# **PROJECT REPORT** ON MULTI FRUIT JUICE & SQUASH









# LIST OF CHAPTERS

SL. NO.	ITEMS	PAGE NO.
1.	THE PROJECT AT A GLANCE	01
2.	INTRODUCTION	02
3.	PROJECT DESCRIPTION	03
4.	MARKET PROSPECT	04
5.	TECHNOLOGICAL PROCESS	05
6.	QUALITY CONTROL AND STANDARDS	06
7.	CONSUMABLES, POWER AND UTILITY	07
8.	INSTALLED CAPACITY	08
9.	<b>BASIS AND PRESUMPTIONS</b>	09
10.	PROJECT COST ESTIMATES AND MEANS OF FINANCE	10
11.	ECONOMIC VIABILITY AND FINANCIAL ANALYSIS	12



# LIST OF ANNEXURES

SL. NO.	ITEMS	PAGE NO.
А.	ESTIMATED COST OF THE PROJECT	14
В.	PROPOSED MEANS OF FINANCE	15
C.	WORKING CAPITAL ESTIMATES	16
D	COST AND PROFITABILITY ESTIMATES	17
Е.	PROJECTED BALANCE SHEET	18
F.	PROJECTED CASH FLOW STATEMENT	19
G.	DEBT-SERVICE COVERAGE RATIO	20
H.	BREAK-EVEN ANALYSIS	21
I.	INTERNAL RATE OF RETURN	22
К.	TERM LOAN REPAYMENT SCHEDULE	23



SL. NO.	ITEMS	PAGE NO.
A1.	COST OF LAND & BUILDING	24
A2.	COST OF PLANT & MACHINERY	25
A3.	MISC. FIXED ASSETS	26
A4.	PRELIMINARY & PRE-OPERATIVE EXPENSES	27
C1.	MANPOWER REQUIREMENT & COST	28
C2.	POWER & UTILITY	29
D1.	<b>REPAIR AND MAINTENANCE COST</b>	30
D2.	ESTIMATES OF INCOME	31
D3.	INTEREST ON WORKING CAPITAL	32
D4.	DEPRECIATION SCHEDULE	33





# THE PROJECT AT A GLANCE

Sl. No.	Particulars	Description					
A. Proje	ect Description	•					
1.	Proposed Project	Processir	g and Pac	kaging of	Multi Frui	its	
2.	Capacity of the Plant/Unit (At 100% Capacity)	■ <u>Fruit S</u>	<ul> <li>Fruit Juice : 75 Ton</li> <li>Fruit Squash: 75 Ton Total : 150 Ton</li> </ul>				
3.	Year-wise Capacity Utilisation	Yr 01 <b>50%</b>	Yr 02 <b>60%</b>	Yr 03 <b>70%</b>	Yr 04 <b>70%</b>	Yr 05 <b>70%</b>	
B. Proje	ect Cost						
1.	Land	Own Lan	d/ On Lea	ise			
2.	Civil Works & Buildings	Rs. 14,0	6,000.00				
3.	Plant & Machinery	Rs. 8,5	3,000.00				
4.	Fixed Assets	Rs. 2,2	0,000.00				
5.	Pre-operative Expenses	Rs. 2,6	2,000.00				
6.	Contingency & Escalation	Rs. 1,24	4,000.00				
7.	Margin for Working Capital	Rs. 1,2	0,000.00				
-	Total	Rs. 29,85	5,000.00				
C. Mear	ns of Finance						
1.	Equity @ 40%	Rs. 11,9	94,000.00				
2.	Loan from Bank @ 60%	Rs. 17,9	1,000.00				
	Total	Rs. 29,85	5,000.00				
D. Finai	ncial Benchmarks	•					
1.	Break Even Point(at Operating Capacity on Third Year)	46.56%					
2.	Average DSCR	1: 1.98					
3.	Internal Rate of Return	20.00%					
E. Basic	Assumptions						
1.	Power Connection and Rate Per Unit	20 HP: F	Rate Per U	J <b>nit : Rs.</b> (	6.00/-		
2.	Interest Rate	Term Lo	an: 8%;	WC Loan	: 12%		
3.	Repayment Period	6 Years i	ncluding	moratori	um period	l of 1 Year.	



