

SAMPLE COSTS TO PRODUCE

SPRING HARVESTED SUGAR BEETS



IN

COLUSA COUNTY

SAMPLE COSTS TO PRODUCE SPRING HARVESTED SUGAR BEETS IN COLUSA COUNTY

22 TONS @ 14% @ \$15.30/TON

Operation	Hours Per Acre	Cash and labor cost per acre				Total	Your Cost Per/A
		Labor	Fuel and Repairs	Materials			
				Kind and Quantity	Cost		
<u>Cultural Costs</u>							
<u>Summer & Fall</u>							
Disc 2X	0.34	0.73	1.85			2.58	
Landplane 2X	0.52	1.14	2.30			3.44	
Subsoil 2X	1.00	2.15	4.25			6.40	
<u>Spring & Summer</u>							
Disc	0.17	0.36	0.92			1.28	
Land Cultivator	0.26	0.56	0.83			1.39	
Harrow & Roll 2X	0.25	0.54	0.56			1.10	
List Beds & Fertilize	0.25	0.54	0.60	150 N @ 6.5¢	9.75	10.89	
Plant & Incorporate	0.40	1.29	2.46	Seed	7.00		
Herbicide				Herbicide	15.75	26.50	
Cut & Fill Ditches 3X	0.50	1.07	1.00			2.07	
Irrigate 7-9X	10.00	21.50	0.25	Water 4 ac. ft. @ \$2.50/ac. ft.	10.00	31.75	
Cultivate 2X	0.44	0.95	1.08			2.03	
Thin & Hoe (contract)		25.00				25.00	
Insect Control							
Cutworm (contract)				Applica. @ \$1.40 + Bait @ \$3.60	5.00	5.00	
Green Peach Aphid (contract)				Applica. @ \$1.75 + Spray - \$5.50	7.25	7.25	
Army or Web Worm (contract)				Applica. @ \$1.75 + Spray - \$2.60	4.35	4.35	
Layby Herbicide	0.33	0.72	0.95	Herbicide	5.25	6.92	
Pull Weeds (contract)		15.00				15.00	
Misc. Labor	1.00	2.15	2.50			4.65	
TOTAL CULTURAL COSTS	15.46	73.70	19.55		64.35	157.60	
<u>Harvest Costs</u>							
Top & Dig				Contract @ \$1.25 per ton	27.50	27.50	
Haul				Contract @ \$0.85 plus 1.5¢ per mile per ton	22.00	22.00	
TOTAL HARVEST COST						49.50	
<u>Cash Overhead</u>							
Misc., Office, Etc.				@ 3%		6.35	
Taxes & Insurance (equipment)						2.10	
Rent				@ 20% of Gross		67.32	
Crop Loan Int. @ 8%						12.23	
TOTAL CASH OVERHEAD						88.00	
TOTAL CASH COST						295.10	
Management 5% of 22 tons @ \$15.30 per ton						16.84	
<u>INVESTMENT</u>							
		<u>Per Acre</u>		<u>Annual Cost</u>			
Shop Buildings		6.00		Depreciation	0.20	Interest	0.21
Equipment		157.86		16.41		5.54	
Total		163.86		16.61		5.75	22.36
TOTAL COST PER ACRE							334.30
Cost Per Ton @ 22 tons per acre yield							15.20

NET RETURN IN DOLLARS PER ACRE FOR VARIOUS YIELDS AND SUGAR %
FROM 200 ACRES OF SUGAR BEETS*

Calculated at \$9.00/cwt NSP

Yield Tons/Acre		Sucrose Percent				
		12%	14%	16%	18%	
19	Sugar Return	\$216.60	\$254.03	\$292.22	\$330.60	
	Gov't Payment	31.52	36.56	41.46	46.44	
	Gross Return	248.12	290.59	333.68	377.04	
	Production Costs	200.64	→			
	Harvest Costs	42.75	→			
	Rent & Management	61.75	72.67	83.60	94.52	
	Net Return	-\$ 52.04	-\$ 25.47	+\$ 6.69	+\$ 39.13	
	22	Sugar Return	\$250.80	\$294.14	\$338.36	\$382.80
		Gov't Payment	36.24	42.00	47.74	53.49
		Gross Return	287.04	336.14	386.10	436.29
Production Costs		200.64	→			
Harvest Costs		49.50	→			
Rent & Management		71.50	84.15	96.80	109.45	
Net Return		-\$ 34.60	+\$ 1.85	+\$ 39.16	+\$ 76.70	
25		Sugar Return	\$285.00	\$334.25	\$384.50	\$435.00
		Gov't Payment	40.94	47.48	54.00	60.13
		Gross Return	325.94	381.73	438.50	495.13
	Production Costs	200.64	→			
	Harvest Costs	56.25	→			
	Rent & Management	81.25	95.62	110.00	124.37	
	Net Return	-\$ 12.20	+\$ 29.23	+\$ 71.61	+\$113.87	
	28	Sugar Return	\$319.20	\$374.36	\$430.64	\$487.20
		Gov't Payment	45.64	52.96	59.87	66.71
		Gross Return	364.84	427.32	490.51	553.91
Production Costs		200.64	→			
Harvest Costs		63.00	→			
Rent & Management		91.00	107.10	123.20	139.30	
Net Return		+\$ 10.20	+\$ 56.58	+\$103.67	+\$150.97	

*Only rent, harvest and 5% management charges have been varied to reflect different beet tonnages and sucrose percentages.

