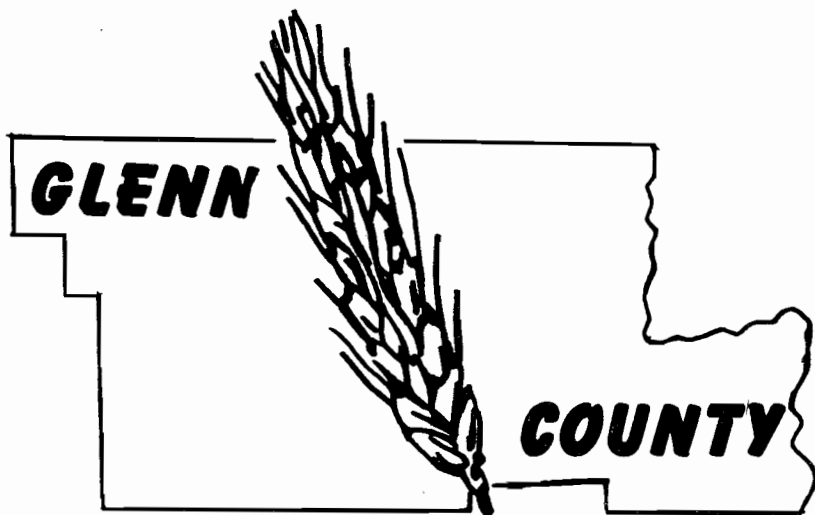


GN-SV-74

IRRIGATED

BARLEY OR WHEAT

PRODUCTION COSTS



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EQUIPMENT AND BUILDING LIST

Item	Original Cost		Years Life	Annual Use (acres)	Non-Cash Overhead	
	Total	Per Acre			Depre- ciation	Interest at 8%
Crawler Tractor, 80-90 HP - Diesel	\$37,000	\$ 37.00	20	1,000	\$ 1.85	\$ 1.48
Wheel Tractor, 90 HP - Diesel	15,000	15.00	15	1,000	1.00	.60
Plow, 4-18 one-way hydraulic	3,500	7.00	15	500	.47	.28
Disk, offset - 15 ft.	6,500	6.50	15	1,000	.43	.26
Border Disk	1,000	2.00	15	500	.14	.08
Blade - 3 point	400	.80	15	500	.06	.03
Spiketooth - 20 ft.	750	.75	15	1,000	.05	.03
Tool Carrier	4,000	4.00	20	1,000	.20	.16
Combine (used) - 14 ft.	10,000	20.00	10	500	2.00	.80
Truck (used) - 2 ton	3,000	3.00	5	1,000	.60	.12
Pickup	5,000	5.00	5	1,000	1.00	.20
Buildings	6,000	6.00	30	1,000	.20	.24
Tools	3,000	3.00	15	1,000	.20	.12
TOTALS	\$95,150	\$110.05			\$ 8.20	\$ 4.40

BASIS OF IRRIGATED BARLEY OR WHEAT COST STUDY

1. The cost study is based on a 1,000 acre field crop operation with 250 acres of irrigated barley or wheat. Other crops grown on the ranch may include one or more of the following crops: seed crops, grain sorghum, field corn, 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 new cost. (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 cost per acre multiplied by 8%. Land is not considered a depreciable item and interest on it is figured at 8% of the full value.
3. Miscellaneous expenses have been found to be about 6% of the total cultural and harvest costs. They include such costs as interest on operating money, use of pickup truck, office, etc.
4. Labor costs are based on a \$4.00 hourly rate for skilled labor and \$3.00 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security and other benefits that the employer might 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: 80-90 HP crawler diesel, \$6.40; 90 HP wheel diesel, \$4.65.
6. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
7. These sample costs to produce irrigated grain may not represent the cost of any one individual grower. However, 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 related investment and other fixed costs which are basically fixed regardless of the crop to be grown.
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 irrigated barley or wheat.
9. Seven Glenn County irrigated grain growers furnished the basic information for this study. Appreciation is expressed to these growers.

SAMPLE COSTS TO PRODUCE IRRIGATED GRAIN
GLENN COUNTY - 1974

Yield - 4,000 lbs./Acre

Operation	Hours Per/A	Cash and Labor Costs Per Acre				Total	Your Cost Per Acre
		Labor	Fuel & Repairs	Description of Materials	Total Materials		
Cultural Costs							
Plow 1x or stubble disk 2x	.50	\$ 2.00	\$ 3.08			\$ 5.08	
Disk, offset 1x	.25	1.00	2.08			3.08	
Fertilize	.12	.48	.77	rig rental @ 75¢/A. 80 lbs. N/A @ 15¢/lb.	\$12.75	14.00	
Harrow	.13	.52	.89			1.41	
Prepare Borders	.10	.40	.53			.93	
Seed				120 lbs. @ \$12.00 cwt. = \$14.40, Airplane \$2.80/A	16.78	16.78	
Harrow Topdress	.13	.52	.89	34 lbs. N/A 25¢/lb. = \$8.50, Airplane \$1.65/A	10.15	10.15	
Weed Control				2,4-D - 10 oz./A = \$1.10, Airplane \$2.50/A	3.60	3.60	
Irrigate	.20	.60		10 ac.-inches @ \$3.25 per ac. ft.	2.71	3.31	
Insurance (on grain)					.80	.80	
Landplaning (1x charged to grain)	.30	1.20	1.92	Landplane rental	1.00	4.12	
Misc. (downtime, service, move equipment, etc.)	.25	1.00	.50			1.50	
TOTAL CULTURAL	1.98	\$ 7.72	\$10.66		\$47.79	\$66.17	
Harvest Costs							
Combine	.50	\$ 2.00	\$ 5.95	roadside deliver 5¢/cwt. field handling	\$ 2.00	\$ 9.95	
TOTAL HARVEST	.50	\$ 2.00	\$ 5.95		\$ 2.00	\$ 9.95	
Cash Overhead							
Misc., office, etc.						\$ 4.57	
Taxes and Insurance						18.61	
TOTAL CASH OVERHEAD						\$23.18	
TOTAL CASH COSTS						\$99.30	
Management 5% of 4,000 lbs. @ \$5.50/cwt.						\$11.00	
Annual Costs							
<u>INVESTMENT</u>		<u>Per Acre</u>		<u>Depreciation</u>		<u>Interest</u>	
Land		\$ 750.00				\$ 60.00	
Irrigation System		250.00		\$ 12.50		10.00	
Equipment		110.00		8.20		4.40	
Total		\$1,110.00		\$ 20.70		\$ 74.40	\$ 95.10
TOTAL COST PER ACRE						\$205.40	
Cost per cwt. @ 4,000 lbs./A yield						\$ 5.14	

NET PER ACRE AT 4,000 LBS./A
AND VARYING GRAIN PRICES

Grain Price/Cwt.	\$ 5.00	\$ 5.50	\$ 6.00	\$ 7.00	\$ 8.00
Income/Acre	-\$ 4.40	+\$14.60	\$33.60	\$71.60	\$109.60

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