Chapter Name

BUSINESS PLANNING & FINANCING

Chapter Submitted By:

Riya Bhattacharjee

Kolkata, West Bengal

CANNED PINEAPPLE PRODUCTS



INTRODUCTION:

Pineapple is one of the popular fruits and is liked by majority of the people irrespective of their age group. As is the case with most of the fruits and vegetables, their availability is limited during the year. Many techniques have been developed to make available seasonal fruits as well as vegetables even during off-season. Canned pineapple slices and juice are such products. Pineapple is consumed as dessert, in fruit salads, while making cakes and pastries etc. Thus there are large number of consumers who would like to consume pineapple slices or juice.

OFFICE:

The Registered Office as well as the Factory/Plant will be situated in ASSAM.

ADDR: MRINAL CANNED FOOD PRODUCTS PVT. LTD.

OLD PWD BLOCK , KAHIKUCHI,BORJHAR, ASSAM-781015 PHONE NO.- +91-361-284177 , E-MAIL: <u>mrinal_280692@yahoo.com</u>

WEBSITE: <u>www.mrinalcfpindia.com</u>

VISION:

To be known as a path definer in the fruit industry.

OBJECTIVE:

Give the best product to our customer and help them to get good health.

PRODUCT:

Applications

Pineapple products include pineapple slices and juice. In order to increase the shelf life and to make pineapple juice and slices even during off-season, canning is the most popular method. The project can be undertaken in pineapple growing states and the preferred locations are the North Eastern states.

Availability of technology and compliances:

CFTRI, Mysore, has developed the process know-how. Certification under **FPO** and compliances with various provisions therein is compulsory.

MARKET POTENTIAL:

Demand and supply:

Fruits provide important proteins as well as minerals and they are being consumed by human beings since many centuries. The major drawback of any Agriculture / horticulture produce is seasonal availability. Several techniques to preserve these perishable commodities have been developed during last few decades and canning is one such reliable method. Pineapples are very popular amongst consumers and their availability in the form of juice or slices round the year would enable the consumers to enjoy them whenever they want. Pineapples are grown in large quantity in North Eastern States including Assam. If fresh pineapples are processed and canned, then there is large market scattered throughout the country. There are also very good export prospects if international quality is achieved and sustained. Countries like the USA, UK, Germany, Holland etc. are regular importers of pineapple products.

MARKETING STRATEGY:

The first generation entrepreneur has to be extra careful while approaching export markets and ideally he should have excellent contacts either with foreign buyers or some intermediaries. India itself is a very large and growing market and once quality of the product is established in the domestic market, efforts can be made to branch out to foreign markets.

Target Customer:

- Retail mall (Big Bazaar and other big retailer)
- Grocery Shop(Area basis)
- Unorganized retail outlet.

Segmentation:

- ➤ It is for younger and also for aged person who loves Pineapples.
- It is for all type of income people

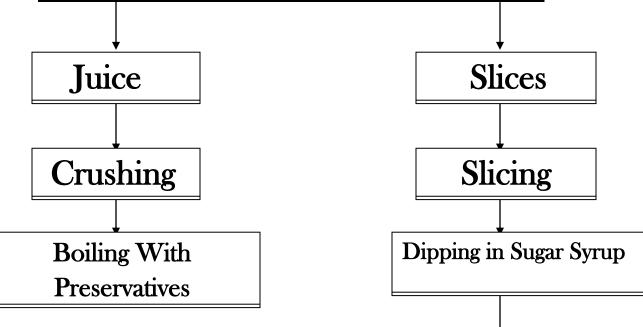
Promotional Activity:

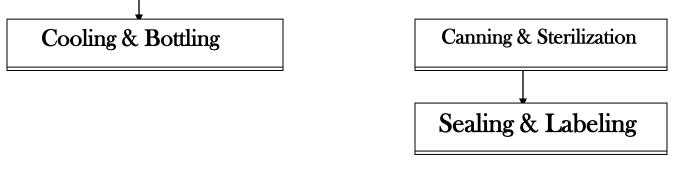
- Direct Marketing.
- > Through own website.
- > Through outsourcing.
- ► B2B Marketing.
- ➢ Word of mouth with the help of sample distributing (mall, movie hall, college etc).
- > Strategic tie up with popular social websites like- YOU TUBE, FACEBOOK, INSTAGRAM etc.

