

TOMATO COSTS OF PRODUCTION

Yolo County - 1970

(1969-70 COSTS USED)

--- This cost study based on 160 acres of machine harvested tomatoes, is assumed to be part of a 1,000 acre multi-crop farming operation. The basic cost information was developed using 1970 information on costs where possible and 1969 harvest costs. The 1,000 acre enterprise base was used to develop realistic figures for equipment use and costs.

--- The rotation of tomatoes following barley and milo, as shown, is not necessarily the general rule. However, early planted tomato fields frequently follow barley. Tomatoes are grown following nearly all crops in Yolo County. Cost would change slightly following the different crops, because field management would change. Cost variation would not be great, however.

--- Labor costs are based on \$2.00 for tractor drivers; \$1.75 for semi-skilled labor and \$1.65 for general labor. Additional labor costs are for social security, workmen's compensation insurance, and miscellaneous benefits, and it amounts to about 12% of the cash hourly wage. The foreman or supervisor's wages would be considerably above the tractor driver's hourly rate. In addition, he would receive free transportation, housing, vacation with pay and usually a bonus. Allowances for these non-cash costs are included in miscellaneous cost.

An additional charge is made for seasonal and part-time labor - weeding crews, sorters, etc., - at the rate of \$2.50 per day per man. This charge is paid to labor supervisors (labor contractors) and includes bookkeeping, housing, field supervision, supplies, transportation to the field, etc.

--- The operations shown in the study are not fixed procedures. Different situations call for different operations. In general, operations would follow those shown. It is not uncommon to encounter special problems. Additional applications or operations may be necessary. Thus, costs would also change.

--- Your costs should be used to figure costs of production for your operations and conditions. This study was developed and is intended to be a guide to compare your costs. For more detailed information, see "Sample Cost of Production, Yolo County, 1967"; "Sample Costs of Production, Clarksburg Area, 1969"; and "Machine Harvest Costs - Tomato - 1969, Yolo County."

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Tomatoes
 160 Acres - 50 following Milo, 130 following Barley
 Yield 25 Tons/Acre

	Hours/ Acre	Cash & Labor Costs Per Acre				Materials	Total
		Labor	Fuel & Repairs				
			Tractor	Implt.			
<u>Seed Bed Preparation</u>							
Fall							
Plow (30A) 3/16 of 0.70	0.13	0.26	0.20	0.11	-	0.57	
Disc (Fall) 2X 13/16 of 0.40	0.32	0.64	0.84	0.36	-	1.84	
Landplane 2X	0.50	1.00	1.73	0.55	-	3.28	
Subsoil or chisel 2X	1.20 <i>2.15</i>	2.40 <i>4.30</i>	4.15	<i>1.07</i> <i>9.01</i>	-	7.62	
Spring							
Disc 2X (Spring)	0.40	0.80	1.04	0.46	-	2.30	
Springtooth 1X	0.12	0.24	0.32	0.27	-	0.83	
Harrow & Roll 1X	0.17	0.34	0.44	0.13	-	0.91	
List or Ridge & apply	0.25	0.50	0.40	0.44	-	1.34	
Starter fertilizer - 10 gal. @ 53¢/gal.					5.30	5.30	
Rent - Tag-a-long @ 50¢/Acre					0.50	0.50	
Move equip., set-up and service @ 10% of operating time	0.31	0.62	-	-	-	0.62	
Total	3.40	6.80	9.12	3.39	5.80	25.11	
<u>Planting</u>							
Sled, Shape, Incorp. & Plant							
	0.40	1.50	0.63	0.88	-	3.01	
(2 men) + Weed Materials - 20" band @ 6#/Acre (1/3 area) 1.80 lbs.					6.23	6.23	
Seed 1 lb. @ \$15/lb.					15.00	15.00	
Rent - Tag-a-long @ 50¢/Acre					.50	.50	
Move equip., set-up and service @ 20% of operating time	0.08	0.30	-	-	-	0.30	
Total	0.48	1.80	0.63	0.88	21.73	25.04	
<u>Growing Costs</u>							
Cultivate - Sled & Implements 2X							
	0.50 <i>1.15</i>	0.88	0.56	0.30	-	1.74	
Thin - Mechanical	0.40	0.70	0.48	0.24	-	1.42	
Rolling Cultivator 1X	0.17	0.30	0.30	0.71	-	1.31	
Cultivate & furrow 2X	0.50	0.88	0.56	0.88	-	2.32	
Hoe (Trim & Hoe, Hoe) 6.5 + 3 hrs/Ac. = 9.5 hrs/Ac. @ \$1.65 = \$15.68						15.68	
Ditch - Open & Close 3X	0.12 <i>2.00</i>	0.24	0.41	0.15	-	0.80	
Irrigate 7X @ 1.5 hrs/Acre							
Labor	10.5	18.38 <i>17</i>	-	-	-	18.38	
Water - 5 Ac. ft. @ \$3.00/Ac. ft. (cash costs)					15.00	15.00	
Irrigation equip., siphons, dams, shovels, etc.					0.33	0.33	
Fertilize (sidedress)							
Tractor & Sled	0.25 <i>1.15</i>	0.44	0.28	0.15	-	0.87	
Fertilizer - 75 lbs. Nitrogen @ 8¢/lb.					6.00	6.00	
Rent - Tag-a-long @ 50¢/Acre					0.50	0.50	

