

U.C. COOPERATIVE EXTENSION

SAMPLE COSTS TO PRODUCE FIELD CORN IN THE SAN JOAQUIN VALLEY - 1990

by

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The detailed costs for field corn production in the San Joaquin Valley are presented in this study. The hypothetical farm used in this report consists of 1200 acres of which 300 acres are in field corn production. The remainder of the farm is planted to different field crops.

Practices described are based on those production procedures considered typical for this crop and area. Sample costs given for labor, materials, equipment and contract services are based on current figures. Some costs and practices detailed in this study may not be applicable to your situation. This study is only intended as a guide and can be used in making production decisions, determining potential returns, preparing budgets and evaluating production loans. A blank **Your Costs** column is provided to enter your actual costs on **Tables 1 and 2, Costs Per Acre To Produce Field Corn** and **Costs And Returns Per Acre To Produce Field Corn**, respectively.

This study consists of **General Assumptions for Producing Field Corn** and seven tables.

- Table 1. Costs Per Acre To Produce Field Corn**
- Table 2. Costs And Returns Per Acre To Produce Field Corn**
- Table 3. Monthly Cash Costs Per Acre To Produce Field Corn**
- Table 4. Whole Farm Annual Equipment, Investment And Business Overhead Costs**
- Table 5. Hourly Equipment Costs**
- Table 6. Ranging Analysis**
- Table 7. Costs And Returns / Breakeven Analysis**

For an explanation of calculations used for the study refer to the attached General Assumptions or call the Department of Agricultural Economics, Cooperative Extension, University of California, Davis, California, (916) 752-3589 or call the Farm Advisor in the county of interest.

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GENERAL ASSUMPTIONS FOR PRODUCING FIELD CORN
San Joaquin Valley - 1990
U.C. Cooperative Extension

The following is a description of some general assumptions pertaining to sample costs of field corn production in the San Joaquin Valley. Costs are presented as annual costs per acre. The costs are based on typical cultural practices used by growers in this region, some of which may not be used during every production year. The use of trade names in this report does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products.

1. LAND:

This cost of production study is based on a 1200 acre field and row crop operation of which 300 acres dedicated to growing field corn. Other crops grown on the same acreage in rotation with field corn might include wheat, oat hay, alfalfa hay, barley, corn silage, cotton, etc.

2. RENT AGREEMENT:

The land used for field corn production in this study is rented on a cash per acre basis. Under this agreement the landowner receives \$100 per acre from the tenant. The landowner maintains the irrigation system on the rented land. Interest cost for land and irrigation system is incurred by the landowner.

3. CULTURAL PRACTICES:

The cultural, pesticide and fertilizer inputs for the production of field corn vary considerably from grower to grower and field to field. All of the primary tillage operations such as discing, land planing and chiseling are done with a 200 hp (horsepower) 4wd wheel tractor. From listing the beds on, all of the successive operations are performed with either 130 hp or an 80 hp wheel tractors.

In this study manure is custom applied before any primary tillage occurs. Beds are listed, fertilized and pre-irrigated with 10 acre inches of water. The corn is planted on the beds. Two cultivations are done through the growing season and fertilizer is custom applied. Thirty eight acre inches of water are utilized in 9 irrigations during the growing season. During two irrigations nitrogen is injected into the water. Inputs, rates and prices for inputs are shown on **Table 2**.

Variations as to cultural practices and inputs can be significant. Contact the farm advisor in the county of interest for advice on production practices.

4. YIELDS & RETURNS:

The crop yield used in this study is 4 tons per acre. An estimated price of a \$110 per ton is used in this study.

5. HARVEST:

In this cost study, custom harvest of the field corn costs \$12 per ton. Hauling the corn from the field to the buyer is charged to the grower at the rate of \$5.50 per ton. If growers do their own harvesting, all contract harvest costs should be removed from harvest costs in Table 1. The equipment for harvest operations should be inventoried in investment costs on

Table 4, and labor, fuel, repairs, depreciation, and operating interest, have to be calculated and added to harvest costs in Table 1.

6. LABOR:

Basic hourly wages for workers are \$6.20 and \$4.75 per hour for skilled and field workers respectively. Adding 34% for SDI, FICA, insurance and other benefits gives the labor rates shown of \$8.31 per hour for skilled labor and \$6.37 per hour for field labor. The labor for operations using machinery are 10% higher than the machine hours to account for the extra labor involved in equipment set-up, moving, maintenance and repair. Wages for managers are not included as a cash cost. Any returns above total costs are considered a return to management.

