



**COST & RETURNS SUMMARY FOR SUGAR BEETS**  
**SAMPLE COSTS TO PRODUCE SUGAR BEETS** BY W. SEYMAN  
 SANTA CLARA COUNTY 1980 D. DOUGLAS  
 YIELD: 31 TONS PER ACRE

\*\*\* TEMPORARY BUDGET \*\*\*

*Sugar beets #202*

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
<b>1. GROSS RECEIPTS FROM PRODUCTION:</b>					
SUGAR BEETS	TON	50.000	31.000	1550.00	
<b>TOTAL RECEIPTS:</b>				1550.00	
<b>2. VARIABLE COSTS:</b>					
<b>PREHARVEST:</b>					
CUSTOM LIST	ACRE	7.750	1.000	7.75	
PRE-MERGE HERB	LBS.	13.000	2.500	32.50	
HERBICIDE APP	ACRE	7.500	2.000	15.00	
PRE-PLANT FERT.	LBS.	0.126	400.000	50.40	
FERTILIZER APP	ACRE	7.750	1.000	7.75	
RAW SEED	LBS.	3.400	1.500	5.10	
HERBICIDE	ACRE	11.950	1.000	11.95	
MILDEW CTL.	LBS.	0.110	5.000	0.55	
AERIAL SPRAYING	ACRE	12.500	1.000	12.50	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			60.68	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			13.99	
MACHINERY LABOR	HOUR	3.900	7.575	29.54	
IRRIGATION LABOR	HOUR	3.900	24.000	93.60	
INTEREST ON OPERATING CAP.	DOL.	0.14000	229.921	31.57	
<b>TOTAL PREHARVEST COSTS:</b>				372.88	
<b>PREHARVEST COST PER TON</b>				12.0284	
<b>HARVEST:</b>					
HARVEST & HAUL	TON	4.900	31.000	151.90	
<b>TOTAL HARVEST COSTS:</b>				151.90	
<b>HARVEST COST PER TON</b>				4.9000	
<b>TOTAL VARIABLE COSTS:</b>				524.78	
<b>VARIABLE COST PER TON</b>				16.9284	
<b>3. INCOME ABOVE VARIABLE COSTS:</b>					
<b>INCOME PER TON</b>				1025.22	
<b>4. OVERHEAD:</b>					
PERSONAL PROPERTY TAXES:				9.77	
CASH RENT:				300.00	
<b>TOTAL OVERHEAD:</b>				309.77	
<b>OVERHEAD COST PER TON</b>				9.9926	
<b>TOTAL CASH COSTS:</b>				834.55	
<b>TOTAL CASH COST PER TON</b>				26.9210	
<b>5. INCOME ABOVE ALL CASH COSTS:</b>					
<b>INCOME PER TON</b>				715.45	
<b>6. OWNERSHIP COSTS:</b>					
<b>DEPRECIATION:</b>					
MACHINERY & EQUIPMENT	ACRE			25.23	
<b>TOTAL DEPRECIATION:</b>				25.73	
<b>CAPITAL &amp; INTEREST:</b>					
MACHINERY & EQUIPMENT		0.14000	254.896	35.69	
<b>TOTAL INTEREST CHARGE:</b>				35.69	
<b>TOTAL FIXED COSTS:</b>				61.41	
<b>FIXED COST PER TON</b>				1.9811	
<b>7. TOTAL OF ABOVE COSTS:</b>					
<b>TOTAL COST PER TON</b>				895.97	
<b>8. NET RETURNS:</b>					
<b>NET RETURNS PER TON</b>				654.03	
<b>NET RETURNS PER TON</b>					
<b>NET RETURNS PER TON</b>					

BASED ON 100 ACRES SUGAR BEETS ON 640 ACRE FARM  
 HANDROVE SPRINKLER IRRIGATION: 28.5 ACIN PER YEAR  
 CASH RENT BASIS IF COATED SEED USED: 4 LBS @ \$1.77  
 DATE PRINTED: 02/13/81 HARVEST MONTH: 10

