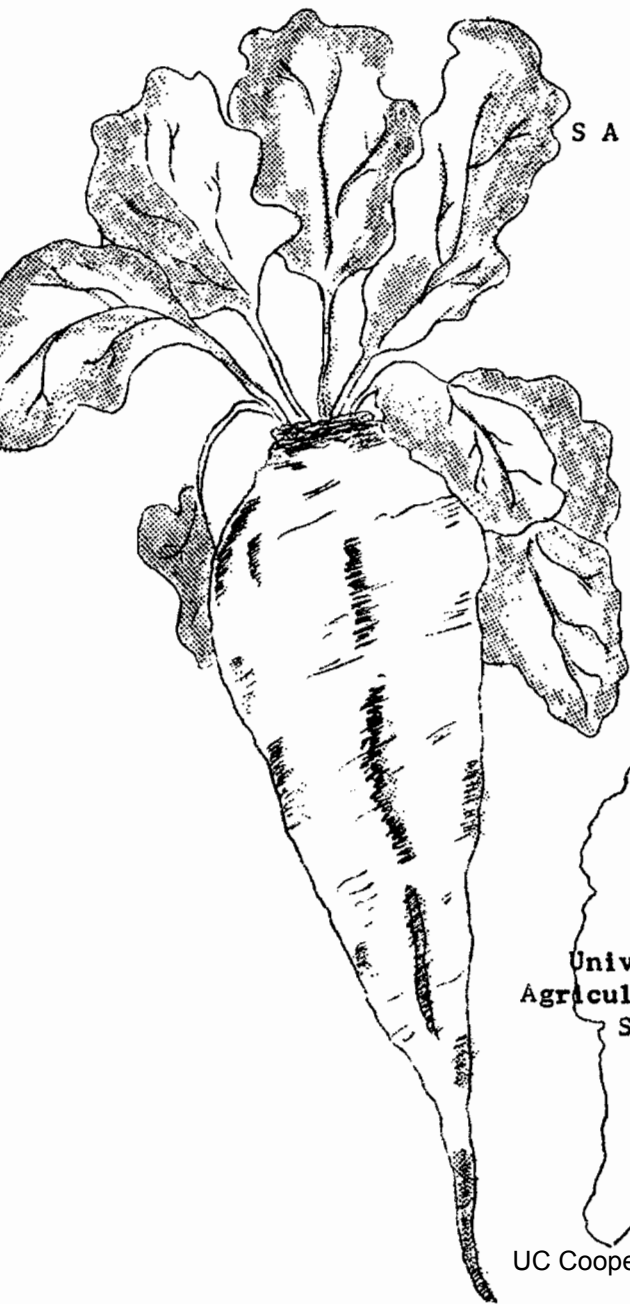


SG-VN-66



SAMPLE COSTS  
TO GROW  
SUGAR  
BEETS  
IN  
SAN JOAQUIN  
COUNTY

University of California  
Agricultural Extension Service  
San Joaquin County

UC Cooperative Extension

SAMPLE COST TO PRODUCE SUGAR BEETS  
IN SAN JOAQUIN COUNTY

YIELD 23 TONS

Operation	Hours Per Acre	Cash and Labor Cost Per Acre			Total
		Labor	Fuel & Repairs	Kind and Quantity Cost	
		See Item #4	See Item #5		
<b>Cultural Costs:</b>					
Plow	.5	.97	1.23		2.20
Disc 2x	.5	.97	1.25		2.22
Landplane 2x	.5	.97	1.25		2.22
Chisel & Harrow	.33	.62	.49		1.11
Furrow & Fertilize				Contract applied \$3.00 + 200# 8-24-0 @ 82/T. 11.20	11.20
Plant	.4	.77	.62	Seed 5# @ 85¢ 4.25	5.64
Weed Control	.5	.97	1.25	Herbicide Chemical 16.00	18.22
Side Dress Fertilizer	-	-	-	Contract applied 2.00 + 100# of Nitrogen @ .10/lb. = \$10.00 12.00	12.00
Cultivate 5x	2.5	4.83	3.70		8.53
Thin & Hoe	16.00	26.40	-		26.40
Irrigate 7x	7.00	12.32		Water, 5 acre ft. @ \$3.75 18.75	31.07
Open & Close ditches	1.00	1.93	2.15		4.08
Miscellaneous	1.00	1.80	2.40	See Item #3	4.20
<b>TOTAL CULTURAL COSTS</b>		<b>52.55</b>	<b>14.34</b>		<b>62.20</b>
<b>Harvest Costs:</b>					
Dig				23 Ton @ \$1.50 34.50	34.50
Haul				23 Ton @ \$1.20 27.60	27.60
<b>TOTAL HARVEST COSTS</b>					<b>62.10</b>
<b>Cash Overhead:</b>					
Miscellaneous, Office, etc.				5.15	5.15
Taxes (Equipment)				.90	.90
Rent				20% of 23 Tons @ 13.50 62.10	62.10
<b>TOTAL CASH OVERHEAD</b>					<b>68.15</b>

TOTAL CASH COST	\$52.55	\$14.34	192.45	259.34
MANAGEMENT 5% of 23 Tons @ \$13.50		See Item #6		15.53
		<u>Annual Cost</u>		
<u>Investment in Equipment</u>	<u>Per Acre</u>	<u>Depreciation</u>	<u>Interest</u>	<u>Total</u>
Total Investment	160.64	17.71	4.84	22.55
TOTAL COST PER ACRE				297.42
Cost Per Ton @ 23 Ton Yield				12.93

