

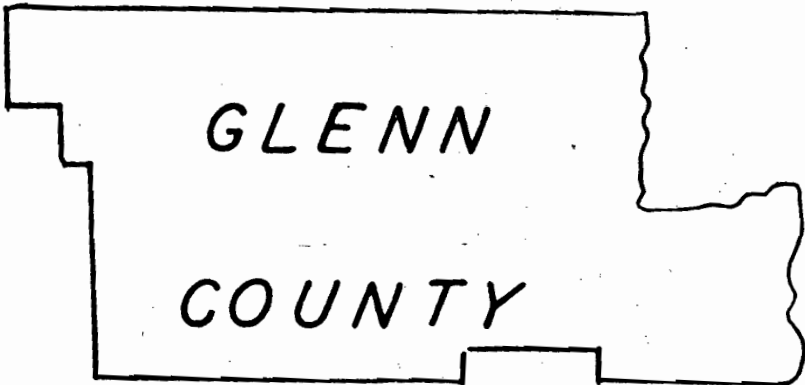
# GRAIN SORGHUM

## PRODUCTION COSTS

(SINGLE CROP)

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University of California  
Agricultural Extension Service  
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UC Cooperative Extension

SAMPLE COSTS TO PRODUCE SINGLE CROP GRAIN SORGHUM IN GLENN COUNTY

YIELD: 6,500 cwt. . . . . YEAR: 1969

		Cash and labor cost per acre																																																					
Operation	Hours Per Acre	Labor	Fuel & Repair	Description of Materials	Total Materials	Total	Your Cost Per Acre																																																
<b>Cultural Costs</b>																																																							
Plow 1x or stubble disk 2x	.50	\$1.25	\$1.76			\$3.01																																																	
Disk - offset 1x	.25	.63	.98			1.61																																																	
Landplane 2x (every other year)	.30	.75	.71	.50/ac. rental	\$ .50	1.96																																																	
Fertilize	.25	.63	.59	150. N @ 7¢ + 50¢ rig rental	11.00	12.22																																																	
Prepare & Fill in borders	.20	.50	.33			.83																																																	
Pre-Irrigate	.33	.75		5 ac-in at \$2.40/ac-ft	1.20	1.95																																																	
Spring tooth & spiketooth (2x)	.40	1.00	1.54			2.54																																																	
Drill	.25	.63	.55	Seed 12 lbs. @ 25¢	3.00	4.18																																																	
Narrow or Roll	.10	.25	.17			.42																																																	
Weed Control (1/2 of acreage)				Contract - material and application	5.15	5.15																																																	
Insect Control				Contract - material and application	5.00	5.00																																																	
Irrigate 6x	1.50	3.38		2½ ac-ft @ \$2.40/ac-ft	6.00	9.38																																																	
<b>TOTAL CULTURAL COSTS</b>	<b>4.08</b>	<b>\$9.77</b>	<b>\$6.63</b>		<b>\$31.85</b>	<b>\$48.25</b>																																																	
<b>Harvest Costs</b>																																																							
Combine	.50	1.25	2.50	(Roadside delivery)		3.75																																																	
Shred stubble	.50	1.25	.95			2.20																																																	
<b>TOTAL HARVEST COSTS</b>	<b>1.00</b>	<b>\$2.50</b>	<b>\$3.45</b>			<b>\$5.95</b>																																																	
<b>Cash Overhead</b>																																																							
Misc., office, etc.						\$ 2.71																																																	
Taxes & Insurance						\$11.04																																																	
<b>TOTAL CASH OVERHEAD</b>						<b>\$13.75</b>																																																	
<b>TOTAL CASH COSTS</b>						<b>\$67.95</b>																																																	
Management 5% of 6,500 @ \$2.00 cwt.						\$ 6.50																																																	
<table border="0" style="width:100%"> <tr> <td></td> <td></td> <td align="center" colspan="2"><u>Annual Cost</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>INVESTMENT</u></td> <td><u>Per Acre</u></td> <td></td> <td><u>Depreciation</u></td> <td><u>Interest</u></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Land</td> <td>\$500.00</td> <td></td> <td></td> <td>\$30.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Irrigation system</td> <td>150.00</td> <td></td> <td>\$ 7.50</td> <td>4.50</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Equipment &amp; Bldg.</td> <td>114.00</td> <td></td> <td>8.30</td> <td>3.50</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>Total</b></td> <td><b>\$764.00</b></td> <td></td> <td><b>\$15.80</b></td> <td><b>\$38.00</b></td> <td></td> <td><b>\$53.80</b></td> <td></td> </tr> </table>										<u>Annual Cost</u>						<u>INVESTMENT</u>	<u>Per Acre</u>		<u>Depreciation</u>	<u>Interest</u>				Land	\$500.00			\$30.00				Irrigation system	150.00		\$ 7.50	4.50				Equipment & Bldg.	114.00		8.30	3.50				<b>Total</b>	<b>\$764.00</b>		<b>\$15.80</b>	<b>\$38.00</b>		<b>\$53.80</b>	
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<b>TOTAL COST PER ACRE</b>						<b>\$128.25</b>																																																	
Cost Per cwt. @ 6,500 yield						\$1.97																																																	
<b>Sample Costs Per CWT at Varying Yields</b>																																																							
Yield - lbs./acre		5,500	6,000	6,500	7,000	7,500	8,000																																																
Cash & Management Cost/cwt.		\$1.34	\$1.23	\$1.14	\$1.07	\$1.01	\$.95																																																
Investment Cost/cwt.		.98	.90	.83	.77	.72	.67																																																
<b>Total Cost/cwt.</b>		<b>\$2.32</b>	<b>\$2.13</b>	<b>\$1.97</b>	<b>\$1.84</b>	<b>\$1.73</b>	<b>\$1.62</b>																																																

