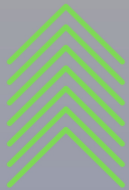
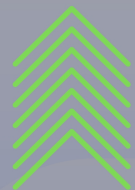




MODEL PROJECT REPORT



PROJECT REPORT ON CURD UNIT



SWAVALAMBI BHARAT ABHIYAN

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxx
 District : xxxxxxxx
 Pin: xxxxxxxx State: xxxxx
 Mobile xxxxxxxx
- 5 Product and By Product : **CURD**
- 6 Name of the project / business activ **CURD MANUFACTURING UNIT**
- 7 Cost of Project : Rs. 10.57 Lakhs
- 8 Means of Finance
 Term Loan Rs. 5.72 Lakhs
 Own Capital Rs. 2.65 Lakhs
 Working Capital Rs. 2.20 Lakhs
- 9 Debt Service Coverage Ratio : 5.51
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 6-7 Months
- 12 Break Even Point : 18%
- 13 Employment : 6 Persons
- 14 Power Requirement : 8.00 KW
- 15 Major Raw materials : Milk
- 16 Estimated Annual Sales Turnov : 57.02 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	6.63
Miss Assets	1.00
Furniture & Fixtures	
Working Capital	2.94
Total	10.57

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.65
Working Capital(Finance)	2.20
Term Loan	5.72
Total	10.57

INTRODUCTION

CURD



Curd, also known as Dahi, is a well-known milk product which is prepared by the process of fermentation. It is generally consumed on a daily basis, as a part of a meal or refreshment by a large part of the Indian population. It is also suitable for consumption by the lactose intolerant consumers. Curd is a rich source of nutrients such as calcium, phosphorus, vitamin B2, magnesium and beneficial fatty acids which help to strengthen bones and teeth, improve digestion and reduce the risk of heart problems.

1. MARKET POTENTIAL:

The curd market in India is currently being driven by the increasing demand from urban regions.

Curd Market in India: exhibiting a CAGR of 13% during 2010-2017. The healthy growth of the market can be attributed to numerous forces. Population growth, rising disposable incomes, increasing health consciousness among consumers and affordable price are some of the factors that are currently broadening the growth aspects of the mark. The market is expected to reach a value of nearly INR 1,809.3 Billion by 2024.

2. PRODUCT DESCRIPTION

2.1 Raw Material

Milk is required as the major raw material for the manufacturing of curd.

Average raw material (cost per Liter): Rs. 40-45

2.2 MANUFACTURING PROCESS

Curd Manufacturing Process

Step1: Procurement

Procurement of raw milk.

Step 2: Milk Reception Area

After procurement step bring the milk to the milk reception & cool the milk, so that life span of the milk can be increased & it can be used for further processing.

Step 3: Pasteurization

After that the main processing of by product starts & put the cooled milk into the inoculation tank and boil the milk at 80oC - 90oC (depends upon the pasteurization). Then again cool it at 4oC.

Pasteurization machines are of two types:

1. Slow online pasteurization
2. Continuous online pasteurization

Step 4: Homogenization

- We used Offline cream separator with pasteurization machine this helps to remove fat from milk and used for the production of the milk.
- Online homogenizer is attached with the pasteurization machine. This breaks the fat part and mixed in the milk.
- It is used for manufacturing of curd.

Step 5: Distribution of pasteurized milk in different tanks

It consists of different tanks which are categorized according to the fat content.

After that milk is transferred into different sections like pouch milk, curd processing, paneer processing.

Curd

Milk is boiled at 92°C and then we thermize it & add culture into that.