*updated 2/5/81*  
 BUDGET RECORD NUMBER 282

CASH FLOW & INVESTMENT SUMMARY FOR SUGAR BEETS

\*\*\* TEMPORARY BUDGET \*\*\*

BUDGET RECORD NUMBER 282

SAMPLE COSTS TO PRODUCE SUGAR BEETS BY W. SEYMAN  
 SANTA CLARA COUNTY 1980 D. DOUGLAS  
 YIELD: 31 TONS PER ACRE

CATEGORY	UNIT	MONTHLY SUMMARY OF RECEIPTS AND EXPENSES												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
TOTAL RECEIPTS	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1550.00	0.00	0.00	1550.00
<b>OPERATING EXPENSES</b>															
CUSTOM LIST	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.75	7.75
PRE-MERGE HERB	\$/AC	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.50
HERBICIDE APP	\$/AC	7.50	0.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00
PRE-PLANT FERT.	\$/AC	50.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.40
FERTILIZER APP	\$/AC	7.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.75
RAW SEED	\$/AC	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
HERBICIDE	\$/AC	0.00	0.00	11.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.95
MILDEW CTL.	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.55
AERIAL SPRAYING	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	12.50
HARVEST & HAUL	\$/AC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	151.90	0.00	0.00	0.00	151.90
MACHINE LABOR COST	\$/AC	3.83	0.00	0.97	0.97	0.00	0.00	0.00	0.00	0.00	1.05	21.81	0.90	0.00	29.54
INTEREST ON OPER. CAP.	\$/AC	11.85	0.00	1.76	0.99	1.33	1.72	1.71	0.85	0.00	0.00	10.16	1.21	0.00	1.57
TRACTOR COST	\$/AC	5.42	0.00	1.37	1.37	0.00	0.00	0.00	0.00	0.00	3.29	47.95	1.27	0.00	60.68
EQUIPMENT COST	\$/AC	2.21	0.00	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.54	9.85	0.55	0.00	13.99
IRRIG LABOR COST	\$/AC	0.00	0.00	0.00	7.80	15.60	23.40	23.40	23.40	0.00	0.00	0.00	0.00	0.00	93.60
TOTAL EXPENSES	\$/AC	126.56	0.00	23.98	15.56	24.95	40.16	53.21	39.29	0.00	156.79	89.77	11.68	524.78	

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
MACHINE LABOR	HR/AC	0.98	0.00	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.27	5.59	0.23	7.58
IRRIGATION LABOR	HR/AC	0.00	0.00	0.00	2.00	4.00	6.00	6.00	6.00	0.00	0.00	0.00	0.00	24.00
IRRIG. WATER APPLIED	ACIN	0.00	0.00	0.00	2.00	4.00	7.50	7.50	7.50	0.00	0.00	0.00	0.00	28.50

MACHINERY FIXED AND VARIABLE COSTS PER ACRE														
MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANN HOURS USED	FIXED COST PER ACRE				VARIABLE COST PER ACRE				HRS PER ACRE
						DEPR.	INTER.	TAX & INS	TOTAL	FUEL	LUBE	REPAIRS	TOTAL	
TRACTOR 70HP	4	75.0	17400.	12.	1000.	1.69	2.37	0.61	4.67	5.38	0.81	3.25	9.43	1.556
TRACTOR 150HP	7	150.0	40000.	12.	1000.	2.84	3.98	1.02	7.84	7.86	1.18	5.46	14.49	1.137
TRACTOR 150HP	8	150.0	40000.	12.	1000.	1.84	2.58	0.66	5.08	5.94	0.89	3.54	10.37	0.737
CRAWLER 75HP	11	75.0	49020.	17.	900.	9.25	15.35	4.24	28.84	13.94	2.09	10.36	26.39	3.457
IRR PUMP 75 HP*	22	2.0	0.	25.	3200.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.250
RED SHAPER 6ROW	50	15.0	5190.	15.	100.	1.19	1.52	0.44	3.15	0.00	0.02	1.09	1.11	0.381
CULTIVATOR 6ROW	53	15.0	3960.	15.	140.	0.70	0.89	0.26	1.86	0.00	0.02	0.82	0.83	0.412
DISK OFFSET	60	14.0	4320.	15.	145.	1.20	1.53	0.45	3.18	0.00	0.03	1.60	1.63	0.670
DISK OFFSET	61	14.0	4320.	15.	145.	1.20	1.53	0.45	3.18	0.00	0.03	1.60	1.63	0.670
SPIKE HARROW	73	16.0	2300.	13.	190.	0.20	0.24	0.07	0.51	0.00	0.01	0.32	0.33	0.248
4 WH PLANE 16X60	86	16.0	14520.	9.	280.	1.68	1.58	0.42	3.69	0.00	0.02	0.77	0.79	0.364
RIPPER, 3 SHANK	90	3.5	4000.	10.	320.	3.23	3.24	0.88	7.35	0.00	0.12	6.22	6.35	3.143
PLANTER 6ROW	109	15.0	4140.	15.	135.	0.69	0.88	0.26	1.82	0.00	0.03	1.31	1.33	0.373
SPRINK-FURROW*	131	2.0	0.	20.	5000.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.250
MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE			1892.			25.73	35.69	9.77	71.18	33.11	5.24	36.31	74.67	
TOTAL INVESTMENT			189170.											