#### **INTRODUCTION**

- 2.1. Fruit juices are produced and consumed for their refreshing character and nutritional qualities being rich in vitamins and minerals and having regulatory functions to the body systems; such as augmenting of alkaline reserve of the blood and proper functioning of blood vessels, including capillary, permeability and fragility as a result of contained falconoid. Juices also increase body retention of calcium, magnesium, nitrogen and are also good sources of quick energy.
- 2.2. The North-East India is rich in fruit diversity and contains more than one-third of the country's total diversity. Fruits are an important source of energy for human-beings. Fruits are also popular amongst all age groups but their availability is limited during season only which lasts for a period of 3-4 months for most of the fruits. Hence, they need to be processed and preserved which also results in value-addition.
- 2.3. There has been an appreciable increase in the export of processed foods which includes fruit juices. With the fast growth of the urban areas and the living standards of the Indian people growing higher, there is a good potential to develop this industry in the small scale sector.
- 2.4. Considering the potential market opportunity of such units, the present detail project report has been developed. The main objective of such initiative is to productively utilize the abundantly available resources of the local area and to enable uninterrupted supply of the products to market throughout the year.
- 2.5. A detailed analysis has been carried out considering mainly the aspects mentioned below:
- 2.5.1. Market and demand of the products.
- 2.5.2. Requirements of miscellaneous assets for the project.
- 2.5.3. Estimation of installed capacity and operation pattern.
- 2.5.4. Consumables, power & utilities and manpower requirements etc.
- 2.5.5. Estimation of the cost of the project and working capital requirements.
- 2.5.6. Means of Finance
- 2.5.7. Estimation of cost of operation, profitability and fund flow statements etc.
- 2.5.8. Implementation Schedule.
- 2.5.9. The total Project cost is estimated at **Rs. 29.85Lakhs** which includes margin money for working capital @ 25%.
- 2.5.10. The various profitability estimates and other financial indicators worked out as given in the following pages are up to the satisfaction level.



## PROJECT DESCRIPTION

- 3.1. The proposed project is that of setting up of a Multi-fruit Juice and Squash Processing unit at suitable location.
- 3.2. The key products of the proposed project are as follows;
  - Fruit Juice
  - Fruit Squash
- 3.3. The primary objective of the fruit juice processing is to preserve the perishable fruits in a stable form that can be stored and supplied to local as well as distant markets round the year. Processing also can change fruits into new or more usable forms and make fruits more convenient to prepare.
- 3.4. The use of fruits for the preparation of processed products will not only reduce wastage of fruits during handling but also add nutrition and palatability to the drink. The rapid increase in the production of these items in different parts of the country is a proof of their rising popularity.
- 3.4. The proposed project would procure the raw materials locally. After processing, the products would be supplied to the market through distributors/ wholesalers/retailers.



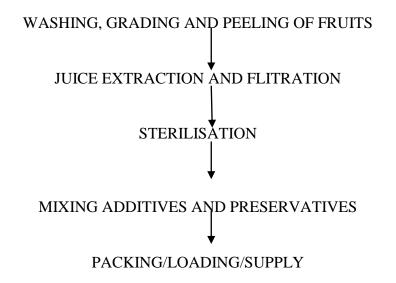
#### MARKET PROSPECT

- 4.1. The rising number of health-conscious consumers is giving a boost to fruit juices; it has been observed that consumers are shifting to fruit juices as they consider the same as a healthier breakfast/snack option. Fruit drinks are popularly used in most urban households.
- 4.2. Today markets are flooded with a large variety of juices e.g., mango, apple, guava, litchi, grape, pineapple etc. The main reason for increased consumption is rising level of health consciousness among consumers and parents. It is believed that these drinks provide superior nutrition because of their fortified status. Factors like preferred choice of children, easy availability, convenience, naturalness and marketing strategies have given fruit drink industry a booming growth.
- 4.3. With changing life styles and increase in disposable incomes, the demand for easy-toprepare drink is also increasing. Besides consumption in the households, it is served in hotels, restaurants, clubs, airlines and railways etc.
- 4.4. Quality should be emphasized at each step right from the beginning to the marketing of the product. Over the years, an image of high quality products should be cultivated.
- 4.5. The effectiveness of distribution coverage and practice is of paramount importance in achieving the desired fruit juice sales. Understanding of the distribution channels is crucial in order for the manufacturer to plan and implement an effective distribution strategy. Distribution network should be given extra emphasis. Market share could be gained by enhancing retailer, and distributor margins. Normally distribution and retailer margins in fruit juice business are from 15 to 20%.
- 4.6. The proposed business may utilise media such as broadcast, newspapers and also social network platforms at certain interval of time to introduce the products and also attract more customers. Placement of the product at strategic outlets and publicity in local media would boost sales. It may also carry door to door services in the initial years to introduce the product and attract more customers.
- 4.7. Marketing plan of the proposed project may include promotional campaign like offering special discounts, referrals, advertisement, new product development, packaging innovations and tying up with buying houses.