7. OVERHEAD:

County taxes are calculated as 1% of the average of the equipment, buildings and improvements. Insurance is charged at 0.5% of the average value of the equipment over its useful life. Office and business costs are estimated at \$20 per acre for the ranch. These expenses include office supplies, phone, bookkeeping, accounting, legal fees, road preparation and maintenance, etc.

8. INTEREST:

Interest on operating capital is based on cash costs and is calculated monthly, for nine months, until harvest at the rate of 12.5% per year. Interest is also charged on investment at 12% per year to account for income foregone that could be received from an alternative investment (opportunity cost) and is based on the average value of the buildings and equipment.

9. INVESTMENT:

The investments shown in Table 3 are those that are partially or completely allocated to the field corn operation. Investments including the fuel wagon, buildings, shop tools, etc., can be used by the whole farm so only a portion of the costs are assigned to the mixed melon operation and the rest of the costs are distributed to the other farm enterprises. Annual investments shown in **Table 1** represent depreciation and opportunity cost for each investment on an annual per acre basis.

10. EQUIPMENT COSTS:

In allocating the equipment costs per acre, the following calculations were made and shown in **Table 3**: (a) Original Cost of equipment is the cost of the new equipment plus sales tax. (b) Depreciation is straight line with no salvage value. (c) Interest on investment is calculated as one-half of the new cost per acre (the average value of the equipment during its useful life) multiplied by an interest rate of 12%. (d) Total investment costs are also calculated as 60% of the depreciation and the interest costs for all new equipment to reflect a mix of the new and used equipment. These values are also used in **Table 1**. Most of this equipment is used on the entire 1200 acre ranch and part of the cost of the equipment can be allocated to other enterprises.

11. FUEL & REPAIR:

The fuel and repair cost for each operation in **Table 1** is determined by multiplying the total hourly operating cost for each piece of equipment by the number of hours per acre for that operation. Prices for on-farm delivery gasoline and diesel fuel are \$0.85 per gallon and \$1.03 per gallon respectively.

Table 1.

U.C. COOPERATIVE EXTENSION
 COSTS PER ACRE TO PRODUCE FIELD CORN
 SAN JOAQUIN VALLEY - 1990

Labor Rate: \$8.31/hr. machine labor Interest Rate: 12.50%
 \$6.37/hr. non-machine labor Yield per Acre: 4 ton

Operation	Operation Time (Hrs/A)	Labor Cost	Fuel & Repairs	Cash and Labor Material Cost	Costs per Acre Custom/Rent	Total Cost	Your Cost
Cultural:							
Apply manure	0.00	0.00	0.00	0.00	32.50	32.50	
Chisel deep	0.21	2.07	3.62	0.00	0.00	5.69	
Disc stubble	0.14	1.43	2.78	0.00	0.00	4.21	
Chisel light	0.11	1.09	1.93	0.00	0.00	3.02	
Disc light	0.12	1.23	1.83	0.00	0.00	3.06	
Preplant herbicide	0.13	1.30	1.18	12.00	0.00	14.47	
Triplane	0.14	1.38	1.88	0.00	0.00	3.26	
List beds & fertilize	0.15	1.55	1.95	11.20	0.00	14.70	
Mulch beds	0.18	1.80	3.15	0.00	0.00	4.96	
Roll beds	0.10	0.95	0.70	0.00	0.00	1.65	
Open ditch	0.02	0.20	0.21	0.00	0.00	0.41	
Preirrigate	0.14	0.89	0.00	22.70	0.00	23.59	
Close ditch	0.02	0.20	0.14	0.00	0.00	0.34	
Disc over ditch	0.02	0.20	0.16	0.00	0.00	0.36	
Plant	0.14	1.44	2.66	23.76	0.00	27.86	
Cultivate	0.31	3.09	2.52	0.00	0.00	5.61	
Fertilize, custom	0.00	0.00	0.00	19.50	5.16	24.66	
Irrigate	0.98	6.24	0.00	66.74	0.00	72.98	
Apply herbicide, custom	0.00	0.00	0.00	3.50	5.00	8.50	
Irrigate & fertilize	0.28	1.78	0.00	31.57	0.00	33.35	
Apply miticide, custom	0.00	0.00	0.00	17.60	5.00	22.60	
TOTAL CULTURAL COSTS	3.20	26.83	24.72	208.57	47.66	307.78	
Harvest:							
Harvest	0.00	0.00	0.00	0.00	48.00	48.00	
Hauling	0.00	0.00	0.00	0.00	22.00	22.00	
TOTAL HARVEST COSTS	0.00	0.00	0.00	0.00	70.00	70.00	
Interest on operating capital @ 12.50%						20.11	
TOTAL OPERATING COSTS/ACRE		26.83	24.72	208.57	117.66	397.89	
TOTAL OPERATING COSTS/TON						99.47	
CASH OVERHEAD:							
Office Expense						20.00	
Land Rent						100.00	
Property Taxes						1.19	
Equipment Insurance						0.60	
Investment Repairs						0.79	
TOTAL CASH OVERHEAD COSTS						122.58	
TOTAL CASH COSTS/ACRE						520.47	
TOTAL CASH COSTS/TON						130.12	
NON-CASH OVERHEAD:							
Investment	Per producing Acre		Annual Cost	Depreciation	Interest @ 12.00%		
Buildings	62.50		2.50		3.75	6.25	
Siphon tubes	1.42		0.20		0.09	0.29	
Fuel tanks & equipment	5.83		0.39		0.35	0.74	
Shop tools	10.00		0.90		0.66	1.56	
Pickup, new	15.00		1.93		0.99	2.92	
Pickup, used	3.33		0.60		0.22	0.82	
Equipment	124.98		9.70		8.25	17.95	
TOTAL NON-CASH OVERHEAD COSTS	223.06		16.22		14.30	30.52	
TOTAL COSTS/ACRE						550.99	
TOTAL COSTS/TON						137.75	

