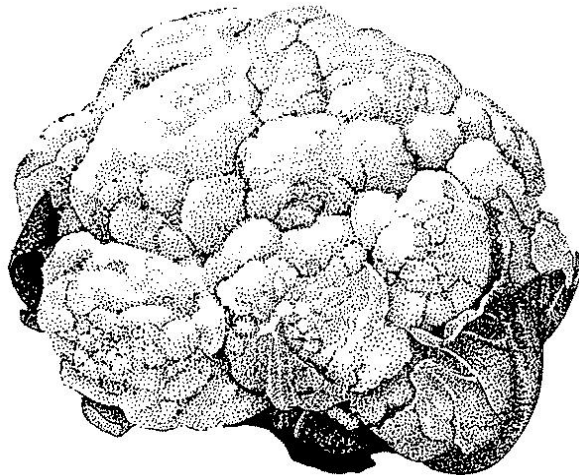

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

2001

SAMPLE COSTS TO PRODUCE
FRESH MARKET

CAULIFLOWER



CENTRAL COAST REGION

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UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

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Acknowledgements. Thank you to the growers, pest control advisors, processors, equipment dealer, and researchers who provided input.

INTRODUCTION

The sample costs to produce cauliflower in the Central Coast region are presented in this study. The study is intended as a guide only, and can be used to make production decisions, determine potential returns, prepare budgets and evaluate production loans. The practices described are based on production procedures considered typical for this crop and area, and will not apply to every situation. Sample costs for labor, materials, equipment and custom services are based on current figures. A blank column, “*Your Costs*”, is provided to enter your actual costs on Tables 2 and 3.

The hypothetical farm operation, production practices, overhead, and calculations are described under assumptions. For additional information or explanation of calculations used in the study call the Department of Agricultural and Resource Economics, University of California, Davis, (530) 752-3589 or the UC Cooperative Extension office in your county.

Sample Cost of Production studies for many commodities are available and can be requested through the Department of Agricultural Economics, UC Davis, (530) 752-1515. Current studies, those produced during the last five years, can be downloaded from the department website <http://coststudies.ucdavis.edu> or obtained from selected county UC Cooperative Extension offices.

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ASSUMPTIONS

The following assumptions pertain to sample costs to produce fresh market cauliflower in the Central Coast Region. Practices described are not recommendations by the University of California, but represent production procedures considered typical for this crop and area. Costs are on an annual, per acre basis. All costs, practices, and materials will not be applicable to every situation nor used during every year. Cultural practices for the production of fresh market cauliflower varies by grower and region, and variations can be significant. The practices and inputs used in this cost study serve as a guide, only. **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.**

Farm. The hypothetical farm is a 1,200 non-contiguous acre vegetable crop operation on which 60 acres are planted to fresh market cauliflower. Other crops grown may be broccoli, lettuce and celery. The farm will normally produce two to two and one-half crops per year. In this study, costs are for producing one cauliflower crop. Costs that affect both crops are allocated 50% to this crop.

Cultural Practices and Material Inputs

Land Preparation. Primary tillage, which includes discing, rolling, subsoiling, land leveling, and listing beds occurs in October and November of the year preceding planting. Fields are subsoiled, disced and rolled two times, then chiseled twice, followed by two passes with a landplane, and a single discing. A custom operator lists the 40-inch beds and incorporates the preplant fertilizer in a single operation.

Stand Establishment. A hybrid variety of cauliflower is custom transplanted into a single row on 40-inch beds at a rate of 13,100 seedlings per acre. Seedlings are spaced one foot apart. The field is planted over a period of time (e.g., 15 acres per week) to accommodate the markets.

Fertilization. Three ton of manure every two years is broadcast over the field prior to the primary tillage operations and for the single crop, one-quarter of the cost is included each year. A dry fertilizer 15-15-15 at 400 pounds per acre (60 units N) is applied at listing. A total of 180 units of N as AN-20 is sidedressed in three applications for a seasonal total of 240 units N.