#### TECHNOLOGICAL PROCESS

5.1. The process flow diagram is as follows:



- 5.2. **Process Details:** Good quality ripe fruits are sorted, washed, peeled and cleaned. Fruits are then passed on to fruit mill for crushing and then to hydraulic press for juice extraction. Extracted juice is then filtered to remove seeds and fibres. Thereafter, various ingredients such as sugar, additives, preservatives, flavours etc. are added and this mixture is stirred till uniform solution is formed. They are standardized as per the FPO specifications, filtered, homogenized, pasteurized and filled in sterilized bottles, followed by coding, cooling and packing of the product. Products will be stored in cool dry store before distribution.
- 5.3. Frequent and continuous availability of quality fruit pulp is a prerequisite for Fruit Juice Business. It is the only way to integrate operations from fruit orchards to pulp processing to juice making and packing. Integrated and earlier pulp supply arrangements with pulp producers and suppliers would be critical in business success.



#### **QUALITY CONTROL AND STANDARDS**

- 6.1. An FPO license is necessary to start a fruit processing industry in India. The FPO mark is a certification mark mandatory on all processed fruit products sold in India such as packaged fruit beverages and fruit extracts following the Food Safety and Standards Act of 2006. The FPO mark guarantees that the product was manufactured in a hygienic 'food-safe' environment, thus ensuring that the product is fit for consumption.
- 6.2. **FSSAI LICENSE:** FSSAI License is issued by the Food Safety and Standards Authority of India (FSSAI), Ministry of Family Health & Welfare, Government of India. Application to commence a food business must be made to the FSSAI in the prescribed format. Based on the application and supporting documents, FSSAI will accord approval. The Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations 2011 introduced to improve the hygiene and quality of food has brought about tremendous changes in the food industry. As per the Act, no person shall commence or carry on any food business except under a FSSAI license or FSSAI registration. Therefore, any food manufacturing or processing or packaging or distributing entity is now required to obtain a FSSAI License or Registration.
- 6.3. **POLLTUION CONTROL:** There is no major pollution problem associated with this industry except for disposal of waste which should be managed appropriately. However, waste water resulting from washing of ginger & lime treated ginger water may be safely dispersed over a large area of land for irrigation purpose. The promoter is advised to take "No Objection Certificate" from the State Pollution Control Board.
- 6.4. **EFFLUENT DISPOSAL:** Disposal of any effluent out of the project unit should be treated with recycling facility or dumped in such a way that these does not cause hazard in the vicinity of the site.
- 6.5. **ENERGY CONSERVATION:** Proper care should be taken in running the machineries and equipment to avoid over run and high electricity consumption. The machineries selected for the plant should be most energy efficient for economical production.



#### CONSUMABLES, POWER AND UTILITY

7.1. The major consumables required are as follows;

1. Fruits

- 2. Sugar, additives, preservatives and flavours
- 3. Packaging Materials including Bottles, Labels and Cardboard Boxes etc.
- 7.2. POWER:

The total requirement of power for the project is 17.42 KW. The total power supply would be distributed in the following way;

Plant & Machinery	-	14.92 KW
General Lighting	-	2.50 KW

The details requirement is shown in Appendix-C2.

7.3. UTILITY:

WATER: Constant flow of water would be necessary in the operation of the plant. Water would be obtained from bore well and can be stored in an overhead tank, from where it will be supplied to the required areas. Process water should be free of mud and suspended particles. It should be available at a pressure of 3 Kg/sq.cm.

OTHER UTILITIES: Other utilities includes fuel etc. those should be locally available. Detail expenditure against the head is shown in **Appendix- C2**.



## **INSTALLED CAPACITY**

- 8.1. In assessing the proposed plant capacity, due consideration has been given to technological and financial factors, marketing considerations, availability of consumables, infrastructure facilities and economic viability. The detailed requirement of the plant and machineries to achieve the plant capacity is assessed by the unit technician. While arriving at the requirement of various type of equipment and machinery required for the unit, due considerations has been given to the following points.
  - a) Minimum Wastage
  - b) High Productivity
  - c) Maximum flexibility in operation
  - d) Adequate stock by provision wherever necessary

The installed production capacity of the unit per annum is as follows;

Fruit Juice	-	75 Ton
Fruit Squash	-	75 Ton

For the purpose of carrying out this economic viability of the proposed project, it is assumed that the plant will operate at following efficiencies during the first 5(Five) years.

Year	01	02	03	04	05
Capacity Utilization	50%	60%	70%	70%	70%

# **A**PS

#### **CHAPTER-9**

#### **BASIS AND PRESUMPTIONS**

While deriving figures and projections in this Project report, following Basis and Presumptions have been made.

