

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					
		\$4.55	\$4.81	\$5.06	\$5.31	\$5.57	
	100.0 lb	\$284	\$309	\$335	\$360	\$385	Low yield
Yields	110.0 lb	\$302	\$330	\$358	\$386	\$414	Middle yield
	120.0 lb	\$358	\$389	\$419	\$450	\$480	High yield

TABLE 2. RETURNS OVER TOTAL COSTS

		Prices					
		\$4.55	\$4.81	\$5.06	\$5.31	\$5.57	
	100.0 lb	\$172	\$198	\$223	\$248	\$273	Low yield
Yields	110.0 lb	\$191	\$218	\$246	\$274	\$302	Middle yield
	120.0 lb	\$247	\$277	\$307	\$338	\$368	High yield

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

----- MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$5.06	110.00	\$556.64	\$556.64	_____

--TOTAL INCOME--					\$556.64	_____
DIRECT EXPENSES						
					\$0.00	_____
Additional labor					\$0.63	_____
Crop insurance					\$14.18	_____
Custom Operations					\$18.18	_____
Diesel					\$15.85	_____
Fertilizers					\$82.95	_____
Herbicides					\$18.92	_____
Miscellaneous					\$7.26	_____
Operator labor					\$7.67	_____
Repair & Maintenance					\$14.04	_____
Seeds					\$11.32	_____
Interest on operating capital		8% percent on direct expenses			\$7.64	_____

--TOTAL DIRECT EXPENSES--					\$198.64	_____
-----Total direct expenses per bu \$1.81						
FIXED EXPENSES						
Cash rent					\$53.00	_____
Capital recovery (depreciation + interest)					\$58.80	_____

--TOTAL FIXED EXPENSES--					\$111.80	_____
-----Total expenses per bu \$2.82						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$358.00	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$246.20	

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

MIDDLE YIELDS

Summary page(s)

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$5.06	110.00	\$556.64	\$556.64	_____
--TOTAL INCOME--					\$556.64	_____
DIRECT EXPENSES						
Post-emergence				\$0.00	\$0.00	_____
Additional labor						
Planting				\$0.47		
Spraying				\$0.16	\$0.63	_____
Crop insurance				\$14.18	\$14.18	_____
Custom Operations						
Fertilizer application				\$18.18	\$18.18	_____
Diesel						
Harvesting				\$5.63		
Hauling				\$3.29		
Planting				\$1.21		
Spraying				\$1.29		
Tillage				\$4.43	\$15.85	_____
Fertilizers						
Pre-plant				\$38.80		
Nitrogen	lbs	\$0.51	98.00	\$49.83		
Phosphorus	lbs	\$0.63	43.00	\$27.11		
Potassium	lbs	\$0.00	0.00	\$0.00		
Lime	lbs	\$0.03	200.00	\$6.00	\$82.95	_____
Herbicides						
Post-emergence				\$7.45		
Pre-emergence				\$11.47	\$18.92	_____
Miscellaneous				\$7.26	\$7.26	_____
Operator labor						
Harvesting				\$2.04		
Hauling				\$2.04		
Planting				\$0.75		
Spraying				\$0.51		
Tillage				\$2.33	\$7.67	_____
Repair & Maintenance						
Harvesting				\$6.15		
Hauling				\$1.88		
Planting				\$2.42		
Spraying				\$0.54		
Tillage				\$3.04	\$14.04	_____
Seeds				\$11.32	\$11.32	_____
Interest on operating capital		8% percent on direct expenses		\$7.64	\$7.64	_____
--TOTAL DIRECT EXPENSES--					\$198.64	_____

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

----- MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
-----Total direct expenses per bu \$1.81						
FIXED EXPENSES						
Cash rent				\$53.00	\$53.00	_____
Capital recovery (depreciation + interest)						
Harvesting				\$25.37		
Hauling				\$7.75		
Planting				\$6.99		
Spraying				\$4.22		
Tillage				\$14.46	\$58.80	_____
--TOTAL FIXED EXPENSES--					\$111.80	
-----Total expenses per bu \$2.82						
RETURNS ABOVE DIRECT EXPENSES					\$358.00	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$246.20	

