Extension
University of Missouri

Strawberry (High Tunnel) Planning Budget

Using this budget, farmers can estimate the costs and returns for raising strawberries in a high tunnel. Table 1 presents estimates for Missouri based on price forecasts in January 2025. The budget assumes strawberries are grown in a 1,000-square-foot high tunnel with trickle irrigation and sold wholesale. Capital investments and a financial sensitivity analysis are summarized in Tables 2 and 3. Use the "Your estimate" column to plan your high tunnel strawberry operation's costs and returns.

Table 1. Missouri high tunnel strawberry budget.

			Year 1 Establishment			Year 2 First production		
	Unit	Price per unit	Quantity	Dollars per 1,000 sq. ft.	Your estimate	Quantity	Dollars per 1,000 sq. ft.	Your estimate
Income								
Fresh berry sales	pound	6.01				650.5	3,909.63	
Total income							3,909.63	
Operating costs								
Plants	each	0.39	650	253.50				
Soil test	each	15.00	1	15.00				
Fertilizer/Lime	pound	0.52	31	16.25				
Insecticide	ounce	2.73				1	2.73	
Fungicide	pound	5.50				1	5.50	
Drip tape	feet	0.06	411	24.66				
Plastic mulch	feet	0.06	158	10.11				
Row covers	each	0.06	661	39.67				
Labor	hour	18.00	10.5	189.00		31	558.00	
Packaging	each	0.50				610	303.18	
Marketing	percent of sales	10.00				3,909	390.96	
Miscellaneous	total			18.23			31.35	
Operating interest	percent	7.75		21.95			50.05	
Total operating costs				588.37			1,341.78	
Ownership costs								
High tunnel building use	month	72.73	6	436.39		6	436.39	
Total ownership costs				436.39			436.39	
Total costs				1,024.76			1,778.17	
Income over operating costs				**–588.37**			**2,567.85**	
Income over total costs				**–1,024.76**			**2,131.46**	

Note: Totals may not sum due to rounding.

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Table 2. Capital investments used in Missouri high tunnel strawberry budget.

Component	Labor (dollars)	Machinery (dollars)	Materials (dollars)	Total (dollars)	Useful life (years)	10-year cost (dollars)
Site evaluation and soil preparation	393.30	86.06	0.00	479.36	10	479.36
Trenching and laying water pipes	17.85	0.00	133.35	151.19	10	151.19
Inserting poles and setting posts	356.89	196.20	281.62	834.72	10	834.72
Assembling the frame	356.89	0.00	9,399.23	9,756.12	10	9,756.12
Treating and setting baseboards	118.96	0.00	159.53	278.50	10	278.50
End and sidewall installation	594.82	0.00	449.37	1,044.20	10	1,044.20
Pulling plastic	118.96	0.00	874.74	993.71	3	3,312.36
Channel lock installation	29.74	0.00	0.00	29.74	10	29.74
Shutter vents	0.00	0.00	816.07	816.07	10	816.07
Trellis purlin installation	178.45	0.00	295.09	473.54	10	473.54
Electrical	146.52	0.00	0.00	146.52	10	146.52
Miscellaneous hardware and tools	0.00	0.00	133.35	133.35	10	133.35
Total cost	**2,312.40**	**282.27**	**12,542.36**	**15,137.03**		**17,455.68**
Cost per square foot	**1.16**	**0.14**	**6.27**	**7.57**		**8.73**

Table 3 provides annual profitability expectations (returns over total costs) under varying yield and price scenarios in full production and holding all costs constant.

Table 3. Sensitivity analysis for Missouri high tunnel strawberry budget, income over total costs (dollars).

Percent change	Sale price per pound	Yield per 1,000 square feet (pounds)						
		455	520	585	651	716	781	846
15% less	5.11	548	880	1,213	1,545	1,877	2,210	2,542
10% less	5.41	685	1,037	1,389	1,740	2,092	2,444	2,796
5% less	5.71	822	1,193	1,565	1,936	2,307	2,679	3,050
Base level	6.01	959	1,350	1,740	2,131	2,522	2,913	3,304
5% more	6.31	1,095	1,506	1,916	2,327	2,737	3,148	3,558
10% more	6.61	1,232	1,662	2,092	2,522	2,952	3,383	3,813
15% more	6.91	1,369	1,819	2,268	2,718	3,168	3,617	4,067

The budget presented here aggregates costs for some inputs. Farmers can find additional details and customize this budget to match their own operation by using the [Strawberry High Tunnel Planning Budget workbook (XLSX)](extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/ht-strawberry-budget.xlsx) (extension.missouri.edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/ht-strawberry-budget.xlsx).

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