

Kent Olson

SAMPLE COSTS TO PRODUCE COTTON IN THE SAN JOAQUIN VALLEY - 1983

Prepared by Alan G. George, Tulare County Farm Advisor; Kent Olson, Economist, Cooperative Extension, Davis.

This sample cost data sheet for cotton is produced only as a guide. It should, however, assist producers in determining the production costs for their operation or a specific field and as an aid in helping analyze costs 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.

These costs are for the cotton grower who owns his own land. Instead of using the 12% interest and land value as we have done in the past, we have used a value related to rental costs and listed it as land cost.

For the person renting land for cotton production, the rental price would be substituted for land cost and depreciation on irrigation system (\$21.88), interest on irrigation system (\$22.75) and county taxes would be deleted.

Yield - Yield is the most important factor affecting costs per pound of lint and profit per acre. The cost of production per pound of lint is reduced greatly as the yield of lint per acre is increased. Example: \$1.01 @ 700 lbs. lint per acre drops to 64¢ for 1200 lbs. lint per acre.

Irrigation - Sample costs for water are based on \$20/acre ft. either by canal or pump or a combination of both. Water costs will change considerably depending on amount pumped, foot of lift, source of power, pump efficiency, amount of district water used in relation to water pumped and variation in irrigation district assessment. Therefore, the \$20/acre ft. is subject to variation depending on location, water table conditions and district involved.

Irrigation labor cost will also vary based on hourly wage rates, number of irrigations and irrigation efficiency. With many growers laser leveling their field to flat or about flat and using larger heads of water, irrigation labor cost may be reduced considerably.

Pest and Disease Control - Costs for insect control will change a great deal from year to year and by areas in the valley. However, this cost data sheet is set up for mite control at planting plus a mid-season application and a pesticide application for lygus bug control.

Weed Control - Costs will vary a great deal depending on methods used and the weed population. Costs include a pre-plant application and either hand weeding or spot spraying which is widely used.

The costs used are considered for average conditions and are not set up for any particular owner/operator but are considered a cross section of costs. There is a great deal of variation in cost inputs in putting such production costs together. For example, tractor size, tillage operations and number of trips as well as other factors previously mentioned above will result in considerable cost of production variation in various areas within a county or from one area of the San Joaquin Valley to another. Therefore, they should only be used as a guide.

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Cost Analysis Worksheet - Owner/Operator

Costs are based on a field producing 1000 lbs. of lint per acre. Field labor @ \$4.50/hr. and equipment operator @ \$5.00/hr., these include benefits. Diesel tractor, 80 hp, per hour cash costs \$10.69, depreciation \$2.58 and interest \$1.94. Heavy tractor 130 hp, cash costs \$15.79, depreciation \$4.75 and interest \$3.56. Gin turnout is 31%.

	SAMPLE COSTS		MY COSTS	
	PER ACRE	PER CWT	PER ACRE	PER CWT
<u>Pre-harvest Costs</u>				
Land Preparation: 3 hrs. - labor and tractor 1 hr. heavy tractor		52.17		
* Nematode control, if needed: add \$50/A				
Plant: Acid delinted seed 14 lbs. @ 60¢ 1/5 hr. labor and tractor		8.40		
Irrigate: 1 pre and 5 crop - 6 hrs. 3 acre ft. at \$20		27.00		
Pre-emergence herbicide, custom application \$6 and 1/2 hr. - labor and tractor for disking		60.00		
Hand weeding; 6 hrs. labor		20.85		
Cultivate 3 X's - 1 1/2 hr. labor and tractor		27.00		
Fertilize: 100 lbs. N at 16¢, NH ₃ Application: custom-injected		23.54		
Pest control: materials		16.00		
Application: Custom 2 X's - 1 ground, 1 air @10 gpa		7.00		
Defoliation: 2 X's - material and application		15.00		
Misc: labor, material, 1 hr. labor and tractor		12.25		
Repairs to equipment - except tractor		17.40		
Office and business costs		15.69		
Land cost		20.00		
Interest on operating capital - total cash cost + 2 X 13%		20.00		
		125.00		
		30.58		
TOTAL PRE-HARVEST COSTS		\$501.02	\$50.10	
<u>Harvest Costs</u>				
Picking and hauling - 90% - first pick 90% - first pick @ \$3.25/cwt. 10% - second pick @ \$25/A		94.48		
Ginning - bags, ties, insurance & storage @ \$3.25/cwt.		25.00		
		104.98		
TOTAL HARVEST COSTS		\$224.46	\$22.45	
<u>Miscellaneous Cash Cost</u>				
Research and promotion - \$1/bale + .4% lint value, estimated sale @ 67¢/lb. lint		3.68		
Pink bollworm eradication @ \$1.75/bale		3.50		
Classing costs @ 67¢/bale		1.34		
National Cotton Council @ 30¢/bale		.60		
Western Cotton Growers @ .06¢/bale		.12		
TOTAL MISCELLANEOUS COSTS		\$ 9.24	\$ 1.02	
TOTAL CASH COSTS		\$734.72	\$73.47	

SAMPLE COSTS		MY COSTS	
PER ACRE	PER CWT	PER ACRE	PER CWT

Depreciation

Irrigation system - \$350 - 16 yr. life @ 2.58	21.88	
Tractor: 5 1/2 hrs. @ \$2.58, 1 hr. @ \$4.75	18.17	
Other equipment: \$100 - 10 yr. life	10.00	
TOTAL DEPRECIATION	50.05	5.01

Investment (13% Interest)

Irrigation system (1/2 cost) \$175	22.75	
Tractor: 5 1/5 hrs. @ \$1.94, 1 hr. @ \$3.56	13.65	
Other equipment: 1/2 cost - \$50	6.50	
TOTAL INTEREST ON INVESTMENT	42.90	4.29
TOTAL COST OF PRODUCTION	\$827.67	\$82.77
CREDIT FOR SEED: 1700 lbs. @ \$100/ton	85.00	8.50
NET COST OF PRODUCTION	\$742.67	\$74.27

* (Nematode Control) - This treatment is required in limited areas.

SAMPLE COSTS AT VARYING YIELDS

Yield - lbs. of Lint/A	Cost per pound of lint					
	700	800	900	1000	1100	1200
Cash & Misc. Costs/lb. of Lint	.96	.87	.79	.73	.69	.65
Total Cost/lb. of Lint	1.09	.98	.90	.83	.77	.72
Net Cost/lb. of Lint	1.01	.90	.81	.74	.69	.64

(Total Cost Minus Seed Credit