U.C. COOPERATIVE EXTENSION
 COSTS AND RETURNS PER ACRE TO PRODUCE FIELD CORN
 SAN JOAQUIN VALLEY - 1990

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Labor Rate: \$8.31/hr. machine labor Interest Rate: 12.50%
 \$6.37/hr. non-machine labor

	Quantity/Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
=====					
GROSS RETURNS					
Grain	4.00	ton	110.00	440.00	
TOTAL GROSS RETURNS FOR FIELD CORN				440.00	

OPERATING COSTS					
Custom:					
Manure & Application	5.00	ton	6.50	32.50	
Fertilizer Application	1.00	acre	5.16	5.16	
Air Application	1.00	acre	5.00	5.00	
Miticide	1.00	acre	5.00	5.00	
Harvest	4.00	ton	12.00	48.00	
Hauling	4.00	ton	5.50	22.00	
Herbicide:					
Sutan	0.50	gal	24.00	12.00	
2,4-D	1.00	acre	3.50	3.50	
Fertilizer:					
P2O5	40.00	lb	0.28	11.20	
NH3	150.00	lb	0.13	19.50	
N, Water Run	50.00	lb	0.25	12.50	
Water:					
Water	47.80	acin	2.27	108.51	
Seed:					
Seed, Corn	0.33	sack	72.00	23.76	
Miticide:					
Comite	0.32	gal	55.00	17.60	
Labor (machine)	2.16	hrs	8.31	17.91	
Labor (non-machine)	1.40	hrs	6.37	8.92	
Fuel - Diesel	14.64	gal	0.73	10.68	
Lube				1.60	
Machinery repair				12.44	
Interest on operating capital @ 12.50%				20.11	
TOTAL OPERATING COSTS/ACRE				397.89	
TOTAL OPERATING COSTS/TON				99.47	

NET RETURNS ABOVE OPERATING COSTS				42.11	

CASH OVERHEAD COSTS:					
Office Expense				20.00	
Land Rent				100.00	
Property Taxes				1.19	
Equipment Insurance				0.60	
Investment Repairs				0.79	
TOTAL CASH OVERHEAD COSTS/ACRE				122.58	

TOTAL CASH COSTS/ACRE				520.47	
TOTAL CASH COSTS/TON				130.12	

NON-CASH OVERHEAD COSTS (DEPRECIATION & INTEREST):					
Buildings				6.25	
Siphon tubes				0.29	
Fuel tanks & equip				0.74	
Shop tools				1.56	
Pickup, new				2.92	
Pickup, used				0.82	
Equipment				17.95	
TOTAL NON-CASH OVERHEAD COSTS/ACRE				30.52	

TOTAL COSTS/ACRE				550.99	
TOTAL COSTS/TON				137.75	

NET RETURNS ABOVE TOTAL COSTS				-110.99	
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Table 3.