- 9.1. The project is based on a single shift basis and 300 days of working schedule in a year, working for 8 hours a day, 25 days a month.
- 9.2. The project cost and other projections etc. have been made on present market conditions and the sources available within our sources only and therefore it may vary on account of market fluctuations and with different suppliers and qualities.
- 9.3. The cost of machinery and equipment/materials indicated refer to a particular make and the prices are approximate to these prevailing at the time of preparation of this report.
- 9.4. Power rate is assumed at Rs.6.00 per unit and monthly fixed rental charges.
- 9.5. Water would be made available through bore well facility at the project site.
- 9.6. Manpower requirement for the project has been planned considering the size of the unit.
- 9.7. Interest rates considered is 8% on term loan and 12.00% on Working capital loan for financial assistance.
- 9.8. For repayment, a period of 6 years is planned with moratorium period of one year.
- 9.9. Insurance charges have been considered Lump Sum.
- 9.10. Repair and maintenance have been calculated at reasonably.
- 9.11. Depreciation shown has been calculated on Straight Line Method.
- 9.12. Non-refundable deposits, Preparation of detailed project report fees, Architecture fees, traveling & Convenience amount, Know-how & Engineering fees, Application processing fees, trial production, fees etc are considered under pre-operative expenses.
- 9.13. Break Even Point & Rate of Return is calculated on optimum production condition findings.
- 9.14. At the plant site, availability of unskilled labour is not a problem. Skilled and unskilled labour can be recruited for operating the plant. Initial training will be required for smooth and efficient running of the plant. It is felt that the skilled manpower available locally having some experience in operation can be recruited to satisfy the manpower need.
- 9.15. Project would be set up at a site that is well connected by road and there is adequate supply of power and water.

#### PROJECT COST ESTIMATES AND MEANS OF FINANCE

#### 10.1. TOTAL PROJECT COST:

The Capital cost of the project has been estimated on the basis of installed capacity assuming 200 working days per annum. The total cost of the Project including margin for working capital has been estimated at **Rs. 29,85,000.00** as detailed in **Annexure-A**.

#### 10.2. LAND, BUILDING AND CIVIL WORKS:

The approximate cost of civil works including Building, Electrification, Water Supply, Sanitation and Drainage etc will be **Rs. 14,06,000.00**.

#### 10.3. PLANT & MACHINERY:

The total cost of Plant & Machinery has been estimated at **Rs.8,53,000.00**as detailed in Appendix-A2.

#### 10.4. PLANT EXPENDITURE:

The total cost on Plant expenditure includes admissible taxes, transportation, insurance of the machineries and installation etc. has been included as detailed in Appendix-A2.

#### 10.5. FIXED ASSET:

The cost of Misc. Fixed Assets has been estimated at around **Rs. 2, 20,000.00** as detailed in Appendix-A3. These include cost of furniture and fixture's and office equipment.

#### 10.6. PRELIMINARY & PRE-OPERATIVE EXPENDITURE:

An expenditure of **Rs. 2, 62,000.00** has been earmarked on this account, as detailed in Appendix- A4.

#### 10.7. CONTINGENCY AND ESCALATION:

This has been calculated @ 5% on Civil Work, Plant & Machinery and Misc. Fixed Assets to provide safeguard against escalation of prices or any other unforeseen expenditure. The total amount works out to **Rs. 1,24,000.00**.

#### 10.8. WORKING CAPITAL ESTIMATES:

The details of the Working Capital requirements of the proposed unit have been shown in Annexure-C. In arriving at the working capital estimates, various components vis Administrative Expenses/Consumables and Working Expenses have been taken on the basis of usual norms. The Working Capital requirement is proposed to be met from project margin money and cash credit loan borrowings from the financial institution.





#### 10.9. MEANS OF FINANCE:

The Proposed Project Cost of **Rs. 29.85 Lakhs** would be financed under MSME development schemes of financial institutions/commercial banks, in the following manner as shown below.

TOTAL	=	29.85 LAKHS
2. PROMOTERS CONSTRIBUTION @ 40%	=	11.94 LAKHS
1. LOAN FROM BANK/FI @ 60%	=	17.91 LAKHS

## 10.10. DEBT-EQUITY RATIO:

Based on the above financing pattern, the Debt-Equity ratio of the Project is 1.5:1.

# **APS**

#### CHAPTER-11

#### ECONOMIC VIABILITY AND FINANCIAL ANALYSIS

#### 11.1. COST OF PRODUCTION:

The cost of production has been estimated annually for the first five years of operation. The various cost components taken into account are cost of administrative expenses, consumable stores, utilities, wages and salaries, repairs and maintenance, insurance, interest rates, taxes etc. depreciation. The detailed cost of production has been shown in **Annexure-D**.

#### 11.2. REPAIR & MAINTENANCE:

Cost under Repair and Maintenance expenses have been assessed by charging 1% on Land & Building, 2% on Machineries and 1.5% on Fixed Assets on first year with increase of 2% on subsequent years as detailed in Appendix-D1.

#### 11.3. ADMINISTRATIVE EXPENSES:

This has been considered in the cost and profitability statement under other expenses etc.

#### 11.4. SELLING EXPENSES:

This has been considered in the cost and profitability statement under other expenses etc.