Step 6: Packaging

Prepared curd is then transferred into the packaging section

Step 7: Cold room

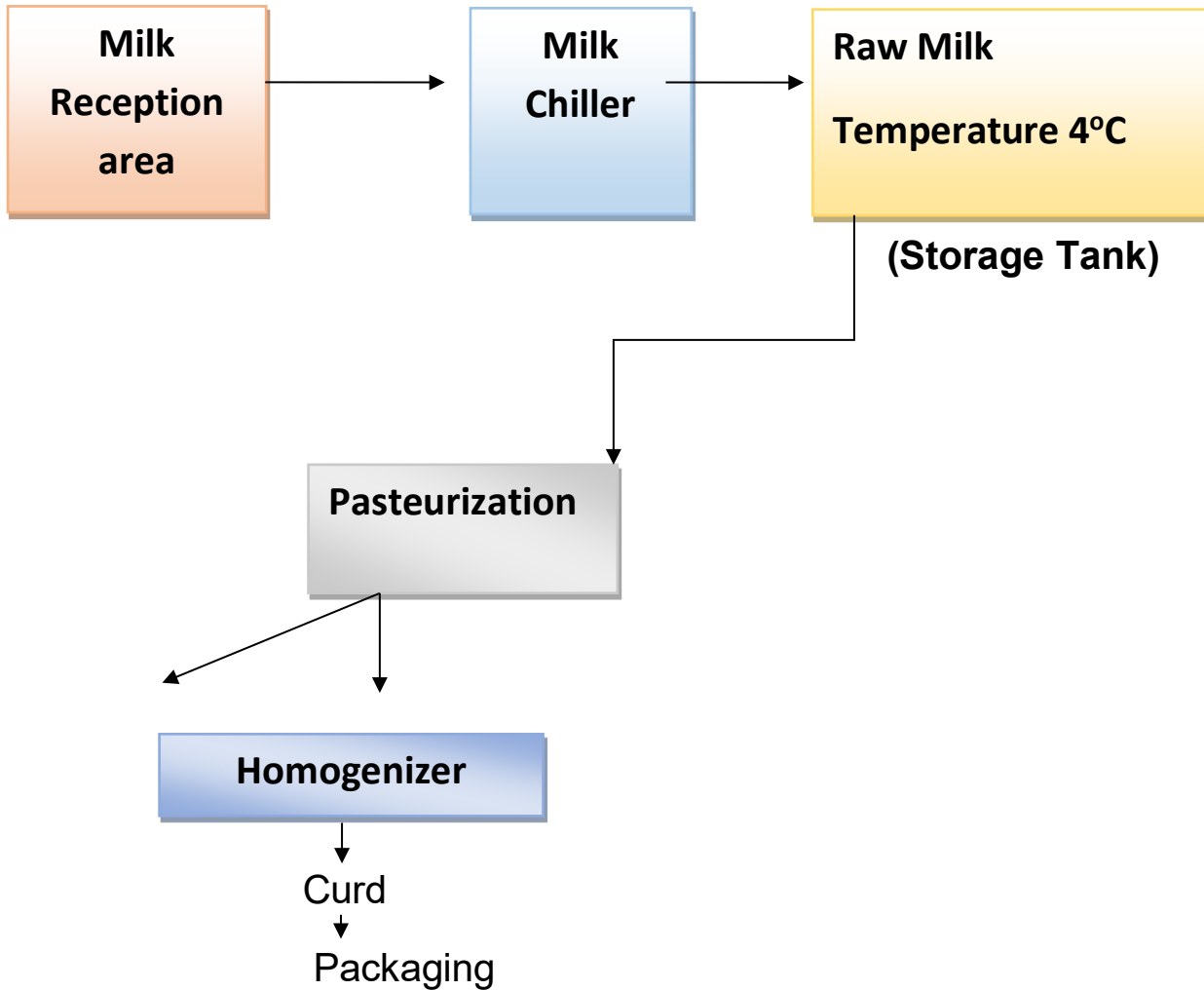
All the product are transferred into cold rooms where the temperature is below 4°C

Step 8: Distribution

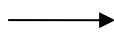
All final products are transferred through transportation into different areas.

Insulation vehicle is required if the final product is transported above 40 – 50 KM.

Curd Processing Technical Flow Chart



Steam Boiler



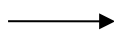
To Boil

Water Chilling Unit



To Cool

Cold Room



To Store By products

3. PROJECT COMPONENTS

3.1 Land

Land required 1200-1500 square feet approx.

