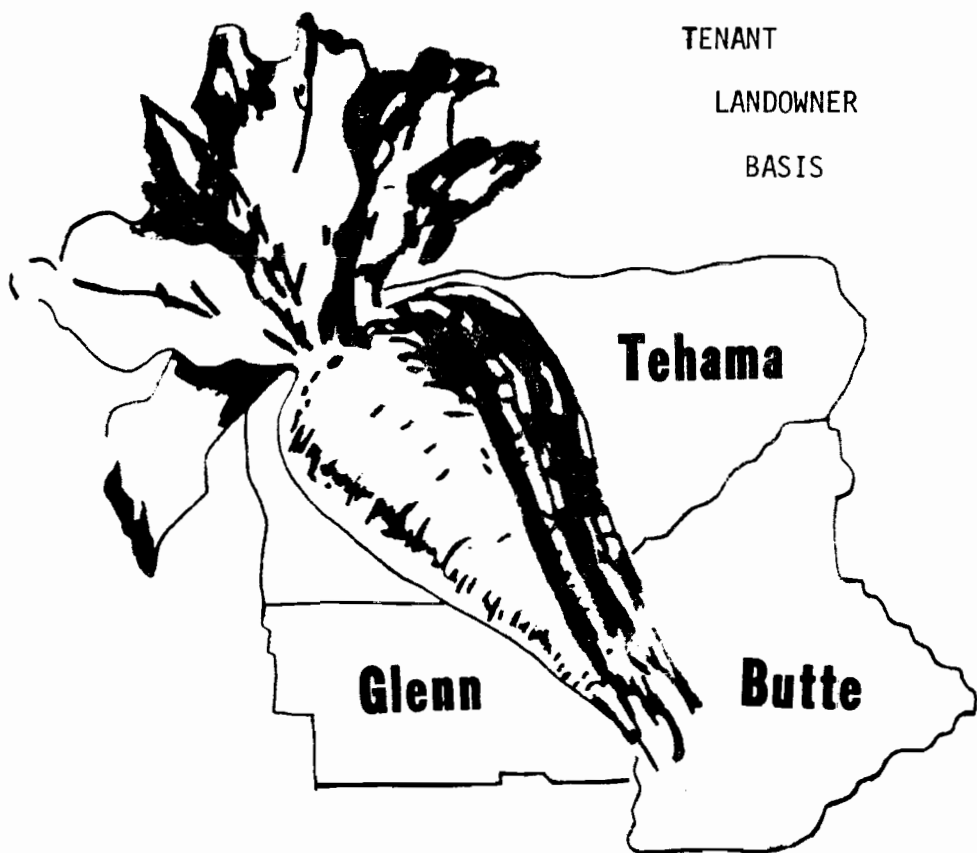


SUGAR BEET

PRODUCTION COSTS



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EQUIPMENT AND BUILDING LIST

Item	Original Cost	Annual Use (Acres)	Cost Per Acre	Life (Years)	Non-Cash Overhead	
					Depre- ciation	Interest at 8%
Tractor, 130-150 HP Tr. Diesel	\$ 63,000	1,500	\$ 42.00	20	\$ 2.10	\$ 1.68
Tr., 180-200 HP, 4 Wh Diesel	55,000	1,500	36.67	15	2.45	1.47
Tractor, 120 HP Wheel Diesel	27,000	1,500	18.00	15	1.20	.72
Tractor, 100 HP Wheel Diesel	22,000	1,500	14.67	15	.98	.59
Plow 4-18 hydraulic 2-way	6,500	750	8.67	15	.58	.35
*(Disk, stubble, 12 ft.)	(12,000)	(750)	(16.00)	(15)	(1.07)	(.64)
*(V Chisel or Ripper)	(3,500)	(750)	(4.67)	(20)	(.23)	(.19)
Disk, offset, 21 ft.	10,500	1,500	7.00	15	.47	.28
*(Chisel [heavy duty] 16 ft.)	(5,000)	(1,500)	(3.33)	(15)	(.22)	(.13)
Sp. tooth or field cult., 32 ft.	4,800	1,500	3.20	15	.21	.13
Spiketooth Adjust. - 30 ft.	1,000	1,500	.67	10	.07	.03
Roller, flat - 15 ft.	2,500	750	3.33	20	.17	.13
Rolling Cultivator - 6-row	4,500	1,000	4.50	10	.45	.18
Planter, w/sled & incorp.- 6-row	12,000	1,000	12.00	10	1.20	.48
Cultivator sled & equipment	4,500	1,000	4.50	10	.45	.18
Wipline - 16 ft.	7,500	1,500	5.00	15	.33	.20
Landplane - 60 ft.	11,000	1,500	7.33	20	.37	.29
Electronic Thinner - 6-row	12,000	250	48.00	10	4.80	1.92
Bedding Tools - 6-row	3,000	1,000	3.00	15	.20	.12
Ditcher - 5 ft.	2,500	1,500	1.67	20	.08	.07
Saddle Tanks (2 sets)	2,500	1,500	1.67	10	.17	.07
Tool Carrier (used)	4,000	1,500	2.67	20	.13	.11
Bait Applicator	1,000	500	2.00	10	.20	.08
Truck (used)	6,000	1,500	4.00	10	.40	.16
Pickup	7,500	1,500	5.00	5	1.00	.20
2 pickups (used)	6,000	1,500	4.00	3	1.33	.16
Siphons	2,500	1,500	1.67	7	.24	.07
Shop Tools	10,000	1,500	6.67	15	.44	.27
Buildings	25,000	1,500	16.67	30	.56	.67
Misc. Equip. (fuel tank, etc.)	6,000	1,500	4.00	15	.27	.16
Total	\$319,800		\$268.56		\$20.85	\$10.77

*Inventoried as needed on this size of operation but not included in totals since these specific pieces of equipment were not used in the cultural sequence selected for this sample study.

SAMPLE COSTS TO PRODUCE SUGAR BEETS
