



MODEL PROJECT REPORT



PROJECT REPORT ON CARBONATED SOFT DRINK

SWAVALAMBI BHARAT ABHIYAN

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur XXXXXXXX
- 2 Constitution (legal Status) : XXXXXXXX
- 3 Father's/Spouce's Name XXXXXXXX
- 4 Unit Address : XXXXXXXX
- Taluk/Block: XXXXX
District : XXXXX
Pin: XXXXX
E-Mail : XXXXX
Mobile XXXXX
- State:
- 5 Product and By Product : **Corbonated Soft Drinks**
- 6 Name of the project / business activity proposed : **Corbonated Soft Drinks**
- 7 Cost of Project : Rs25.00lac
- 8 Means of Finance
- | | | |
|-------------------|---|----------------------------|
| Term Loan | - | Rs.11.79 Lacs |
| KVIC Margin Money | | As per Project Eligibility |
| Own Capital | | Rs.2.5 Lacs |
| Working Capital | | Rs.10.71 Lacs |
- 9 Debt Service Coverage Ratio : 9.75
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 8 Months
- 12 Break Even Point : 21%
- 13 Employment : 9 Persons
- 14 Power Requirement : 20.00 HP
- 15 Major Raw materials : Sugar ,Caustic Soda, activated carbon
- 16 Estimated Annual Sales Turnover : 77.76 Lacs
- 16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (3000 Sq Ft)	-
Plant & Machinery	12.00
Furniture & Fixtures	0.50
Pre-operative Expenses	0.60
Working Capital Requirement	11.90
Total	25.00

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	2.50
Term Loan	11.79
Workign Capital Finance	10.71
Total	25.00

	General	Special
Beneficiary's Margin Money (% of Project Cost)	10%	5%

PROJECT REPORT ON CARBONATED SOFT DRINK



INTRODUCTION:

Carbonated soft drinks constitute the major category in “Aerated Soft Drinks”, the other two categories being juice based soft drinks and squash, sharbat and syrup. Various types of soft drinks including orange, lime and lemon based drinks as well as soda water fall in the category of aerated soft drinks. These water drinks consist of water, carbon-di-oxide, colour, additives and preservative. In a tropical country like India, which has oppressive summers, there is substantial market for aerated soft drinks.

MARKET POTENTIAL:

The Indian soft drink market might continue its "robust growth trajectory" as annual per capita bottle consumption is expected to reach around 84 by 2021, according to a report by PepsiCo India's bottling partner Varun Beverages Ltd. The industry would have a broad-based growth across categories, especially helped by juices and bottled water, . It will be helped by key growth drivers such as under-penetration of the segment, growing middle class, rising affordability and urbanization, and rural electrification besides continued innovations towards product packaging and sizing.

"Within carbonates, non-cola carbonates, especially lemon-based ones, are expected to grow faster," said VBL. Carbonated beverages account for 51 per cent of PepsiCo's sales volumes in India. It further said: "The bottled water category is expected to see a robust volume growth with increasing awareness among consumers about water-borne diseases and shortages in drinking water in the urban areas." Moreover, rising health awareness is also driving juice consumption and it is increasingly becoming part of the regular breakfasts and social gatherings.

PLANT CAPACITY:

The production basis would be as under at 100 % capacity:

No.of bottles per crate	24 bottles
Daily production	200 crates
Annual working days	300
Average capacity utilization	100%
Annual production at 60% capacity utilization:	
* Crates	60,000
* Bottles	1440 lakh.

It is proposed to produce orange, cola, lime/lemon and soda based drinks as given below:

Crates/Yr.

Orange	30,000
Cola	12,000
Lime/Lemon	12,000
Soda	6,000
	60,000

The main raw materials required are sugar, citric acid, essence, activated carbon, caustic soda, glucose & carbon-di-oxide and the annual requirements are as under:

Item Name	UOM	Quantity of Raw Material	Unit Rate	Total Cost Per Annum (100%)
Sugar	MT	14.40	30,000.00	4,32,000.00
Citric Acid	Kilograms	600.00	40.00	24,000.00
Essence	Kilograms	135.00	1,250.00	1,68,750.00
Activated Carbon	Kilograms	110.00	30.00	3,300.00
Caustic Soda	Kilograms	1,200.00	40.00	48,000.00
Liquid Glucose	Kilograms	12.00	25.00	300.00
Carbon-di-oxide	Kilograms	2400.00	60.00	1,44,000.00
Pilfer proof caps	Lacs	14.40	1.00	14,40,000.00
				22,60,350.00

All the above materials would be available from the open market.