#### 11.5. DEPRECIATION:

In calculating the cost of operation, depreciation has been calculated under straight line method after absorbing the pre-operative and contingencies expenses as shown in **Appendix-D4**.

#### 11.6. FINANCIAL CHARGES:

The interest on proposed term loan amount of **Rs. 17.91 Lakhs** has been calculated@ **8%** being the rate of interest. The interest calculation for various years after considering the repayments due in respective years has been shown in **Appendix-D3**.

#### 11.7. SALES REALISATION:

The total annual income of the Project is shown in **Appendix-D2**. Based on 70% capacity utilisation, total turnover is estimated at **Rs. 52.50 Lakhs on third year**, the sale for other years are estimated at different capacity utilisation as shown in Appendix-D2.



#### 11.8. NET PROFIT:

The proposed project is expected to generate profit from the first year of operation itself and will gradually increase with increase in capacity utilisation.

#### 11.9. INTERNAL ACCRUALS:

The net profit after tax with depreciation added back would make up sufficient internal accruals to meet the term loan, working capital loan repayment obligations without any liquidity problems.

#### 11.10. FINANCIAL ANALYSIS:

The break-even point of the proposed project is **46.56%** at 70% operating capacity on third year as shown in **Annexure-F**.

The DSCR of the project has been worked out in **Annexure-H** with an average of **1:1.98**, which is considered quite satisfactory to meet the repayment and interest obligations in respect of the term loan.

The internal rate of return of the project works out to 20.00 %, which is satisfactory.



## ANNEXURE-A

## ESTIMATED COST OF THE PROJECT

Particulars	Amount (Rs. lacs)
Land & Site development	Own Land/ On Lease
Building & Civil Works	14.06
Plant & Machinery	8.53
Misc. Fixed Assets	2.20
Preliminary & Pre-operative Expenses	2.62
Contingencies & Escalation @ 5%	1.24
Working Capital	1.20
TOTAL	29.85

## Total Project Cost :Rs. 29, 85, 000.00

(Rupees Twenty Nine Lakhs and Eighty Five Thousand Only).



#### **ANNEXURE-B**

### PROPOSED MEANS OF FINANCE

			(Rs. in lacs)
Particulars		Percent	Amount
EQUITY			
A. Equity from Promoters		40%	11.94
B. Subsidy from Central/ State Govt.		-	
DEBT			
Term Loan from Banks/ FIs		60%	17.91
	TOTAL	100%	29.85

## Total Project Cost :Rs. 29, 85, 000.00

#### (Rupees Twenty Nine Lakhs and Eighty Five Thousand Only).



## ANNEXURE-C

# WORKING CAPITAL ESTIMATES

		(Rs. in lacs)			
	Period	Total Current Assets			
	(Days)	Year 1 Year 2		Year 3	
Raw Materials	15	0.85	1.03	1.20	
Power & Utility	30	0.11	0.14	0.16	
Salary	30	0.89	0.89	0.90	
Finished Goods	15	1.39	1.57	1.76	
Receivables	15	1.54	1.85	2.16	
Total		4.78	5.48	6.17	
Working Capital Margin in Year 1					
(25%)	1.20				

• 1 .



#### ANNEXURE-D

# COST AND PROFITABILITY ESTIMATES

					(Rs. i	in lacs)
Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
<u>A. INCOME</u>						
Production Capacity (Ton/ annum)	150	150	150	150	150	150
Capacity utilisation	50%	60%	70%	70%	70%	70%
Production/ annum at capacity utilisation	75	90	105	105	105	105
Total income/ annum	37.50	45.00	52.50	52.50	52.50	52.50
<b>B. OPERATING EXPENSES</b>						
Raw Materials	20.80	24.96	29.12	29.12	29.12	29.12
Power & Utility	1.37	1.65	1.92	1.92	1.92	1.92
Salary	10.80	10.85	10.91	10.96	11.02	11.07
Repair & Maintenance	0.36	0.37	0.38	0.38	0.39	0.40
Other Expenses	0.38	0.45	0.53	0.53	0.53	0.53
Total Operating Expenses	33.71	38.28	42.85	42.92	42.98	43.04
Operating profit	3.79	6.72	9.65	9.58	9.52	9.46
C. FINANCIAL EXPENSES						
Depreciation	1.25	1.25	1.25	1.25	1.25	1.25
Interest on Term Loan	1.43	1.30	1.01	0.73	0.44	0.16
Interest on Working Capital Loan	0.43	0.49	0.56	0.56	0.56	0.56
Net Profit	0.67	3.67	6.82	7.05	7.27	7.49
Net Cash Accruals	1.93	4.92	8.08	8.30	8.53	8.75
Principal Repayment	0.00	3.58	3.58	3.58	3.58	3.58



