



PLANNING FOR PROFIT



Ministry of Agriculture,
Fisheries and Food **Apple Juice**
Cottage Industry Scale
Fraser Valley
Fall 1996

Agdex 200-71

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
Production Efficiency	95%
Price	\$1.69/1 litre jug \$6.50/4 litre jug

This budget profiles an entry level, cottage size apple juice processing operation. The costs which are included are made on the basis of this assumption.

Distance to market and volume of sales at each market greatly affects the profitability of this scale of operation.

Potential exists for entry level operations to produce more sophisticated products but higher packaging costs will be incurred in order to market these products successfully.

Marketing Alternatives

Small processors have the option of selling their products through their own farm stands or at local farmers' markets. The option also exists to sell a larger volume through local roadside stands and to restaurants for a lower than retail price.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc									30	60	10	
%Exp									60	40		

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 Expenses % of Income	40% - 50%
Production Labour	15 hours/1,000 litres
Marketing Labour	5 hours/1,000 litres

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

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APPLE JUICE PRODUCTION

Entry Level Operation

Contribution Margin Cottage Production Scale Fraser Valley 10,000 litres

Income

	Yield	Price	Unit	Income
One Litre Jugs	5,000	\$1.69	ea	\$8,125
Four Litre Jugs	1,250	6.50	ea	8,125
Total Income				\$16,250

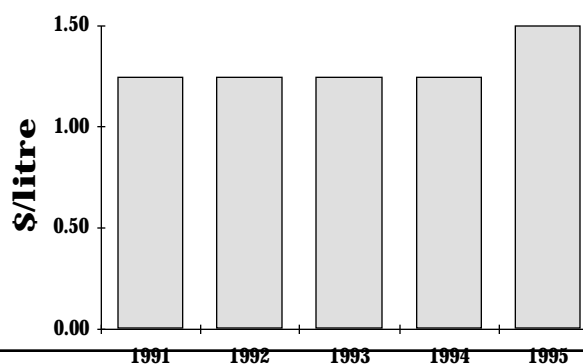
Direct Expenses

	Quantity	Price	Unit	Expense
<u>Ingredients</u>				
Apples	35,000	0.10	lb.	\$3,500
<u>Packaging</u>				
Jugs -1 litre	5,263	0.20	ea	1,052
4 litre	1,315	0.33	ea	428
Lids	6,578	0.03	ea	197
Labels	6,578	0.14	ea	930
Fuel, Oil, Lubrication				52
Machinery R & M				229
Market Fees				200
Hydro				37
Total Direct Expenses				\$6,625
Contribution Margin				\$9,950

Building and Equipment Replacement Cost

Building	\$ 3,750
Storage	6,500
Juice Press and Grinder	6,500
Elevator	1,000
Bins	750
Other	<u>500</u>
Total	\$19,000

Apple Juice Prices



Contribution Margin - Sensitivity Analysis

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

PRICE \$/litre	Efficiency			
	80%	90%	95%	100%
1.00	1,671	2,523	3,375	3,823
1.25	3,671	4,773	5,875	6,455
1.66	6,931	8,440	9,950	10,744
2.00	9,671	11,523	13,375	14,349

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 BC Ministry of Agriculture, Fisheries and Food.