



# Southwest British Columbia Small-Scale Farm Enterprise Budget: **Lamb**



Institute for Sustainable Food Systems  
Kwantlen Polytechnic University

Technical Bulletin 2015-023

[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 20 ewe small-scale farm in southwest British Columbia, Canada. The sample values are typical of small-scale lamb 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 size of herd is 21, consisting of 20 ewes and 1 ram.
- 2) Ewes grow up to about 1 year and 6 months old before they start giving birth.
- 3) The ewe fertility rate is 200%, i.e., each ewe gives birth to two lambs
- 4) Land for shelter is owned
- 5) Grazing land is not paid for ( provided by ALR land owners in return for receiving farm status)
- 6) Physical farm labourers (regular labour) are paid \$12 per hour.
- 7) Equipment operators (operator labour) are paid \$15 per hour.
- 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.

<b>SHEEP PRODUCTIVITY INFORMATION</b>		
<b>Item</b>	<b>As % of Ewes</b>	<b>Number</b>
Ewes		20
Ram		1
Fertility rate (lambs born)	200%	40
Ewes culled		2
Rams culled		0
Ewe death rate (loss)	5%	1
Pre weaning lamb mortalities	10%	4
Lambs weaned	180%	36
Replacement ewe lambs		2
Lambs available for sale	170%	34

REVENUE							
	No. Head	Quantity /head	Unit	Total Quantity	\$/Unit	\$/20 ewes	Per ewe
Market lambs	34	55.00	pounds	1870.00	7.50	14,025.00	701.25
Cull ewes	2		number	2.00	50.00	100.00	5.00
Cull rams	0		number	0.00	0.00	0.00	0.00
Fleece adults	21	12.00	pounds	252.00	2.00	504.00	25.20
Fleece lambs	36	6.00	pounds	216.00	2.00	432.00	21.60
<b>TOTAL REVENUE</b>						<b>15,061.00</b>	<b>753.05</b>

ANNUAL VARIABLE COST							
	No. Head	Quantity /head	Unit	Total Quantity	\$/Unit	\$/20 ewes	Per ewe
<b>Feed</b>							
Pasture management			acres	5	75.00	375.00	18.75
Hay (ewes and ram)	21	25	bails	525	7.00	3,675.00	183.75
Grain (ewes and lambs)	60	3	sacs	180	12.60	2,268.00	113.40
Minerals (ewes)	20		sac (44 lb)	2	35.00	70.00	3.50
Salt (ewes)	20		sac (44 lb)	2	15.00	30.00	1.50
Calcium Flour (ewes)	20		sac (44 lb)	2	15.00	30.00	1.50
Total feed cost						<b>6,448.00</b>	<b>322.40</b>
<b>Veterinary</b>							
Deworming adults	20	3	25 cc	60	2.50	150.00	7.50
Deworming lambs	40	3	10 cc	120	0.85	102.00	5.10
8 way Vaccine adults	20	1	times	20	1.00	20.00	1.00
8 way Vaccine lambs	40	2	times	80	1.00	80.00	4.00
Total veterinary cost						<b>352.00</b>	<b>17.60</b>
<b>Labour</b>							
Lambing		1	hours	240	12.00	2,880.00	144.00
General		1	hours	660	12.00	7,920.00	396.00
Shearing ewes	20	1	head	20	12.00	240.00	12.00
Shearing ram	1	1	head	1	24.00	24.00	1.20
Shearing ewes	40	1	head	40	6.00	240.00	12.00
Total labour cost						<b>11,304.00</b>	<b>565.20</b>
<b>Miscellaneous</b>							
Butchering (lambs)	34	1	head	34	110.00	3,740.00	187.00
Contract transportation (lambs)	34	1	head	34	10.00	340.00	17.00
Fuel					150.00	150.00	7.50
Repair and maintenance					640.00	640.00	32.00
Interest on working capital					5.00%	2,053.90	102.70
Total miscellaneous cost						<b>6,923.90</b>	<b>346.20</b>
<b>TOTAL VARIABLE COST</b>						<b>25,027.90</b>	<b>1,251.40</b>

<b>ANNUAL FIXED COST</b>		
<b>Item</b>	<b>\$/20 ewes</b>	<b>\$/ewe</b>
Animals	745.00	37.25
Building and fencing	1,678.75	83.94
Equipment and tools	133.13	6.66
Machinery	4,250.00	212.50
Overhead	1,050.00	52.50
<b>TOTAL FIXED COST</b>	<b>7,856.88</b>	<b>392.84</b>

<b>TOTAL COST</b>	<b>\$/20 ewes</b>	<b>\$/ewe</b>
<b>TOTAL VARIABLE AND FIXED COST</b>	<b>32,884.78</b>	<b>1,644.24</b>

<b>NET RETURNS</b>		
<b>Item</b>	<b>\$/20 ewes</b>	<b>\$/ewe</b>
<b>Returns Over Variable Cost</b>	<b>-9,966.90</b>	<b>-498.35</b>
<b>Returns Over Fixed Cost</b>	<b>7,204.13</b>	<b>360.21</b>
<b>Returns Over Total Cost</b>	<b>-17,823.78</b>	<b>-891.19</b>

## **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. We would like to recognize Kwantlen Polytechnic University's Michael Bomford (Sustainable Agriculture & Food Systems) and Caitlin Dorward (Institute for Sustainable Food Systems) for their invaluable input to this document. Finally, we would like to acknowledge the financial support provided by Vancouver City Savings Credit Union (VanCity).