#### ANNEXURE-E

# PROJECTED BALANCE SHEET

(Rs.	in	lacs)

Particulars	Impl. Period	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
LIABILITIES							
Promoters Capital							
Promoters capital	11.94	11.94	11.94	11.94	11.94	11.94	11.94
Profit from P&L		0.67	4.34	11.16	18.21	25.48	32.98
Sub Total	11.94	12.61	16.28	23.10	30.15	37.42	44.91
Secured Loan							
Term loan	17.91	17.91	14.33	10.74	7.16	3.58	0.00
CC limit from Banks		3.59	4.11	4.63	4.63	4.63	4.63
Sub Total	17.91	21.49	18.43	15.37	11.79	8.21	4.63
Unsecured Loan							
Current Liabilities							
Total of Liabilities	29.85	34.10	34.71	38.47	41.94	45.63	49.54
ASSETS							
Gross Fixed Block	26.03	26.03	26.03	26.03	26.03	26.03	26.03
Sub Total (a)	26.03	26.03	26.03	26.03	26.03	26.03	26.03
Depreciation							
Cum. Depreciation		1.25	2.51	3.76	5.02	6.27	7.53
Sub Total (b)	0.00	1.25	2.51	3.76	5.02	6.27	7.53
Net Fixed Asset Block (a-b)	26.03	24.78	23.52	22.27	21.01	19.76	18.51
Current Asset Block							
W.I.P.(Inventories)							
Cash & Bank balance	1.20	2.19	3.62	8.20	13.18	18.39	23.82
Other Current Assets		4.78	5.48	6.17	6.17	6.17	6.17
Sub-Total	1.20	6.97	9.10	14.37	19.35	24.56	29.99
Preliminary expenses not written off	2.62	2.36	2.09	1.83	1.57	1.31	1.05
Total of Assets	29.85	34.10	34.71	38.47	41.94	45.63	49.54



#### ANNEXURE-F

# PROJECTED CASHFLOW STATEMENT

(Rs. in lacs)

Particulars	Impl. Period	Yr 1	Yr 2	Yr 3	Yr4	Yr 5	Yr 6
SOURCES OF FUND							
Profit after tax with depreciation &							
interest added back		3.79	6.72	9.65	9.58	9.52	9.46
Increase in Promoters capital	11.94						
Increase in un-secured loan							
Increase in Term Loan	17.91						
Increase in Bank borrowing (WC)		3.59	0.52	0.52			
Prelim. exp. W/off		0.26	0.26	0.26	0.26	0.26	0.26
Decrease in WIP(inventory)							
Decrease in Other current assets							
Sub Total	29.85	7.64	7.50	10.43	9.85	9.78	9.72
USES OF FUND							
Preliminary expenses	2.62						
Capital expenditure	26.03						
Increase in WIP							
Repayment of Term Loan		0.00	3.58	3.58	3.58	3.58	3.58
Decrease in unsecured loan							
Interest payment							
Term Loan		1.43	1.30	1.01	0.73	0.44	0.16
Other bank(W.C)		0.43	0.49	0.56	0.56	0.56	0.56
Increase in Working capital		4.78	0.69	0.69			
Decrease in Other current liabilities							
Sub Total	28.65	6.64	6.07	5.85	4.86	4.58	4.29
Opening cash/bank balance	0.00	1.20	2.19	3.62	8.20	13.18	18.39
Surplus/Deficit	1.20	0.99	1.43	4.58	4.98	5.21	5.43
Closing cash/bank balance	1.20	2.19	3.62	8.20	13.18	18.39	23.82



#### ANNEXURE-G

# **DEBT-SERVICE COVERAGE RATIO**

						(Rs. i	in lacs)
	Year	1	2	3	4	5	6
Profit After Tax (Net Profit)		0.67	3.67	6.82	7.05	7.27	7.49
Depreciation		1.25	1.25	1.25	1.25	1.25	1.25
Interest		1.43	1.30	1.01	0.73	0.44	0.16
	Total	3.36	6.23	9.09	9.03	8.97	8.90
Interest		1.43	1.30	1.01	0.73	0.44	0.16
Loan Repayment		0.00	3.58	3.58	3.58	3.58	3.58
	Total	1.43	4.88	4.60	4.31	4.02	3.74
	DSCR	2.34	1.28	1.98	2.10	2.23	2.38

