

READY-TO SERVE DRINKS & SOFT DRINKS WITH CO2

1. INTRODUCTION:

Soft Drink and Ready-to-serve Drink industry is largely fall into two distinct categories where one is flavoring syrup manufacturing and second one is soft drink manufacturing. The majority of the bottled soft drinks follow a similar product life cycle, moving from syrup producer, to bottler, to distributor (if used), to merchant, to final consumer. Products in this industry further classified into Carbonated Soft drinks, Fruit beverages, Flavored Bottled Water, Functional Beverages (like energy drinks, relaxation drinks), Sports Drinks etc.

2. PRODUCT & ITS APPLICATION:

Ready to serve drinks and soft drinks are widely used across globe in restaurants, hotels, roadside stalls and even in households for consumption during festivals and occasions. With various other categories like energy drinks, sports drinks, ready to eat teas and coffee, flavored water, soft drink industry have various products to manufacture and introduce in various markets.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

Successful running this project does not require any specific qualification.

4. INDUSTRY LOOKOUT AND TRENDS

The soft drinks industry is under increasing pressure as consumer spending stagnates, the war on sugar rages on, and consumers increasingly reject artificial alternatives. Trends explored in this research include healthy hydration solutions, the dulcification of soft drinks, savory and spicy flavors, and soft drinks with just a hint of flavor or sweetness.

Globally, 60% of consumers are always or often influenced by how familiar or trustworthy a product feels when choosing non-alcoholic beverages.

Almost half of consumers (48%) globally are actively choosing soft drinks with low or no sugar.

Consumers are more willing to experiment with new product varieties when buying more generic beverages such as bottled water and RTD coffee/tea, than beverages that serve a functional purpose like energy and sports drinks.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

The final products of soft drink production are distributed different segments. Supermarkets, general merchandisers (such as D Mart, Big Bazaar, Reliance Mart) and retailers represent the largest channel the ultimate consumer utilizes to purchase soft drinks. Other than these, hotel and restaurant chains procure in large quantity. Price, consumer lifestyle and tastes are determinant factors deciding demand of soft drinks. There has been an increasing group of people who prefer health, energy, low sugar/diet and sports drinks for their consumption as compared to sugar sweetened beverages. There has to be focus on this particular product category as well.

6. RAW MATERIAL REQUIREMENTS:

Assorted fruits, sugar, activated carbon, liquid glucose, carbon dioxide, citric acid, food color, essence, and preservatives are raw materials required. For packing, PP bottles, caps and cardboard boxes are required.

7. MANUFACTURING PROCESS:

First, sugar syrup is made with the jacketed mixing tank from the sugar granules, then this sugar syrup is mixed up with water, synthetic juice flavors, colors,

preservatives etc. in the other mixing tank for some time and once juice gets ready, it is stored in the storage tank and there after it is fed into dosing machine. It is then released in each bottle in a required proportion. Bottles are then filled with treated water. Crown-cork is placed on the bottle and then it is passed through a shaker for proper mixing.

8. MANPOWER REQUIREMENT:

The enterprise requires 15 employees as detailed below:

Sr. No.	Designation of Employees	Salary Per Person	Monthly Salary ₹	Number of employees required				
				Year-1	Year-2	Year-3	Year-4	Year-5
	Variable Labour: Workers							
1	Operator	₹ 10,000.00	₹ 10,000.00	2	2	2	3	3
2	Un Skilled Workers	₹ 8,000.00	₹ 24,000.00	6	6	6	10	10
	<i>sub-total</i>		₹ 34,000.00	8	8	8	13	13
	Fixed Staff:							
1	Accountant	₹ 12,000.00	₹ 12,000.00	1	1	1	1	1
2	Store Keeper	₹ 8,000.00	₹ 8,000.00	2	2	2	4	4
3	Sales Staff	₹ 12,000.00	₹ 24,000.00	4	4	4	6	6
	<i>sub-total</i>		₹ 44,000.00	7	7	7	11	11
	Total		₹ 78,000.00	15	15	15	24	24

9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 6 to 8 months' time as detailed below:

Sr. No.	Activity	Time Required (in months)
1	Acquisition of premises	2.00
2	Construction (if applicable)	2.00
3	Procurement & installation of Plant & Machinery	1.50
4	Arrangement of Finance	1.50
5	Recruitment of required manpower	1.00
	Total time required (<i>some activities shall run concurrently</i>)	6.00 - 8.00

