



PLANNING FOR PROFIT



BRITISH COLUMBIA

Ministry of Agriculture and Food

**Processing Broccoli
Fraser Valley
Summer 1998**

Agdex 252 - 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	4.0 tons/acre (pack-out)
Price	\$740/ton

Yield and quality of the product are affected by variety, cultural practices, labour management and harvest timing. This budget assumes a lime application of 2 tons every two years. Cole crops are very susceptible to insect attack. There is no tolerance for insect contamination or damage in product shipped to processors so effective pest control is critical. An integrated pest management program can minimize pesticide costs and ensure pest free crops.

For production recommendations, consult the "Vegetable Production Guide for Commercial Growers" which is available from the Lower Mainland Horticulture Improvement Association (604-556-3001).

Marketing Alternatives

All product is grown under contract to processors. Growers must be registered with the Vegetable Marketing Commission. Broccoli is generally cut-up on the farm prior to shipping to the processor. Processors of broccoli include Snowcrest, Packers Ltd., Lucerne Foods and BC Frozen Foods Ltd.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc										50	50	
%Exp			10		20	5	5	30	10	10	10	

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	\$3,500 - \$4,000/acre
Direct Expense % of Income	80% - 90%

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

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PROCESSING BROCCOLI

Target Yield - 4.0 tons/acre

Summer 1998

Contribution Margin 1 Acre of Processing Broccoli Fraser Valley

Total Income

	Yield	Price	Unit	Income
Cut-up Broccoli	4.0	\$740	ton	\$2,960

Direct Expenses

	Quantity	Price	Unit	Expense
Plants	10,000	\$0.0125	plant	\$125
<u>Fertilizer</u>				
12 - 16 - 16	225	0.51	kg	115
46 - 0 - 0	90	0.49	kg	44
Lime	1.0	47.00	MT	47
Solubor	0.04	2.95	kg	1
<u>Pest Control</u>				
Ambush (2X)	0.12	176.00	L	42
Lorsban	0.8	17.90	L	14
Monitor	0.9	34.50	L	31
Fuel Costs				185
Machinery R & M				110
<u>Custom Work</u>				
Mach. Operation	13	10.00	hr	130
Planting	12	8.50	hr	102
Harvest	50	8.50	hr	425
Cut Up	4.0	200.00	ton	800

Marketing

Board Fees	4.0	6.00		24
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Irrigation Water & Power				45
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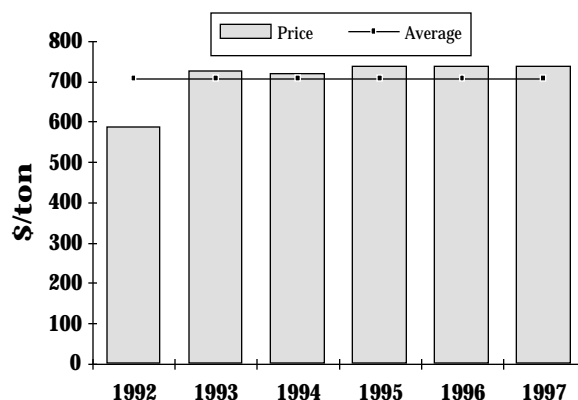
Total Direct Expenses \$2,240

Contribution Margin \$720

Buildings and Machinery Replacement Cost Total Farm Size - 60 Acres

Buildings	\$ 28,000
Power Machinery	104,000
Field Machinery	40,000
Product Handling Equip.	16,000
Irrigation System	20,000
Vehicles	<u>40,000</u>
Total	\$248,000

Processing Broccoli Prices



Contribution Margin - Sensitivity Analysis

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

PRICE \$/ton	Yield (tons/acre)			
	3.3	3.5	4.0	4.5
560	(172)	(126)	0	126
660	158	224	400	576
740	422	504	720	936
900	950	1,064	1,360	1,656

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 and Food.