GROWER RETURN UNDER VARIOUS YIELDS AND PRICES

FOR SUGAR BEETS

Price Per Ton

Yield Tons/Acre		10	12	13.50	15.00
18	GROSS RETURN	180.00	216.00	243.00	270.00
	Cost	<u>251.30</u>	<u>260.30</u>	<u>267.05</u>	<u>273.80</u>
	Net Return	-71.30	-44.30	-24.05	+ 3.80
20	GROSS RETURN	200.00	240.00	270.00	300.00
	Cost	<u>261.70</u>	<u>271.70</u>	<u>279.20</u>	<u>286.70</u>
	Net Return	-61.70	-31.70	- 9.20	+13.30
25	GROSS RETURN	250.00	300.00	337.50	375.00
	Cost	<u>287.70</u>	<u>300.20</u>	<u>310.57</u>	<u>318.95</u>
	Net Return	-37.70	- 0.20	+26.93	+56.05
30	GROSS RETURN	300.00	360.00	405.00	450.00
	Cost	<u>313.70</u>	<u>328.70</u>	<u>339.95</u>	<u>351.20</u>
	Net Return	-13.70	+31.30	+65.05	+98.80
35	GROSS RETURN	350.00	420.00	472.50	525.00
	Cost	<u>339.70</u>	<u>357.20</u>	<u>370.32</u>	<u>383.45</u>
	Net Return	+10.30	+62.80	+102.18	+141.55

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

## COMMENTS ON SAMPLE OF SUGAR BEET PRODUCTION COSTS

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1. The cost study is based on an operation of 600 acres of which 400 acres are in row crops such as tomatoes, sugar beets, milo, and other vegetables, and the equipment needed in such an operation .
2. In allocating equipment cost per acre in the equipment list, the following calculations were made: (a) "New cost of equipment" is the actual new cost. (b) A per acre annual use is the new cost divided by the number of acres the equipment will be used on. (c) "Depreciation" is based on the "per acre annual use" divided by the expected life of the equipment. (d) "Interest" on investment is figured on 1/2 the new cost per acre multiplied by 6%.
3. Miscellaneous expenses have been found to be about 5% of the total cultural and harvest costs. They include operations and such expenses as preparing roadways, weed control, etc., as shown as miscellaneous under cultural costs, (\$1.80 labor, \$2.40 equipment) and office, book-keeping, interest on operating money, and similar costs shown as miscellaneous under cash overhead (\$5.15). These two items are 5% of total cultural and total harvest costs.
4. Labor costs are based on the following hourly rates and include cash wages, compensation insurance, social security and other benefits, which the grower must pay.  
(1) Tractor driver - \$1.93 (2) Irrigator - \$1.76 (3) Common - \$1.65
5. Equipment operating costs are listed under fuel and repair. This figure includes cost of fuel, maintenance, replacement parts, tires, etc., of tractors and equipment. Tractor charges are: 75 H.P. crawler diesel - \$2.00 per hr.: 50 H.P. wheel-gas - \$1.20; 65 H.P. wheel diesel - \$1.40.
6. Management (what the growers' decision making is worth) is figured at 5% of the market value of the crop. 5% of 23 tons x 13.50 = 15.53.
7. Other costs can occur in beet production such as the need to replant, need to treat for cutworms, red spider or army worm control, additional irrigations, higher wage rates, etc.
8. Planting dates are influenced by green peach aphid population and beets infected by virus yellows. Harvest dates and schedules will vary with sugar beet processing plant schedules. A large percentage of San Joaquin County sugar beets are overwintered.

EQUIPMENT LIST

Item	Original Cost		Years Life	Annual Use (Acres)	Non-Cash Overhead	
	Total	Per Acre Annual use			Depre- ciation	Interest at 6%
1 Crawler tractor 75 H.P. - D	22,000	44.00	10	500	4.40	1.32
1 Wheel tractor 65 H.P. - D	7,000	17.50	10	400	1.75	.53
2 Wheel tractors 40 H.P. - G	9,000	22.50	10	400	2.25	.68
3 Cultivators+tool bars & seeders	4,000	10.00	10	400	1.00	.30
1 Planter-culti- vator sled	3,000	10.00	10	300	1.00	.30
1 Landplane	3,600	9.00	10	400	.90	.27
2 Discs - 12 Feet	2,800	5.60	10	500	.56	.17
1 Chisel	800	2.00	10	400	.20	.06
2 Harrows	300	.75	10	400	.08	.02
1 Subsoiler	1,400	4.67	10	300	.48	.14
Siphons	600	1.20	10	500	.12	.04
1 Flat bed trailer	2,000	5.00	10	400	.50	.15
1 Ditcher	400	1.00	10	400	.10	.03
1 Tool carrier	1,500	3.00	10	500	.30	.09
1 Plow - 4 bottom 16 inch	900	4.50	10	200	.45	.14
1 Sprayer (ground- rig)	800	2.67	10	300	.27	.08
1 Truck - 1½ Ton	4,500	11.25	6	400	1.88	.34
1 Pickup	2,400	4.00	5	600	.80	.12
1 Pickup	1,200	2.00	3	600	.67	.06
<b>TOTALS</b>	<b>68,200</b>	<b>160.64</b>			<b>17.71</b>	<b>4.84</b>

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