Average DSCR = 1.98



## ANNEXURE-H

# BREAK-EVEN ANALAYSIS

		(R	s. in lacs)
Year	1	2	3
A. Net sales (Rs. lac)	37.50	45.00	52.50
B. Variable cost			
Raw Materials	20.80	24.96	29.12
Power & Utility	1.37	1.65	1.92
Other Expenses	0.38	0.45	0.53
Interest on Working Capital Loan	0.43	0.49	0.56
Total variable cost	22.98	27.55	32.12
C. Contribution (A-B)	14.52	17.45	20.38
D. Fixed & Semi-fixed Costs			
Salary	10.80	10.85	10.91
Repair & maintenance	0.36	0.37	0.38
Interest on Term Loan	1.43	1.30	1.01
Depreciation	1.25	1.25	1.25
Total fixed cost	13.85	13.78	13.55
E. BREAKEVEN POINT	95.37%	78.97%	66.52%
F. BEP at operating capacity	47.69%	47.38%	46.56%
G. Cash BEP	43.37%	43.07%	42.25%



## **ANNEXURE-I**

# **INTERNAL RATE OF RETURN**

						(Rs. ii	n lacs)
Year	0	1	2	3	4	5	6
CASH OUTFLOW							
Capital Expenditure	26.03	0.00	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	4.78	0.69	0.69	0.00	0.00	0.00
Total (A)	26.03	4.78	0.69	0.69	0.00	0.00	0.00
CASH INFLOW							
Profit After Tax		0.67	3.67	6.82	7.05	7.27	7.49
Add: Depreciation		1.25	1.25	1.25	1.25	1.25	1.25
Add: Interest		1.43	1.30	1.01	0.73	0.44	0.16
Add: Salvage Value							
Total (B)	0.00	3.36	6.23	9.09	9.03	8.97	8.90
NET FLOW (B-A)	-26.03	-1.42	5.53	8.40	9.03	8.97	8.90

IRR = 20%



#### ANNEXURE-J TERM LOAN REPAYMENT SCHEDULE

TERM LOAN REPAYMENT SCHEDULE (Rs in lacs)							
Month	Year	1	2	3	4	5	6
Month 1	Opening balance	17.91	17.91	14.33	10.74	7.16	3.58
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest (8%)	0.12	0.12	0.10	0.07	0.05	0.02
	Closing balance	17.91	17.61	14.03	10.45	6.86	3.28
Month 2	Opening balance	17.91	17.61	14.03	10.45	6.86	3.28
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.12	0.09	0.07	0.05	0.02
	Closing balance	17.91	17.31	13.73	10.15	6.57	2.98
Month 3	Opening balance	17.91	17.31	13.73	10.15	6.57	2.98
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.12	0.09	0.07	0.04	0.02
	Closing balance	17.91	17.01	13.43	9.85	6.27	2.69
Month 4	Opening balance	17.91	17.01	13.43	9.85	6.27	2.69
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.11	0.09	0.07	0.04	0.02
	Closing balance	17.91	16.71	13.13	9.55	5.97	2.39
Month 5	Opening balance	17.91	16.71	13.13	9.55	5.97	2.39
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.11	0.09	0.06	0.04	0.02
	Closing balance	17.91	16.41	12.83	9.25	5.67	2.09
Month 6	Opening balance	17.91	16.41	12.83	9.25	5.67	2.09
Monul 0	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.11	0.09	0.06	0.04	0.01
	Closing balance	17.91	16.12	12.53	8.95	5.37	1.79
Month 7	Opening balance	17.91	16.12	12.53	8.95	5.37	1.79
Wolldin /	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.30	0.08	0.30	0.30	0.01
	Closing balance	17.91	15.82	12.24	8.66	5.07	1.49
Month 8	Opening balance	17.91	15.82	12.24	8.66	5.07	1.49
Wolten 8		0.00	0.30	0.30	0.30	0.30	0.30
	Repayment Interest	0.00	0.30	0.30	0.30	0.30	0.30
		17.91	15.52	11.94	8.36		1.19
Manth 0	Closing balance					4.78	
Month 9	Opening balance	17.91	15.52	11.94	8.36	4.78	1.19
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.10		0.06	0.03	0.01
M	Closing balance	17.91	15.22	11.64	8.06	4.48	0.90
Month 10	Opening balance	17.91	15.22	11.64	8.06	4.48	0.90
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.10	0.08	0.05	0.03	0.01
X 4 11	Closing balance	17.91	14.92	11.34	7.76	4.18	0.60
Month 11	Opening balance	17.91	14.92	11.34	7.76	4.18	0.60
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.10	0.08	0.05	0.03	0.00
M 4 42	Closing balance	17.91	14.62	11.04	7.46	3.88	0.30
Month 12	Opening balance	17.91	14.62	11.04	7.46	3.88	0.30
	Repayment	0.00	0.30	0.30	0.30	0.30	0.30
	Interest	0.12	0.10	0.07	0.05	0.03	0.00
	Closing balance	17.91	14.33	10.74	7.16	3.58	0.00
Principal Re	payment	0.00	3.58	3.58	3.58	3.58	3.58
Interest		1.43	1.30	1.01	0.73	0.44	0.16



