

Tomato (High Tunnel) Planning Budget

sing this budget, farmers can estimate the costs and returns for raising tomatoes in a high tunnel. Table 1 presents estimates for Missouri based on price forecasts in March 2024. Production is assumed in 2,000 square feet high tunnel system with 226 plants yielding 11 pounds per plant. Capital investments and a sensitivity analysis are summarized in Tables 2 and 3. Use the "Your estimate" column to plan your high tunnel tomato operation's costs and returns.

Table 1. Missouri high tunnel tomato budget for 2024.

	Unit	Quantity	Price per unit	Total per 2,000 square feet	Total per square foot	Your estimate
Income						
Tomatoes (wholesale)	pound	0	1.75	0.00	0.00	
Tomatoes (retail)	pound	2,486	2.75	6,836.50	3.42	
Total income				6,836.50	3.42	
Operating costs						
Soil test	each	1	15.00	15.00	0.01	
Plastic mulch	feet	400	0.06	24.96	0.01	
Drip tape	feet	400	0.05	18.40	0.01	
Transplants	each	226	0.44	99.44	0.05	
Vertical supports	each	56.5	2.20	124.28	0.06	
Fertigation	ounce	360	0.32	115.20	0.06	
Insecticide	ounce	90	1.09	98.40	0.05	
Fungicide	ounce	4	2.00	8.00	0.00	
Packing boxes (25 pound)	box	100	3.31	331.00	0.17	
Labor	hour	111	20.00	2,220.00	1.11	
Marketing	% of sales	10		683.65	0.34	
Repairs	% of capital	1		102.50	0.05	
Miscellaneous	total			0.00	0.00	
Operating interest	percent	8.5		81.62	0.04	
Total operating costs				3,922.44	1.96	
Ownership costs						
Depreciation on capital investments				887.50	0.44	
Interest on capital investments	percent	8.5		476.00	0.24	
Real estate charge	-			25.00	0.01	
Overhead, taxes and insurance	% of capital	1		205.00	0.10	
Total ownership costs	-	,		1,593.50	0.80	
Total costs				5,515.94	2.76	
Income over operating costs				2,914.06	1.46	
Income over total costs				1,320.56	0.66	

Note: Totals may not sum due to rounding.

Written by

Juo-Han Tsay, Assistant Extension Professor, Agricultural Business and Policy

extension.missouri.edu g704

Table 2. Capital investments used in Missouri high tunnel tomato budget for 2024.

ltem	Total (dollars)	Lifespan (years)	Salvage value (percent)	Depreciation (dollars)	Interest (dollars)
High tunnel structure/ventilation/installation	14,000	12	10	1,050.00	654.50
High tunnel covering	1,000	4	0	250.00	42.50
Growing/storage/other equipment	5,000	10	10	450.00	233.75
Land/site preparation (machinery and labor)	500	20		25.00	21.25
Total	20,500				

Table 3. Sensitivity analysis for Missouri high tunnel tomato budget, 2,000 square feet in production, income over total costs (dollars).

Sale price (dollars per pound)	Pounds per tomato plant						
	9	10	11	12	13		
2.20	(822)	(364)	93	550	1,007		
2.48	(331)	188	707	1,225	1,744		
2.75	161	741	1,321	1,901	2,481		
3.03	652	1,293	1,934	2,576	3,217		
3.63	1,732	2,508	3,285	4,061	4,838		

Farmers can also customize this budget to fit their own operations by using the <u>High Tunnel Tomato Enterprise</u> <u>Budget (XLSX)</u> (muext.us/MONicheAgBudgets). Download the spreadsheet tool and update cost and return estimates for a customized high tunnel tomato budget.