Approximate rent for the same is Rs.25000-30000 per month.

3.2 Plant & Machinery

S. N.	Description	Image
1	Electrical Heating Tank (Single Jacketed)	
2	Homogenizer (double stage) Manual	
3	Plate Heat Exchanger (double stage)	
4	Culture tank with buff	

5	Curd Incubator	
6	Dump Tank	
7	S.S. Pump, filter, pipeling, fitting etc.	
8	Packaging machine	

Note: cost of the machinery is approx. Rs. 8,00,000 excluding GST and other transportation cost.

3.3 Misc. Assets

S.N.	Item Description	Rate
1	Electricity connection	50,000
2	Equipment's & fixtures	50,000

3.4 Power Requirement

The borrower shall require power load of 20 HP which shall be applied with Power Corporation. However, for standby power arrangement the borrower shall also purchase DG Set.

3.5 Manpower Requirement

7-8 Manpower are required for the Curd Manufacturing unit.

Includes:

2 Skilled Labour

2 Unskilled Labour

2-3 Helper

1 Accountant

4. FINANCIALS

PROJECT CURD MAKING

COST OF PROJECT		(in Lacs)
PARTICULARS		Amount
Land & Building		Owned/rented
Plant & Machinery		6.63
Miscellaneous Assets		1.00
Working capital		2.94
Total		10.57
MEANS OF FINANCE		
PARTICULARS		AMOUNT
Own Contribution@ 25%		2.65
Term Loan @ 75%		5.72
Working Capital (bank Finance)		2.20
Total		10.57

PROJECT CURD MAKING

<u>PROJECTED BALANCE SHEET</u>					
(in Lacs)					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		2.75	3.52	4.31	5.85
Add:- Own Capital	2.65				
Add:- Retained Profit	2.10	4.77	6.79	9.55	11.45
Less:- Drawings	2.00	4.00	6.00	8.00	10.00
Closing Balance	2.75	3.52	4.31	5.85	7.30
Term Loan	5.09	3.82	2.54	1.27	-
Working Capital Limit	2.20	2.20	2.20	2.20	2.20
Sundry Creditors	0.64	1.51	1.90	2.32	2.76
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	11.07	11.55	11.55	12.36	13.13
<u>Assets</u>					
Fixed Assets (Gross)	7.63	7.63	7.63	7.63	7.63
Gross Dep.	1.09	2.03	2.83	3.51	4.10
Net Fixed Assets	6.54	5.60	4.80	4.12	3.53
Current Assets					
Sundry Debtors	2.85	3.71	4.60	5.54	6.52
Stock in Hand	0.73	0.94	1.17	1.41	1.66
Cash and Bank	0.96	1.29	0.98	1.30	1.42
TOTAL :	11.07	11.55	11.55	12.36	13.13

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PROJECT CURD MAKING

<u>PROJECTED PROFITABILITY STATEMENT</u>					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	20%	25%	30%	35%	40%
<u>SALES</u>					
Gross Sale					
CURD	57.02	74.25	92.01	110.72	130.40
Total	57.02	74.25	92.01	110.72	130.40
<u>COST OF SALES</u>					
Raw Material Consumed	38.40	50.40	63.36	77.28	92.16
Electricity Expenses	0.72	0.83	0.95	1.10	1.20
Depreciation	1.09	0.94	0.80	0.68	0.58
Wages & labour	5.04	5.54	6.10	6.71	7.38
Repair & maintenance	1.00	1.30	1.61	1.38	1.30
Packaging	1.14	1.49	1.84	2.21	2.35
Cost of Production	47.39	60.49	74.66	89.37	104.98
Add: Opening Stock /WIP	-	0.47	0.60	0.75	0.89
Less: Closing Stock /WIP	0.47	0.60	0.75	0.89	1.05
Cost of Sales	46.92	60.36	74.52	89.22	104.82
GROSS PROFIT	10.11	13.89	17.49	21.50	25.57
Salary to Staff	1.92	2.11	2.32	2.56	2.81
Interest on Term Loan	0.56	0.50	0.36	0.22	0.08
Interest on working Capital	0.24	0.24	0.24	0.24	0.24
Rent	3.00	3.30	3.63	3.99	4.39
Selling & administrative exp	2.28	2.97	3.68	4.43	5.22
TOTAL	8.01	9.12	10.23	11.44	12.74
NET PROFIT	2.10	4.77	7.26	10.07	12.84
Taxation			0.47	0.52	1.38
PROFIT (After Tax)	2.10	4.77	6.79	9.55	11.45

