13.17	_____
Fertilizers	-----				\$54.57	_____
Herbicides	-----				\$92.40	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$6.16	_____
Repair & Maintenance	-----				\$13.48	_____
Seeds	-----				\$9.00	_____
Interest on operating capital		8% percent on direct expenses			\$8.92	_____

--TOTAL DIRECT EXPENSES--					\$231.96	
-----Total direct expenses per bu \$3.09						
FIXED EXPENSES						
Cash rent	-----				\$76.50	_____
Capital recovery (depreciation + interest)	-----				\$52.56	_____

--TOTAL FIXED EXPENSES--					\$129.06	
-----Total expenses per bu \$4.81						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$150.18	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$21.12	

2024 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Southwest K

Budget abstract

----- HIGH YIELDS

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

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - Southwest KS	bu	\$5.10	95.00	\$484.04	\$484.04	_____

--TOTAL INCOME--					\$484.04	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.89	_____
Crop insurance	-----				\$26.71	_____
Diesel	-----				\$13.17	_____
Fertilizers	-----				\$69.13	_____
Herbicides	-----				\$92.40	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$6.16	_____
Repair & Maintenance	-----				\$13.48	_____
Seeds	-----				\$11.40	_____
Interest on operating capital	8% percent on direct expenses				\$9.60	_____

--TOTAL DIRECT EXPENSES--					\$249.59	
-----Total direct expenses per bu \$2.63						
FIXED EXPENSES						
Cash rent	-----				\$76.50	_____
Capital recovery (depreciation + interest)	-----				\$52.56	_____

--TOTAL FIXED EXPENSES--					\$129.06	
-----Total expenses per bu \$3.99						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$234.45	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$105.39	