

YOGHURT



INTRODUCTION:

Yoghurt is one of the most popular fermented dairy products for its wide variety of flavours and fruits that are added to it. Different forms of yoghurt are available in the market like stirred, set, frozen and liquid yoghurt. Yogurt is a low fat, calcium-rich food with "active cultures". Yogurt can pump up your immunity, regulate your digestive health, nourish your memory, lower your cholesterol, maintain your muscles, boost your fiber intake, strengthen your bones, help you lose weight, and make you happy. Yogurt has become prune juice, bran, and chicken soup, all rolled into one.

OBJECTIVE:

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of yoghurt plant. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

RAW MATERIAL AVAILABILITY:

The main raw material is milk and easily available across India.

SUITABLE LOCATION:

Yoghurt can be manufactured at any location which is near to the market.

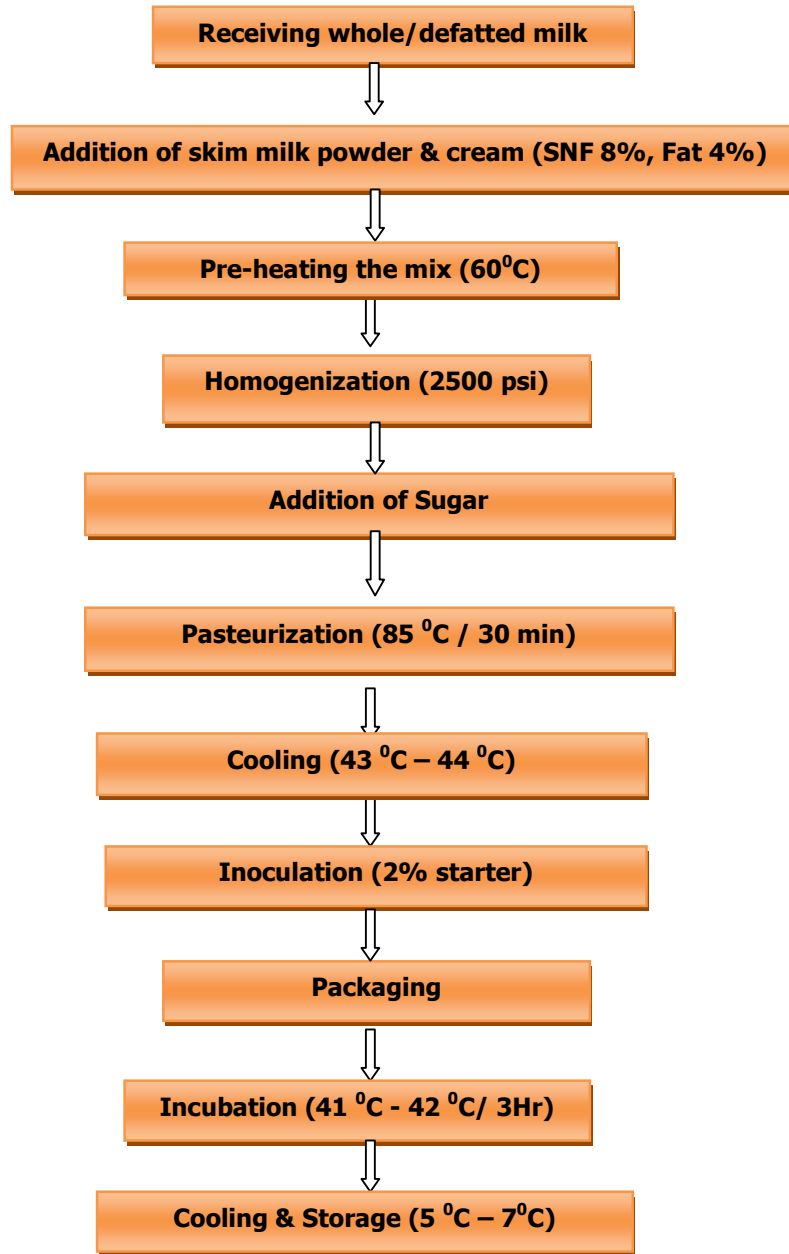
MARKET OPPORTUNITIES:

Milk is one of the essential items of daily life in our country and it is more so as the majority of Indians are vegetarians and thus milk products are an indispensable necessity. Frozen yoghurt players have up their ante to increase penetration in the Indian market. As a part of their strategy, makers have chosen to either slash price points, offer smaller affordable portions, or value meals for families, while global players have come up with flavours that entice Indian taste bud. Indian brand Cocoberry, one of the earlier entrants in the frozen yoghurt space in the country back in 2009, has given an advantage compared to the newer entrants, it has managed to generate significant volumes already. Yoghurt market in India is still at a nascent stage, and as more and more companies enter the space, the market will expand exponentially in the coming years.