U.C. COOPERATIVE EXTENSION
MONTHLY CASH COSTS PER ACRE TO PRODUCE FIELD CORN
SAN JOAQUIN VALLEY - 1990

Beginning NOV 89	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	TOTAL
Ending OCT 90	89	89	90	90	90	90	90	90	90	90	90	90	

Cultural:													
Apply manure	32.50												32.50
Chisel deep		5.69											5.69
Disc stubble					4.21								4.21
Chisel light					3.02								3.02
Disc light					3.06								3.06
Preplant herbicide					14.47								14.47
Triplane					3.26								3.26
List beds & fertilize					14.70								14.70
Mulch beds					4.96								4.96
Roll beds					1.65								1.65
Open ditch					0.23	0.18							0.41
Preirrigate					23.59								23.59
Close ditch					0.17						0.17		0.34
Disc over ditch					0.18						0.18		0.36
Plant					27.86								27.86
Cultivate						5.61							5.61
Fertilize						24.66							24.66
Irrigate						10.43		10.43	31.28	20.85			72.98
Apply herbicide						8.50							8.50
Irrigate & fertilize							16.68	16.68					33.35
Apply miticide							22.60						22.60

TOTAL CULTURAL COSTS	32.50	5.69			101.35	49.37	39.28	27.10	31.28	20.85	0.35		307.78

Harvest:													
Harvest											48.00		48.00
Hauling											22.00		22.00

TOTAL HARVEST COSTS											70.00		70.00

Interest on oper. capital	0.34	0.40	0.40	0.40	1.45	1.97	2.38	2.66	2.99	3.20	3.94		20.11

TOTAL OPERATING COSTS/ACRE	32.84	6.09	0.40	0.40	102.80	51.34	41.65	29.76	34.26	24.05	74.28		397.89
TOTAL OPERATING COSTS/TON	8.21	1.52	0.10	0.10	25.70	12.84	10.41	7.44	8.57	6.01	18.57		99.47

OVERHEAD:													
Office Expense										20.00			20.00
Land Rent										100.00			100.00
Property Taxes						0.60				0.60			1.19
Equipment Insurance			0.60										0.60
Investment Repairs	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07		0.79

TOTAL CASH OVERHEAD COSTS	0.07	0.07	0.67	0.07	0.07	0.67	0.07	0.07	0.07	120.67	0.07		122.58

TOTAL CASH COSTS/ACRE	32.91	6.16	1.07	0.47	102.88	52.01	41.72	29.83	34.33	144.72	74.36		520.47
TOTAL CASH COSTS/TON	8.23	1.54	0.27	0.12	25.72	13.00	10.43	7.46	8.58	36.18	18.59		130.12
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Table 4.

U.C. COOPERATIVE EXTENSION
WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SAN JOAQUIN VALLEY - 1990

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	- Non-Cash Over. - - -			Cash Overhead -		Total
			Yrs Life	Depre- ciation	Interest	Insur- ance	Taxes	
90	130 hp 2wd Tractor	66000	10	5940.00	4356.00	181.50	363.00	10840.50
90	200 hp 4wd Tractor	94000	10	8460.00	6204.00	258.50	517.00	15439.50
90	80 hp 2wd Tractor	42000	10	3780.00	2772.00	115.50	231.00	6898.50
90	Chisel, heavy, 11'	5300	15	318.00	349.80	14.58	29.15	711.53
90	Chisel, light, 21'	6400	15	384.00	422.40	17.60	35.20	859.20
90	Cultipacker, 6 row	3300	15	198.00	217.80	9.07	18.15	443.02
90	Cultivator, 6 row	6000	15	360.00	396.00	16.50	33.00	805.50
90	Disc, finish, 21'	12500	15	750.00	825.00	34.38	68.75	1678.13
90	Disc, offset 7'	5500	15	330.00	363.00	15.13	30.25	738.38
90	Disc, stubble, 16'	12500	15	750.00	825.00	34.38	68.75	1678.13
90	Ditcher, 5'	5300	15	318.00	349.80	14.58	29.15	711.53
90	Lister, 6 row	4500	15	270.00	297.00	12.37	24.75	604.12
90	Mulcher, PTO, 6 row	21200	15	1272.00	1399.20	58.30	116.60	2846.10
90	Planter, 6 row	14300	10	1287.00	943.80	39.33	78.65	2348.78
90	Rear blade, 3pt 8'	1900	15	114.00	125.40	5.22	10.45	255.07
90	Saddle Tanks, 250 gal	1800	10	162.00	118.80	4.95	9.90	295.65
90	Spray boom, 25'	3500	10	315.00	231.00	9.63	19.25	574.88
90	Triplane, 16'	16000	15	960.00	1056.00	44.00	88.00	2148.00
TOTAL		322000		25968.00	21252.00	885.52	1771.00	49876.52
60% of New Cost *		193200		15580.80	12751.20	531.31	1062.60	29925.91

* Used to reflect a mix of new and used equipment.

