



PLANNING FOR PROFIT



Province of British Columbia
Ministry of Agriculture, Fisheries and Food

Elstar Apples - Full Production
Slender Spindle - 808 Trees/Acre
Fraser Valley
Spring 1994

Agdex 211 - 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 an overall farm plan which will include a **Projected Income Statement** and **Projected Cash Flow Budget**.

Key Factors Affecting Profit

	Target
Full Production	Year 6
Quantity	30,000 lbs./acre
Price	\$.40 - \$.75 /lb.

An operation may realize additional income through sales of cull fruit or fresh juice. This budget includes neither income from direct sales of culls and juice nor expenses from culls through the packinghouse.

The orchard should be monitored frequently to reduce costs and minimize pest damage, through proper timing of pest control measures.

A "Tree Fruit Production Guide for Commercial Growers" is available from district offices of the B.C. Ministry of Agriculture, Fisheries and Food.

Marketing Alternatives

Apple producers in the Fraser Valley may choose to ship to one of the Okanagan packinghouses, grade and pack at the farm and sell to Lower Mainland retailers, wholesalers, or direct market to Lower Mainland customers. Apples can be sold at farm-gate and at farmer's markets.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc									40	10		
%Ex		10	15	10	5	5			20	30	5	

The above information indicates the timing of the 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

Planting Year Costs	≤ \$15,000/acre
Direct Expense % of Income	70% - 80%

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

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ELSTAR APPLES

Target Yield - 30,000 lbs./Acre

Contribution Margin 1 Acre of Apples at Full Production Fraser Valley

Income	Yield	Price	Unit	Income
Co-op (75%)	9,000 ¹	\$.45	lb.	\$4,068
Direct (25%)	4,500 ²	\$.75	lb.	3,375
Total Income				\$7,443

Direct Expenses

Quantity	Price	Unit	Expense
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Fertilizers

Foliar Sprays \$80

Crop Protection

Herbicide 48
Insecticide 181
Fungicide 197

Other

Hive Rental 40
Tree/Crop Insurance 557
Fuel Costs 196
Machinery Repair & Maintenance 205

Labour³

Prune/Train	31.5	8.00	hour	252
General	15.5	8.00	hour	124
Picking	30,000	.10	lb.	3,000
Hauling	22,500	.018	lb.	405

Marketing ⁴	4,500	.048	lb.	217
Total Direct Expenses				\$5,502

Contribution Margin \$1,941

1. Co-op Packout is assumed to be 50% Fcy+
2. Direct Packout is assumed to be 60% Fcy+
3. Includes, UIC, CPP, etc.
4. Marketing cost is based on selling at a farmer's market.

Buildings and Machinery Replacement Cost Total Orchard - 10 Acres

Buildings	\$8,000
Power Machinery	43,000
Orchard Equipment	15,400
Irrigation	12,000
Vehicle	25,000
Small Tools & Other	<u>4,600</u>
Total	\$108,000

Elstar Co-op Fcy+ Prices



Contribution Margin - Sensitivity Analysis

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

PRICE \$/lb.	Yield lbs. per Acre			
	20,000	25,000	30,000	35,000
.30	(1,667)	(1,559)	(1,452)	(1,344)
.40	(767)	(434)	(102)	231
.55	595	1,268	<u>1,941</u>	2,614
.60	1,033	1,816	2,598	3,381

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.