Irrigation. Approximately three acre-inches are applied through sprinklers during stand establishment. An additional twenty-seven acre inches are applied in the furrow, one as a preirrigation, and at seven to ten-day intervals during the growing season. A total of 30 acre-inches or 2.5-acre feet is applied to the crop.

Pest Management. The pesticides and rates mentioned in this cost study are listed in *Integrated Pest Management for Cole Crops and Lettuce* and *UC Pest Management Guidelines: Cole Crops*. For more information on pesticides available, pest identification, monitoring, and management visit the UC IPM website at www.ipm.ucdavis.edu. Written recommendations are required for many pesticides and are made by licensed pest control advisors. For information and pesticide use permits, contact the local county agricultural commissioner's office.

Weeds. A preplant herbicide, Goal, is banded into 12.5% (five-inch band) of the bed. Weed control for the remainder of the season consists of hand hoeing and mechanical cultivations. The field is cultivated about 15 to 21 days after planting followed by two additional cultivations at ten-day intervals. The field is hand hoed after the last cultivation.

Insects and Diseases. Integrated pest management is used to control the various diseases, insects and related pests. Lorsban 15G at 7 pounds per acre is incorporated with the preplant herbicide for root maggot control. Metasystox R at 0.75 pints per acre for aphid control is ground applied 30 to 40 days after transplanting. Within 10 to 14 days a combined second treatment of Metasystox R for aphids and Lannate at 1 pound per acre for worms is applied.

Harvest. The cauliflower crop is hand harvested two to three times under contract 90 to 110 days after transplanting. Cool season plantings may require 110 days to mature but as the season warms, time to maturity decreases. Harvesting is done under contract and the cauliflower is packed in the field. A custom rate of \$1.85 per box is charged to cut, wrap, and box the cauliflower. The container cost of \$1.50 per box brings the total harvest cost to \$3.20 per packed box. A packed box of cauliflower weighs 25 pounds. Transportation costs vary depending on the distance to market. Most growers are within a 25-mile radius of the cooler. This study assumes a rate of \$450 per 1,500 box truckload or \$0.30 per box. Cooling, packing and selling cost \$1.15 per box for a total cost of \$4.60 per box.

Yields. Average yields over the last five years in the Central Coast for fresh market cauliflower range from 599 to 752 boxes per acre and are shown in Table A. The crop yield used in this study is 680 twenty-five pound boxes or eight and one-half ton per acre.

Returns. Average prices to growers in the Central Coast for fresh market cauliflower in the last five years ranged from \$7.97 to \$8.85 per box or \$637.63 to \$707.89 per ton. The return price in this study is \$8.41 per box. Table 6, Ranging Analysis, shows the net returns above operating costs, cash costs and total costs for various price and yield levels. Return prices to growers over the last five years are shown in Table A.

Table A. Average Yield and Price for Fresh Market Cauliflower, Central Coast 1995 - 99^{1/}

<u>Year</u>	<u>Yield</u>		<u>Revenues</u>	
	<u>Tons/Acre</u>	<u>Boxes/Acre</u>	<u>\$/Ton</u>	<u>\$/Box</u>
1999	8.53	682	701.97	8.77
1998	8.40	672	666.48	8.33
1997	9.40	752	637.63	7.97
1996	7.76	621	699.12	8.74
1995	7.49	599	707.89	8.85

^{1/} Source: Agricultural Commissioner: Monterey

Risk. Risks associated with cauliflower production are not assigned a production cost. While this study makes every effort to model a production system based on typical, real world practices, it cannot fully represent financial, agronomic and market risks which affect the profitability and economic viability of fresh market vegetable production. The fresh market vegetables are volatile for both price and quantity. Perishability of fresh vegetables diminishes the opportunity to wait for a better market and price. Because of the risk involved, access to a market is crucial.

