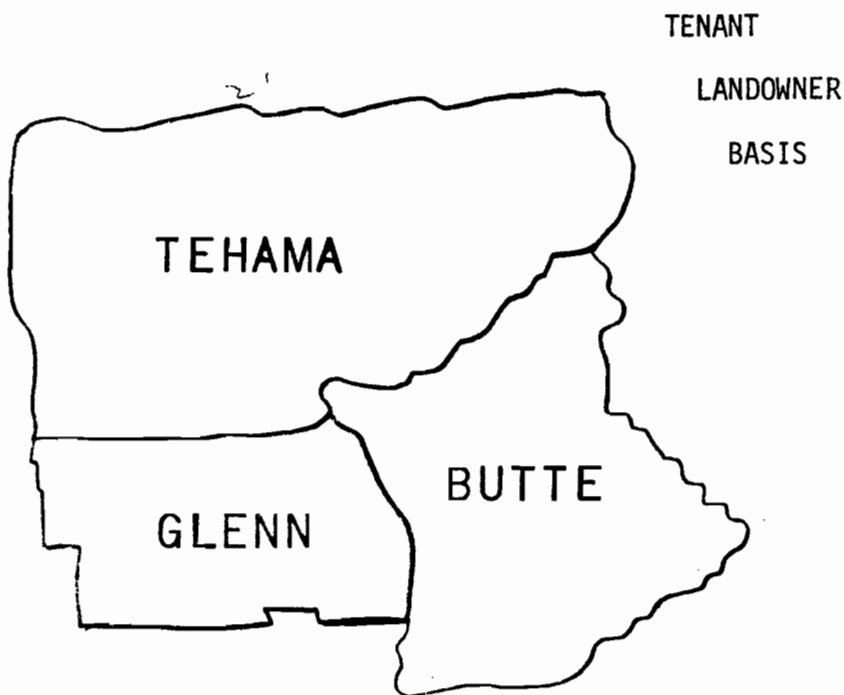


# GRAIN SORGHUM

PA-SV-74-1

## PRODUCTION COSTS

(SINGLE CROP)



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INVESTMENT FOR GRAIN SORGHUM PRODUCTION IN  
BUTTE-GLENN-TEHAMA COUNTIES

Item	Year Bought	Original Cost		Years Life	Annual Use (acres)	Non-Cash Overhead	
		Total	Per Acre			Depre- ciation	Interest at 8%
Crawler Tractor - Diesel 80 HP	1974	\$36,000	\$ 45.00	15	800	\$ 3.00	\$ 1.80
Wheel Tractor - Diesel 100 HP	1974	15,000	18.75	10	800	1.88	.75
Wheel Tractor - Diesel 75 HP	1974	11,000	13.75	10	800	1.38	.55
Stubble Disk - 12'	1974	7,000	17.50	10	400	1.75	.70
Offset Disk - 16'	1974	3,400	4.25	10	800	.43	.17
Field Cultivator - 24 ft.	1974	2,400	3.00	10	800	.30	.12
Adjustable Harrow - 24 ft.	1974	500	.63	15	800	.05	.03
Planter w/sled and incorporator, 6 row	1974	7,500	12.50	7	600	1.79	.50
Saddle Tanks Installed	1974	1,100	1.84	10	600	.18	.08
Rolling Cultivator 6 row	1974	2,600	4.34	15	600	.29	.18
Ditcher - 4 ft.	1974	1,600	2.00	15	800	.14	.08
Stalk Shredder - 14 ft.	1974	2,500	6.25	10	400	.63	.25
Combine (Used) - 16 ft.		8,000	16.00	10	500	1.60	.64
Truck (Used) - 2 ton		5,000	6.25	5	800	1.25	.25
Pickup - 3/4 ton	1974	4,000	5.00	5	800	1.00	.20
Shop Building	1974	5,000	6.25	30	800	.21	.25
Shop Tools	1974	2,000	2.50	15	800	.17	.10
Totals		\$114,600	\$165.81			\$16.05	\$6.65

BASIS OF SINGLE CROP IRRIGATED GRAIN SORGHUM  
(Tenant - Landowner Basis)