10. COST OF PROJECT:

The project shall cost ₹ 60.92 lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	7.20
2	Building	5.50
3	Plant & Machinery	10.20
4	Furniture, other Misc. Equipments	0.85
5	Other Assets including Preliminary / Pre-operative expenses	1.02
6	Margin for Working Capital	36.15
	Total	60.92

11. MEANS OF FINANCE:

Bank term loans are assumed @ 60% of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	15.23
2	Bank Finance	45.69
	Total	60.92

12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 36.15 lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	18.08	0.25	4.52	13.56
2	Receivables	9.04	0.25	2.26	6.78
3	Overheads	9.04	100%	9.04	0.00
4	Creditors	-		0.00	0.00
	Total	36.15		15.82	20.33

13. LIST OF MACHINERY REQUIRED:

A detail of important machinery is given below:

Sr. No.	Particulars	UOM	Qty	Rate (₹ in Lacs)	Value (₹ in Lacs)
	Plant & Machinery / equipments				
	a) Main Machinery				
1	Sugar Syrup Preparation Tank	Nos	1	₹ 0.53	₹ 0.53
2	Filter Press for Sugar Filtration	Nos	1	₹ 0.68	₹ 0.68
3	Blending Tank for Beverage Preparation	Nos	1	₹ 0.47	₹ 0.47
4	Storage Tank for Sugar Syrup	Nos	1	₹ 0.35	₹ 0.35
5	Carbonation Unit	Set	1	₹ 2.05	₹ 2.05
6	RO - Mineral Water Plant	Nos	1	₹ 0.75	₹ 0.75
7	Rinsing, Filling Sealing Capping Machine	Nos	1	₹ 0.63	₹ 0.63
8	Boiler for Sugar Syrup Tank	Nos	1	₹ 0.35	₹ 0.35
9	Refrigeration Unit	Set	1	₹ 1.75	₹ 1.75
10	Crown Corking Machine	Nos	1	₹ 1.30	₹ 1.30
11	Wrapping and Labelling Machine	Nos	1	₹ 0.32	₹ 0.32
12	Material Handling Equipment	LS	1	₹ 0.72	₹ 0.72
13	Misc. Tools	LS	1	₹ 0.30	₹ 0.30
	<i>sub-total Plant & Machinery</i>				₹ 10.20
	Furniture / Electrical installations				

1	Office furniture and Electrification	LS	1	₹ 0.85	₹ 0.85
	<i>sub total</i>				₹ 0.85
	Other Assets				
1	preliminary and preoperative	LS		1.02	₹ 1.02
	<i>sub-total Other Assets</i>				₹ 1.02
	Total				₹ 12.07

All the machines and equipments are available from local manufacturers. The entrepreneur needs to ensure proper selection of product mix and proper type of machines and tooling to have modern and flexible designs. It may be worthwhile to look at reconditioned imported machines, dies and tooling. Some of the machinery and dies and tooling suppliers are listed here below:

1. Fry-Tech Food Equipments Private Limited

S. No. 4, Raviraj Industrial Estate,
Bhikhubhai Mukhi Ka Kuwa Bharwadvasb,
Ramol, Ahmedabad - 380024,
Gujarat, India

2. Hindustan Vibrotech Pvt. Ltd.

Office No. 2, Ground Floor,
Vrindavan Building, Vile Parle East,
Mumbai - 400057,
Maharashtra, India

3. Electrons cooling systems Pvt. Ltd.

S-27, SIDCO Industrial Estate
Kakkalur Industrial Estate
Tiruvallur - 602003,
Tamil Nadu, India

4. Springboard Enterprises India Ltd.

1st, 2nd & 3rd Floor,
Plot No. 7, 8 & 9,

Garg Shopping Mall,
Service Centre, Rohini Sector 2
New Delhi - 110085,
Delhi, India

5. Flour Tech Engineers Private Limited
Plot No. 182, Sector 24,
Faridabad - 121005,
Haryana, India

6. P Square Technologies
3, Swami Mahal,
Gurunanak Nagar,
Off. Shankarsheth Road Bhavani Peth,
Pune - 411002,
Maharashtra, India