Cash & Labor Costs Per Acre

Tomatoes, con't.	Hours/ Acre	Labor	Fuel & Repairs		Materials	Total
			Tractor	Implt.		
<u>Growing Costs continued</u>						
<u>Insect Control</u>						
Seedling stage - ground rig	0.16 ¹⁰⁵	0.28	0.14	0.14	-	0.56
Seedling stage - bait	0.16 ¹⁰⁵	0.28	0.14	0.07	-	0.49
Worm Control - 2X ground	0.32 ¹⁰⁵	0.56	0.27	0.28	-	1.11
- 1X air - @ \$2.50/Acre					2.50	2.50
Materials - Seedling and 1st worm - 3, 1/2 lbs. @ \$1.75/lb					6.13	6.13
- 2nd and 3rd worm - @ \$7.50 ea.					15.00	15.00
- Bait - 25# - @ 18¢/lb					4.50	4.50
- Misc. Control - Air - (Non routine problems - armyworm or stinkbug or leafminor or cutworms, etc.)					7.50	7.50
Move equip., service, set-up @ 15% of operating time	0.39 ¹⁰⁵	0.68	-	-	-	0.68
Total	2.97	39.30	3.14	2.92	57.46	102.82

<u>Misc. Operating and Growing Costs</u>						
Pickup, phone, postage, bookkeeping, roadways, mis. weed control, travel, meetings, Interest on Operating Capital, etc. @ 12% of cultural costs						19.42
Social Security, compensation insurance, transportation, vacation, bonuses, etc. @ 12% of hourly wage						3.87
Additional charges for seasonal and part-time labor @ \$2.50/day/man (Includes transportation, bookkeeping, crew supervision, labor manager fees, etc.)						5.00
Total Misc.						28.29
Total Growing Costs						181.26

Taxes - Land						17.10
Total Costs Pre-Harvest						198.36
Pre-Harvest cost per ton (23 ton)						8.62

<u>Harvesting Costs</u>						
Machine 3.3 A/day	2.7	-	16.78	-	-	16.78
Driver @ \$2.15	3.2	6.88	-	-	-	6.88
Sorters - 14 @ \$1.65	2.7	62.37	-	-	-	62.37
Sorter Supervisor @ \$1.75	2.7	4.73	-	-	-	4.73
Trailers (2)	2.7	-	-	0.88	-	0.88
Tractors (2)	2.7	-	5.48	-	-	5.48
Drivers (2) @ \$1.75/hr.	2.9	10.15	-	-	-	10.15
Forklift	3.0	-	3.91	-	-	3.91
Driver @ \$2.00/hr.	3.0	6.00	-	-	-	6.00
Swampers 1 @ \$1.70	2.7	4.59	-	-	-	4.59
Other labor (Mech., super @ \$3.00)	3.3	9.90	-	-	-	9.90
Misc. Equipment (Disc, scraper, washing equip., pickup) @ \$14.33/day						4.34

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181.26
 19.42
 161.84
 12.88
 174.72