Labor. Basic hourly wages for workers are \$8.75 per hour for machine operators and \$7.00 per hour for non-machine labor (irrigators and manual laborers). Adding 34% for the employer's share of federal and state payroll taxes and other possible employer paid benefits raises the total labor costs to \$10.39 per hour for machine operators and \$9.38 per hour for non-machine labor. The labor for operations involving machinery is 20% higher than the operation time to account for the additional time involved in equipment set up, moving, maintenance and repair.

Overhead

Cash Overhead. Cash overhead consists of various cash expenses paid out during the year that are assigned to the whole farm and not to a particular operation. These costs include property taxes, interest on operating capital, office expense, liability and property insurance, and investment repairs.

Property Taxes. Counties charge a base property tax rate of 1% on the assessed value of the property. In some counties special assessment districts exist and charge additional taxes on property including equipment, buildings, and improvements. For this study, county taxes are calculated as 1% of the average value of the property. Average value equals new cost plus salvage value divided by two on a per acre basis.

Interest On Operating Capital. Interest on operating capital is based on cash operating costs and is calculated monthly until harvest at a nominal rate of 10.51% per year. A nominal interest rate is the typical market cost of borrowed funds.

Insurance. Insurance for farm investments varies depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss and is charged at 0.666% of the average value of the assets over their useful life. Liability insurance covers accidents on the farm and costs \$1,175 for the entire farm or \$0.98 per acre.

Office Expense. Office and business expenses are estimated at \$50 per acre. These expenses include office supplies, telephones, bookkeeping, accounting, legal fees, road maintenance, and miscellaneous item.

Land Rent. Land in this study is rented on a per acre basis with the landowner receiving \$550 per acre per crop. The land rented includes developed wells and irrigation system. The landowner is responsible for the maintenance of the irrigation system. All costs for the land and the irrigation system are incurred by the landowner.

Field Sanitation. Portable toilet units with washing facilities cost the farm \$540. The units are rented for five months and include weekly servicing. Although the units may at times be used on the other parts of the ranch, the total cost is allocated to this single crop.

Investment Repairs. Repairs to the non-cash overhead or investment items are calculated as 10% of new cost divided by the life of the investment.

Managers/Supervisors Salary. Wages for managers are not included as a cash cost. Any returns above total costs are considered a return to management.

Non-cash Overhead. Non-cash overhead is calculated as the capital recovery cost for equipment and other farm investments. Although farm equipment used for cauliflower production may be purchased new or used, this study shows the current purchase price for new equipment. The new purchase price is adjusted to 60% to indicate a mix of new and used equipment. Annual ownership costs of equipment and investments are shown in Tables 1, 2, 3, and 5. They represent the capital recovery cost for investments on an annual per acre basis.

Capital Recovery Costs. Capital recovery cost is the annual depreciation and interest costs for a capital investment. It is the amount of money required each year to recover the difference between the purchase price and salvage value (unrecovered capital). Put another way, it is equivalent to the annual payment on a loan for the investment with the down payment equal to the discounted salvage value. This is a more complex method of calculating ownership costs than straight-line depreciation and opportunity costs, but more accurately represents the annual costs of ownership because it takes the time value of money into account. The calculation for the annual capital recovery costs is $((\text{Purchase Price} - \text{Salvage Value}) \times \text{Capital Recovery Factor}) + (\text{Salvage Value} \times \text{Interest Rate})$.

Salvage Value. Salvage value is an estimate of the remaining value of an investment at the end of its useful life. For farm machinery (tractors and implements) the remaining value is a percentage of the new cost of the investment (Boehlje and Eidman). The percent remaining value is calculated from equations developed by the American Society of Agricultural Engineers (ASAE) based on equipment type and years of life. The life in years is estimated by dividing the wearout life, as given by ASAE by the annual hours of use in this operation. For other investments including irrigation systems, buildings, and miscellaneous equipment, the value at the end of its useful life is zero. The salvage value for land is equal to the purchase price because land does not depreciate. The purchase price and salvage value for equipment and investments are shown in Table 5.

