

PLANNING FOR PROFIT



Ministry of
Agriculture
and Lands

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Dairy Goats – Vancouver Island

This information is a resource to project costs and returns for British Columbia farm enterprises and is a general guide to plan individual farm operations. This budget should be used as a guide only. Each farm should develop their own budget to reflect specific production goals, costs and market prices. Information regarding financial planning and other enterprise budgets may be viewed at the B.C. Ministry of Agriculture and Lands website (<http://www.agf.gov.bc.ca/busmgmt/>) and InfoBasket (<http://www.infobasket.gov.bc.ca>).

Overview

The planning process provides producers with the opportunity to look at their operation as a group of distinct enterprises. Alternative enterprises should be evaluated on the basis of the Contribution Margin, taking into consideration resource constraints, market opportunity and risk.

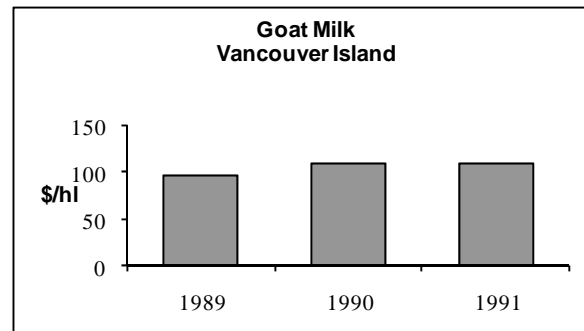
The Contribution Margin must provide funds for interest, overhead and other fixed expenses as well as a return for living expenses, loan repayment and investment. These items should be included in the overall farm plan which will include a Projected Income Statement and Projected Cash Flow Statement.

Market Alternatives

This fact sheet is prepared for a dairy goat enterprise. Marketing goat's milk in BC requires no milk quota. Before milk production can begin, a Certificate of Approval must be obtained. Milk prices may vary depending on where the milk is processed and sold and the time of year.

Dairy goats are sold either as breeding stock to other producers or they are slaughtered and direct marketed for their meat. There is potential for income from selling high quality, premium breeding stock. Out of

season breeding must be practiced in order to maintain a steady year round cash flow.



Risk Factors & Strategies

Individual operators must address the following risk factors:

- Market risk is a function of how much time the producer is willing to invest in direct marketing the end product. Conventional markets are relatively lower risk, producing lower prices.
- Disease and parasites—a good preventative health and parasite control program is required; including careful selection of replacement stock (purchased from a herd with known health standards).
- Pre-weaned dairy goat mortality—good goat management is essential to ensure the kids are attended to at birth, ensuring goat vigor and adequate milk availability.
- Low milk production—milk production must be maintained at an economic level. Genetics, sound nutrition, and flock health are all factors.
- Losses to predators—predators such as wolves, can be a concern for goat operations, especially those that graze on pasture. Predator problems can be minimized with good livestock husbandry, well-trained guard dogs and perimeter fencing.

Key Success Factors

- Farm gate marketing ability
- Herd health
- Minimizing feed costs
- Quality milk production
- Flock replacement

Assumptions

The sample enterprise budget provided should be viewed as a first approximation only. Use the column “Your Estimate” to add, delete and adjust items to reflect your specific production situation. The figures provided are estimates based on above average production and farm management practices in the area, and were developed in consultation with goat producers and BCMAFF commodity specialists. The following assumptions are made regarding production practices, costs and revenues:

	<u>Number</u>	<u>As a % of Goat Herd</u>	<u>Your Estimate</u>
• Number of Does	100	--	.....
• Cull Goats	20	20%	.....
• Goat Death Loss	3	3%	.....
• Kids Born	180	180%	.....
• Pre-weaning Kid Mortalities	18	10%	.....
• Kids Weaned	162	170%	.....
• Replacement Does	23	23%	.....
• Goats available for sale	139	147%	.....

- Animals are rotationally grazed on 20 acres of irrigated pasture. Less acreage may be required if pasture is well-managed.
- The majority of kidding occurs in the Spring and is attended to by the producer to ensure that the kids get a good start. A target weaning of 180% is assumed.
- A target milk yield of 686 litres/doe/year (305 days at 2.25 litres per day).
- Target price for milk is \$1.15 per litre.
- The breeding herd is pasture fed from spring to mid fall, and is fed hay and grains throughout the entire lactation period. The lactating feed program includes:
 - Hay - 5lbs per day for 305 days.
 - Grain - 3lbs per day for 305 days.
- Pasture maintenance costs are estimated at \$20/acre.
- Repair and maintenance costs are approximated at 3% of building and fence replacement value.
- Equipment repair and maintenance costs are approximately at 5% of replacement value.
- Fuel, oil and lube costs are associated with pasture operations as well as transporting kids to and from slaughter facilities.

