



Southwest British Columbia Small-Scale Farm Enterprise Budget: **Potato**



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This enterprise budget presents costs and returns for one acre of potatoes grown on a small-scale mixed vegetable farm in southwest British Columbia, Canada. The sample values are typical of small-scale root 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 potato crop area is one acre, consisting of 109 beds, each measuring 4' x 100' (400 square feet per bed) grown on a small-scale mixed-vegetable farm.
- 2) Potato takes three 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 potato 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 potato enterprise.
- 7) The proportion of the farm's total cultivated acreage used to grow potatoes is used to allocate fixed costs to the potato enterprise.
- 8) Fuel cost is \$1.30 per liter.
- 9) Fuel cost is \$1.30 per liter.
- 10) The interest rate is fixed at 5%.
- 11) The annual fixed cost is estimated using the straight-line depreciation method.
- 12) 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 1 Acre	Unit	\$ per unit	\$ per 1 Acre	\$ per 100' Bed
Potato	10,000.00	pounds	\$2.00	\$20,000.00	\$183.49

ANNUAL VARIABLE COST					
Item	Quantity per 1 Acre	Unit	\$ per unit	\$ per 1 Acre	\$ per 100' Bed
Seeds and Plants					
Organic seed	1450.00	seeds	2.00	2,900.00	26.61
Cover crop (winter grain) seed	55.00	pounds	0.60	33.00	0.30
Fertility and Nutrients					
Chicken manure	13.00	yards	50.00	650.00	5.96
Other Materials					
Copper fungicide	30.00	pounds	1.70	51.00	0.47
Land Preparation					
Prepare land (plow, disk, rotovate) – operator labour	3	hours	15.00	45.00	0.41
Apply pre-plant amendments (lime, fertilizer, manure, compost) – operator labour	1.5	hours	15.00	22.50	0.21
Planting					
Seeding – regular labour	4	hours	12.00	48.00	0.44
Pest Management					
Spraying copper – operator labour	9	hours	15.00	135.00	1.24
Hand-hoe weeding – regular labour	8	hours	12.00	96.00	0.88
Hilling – operator labour	4		15.00	60.00	0.55
Other Activities					
Irrigating (set up, manage overhead or drip) – regular labour	8	hours	12.00	96.00	0.88
Topping – regular labour	8	hours	12.00	96.00	0.88
Post-Harvest Activities					
Harvesting – regular labour	8	hours	12.00	96.00	0.88
Harvesting – operator labour	3	hours	15.00	45.00	0.41
Post-harvest handling (wash, sort, pack, store) – regular labour	20	hours	12.00	240.00	2.20
Miscellaneous Expenses					
Repair and maintenance				1,345.80	12.35
Fuel				147.06	1.35
Interest on working capital				76.33	0.70
Marketing				1,754.04	16.09
TOTAL LABOUR COST				979.50	8.99
TOTAL MATERIAL COST				3,634.00	33.34
TOTAL MISCELLANEOUS COST				3,323.24	30.49
TOTAL VARIABLE COST				7,936.74	72.81

ANNUAL FIXED COST		
Item	\$ per 1 Acre	\$ per 100' Bed
Machinery		
Tractor	448.05	4.11
Rototiller	95.24	0.87
Discer	45.45	0.42
Manure spreader	129.87	1.19
Sprayer	625.00	5.73
Delivery van	571.43	5.24
Pick-up truck	190.48	1.75
Potato digger	550.00	5.05
Potato hiller	29.17	0.27
Equipment and tools	549.31	5.04
Irrigation	367.45	3.37
Building	391.77	3.59
Overhead Charges		
Land rent	420.00	3.85
Soil test	27.27	0.25
Farm liability insurance	163.64	1.50
Motor vehicle insurance	559.09	5.13
Office expenses	272.73	2.50
Electricity	190.91	1.75
Water	272.73	2.50
Telephone and internet	136.36	1.25
Bookkeeping fees	1,636.36	15.01
Professional fees (accountant, lawyers, etc)	190.91	1.75
TOTAL ANNUAL FIXED COST	7,863.22	72.14

TOTAL COST	\$ per 1 Acre	\$ per 100' Bed
TOTAL FIXED AND VARIABLE COST	15,799.96	144.95

NET RETURNS		
Item	\$ per 1 Acre	\$ per 100' Bed
Return over Variable Cost	12,063.26	110.67
Return over Fixed Cost	12,136.78	111.35
Return over Total Cost	4,200.04	38.53

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
Potato digger	new	6,000.00	0.00	15
Potato hiller	used	500.00	0.00	30

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