Capital Recovery Factor. Capital recovery factor is the amortization factor or annual payment whose present value at compound interest is 1. The amortization factor is a table value that corresponds to the interest rate used and the life of the machine.

Interest Rate. The interest rate of 6.70% used to calculate capital recovery cost is the United States Department of Agriculture-Economic Reporting Service's (USDA-ERS) ten-year average of California's agricultural sector long run rate of return to production assets from current income. It is used to reflect the long-term realized rate of return to these specialized resources that can only be used effectively in the agricultural sector. In other words, the next best alternative use for these resources is in another agricultural enterprise.

Irrigation System. The irrigation water is pumped from a well and delivered to the fields through an underground pipe system. Main lines above ground are connected to the underground system to deliver water for the sprinkler and furrow irrigations. In this study, water is pumped from a depth of 120 feet from a 500-foot deep well and cost \$55.00 per acre-foot.

Equipment. Equipment costs are composed of three parts: non-cash overhead, cash overhead, and operating costs. Both of the overhead factors have been discussed in previous sections. The operating costs consist of repairs, fuel, and lubrication. The fuel, lube, and repair cost per acre for each operation in Table 1 is determined by multiplying the total hourly operating cost in Table 5 for each piece of equipment used for the selected operation by the hours per acre. Tractor time is 10% higher than implement time for a given operation to account for setup, travel and down time.

Repairs, Fuel and Lube. Repair costs are based on purchase price, annual hours of use, total hours of life, and repair coefficients formulated by the American Society of Agricultural Engineers (ASAE). Fuel and lubrication costs are also determined by ASAE equations based on maximum PTO horsepower, and fuel type. Prices for on-farm delivery of diesel and gasoline are \$1.26 and \$1.51 per gallon, respectively.

Table Values. Due to rounding, the totals may be slightly different from the sum of the components.

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UC COOPERATIVE EXTENSION
Table 1. COST PER ACRE TO PRODUCE CAULIFLOWER
 CENTRAL COAST - MONTEREY COUNTY 2001

Operation	Operation	Cash and Labor Costs per Acre					Total Cost	Your Cost
	Time (Hrs/A)	Labor Cost	Fuel, Lube & Repairs	Material Cost	Custom/Rent			
Cultural:								
Manure/Compost 1/4 per crop/yr	0.00	0	0	17	11	27		
Sub Soil 2X (1/2 to crop)	0.61	9	20	0	0	28		
Disc & Roll 2X	0.29	4	10	0	0	14		
Chisel 2X	0.40	6	13	0	0	19		
Land plane field 2X	0.27	4	9	0	0	13		
Disc & Roll 1X	0.14	9	5	0	0	14		
List Beds & Preplant Fertilizer	0.00	0	0	60	11	71		
Shape beds & roll	0.20	3	3	0	0	6		
Irrigate - Preirrigation	1.00	9	0	14	0	23		
Irrigate - Sprinkle 2X	4.00	38	0	14	0	51		
Irrigate 8X	8.50	80	0	110	0	190		
Herbicide/Insecticide Preplant 5" band	0.00	0	0	22	16	37		
Transplant Seedlings	0.00	0	0	289	131	420		
Fertilize – Sidedress 3X	0.00	0	0	125	29	153		
Cultivate & furrow 4X	0.64	9	11	0	0	20		
Hand Hoe	6.00	56	0	0	0	56		
Pest Control 2X	0.00	0	0	67	32	98		
Tie Tops 70% acres	12.31	115	0	19	0	135		
Pickup	0.56	8	3	0	0	11		
TOTAL CULTURAL COSTS	34.92	349	73	735	228	1,386		
Harvest:								
Cut, wrap and pack 3X	0.00	0	0	0	1,292	1,292		
Carton cost	0.00	0	0	782	0	782		
Haul to market	0.00	0	0	0	204	204		
Cool, Palletize, Sell	0.00	0	0	0	918	918		
TOTAL HARVEST COSTS	0.00	0	0	782	2,414	3,196		
Postharvest:								
Chop stubble	0.33	5	6	0	0	10		
TOTAL POSTHARVEST COSTS	0.33	5	6	0	0	10		
Interest on operating capital @ 10.51%						77		
TOTAL OPERATING COSTS/ACRE		354	79	1,511	2,652	4,669		
Cash Overhead:								
Land Rent						550		
Office Expense						50		
Field Sanitation						9		
Liability Insurance						1		
Property Taxes						3		
Property Insurance						2		
Investment Repairs						3		
TOTAL CASH OVERHEAD COSTS						618		
TOTAL CASH COSTS/ACRE						5,286		
TOTAL CASH COST/BOX						7.77		