# COST OF LAND AND BUILDING

## <u>Covered Area – 1,200 Square Feet</u>

Particulars	Area (Sqft)	Rate (Rs)	Amount (Rs)
Work Shed, Store House cum Office	2500	450	1125000
		Sub total	1125000
Add: Electrification, Water supply, Sanitation a	25%	281250	
		TOTAL	1406250
	S	ay (Rs. in lacs)	14.06



## COST OF PLANT AND MACHINERY

Particulars	Qty	Amount (Rs)
Fruit Washing Tank	1	675000
Juice Storage Tanks	2	
Juice Extractor	1	
Mixing Tank with Stirrer	1	
Baby Boiler	1	
Steam Jacketed Kettle	2	
Bottle Washing and Filling Machine	1	
Shrink Packaging Machine	1	
SS Utensils, Weighing Scales, Hand Gloves, Miscellaneous	LS	75000
Tools and Equipment		
Testing Equipment	LS	25000
	Sub total	775000
Add: Taxes, transportation and installation etc @ 10%		77500
	TOTAL	852500
S	ay (Rs. in lacs)	8.53



## MISCELLANEOUS FIXED ASSETS

Particulars	Qty	Rate (Rs)	Amount (Rs)
Electrical Load Security and Transformer	LS		95000
Furniture's, Fixtures including Working	LS		55000
Tables			
Miscellaneous items	LS		50000
		Sub total	200000
Add: Taxes, transportation and installation etc	@ 10%		20000
		TOTAL	220000
		Say (Rs. in lacs)	2.20



# PRELIMINARY AND PRE-OPERATIVE EXPENSES

Particulars	Amount (Rs. lacs)
Travelling Expenses	25000
Non Refundable Deposits and Professional Fees	92000
Interest during implementation	94750
Miscellaneous expenses	50000
TOTAL	261750
Say (Rs. in lacs)	2.62



#### **APPENDIX-C1**

## **MANPOWER REQUIREMENT & COST**

The salaries and wages of different types of manpower is projected as follows:

		Salary/	Cost/
Particulars of Employee	Numbers	Month	annum
		(Rs)	(Rs)
Manager	1	12000	144000
Sales Personnel	4	8000	384000
Machine Operators	2	8000	192000
Skilled Workers	2	6000	144000
Unskilled Workers	4	4500	216000
Expenses on salary in the 1st year (Rs)			1080000

Increase of 0.50% has been considered every subsequent year.



#### **APPENDIX-C2**

# POWER AND UTILITY

# A. Expenses on Power

Particulars	Quantity	Power (Kw)	Total (Kw)
Plant & Machinery (Total HP of 20)	1	14.92	14.92
General Lighting	25	0.10	2.50
Total powe	ent/ day (Kw)	17.42	
No. of hrs/ day	8		
Nos. of days/annum	300		
Annual power requirement (kwh)	41808		
Rate per unit (Rs)	6		
Expenses on power (Rs)	250848		
B: Estimate of Utility		_	
Expenses on Water/Other Utilities (Rs)	24000		
Expenses on Power & Utility at 100% capacity (Rs)	274848		



# **REPAIR AND MAINTENANCE COST**

					(Rs. in lacs)
Particulars	Cost (Rs)	Contingencies	Total	Rate	Amount (Rs)
Building & Civil Works	14.06	0.70	14.77	1.00%	0.15
Plant & Machinery	8.53	0.43	8.96	2.00%	0.18
Misc. Fixed Assets	2.20	0.11	2.31	1.50%	0.03
Expenses on repair &					
maintenance in year 1	24.79	1.24	26.03		0.36



# **ESTIMATES OF INCOME**

# (Basis-100% Capacity Utilisation)

		Price per	
		Unit	Amount
Particulars	Qty	(Rs.)	(Rs.)
Fruit Juice	75 Ton	45000	3375000
Fruit Squash	75 Ton	55000	4125000
Total Sales per annum at 100% capacity (Rs)	150 Ton		7500000



# **INTEREST ON WORKING CAPITAL**

		(H	Rs. in lacs)
Particulars	Year 1	Year 2	Year 3
Total Current Assets	4.78	5.48	6.17
Bank Loan (75%)	3.59	4.11	4.63
Interest @ 12%	0.43	0.49	0.56

Page | 32



# **DEPRECIATION SCHEDULE**

(Rs in lacs)					Rs in lacs)
					Amount/
Description	Cost (Rs)	Contingencies	Total	Rate	annum
					(Rs)
Building & Civil Works	14.06	0.70	14.77	3.17%	0.47
Plant & Machinery	8.53	0.43	8.96	6.33%	0.57
Misc. Fixed Assets	2.20	0.11	2.31	9.50%	0.22
TOTAL	24.79	1.24	26.03		1.25