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PLASTIC GREENHOUSE | TOMATO PRODUCTION COSTS

Market tomatoes have been produced in plastic greenhouses on the Mojave Desert for some years. Good management is necessary in order to obtain high yields, since growers have encountered many production problems. Production methods necessary to produce greenhouse tomatoes can be found in our publication "Growing Tomatoes in Plastic Greenhouses."

Though the costs are presented for a one-acre greenhouse, most of the producers on the desert have smaller sized houses. It is felt, however, that a one-acre unit is about the minimum size a good manager should handle in order to do the most efficient and economical production job.

The costs of production presented here are meant to be a sample of those which might be encountered by an above average manager. The production methods used and the rates and kinds of materials applied are, for the most part, those recommended by the University, rather than those typical for any specific operation.

Specific Cost Items

The labor rate of \$1.50 includes not only the cash rates paid per hour, but an allowance for Social Security, Workmen's Compensation, and fringe benefits. All labor costs, whether supplied by the operator, his family, or hired workers, have been computed at the \$1.50 per hour rate.

Building depreciation is based on a construction cost of \$13,000 for a gable-type greenhouse, as described in University of California Agricultural Extension Service publication AXT-163. Forced air gas heaters are included in this cost. Additional equipment includes the well and pump, an irrigation distribution system, 30 h.p. tractor and tillage tools, portable sprayer, fertilizer spreader, and 1200 redwood stakes.

Interest on investment is included as a cost to the business for the capital invested in land, buildings, and equipment. The interest rate charged was 6 per cent. On depreciable items such as buildings and equipment, the interest was charged against one-half the original cost as representing the average amount invested in these items.

Based on 1 acre under plastic greenhouse

PLASTIC GREENHOUSE TOMATO PRODUCTION COSTS
IN SAN BERNARDINO COUNTY (DESERT AREA)

Labor - \$1.50 per hour
Yield: 6000 - 20 lb. lugs

Operation	Total Annual Manhours	Labor	Equip-ment	Material	Cost	Combined Costs	Total All Costs
<u>Land Preparation</u>							
Pre-Irrigation	3.0	\$ 4.50		Water - 1 acre foot @ \$10	\$ 10.00	\$ 14.50	
Fertilize (organic)	6.0	9.00		Manure, 200 cu.ft. @ 10¢ (applied)	20.00		
(commercial)				0-20-20, 500 lbs. @ 4¢ (applied)	20.00	49.00	
Irrigate	3.0	4.50		Water - 1 acre foot @ \$10	10.00	14.50	
Disc	5.0	7.50	\$ 6.00			13.50	
Plow	3.0	4.50	3.60			8.10	
Harrow and float	8.0	12.00	8.00			20.00	\$ 119.60
<u>Cultural</u>							
Apply plastic	80.00	120.00		Plastic, 4 mil - 55,000 sq. ft. @ \$9 per 1000	495.00	615.00	
List and furrow	6.0	9.00	6.90			15.90	
Irrigate - 30x	60.0	90.00		Water - 7.5 acre feet @ \$10	75.00	165.00	
Transplant	36.0	54.00		10,000 plants @ 4¢ each	400.00	454.00	
Stake	24.0	36.00				36.00	
Train	192.0	288.00		8 bales twine @ \$10.85 per bale	86.80	374.80	
Weed and furrow	112.0	168.00				168.00	
Pest Control	24.0	36.00		Insecticide	18.75	54.75	
Prune	633.0	949.50				949.50	
Fertilize - 10x	50.0	75.00		1000 lbs. ammonium sulfate	24.00	99.00	2931.95
				Gas and electricity	2100.00		2100.00
<u>Heating</u>							
<u>Harvest</u>							
Pick	1700.0	2550.00				2550.00	
Grade and pack	942.0	1413.00		6000 used lugs @ 11¢ each	660.00		
				Liners and chipboard	276.00		
Clean up and remove plastic	82.0	123.00		Labels	60.00	2409.00	
						123.00	5082.00
<u>Cash Overhead</u>							
General expense (accounting, insurance, office, transportation, electricity)						445.00	
Repairs	32.0	48.00				48.00	
Taxes						33.00	526.00
TOTAL CASH COSTS							10759.55
<u>Non-Cash Overhead</u>							
			<u>Depreciation per 1 acre</u>	<u>Interest per 1 acre</u>			
Land			-----	\$ 90.00			
Buildings - 10 years			\$ 1300.00	390.00			
Equipment (includes heaters)			1093.00	305.00			
TOTAL OVERHEAD COSTS							3178.00
TOTAL ALL COSTS							\$13937.55

(Per 20 lb. lug - \$2.32)