BASED ON 100 ACRES SUGAR BEETS ON 640 ACRE FARM  
 HANDMOVE SPRINKLER IRRIGATION: 28.5 ACIN PER YEAR  
 CASH RENT BASIS IF COATED SEED USED: 4 LBS @ \$1.77  
 DATE PRINTED: 02/13/81

FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 282  
 SAMPLE COSTS TO PRODUCE SUGAR BEETS BY W. SEYMAN  
 SANTA CLARA COUNTY 1980 D. DOUGLAS  
 YIELD: 31 TONS PER ACRE

\*\*\* TEMPORARY BUDGET \*\*\*

FUEL USED IN GALLONS PER HOUR

TRACTOR 70HP	3.600
TRACTOR 150HP	7.200
TRACTOR 150HP	8.400
CRAWLER 75HP	4.200
IRR PUMP 75 HP*	18.379 (KWHRS)

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE	GALLONS	POWER UNIT
DISK OFFSET	2.063	TRACTOR 150HP
DISK OFFSET	1.768	TRACTOR 150HP
RIPPER, 3 SHANK	7.260	CRAWLER 75HP
4 WH PLANE 16X60	1.440	TRACTOR 150HP
BED SHAPER 6ROW	0.754	TRACTOR 70HP
SPIKE HARROW	0.984	TRACTOR 70HP
PLANTER 6ROW	1.478	TRACTOR 70HP
CULTIVATOR 6ROW	0.816	TRACTOR 70HP
SPRINK-FURROW*	261.908 (KWHRS)	IRR PUMP 75 HP*

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
DISK OFFSET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.031	5.156	0.000	6.188	DIESEL
DISK OFFSET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.884	4.420	0.000	5.304	DIESEL
RIPPER, 3 SHANK	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.520	0.000	14.520	DIESEL
4 WH PLANE 16X60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.881	0.000	2.881	DIESEL
BED SHAPER 6ROW	0.754	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.754	1.508	DIESEL
SPIKE HARROW	0.984	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.984	DIESEL
PLANTER 6ROW	1.478	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.478	DIESEL
CULTIVATOR 6ROW	0.000	0.000	0.816	0.816	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.631	DIESEL
SPRINK-FURROW*	0.000	0.000	0.000	18.379	36.759	68.923	68.923	68.923	0.000	0.000	0.000	0.000	261.908	KWH
TOTALS	3.216	0.000	0.816	19.195	36.759	68.923	68.923	68.923	0.000	1.915	26.977	0.754	34.493	

GALLONS FUEL BY TYPE  
 0.00 GAS  
 0.00 LP  
 34.49 DIESEL  
 0.00 N. GAS  
 261.91 KWHRS

FUEL TYPES  
 1=GAS  
 2=L.P.  
 3=DIESEL  
 4=N. GAS  
 5=ELEC.