## BASIS OF SINGLE CROP IRRIGATED GRAIN SORGHUM

1. The cost study is based on a 640 acre field crop operation with 150 acres of grain sorghum. Other crops grown on the ranch may include one or more of the following crops: seed crops, other grain crops, alfalfa hay, sugar beets, etc. Much of the equipment listed will be used on the entire acreage sometime during the year. Irrigation is based on an underground concrete pipe system complete with well, pump, motor, etc.
2. In allocating the equipment cost per acre in the equipment list the following calculations were made: (a) "Original cost" of equipment is the estimated new cost. Except where otherwise designated, the equipment listed is based on the estimated new costs. (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 6%. Land is not considered a depreciable item and interest on it is figured at 6% of the full value.
3. Miscellaneous expenses have been found to be about 5% 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.
4. Labor costs are based on a \$2.50 hourly rate for skilled labor and \$2.25 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security and other benefits that the employer must pay.
5. 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: 60 HP crawler diesel, \$2.35; 50 HP wheel diesel, \$1.40. (Horsepower is based on 75% of maximum)
6. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
7. 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. This cost study should assist in this aspect of decision making as well as relate investment and other fixed costs which are basically fixed regardless of the crop to be grown. While the annual investment costs in this cost study may not independently justify grain sorghum production, growers who produce good to excellent yields of irrigated grain sorghum may find grain sorghum to be an attractive rotational cash crop.
8. 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.
9. "Sample Costs Per Cwt. at Varying Yields," the table at the bottom of the study, shows how good to excellent yields reduce cost of production.
10. Six Glenn County irrigated grain sorghum growers furnished the basic information for this study. Appreciation is expressed to these growers.

INVESTMENT FOR SINGLE CROP GRAIN SORGHUM

Glenn County - February 1969 - Based on 150 acres of Grain Sorghum on a 640 acre farm.

Item	Original Cost		Years Life	Annual Use (acres)	Non-Cash Overhead	
	Total	Per Acre			Depreciation	Interest at 6%
Crawler Tractor 60 HP - Diesel	\$20,000	\$31.25	20	640	\$1.57	\$ .94
Wheel Tractor 50 HP - Diesel	8,850	13.83	15	640	.93	.42
Plow, 4-16 one-way hydraulic	1,670	5.22	15	320	.35	.16
Disk, offset - 15 ft.	2,400	3.75	15	640	.25	.12
Border Disk	325	1.02	15	320	.07	.03
Blade - 3 point	300	.94	15	320	.07	.03
Springtooth - 20 ft.	1,380	2.16	15	640	.15	.07
Spiketooth - 20 ft.	650	1.02	15	640	.07	.04
Adjustable Harrow 20 ft.	400	1.25	15	320	.09	.04
Drill - 12 ft.	2,000	6.25	15	320	.42	.19
Roller - 20 ft.	1,000	3.13	15	320	.21	.10
Combine (Used) 14 ft.	8,000	25.00	10	320	2.50	.75
Stalk Shredder	1,500	4.69	10	320	.47	.15
Truck (Used), 2 ton	1,500	2.35	10	640	.24	.08
Pickup, 1/2 ton	3,000	4.69	8	640	.59	.15
Shop Building	3,000	4.69	30	640	.16	.15
Shop Tools	1,500	2.35	15	640	.16	.08
<b>TOTALS</b>	<b>\$ 57,475</b>	<b>\$113.59</b>			<b>\$8.30</b>	<b>\$3.50</b>

Farm Advisors' Office  
Glenn County  
February 1969  
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