PROCESS:

The main process steps are:

- i) Making concentrate of sugar, glucose, citric acid, essence and preservatives.
- ii) Feeding the concentrate into dosing machine.
- iii) Releasing the concentrate in each bottle in a required proportion.
- iv) Filling the bottle with treated water.
- v) Placing crown-cork on the bottle and passing through a shaker for proper mixing.

PLANT CAPACITY: 60% in first year with 10% increase PA in subsequent year is presumed

MACHINERY:

The major equipment required for the production of carbonated soft drinks are:

1.	Automatic bottle filling machine	1 no.
2.	Automatic bottle washing machine	1 no.
3.	Carbonation unit	1 set
4.	Bottle collection & revolving table	1 no.
5.	Steam jacket tank	1 no.
6.	Water treatment plant	1 no.
7.	Baby boiler	1 no.
8.	Refrigeration unit	1 no.
9.	Chain conveyor	1 no.
10.	Other accessories	
11.	Crown corking machine	1 no.

INFRASTRUCTURE

The main infrastructure facilities required are –

Land		2000 sq.ft.
Shed		1000 sq.ft
Power		20 KW
Water		2000 ltr. Per day.

SALES REALISATION:

The market price of a Gold Spot, Thumps Up etc. is in the range of Rs 15.00 to 16.00 per bottle. Providing for distributors/dealers commission, GST etc. the ex-

factory realization would be about Rs 15.00 to 20 per bottle. Considering that a tiny unit would have to face competition from premier brands, a market penetration price of Average Rs 10/- per bottle i.e. Rs 240/- per crate is considered for orange, lime, lemon drinks soda water etc

STATUTORY / GOVERNMENT APPROVALS

The Ministry of Food Processing Industries has been operating several plan schemes for the development of processed food sector in the country during the 10th Plan. One of the schemes relates to the Technology Up-gradation/ Establishment/ Modernization of food processing industries.

The Indian food processing industry is regulated by several laws which govern the aspects of sanitation, licensing and other necessary permits that are required to start up and run a food business. The legislation that dealt with food safety in India was the Prevention of Food Adulteration Act, 1954 (hereinafter referred to as "**PFA**"). The PFA had been in place for over five decades and there was a need for change due to varied reasons which include the changing requirements of our food industry. The act brought into force in place of the PFA is the Food Safety and Standards Act, 2006 (hereinafter referred to as "**FSSA**") that overrides all other food related laws.

FSSA initiates harmonization of India's food regulations as per international standards. It establishes a new national regulatory body, the Food Safety and Standards Authority of India (hereinafter referred to as "**FSSAI**"), to develop science based standards for food and to regulate and monitor the manufacture, processing, storage, distribution, sale and import of food so as to ensure the availability of safe and wholesome food for human consumption. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

All food imports will therefore be subject to the provisions of the FSSAI and rules and regulations which as notified by the Government on 5th of August 2011 will be applicable.

Key Regulations of FSSA

A. Packaging and Labeling

B. Signage and Customer Notices

C. Licensing Registration and Health and Sanitary Permits

FINANCIAL ASPECTS

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Capital Account	2.50	2.50	2.50	2.50	2.50
Retained Profit	22.37	50.08	80.18	115.49	155.70
Term Loan	11.79	8.84	5.90	2.95	0.37
Cash Credit	10.71	10.71	10.71	10.71	10.71
Sundry Creditors	0.32	0.37	0.42	0.47	0.53
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	48.04	72.90	100.15	132.60	170.34
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	12.50	12.50	12.50	12.50	12.50
Gross Dep.	1.83	3.40	4.75	5.89	6.86
Net Fixed Assets	10.68	9.10	7.75	6.61	5.64
Current Assets					
Sundry Debtors	2.59	3.31	3.79	4.27	4.75
Stock in Hand	9.62	11.23	12.83	14.44	16.04
Cash and Bank	22.65	46.51	72.74	103.95	140.25
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	48.04	72.90	100.15	132.60	170.34
	-	-	-	-	-