BASIS OF SUGAR BEET SAMPLE COST STUDY

1. This cost study is based on a 1,000 acre field and vegetable crop operation with 200 acres of sugar beets. Other crops grown on the farm may include alfalfa hay, beans, grain sorghum, winter cereals, rice, safflower, tomatoes, etc.
2. Appreciation is expressed to all persons who provided information used in this study, especially the growers that helped compile the equipment list and cultural operations.
3. In determining equipment cost per acre the following calculations are included:
 - a) the equipment cost per acre is an estimate of the average costs made for purchases in the last 3 to 4 years or the approximate used cost. New cost of equipment is not used since most growers interviewed had few pieces of new equipment.
 - b) The "per acre annual use cost" is calculated by dividing the estimated equipment cost by the average number of acres upon which the equipment was used each year.
 - c) "Depreciation" is calculated by dividing the "per acre annual use cost" by the expected life of the equipment.
 - d) "Interest" on investment is calculated by multiplying 7% times 1/2 the equipment cost per acre.
4. Equipment operating expense is listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, etc. Tractor horsepower under continuous load is estimated at 75% of maximum.
5. Labor cost is based on a \$2.15 hourly rate for tractor drivers, and a \$1.85 hourly rate for irrigators. Included in the hourly rate are cash wages, Social Security and workmen's compensation.
6. Average figures for contract insecticide applications were used. Contract applications range from \$1.25 to \$1.50 per acre for bait and \$1.50 to \$2.00 for spray.
7. Miscellaneous labor expense includes time to service, repair and move equipment.
8. Miscellaneous overhead expense is based on 3% of the total cultural and harvest costs. These costs include office, bookkeeping, preparing road, general weed control, etc. Interest on crop loan included elsewhere and explained in point 10.
9. Taxes on equipment valued at \$163.86 per acre \times 50% \times 25% = assessed value of \$20.48 \times \$7.25 tax rate = \$1.48 per acre. Insurance on \$100,000 of equipment \times 80% = 80,000 insurance value \times \$0.775 per \$100 \div 1,000 acres = \$0.62 per acre.
10. Interest on crop loan is entered separately for spring harvested beets since most of the cultural costs must be financed over a 10 to 20 month period.
11. Gross returns from sugar beets were based on a \$9.00 per cwt Net Selling Price for sugar and government payments based on 200 acres of sugar beets at the respective yields and sucrose %.
12. Overwintering usually increases sugar beet yields several tons per acre. This increase can be largely offset by the restricted number of crops that can be grown after late spring harvested beets. Spring harvest generally continues from March through May and sometimes into June.

EQUIPMENT AND BUILDING LIST

Item	Equipment Cost	Annual Use (acres)	Cost Per Acre	Life (yrs.)	Depreciation	At 7% Interest
Shop Building	6,000	1,000	6.00	30	0.20	0.21
Shop Tools	3,300	1,000	3.30	6	0.55	0.12
Tracklayer Diesel 86 hp	22,000	1,000	22.00	15	1.46	0.77
Tracklayer Diesel 60 hp	8,000	1,000	8.00	10	0.80	0.28
Wheel Engine Diesel 100 hp	12,500	1,000	12.50	10	1.25	0.44
Wheel Engine Diesel 70 hp	7,000	700	10.00	10	1.00	0.35
Wheel Engine Gas 50 hp	3,000	700	4.50	10	0.45	0.17
Disk 18'	3,600	1,000	3.60	10	0.36	0.13
Stubble Disk 10'	6,600	300	22.00	10	2.20	0.77
Subsoiler 10'	2,100	400	5.25	10	0.52	0.18
Land Cultivator 20'	1,800	600	3.00	10	0.30	0.10
Landplane 12' x 60'	4,500	500	9.00	10	0.90	0.32
Swede Harrow 20'	500	500	1.00	10	0.10	0.04
Spike Harrow 30'	980	500	1.96	20	0.10	0.07
Roller 20'	2,100	700	3.00	20	0.15	0.10
Lister	700	700	1.00	10	0.10	0.04
Ditcher and Grader	1,800	1,400	2.57	10	0.26	0.09
Planter Sled 4 row	5,000	200	25.00	7	3.57	0.87
2 Cultivator Sleds 4 row	2,800	1,000	5.60	10	0.56	0.20
Rolling Cultivator 4 row	1,700	400	4.25	10	0.42	0.15
Siphons and Canvas	1,100	1,400	1.57	10	0.16	0.05
Sprayer	1,250	1,000	1.25	10	0.12	0.04
Fuel Wagon	700	500	1.40	20	0.07	0.05
Tool Carrier 30'	2,100	1,000	2.10	10	0.21	0.07
Pickup 1/2 Ton	3,300	1,000	3.30	5	0.66	0.11
Pickup 1/2 Ton	500	700	0.71	5	0.14	0.03
TOTAL			163.86		16.61	5.75

The Sample Cost To Produce Spring Harvested Sugar Beets in Colusa County is basically adapted from information furnished by growers. The production costs and data used are not intended to represent any specific farm or the average for Colusa County

Sample costs of production are prepared to help growers analyze the crops that best fit their farm's resources and to budget for cash operating expenses.

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