

PROJECT PROFILE

ON

SWEET CURD AND BUTTERMILK

Month & Year
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**PREPARED BY
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STIFTUNG **FÜR DIE FREIHEIT**

SWEET CURD AND BUTTERMILK

1. Introduction

Dairy products are commonly consumed in every household as they are highly nutritive and farm fresh. In hot tropical climate like ours, they are nourishing, cooling and less expensive. They also form an alternative to aerated and bottled soft drinks.

The product consists of sweetened milk curdled, packed and refrigerated or homogenized to a thick fluid mass, packed and stored refrigerated.

2. Market

The product finds placement in all “A” , “B” and “C” class outlets, self service, departmental stores and supermarkets.

3. Packaging

Sweet curds are packed in disposable cups of 100 ml., while buttermilk is packed in polyethylene pouches of 200 ml. capacity

4. Production capacity

- The plant operates to one shift of eight hours duration.
- The time period required for achieving full capacity utilization is six months.
- The estimated production per day is 100 litres of sweet curd and 100 litres of buttermilk.
- The estimated production per annum of 300 working days is 30,000 litres of each product.

5. Sales revenue

- One hundred litres of milk will yield 1200 cups of sweet curd, each of 100 ml capacity.
- One hundred litres of milk will yield 750 sachets of buttermilk, each of 200 ml capacity
- The sales revenue per annum comprises:
 - a. Rs. 28.80 lakhs through sale of sweet curd @ Rs. 8.00 per cup. MRP Rs.10
 - b. Rs.13.50 lakhs through sale of buttermilk @ Rs. 6.00 per sachet. MRP Rs.6
 - c. Rs. 2.70 lakhs through sale of skimmed cream.

6. Production process outline.

a. Sweet curd: Milk is boiled in copper bottom vessels and cooled by dipping into the can cooler. The cream separating on top is skimmed off. The total solids non fat in milk is adjusted to 12 percent by the addition of sugar and the sweetened milk dispersed into cups of 100 ml capacity. The milk in each cup is then curdled by the addition of seed curd. The curd is allowed to set gradually in 8 to 10 hours time. The lids are placed after curdling and the cups refrigerated prior to dispatch.

b. Buttermilk: Milk is boiled in copper bottom vessels and cooled by dipping into a can cooler. The cream separating on top is skimmed off. The milk is curdled by addition of sufficient quantities of seed curd and allowed to set for a period of 8 to 10 hours. To a known weight of the curd, salt and spices consisting of an extract of green chillies, ginger, pepper, cumin, amounting to 2 percent of the weight of the curd are added. The mixture is homogenized in a centrifugal homogeniser. The resulting liquid mass is dispensed by 200 ml dispensers in standee pouches. The pouches are sealed in an impulse sealer.

7. Quality specifications

- The manufacturer must obtain a Health Authority license.
- Mold and fungal growth should be absent.
- The product should not have a fermented odour and should not provide an acidic sour taste.
- Addition of flavouring and colouring substances is prohibited.
- Addition of artificial sweeteners is prohibited.
- The product should be free from coliforms, salmonella and streptococci bacteria.

8. Pollution control measures

Not necessary as there are no pollutants or effluents. However, as it is a dairy product, the processing area has to be kept sterile by washing with a solution of sodium hypochlorite to prevent external pollution.

9. *Energy conservation measures*

Common measures will do.

10. *Land and construction cost for the proposed unit*

The proposed unit is to be taken up on lease. The total leased area is 1000 square feet vide details given below:

SI	Description	Sq. feet
1	Processing area	500
2	Refrigeration room	150
3	Washing area	150
4	Office space	100
5	Toilets	100
6	Total	1000

Lease rent – Rs. 8.00 per square foot

Total rent per month – Rs. 8000

Lease advance – Rs. 40000

11. *Costing of machinery and equipment*

SI	Description	Rs. lakhs
1	Copper bottom heating vessels	0.350
2	Can cooler	0.550
3	Refrigerator (2 nos)	0.660
4	Stainless steel storing vessels	0.150
5	Freezer	0.700
6	High speed centrifugal homogeniser	0.250
7	Slat conveyers and sealers	0.250
8	Stainless steel working tools	0.100
9	Weighing scales, dispensers, fillers etc	0.250
10	Plastic trays (50 nos)	0.100
11	Total	3.360
12	Laboratory equipment	0.500
13	Grand total machinery and equipment	3.860

12. Project cost

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	3.360
4	Laboratory equipment	0.500
5	Transport vehicle	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.250
9	Cost of electrification	0.350
10	Erection and commissioning	0.330
11	Cost of machinery spares	0.100
12	Cost of office equipment	1.000
13	Deposits if any	0.200
14	Company formation expenses	0.100
15	Gestation period expenses	0.500
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	2.000
18	Contingencies	0.250
19	Working capital margin money	1.156
20	Total	13.956

13. Working capital requirements per month

a. Salaries and wages

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Manager (female)	1	0.150
2	Unskilled labour (female)	5	0.200
3	Driver	1	0.065
4	Assistant driver	1	0.040
5	Accounts and Administration	1	0.100
6	Total	9	0.555

b. Raw material requirement per month

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Milk	5000	18.00	0.900
2	Skimmed milk powder	100	140.00	0.140
3	Sugar	200	24.00	0.048
4	Bleaching solution	250	10.00	0.025
5	Spices and salt	50	20.00	0.010
2	Total raw material	25000		1.123

c. Packaging material requirement per month

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	100 ml cup for curd with lid	30000	1.00	0.300
2	200 ml standee pouches for buttermilk	18750	1.00	0.188
3	Total			0.488

Total raw + packaging material = Rs. 1.611 lakhs

d. Utilities per month

SI	Description	Rs. lakhs
1	Power 600 kwh @ Rs. 5.50 per unit	0.033
2	Water	0.010
3	Boiler fuel	0.000
4	Total utilities	0.043

e. Contingent expenses per month

SI	Description	Rs. lakhs
1	Rent for processing shed	0.080
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.066
6	Local transports, loading and unloading	0.100
7	Advertisement and publicity @ 5% of sales	0.133
8	Insurance	0.005
9	Sales expenses @ 1% of sales	0.027
10	Miscellaneous expenses @ 1% of sales	0.027
11	Trade incentives @ 2% of sales	0.054
12	Taxes @ 4%	0.108
13	Total contingent expenses	0.680

f. Total working capital requirement per month

SI	Description	Rs. lakhs
1	Salaries and wages	0.555
2	Raw material and packaging material	1.611
3	Utilities	0.043
4	Contingent expenses	0.680
5	Total	2.889

14. Means of finance

SI	Description	Rs. lakhs
1	Total Project Cost	13.956
2	Equity	4.605
3	Debt	9.351
4	Working capital margin money	1.156

15. Financial analysis

SI	Description	Rs. lakhs
1	Total recurring cost per year	34.668
2	Depreciation on land and building	0.000
3	Depreciation on machinery	0.790
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	1.262
8	Interest on short term borrowings@ 13.5%	0.234
9	Total cost of production	37.074

16. Turnover per year

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Sweet curd	36000 litres	80	28.80
2	Buttermilk	45000 litres	30	13.50
3	Cream	1800 litres	150	2.70
4	Total			45.00

17. Viability analysis

SI	Description	Value
1	Net profit before income tax (Rs. lakhs)	7.926
2	Net profit ratio	17.6%
3	Internal rate of return	22.5%
4	Break even percentage	40%
5	Debt service coverage ratio	2.022

List of machinery suppliers for sweet curd and buttermilk

There is no machinery required