7. Ricon Engineers
10 To 13, Bhagwati Estate,
Near Amraiwadi Torrent Power,
Behind Uttam Dairy,
Rakhial, Ahmedabad - 380023,
Gujarat, India

8. Kamdhenu Agro Machinery
Plot No. 6, Near Power House,
Wathoda Road Wathoda,
Nagpur - 440035,
Maharashtra, India

14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	140.25	163.63	187.00	210.38	233.75
3	Raw Materials & Other direct inputs	₹. In Lacs	95.53	111.45	127.37	143.29	159.21
4	Gross Margin	₹. In Lacs	44.72	52.18	59.63	67.09	74.54
5	Overheads except interest	₹. In Lacs	19.94	21.19	23.68	24.43	24.93
6	Interest @ 10 %	₹. In Lacs	4.57	4.57	3.05	2.28	1.83
7	Depreciation @ 30 %	₹. In Lacs	7.14	5.10	3.57	2.55	2.30
8	Net Profit before tax	₹. In Lacs	13.07	21.32	29.33	37.82	45.49

The basis of profitability calculation:

This unit will have capacity of Sales Turnover of 400 - 450 kilo Liters of Soft Drinks. The growth of selling capacity will be increased 10% per year. (This is assumed by various analysis and study; it can be increased according to the selling strategy.)

Energy Costs are considered at Rs 7 per Kwh and fuel cost is considered at Rs. 65 per liter. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 35.90 % of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	233.75
2	Variable costs	₹. In Lacs	159.21
3	Fixed costs incl. interest	₹. In Lacs	26.76
4	BEP = $FC / (SR - VC) \times 100 =$	% of capacity	35.90%

16. 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 FSSA 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 Labelling
- B. Signage and Customer Notices
- C. Licensing Registration and Health and Sanitary Permits

17. BACKWARD AND FORWARD INTEGRATIONS

The objective of the scheme is to provide effective and seamless backward and forward integration for processed food industry by plugging the gaps in supply chain in terms of availability of raw material and linkages with the market. Under the scheme, financial assistance is provided for setting up of primary processing centres/ collection centres at farm gate and modern retail outlets at the front end along with connectivity through insulated/ refrigerated transport.

The Scheme is applicable to perishable horticulture and non-horticulture produce such as, fruits, vegetables, dairy products, meat, poultry, fish, Ready to Cook Food Products, Honey, Coconut, Spices, Mushroom, Retails Shops for Perishable Food Products etc. The Scheme would enable linking of farmers to processors and the market for ensuring remunerative prices for agri produce.

The scheme is implemented by agencies/ organizations such as Govt. / PSUs/ Joint Ventures/ NGOs/ Cooperatives/ SHGs / FPOs / Private Sector / individuals etc.

Backward Linkage:

- Integrated Pack-house(s) (with mechanized sorting & grading line/ packing line/ waxing line/ staging cold rooms/cold storage, etc.)
- Pre Cooling Unit(s)/ Chillers
- Reefer boats
- Machinery & equipment for minimal processing and/or value addition such as cutting, dicing, slicing, pickling, drying, pulping, canning, waxing, etc.
- Machinery & equipment for packing/ packaging.

Forward Linkage:

- Retail chain of outlets including facilities such as frozen storage/ deep freezers/ refrigerated display cabinets/cold room/ chillers/ packing/ packaging, etc.
- Distribution center associated with the retail chain of outlets with facilities like cold room/ cold storage/ ripening chamber.

18. TRAINING CENTERS AND COURSES

There are few specialized Institutes provide degree certification in Food Technology, few most famous and authenticate Institutions are as follows:

1. Indian Institute of Food Science & Technology,
Plot No.1, Near Maa-Baap ki Dargah,Opp to Nath Seeds,
Paithan Road Aurangabad
Aurangabad - 431005
Maharashtra, India

2. MIT College of Food Technology, Pune
Gate.No.140, Raj Baugh Educational Complex,
Pune Solapur Highway,
Loni Kalbhor, Pune - 412201
Maharashtra, India

3. CSIR - Central Food Technological Research Institute (CFTRI)
Cheluvamba Mansion, Opp. Railway Museum,
Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru
Karnataka - 570020

Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.

Source:- Udyami Mitra/Sidbi