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 HANDMOVE SPRINKLER IRRIGATION: 28.5 ACIN PER YEAR  
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MACHINERY OPERATIONS SUMMARY BUDGET RECORD NUMBER 282  
 SAMPLE COSTS TO PRODUCE SUGAR BEETS BY W. SEYMAN  
 SANTA CLARA COUNTY 1980 D. DOUGLAS  
 YIELD: 31 TONS PER ACRE

OPERATION	ITER NO.	DATE	TIRES OVER	LABOR HOUR S	MACHINE HOURS	FUEL, OIL, LUB., REP. PER ACRE	FIXED COSTS PER ACRE
DISK OFFSET	8,	61 NOV	2.50	0.675	0.558	10.00	6.89
DISK OFFSET	7,	60 NOV	2.50	0.675	0.558	9.18	6.89
RIPPER, 3 SHANK	11,	90 NOV	2.00	3.803	3.143	32.73	36.19
4 WH PLANE 16X60	7,	86 NOV	2.00	0.440	0.364	5.89	6.45
BED SHAPER 6ROW	4,	50 DEC	1.00	0.230	0.190	1.82	2.21
BED SHAPER 6ROW	4,	50 JAN	1.00	0.230	0.190	1.82	2.21
SPIKE HARROW	4,	73 JAN	1.00	0.301	0.248	1.99	1.33
PLANTER 6ROW	4,	109 JAN	1.00	0.451	0.373	3.82	3.06
CULTIVATOR 6ROW	4,	53 MAR	1.00	0.249	0.206	1.79	1.61
CULTIVATOR 6ROW	4,	53 APR	1.00	0.249	0.206	1.79	1.61
DISK OFFSET	8,	61 OCT	0.50	0.135	0.112	2.00	1.38
DISK OFFSET	7,	60 OCT	0.50	0.135	0.112	1.84	1.38
TOTALS			7.575	6.260	74.67	71.18	

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RANGING ANALYSIS FOR BUDGET RECORD NUMBER 282  
 SAMPLE COSTS TO PRODUCE SUGAR BEETS BY W. SEYMAN  
 SANTA CLARA COUNTY 1980 D. DOUGLAS  
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\*\*\* TEMPORARY BUDGET \*\*\*

**INCOME ABOVE VARIABLE COSTS**

WHEN THE PRICE OF SUGAR BEETS AND THE QUANTITY OF SUGAR BEETS		RANGES FROM RANGES FROM		45.00 TO 25.00 TO	55.00 TO 37.00	
PRICE OF SUGAR BEETS		PRICE OF SUGAR BEETS				
		45.00	47.50	50.00	52.50	55.00
*****						
QUANTITY OF SUGAR BEETS	25.00	600.22	662.72	725.22	787.72	850.22
	28.00	735.22	805.22	875.22	945.22	1015.22
	31.00	870.22	947.72	1025.22	1102.72	1180.22
	34.00	1005.22	1090.22	1175.22	1260.22	1345.22
	37.00	1140.22	1232.72	1325.22	1417.72	1510.22

**INCOME ABOVE ALL CASH COSTS**

WHEN THE PRICE OF SUGAR BEETS AND THE QUANTITY OF SUGAR BEETS		RANGES FROM RANGES FROM		45.00 TO 25.00 TO	55.00 TO 37.00	
PRICE OF SUGAR BEETS		PRICE OF SUGAR BEETS				
		45.00	47.50	50.00	52.50	55.00
*****						
QUANTITY OF SUGAR BEETS	25.00	290.45	352.95	415.45	477.95	540.45
	28.00	425.45	495.45	565.45	635.45	705.45
	31.00	560.45	637.95	715.45	792.95	870.45
	34.00	695.45	780.45	865.45	950.45	1035.45
	37.00	830.45	922.95	1015.45	1107.95	1200.45

**INCOME ABOVE ALL COSTS**

WHEN THE PRICE OF SUGAR BEETS AND THE QUANTITY OF SUGAR BEETS		RANGES FROM RANGES FROM		45.00 TO 25.00 TO	55.00 TO 37.00	
PRICE OF SUGAR BEETS		PRICE OF SUGAR BEETS				
		45.00	47.50	50.00	52.50	55.00
*****						
QUANTITY OF SUGAR BEETS	25.00	229.03	291.53	354.03	416.53	479.03
	28.00	364.03	434.03	504.03	574.03	644.03
	31.00	499.03	576.53	654.03	731.53	809.03
	34.00	634.03	719.03	804.03	889.03	974.03
	37.00	769.03	861.53	954.03	1046.53	1139.03

