

# Microgreens Planning Budget

Using this budget, farmers can estimate the costs and returns for microgreens. Table 1 presents estimates for Missouri based on price forecasts in March 2024. Production is assumed in a greenhouse on a stainless steel shelf system under artificial lights. Detailed assumptions and capital investments are summarized in Tables 2, 3 and 4. Use the “Your estimate” column to plan your microgreens operation’s costs and returns.

**Table 1. Missouri microgreens budgets for 2024.**

	Mix microgreens	Broccoli microgreens	Cabbage microgreens	Pea microgreens	Radish microgreens	Your estimate
<b>Income</b>						
<i>Dollars per harvested tray (1020)</i>						
Microgreen sales	46.00	46.00	60.00	32.00	32.00	
Other income	0.00	0.00	0.00	0.00	0.00	
<b>Total income</b>	<b>46.00</b>	<b>46.00</b>	<b>60.00</b>	<b>32.00</b>	<b>32.00</b>	
<b>Operating costs</b>						
Seed	1.04	1.04	4.00	0.38	2.00	
Soilless growing media	3.00	3.00	3.00	3.00	3.00	
Fertilizer	0.07	0.07	0.07	0.07	0.07	
Electricity	1.20	1.20	0.98	1.20	0.83	
Labor	5.00	5.00	5.00	5.00	5.00	
Labels	6.60	6.60	9.00	4.80	4.80	
Packages	4.62	4.62	6.30	3.36	3.36	
Marketing	6.90	6.90	9.00	4.80	4.80	
Repairs	0.41	0.38	0.30	0.35	0.24	
Miscellaneous	0.00	0.00	0.00	0.00	0.00	
Operating interest	1.23	1.22	1.60	0.98	1.02	
<b>Total operating costs</b>	<b>30.06</b>	<b>30.03</b>	<b>39.26</b>	<b>23.93</b>	<b>25.13</b>	
<b>Ownership costs</b>						
Depreciation on capital investments	0.85	0.79	0.63	0.72	0.50	
Interest on capital investments	0.43	0.40	0.32	0.37	0.26	
Business overhead, taxes and insurance	0.46	0.43	0.34	0.39	0.27	
<b>Total ownership costs</b>	<b>1.74</b>	<b>1.61</b>	<b>1.29</b>	<b>1.48</b>	<b>1.03</b>	
<b>Total costs</b>	<b>31.80</b>	<b>31.64</b>	<b>40.55</b>	<b>25.42</b>	<b>26.16</b>	
<b>Income over operating costs</b>	<b>15.94</b>	<b>15.97</b>	<b>20.74</b>	<b>8.07</b>	<b>6.87</b>	
<b>Income over total costs</b>	<b>14.20</b>	<b>14.36</b>	<b>19.45</b>	<b>6.58</b>	<b>5.84</b>	

Note: Totals may not sum due to rounding.

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**Table 2. Input assumptions used in Missouri microgreens budgets for 2024.**

Selected input quantities	Quantity	Selected input prices	Dollars per unit
Soiless growing media, quarts per tray	3	Soiless growing media, per quart	1.00
Fertilizer, ounces per tray	0.36	Fertilizer, per ounce	0.20
Operating interest, %	8.5	Electricity, per kilowatt hour	0.12
Labor, minutes per tray	15	Labor, per hour	20.00
Repairs and maintenance, % of capital	1	Labels, each	0.60
Marketing, % of sales	15	Packages, each	0.42

**Table 3. Crop assumptions used in Missouri microgreens budgets for 2024.**

Crop	Crop yield per tray (total ounces)	Growing period (days)	Crop cycles (per year)	Sales price (per ounce)	Seed cost (per ounce)
Microgreen mix	11.5	13.5	27	4.00	2.60
Broccoli microgreens	11.5	12.5	29	4.00	2.60
Cabbage microgreens	15.0	10.0	37	4.00	8.00
Pea microgreens	8.0	11.5	32	4.00	0.48
Radish microgreens	8.0	8.0	46	4.00	2.00

**Table 4. Capital investments used in Missouri microgreens budgets for 2024.**

Item	Unit	Quantity	Price per unit (dollars)	Total (dollars)	Lifespan (years)	Depreciation (dollars)	Interest (dollars)
Heavy duty trays (10x20 inches)	each	20	10	200	3	66.67	8.50
Stainless steel shelf unit (4 levels)	each	1	150	150	10	15.00	6.38
LED lights	each	4	225	900	10	22.50	38.25
Fans	each	4	55	220	10	5.50	9.35
Cutter	each	1	30	30	10	3.00	1.28
Cold storage/refrigerator	each	1	2,500	2,500	10	250.00	106.25
Infrastructure for growing crops <sup>1</sup>	square feet	8	48	384	10	4.80	16.32
<b>Total</b>				<b>4,384</b>		<b>367.47</b>	<b>186.32</b>
<b>Total per shelf<sup>2</sup></b>				<b>1,096</b>		<b>91.87</b>	<b>46.58</b>

<sup>1</sup> This is a charge for the greenhouse space or area dedicated for microgreen production.

<sup>2</sup> It is assumed that the stainless steel shelf unit will grow four 1020 trays of a single microgreen crop per shelf.

Farmers can customize these microgreens budgets by using the [Microgreens Enterprise Budget \(XLSX\)](https://muext.us/MONicheAgBudgets) (muext.us/MONicheAgBudgets).

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