MANUFACTURING PROCESS:

CFTRI, Mysore has developed technology for these products. The manufacturing process of the proposed pineapple products viz. Slices and Juice involves many steps and different sub-processes. Ripe and matured pineapples are washed, graded and peeled. Then they are crushed in the crusher to obtain juice. In case of slices, after peeling, uniform slices are made on the slicer. Juice is then taken to vessels and boiled and certain preservatives are added. It is finally taken to storage tanks and packed in bottles on vacuum filling machine. In case of slices, they are dipped in sugar syrup for about 3 to 4 hours. Then the slices are taken to lacquered cans and cans are sterilized. While canning, sugar syrup is added. Cans are cooled quickly and after sealing and labeling, they are stored. The average yield is around 80%. The Process Flow Chart is as under:

WASHING, GRADING AND PEELING OF PINEAPPLES





CAPITAL INPUTS:

Land and Buildings:

A plot of land of around 1000 sq.mtrs. with built up area of 600 sq.mtrs. would be required. The main factory operations would need around 350 sq.mtrs. of built up area whereas balance area will be needed for washing, storage of raw materials and finished goods and packing. 5000 ltrs. capacity water storage tank shall also be needed. Cost of land is estimated Rs.3.00 lacs whereas that of civil work Rs.16.50 lacs.

Plant and Machinery:

The requirement of plant and machinery for the project could be divided into five lines as under.

- 1. Washing and preparation.
- 2. Slice line.
- 3. Juice line.
- 4. Syrup line.
- 5. Packing line.

It is suggested to have installed processing capacity of 3600 tonnes per year considering double shift working and 300 working days. This would require following machinery.

SL NO.	PARTICULARS	QUANTITY/NO.
1.	Washing & Preparation:	
	(a) Channel System for Unloading & Washing Pineapples	1 NO.
	(b) Discharge Elevator	1 NO.
	(c) Graders	1 NO.
	(d) Belt Conveyors	2 NO.
	(e) Chutes	2 NO.
	(f) Pineapple Peelers	2 NO.
2.	Slice Line:	
	(a) Single Knife Slicers	1 NO.
	(b) Corner and Can Loaders	2 NO.
	(c) Resizer/Corners	2 NO.
	(d) Can Loaders	1 NO.
	(e) Pieces Cutting Machines	2 NO.
	(f) Vaccum Filling Machine	1 NO.
	(g) Seaming Machine	1 NO.
	(h) Tunnel Pasteurizer/Cooler	1 NO.
	(i) Can Dryer	1 NO.
	(j) Belt Conveyors	2 NO.
3.	Juice Line:	
	(a) Disintegrator	1 NO.

	(b) Vessels	2 NO.
	(c) Pumps	2 NO.
	(d) Packing Press	1 NO.
	(e) Tubular Preheater	1 NO.
	(f) Separator	1 NO.
	(g) Vacuum Filling Machine	1 NO.
	(h) Seaming Machine	1 NO.
	(i) Tunnel Pasteurizer/cooler	1 NO.
	(j) Can Dryer	1 NO.
	(k) Belt Conveyors	1 NO.
4.	Syrup Line	1 NO.
5.	Labeling and Packing Line	1 NO.

The total cost of machinery and equipments would be Rs.100.00 lacs.

Miscellaneous Assets:

Other assets like belts, pulleys, pumps, furniture and fixtures, storage racks and bins, plastic crates and tubs, etc would cost Rs.8.00 lacs.

Utilities:

The power requirement shall be 100 HP whereas water requirement will be 10,000 liters every day. The total cost of power and water would be Rs.12.00 lacs per year.

Raw and Packing Materials:

Yearly requirement of pineapples will be 3600 tonnes. The states of Assam, Manipur, Arunachal Pradesh etc. grow more than 75,000 tonnes of pineapple every year and availability of 300 tonnes every month will not be a problem. Other materials like preservatives, sugar etc. shall be available locally. Packing materials shall be lacquered tins, labels, corrugated boxes, BOPP tape etc. for which it is advisable to have confirmed prior arrangements.

	Total			93,500
6.	Salesman	6	2,500	15,000
5.	Accountant	1	4,000	4,000
4.	Helpers	6	1,250	7,500
3.	Semi-Skilled Workers	8	1,750	14,000
2.	Skilled Workers	10	2,500	25,000
1.	Plant Operators	8	3,500	28,000
SL. NO.	PARTICULARS	NO.	MONTHLY SALARY	TOTAL MONTHLY

MANPOWER REQUIREMENT:

Recruitments:

- \succ From the campus.
- ➢ Group discussions, psychometric tests and an in- depth reference check.
- ➤ Merit-basis only.

FINANCIAL PLAN

DETAILS OF THE PROPOSED PROJECT:

Land and Building		(Rs. In Lakhs.)
Particulars	Area (Sq. Mtrs.)	Cost
Land	1,000	3.00
Building	600	16.50
Total		19.50

Plant and Machinery:

The total cost is estimated to be Rs. 100 lacs, as explained earlier. Miscellaneous Assets:

The provision for miscellaneous assets has been made to the extent of Rs. 8.00 lacs. The details are furnished earlier.

Preliminary and Pre-operative Expenses:

The registration charges, establishment expenses, trial run expenses, interest during implementation etc would be around Rs. 10.00 lacs.