ANNUAL INVESTMENT COSTS

Yr	Description	Price	- Non-Cash Over. - - - - -			Cash Overhead - - - - -		Total
			Yrs Life	Depre- ciation	Interest	Insur- ance	Taxes	
INVESTMENT								
	Buildings	75000	25	3000.00	4500.00	187.50	375.00	8412.50
	Fuel tanks & equipment	7000	15	466.67	420.00	17.50	35.00	989.17
	Pickup, new	18000	7	2314.29	1188.00	49.50	99.00	3850.79
	Pickup, used	4000	5	720.00	264.00	11.00	22.00	1217.00
	Shop tools	12000	10	1080.00	792.00	33.00	66.00	2071.00
	Siphon tubes	1700	7	242.86	102.00	4.25	8.50	407.61
TOTAL INVESTMENT		117700		7823.82	7266.00	302.75	605.50	16948.07

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Land Rent	300.00	acre	100.00	30000.00
Office Expense	1200.00	acre	20.00	24000.00

Table 5.

U.C. COOPERATIVE EXTENSION
HOURLY EQUIPMENT COSTS
SAN JOAQUIN VALLEY - 1990

Yr Description	COSTS PER HOUR								Total Costs/Hr.
	Actual Hours Used	-Non-Cash Over- depre- ciation	Interest	- Cash Overhead - Insur- ance	Taxes	Repairs	Operating Fuel & Lube	Total Oper.	
90 130 hp 2wd Tractor	1295.0	2.75	2.02	0.08	0.17	3.96	6.33	10.29	15.31
90 200 hp 4wd Tractor	1304.6	3.89	2.85	0.12	0.24	4.70	9.74	14.44	21.54
90 80 hp 2wd Tractor	1299.6	1.75	1.28	0.05	0.11	2.52	3.30	5.82	9.00
90 Chisel, heavy, 11'	166.4	1.15	1.26	0.05	0.11	1.52	0.00	1.52	4.09
90 Chisel, light, 21'	165.7	1.39	1.53	0.06	0.13	1.84	0.00	1.84	4.95
90 Cultipacker, 6 row	165.5	0.72	0.79	0.03	0.07	0.95	0.00	0.95	2.55
90 Cultivator, 6 row	166.0	1.30	1.43	0.06	0.12	1.72	0.00	1.72	4.63
90 Disc, finish, 21'	165.9	2.71	2.98	0.12	0.25	3.59	0.00	3.59	9.66
90 Disc, offset 7'	166.0	1.19	1.31	0.05	0.11	1.58	0.00	1.58	4.25
90 Disc, stubble, 16'	165.9	2.71	2.98	0.12	0.25	3.59	0.00	3.59	9.66
90 Ditcher, 5'	166.0	1.15	1.26	0.05	0.11	1.52	0.00	1.52	4.10
90 Lister, 6 row	165.5	0.98	1.08	0.04	0.09	1.29	0.00	1.29	3.48
90 Mulcher, PTO, 6 row	166.3	4.59	5.05	0.21	0.42	6.09	0.00	6.09	16.36
90 Planter, 6 row	120.2	6.42	4.71	0.20	0.39	7.18	0.00	7.18	18.90
90 Rear blade, 3pt 8'	166.0	0.41	0.45	0.02	0.04	0.55	0.00	0.55	1.47
90 Saddle Tanks, 250 gal	120.0	0.81	0.59	0.02	0.05	0.90	0.00	0.90	2.38
90 Spray boom, 25'	120.0	1.58	1.16	0.05	0.10	1.76	0.00	1.76	4.63
90 Triplane, 16'	166.4	3.46	3.81	0.16	0.32	2.32	0.00	2.32	10.07

Table 6.