Tomatoes, con't.	Hours/ Acre	Labor	Cash & Labor Costs Per Acre			Total
			Fuel & Repairs Tractor	Implt.	Materials	
Misc. Supplies - drinking water, sodas, goggles, etc. @ \$6.60/day						2.00
Toilet facilities - 2 units - 2 months - @ \$2.92/day						0.88
Inspection @ 20¢/ton - 23 ton						4.60
Bin Rental @ 40¢/ton - 23 ton						9.20
Rejected load - 0.5% of del. loads - 25% loss from re-sorting						1.22
Social Security, Workman's Comp., bonus, transportation etc, @ 12% of hourly wage for steady employees						4.52
Additional charges for seasonal and part-time labor (sorters, swamper, 1 trailer man) @ \$2.50/day/man. Includes transportation, bookkeeping, etc.						12.01
			Total Harvesting Costs (cash)			170.44
			Cost Per Ton			7.41
Management charges @ 5% of gross income (23 ton @ \$25/ton)						28.75
			Total Growing and Harvesting Costs			397.55
			Cost Per Ton			17.28
<u>Investment Costs (Depreciation and Interest)</u>						
Land - \$900 @ 7%						63.00
Buildings - \$15/Acre						1.95
Irrigation Wells & Pumps						5.81
Tractors & Equipment						29.62
Harvest Equipment						47.31
			Total Investment Costs			147.69
			Investment Cost Per Ton			6.42
			Total All Costs			545.24
			<u>Total All Costs Per Ton</u>			23.70

COSTS OF PRODUCTION OF THE SHARE-RENT OR CASH RENT TOMATO GROWER.

The share-rent tomato grower would have the same annual cash costs as an owner-operator, except for the land tax and the rent paid. Fixed or overhead costs would be different. Investments in land, wells and pumps, and buildings need not be considered by the rent grower. These are the landlords costs. However, the rent operator does have to consider and include tractor and equipment fixed costs as part of his operational cost.

There is no set rental rate for tomatoes. The rental rates depend on many things such as the amount of costs or services shared or supplied, length of term of the lease, working agreement or relationship between landlord and rentor, productivity of soil, reliability of the grower, reputation of the landlord, company for whom the tomatoes are grown, etc. The rental rates vary from less than 15% to over 20%. The most common rates are in the 15 to 17% range.

The accompanying table presents the per ton costs of production, with three prices per ton and three rental rates for several yields. The cost per ton varies because at different yields the rent charges are different, management charges are different, and harvest efficiencies are different.

To show a few examples, the share-rent grower would have to figure his costs as follows:

	20 TON @ 25.00		23 TONS @ 25.00/TON			25 TON @ 25.00	
	17%	20%	17%	15%	17%		
Growing Cost To Harvest	198.36	198.36	198.36	198.36	198.36		
Plus Mgmt. charges @ 5% of Gross Income	25.00	28.75	28.75	28.75	28.75	31.25	
Less Land Tax	17.10	17.10	17.10	17.10	17.10	17.10	
	<u>206.26</u>	<u>210.01</u>	<u>210.01</u>	<u>210.01</u>	<u>210.01</u>	<u>212.51</u>	
Plus Growing Equip. Cost	29.62	29.62	29.62	29.62	29.62	29.62	
Plus Harvest Equip. Cost	47.31	47.31	47.31	47.31	47.31	47.31	
Plus Harvest Costs	168.64	170.44	170.44	170.44	170.44	171.64	
Plus Rent	85.00	115.00	97.75	86.25	86.25	106.25	
Total Costs Per Acre	<u>536.83</u>	<u>572.38</u>	<u>555.13</u>	<u>543.63</u>	<u>543.63</u>	<u>567.33</u>	
Cost Per Ton	26.84	24.88	24.13	23.63	23.63	22.69	

PER TON COSTS TO GROW TOMATOES
Under 3 Prices, 3 Rental Rates and Several Yields

Yield Tons/Ac	\$20.00 Per Ton			\$25.00 Per Ton			\$30.00 Per Ton		
	15% Rent	17% Rent	20% Rent	15% Rent	17% Rent	20% Rent	15% Rent	17% Rent	20% Rent
10	46.08	46.48	47.08	47.08	47.58	48.33	48.08	48.63	49.58
15	32.25	32.65	33.25	33.25	33.75	34.50	34.25	34.85	35.75
20	25.34	25.74	26.34	26.34	26.84	27.59	27.34	27.94	28.84
23	22.63	23.03	23.63	23.63	24.13	24.88	24.63	25.23	26.13
25	21.19	21.59	21.87	22.19	22.69	23.44	23.19	23.79	24.69
28	19.41	19.81	20.41	20.41	20.91	21.66	21.41	22.01	22.91
30	18.42	18.82	19.42	19.42	19.92	20.67	20.42	21.02	21.92

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