Miscellaneous Calculations:

Sales Revenue @ 100% Capacity

(Rs. In Lakhs.)

Products	Qty. (Tonnes)	Selling Price per ton	Value
Pineapple Slices	1350	11,000	148.50
Pineapple Juice	1550	14,000	217.00
Total			365.50

Raw and Packing Materials Required @ 100% Capacity

(Rs. In Lakhs)

Products	Qty. (Tonnes)	Rate per Ton	Value
Pineapples	3600	2,000	72.00
Sugar			45.00
Preservatives, essence, etc.			6.00
Packingmaterials@Rs.3000per Ton			87.00
Total			210.00

COST OF LABOUR WAGES:

Labour Charges= Rs.7,500*12= Rs.90,000 per year.

Cost of Utilities:

The annual cost of utilities at 100% capacity level would be

Rs.12 lacs.

For 60% Capacity: 60/100*12, 00,000=Rs. 7, 20,000.

For 70% Capacity: 70/100*12, 00,000=Rs. 8, 40,000.

Establishment Cost:

Salaries: Rs. 86,000 per month * 12 = Rs. 10,32,000.

Administrative Cost:

Administration Cost = Rs. 6,00,000 @ 100% capacity

For 60% Capacity: 60/100*6,00,000= Rs.3,60,000

For 70% Capacity: 70/100*6,00,000= Rs.4,20,000

Selling & Distribution Cost:

10% of Sales Revenue: &

- For 60% Capacity: =60% of 365.5 Lakhs = 10% of 219.3 LAKHS
- For 70% Capacity: = 70% of 365.5 Lakhs= 10% of 255.85 LAKHS

MANUFACTURING COST:

Manufacturing Cost is 1% of Sales Value.

COST OF PROJECT:

INVESTMENT IN CAPITAL ASSETS:-

TOTAL	: Rs.1,84,74,000
CAPITAL	: Rs. 37,24,000
> INVESTMENT IN WORKING	
PLANT & MACHINERY	: Rs. 10,00,000
➤ CONTINGENCY @ 10% ON	
PREOPERATIVE EXPENSES	: Rs. 10,00,000
PRELIMINARY AND	
MISCELLANEOUS ASSETS	: Rs. 8,00,000
PLANT & MACHINERY	: Rs.1,00,00,000
LAND & BUILDING	: Rs. 19,50,000

MEANS OF FINANCE:

TOTAL	: Rs.1,84,74,000
(6.68+3+10+40.35)	
OWN INVESTMENT	: Rs. 60,03,000
CREDITORS SUPPORT	: Rs. 10,50,000
LOAN	: Rs. 20,06,000
BANK WORKING CAPITAL	
➤ TERM LOAN (70% OF 134.5 LAKHS)	: Rs. 94,15,000

Statement of Working Capital Requirement:

At 60% utilization in the first year, the total working capital needs shall be as under:

SL. NO.	PARTICULARS	% OF MARGIN	HOLDING PERIOD	TOTAL INVESTMEN T	MPBF	OWN CONTRIBUTION
	(A) CURRENT ASSETS					
1	INVENTRY OF FINISHED GOODS	25%	1/2 MONTHS OF SALES	9,14,000	6,86,000	2,28,000
2	INVENTRY OF RAW MATERIALS	25%	1/2 MONTHS OF COST	5,25,000	3,94,000	1,31,000
3	INVENTRY OF W-I-P	25%	1/4 MONTHS OF SALES	4,57,000	3,43,000	1,14,000
4	DEBTORS	25%	1 MONTH OF SALES	18,28,000	13,71,000	4,57,000
GR	GROSS WORKING CAPITAL			37,24,000	27,94,000	9,30,000
(B) CURRENT LIABILITIES		IES				
5	(A) CREDITORS	25%	1 MONTH OF COST	10,50,000	7,88,000	2,62,000
	NET WORKING CAPITAL			26,74,000	20,06,000	6,68,000

SCHEDULE FOR FIXED ASSETS:

SL NO.	PARTICULARS	RATE OF DEP	COST AMT	DEPRECIATION	WDV
1	LAND		3,00,000		3,00,000
2	BUILDING	10%	16,50,000	1,65,000	14,85,000
3	PLANT & MACHINERY	20%	1,00,00,000	20,00,000	80,00,000
4	MISC. ASSETS	20%	8,00,000	1,60,000	6,40,000

Depreciation:

It is calculated on WDV method and rates considered are 10% on buildings and 20% on plant and machinery and misc. assets.