UC COOPERATIVE EXTENSION

Table 1. Continued

Non-cash Overhead	Per producing	Annual Costs	
	Acre	Capital Recovery	
Investment:			
Shop Building	100	8	8
Shop Tools	11	1	1
Fuel Wagon	2	0	0
Implement Carrier	8	1	1
Fuel Tanks & Pumps	17	1	1
Pipe Gated 8" 1612'	4	1	1
Pipe Sprinkler 1456'	8	1	1
Trailer – Lowbed	6	1	1
Trailer – Pipe #1	2	0	0
Trailer – Pipe #2	2	0	0
Truck Tractor	41	4	4
Forklift – 5000 lb	10	1	1
Equipment	266	33	33
TOTAL NON-CASH OVERHEAD COSTS	476	52	52
TOTAL COSTS/ACRE			5,339
TOTAL COST/BOX			7.85

UC COOPERATIVE EXTENSION
Table 2. COSTS AND RETURNS PER ACRE TO PRODUCE CAULIFLOWER
 CENTRAL COAST - MONTEREY COUNTY 2001

	Quantity/ Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
GROSS RETURNS					
Cauliflower	680.00	box	8.41	5,719	
OPERATING COSTS					
Custom:					
Haul Manure	1,500.00	lb	0.003	5	
Spread Manure	1,500.00	lb	0.004	6	
List/Fertilize	1.00	acre	11.00	11	
Ground Application-Pesticide	3.00	acre	15.75	47	
Transplant Cauliflower	13.07	thou	10.00	131	
Ground Application-AN20	3.00	acre	9.50	29	
Contract:					
Hauling	680.00	box	0.3	204	
Harvest	680.00	box	1.90	1,292	
Cool Vegetables	680.00	box	0.65	442	
Palletize Vegetables	680.00	box	0.20	136	
Sell Vegetables	680.00	box	0.50	340	
Water:					
Water-Pumped	30.00	acin	4.58	137	
Fertilizer:					
Manure/Compost	1,500.00	lb	0.011	17	
15-15-15	400.00	lb	0.150	60	
AN20 (10.6#/gal)	240.00	lb N	0.52	125	
Herbicide:					
Goal 2XL	0.13	pint	14.60	2	
Insecticide:					
Lorsban 14G	7.00	lb	2.80	20	
Metasystox-R	4.00	pint	10.18	41	
Lannate 90 SP	1.00	lb	26.05	26	
Seed:					
Seed	16.33	thou	5.25	86	
Transplant:					
Transplant Seedlings	14.52	thou	14.00	203	
Plant Aid:					
Rubber Bands	9.17	thou	2.08	19	
Packing Aid:					
Packing box	680.00	box	1.15	782	
Labor (machine)	4.13	hrs	11.73	48	
Labor (non-machine)	32.56	hrs	9.38	305	
Fuel - Gas	1.39	gal	1.51	2	
Fuel - Diesel	40.31	gal	1.26	51	
Lube				8	
Machinery repair				18	
Interest on operating capital @ 10.51%				77	
TOTAL OPERATING COSTS/ACRE				4,669	
NET RETURNS ABOVE OPERATING COSTS				1,050	