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Share Capital	2.50	-			
Reserve & Surplus	24.85	30.79	37.63	44.13	50.27
Depreciation & Exp. W/off	1.83	1.58	1.34	1.14	0.97
Increase in Cash Credit	10.71	-	-	-	-
Increase In Term Loan	11.79	-	-	-	-
Increase in Creditors	0.32	0.05	0.05	0.05	0.05
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	52.35	32.46	39.06	45.37	51.34
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	12.50	-	-	-	-
Increase in Stock	9.62	1.60	1.60	1.60	1.60
Increase in Debtors	2.59	0.72	0.48	0.48	0.48
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	2.95	2.95	2.95	2.57
Taxation	2.49	3.08	7.53	8.83	10.05
TOTAL :	29.70	8.60	12.83	14.16	15.04
Opening Cash & Bank Balance	-	22.65	46.51	72.74	103.95
Add : Surplus	22.65	23.86	26.23	31.21	36.30
Closing Cash & Bank Balance	22.65	46.51	72.74	103.95	140.25

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>A) SALES</u>					
Gross Sale	77.76	99.36	113.76	128.16	142.56
Total (A)	77.76	99.36	113.76	128.16	142.56
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	13.56	15.82	18.08	20.34	22.60
Elecricity Expenses	1.72	2.01	2.29	2.58	2.86
Repair & Maintenance	-	0.99	1.14	1.28	1.43
Labour & Wages	5.54	6.10	6.71	7.38	8.12
Depreciation	1.83	1.58	1.34	1.14	0.97
Commissions	7.78	9.94	11.38	12.82	14.26
Consumables and Other Expenses	3.89	4.97	5.69	6.41	7.13
Cost of Production	34.31	41.40	46.63	51.95	57.37
Add: Opening Stock /WIP	-	6.91	8.06	9.22	10.37
Less: Closing Stock /WIP	6.91	8.06	9.22	10.37	11.52
Cost of Sales (B)	27.40	40.25	45.48	50.80	56.22
C) GROSS PROFIT (A-B)	50.36	59.11	68.28	77.36	86.34
	65%	59%	60%	60%	61%
D) Bank Interest (Term Loan)	1.02	1.23	0.89	0.55	0.22
Bank Interest (C.C. Limit)	1.23	1.23	1.23	1.23	1.23
E) Salary to Staff	21.70	23.87	26.26	28.88	31.77
F) Selling & Adm Expenses Exp.	1.56	1.99	2.28	2.56	2.85
TOTAL (D+E)	25.51	28.32	30.66	33.23	36.07
H) NET PROFIT	24.85	30.79	37.63	44.13	50.27
I) Taxation	2.49	3.08	7.53	8.83	10.05
J) PROFIT (After Tax)	22.37	27.71	30.10	35.31	40.22

COMPUTATION OF MANUFACTURING OF CORBONATED DRINKS**Items to be Manufactured Corbonated drinks**

Manufacturing Capacity per day	-	200.00	Crates	1 crates=24 Bottles	
	-				
No. of Working Hour		8			
No of Working Days per month		25			
No. of Working Day per annum		300			
Total Production per Annum		60,000.00	Crates		
Year		Capacity	Crates		
		Utilisation			
					Final Production
IST YEAR		60%	36,000		-
IIND YEAR		70%	42,000		-
IIIRD YEAR		80%	48,000		-
IVTH YEAR		90%	54,000		-
VTH YEAR		100%	60,000		-

COMPUTATION OF RAW MATERIAL

Item Name	UOM	Quantity of		Unit Rate	Total Cost
		Raw Material			Per Annum (100%)
Sugar	MT	14.40		30,000.00	4,32,000.00
Citric Acid	Kilograms	600.00		40.00	24,000.00
Essence	Kilograms	135.00		1,250.00	1,68,750.00
Activated Carbon	Kilograms	110.00		30.00	3,300.00
Caustic Soda	Kilograms	1,200.00		40.00	48,000.00
Liquid Glucose	Kilograms	12.00		25.00	300.00
Carbon-di-oxide	Kilograms	2400.00		60.00	1,44,000.00
Pilfer proof caps	Lacs	14.40		1.00	14,40,000.00
					22,60,350.00

