

SAMPLE COSTS TO PRODUCE COTTON
SAN JOAQUIN VALLEY - 1984

RON VARGAS AND KENT OLSON

This sample cost data sheet is produced as a guide only. It should, however, assist producers in determining production cost for their operation or specific fields and aid in analyzing cost and procedures that might increase production efficiency. The figures shown are based on what are considered good management practices and do not represent industry averages.

The cost data sheet was developed on a microcomputer using the spread sheet program VISICALC. A program listing can be obtained by contacting either of authors. From the listing someone with a microcomputer and a spread sheet program like VISICALC, or SUPERCALC could reconstruct the template. Then, by substituting their costs, they could customize the cost sheet for their operation. If you have any questions regarding the program, call the authors of this section.

Yield - Yield is the most important variable affecting both cost of lint per pound and profit per acre. The cost of production per pound of lint is greatly reduced as the yield of lint per acre increases.

Irrigation - Sample cost for water are based on \$15/acre foot. This cost will vary depending on irrigation district, portion of water supplied from wells, depth of pumping, time of day the water is pumped, and type of irrigation system.

Irrigation labor costs will vary with number of irrigations per season, hourly wage rates, type of irrigation system, and other factors. Laser leveling of furrow irrigated fields can have a significant impact on irrigation cost.

Insect Control - Insect control costs will vary with location, year, and the degree of control expected by the grower. This cost data sheet is set up for one miticide spray, and one mid-season insect spray. Note that a systemic insecticide treatment at planting is not included.

Weed Control - Cost will vary greatly depending on methods used, and the magnitude of the weed problem in general. This cost sheet is set up for one preplant application of a Dinitroaniline herbicide, one hand weeding operation, three cultivations, and a layby application of a herbicide.

SAMPLE COSTS TO PRODUCE COTTON SAN JOAQUIN VALLEY 1984

DATA ENTRY SECTION

<u>Labor</u>		
Field	\$/hr	5.50
Equipment Oper.	\$/hr	6.50
<u>Equipment Cost</u>		
80 HP Tractor	\$/hr	10.69
130 HP Tractor	\$/hr	15.79
Yield	lbs/ac	1000
Gin Turnout	%	32
Estimated Price	\$/lbs	0.75
Seed to Lint Ratio		1.70
Interest Rate	%	12

SAMPLE COSTS TO PRODUCE COTTON (contined)

ACTIVITY	UNIT COST	UNIT	RATE	UNIT	COST/ACRE	COST/LBS
<u>PRE-HARVEST COST</u>						
Land Preparation						
Labor	6.50	\$/hr	3.00	hr/ac	19.50	
130 HP Tractor	15.79	\$/hr	1.00	hr/ac	15.79	
80 HP Tractor	10.69	\$/hr	2.00	hr/ac	21.38	
Nematode Control						
if Needed	66.00	\$/ac	1.00	ac		
Preplant Herbicide						
Material	6.75	\$/ac	1.00	ac	6.75	
Application	8.00	\$/ac	1.00	ac	8.00	
Incorporation						
Labor	6.50	\$/hr	0.50	hr/ac	3.25	
80 HP Tractor	10.69	\$/hr	0.50	hr/ac	5.35	
Planting						
Seed	0.55	\$/lbs	14.00	lbs/ac	7.70	
Labor	6.50	\$/hr	0.25	hr/ac	1.63	
80 HP Tractor	10.69	\$/hr	0.25	hr/ac	2.67	
Fertilizer						
Material (NH3)	0.19	\$/lbs	125	lbs/ac	23.75	
Application						
Custom	7.00	\$/ac	1.00	ac	7.00	
Irrigation						
Water charge	15.00	\$/acft	3.00	acft/ac	45.00	
Labor (1 pre and 5 post irrig.)	5.50	\$/hr	6.00	hr/ac	33.00	
Postplant weed control						
Material	15.00	\$/ac	1.00	ac	15.00	
Application	8.00	\$/ac	1.00	ac	8.00	
Hand weeding (1x)	5.50	\$/hr	5.00	hr/ac	27.50	
Cultivation (3x)						
Labor	6.50	\$/hr	1.50	hr/ac	9.75	
80 HP Tractor	10.69	\$/hr	1.50	hr/ac	16.04	
Mite Control						
Material	11.00	\$/ac	1.00	ac	11.00	
Application	5.00	\$/ac	1.00	ac	5.00	
Insect Control						
Material	10.00	\$/ac	1.00	ac	10.00	
Application	5.00	\$/ac	1.00	ac	5.00	
Defoliation (2x)						
Material	10.00	\$/ac	2.00	x/ac	20.00	
Application	5.00	\$/ac	2.00	x/ac	10.00	
Land Rent	125.00	\$/ac	1.00	ac	125.00	
Non-tractor repair	20.00	\$/ac	1.00	ac	20.00	
Misc. Labor						
Labor	6.50	\$/hr	1.00	hr/ac	6.50	
80 HP Tractor	10.69	\$/hr	1.00	hr/ac	10.69	
Office Expense	20.00	\$/ac	1.00	ac	20.00	
Interest on Loan (prod. cost/2)*IR	12.00	%/ \$	520.24	\$/ac	31.21	

SAMPLE COSTS TO PRODUCE COTTON (continued)

ACTIVITY	UNIT COST	UNIT	RATE	UNIT	COST/ACRE	COST/LBS
TOTAL PREHARVEST COST					551.45	0.55
HARVEST COST						
Picking + Hauling						
1st pick 90%	3.20	\$/cwt SC	28.13	cwt/ac	90.00	
2nd pick 10%	3.35	\$/cwt SC	3.13	cwt/ac	10.47	
Ginning: (Bags, Ties, etc.)						
	3.20	\$/cwt SC	31.25	cwt/ac	100.00	
TOTAL HARVEST COST					200.47	
MISCELLANEOUS CASH COST						
CI Research and promotion						
	1.00	\$/bale	2.08	bale/ac	2.08	
plus .4% of value	0.40	*/\$	750.00	\$/ac	3.00	
Pink bollworm	1.75	\$/bale	2.08	bale/ac	3.65	
National Cotton C.	0.45	\$/bale	2.08	bale/ac	0.94	
West. Cotton G. A.	0.06	\$/bale	2.08	bale/ac	0.12	
Classing	1.10	\$/bale	2.08	bale/ac	2.29	
TOTAL MISCELLANEOUS COST					12.08	
TOTAL CASH COST					763.99	0.76
DEPRECIATION						
Irrigation system	300.00	\$/ac	16.00	years	18.75	
80 HP Tractor	2.58	\$/hr	5.25	hr/ac	13.55	
130 HP Tractor	4.75	\$/hr	1.00	hr/ac	4.75	
Other Equipment	100.00	\$/ac	10.00	years	10.00	
INTEREST ON INVESTMENT						
Irrigation system	160.00	\$/ac	12.00	*/\$	19.20	
80 HP Tractor	1.94	\$/hr	5.25	hr/ac	10.19	
130 HP Tractor	3.56	\$/hr	1.00	hr/ac	3.56	
Other Equipment	50.00	\$/ac	12.00	*/\$	6.00	
TOTAL NON-CASH COST					85.99	0.85
TOTAL COST OF PRODUCTION					849.98	
CREDIT FOR SEED	120.00	\$/ton	0.85	ton/ac	102.00	
NET COST OF PRODUCTION					747.98	0.75
PROFIT OR LOSS					2.02	0.002