

Tomato Costs

1965

YOLO
COUNTY

Hand
Harvest



CONDITIONS OF STUDY

TYPE OF FARM: This cost study is assumed to be part of a 1000-acre farm operation. This is necessary to develop realistic cost figures for equipment and investment costs. Originally this tomato cost sheet was developed as part of an over-all study.

LABOR: The hourly wage rates used were \$1.65 for tractor drivers. This includes other benefits not itemized. Other hourly wage rates used were \$1.50 for irrigators and \$1.40 for general labor. This also includes additional benefits. Social security and workmen's compensation costs are in addition to the hourly wage rate and amounts to 11¢ per hour. The combined wage cost would be \$1.76 for tractor driver, \$1.47 for irrigators and \$1.37 for general labor. The foreman's wage would be more, and would in addition, have benefits such as vacation, housing and transportation.

HIGHER OR LOWER YIELDS: The costs, up to harvest, are about the same regardless of yields. With high yields the cost of growing is spread over more tons, thus less cost per ton. Picking costs per ton also are usually lower with high yields, as the minimum rate on the scale of pay usually is used and fixed charges are spread over more tons. Low yields, on the other hand, usually cost more per ton to pick because low yielding fields are frequently associated with adverse conditions. Also, fewer tons must absorb the cost of production. Yields not only vary from year to year, but also from field to field. In Yolo County the average yield was 21 tons of processing tomatoes in 1964, and 19.1 tons per acre in 1963.

UNPREDICT-ABLE COSTS: Nearly every crop encounters some unusual condition or problem. This results in higher costs because money must be spent to overcome the adverse situation or problem. If leafminers, crickets, army worms, etc., need control, the cost is in addition to the usual pest control problem. If high temperatures cause flower drop, this causes a longer growing season. Thus, it costs more to maintain the crop. Weedy conditions, moldy fruit, over-ripe fruit because of quotas - all mean extra costs. Any operation, in addition to the standard operation, adds to the costs of production.

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|--------------------------------|-----|--------------------------------|
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Sample Cost of Producing and Harvesting Tomatoes for Processing
 Hand Harvest - Yolo County - California, 1965
 160 Acres Tomatoes following Barley - Yield: 20 Tons

| Item | Hours per Acre | Cash and Labor Costs Per Acre | | | | |
|---|----------------------|-------------------------------|---------------------------|----------|-------------|-------------|
| | | Labor | Fuel & Repairs Tractor | Imp. | Materials | Total |
| <u>Seed Bed Preparation</u> | | | | | | |
| Disc 2X (fall) | 0.4 | 0.66 | 1.34 | 0.30 | - | 2.30 |
| Landplane 2X (fall) | 0.5 | 0.82 | 1.67 | 0.34 | - | 2.83 |
| Subsoil or chisel (fall) 2X | 1.3 | 2.14 | 4.35 | 1.14 | - | 7.63 |
| Springtooth 2X | 0.4 | 0.66 | 1.34 | 0.36 | - | 2.36 |
| Harrow & roll 2X | 0.3 | 0.49 | 0.82 | 0.25 | - | 1.56 |
| Weed control - disc 2X Incorporate weed material | 0.4 | 0.66 | 1.34 | 0.30 | - | 2.30 |
| Weed material 5# @ \$4.00/lb. = \$20 | - | - | - | - | 20.00 | 20.00 |
| List for planting | 0.4 | 0.66 | 1.10 | 0.25 | - | 2.01 |
| Move equip., set up & service @ 10% of time | <u>0.4</u> | <u>0.66</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>0.66</u> |
| Total | 4.1 | 6.75 | 11.96 | 2.94 | 20.00 | 41.65 |
| <u>Planting</u> | | | | | | |
| Sled=shape, plant & fertilize (2 men) | 0.3 | 0.98 | 0.35 | 0.09 | - | 1.42 |
| Seed 3/4 lb. @ \$15/lb. | - | - | - | - | 11.25 | 11.25 |
| Rent tag-a-long @ 50¢/acre | - | - | - | - | - | 0.50 |
| Fertilizer 8-24-0 -- 10 gals/A @ 40¢/gal | <u>-</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>4.00</u> | <u>4.00</u> |
| Total | 0.3 | 0.98 | 0.35 | 0.09 | 15.25 | 17.17 |
| <u>Growing Costs</u> | | | | | | |
| Thinning | 10.00 | 14.00 | - | - | - | 14.00 |
| Hoeing 2½X @ 5.0 hrs/A | 12.5 | 17.50 | - | - | - | 17.50 |
| Cultivate - sled & implements 2X | 0.6 | 0.99 | 0.70 | 0.76 | - | 2.45 |
| Cultivate & furrow 3X | 0.9 | 1.48 | 1.05 | 1.19 | - | 3.72 |
| Ditch 5X | 0.2 | 0.33 | 0.67 | 0.20 | - | 1.20 |
| Irrigate 7X: | | | | | | |
| Labor | 10.5 | 15.75 | - | - | - | 15.75 |
| Water, 5 acre feet @ \$3.04 peracre foot (pumping costs)* | - | - | - | - | - | 15.20 |
| Irrigation equipment - siphons, canvas dams, shovels, etc. | - | - | - | - | 0.25 | 0.25 |
| Fertilize (sidedress) | | | | | | |
| Tractor | 0.3 | 0.49 | 0.28 | 0.29 | - | 1.06 |
| Fertilizer - 75 lbs. N @ 9½¢/lb | - | - | - | - | 7.12 | 7.12 |
| Rent tag-a-long @ 50¢/A | - | - | - | - | - | 0.50 |
| Insect Control | | | | | | |
| Seedling stage & 1st worm Control - spray with ground rig-- materials | 0.5 | 0.82 | 0.47 | 0.24 | - | 1.53 |
| Worm & mite control - air 2X @ \$2.50 | - | - | - | - | 3.90 | 3.90 |
| Materials - Sevin - spray (2X) \$4.40 & Sulfur dust 40 lbs. @ \$5.5¢/lb | - | - | - | - | 11.00 | 11.00 |
| Move equip., service & set up at 10% of time | <u>0.2</u> | <u>0.34</u> | <u>-</u> | <u>-</u> | <u>-</u> | <u>0.34</u> |
| Total | 35.7 | 51.70 | 3.17 | 2.68 | 22.27 | 100.52 |

