



# Southwest British Columbia Small-Scale Farm Enterprise Budget: Yellow Onion



Institute for Sustainable Food Systems  
Kwantlen Polytechnic University

Technical Bulletin 2015-012

[kpu.ca/isfs](http://kpu.ca/isfs)

*Ermias Afeworki, Wallapak Polasub, Caroline Chiu and Kent Mullinix*

This enterprise budget presents costs and returns for a 0.06 acre of yellow onions 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 yellow onion 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) Yellow onion 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 yellow onion 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 yellow onion enterprise.
- 7) The proportion of the farm's total cultivated acreage used to grow yellow onions is used to allocate fixed costs to the yellow onion 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.

The enterprise budgets project was generously funded by Vancouver City Savings Credit Union (Vancity). Support for this project does not necessarily imply Vancity's endorsement of the findings or contents here in.

**Vancity**

<b>REVENUE</b>					
<b>Item</b>	<b>Quantity per 0.06 Acre</b>	<b>Unit</b>	<b>\$ per unit</b>	<b>\$ per 0.06 Acre</b>	<b>\$ per 100' Bed</b>
Yellow Onion	1,500.00	pounds	\$2.00	\$3,000.00	\$428.57

<b>ANNUAL VARIABLE COST</b>					
<b>Item</b>	<b>Quantity per 0.06 Acre</b>	<b>Unit</b>	<b>\$ per unit</b>	<b>\$ per 0.06 Acre</b>	<b>\$ per 100' Bed</b>
<b>Seeds and Plants</b>					
Seed	5000.00	plants	0.01	70.00	10.00
Cover crop	13.00	pounds	0.60	7.80	1.11
<b>Fertility and Nutrients</b>					
Compost	3.00	yards	40.00	120.00	17.14
Lime	1.25	pounds	1.60	2.00	0.29
<b>Other Materials</b>					
Potting mix				18.00	2.57
Trays	50.00	trays	1.20	60.00	8.57
Mulch				10.00	1.43
<b>Land Preparation</b>					
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 plastic, drip tape, etc) – regular labour	4	hours	12.00	48.00	6.86
<b>Planting</b>					
Transplanting ( potting up, moving, transplanting) – regular labour	10	hours	12.00	120.00	17.14
<b>Pest Management</b>					
Weeding – regular labour	24	hours	12.00	288.00	41.14
<b>Other Activities</b>					
Irrigating (set up, manage drip) – regular labour	0.5	hours	12.00	6.00	0.86
<b>Post-Harvest Activities</b>					
Harvesting (picking, drying, cleaning) – regular labour	48	hours	12.00	576.00	82.29
<b>Miscellaneous Expenses</b>					
Repair and maintenance				125.19	17.88
Fuel				13.80	1.97
Interest on working capital				49.83	7.12
Marketing				264.60	37.80
<b>TOTAL LABOUR COST</b>				<b>1,068.00</b>	<b>152.57</b>
<b>TOTAL MATERIAL COST</b>				<b>287.80</b>	<b>41.11</b>
<b>TOTAL MISCELLANEOUS COST</b>				<b>453.41</b>	<b>64.77</b>
<b>TOTAL VARIABLE COST</b>				<b>1,809.21</b>	<b>258.46</b>

<b>ANNUAL FIXED COST</b>		
<b>Item</b>	<b>\$ per 0.06 Acre</b>	<b>\$ per 100' Bed</b>
<b>Machinery</b>		
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
<b>Equipment and tools</b>	14.61	2.09
<b>Irrigation</b>	349.39	49.91
<b>Building and shelter</b>	16.05	2.29
<b>Overhead charges</b>		
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
<b>TOTAL ANNUAL FIXED COST</b>	<b>701.08</b>	<b>100.15</b>

<b>TOTAL COST</b>	<b>\$ per 0.06 Acre</b>	<b>\$ per 100' Bed</b>
<b>TOTAL FIXED AND VARIABLE COST</b>	<b>2,510.29</b>	<b>358.61</b>

<b>NET RETURNS</b>		
<b>Item</b>	<b>\$ per 0.06 Acre</b>	<b>\$ per 100' Bed</b>
<b>Return Over Variable Cost</b>	<b>1,190.79</b>	<b>170.11</b>
<b>Return Over Fixed Cost</b>	<b>2,298.92</b>	<b>328.42</b>
<b>Return Over Total Cost</b>	<b>489.71</b>	<b>69.96</b>

<b>MACHINERY INFORMATION</b>				
<b>Item</b>	<b>Type</b>	<b>Purchase Price (\$)</b>	<b>Trade-in Value (\$)</b>	<b>Useful Life (Years)</b>
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

### **ACKNOWLEDGMENTS**

The authors would like to express our sincere appreciation to all the farmers who contributed information used to develop this enterprise budget. We would also like to thank Chris Bodnar, co-owner of Close to Home Organics Ltd, and Heather Pritchard, farm program manager at Farm Folk City Folk, for helping us connect with experienced farmers. Kwantlen Polytechnic University's Michael Bomford (Sustainable Agriculture & Food Systems) and Caitlin Dorward (Institute for Sustainable Food Systems), reviewed and revised this document. Finally, we would like to acknowledge the financial support provided by Vancouver City Savings Credit Union.