U.C. COOPERATIVE EXTENSION

Table 2. Continued

CASH OVERHEAD COSTS:	
Land Rent	550
Office Expense	50
Field Sanitation	9
Liability Insurance	1
Property Taxes	3
Property Insurance	2
Investment Repairs	3
TOTAL CASH OVERHEAD COSTS/ACRE	618
TOTAL CASH COSTS/ACRE	5,286
NON-CASH OVERHEAD COSTS (CAPITAL RECOVERY):	
Shop Building	8
Shop Tools	1
Fuel Wagon	0
Implement Carrier	1
Fuel Tanks & Pumps	1
Pipe Gated 8" 1612'	1
Pipe Sprinkler 1456'	1
Trailer - Lowbed	1
Trailer - Pipe #1	0
Trailer - Pipe #2	0
Truck Tractor	4
Forklift - 5000 lb	1
Equipment	33
TOTAL NON-CASH OVERHEAD COSTS/ACRE	52
TOTAL COSTS/ACRE	5,338
NET RETURNS ABOVE TOTAL COSTS	380

UC COOPERATIVE EXTENSION
Table 3. MONTHLY CASH COSTS PER ACRE TO PRODUCE CAULIFLOWER
 CENTRAL COAST - MONTEREY COUNTY 2001

Beginning OCT 00	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Ending SEP 01	00	00	00	01	01	01	01	01	01	01	01	01	
Cultural:													
Fertilizer-Manure 1/4 per crop/yr	27												27
Sub Soil 2X (1/2 to crop)	28												28
Disc & Roll 2X	14												14
Chisel 2X	19												19
Land plane field 2X		13											13
Disc & Roll 1X		14											14
List Beds & Preplant Fertilizer		71											71
Shape beds & roll				6									6
Irrigate - Preirrigation				23									23
Herbicide/Insecticide Preplant 5"band				37									37
Transplant Seedlings				420									420
Irrigate - Sprinkle 2X				26	26								51
Fertilize - 3X Sidedress					51	51	51						153
Cultivate & furrow 4X					5	10	5						20
Hand Hoe							56						56
Pest Control 2X						36	62						98
Irrigate 8X					23	69	69	28					190
Tie Plant Tops 70% acres								135					135
Pickup	1	1	1	1	1	1	1	1	1				11
TOTAL CULTURAL COSTS	89	99	1	513	106	168	245	164	1				1,386
Harvest:													
Cut, wrap and pack 3X								1,292					1,292
Carton cost								782					782
Haul to market								204					204
Cool, Palletize, Sell								918					918
TOTAL HARVEST COSTS								3,196					3,196
Postharvest:													
Chop stubble									10				10
TOTAL POSTHARVEST COSTS									10				10
Interest on operating capital	1	2	2	6	7	9	11	40	0				77
TOTAL OPERATING COSTS/ACRE	90	101	3	519	114	176	256	3,400	12				4,669
Overhead:													
Land Rent									550				550
Office Expense	6	6	6	6	6	6	6	6	6				50
Field Sanitation	1	1	1	1	1	1	1	1	1	1	1	1	9
Liability Insurance	0	0	0	0	0	0	0	0	0	0	0	0	1
Property Taxes				3									3
Property Insurance				2									2
Investment Repairs	0	0	0	0	0	0	0	0	0	0	0	0	3.24
TOTAL CASH OVERHEAD COSTS	6.65	6.65	6.65	11.26	6.65	6.65	6.65	6.65	556.70	1.09	1.09	1.09	617.72
TOTAL CASH COSTS/ACRE	124	108	10.00	531	120	183	262	3384	568	1	1	1	5286