Sensitivity Analysis—Projected Income

The profitability of a dairy goat operation will be strongly influenced by market prices and milk production. The tables below list changes to income as milk yield and prices per litre vary. Milk yields and price ranges are based on actual rates achieved by Vancouver Island producers. Variances are primarily the result of differing management, marketing skills and experience.

Milk Yield (litres/doe/year)	Income*
Low	534 62410
Average	610 71150
Target	686 79890
High	763 88745
Exceptional	839 97485

*Income is based on milk price (\$1.15/litre)

Fresh Milk Price (\$/litre)	Income*
Low	0.85 59310
Average	1.00 69600
Target	1.15 79890
High	1.25 86750
Exceptional	1.35 93610

*Income is based on yield (686 litres/doe/year)

Sample Enterprise Budget and Worksheet 100 Dairy Goats-- Vancouver Island

Projected Income	Head	Average Weight	Units	Price \$/Unit	Total	Your Estimate
Milk Sales	100	686	litres	\$1.15/litre	78890	.....
Cull Goats	20	50	lbs	\$1.00/lb	1000	.....
Total Projected Income					79,890	.....

Projected Direct Expenses	Head	Quantity	Units	Cost/Unit	Yearly Total	Your Estimate
<u>Feed and Supplements</u>						
Hay-Does	100	1525	lbs	\$0.11/lb	16775	.....
Hay-Bucks	4	720	lbs	\$0.11/lb	317	.....
Grain-Does	100	915	lbs	\$0.15/lb	13725	.....
Salt & Minerals	104	10	lbs	\$0.60/lb	624	.....
Pasture Maintenance					400	.....
<u>Livestock Supplies and Services</u>						
Buck Purchase	2		head	\$500/head	1000	.....
Vet & Medicine	104		head	\$14 /head	1456	.....
Dairy Supplies & Breeding	100		head	\$60 /head	6000	.....
<u>Other</u>						
Fuel, Oil and Lube					2400	.....
Equipment Repair & Maintenance					2330	.....
Building Repair & Maintenance					2310	.....
Shipping & Transportation					7000	.....
Utilities					2500	.....
Total Projected Direct Expenses					56837	.....

Calculation of Projected Net Income

To assess the net income of an enterprise, indirect expenses must be considered. Indirect expenses do not vary with the level of output and are typically associated with inputs used in more than one enterprise.

Projected Income	.....
Less Projected Direct Expenses	-
= Projected Contribution Margin	=
Less Projected Indirect Expenses	
Depreciation (e.g., buildings and equipment)	-
Interest	-
Other Indirect Expenses (e.g., operator labour)	-
= Projected Net Income	.....

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
% Income	8	8	8	8	8	8	8	8	8	8	8	8
% Dir Exp	8	8	8	8	8	8	8	8	8	8	8	8

The above information indicates the monthly flow of funds included in the contribution margin only. A completed Projected Cash Flow should include fixed expenses, capital sales and purchases, loans, and personal expenses.

Labour Requirements

Estimated Annual Labour Requirements (Hours):

Milking (2 hours twice a day for 305)	1220
Feeding and grazing	365
Cleaning and repair	260
Health	50
Kidding	150
Management	150
<u>Other</u>	<u>180</u>
Total Hours per 100 Goats	2,375
Hours/Goat/Year	24

Herd, Buildings and Machinery Replacement Cost

The figures below provide an estimate, based on replacement cost, of the capital investment required to get involved in a dairy goat enterprise. Some of these items are likely to be used in more than one enterprise—as a result the costs should be allocated among the different uses accordingly.

Breeding stock	25,000
Buildings & handling fee	20,000
<u>Husbandry equipment</u>	<u>15,000</u>
Total	60,000

It is important to maintain a healthy herd for optimum production. Goats are short day breeders. Breeding out of season using hormone treatments is necessary to have continuous milk production throughout the year. Goats must receive quality feed whether it is purchase or grown on the farm. Feed analysis, formulating

rations, and precision nutrient delivery will enhance efficiency and will assist the producer in meeting target production levels.

Rules of Thumb

Investment/Goat	\$550-650
Estimate of Labour	2400hr/100 Goats/yr
Direct Expense as % of Income	40-60%

The above indicators are provided for comparison purposes. They are set out as potential targets for goat milk production.

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