PROJECT CURD MAKING

<u>PROJECTED CASH FLOW STATEMENT</u>					
(in Lacs)					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	2.65				
Net Profit	2.10	4.77	7.26	10.07	12.84
Depriciation & Exp. W/off	1.09	0.94	0.80	0.68	0.58
Increase in Cash Credit	2.20	-	-	-	-
Increase In Term Loan	5.72	-	-	-	-
Increase in Creditors	0.64	0.87	0.39	0.42	0.45
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	-				
TOTAL :	14.81	6.68	8.55	11.29	14.01
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	7.63				
Increase in Stock	0.73	0.21	0.23	0.24	0.26
Increase in Debtors	2.85	0.86	0.89	0.94	0.98
Repayment of Term Loan	0.64	1.27	1.27	1.27	1.27
Drawings	2.00	4.00	6.00	8.00	10.00
Taxation	-	-	0.47	0.52	1.38
TOTAL :	13.85	6.34	8.86	10.97	13.90
Opening Cash & Bank Balance	-	0.96	1.29	0.98	1.30
Add : Surplus	0.96	0.33	-0.31	0.32	0.12
Closing Cash & Bank Balance	0.96	1.29	0.98	1.30	1.42

PROJECT CURD MAKING

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	3.19	5.71	7.59	10.23	12.04
Interest on Term Loan	0.56	0.50	0.36	0.22	0.08
Total	3.76	6.20	7.94	10.45	12.11
<u>REPAYMENT</u>					
Instalment of Term Loan	0.64	1.27	1.27	1.27	1.27
Interest on Term Loan	0.56	0.50	0.36	0.22	0.08
Total	1.20	1.77	1.63	1.49	1.35
DEBT SERVICE COVERAGE RATIO	3.13	3.51	4.88	7.02	8.99
AVERAGE D.S.C.R.	5.51				

PROJECT CURD MAKING

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	0.47	0.60	0.75	0.89	1.05
<u>Raw Material</u>					
	0.26	0.34	0.42	0.52	0.61
Closing Stock	0.73	0.94	1.17	1.41	1.66

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw M	0.73				
Less : Creditors	0.64				
Paid stock	0.09	25%	0.02	90%	0.07
Sundry Debtors	2.85	25%	0.71	90%	2.14
	2.94		0.74		2.21
MPBF					2.21
WORKING CAPITAL LIMIT DEMAND (from Bank)					2.20
Working Capital Margin					0.74