UC COOPERATIVE EXTENSION
Table 4. WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
 CENTRAL COAST - MONTEREY COUNTY 2001

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	Yrs Life	Salvage Value	Capital Recovery	Cash Overhead		Total
						Insur- ance	Taxes	
01	130 HP 2WD Tractor	62,500	10	18,462	7,420	270	405	8,095
01	280 HP Crawler	166,500	10	49,181	19,768	718	1,078	21,564
01	Bed shaper, 3 row	4,004	15	400	415	15	22	452
01	Chisel - Heavy 16'	6,163	12	854	715	23	35	773
01	Cultivator - 6 Row	8,580	12	1,188	995	33	49	1,077
01	Disc - Finish 21'	19,595	12	2,714	2,273	74	112	2,459
01	Mower, flail 10'	5,628	10	563	749	21	31	800
01	Pickup 1/2 Ton	20,565	5	9,217	3,363	99	149	3,611
01	Ringroller - 21'	3,699	10	654	471	15	22	508
01	Subsoiler - 8'	8,022	10	1,419	1,022	31	47	1,101
01	Triplane - 16'	20,109	12	2,785	2,333	76	114	2,524
TOTAL		325,365		87,437	39,525	1,375	2,064	42,964
60% of New Cost *		195,219		52,462	23,715	825	1,238	25,778

*Used to reflect a mix of new and used equipment

ANNUAL INVESTMENT COSTS

Description	Price	Yrs Life	Salvage Value	Capital Recovery	Cash Overhead			Total
					Insur- ance	Taxes	Repairs	
INVESTMENT								
Forklift - 5000 lb	12,305	10	1,231	1,637	45	68	615	2,365
Fuel Tanks & Pumps	19,835	20	1,984	1,779	73	109	397	2,358
Fuel Wagon	1,975	10	198	263	7	11	40	321
Implement Carrier	9,742	15	974	1,010	36	54	487	1,586
Pipe Gated 8" 1612'	4,940	10		694	16	25	494	1,229
Pipe Sprinkler 1456'	9,279	10	928	1,235	34	51	510	1,830
Shop Building	120,000	32		9,194	400	600	652	10,846
Shop Tools	13,072	20	1,307	1,172	48	72	131	1,423
Trailer - Lowbed	7,695	15	769	798	28	42	103	971
Trailer - Pipe #1	1,935	7	194	333	7	11	39	389
Trailer - Pipe #2	1,935	7	194	333	7	11	39	389
Truck Tractor	48,849	15	4,885	5,063	179	269	377	5,888
TOTAL INVESTMENT	251,562		12,664	23,510	880	1,321	3,884	29,595

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Field Sanitation	60	acre	9.00	540
Land Rent	60	acre	550.00	33,000
Liability Insurance	1,200	acre	0.98	1,175
Office Expense	1,200	acre	50.00	60,000

UC COOPERATIVE EXTENSION
Table 5. HOURLY EQUIPMENT COSTS
 CENTRAL COAST - MONTEREY COUNTY - 2001

Yr	Description	Actual	Cash Overhead			Operating			Total Costs/Hr.
		Hours Used	Capital Recovery	Insur- ance	Taxes	Repairs	Fuel & Lube	Total Oper.	
01	130 HP 2WD Tractor	1,200.40	3.71	0.13	0.20	2.81	10.93	13.74	17.79
01	280 HP Crawler	1,599.90	7.41	0.27	0.40	4.28	23.55	27.83	35.92
01	Bed shaper, 3 row	166.10	1.50	0.05	0.08	1.25	0.00	1.25	2.88
01	Chisel - Heavy 16'	165.20	2.60	0.08	0.13	1.28	0.00	1.28	4.09
01	Cultivator - 6 Row	166.30	3.59	0.12	0.18	1.72	0.00	1.72	5.60
01	Disc - Finish 21'	165.70	8.23	0.27	0.40	3.08	0.00	3.08	11.99
01	Mower, flail 10'	200.00	2.25	0.06	0.09	2.32	0.00	2.32	4.72
01	Pickup 1/2 Ton	304.30	6.63	0.20	0.29	1.33	4.34	5.67	12.79
01	Ringroller - 21'	199.70	1.42	0.04	0.07	0.42	0.00	0.42	1.94
01	Subsoiler - 8'	207.40	2.96	0.09	0.14	1.80	0.00	1.80	4.98
01	Triplane - 16'	251.20	5.57	0.18	0.27	3.02	0.00	3.02	9.05