MANUFACTURING PROCESS:

The raw milk or the skim milk is taken in a well cleaned vessel as per pre-determined recipe dissolved. The addition of skim milk powder will improve the firmness of yoghurt. The mixture is boiled for about 5 minutes and cooled down to lukewarm temperature of about 45°C and then added yoghurt culture. In case fruit pulp such as orange, banana or apple etc. are to be added, the same may be added at this stage along with extra flavour if necessary as per taste and choice. Mix the whole content very well and distribute it in small containers of desired size. Keep the whole lots or small containers at a warm place at temperature ranging 42-- 50°C. When it gets completely curdled remove it from warm place, which will generally take 3-4 Hrs. The temperature should not be kept below 40°C otherwise no firm curd will be obtained. Once the curd is set, transfer it to a cool place preferably a refrigerator. It is now ready for consumption.

Flow Chart of Yoghurt



CAPACITY OF THE PROJECT:

- The total capacity of the unit is to be produced 48 MT Yoghurt per year.

PRODUCTION TARGETS (PER ANNUM):

- The scheme is worked out per shift (8 Hour) basis and 300 working days per annum.
- Assume there'll be 70% production in first year.
- Quantity: 33.60 MT Yoghurt per year or 2.80 MT per month.

PROJECT COMPONENT AND COST:**FINANCIAL ASPECTS:-****APPLICATION OF FUNDS****SOURCE OF FUND**

Particular	Amount	Particular	Amount
Land & Building : 300 sq. meter covered area on rent		Own Capital	1,345,753.35
Plant & Machinery	3,514,500.00	Loan from Banks	2,688,375.00
Office Equipment & Furniture	70,000.00	Loan for Working Capital	371,485.05
Working Capital	796,113.40		
Pre-Operative Expenses	25,000.00		
Total	4,405,613.40	Total	4,405,613.40

FIXED ASSETS

(1) Land And Building:				Value (Rs.)
Land & Building: 300 sq. meter covered area on rent				240,000 per annum
(2) Machinery And Equipment:				
S. N.	Description (Name of machine with specification)	Qty.	Rate	Value (Rs.)
Production Unit				
i	Storage Tank: 100 L	2	35,000.00	70,000.00
ii	Weighing Scale	1	50,000.00	50,000.00
iii	Blending Tank: 200 L	1	75,000.00	75,000.00
iv	Homogenizer: 500 LPH	1	400,000.00	400,000.00
v	Pasteurization Plant: 500 LPH	1	750,000.00	750,000.00
vi	Chiller	1	275,000.00	275,000.00
vii	Pump	2	40,000.00	80,000.00
viii	Storage Tank: 200 L	1	45,000.00	45,000.00
ix	Incubation Room	1	200,000.00	200,000.00
x	Cup Filling Machine	1	350,000.00	350,000.00
xi	Freezer	1	100,000.00	100,000.00
xii	Boiler: 200 Kg/Hr	1	400,000.00	400,000.00
xiii	DG Set: Cap 30 KVA	1	300,000.00	300,000.00
xiv	Miscellaneous Equipments	-	-	100,000.00
Total Cost of Machinery & Equipments			-	3,195,000.00
Electrification & Installation Charges @ 10%			-	319,500.00
Total Cost of Production Unit			-	3,514,500.00
Furniture & Fixtures			-	70,000.00

(3) Pre-Operative Expenses:	-	25,000.00
Total Fixed Capital (2+3)	-	3,539,500.00

SALES TURNOVER PER MONTH

Description	Qty. (Packet)	Rate (Rs/packet)	Value (Rs.)
Yoghurt: Cups (100 gm.)	28,000.00	18.00	504,000.00
Total			504,000.00

RAW MATERIAL REQUIREMENT & STOCK

Raw Material (per month):

Description with specification	Qty. (Packet)	Rate (Rs/packet)	Value (Rs.)
Milk	2,324.00	29.00	67,396.00
Skimmed Milk Powder	280.00	220.00	61,600.00
Sugar	56.00	35.00	1,960.00
Miscellaneous (Stabiliser, Fruit & Flavour, Bacterial Culture)	-	-	20,000.00
Total			150,956.00

ANNUAL CONSUMPTION

Milk	Rs	808,752.00
Skimmed Milk Powder	Rs	739,200.00
Sugar	Rs	23,520.00
Miscellaneous (Stabiliser, Fruit & Flavour, Bacterial Culture)	Rs	240,000.00
Total		1,811,472.00
Stock of Raw Material	30 Days	148,888.11
Stock of WIP	02 Days	4,431.52
Purchase Cost of Raw Material	Rs	1,964,791.63

WORKING CAPITAL REQUIREMENT

Particulars	Days	Year' 1
Raw Material	30	148,888.11
Work in Process	2	4,431.52
Finished Goods	10	102,526.41
Receivables	30	504,000.00
Advance/Security		200,000.00
Total		959,846.04
Less: Creditors	30	163,732.64
Net Current Assets		796,113.40
Paid Stock		92,113.40
75% of Paid Stock		69,085.05
60% of Book Debts		302,400.00
Bank Limits		371,485.05
Margin for Working Capital		424,628.35

