



PLANNING FOR PROFIT

Province of British Columbia
Ministry of Agriculture, Fisheries and Food

Alfalfa Hay - 3 Cut Square Bale Kamloops District Spring 1994

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 Budget**.

Key Factors Affecting Profit

	Target
Yield	5 tons/acre
Price - #1 Quality	\$110.00/ton
Price - #2 Quality	\$90.00/ton

Quality is the main determinant of price, therefore it is important to know the quality of your hay. Good quality hay should have a TDN of 60% and protein of 17% or better. Develop your market based on the quality of your hay.

Hay must be dust free to be accepted by the horse market. It is important to control weeds since weed-infested hay is hard to market.

Marketing Alternatives

Hauling hay to Fraser Valley dairy farmers is the main cash market for high quality alfalfa hay. Other marketing alternatives for hay producers include the horse market and local ranchers who may prefer to purchase their hay requirements 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												Next Year
%Exp					15	10	20	20	20	15		

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.

Labour Time

Fertilizing	8 - 10 min./acre
Spraying	2 min/acre
Irrigating	8 hours/acre
Harvesting	7 - 8 hours/acre

The above indicators are based on the equipment complement used in this budget. Individual operations may vary from this depending on equipment size, land and operator expertise.

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ALFALFAHAY - 3 CUT, SQUARE BALE

Target Yield - 5 Tons/Acre

Contribution Margin 1 Acre of Alfalfa Hay - 3 Cut Kamloops

Income

	Yield	Price	Unit	Income
Alfalfa Hay #1	3.5	\$110.00	ton	\$385.00
Alfalfa Hay #2	1.5	90.00	ton	135.00
Total Income				\$520.00

Direct Expenses

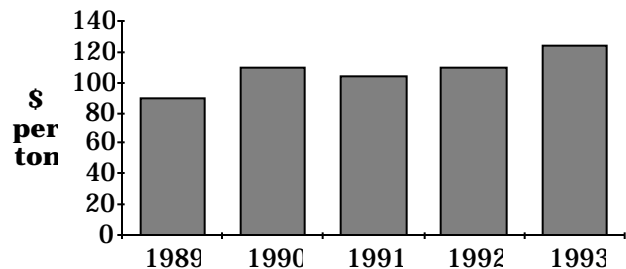
	Quantity	Price	Unit	Expense
<u>Fertilizer</u>				
11 - 52 - 0	100	\$.23	lb.	\$22.75
<u>Herbicide</u>				
Embitox	.9	15.94	litre	14.35
<u>Machinery Costs</u>				
Fertilizing				1.45
Spraying				.55
Irrigation				14.00
Harvesting				30.05
<u>Crop Supplies and Service</u>				
Twine	.3	28.74	roll	8.60
Irrigation Hydro	8	2.90	use	23.20
Water Rights	2	.55	acre foot	1.10
Total Direct Expenses				\$116.05

Contribution Margin \$403.95

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

Machine Shed & Shop	\$25,000
Hay Storage	14,000
Power Machinery	57,000
Field Machinery	24,000
Harvesting Machinery	48,000
Irrigation	83,000
Small Tools & Other	8,000
Vehicle	18,000
Total	\$277,000

Okanagan Alfalfa Hay



Contribution Margin - Sensitivity Analysis

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

Price \$/ton	Yield Tons per Acre			
	3.0	4.0	5.0	6.0
80.00	124	204	284	364
90.00	154	244	334	424
104.00	196	300	404	508
110.00	214	324	434	544

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.