1. This cost study is an attempt to outline a basis of sample costs for producing irrigated grain sorghum in the Butte-Glenn-Tehama Counties area. Grain sorghum is a versatile crop as to planting method. The method selected in this sample study is only one example of a planting method and does not imply the method is predominate in the area. Growers using this cost study can follow the suggestions outlined in item 9 below and determine their specific costs based on a specific planting method being used by the individual grower.
2. The cost study is based on a 800 acre field crop operation with 200 acres of grain sorghum. Other crops grown on the ranch may include one or more of the following crops: other grain crops, alfalfa hay, sugar beets, beans, etc. Much of the equipment listed will be used on the entire acreage sometime during the year. This study is on a tenant-landowner basis. It is doubtful if production costs would be any less on a landowner basis since interest on the land and land taxes would be significant.
3. In allocating the equipment cost per acre in the equipment list the following calculations were made: (a) "Original Cost" of equipment is generally estimated new cost. Unless otherwise indicated, the equipment listed is based on the estimated new costs including sales tax. (b) "Original Cost Per Acre" is the new or used cost divided by the number of acres the equipment will be used on. (c) "Depreciation" is based on the "Per Acre Cost" divided by the expected life of the equipment. (d) "Interest" on investment is figured on one-half of the new or used cost per acre multiplied by 8%.
4. ~~Miscellaneous expenses have been found to be about 6% of the total cultural and harvest costs. They include such costs as preparing roadways, general weed control, office, bookkeeping, interest on operating money (6 mo. or less), etc.~~
5. Labor costs are based on a \$3.55 hourly rate for skilled labor and \$2.90 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security and other benefits that the employer must pay.
6. Equipment operating costs are listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, tires, etc. Tractor charges per hour are: 80 HP crawler diesel, \$4.75; 100 HP wheel diesel, \$2.85; and 75 HP wheel diesel, \$2.55.
7. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
8. Some growers may base their decisions as to which crops to grow by comparing cultural and harvest costs for specific crops with estimated gross income from the crops. If feed grain prices remain at current levels grain sorghum may be an attractive rotational cash crop for some growers.
9. There is a column provided entitled "Your Cost Per Acre" which growers can use to insert their individual costs. Growers are encouraged to use this column which in turn should assist them with budget questions as well as evaluate their cost-income relationship with this crop.
10. The table at the bottom of the study indicates how net income will vary at different market prices for grain sorghum with a constant yield of 6,500 cwt. per acre.
11. Eleven grain sorghum growers from the three-county area furnished basic information for this study. Appreciation is expressed to these growers.

SAMPLE COSTS TO PRODUCE GRAIN SORGHUM  
Butte-Glenn-Tehama Counties

Cash and Labor Costs Per Acre							
Operation	Hours Per/A	Labor	Fuel & Repairs	Description of Materials	Total Materials	Total	Your Cost Per Acre
<b>Cultural Costs</b>							
Stubble disk 2X	.50	\$ 1.78	\$ 4.26			\$ 6.04	
Disk, offset 1X	.16	.57	1.01			1.58	
Landplane 2X (every other year)	.50	1.78	2.38	Rental @ \$.50/acre	\$ .50	4.66	
Fertilize	.25	.89	1.19	\$.50/A rental + 160 lbs. N/A @ .15/lb. N	24.50	26.58	
Make beds & starter fertilizer	.20	.71	.57	N-P mix 150 lbs./A @ \$7.10 cwt.	10.65	11.93	
Plant, incorporate herbicide (banded)	.50	1.78	4.01	Seed 10 lbs. @ 35¢ (\$3.50) & herbicide (\$4.50)	8.00	13.79	
Rolling or sled							
Cultivate	.15	.53	.54			1.07	
Irrigate	1.00	2.90		8 acre-inch	2.25	5.15	
Crop Irrigations 6X	4.80	13.92		2 1/3 ac-ft	7.75	21.67	
Insecticide (by air)				Insecticide & Application	4.20	4.20	
Ditch preparation (season)	.20	.71	1.13			1.84	
<b>TOTAL</b>	<b>8.26</b>	<b>\$25.57</b>	<b>\$15.09</b>		<b>\$57.85</b>	<b>\$98.51</b>	
<b>Harvest Costs</b>							
Combine (roadside)	.50	\$ 1.78	\$ 4.88			\$ 6.66	
Shred stalks	.33	1.18	1.27			2.45	
<b>TOTAL HARVEST</b>						<b>\$ 9.11</b>	
<b>Cash Overhead</b>							
Misc., office, etc.						\$ 6.48	
Taxes & Insurance						3.65	
Rent 25% of 6,500 cwt. @ \$4.00 cwt.						65.00	
<b>TOTAL CASH OVERHEAD</b>						<b>\$75.13</b>	
Management 5% of 6,500 cwt. @ \$4.00 cwt.						\$13.00	
<b>Annual Costs</b>							
<u>INVESTMENT</u>		<u>Per Acre</u>		<u>Depreciation</u>	<u>Interest</u>		
Equipment & Bldgs.		\$166.00		\$16.05	\$6.65	\$22.70	
<b>TOTAL COST PER ACRE</b>						<b>\$218.45</b>	
Cost per cwt @ 6,500 cwt. yield						\$ 3.36	

Net Per Acre At 6,500 Cwt./A and Varying Sorghum Prices

Sorghum Price/Cwt.	\$ 3.00	\$ 3.50	\$ 4.00	\$ 4.50	\$ 5.00	5.50
Income/Acre	- \$ 4.00	+ \$19.00	+ \$42.00	+ \$64.00	+ \$87.00	+ \$110.00

**Farm Advisors  
Glenn County  
January 1974  
325 copies**

UC Cooperative Extension