SELLING & ADMINISTRATION EXPENSES

Particular	Year I
i Postage	18,000.00
ii Commission on sales	60,000.00
iii Office Expenses	24,000.00
iv Tour & Travel	18,000.00
v Printing & Stationary	20,000.00
vi Advertisement	60,000.00
vii Telephone	20,000.00
viii Repair & Maintenance	22,000.00
ix Conveyance	27,000.00
x Sales expenses	36,000.00
xi Insurance	20,000.00
xii Misc. Expenses	20,744.00
Total	345744.00

STAFF AND LABOUR EXPENSES

S. No.	Description	No.	Salary	Total Salaries-Year I
(a) Administrative & Supervisory				
i	Production Incharge cum accountant	1	15,000.00	180,000.00
ii	Salesman	1	8,000.00	96,000.00
Total Salaries				276,000.00
(b) Technical Skilled & Unskilled				
i	Skilled Worker	1	10,000.00	120,000.00
ii	Semi Skilled Worker	1	8,000.00	96,000.00
iii	Helper	1	5,000.00	60,000.00
Total Wages				276,000.00
Grand Total				552,000.00

MANUFACTURING AND PROFIT & LOSS
ACCOUNT

Particulars	Year' 1
Sales Value of Yoghurt	6,048,000.00
Cost of Production:	
Raw Material Consumed:	
Opening Stock	-
Add: Purchases	1,964,791.63
	<hr/> 1,964,791.63
Less: Closing Stock	148,888.11
Raw Material Consumption	<hr/> 1,815,903.52
Add: Op Stock of WIP	-
	<hr/> 1,815,903.52
Less: Cl Stock of WIP	4,431.52
	<hr/> 1,811,472.00
Power & Fuel	600,000.00
Manufacturing Wages	276,000.00
Bonus & Incentives	16,560.00
Packaging Materials	362,880.00
Rent	240,000.00
Raw material storage & ins.	13,800.00
Cost	
Carriage inward	11,788.75
Depreciation	358,450.00
Total Cost of Production	3,690,950.75
Add: Op. Stock of Finish. Goods	-
	<hr/> 3,690,950.75
Less: Cls. Stock of F. Goods	102,526.41
Cost of Sales	3,588,424.34
Gross Profit	2,459,575.66
	0.41
Selling & Admin Cost:	
Expenses	345,744.00
Salary	276,000.00
Financial Expenses:	
Interest on Term Loan	317,452.28
Interest on W. Capital	46,435.63
Pre. Expenses	5,000.00
Profit Before Taxation	1,468,943.75
Taxation	440,683.12
Net Profit After Taxation	1,028,260.62
Cash withdrawal	411,304.25
Transfer to Reserves	616,956.37
Cumulative Reserves	616,956.37
% of PBT on Sales	24.29

BALANCE SHEET

Particulars	Year' 1
Liabilities:	
Capital	1,345,753.35
Reserve & Surplus	616,956.37
Secured Loan:	
Term Loan	2,150,700.00
Unsecured loan:	
Current Liabilities:	
Bank Borrowings	371,485.05
Sundry Creditors	163,732.64
	<hr/> 4,648,627.41
Assets:	
Fixed Assets:	
Gross Block:	3,584,500.00
Less: Depreciation	358,450.00
	<hr/> 3,226,050.00
Current Assets:	
Inventories	255,846.04
Receivables	504,000.00
Advance/Security	200,000.00
Cash & Bank Balance	442,731.37
Preliminary Expenses	20,000.00
	<hr/> 4,648,627.41
Difference	0.00

RATIO ANALYSIS

Particulars	Year' 1
Net Profit ratio	
NP*100/Total sales	17.00
Rate of Return	
NP*100/Total Investment	23.34

BREAK EVEN ANALYSIS

Fixed Cost	
Rent	240,000.00
Interest on Borrowing	317,452.28
40% of Salaries	110,400.00
40% of Utilities	240,000.00
25% of Admin Exp	86,436.00
Depreciation	358,450.00
	-
Total	1,352,738.28
Break Even Point	$\frac{\text{Fixed Cost} * 100}{\text{Fixed Cost} + \text{Profit}}$
	56.81

ADDRESS OF MACHINERY & EQUIPMENT SUPPLIERS:

- M/s Bajaj Processpack Maschinen Pvt. Ltd., 7/27, Jai Lakshmi Industrial Estate, Sahibabad Industrial Area, Sahibabad, Dist. Ghaziabad (U.P.) - 201301.
- M/s Jaya Industries, No. 543, Jessore Road, Kolkata - 700 028, West Bengal, India.
- M/s Food & Biotech Engineers (I) Pvt. Ltd., Chaprola Road, Prithla, Tehsil- Palwal Distt. - Palwal, Pin: 121102 Haryana (India).
- M/s Filtron Engineers Ltd., 6, Sitabaug Colony, Sinhagad Road, Pune – 411030 (Mahaeashtra).
- M/s Eskimo Refrigeration Industries, S. No. 85/1, Shree Shankar Nagar, B-Building, Ground Floor, Poud Road, Kothrud, Pune - 411038, Maharashtra, India.
- M/s Om Metals & Engineers, S. No. 5, Ekata Hsg. Society, Bapujibuwa Nagar, Thergaon, Pune - 411 033, Maharashtra, India.