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

----- MIDDLE YIELDS

Detailed budget page(s)

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$5.06	110.00	\$556.64	\$556.64	_____
Other						
Govt payments, indemnity payments, etc.						_____
--TOTAL INCOME--					\$556.64	_____
DIRECT EXPENSES						
Post-emergence						
		\$0.00	0.00	\$0.00	\$0.00	_____
Additional labor						
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	hour	\$15.00	0.03	\$0.47		
Spraying						
Sprayer 1000gal_100' 300hp with Sprayer 1000gal	hour	\$15.00	0.01	\$0.16	\$0.63	_____
Crop insurance						

Grain Sorghum_SC_Dry	acre	\$14.18	1.00	\$14.18	\$14.18	_____
Custom Operations						
Fertilizer application						
Application of Anhydrous Ammonia	acre	\$18.18	1.00	\$18.18	\$18.18	_____
Diesel						
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	gal	\$3.95	1.42	\$5.63		
Hauling						
Grain Cart Wht/Sor_700 bu with Tractor(180-199hp)CB	gal	\$3.95	0.83	\$3.29		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	gal	\$3.95	0.31	\$1.21		
Spraying						
Sprayer 1000gal_100' 300hp with Sprayer 1000gal	gal	\$3.95	0.33	\$1.29		
Tillage						
Disk Harrow_32' with Tractor(200-249hp)CB	gal	\$3.95	0.71	\$2.81		
Field Cultivate Fld_42' with Tractor(200-249hp)CB	gal	\$3.95	0.41	\$1.63	\$15.85	_____
Fertilizers						
Pre-plant						
Lime	lb	\$0.03	200.00	\$6.00		
MAP (11-52-0)	lb	\$0.40	82.00	\$32.80		
Side-dressed						
Anhydrous	lb	\$0.41	109.00	\$44.15	\$82.95	_____
--- ACTUAL POUNDS - 98 lb - N, 43 lb - P, 0 lb - K						
Herbicides						
Post-emergence						
Atrazine 4L	oz	\$0.17	10.00	\$1.70		
Huskie	oz	\$0.82	7.00	\$5.75		
Pre-emergence						
Bicep II Magnum	oz	\$0.36	32.00	\$11.47	\$18.92	_____
Miscellaneous						

Corn_SC_Dry	acre	\$7.26	1.00	\$7.26	\$7.26	_____
Operator labor						

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

Detailed budget page(s)

----- MIDDLE YIELDS

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Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	hour	\$20.00	0.10	\$2.04		
Hauling						
Grain Cart Wht/Sor_700 bu with Tractor(180-199hp)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 1000gal_100' 300hp with Sprayer 1000gal	hour	\$20.00	0.03	\$0.51		
Tillage						
Disk Harrow_32' with Tractor(200-249hp)CB	hour	\$20.00	0.07	\$1.47		
Field Cultivate Fld_42' with Tractor(200-249hp)CB	hour	\$20.00	0.04	\$0.85	\$7.67	_____
Repair & Maintenance						
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	Hour	\$72.27	0.09	\$6.15		
Hauling						
Grain Cart Wht/Sor_700 bu with Tractor(180-199hp)CB	Hour	\$22.07	0.09	\$1.88		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$77.10	0.03	\$2.42		
Spraying						
Sprayer 1000gal_100' 300hp with Sprayer 1000gal	Hour	\$51.32	0.01	\$0.54		
Tillage						
Disk Harrow_32' with Tractor(200-249hp)CB	Hour	\$32.99	0.06	\$2.02		
Field Cultivate Fld_42' with Tractor(200-249hp)CB	Hour	\$28.65	0.04	\$1.02	\$14.04	_____
Seeds						