LOAN REPAYMENT SCHEDULE:

(Rs. IN LAKHS)

QUARTER	PARTICULARS	PRINCIPAL	INTEREST
	LOAN RECEIVED	94.15	
1ST	LOAN REPAID	3.37	2.35
		90.78	
2ND	LOAN REPAID	3.37	2.27
		87.41	
3RD	LOAN REPAID	3.37	2.19
		84.04	
4TH	LOAN REPAID	3.37	2.1
		80.67	
5TH	LOAN REPAID	3.37	2.01
		77.3	
6TH	LOAN REPAID	3.37	1.93
		73.93	
7TH	LOAN REPAID	3.37	1.85
		70.56	
8TH	LOAN REPAID	3.37	1.76
	BALANCE	67.19	

BANK WILL CHARGE 10% INTEREST ON TERM LOAN AS WELL AS ON WORKING CAPITAL LOAN.

CALCULATION OF FINANCIAL COST:

INTEREST ON TERM LOAN: Rs. 8,90,000 INTEREST ON W.CAPITAL: Rs. 2,00,600 TOTAL Rs.10,90,600

(Rs. IN LAKHS)

PROJECTED PROFITABILITY STATEMENT				
Particulars	60%	70%		
A. INCOME/REVENUES		•		
-sales	219.3	255.85		
B. EXPENDITURE	•	•		
-Cost of raw material consumed	126	147		
-Labour Wages	0.9	0.9		
-Utility	7.2	8.4		
-Manufacturing Expanses	2.1	2.5		
-Establishment Expances	10.32	10.32		
-Stores & Spares	2.4	3.6		
-Administration Expanses	3.6	4.2		
-Selling & Distribution Expanses	21.9	25.6		
-Financial Cost	10.9	9.55		
-Depreciation	23.25	18.77		
-Preliminary & Preoperative Expenses	2	2		
Profit before Tax	8.73	23.01		
Tax @ 30 %	2.6	6.9		
Profit after Tax	6.13	16.11		

#ASSUME TAX RATE @ 30%

(Rs. IN LAKHS)

PROJECTED FUND FLOW STATEMENT				
Particulars	1st yr.	2nd yr.		
A. Sources of Funds:				
- Term Loan from Bank	94.15	80.67		
-Working Capital Loan	20.06	20.06		
- Crediter support	10.5	12.25		
-Own investment	60.03	60.03		
-Fund from Operation :				
Net Profit	6.13	16.11		
Add: Depreciation	23.25	18.77		
Add:Preliminary & Pre-operating expanse	2	2		
Total	216.12	209.89		
B. Application of Funds				
- Investment in Working Capital	37.24	43.43		
- Investment in Capital Asset	127.5	104.25		
- Investment in deferred Revenue Expanse	10	8		
- Repayment of loan	13.48	13.48		
Total	188.22	169.16		
Cash balance	27.9	40.73		

(RS. IN LAKHS)

PROJECTED BALANCE SHEET					
Particulars		1st yr.		2nd yr.	
A. Liabilities:					
Shareholder Fund					
- Own Investment		60.03		60.03	
- Credit Balance of P\L appropriation A/C		6.13		16.11	
Loan					
- Term Loan	94.15		80.67		
Less: Loan Repayment	13.48		13.48		
		80.67		67.19	
-Working Capital Loan		20.06		20.06	
-Creditor		10.5		12.25	
Total		177.39		175.64	
B. Assets:					
Fixed Asset	127.5		104.25		
Less:Depreciation	23.25		18.77		
<u> </u>		104.25		85.23	
Current Asset					
- Inventory					
Inventory of Finished goods	9.14		10.66		
Add: Inventory of raw materials	5.25		6.12		
Add: Inventory of WIP	4.57		5.33		
		18.96		22.11	
-Debtors		18.28		21.57	
-Cash Balance		27.9		40.73	
Miscellenous Expanse					
- Preliminary & Pre-operative Exp	10		8		
Less : Return	2		2		
		8		6	
Total		177.39		175.64	

RATIO ANALYSIS:	FIRST YEAR	SECOND YEAR
✓ CURRENT RATIO=	6.20:1	6.89:1
✓ DEBT EQUITY RATIO=	2.07:1	1.88:1
✓ GROSS PROFIT RATIO=	37.8%	37.5%
✓ NET PROFIT RATIO=	2.8%	6.30%
✓ DSCR=	0.67	1.13

Some of the machinery & raw materials suppliers are:

- 1. B. Sen. Berry and Co,65/11, Rohatak Road, Karol Baugh, New Delhi- 110005
- 2. Raylon Metal Works, PB NO. 17426, JB Nagar, Andheri (E), Mumbai 400 059
- 3. Metal Box (I) Ltd, 17, Parliament street, New Delhi-110001
- 4. Auric Techno Services Pvt. Ltd. C-101, Shrinath Hermitage, Baner Road, Pune 411008. Tel No. 25898072/25899113, Fax: 25899113
- 5. Buhler (India) Pvt. Ltd., 13-D, KAIDB Industrial Area, Attibele, Bangalore- 562107. Tel No. 27820000, Fax: 27820001

-----XXXX