



# PLANNING FOR PROFIT



BRITISH  
COLUMBIA

Ministry of Agriculture,  
Fisheries and Food

**Dairy**  
**Graduated Entry Program**  
**Fraser Valley**  
**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 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
Production Level	7,800 litres/305 days
Somatic Cell Count	125,000
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%. 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

All producers must obtain a Certificate of Approval before production begins. The Milk Board will allot the new entrant 100 litres of daily milk quota and 1,800 kgs of manufacturing milk quota. If the entrant purchases additional daily milk quota within 5 years of starting the program, the Board will allot additional daily quota in a matching amount up to a maximum of 300 additional litres. Consult the Board for details.

## 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

Min. Avg. daily production	754 litres
Direct Expenses as % of Income	60% - 70%

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

Contact: RON BARKER, P.Ag.  
Dairy Industry Specialist  
Abbotsford  
ANNETTE MOORE, P.Ag.  
Regional Dairy Specialist  
Abbotsford  
LAWRENCE HURD, P. Ag.  
Farm Management Specialist  
Abbotsford

Prepared by: WILLIAM PIERCE, CA

# DAIRY

## Target Yield – 7,800 litres/305 days

### Contribution Margin One Dairy Cow and Replacement Heifer Cost Graduated Entry Program Fraser Valley

#### Revenue\*

	Yield	Price	Unit	Income
Butterfat component	273	\$4.62	kg	\$1,261
Class 1 fluid	77.90	41.05	hl	3,198
Industrial fluid	0.10	30.43	hl	3
Federal subsidy	-	1.06	kg	-
Livestock sales				273
<b>Total Income</b>				<b>\$4,735</b>

#### Variable Costs

	Quantity	Price	Unit	Expense
<u>Feed &amp; 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
<u>Supplies and Services</u>				
Vet, Medicine & Breeding				140
Dairy Supplies & Bedding				75
Registration & D.H.I.S.				34
Freight, Promotion, & Levies				165
Fuel Costs				65
Building & Equipment R & M				175
Utilities				75
<b>Total Variable Costs</b>				<b>\$2,985</b>
<b>Contribution Margin/cow/year</b>				<b>\$1,750</b>

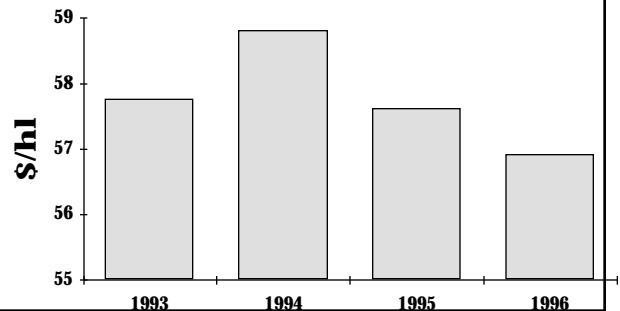
\* Assumes 80% fluid utilization & 3.5 kg/hl BF

### Buildings, Equipment, Quota, & Livestock Replacement Costs Total Herd Size - 33 Milking Cows (lactating & dry)

Quota*	\$123,000
Buildings	318,000
Equipment	480,000
Livestock	<u>66,000</u>
<b>Total</b>	<b>\$987,000</b>

\*Purchase 300 L fluid & granted 400 L fluid & 1,800 kg MMQ.

### Fluid Milk Prices



### Contribution Margin - Sensitivity Analysis

The table below lists the changes to the contribution margin as the weighted price of alfalfa and the price of grain vary.

	Alfalfa Hay		Grain \$/Tonne	
\$/Tonne	250	275	300	325
<b>150</b>	1,959	1,881	1,804	1,726
<b>200</b>	1,929	1,851	1,774	1,696
<b>250</b>	1,899	1,821	1,744	1,666
<b>300</b>	1,869	1,791	1,714	1,636

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