



PLANNING FOR PROFIT



BRITISH
COLUMBIA

Ministry of Agriculture,
Fisheries and Food

Dairy
Fraser Valley
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Agdex 410-810

Introduction

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 **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**.

Key Factors Affecting Profit

	Target
Somatic Cell Count	150,000 - 175,000
Calving Interval	12 - 13 months
Production	8,000 litres/305 days

It is important to maintain a regular herd health program to ensure timely breeding and continued udder health. An optimal culling rate is between 25 - 30%. Involuntary culling should be minimized to less than 10 - 15%. Cows must receive quality feed whether it is purchased or grown on the farm. Feed analysis, formulating balanced rations and precision nutrient delivery will enhance efficiency and will assist the producer in meeting target production levels.

Marketing Alternatives

To market milk in BC requires the producers to own milk quota. Before production can begin a Certificate of Compliance must be obtained. A milk producer can ship milk to an independent processor or to one of the co-operative processing plants.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc	8	8	8	8	8	8	8	8	8	8	8	8
%Exp	8	8	8	8	8	8	8	8	8	8	8	8

The above information indicates the timing of 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.

Rules of Thumb

Debt/Cow	\$7,000 - \$8,000
Direct Expenses as % of Income	60% - 65%

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

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DAIRY

Target Yield – 8,000 litres/305 days

Annual Contribution Margin One Dairy Cow and Replacement Heifer Cost Fraser Valley

Revenue*

	Yield	Price	Unit	Income
Butterfat component	288	\$4.62	kg	\$1,331
Class 1 fluid	65.00	41.05	hl	2,668
Industrial fluid	15.00	30.43	hl	456
Federal subsidy	54	1.06	kg	57
Livestock Sales				273

Total Income **\$4,785**

Variable Costs

	Quantity	Price	Unit	Expense
<u>Feed & Supplements</u>				
Grain	3.10	\$295	mt	\$915
Alfalfa Hay	0.60	265	mt	159
Local Hay	2.10	220	mt	462
Corn Silage	6.20	55	mt	341
Grass Silage	6.20	45	mt	279
Minerals & Supplements				50
Calf Starter and Milk Replacer				50

Livestock Supplies & Services

Vet, Medicine & Breeding	140
Dairy Supplies & Bedding	75
Registration & D.H.I.S.	30
Freight, Promotion, & Levies	172
Fuel Costs (scrapping & spreading)	65
Building & Equipment R & M	150
Utilities	65

Total Variable Costs **\$2,953**

Contribution Margin/cow/year **\$1,832**

*Assumes 80% fluid utilization and 3.6 kg/hl BF.

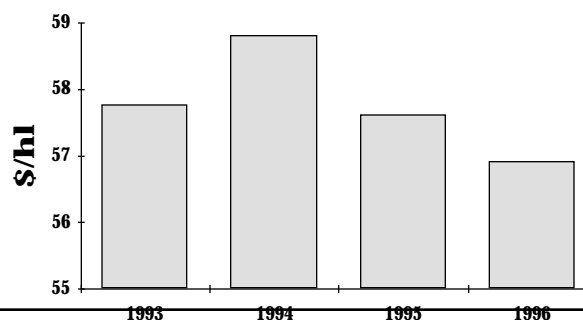
Buildings, Machinery, Quota and Livestock Replacement Costs

Total Herd Size - 100 Milking Cows
(milking & dry)

Quota*	\$1,048,000
Buildings	813,000
Equipment	529,000
Livestock	233,000
Total	\$2,623,000

*1,780L fluid & 10,100 kg MMQ.

Fluid Milk Prices



Contribution Margin – Sensitivity Analysis

The table below lists the changes to the contribution margin as the price you pay for grain and alfalfa hay vary.

Alfalfa Hay \$/Tonne	Grain \$/Tonne			
	250	275	300	325
150	2,041	1,963	1,886	1,808
200	2,011	1,933	1,856	1,778
250	1,981	1,903	1,826	1,748
300	1,951	1,873	1,796	1,718

This information is provided as a guideline only. Target yield indicates above average production. An individual livestock plan should be developed by each producer. A business planning guide may be obtained from your local office of the BC Ministry of Agriculture, Fisheries & Food.