PROJECT CURD MAKING

REPAYMENT SCHEDULE OF TERM LOAN							
						Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	5.72	5.72	-	-	5.72
	2nd month	5.72	-	5.72	0.05	-	5.72
	3rd month	5.72	-	5.72	0.05	-	5.72
	4th month	5.72	-	5.72	0.05		5.72
	5th month	5.72	-	5.72	0.05		5.72
	6th month	5.72	-	5.72	0.05		5.72
	7th month	5.72	-	5.72	0.05	0.11	5.62
	8th month	5.62	-	5.62	0.05	0.11	5.51
	9th month	5.51	-	5.51	0.05	0.11	5.40
	10th month	5.40	-	5.40	0.05	0.11	5.30
	11th month	5.30	-	5.30	0.05	0.11	5.19
	12th month	5.19	-	5.19	0.05	0.11	5.09
					0.56	0.64	
2nd	Opening Balance						
	1st month	5.09	-	5.09	0.05	0.11	4.98
	2nd month	4.98	-	4.98	0.05	0.11	4.87
	3rd month	4.87	-	4.87	0.04	0.11	4.77
	4th month	4.77	-	4.77	0.04	0.11	4.66
	5th month	4.66	-	4.66	0.04	0.11	4.56
	6th month	4.56	-	4.56	0.04	0.11	4.45
	7th month	4.45	-	4.45	0.04	0.11	4.34
	8th month	4.34	-	4.34	0.04	0.11	4.24
	9th month	4.24	-	4.24	0.04	0.11	4.13
	10th month	4.13	-	4.13	0.04	0.11	4.03
	11th month	4.03	-	4.03	0.04	0.11	3.92
	12th month	3.92	-	3.92	0.04	0.11	3.82
					0.50	1.27	
3rd	Opening Balance						
	1st month	3.82	-	3.82	0.03	0.11	3.71
	2nd month	3.71	-	3.71	0.03	0.11	3.60
	3rd month	3.60	-	3.60	0.03	0.11	3.50
	4th month	3.50	-	3.50	0.03	0.11	3.39
	5th month	3.39	-	3.39	0.03	0.11	3.29
	6th month	3.29	-	3.29	0.03	0.11	3.18
	7th month	3.18	-	3.18	0.03	0.11	3.07
	8th month	3.07	-	3.07	0.03	0.11	2.97
	9th month	2.97	-	2.97	0.03	0.11	2.86
	10th month	2.86	-	2.86	0.03	0.11	2.76
	11th month	2.76	-	2.76	0.03	0.11	2.65
	12th month	2.65	-	2.65	0.02	0.11	2.54
					0.36	1.27	
4th	Opening Balance						
	1st month	2.54	-	2.54	0.02	0.11	2.44

PROJECT CURD MAKING

2nd month	2.44	-	2.44	0.02	0.11	2.33
3rd month	2.33	-	2.33	0.02	0.11	2.23
4th month	2.23	-	2.23	0.02	0.11	2.12
5th month	2.12	-	2.12	0.02	0.11	2.01
6th month	2.01	-	2.01	0.02	0.11	1.91
7th month	1.91	-	1.91	0.02	0.11	1.80
8th month	1.80	-	1.80	0.02	0.11	1.70
9th month	1.70	-	1.70	0.02	0.11	1.59
10th month	1.59	-	1.59	0.01	0.11	1.48
11th month	1.48	-	1.48	0.01	0.11	1.38
12th month	1.38	-	1.38	0.01	0.11	1.27
				0.22	1.27	
5th Opening Balance						
1st month	1.27	-	1.27	0.01	0.11	1.17
2nd month	1.17	-	1.17	0.01	0.11	1.06
3rd month	1.06	-	1.06	0.01	0.11	0.95
4th month	0.95	-	0.95	0.01	0.11	0.85
5th month	0.85	-	0.85	0.01	0.11	0.74
6th month	0.74	-	0.74	0.01	0.11	0.64
7th month	0.64	-	0.64	0.01	0.11	0.53
8th month	0.53	-	0.53	0.00	0.11	0.42
9th month	0.42	-	0.42	0.00	0.11	0.32
10th month	0.32	-	0.32	0.00	0.11	0.21
11th month	0.21	-	0.21	0.00	0.11	0.11
12th month	0.11	-	0.11	0.00	0.11	-
				0.08	1.27	
DOOR TO DOOR	60	MONTHS				
MORATORIUM PERIOD	6	MONTHS				
REPAYMENT PERIOD	54	MONTHS				

Assumptions:

1. Production Capacity of a Curd unit is taken at 50 Kg per Hour. First year, Capacity has been taken @ 20%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 2- 3 days.
4. Credit period to Sundry Debtors has been given for 5 days.
5. Credit period by the Sundry Creditors has been provided for 10 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 8 KW.
10. Selling Prices & Raw material costing has been increased by 5% & 5% respectively in the subsequent years.