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STORED DATA PAGE (NO CALCULATIONS) FOR SUGAR BEETS

BUDGET RECORD NUMBER 282

SAMPLE COSTS TO PRODUCE SUGAR BEETS BY W. SEYMAN  
SANTA CLARA COUNTY 1980 D. DOUGLAS  
YIELD: 31 TONS PER ACRE

COSTS AND RETURNS WILL BE DIVIDED BY 31.0 TON TO OBTAIN PER TON COSTS

Table with columns: LINE, PRODUCTION, 1-13 PRICE, 14 SHARE RENT, 15 UNIT CODE, 16 ITEM CODE, 17 TYPE, 18 XXXX. Rows include 1 SUGAR BEETS, 6 CUSTOM LIST, 7 PRE-MERGE HERB, 8 HERBICIDE APP, 9 PRE-PLANT FERT., 10 FERTILIZER APP, 12 RAW SEED, 13 HERBICIDE, 14 WILDEW CTL., 15 AERIAL SPRAYING, 16 HARVEST & HAUL.

Table with columns: MACHINERY REQUIREMENTS, IMPLEMENTS = TIMES OVER, TRUCKS = # MILES/ACRE, TRACTORS = HRS/ACRE, R CREW LABOR, POWER UNIT, MACH CODE, TYPE, HARV CODE. Rows include 25 DISK OFFSET, 27 RIPPER, 28 4 WH PLANE 16X60, 29 BED SHAPER 6ROW, 30 SPIKE HARROW, 31 PLANTER 6ROW, 32 CULTIVATOR 6ROW, 49 ACIN IRRIG WATER, 50 NO. TIMES IRRIG.

Table with columns: EQUIPMENT REQUIREMENTS, NUMBER UNITS, PROPORT OF COST, XXX EQUIP CODE, TYPE, XXXX. Includes row 71 ENTERPRISE 2-32 REGION/COUNTY 43 UNASSIGNED 00000 MACH CORP 3 IRIG SYST 4 UNASSIGNED 0 EQUIP SET 1 HARVEST MONTH 10.

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CASH RENT BASIS IF COATED SEED USED: 4 LBS @ \$1.77

MACHINERY COMPLEMENT 3  
EQUIPMENT COMPLEMENT 1

Table with columns: LINE-CHANGE, GENERAL NAME CHANGE, MACHNRY NAME CHANGE, RW CL, VALUE. Includes changes for COATED SEED, RIPPER, 3 SHANK, RAW SEED, TRACTOR 150HP, WILDEW CTL., CRAWLER 75HP, TRACTOR 70HP, TRACTOR 150HP.

DATE PRINTED: 02/13/81

Additional Notes: Sugar Beets  
Santa Clara County 1980

Data Base: 100 acres sugar beets of 600-700 acre farm

A. Production

Yield: 31 ton per acre

B. Operating Inputs

Preharvest:

- |                                     |   |
|-------------------------------------|---|
| 1. Pre-plant fertilizer: 16-20      | Raw seed: 1.5 lb/ac @ \$3.40                                      |
| 2. Seed: 40"beds                    | If raw seed bought and then<br>coated (6:1 ratio): 4 lbs @ \$1.77 |
| 3. Mildew control: sulfur w/ aerial | spray application   |

C. Machinery Requirements

- |                 |    |          |                                |
|-----------------|----|----------|--------------------------------|
| 1. Disk         | 1x | October  | utilizing two disks and 150 hp |
|                 | 1x | November | tractors (50% acreage each)    |
| 2. Rip          | 2x | "        |                                |
| 3. Disk         | 2x | "        | " "                            |
| 4. Landplane    | 2x | "        |                                |
| 5. Disk         | 2x | "        | " "                            |
| 6. Bed shaper   | 1x | December |                                |
| 7. Spike harrow | 1x | January  | work beds                      |
| 8. Bed shaper   | 1x | "        |                                |
| 9. Planter      | 1x | "        |                                |
| 10. Cultivator  | 1x | March    | w/herbicide spray              |
|                 | 1x | April    |                                |

Multiple Investments:

- 2 150 hp tractors
- 2 offset disks

D. Irrigation Schedule

Beginning April 1, sprinkle 2.5 ACIN every 10-12 days  
(3x/month) until August