Annual Consumption cost	(In Lacs)	22.60
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Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	60%	13.56
IIND YEAR	70%	15.82
IIIRD YEAR	80%	18.08
IVTH YEAR	90%	20.34
VTH YEAR	100%	22.60

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>Finished Goods</u>					
(30 Days requirement)	6.91	8.06	9.22	10.37	11.52
<u>Raw Material</u>					
(60Days requirement)	2.71	3.16	3.62	4.07	4.52
Closing Stock	9.62	11.23	12.83	14.44	16.04

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total
			Amount
Stock in Hand			9.62
Sundry Debtors			2.59
		Total	12.22
Sundry Creditors			0.32
Working Capital Requirement			11.90
Margin			1.19
Working Capital Finance			10.71

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Food Technologist		12,000.00	1	12,000.00
Skilled Worker		9,000.00	2	18,000.00
Unskilled Worker		6,000.00	4	24,000.00
				42,000.00
Add: 10% Fringe Benefit				4,200.00
Total Labour Cost Per Month				46,200.00
Total Labour Cost for the year (In Rs. Lakhs)			7	5.54

BREAK UP OF SALARY

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager	self	-	-	-
Accountant		8,000.00	1	8,000.00
Sales		10,000.00	1	10,000.00
Total Salary Per Month				1,64,405.54
Add: 10% Fringe Benefit				16,440.55
Total Salary for the month				1,80,846.10
Total Salary for the year (In Rs. Lakhs)			2	21.70

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased	-	-	-	-
Addition	-	-	12.00	0.50	12.50
	-	-	12.00	0.50	12.50
Less : Depreciation	-	-	1.80	0.03	1.83
WDV at end of Ist year	-	-	10.20	0.48	10.68
Additions During The Year	-	-	-	-	-
	-	-	10.20	0.48	10.68
Less : Depreciation	-	-	1.53	0.05	1.58
WDV at end of IIInd Year	-	-	8.67	0.43	9.10
Additions During The Year	-	-	-	-	-
	-	-	8.67	0.43	9.10
Less : Depreciation	-	-	1.30	0.04	1.34
WDV at end of IIIrd year	-	-	7.37	0.38	7.75
Additions During The Year	-	-	-	-	-
	-	-	7.37	0.38	7.75
Less : Depreciation	-	-	1.11	0.04	1.14
WDV at end of IV year	-	-	6.26	0.35	6.61
Additions During The Year	-	-	-	-	-
	-	-	6.26	0.35	6.61
Less : Depreciation	-	-	0.94	0.03	0.97
WDV at end of Vth year	-	-	5.32	0.31	5.64

REPAYMENT SCHEDULE OF TERM LOAN

11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
IST YEAR	Opening Balance						
	Ist Quarter	-	11.79	11.79	-	-	11.79
	Iind Quarter	11.79	-	11.79	0.34	-	11.79
	IIIrd Quarter	11.79	-	11.79	0.34	-	11.79
	Ivth Quarter	11.79	-	11.79	0.34	-	11.79
					1.02	-	
IIND YEAR	Opening Balance						
	Ist Quarter	11.79	-	11.79	0.34	0.74	11.05
	Iind Quarter	11.05	-	11.05	0.32	0.74	10.32
	IIIrd Quarter	10.32	-	10.32	0.30	0.74	9.58
	Ivth Quarter	9.58		9.58	0.28	0.74	8.84
					1.23	2.95	
IIIRD YEAR	Opening Balance						
	Ist Quarter	8.84	-	8.84	0.25	0.74	8.11
	Iind Quarter	8.11	-	8.11	0.23	0.74	7.37
	IIIrd Quarter	7.37	-	7.37	0.21	0.74	6.63
	Ivth Quarter	6.63		6.63	0.19	0.74	5.90
					0.89	2.95	
IVTH YEAR	Opening Balance						
	Ist Quarter	5.90	-	5.90	0.17	0.74	5.16
	Iind Quarter	5.16	-	5.16	0.15	0.74	4.42
	IIIrd Quarter	4.42	-	4.42	0.13	0.74	3.68
	Ivth Quarter	3.68		3.68	0.11	0.74	2.95
					0.55	2.95	
VTH YEAR	Opening Balance						
	Ist Quarter	2.95	-	2.95	0.08	0.74	2.21
	Iind Quarter	2.21	-	2.21	0.06	0.74	1.47
	IIIrd Quarter	1.47	-	1.47	0.04	0.55	0.92
	Ivth Quarter	0.92		0.92	0.03	0.55	0.37
					0.22	2.57	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>CASH ACCRUALS</u>	24.19	29.29	31.45	36.45	41.19
Interest on Term Loan	1.02	1.23	0.89	0.55	0.22
Total	25.21	30.52	32.34	37.00	41.41
<u>REPAYMENT</u>					
Instalment of Term Loan	2.95	2.95	2.95	2.57	2.57
Interest on Term Loan	1.02	1.23	0.89	0.55	0.22
Total	3.96	4.18	3.84	3.12	2.79
DEBT SERVICE COVERAGE RA	6.36	7.31	8.43	11.84	14.84
AVERAGE D.S.C.R.			9.75		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	3,600.00	4,200.00	4,800.00	5,400.00
Production	36,000.00	42,000.00	48,000.00	54,000.00	60,000.00
	36,000.00	45,600.00	52,200.00	58,800.00	65,400.00
Less : Closing Stock	3,600.00	4,200.00	4,800.00	5,400.00	6,000.00
Net Sale	32,400.00	41,400.00	47,400.00	53,400.00	59,400.00
Sale Price per Average per crate	240.00	240.00	240.00	240.00	240.00
Sale (in Lacs)	77.76	99.36	113.76	128.16	142.56

