

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					
		\$31.15	\$32.88	\$34.62	\$36.35	\$38.08	
		=====					
Yields	1.8 ll	-\$76	-\$73	-\$70	-\$67	-\$64	Low yield
	2.0 ll	-\$161	-\$157	-\$154	-\$151	-\$147	Middle yield
	2.3 ll	-\$76	-\$72	-\$68	-\$64	-\$60	High yield

TABLE 2. RETURNS OVER TOTAL COSTS

		Prices					
		\$31.15	\$32.88	\$34.62	\$36.35	\$38.08	
		=====					
Yields	1.8 ll	-\$186	-\$183	-\$180	-\$177	-\$174	Low yield
	2.0 ll	-\$271	-\$267	-\$264	-\$260	-\$257	Middle yield
	2.3 ll	-\$186	-\$182	-\$178	-\$174	-\$170	High yield

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - MIDDLE YIELDS

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

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Forage Sorghum Hay - Western KS	ton	\$34.62	2.00	\$69.23	\$69.23	_____

--TOTAL INCOME--					\$69.23	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.76	_____
Custom Operations	-----				\$81.42	_____
Diesel	-----				\$3.18	_____
Fertilizers	-----				\$29.68	_____
Herbicides	-----				\$58.08	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$1.65	_____
Repair & Maintenance	-----				\$4.71	_____
Seeds	-----				\$28.50	_____
Interest on operating capital	8% percent on direct expenses				\$8.58	_____

--TOTAL DIRECT EXPENSES--					\$223.21	
-----Total direct expenses per ton		\$111.6				
FIXED EXPENSES						
Cash rent	-----				\$94.50	_____
Capital recovery (depreciation + interest)	-----				\$15.24	_____

--TOTAL FIXED EXPENSES--					\$109.74	
-----Total expenses per ton		\$166.48				
RETURNS ABOVE DIRECT EXPENSES					=====	
					-\$153.98	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES						
					-\$263.72	

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - MIDDLE YIELDS

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

Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Forage Sorghum Hay - Western KS	ton	\$34.62	2.00	\$69.23	\$69.23	_____
					\$69.23	_____
--TOTAL INCOME--						
DIRECT EXPENSES						
Additional labor						
Fertilizer application				\$0.14		
Planting				\$0.49		
Spraying				\$0.13	\$0.76	_____
Custom Operations						
Hay				\$81.42	\$81.42	_____
Diesel						
Fertilizer application				\$0.84		
Planting				\$1.26		
Spraying				\$1.08	\$3.18	_____
Fertilizers						
Nitrogen	lbs	\$0.62	36.00	\$22.41		
Phosphorus	lbs	\$0.66	11.00	\$7.27		
Potassium	lbs	\$0.00	0.00	\$0.00		
Lime	lbs	\$0.00	0.00	\$0.00	\$29.68	_____
Herbicides						
Burndown				\$58.08	\$58.08	_____
Miscellaneous						
-----				\$6.65	\$6.65	_____
Operator labor						
Fertilizer application				\$0.44		
Planting				\$0.79		
Spraying				\$0.42	\$1.65	_____
Repair & Maintenance						
Fertilizer application				\$1.43		
Planting				\$2.82		
Spraying				\$0.46	\$4.71	_____
Seeds						
-----				\$28.50	\$28.50	_____
Interest on operating capital			8% percent on direct expenses	\$8.58	\$8.58	_____
--TOTAL DIRECT EXPENSES--					\$223.21	_____
-----Total direct expenses per ton \$111.6						
FIXED EXPENSES						
Cash rent						
-----				\$94.50	\$94.50	_____
Capital recovery (depreciation + interest)						
Fertilizer application				\$3.68		
Planting				\$7.97		
Spraying				\$3.59	\$15.24	_____
--TOTAL FIXED EXPENSES--					\$109.74	_____
-----Total expenses per ton \$166.48						

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - MIDDLE YIELDS

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Summary page(s)

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
RETURNS ABOVE DIRECT EXPENSES					=====	-\$153.98
RETURNS ABOVE TOTAL SPECIFIED EXPENSES						-\$263.72

