



Southwest British Columbia Small-Scale Farm Enterprise Budget: **Brussel Sprout**



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This enterprise budget presents costs and returns for a 0.05 acre of Brussel sprouts grown on a small-scale mixed vegetable farm in southwest British Columbia, Canada. The sample values are typical of small-scale brassica 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 Brussel sprout crop area is 0.05 acre, consisting of five beds, each measuring 4' x 100' (400 square feet per bed) grown on a small-scale mixed-vegetable farm.
- 2) Brussel sprout takes four 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 Brussel sprout 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 Brussel sprout enterprise.
- 7) The proportion of the farm's total cultivated acreage used to grow Brussel sprouts is used to allocate fixed costs to the Brussel sprout enterprise Fuel cost is \$1.30 per liter.
- 8) The interest rate is fixed at 5%.
- 9) The annual fixed cost is estimated using the straight-line depreciation method.
- 10) Management time is not included as a cost. The net return over total cost may be considered as the return to management time.

REVENUE					
Item	Item	Item	Item	Item	Item
Brussel sprout	450.00	pounds	\$6.00	\$2,700.00	\$540.00

ANNUAL VARIABLE COST					
Item	Quantity per 0.05 Acre	Unit	\$ per unit	\$ per 0.05 Acre	\$ per 100' Bed
Seeds and Plants					
Seed	1000.00	seeds	0.03	25.00	5.00
Fertility and Nutrients					
Compost	0.75	yards	40.00	30.00	6.00
Lime	100.00	pounds	0.10	10.00	2.00
Other Materials					
BT				10.00	2.00
Potting mix				15.00	3.00
Trays	10.00	trays	1.20	12.00	2.40
Land Preparation					
Prepare land (plow, disk, rotovate) – operator labour	0.5	hours	15.00	7.50	1.50
Apply pre-plant amendments (lime, compost) – operator labour	0.5	hours	15.00	7.50	1.50
Planting					
Transplanting (potting up, moving, transplanting) – regular labour	5	hours	12.00	60.00	12.00
Pest Management					
Weeding – regular labour	4	hours	12.00	48.00	9.60
Spraying BT – regular labour	6	hours	12.00	72.00	14.40
Other Activities					
Irrigating (set up, manage drip) – regular labour	2.5	hours	12.00	30.00	6.00
Pruning – regular labour	2		12.00	24.00	4.80
Post-Harvest Activities					
Harvesting – regular labour	5	hours	12.00	60.00	12.00
Miscellaneous Expenses					
Repair and maintenance				56.38	11.28
Fuel				6.90	1.38
Interest on working capital				7.90	1.58
Marketing				238.31	47.66
TOTAL LABOUR COST				309.00	61.80
TOTAL MATERIAL COST				102.00	20.40
TOTAL MISCELLANEOUS COST				309.50	61.90
TOTAL VARIABLE COST				720.50	144.10

ANNUAL FIXED COST		
Item	\$ per 0.05 Acre	\$ per 100' Bed
Machinery		
Tractor	22.40	4.48
Rototiller	4.76	0.95
Discer	2.27	0.45
Manure spreader	6.49	1.30
Delivery van	28.57	5.71
Pick-up truck	9.52	1.90
Equipment and tools	12.50	2.50
Irrigation	65.45	13.09
Building and shelter	85.26	17.05
Overhead charges		
Land rent	21.00	4.20
Soil test	1.36	0.27
Farm liability insurance	8.18	1.64
Motor vehicle insurance	27.95	5.59
Office expenses	13.64	2.73
Electricity	9.55	1.91
Water	13.64	2.73
Telephone and internet	6.82	1.36
Bookkeeping fees	81.82	16.36
Professional fees (accountant, lawyers, etc.)	9.55	1.91
TOTAL ANNUAL FIXED COST	430.73	86.15

TOTAL COST	\$ per 0.05 Acre	\$ per 100' Bed
TOTAL FIXED AND VARIABLE COST	1,151.23	230.25

NET RETURNS		
Item	\$ per 0.05 Acre	\$ per 100' Bed
Return Over Variable Cost	1,979.50	395.90
Return Over Fixed Cost	2,269.27	453.85
Return Over Total Cost	1,548.77	309.75

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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