



# PLANNING FOR PROFIT



Province of British Columbia  
Ministry of Agriculture, Fisheries and Food  
Hon. Bill Barlee, Minister

## Corn Silage North Cariboo 1993 Season

Agdex 111-810

### 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
Quantity	20 tons/acre
Price	\$30/ton
Quality	30% Dry Matter

Corn is the highest yielding crop for silage under irrigation in areas where heat is not limiting, i.e., a minimum of 1800 corn heat units. Corn silage production is restricted to warmer areas or river valleys. Dry matter content is unlikely to be higher than 30%. Average yields are 6 tons per acre of dry matter, but yields as high as 10 tons per acre have been obtained in warm areas. Corn should be planted by the first week of May and good weed control is a necessity.

### Marketing Alternatives

Corn silage production is basically limited by a producer's cattle operation. The corn produced in the Cariboo is generally fed to feeder cattle because of its high energy content. A very small percentage of corn silage is marketed. However, custom feeding is an alternative marketing system for corn producers.

### Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc	10	10	10	10	10	10	10	10			10	10
%Exp			15	20	20	5				10	30	

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

Direct Expense % of Income	40 - 50%
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The above indicators are provided for comparison purposes. They are set out as potential targets for corn silage production.

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# CORN SILAGE

## Target Yield - 20 Tons/Acre

### Contribution Margin 1 Acre of Corn Silage

#### Total Income

	Yield	Price	Unit	Income
Corn Silage	20	\$25.00	Ton	\$500.00

#### Direct Expenses

	Quantity	Price	Unit	Expense
<u>Seed</u>	33,000	\$92.00	80,000 Seeds	\$37.95

#### Fertilizers

11-51-0	100	0.17	lb.	16.56
34-0-0	300	0.12	lb.	36.07
0-0-60	200	0.09	lb.	17.70

#### Herbicides

Atrazine	1.5	4.75	litre	7.13
Dual	1.0	22.00	litre	22.00

Fuel Costs 25.47

Machine Repair & Maintenance 32.10

Irrigation 18.51

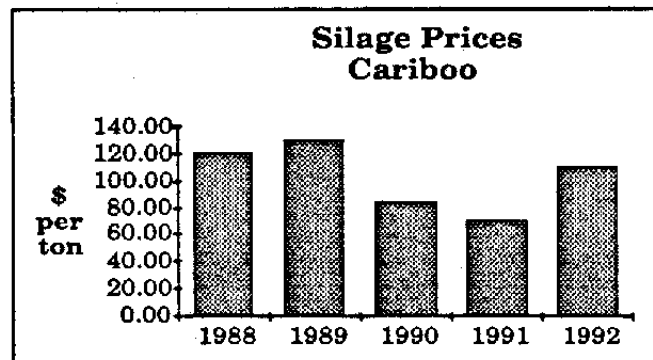
Silage Cover 120 .04 sq.ft. 4.83

**Total Direct Expenses \$218.31**

**Contribution Margin \$281.69**

### Buildings and Machinery Replacement Cost Total Farm Size - 600 Acres (100 Acres Corn Silage)

Buildings	\$ 15,000
Bunker Silo	60,000
Power Machinery	119,300
Field Machinery	36,000
Harvesting Equipment	52,000
Irrigation	34,000
Smal Tools & Other	8,000
Vehicle	<u>15,000</u>
<b>Total</b>	<b>\$339,300</b>



### Contribution Margin - Sensitivity Analysis

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

Price \$/ Ton	Yield Tons per Acre			
	16	18	20	24
20.00	101.69	141.69	181.69	261.69
22.50	141.69	186.69	231.69	321.69
25.00	181.69	231.69	<u>281.69</u>	381.69
30.00	261.69	321.69	381.69	501.69

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.