Milo - concep treated	lb	\$3.40	3.33	\$11.32	\$11.32	_____
Interest on operating capital						
				8% percent on direct expenses	\$7.64	\$7.64 _____
--TOTAL DIRECT EXPENSES--					\$198.64	
-----Total direct expenses per bu \$1.81						
FIXED EXPENSES						
Cash rent						

All crops_SC_Dry	acre	\$53.00	1.00	\$53.00	\$53.00	_____
Capital recovery (depreciation + interest)						
Harvesting						
Header Wheat/Sorghum_30' Rigid with Combine (300-349	Hour	\$298.01	0.09	\$25.37		
Hauling						
Grain Cart Wht/Sor_700 bu with Tractor(180-199hp)CB	Hour	\$91.12	0.09	\$7.75		
Planting						
Plant - Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$222.52	0.03	\$6.99		
Spraying						
Sprayer 1000gal_100' 300hp with Sprayer 1000gal	Hour	\$399.10	0.01	\$4.22		
Tillage						
Disk Harrow_32' with Tractor(200-249hp)CB	Hour	\$135.99	0.06	\$8.35		
Field Cultivate Fld_42' with Tractor(200-249hp)CB	Hour	\$171.82	0.04	\$6.11	\$58.80	_____
--TOTAL FIXED EXPENSES--					\$111.80	
-----Total expenses per bu \$2.82						
RETURNS ABOVE DIRECT EXPENSES					\$358.00	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$246.20	

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

----- - LOW YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$5.06	100.00	\$506.03	\$506.03	_____

--TOTAL INCOME--					\$506.03	_____
DIRECT EXPENSES						
					\$0.00	_____
Additional labor					\$0.63	_____
Crop insurance					\$14.18	_____
Custom Operations					\$0.00	_____
Diesel					\$15.85	_____
Fertilizers					\$75.95	_____
Herbicides					\$18.92	_____
Miscellaneous					\$7.26	_____
Operator labor					\$7.67	_____
Repair & Maintenance					\$14.04	_____
Seeds					\$10.29	_____
Interest on operating capital		8% percent on direct expenses			\$6.59	_____

--TOTAL DIRECT EXPENSES--					\$171.39	_____
-----Total direct expenses per bu \$1.71						
FIXED EXPENSES						
Cash rent					\$53.00	_____
Capital recovery (depreciation + interest)					\$58.80	_____

--TOTAL FIXED EXPENSES--					\$111.80	_____
-----Total expenses per bu \$2.83						
RETURNS ABOVE DIRECT EXPENSES					=====	
					\$334.64	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES						
					\$222.84	

2024 Grain Sorghum Cost-Return Budget in South Central Kansas

----- - HIGH YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Grain Sorghum - South Central KS	bu	\$5.06	120.00	\$607.24	\$607.24	_____

--TOTAL INCOME--					\$607.24	_____
DIRECT EXPENSES						
					\$0.00	_____
Additional labor	-----				\$0.63	_____
Crop insurance	-----				\$14.18	_____
Custom Operations	-----				\$0.00	_____
Diesel	-----				\$15.85	_____
Fertilizers	-----				\$89.94	_____
Herbicides	-----				\$18.92	_____
Miscellaneous	-----				\$7.26	_____
Operator labor	-----				\$7.67	_____
Repair & Maintenance	-----				\$14.04	_____
Seeds	-----				\$12.35	_____
Interest on operating capital		8% percent on direct expenses		\$7.23	_____	

--TOTAL DIRECT EXPENSES--					\$188.08	
-----Total direct expenses per bu \$1.57						
FIXED EXPENSES						
Cash rent	-----				\$53.00	_____
Capital recovery (depreciation + interest)	-----				\$58.80	_____

--TOTAL FIXED EXPENSES--					\$111.80	
-----Total expenses per bu \$2.5						
					=====	
RETURNS ABOVE DIRECT EXPENSES					\$419.16	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$307.36	