



PLANNING FOR PROFIT



BRITISH COLUMBIA

Ministry of Agriculture,
Fisheries and Food

**Dairy
Vanderhoof
Fall 1996**

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, risk and uncertainty.

The **Contribution Margin** must provide funds for interest, overhead and other indirect 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
Production	8,000 litres/305 days
Somatic Cell Count	150,000
Calving Interval	12 - 13 months

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

Marketing milk in BC requires the producer 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 monthly flow of funds included in the **Contribution Margin** only. A complete **Projected Cash Flow** should include indirect expenses, capital sales and purchases, loans and personal expenses.

Rules of Thumb

Investment	\$7,000-8,000/cow
Direct Expense % of Income	70% - 80%

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

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MILK

Target Yield - 8,000 litres/305 days

Annual Contribution Margin One Dairy Cow and Replacement Heifer Cost Vanderhoof

Revenue

	Volume	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				283
Total Income				\$4,795

Variable Costs

	Quantity	Price	Unit	Expense
<u>Feed & Supplements</u>				
Barley & Supplement	3.40	\$200	mt	680
Local Hay	2.60	88	mt	229
Silage	14.40	25	mt	360
Minerals				70
Calf Starter & Milk Replacer				70
<u>Supplies & Services</u>				
Vet, Medicine & Breeding				170
Dairy Supplies & Bedding				95
Registration and D.H.I.A				30
Freight Promotion & Levies				276
Fuel Costs				80
Building & Equipment R & M				175
Utilities				85
Total Variable Costs				\$2,320
Contribution Margin/cow/year				\$2,475

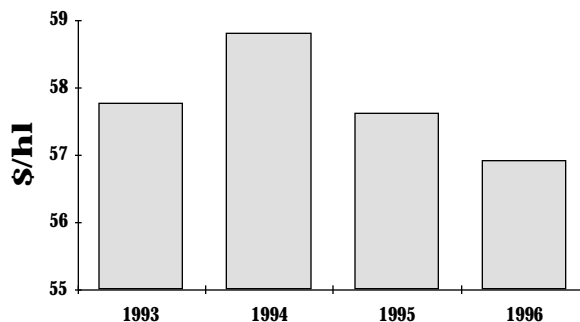
*Assumes 80% fluid utilization and 3.6 kg/hl BF

Buildings and Machinery Quota & Livestock New Replacement Costs Total Herd Size - 100 Cows (lactating & dry)

Quota*	\$1,048,000
Buildings	958,000
Equipment	529,000
Livestock	<u>233,000</u>
Total	\$2,768,000

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

Fluid Milk Prices



Contribution Margin - Sensitivity Analysis

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

Local Hay \$/Tonne	Grain \$/Tonne			
	180	190	200	210
70	2,590	2,556	2,522	2,488
80	2,564	2,530	2,496	2,462
90	2,538	2,504	2,470	2,436
100	2,512	2,478	2,444	2,410

This information is provided as a guideline only. Target yield indicates above average production. An individual crop 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 and Food.