Butte, Glenn & Tehama Counties - January 1977

Operation	Hours Per Acre	Cash and Labor Cost Per Acre			Total	Your Cost Per/A
		Labor	Fuel and Repairs	Materials Kind and Quantity Cost		
Cultural Costs						
Plow	.50	\$ 2.75	\$ 4.23		\$ 6.98	
Disk, Offset (2x)	.30	1.65	3.95		5.60	
Field Cult. & Harrow (2x)	.20	1.10	1.76		2.86	
Landplane (bi-annually 2x)	.25	1.38	2.13		3.51	
Fertilize (Inject)	.15	.83	.64	\$1.50/acre rental, 130 lbs. N/A @\$0.15 = \$21.00	22.47	
Triplane	.20	1.10	1.56		2.66	
List Beds and Preplant Fertilizer	.20	1.10	1.31	17 lbs. N & 50 lbs. P205/A @\$197/T = 20.49	22.90	
Plant & Incorporate Herbicide	.50	2.75	6.90	Herb. banded \$7.41, seed \$5.66 13.07	22.72	
Early post emergence weed spray	.20	1.10	.95	Herbicide banded 9.70	11.75	
Roll Beds	.25	1.38	1.01		2.39	
Electronic Thinning	.50	2.75	2.98		5.73	
Cultivate &/or rolling cultivator (3x)	.75	4.13	3.65		7.78	
Bait for Cutworms	.20	1.10	.83	Insecticide 9.01	10.94	
Layby Herbicide and Incorporate	.50	2.75	3.04	Herbicide 5.72	11.51	
dew and/or Leaf Spot				Airplane \$11.78 Fungicide \$2.41 = 14.19	14.19	
Ditch preparation (season)	.20	1.10	2.21		3.31	
Irrigate (9x) for season	6.30	22.05		Approx. 4 ac.ft./A @ \$5.00 20.00	42.05	
Hand Labor (thinning and/or weeding)		60.00			60.00	
Misc. (i.e., downtime)	1.50	8.25	1.00		9.25	
TOTAL CULTURAL COSTS	12.70	\$117.27	\$38.15	\$113.18	\$268.60	
Harvest Costs						
Dig				Contract, 25 tons/A @ \$1.50 per ton (net tons)	\$ 37.50	
Load and Haul (20 mile haul)				Contract, 26.25 tons/A @ \$1.25 per ton plus non-reimbursed mileage costs (5% Tare)	36.44	
TOTAL HARVEST COSTS					\$ 73.94	
Cash Overhead						
Misc., Office, etc. (\$342.54 x 6%)					\$ 20.55	
Taxes & Insurance (\$3.93 + \$.30)					4.23	
Rent 20% x 25 tons x \$19.00 per ton					95.00	
TOTAL CASH OVERHEAD					\$119.78	
TOTAL CASH COSTS					\$462.32	
Management 5% x 25 tons x \$19.00 per ton					\$ 23.75	
Annual Costs						
INVESTMENT	Per Acre	Depreciation		Interest		
Equip. & Shop Bldg.	\$ 268.56	\$20.85	\$10.77		\$ 31.62	
TOTAL COST PER ACRE					\$517.69	
Cost per ton @ 25 Tons/A yield					\$ 20.71	