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	20	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				2,86,464.00
Add : Minimim Charges (@ 10%)				
(B) D.G. SET /Coal Fired				
No. of Working Days			300	days
No of Working Hours			2	Hour per day
Total no of Hour			600	
Diesel Consumption per Hour			-	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				2.86
Year		Capacity		Amount
				(in Lacs)
IST YEAR		60%		1.72
IIND YEAR		70%		2.01
IIIRD YEAR		80%		2.29
IVTH YEAR		90%		2.58
VTH YEAR		100%		2.86

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	77.76	99.36	113.76	128.16	142.56
Less : Op. WIP Goods	-	6.91	8.06	9.22	10.37
Add : Cl. WIP Goods	6.91	8.06	9.22	10.37	11.52
Total Sales	84.67	100.51	114.91	129.31	143.71
Variable & Semi Variable Exp.					
Raw Material & Tax	13.56	15.82	18.08	20.34	22.60
Electricity Exp/Coal Consumption at 85%	1.46	1.70	1.95	2.19	2.43
Manufacturing Expenses 80%	3.11	4.77	5.46	6.15	6.84
Wages & Salary at 60%	16.35	17.98	19.78	21.76	23.93
Selling & administrative Expenses 80%	1.24	1.59	1.82	2.05	2.28
Intt. On Working Capital Loan	1.23	1.23	1.23	1.23	1.23
Total Variable & Semi Variable Exp	36.96	43.10	48.32	53.73	59.33
Contribution	47.72	57.41	66.59	75.59	84.38
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.78	1.19	1.37	1.54	1.71
Electricity Exp/Coal Consumption at 15%	0.26	0.30	0.34	0.39	0.43
Wages & Salary at 40%	10.90	11.99	13.19	14.51	15.96
Interest on Term Loan	1.02	1.23	0.89	0.55	0.22
Depreciation	1.83	1.58	1.34	1.14	0.97
Selling & administrative Expenses 20%	0.31	0.40	0.46	0.51	0.57
Total Fixed Expenses	15.09	16.68	17.58	18.64	19.86
Capacity Utilization	60%	70%	80%	90%	100%
OPERATING PROFIT	32.63	40.73	49.00	56.95	64.53
BREAK EVEN POINT	19%	20%	21%	22%	24%
BREAK EVEN SALES	26.77	29.21	30.34	31.89	33.82

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
Automatic bottle filling machine	1		
Automatic bottle washing machine	1		
Carbonation unit	1		
Bottle collection & revolving table	1		
Steam jacket tank	1		
Water treatment plant	1		
Baby boiler	1		
Refrigeration unit	1		
Chain conveyor	1		
Other accessories	1		
Crown corking machine	1		
Electrical panels fittings			
Total			12,00,000.00