UC COOPERATIVE EXTENSION
Table 6. RANGING ANALYSIS
 CENTRAL COAST - MONTEREY COUNTY 2001
 COSTS PER ACRE AT VARYING YIELD TO PRODUCE CAULIFLOWER

	YIELD (box/acre)						
	590	620	650	680	710	740	770
OPERATING COSTS/ACRE:							
Cultural Cost	1,386	1,386	1,386	1,386	1,386	1,386	1,386
Harvest Cost	2,773	2,914	3,055	3,196	3,337	3,478	3,619
Postharvest Cost	10	10	10	10	10	10	10
Interest on operating capital	73	74	75	77	78	79	80
TOTAL OPERATING COSTS/ACRE	4,242	4,384	4,526	4,669	4,811	4,953	5,095
TOTAL OPERATING COSTS/BOX	7.19	7.07	6.96	6.87	6.78	6.69	6.62
CASH OVERHEAD COSTS/ACRE	618	618	618	618	618	618	618
TOTAL CASH COSTS/ACRE	4,860	5,002	5,144	5,286	5,429	5,571	5,713
TOTAL CASH COSTS/BOX	8.24	8.07	7.91	7.77	7.65	7.53	7.42
NON-CASH OVERHEAD COSTS/ACRE	52	52	52	52	52	52	52
TOTAL COSTS/ACRE	4,912	5,054	5,196	5,339	5,481	5,623	5,765
TOTAL COSTS/BOX	8.33	8.15	7.99	7.85	7.72	7.60	7.49

NET RETURNS PER ACRE ABOVE OPERATING COSTS FOR CAULIFLOWER

PRICE \$/box	YIELD (box/acre)						
	590	620	650	680	710	740	770
7.66	277	365	453	540	628	715	803
7.91	425	520	615	710	805	900	995
8.16	572	675	778	880	983	1,085	1,188
8.41	720	830	940	1,050	1,160	1,270	1,380
8.66	867	985	1,103	1,220	1,338	1,455	1,573
8.91	1,015	1,140	1,265	1,390	1,515	1,640	1,765
9.16	1,162	1,295	1,428	1,560	1,693	1,825	1,958

NET RETURN PER ACRE ABOVE CASH COSTS FOR CAULIFLOWER

PRICE \$/box	YIELD (box/acre)						
	590	620	650	680	710	740	770
7.66	-340	-253	-165	-78	10	98	185
7.91	-193	-98	-3	92	187	283	378
8.16	-45	57	160	262	365	468	570
8.41	102	212	322	432	542	653	763
8.66	250	367	485	602	720	838	955
8.91	397	522	647	772	897	1,023	1,148
9.16	545	677	810	942	1,075	1,208	1,340

NET RETURN PER ACRE ABOVE TOTAL COSTS FOR CAULIFLOWER

PRICE \$/box	YIELD (box/acre)						
	590	620	650	680	710	740	770
7.66	-393	-305	-217	-130	-42	45	133
7.91	-245	-150	-55	40	135	230	325
8.16	-98	5	108	210	313	415	518
8.41	50	160	270	380	490	600	710
8.66	197	315	433	550	668	785	903
8.91	345	470	595	720	845	970	1,095
9.16	492	625	758	890	1,023	1,155	1,288