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western 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						
Forage Sorghum Hay - Western KS	ton	\$34.62	2.00	\$69.23	\$69.23	_____
Other						
Govt payments, indemnity payments, etc.						_____
--TOTAL INCOME--					\$69.23	_____
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	0.01	\$0.13	\$0.76	_____
Custom Operations						
Hay						
Baling - Large Round Bales, over 1,500 lb with net	bale	\$18.09	3.67	\$66.38		
Swathing and Conditioning	acre	\$15.03	1.00	\$15.03	\$81.42	_____
Diesel						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	gal	\$3.95	0.21	\$0.84		
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	0.27	\$1.08	\$3.18	_____
Fertilizers						
Pre-plant						
MAP (11-52-0)	lb	\$0.40	22.00	\$8.80		
Urea	lb	\$0.29	72.00	\$20.88	\$29.68	_____
- - - ACTUAL POUNDS - 36 lb - N, 11 lb - P, 0 lb - K						
Herbicides						
Burndown						
2,4-D LV Ester	oz	\$0.18	16.00	\$2.89		
Atrazine 4L	qt	\$5.45	2.00	\$10.90		
Dicamba	oz	\$0.69	24.00	\$16.66		
Glyphosate	oz	\$0.43	64.00	\$27.63	\$58.08	_____
Miscellaneous						

Forage Sorghum Hay_West_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		
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	0.02	\$0.42	\$1.65	_____
Repair & Maintenance						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$77.85	0.02	\$1.43		
Planting						
NT Plant-Folding_24R-30 with Tractor(180-199hp)CB	Hour	\$86.10	0.03	\$2.82		

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - MIDDLE YIELDS

Detailed budget page(s)

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Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
Spraying						
Sprayer 1200+gal_120' 300hp with Sprayer 1200+gal	Hour	\$52.39	0.01	\$0.46	\$4.71	_____
Seeds						

Forage Sorghum	lb	\$1.90	15.00	\$28.50	\$28.50	_____
Interest on operating capital						
				8% percent on direct expenses	\$8.58	_____
--TOTAL DIRECT EXPENSES--						-----
-----Total direct expenses per ton					\$223.21	
						\$111.6
FIXED EXPENSES						
Cash rent						

All crops_West_dry	acre	\$63.00	1.50	\$94.50	\$94.50	_____
Capital recovery (depreciation + interest)						
Fertilizer application						
Nutrient applicator_60 ft with Tractor(200-249hp)CB	Hour	\$200.66	0.02	\$3.68		
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	\$407.44	0.01	\$3.59	\$15.24	_____
--TOTAL FIXED EXPENSES--						-----
-----Total expenses per ton					\$109.74	
RETURNS ABOVE DIRECT EXPENSES						=====
						-\$153.98
RETURNS ABOVE TOTAL SPECIFIED EXPENSES						=====
						-\$263.72

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - LOW YIELDS

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

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Forage Sorghum Hay - Western KS	ton	\$34.62	1.75	\$60.58	\$60.58	_____

--TOTAL INCOME--					\$60.58	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.76	_____
Custom Operations	-----				\$0.00	_____
Diesel	-----				\$3.18	_____
Fertilizers	-----				\$25.97	_____
Herbicides	-----				\$58.08	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$1.65	_____
Repair & Maintenance	-----				\$4.71	_____
Seeds	-----				\$24.94	_____
Interest on operating capital		8% percent on direct expenses			\$5.04	_____

--TOTAL DIRECT EXPENSES--					\$130.97	
-----Total direct expenses per ton \$74.84						
FIXED EXPENSES						
Cash rent	-----				\$94.50	_____
Capital recovery (depreciation + interest)	-----				\$15.24	_____

--TOTAL FIXED EXPENSES--					\$109.74	
-----Total expenses per ton \$137.55						
					=====	
RETURNS ABOVE DIRECT EXPENSES					-\$70.40	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$180.14	

2024 Forage Sorghum Hay Cost-Return Budget (W-H-F)

-----Western Kansas - HIGH YIELDS

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

Budget abstract

Date: Nov-01-2023

item	unit	price	quantity	amount	Sub-total	your farm
INCOME						
Product						
Forage Sorghum Hay - Western KS	ton	\$34.62	2.25	\$77.88	\$77.88	_____

--TOTAL INCOME--					\$77.88	_____
DIRECT EXPENSES						
Additional labor	-----				\$0.76	_____
Custom Operations	-----				\$0.00	_____
Diesel	-----				\$3.18	_____
Fertilizers	-----				\$33.39	_____
Herbicides	-----				\$58.08	_____
Miscellaneous	-----				\$6.65	_____
Operator labor	-----				\$1.65	_____
Repair & Maintenance	-----				\$4.71	_____
Seeds	-----				\$32.06	_____
Interest on operating capital		8% percent on direct expenses			\$5.62	_____

--TOTAL DIRECT EXPENSES--					\$146.10	
-----Total direct expenses per ton					\$64.93	
FIXED EXPENSES						
Cash rent	-----				\$94.50	_____
Capital recovery (depreciation + interest)	-----				\$15.24	_____

--TOTAL FIXED EXPENSES--					\$109.74	
-----Total expenses per ton					\$113.71	
					=====	
RETURNS ABOVE DIRECT EXPENSES					-\$68.22	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					-\$177.96	