



Southwest British Columbia Small-Scale Farm Enterprise Budget: Garlic



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Ermias Afeworki, Wallapak Polasub, Caroline Chiu and Kent Mullinix

This enterprise budget presents costs and returns for a 0.06 acre of garlic grown on a small-scale mixed vegetable farm in southwest British Columbia, Canada. The sample values are typical of small-scale long season crop production using low-input growing methods and selling directly to consumers through venues such as farmers' markets. These values were derived from data gathering sessions with representative farmers from the region, but do not represent any particular farm, and should be used only as a guide. The actual costs of production may vary from farm to farm depending on production method and scale, machinery use and other input costs. This budget is also available as a dynamic MS Excel spreadsheet to facilitate more detailed planning for your own operation. Please refer to the "Institute for Sustainable Food Systems Enterprise Budget User Guide for assistance in tailoring the spreadsheet to your own farm.

Assumptions:

- 1) The garlic crop area is 0.06 acre, consisting of seven beds, each measuring 4' x 100' (400 square feet per bed) grown on a small-scale mixed-vegetable farm.
- 2) Garlic takes eight months from seed to harvestable maturity.
- 3) An annual land rent of \$400 per acre is included in overhead charges.
- 4) Physical farm labourers (regular labour) are paid \$12 per hour.
- 5) Equipment operators (operator labour) are paid \$15 per hour.
- 6) The proportion of sales of garlic to the total annual sales of 20 crops, grown on a 3.85-acre mixed vegetable farm, is used to allocate marketing costs to the garlic enterprise.
- 7) The proportion of the farm's total cultivated acreage used to grow garlic is used to allocate fixed costs to the garlic enterprise.
- 8) Fuel cost is \$1.30 per liter.
- 9) The interest rate is fixed at 5%.
- 10) The annual fixed cost is estimated using the straight-line depreciation method.
- 11) Management time is not included as a cost. The net return over total cost may be considered as the return to management time.

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REVENUE					
Item	Quantity per 0.06 Acre	Unit	\$ per unit	\$ per 0.06 Acre	\$ per 100' Bed
Garlic	650.00	pounds	\$12.00	\$7,800.00	\$1,114.29

ANNUAL VARIABLE COST					
Item	Quantity per 0.06 Acre	Unit	\$ per unit	\$ per 0.06 Acre	\$ per 100' Bed
Seeds and Plants					
Seed	800.00	bulbs	4.00	3,200.00	457.14
Fertility and Nutrients					
Compost	3.00	yards	40.00	120.00	17.14
Lime	1.25	pounds	1.60	2.00	0.29
Other Materials					
Mulch	10.00	bales	7.00	70.00	10.00
Land Preparation					
Prepare land (clearing, digging) – operator labour	1	hours	15.00	15.00	2.14
Apply pre-plant amendments (lime, compost) – operator labour	1	hours	15.00	15.00	2.14
Prepare for planting (form beds, lay mulch, drip tape, etc) – regular labour	2	hours	12.00	24.00	3.43
Planting					
Seeding – regular labour	4	hours	12.00	48.00	6.86
Pest Management					
Weeding – regular labour	2.5	hours	12.00	30.00	4.29
Post-Harvest Activities					
Harvesting (picking, drying, cleaning) – regular labour	70	hours	12.00	840.00	120.00
Miscellaneous Expenses					
Repair and maintenance				51.51	7.36
Fuel				13.80	1.97
Interest on working capital				147.64	21.09
Marketing				685.14	97.88
TOTAL LABOUR COST				972.00	138.86
TOTAL MATERIAL COST				3,392.00	484.57
TOTAL MISCELLANEOUS COST				898.09	128.30
TOTAL VARIABLE COST				5,262.09	751.73

ANNUAL FIXED COST		
Item	\$ per 0.06 Acre	\$ per 100' Bed
Machinery		
Tractor	26.88	3.84
Rototiller	5.71	0.82
Discer	2.73	0.39
Manure spreader	7.79	1.11
Delivery van	34.29	4.90
Pick-up truck	11.43	1.63
Equipment and tools	14.61	2.09
Building and shelter	15.00	2.14
Overhead charges		
Land rent	25.20	3.60
Soil test	1.64	0.23
Farm liability insurance	9.82	1.40
Motor vehicle insurance	33.55	4.79
Office expenses	16.36	2.34
Electricity	11.45	1.64
Water	16.36	2.34
Telephone and internet	8.18	1.17
Bookkeeping fees	98.18	14.03
Professional fees (accountant, lawyers, etc)	11.45	1.64
TOTAL ANNUAL FIXED COST	350.64	50.09

TOTAL COST	\$ per 0.06 Acre	\$ per 100' Bed
TOTAL FIXED AND VARIABLE COST	5,612.73	801.82

NET RETURNS		
Item	\$ per 0.06 Acre	\$ per 100' Bed
Return Over Variable Cost	2,537.91	362.56
Return Over Fixed Cost	7,449.36	1,064.19
Return Over Total Cost	2,187.27	312.47

MACHINERY INFORMATION				
Item	Type	Purchase Price (\$)	Trade-in Value (\$)	Useful Life (Years)
Tractor	25 HP (new)	23,000.00	0.00	20
Rototiller	48" (new)	4,000.00	0.00	15
Discer	used	3,000.00	0.00	30
Manure spreader	used	4,000.00	0.00	10
Sprayer	used	5,000.00	0.00	10
Delivery van	Isuzu 2002 (used)	24,000.00	0.00	15
Pick-up truck	used	8,000.00	0.00	15

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