



# PLANNING FOR PROFIT

Province of British Columbia  
Ministry of Agriculture, Fisheries and Food

## Premium Alfalfa Hay Kamloops District Spring 1993

Agdex 120-810

### 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
Yield	5+ tons/acre
Price: Premium Alfalfa Hay	\$120.00/ton
Quality	62% TDN
Protein	20 %

Quality is the main determinant of price, therefore it is important to know the quality of your hay. Develop your market based on the quality. It is as wrong to under price good hay as it is to overprice poor quality hay.

Hay must be dust free to be accepted by the horse market.

Weeds reduce the marketability of hay, thus there is a requirement for controlling weeds.

### Marketing Alternatives

Hauling hay to the Fraser Valley dairy farmers is the main cash market for high quality alfalfa hay. Other marketing alternatives for hay producers include local ranchers who may prefer to purchase hay rather than produce hay. There may be an additional requirement for extra feed during drought or bad weather conditions. Local ranchers provide the opportunity to market hay of lower quality than that required for milk production.

### Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc								10	10	10	20	20
%Exp	20	25	5	10	10	10	15	5				

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

Irrigation Equip. Investment	\$415/acre
Equipment Investment	\$780/acre
Building Investment	\$200/acre

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

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# Premium Alfalfa Hay

## Target Yield - 5 Tons / Acre

### Contribution Margin 1 Acre of Alfalfa Hay Production Year

#### Income

	Yield	Price	Unit	Income
Premium Alfalfa	3.5	\$120.00	ton	\$420.00
Alfalfa Hay #2	1.5	95.00	ton	142.50
<b>Total Income</b>				<b>\$562.50</b>

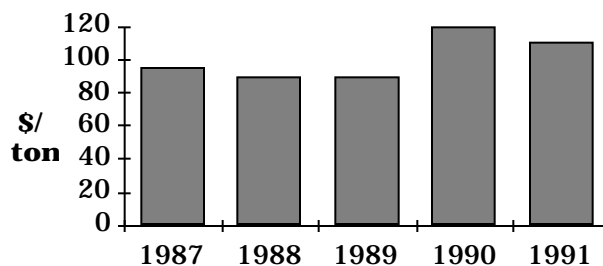
#### Direct Expenses

	Quantity	Price	Unit	Expense
<u>Fertilizer</u>				
11-55-0	100	\$.21	lb.	\$21.01
(actual rates should be based on soil tests)				
<u>Crop Supplies &amp; Services</u>				
Twine	0.4	28.74	roll	11.50
Hydro				20.32
Water Rights	2.5	0.50	ac.ft.	1.25
Machine Repairs & Maintenance				36.08
Fuel Costs				25.46
<b>Total Direct Expenses</b>				<b>\$115.62</b>
<b>Contribution Margin</b>				<b>\$446.88</b>

### Buildings and Machinery Replacement Cost Total Farm Size - 200 Acres Production - 166 Acres

Machine Shed & Shop	\$25,000
Hay Storage (4000 sq. ft.)	14,000
Power Machinery	50,000
Field Machinery	24,000
Harvesting Equipment	58,400
Irrigation	83,000
Small Tools & Miscellaneous	8,000
Vehicle	15,000
<b>Total</b>	<b>\$277,400</b>

### Alfalfa Hay Prices Okanagan



### Contribution Margin - Sensitivity Analysis

The table below lists the changes to contribution margin as quantity of yield changes and price received varies.

#### Weighted

Price \$/Ton	Yield Tons per Acre			
	4.0	4.5	5.0	5.5
<b>95.00</b>	264	312	359	407
<b>105.00</b>	304	357	409	462
<b>113.00</b>	334	391	447	503
<b>125.00</b>	384	447	509	572

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