BASIS OF SUGAR BEET COST STUDY

1. This cost study is based on a 1,500 acre field crop operation with 250 acres of sugar beets. Other crops grown on the ranch may include one or more of the following crops: grain crops, alfalfa hay, legume seed, grain sorghum, field corn, beans, safflower, rice, etc. Much of the equipment listed will be used on the entire acreage sometime during the year.
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 and includes 6% sales tax; (b) "Cost Per Acre" is the new 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%.
3. Miscellaneous expenses are estimated 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, etc.
4. Labor costs are based on a \$5.50 hourly rate for skilled labor and \$3.50 hourly rate for unskilled (irrigator). Included are cash wages, compensation insurance, Social Security, unemployment insurance 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: 130-150 HP track diesel \$9.85; 180-200 HP 4-wheel drive diesel \$6.00; 120 HP wheel diesel \$4.25; and 100 HP wheel diesel \$3.55.
6. Management (what the grower's decision making is worth) is figured at 5% of the market value of the crop.
7. Every operation in Butte, Glenn and Tehama Counties is not necessarily the same. Therefore, in some cases a specific operation may more nearly reflect a typical situation in one county than in another. However, it is believed that overall operations in the three counties are sufficiently similar to warrant this sugar beet study being presented as a three-county study.
8. Practices such as insecticide and fungicide applications and certain herbicide applications may not always be necessary every year or on the entire acreage every year. However, a reasonably complete pesticide program is included in this study.
9. Percent sucrose and net selling price of sugar determine the per ton return on sugar beets. As these factors vary, changes in returns per ton for sugar beets will change accordingly. For this study a value of \$19.00 per ton is used which reflects strictly an estimate of a proposed 1977 return based on recent or current sugar prices.
10. These sample costs to produce sugar beets in the three-county area designated may not represent the cost of any one individual grower. However, this cost study should serve as a useful guide in reviewing the typical costs and practices in sugar beet production. Growers are encouraged to make use of the column "Your Costs Per/A" provided to permit a comparison of the sample costs in this study with individual grower costs.
11. Grower representation from Glenn, Butte and Tehama Counties participated in furnishing information for compiling the basic information for this study. Appreciation is expressed to these growers.

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NET/A AT 25 TONS/A AND VARYING PRICES/TON FOR SUGAR BEETS

Prices/Ton	\$ 15.00	\$19.00	\$23.00	\$ 27.00	\$ 31.00
Income/A	-\$117.69	-\$42.69	+\$32.31	+\$107.31	+\$182.31

NET/A AT \$19.00/TON OF BEETS AND VARYING TONS/A YIELD

Tons/Acre	22	25	28	31	34
Income/A	-\$76.57	-\$42.69	-\$ 8.81	+\$25.06	+\$58.94

RELATIONSHIP BETWEEN YIELD TONS/A, TOTAL COSTS AND COST/TON

Yield Tons/A	22	25	28	31	34
Total Costs	\$494.57	\$517.69	\$540.81	\$563.94	\$587.06
Cost/Ton	\$ 22.48	\$ 20.71	\$ 19.31	\$ 18.19	\$ 17.27

MANAGEMENT INCOME FROM VARYING YIELDS AT \$19.00/TON

Yield Tons/A	22	25	28	31	34
Cash, Dep., Int., Costs	\$474	\$494	\$514	\$534	\$555
Gross Income	\$418	\$475	\$532	\$589	\$646
Management Income	-\$ 56	-\$ 19	+\$ 18	+\$ 55	+\$ 91

Consult your farm advisor if you have questions regarding this production cost study or sugar beet production.

Farm Advisor's Office
Glenn County

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