*Total water costs - \$4.74/acre foot (\$3.04 pumping, plus \$1.70 investment).

| | Per Acre <u>Total</u> |
|--|-----------------------------|
| <u>Misc. Operating and Growing Costs</u> | |
| Pickup, phone, postage, cut roadways, misc. weed control, etc. @ 5% of cultural and harvest cost | 25.80 |
| Social Security, compensation insurance @ 11¢/hr. | 4.41 |
| Foreman's transportation, vacation, bonuses, etc., @ 25¢/hr. | 4.12 |
| Additional charges for seasonal labor | |
| Camp charges @ \$1/day/man | 3.50 |
| Crew supervision @ \$17.50/day | 1.00 |
| Crew transportation to and from field @ 15¢/hr./man | 5.20 |
| Additional board @ 25¢/day/man | 3.75 |
| Management charges 5% of gross income (20 ton @ \$35/ton) | <u>35.00</u> |
| Total misc. operating and growing cost | \$ 82.78 |
| <u>Taxes - land</u> | 12.00 |
| Total costs pre-harvest | 254.12 |
| Pre-harvest costs per ton | 12.71 |
| <u>Harvesting Costs</u> | |
| Picking 20-tons - 43 boxes/ton - 860 boxes @ 23¢/box (17¢ to 30¢) | 197.80 |
| Box rent @ 1¢/box | 8.60 |
| Loading - includes scattering empties @ 3¢/box | 25.80 |
| Inspection @ 17¢/ton | 3.40 |
| Drinking water, equipment, clean-up after harvest @ 2¢/box | 17.20 |
| Labor supervisors @ 4¢/box - includes transportation to field, checkers, bookkeeping, swamper | 34.40 |
| Labor Association Charges - \$1.50/man/day | 8.44 |
| T.G. Association dues @ 10¢/ton | 2.00 |
| Additional board @ 25¢/day/man | 2.25 |
| Recruiting & transport of foreign harvest labor @ \$80/man (1 man/2.5 acres) (Restricted to ½ need) = 30 men | 15.00 |
| Recruit and transport out of state & domestic labor - .50/acre | .50 |
| Day haul from population center - \$30/day (3 growers share=\$10/day/grwr) | 1.88 |
| Delivery of over-tolerance tomatoes (7% tomatoes on 5% contract) Grower receives \$1/ton for over-tolerance fruit | 5.61 |
| Rejected loads - 1-3/4% of loads delivered, plus sorting | 4.00 |
| Camp upkeep and supervision \$1/man/day | <u>16.88</u> |
| Total harvest costs | 343.76 |
| Cost per ton | 17.19 |
| Total all growing and harvesting costs | 597.88 |
| Cost per ton | 29.89 |
| <u>Investment Costs - (includes depreciation and interest)</u> | |
| Land - \$750/acre @ 6% | 45.00 |
| Buildings - \$10/acre | .80 |
| Irrigation wells and equipment | 8.50 |
| Tractors and equipment | <u>16.78</u> |
| Total investment cost | 71.08 |
| Total - all costs | 668.96 |
| Costs per ton | 33.45 |

(A share rent grower would substitute - 17% of the gross income for the land taxes and investment charges. A charge should be made for tractors and equipment. Usually the share rent grower's costs are higher than those of the owner-operator.)