U.C. COOPERATIVE EXTENSION
RANGING ANALYSIS
SAN JOAQUIN VALLEY - 1990

COSTS PER ACRE AT VARYING YIELDS TO PRODUCE FIELD CORN							
	YIELD (TON/ACRE)						
	2.5	3.0	3.5	4.0	4.5	5.0	5.5

OPERATING COSTS/ACRE:							
Cultural Cost	308	308	308	308	308	308	308
Harvest Cost	44	53	61	70	79	88	96
Interest on operating capital	20	20	20	20	20	20	20
TOTAL OPERATING COSTS/ACRE	371	380	389	398	407	416	424
TOTAL OPERATING COSTS/TON	148.55	126.74	111.16	99.47	90.38	83.11	77.17
CASH OVERHEAD COSTS/ACRE	123	123	123	123	123	123	123
TOTAL CASH COSTS/ACRE	494	503	512	520	529	538	547
TOTAL CASH COSTS/TON	197.58	167.60	146.18	130.12	117.62	107.63	99.45
NON-CASH OVERHEAD COSTS/ACRE	31	31	31	31	31	31	31
TOTAL COSTS/ACRE	524	533	542	551	560	569	578
TOTAL COSTS/TON	209.79	177.77	154.90	137.75	124.41	113.73	105.00

NET RETURNS PER ACRE ABOVE OPERATING COSTS FOR FIELD CORN							
PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	2.5	3.0	3.5	4.0	4.5	5.0	5.5
80.00	-171	-140	-109	-78	-47	-16	16
90.00	-146	-110	-74	-38	-2	34	71
100.00	-121	-80	-39	2	43	84	126
110.00	-96	-50	-4	42	88	134	181
120.00	-71	-20	31	82	133	184	236
130.00	-46	10	66	122	178	234	291
140.00	-21	40	101	162	223	284	346

NET RETURNS PER ACRE ABOVE CASH COSTS FOR FIELD CORN							
PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	2.5	3.0	3.5	4.0	4.5	5.0	5.5
80.00	-294	-263	-232	-200	-169	-138	-107
90.00	-269	-233	-197	-160	-124	-88	-52
100.00	-244	-203	-162	-120	-79	-38	3
110.00	-219	-173	-127	-80	-34	12	58
120.00	-194	-143	-92	-40	11	62	113
130.00	-169	-113	-57	-0	56	112	168
140.00	-144	-83	-22	40	101	162	223

NET RETURNS PER ACRE ABOVE TOTAL COSTS FOR FIELD CORN							
PRICE (DOLLARS PER TON)	YIELD (TON/ACRE)						
	2.5	3.0	3.5	4.0	4.5	5.0	5.5
80.00	-324	-293	-262	-231	-200	-169	-138
90.00	-299	-263	-227	-191	-155	-119	-83
100.00	-274	-233	-192	-151	-110	-69	-28
110.00	-249	-203	-157	-111	-65	-19	27
120.00	-224	-173	-122	-71	-20	31	82
130.00	-199	-143	-87	-31	25	81	137
140.00	-174	-113	-52	9	70	131	192

Table 7.

U.C. COOPERATIVE EXTENSION
 COSTS AND RETURNS / BREAKEVEN ANALYSIS
 SAN JOAQUIN VALLEY - 1990

COSTS AND RETURNS - PER ACRE BASIS

Crop	1. Gross Returns	2. Operating Costs	3. Net Returns Above Oper. Costs (1-2)	4. Cash Costs	5. Net Returns Above Cash Costs (1-4)	6. Total Costs	7. Net Returns Above Total Costs (1-6)
Field Corn	440	398	42	520	-80	551	-111

COSTS AND RETURNS - TOTAL ACREAGE

Crop	1. Gross Returns	2. Operating Costs	3. Net Returns Above Oper. Costs (1-2)	4. Cash Costs	5. Net Returns Above Cash Costs (1-4)	6. Total Costs	7. Net Returns Above Total Costs (1-6)
Field Corn	132000	119366	12634	156140	-24140	165297	-33297
TOTAL	132000	119366	12634	156140	-24140	165297	-33297

BREAKEVEN PRICES PER YIELD UNIT

CROP	Base Yield (Units/Acre)	Yield Units	Breakeven Price To Cover		
			Operating Costs	Cash Costs	Total Costs
Field Corn	4.0	ton	99.47	130.12	137.75

BREAKEVEN YIELDS PER ACRE

CROP	Yield Units	Base Price (\$/Unit)	Breakeven Yield To Cover		
			Operating Costs	Cash Costs	Total Costs
Field Corn	ton	110.00	3.6	4.7	5.0