

Model DPR for End Borrowers under PMFME scheme

Expansion Plan for a existing (small) Dairy Plant

INTRODUCTION

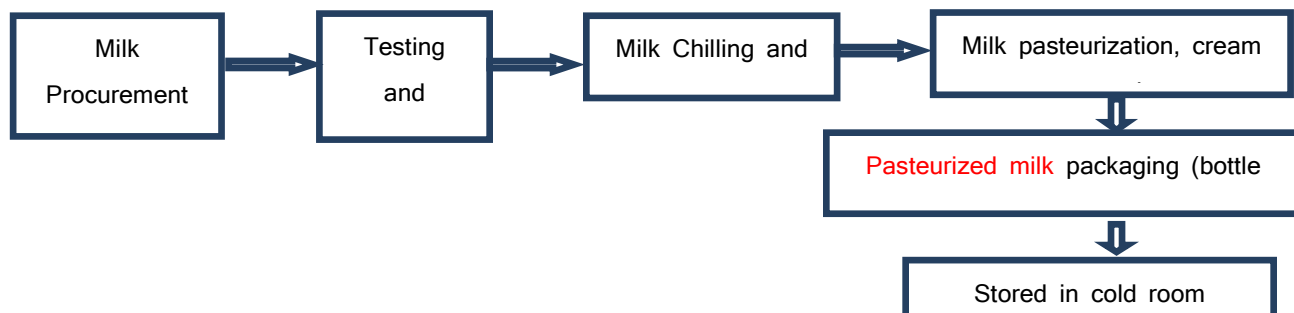
The per capita availability of milk in India during 2017-18 was 375 g/day and by 2023-24, it is estimated to increase to 592 g/day with around 10% increase per annum. To achieve this demand annual growth rate in milk production has to be increased around 4% additionally per annum. Thus, there is a tremendous scope/potential for increasing the milk production through profitable dairy farming. Milk is a perishable product as being very rich in nutrients such as carbohydrates, fats, proteins, minerals, vitamins and water; it becomes good media for the growth of micro-organisms. Storing and Processing of milk leads to value addition for readily available market. The dairy business has the following strengths:

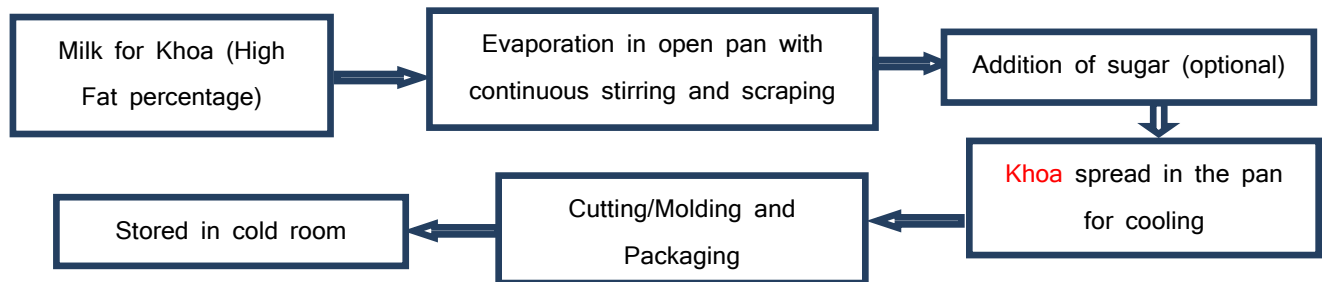
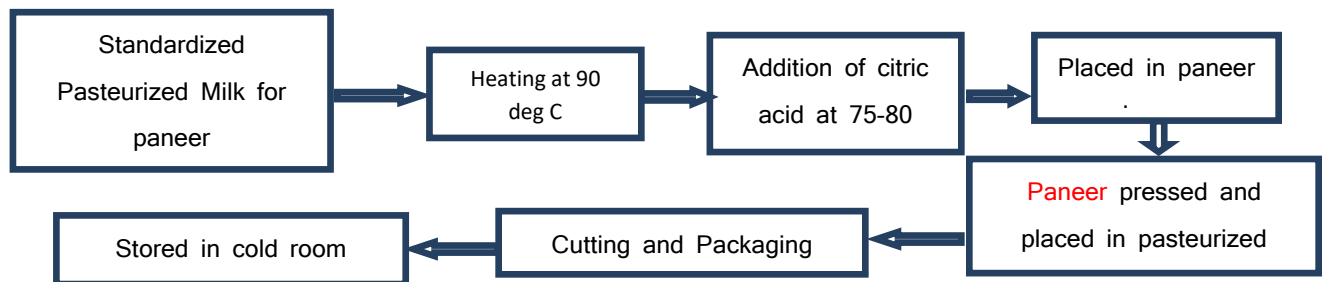
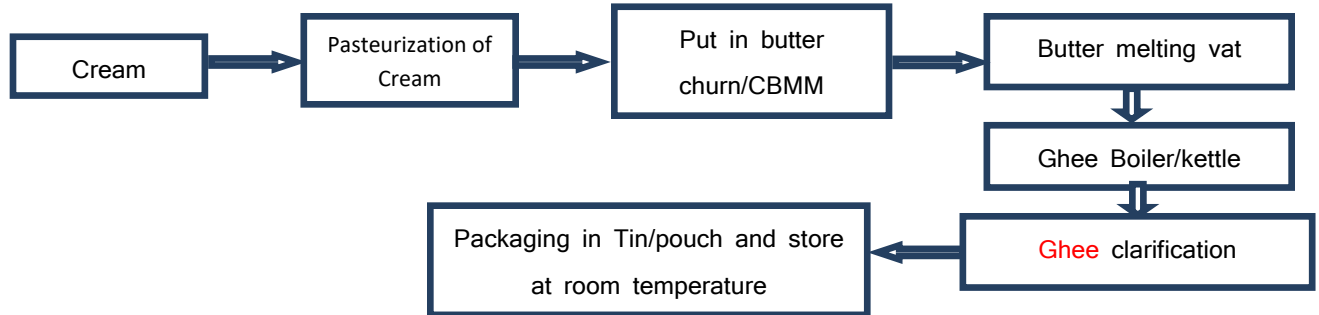
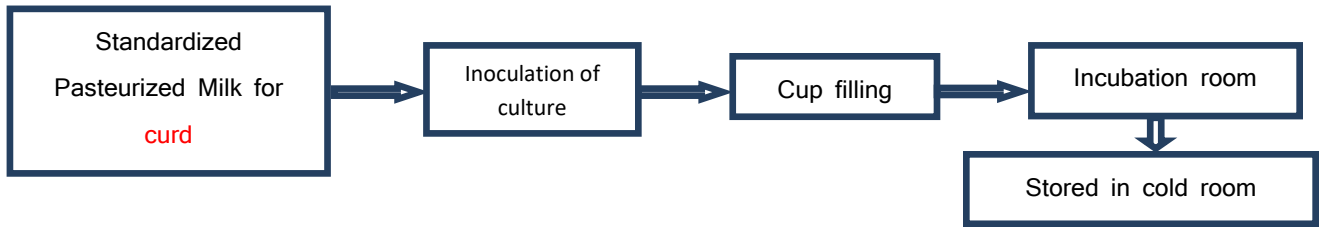
- Steady business with steady income unaffected by recession.
- Milk can be sold directly from the farm (No marketing setup needed)
- No brokers; price is fairly market regulated.
- Milk can be converted into several value added products.
- Selling rate of milk has been consistently increasing over a period of time.
- Consumption accepted by all religions, caste & creed.
- Several schemes of Govt. of India support the growth of dairy sector.

OPPORTUNITIES

1. New technology in dairy processing, like membrane filtration, cold centrifuge, cold concentration modified cold storage, and ice silo or ice bank tank.
2. New and innovative Packaging solutions for dairy products, which attract customers and provide easy handling along with high shelf life.
3. Enhancement of shelf life for the existing products, without altering the taste and texture,
4. Research infrastructure for new product development
5. Energy efficient technologies
6. Dedicated testing labs for nutrients and sensory parameters

Manufacturing Process





PROPOSED PLAN

There are various micro scale dairy processors/producers which would like to upgrade their equipments to increase output. The proposed scheme aims at helping the existing units to acquire new machinery for scaling up production or enhancing the existing product range. Assistance may be given to them by way of grants to fund capital expenditure. This will also help them to avail bank credit due to increase in owner's contribution. It is assumed that there will be no investment in land and building as part of the project. If required, such investment can be done by the promoter from his own sources. It is proposed to provide capital grant of upto 35% of investment made in acquiring plant and machinery up to a maximum of Rs. 10 lakhs. However, dairy business is working capital intensive so the bank support and contribution margin is required towards procurement of raw material.

SAMPLE TEMPLATE FOR A PROJECT SIZE OF Rs. 40 LACS

The following template shows the financial calculations related to a project outlay of Rs. 39.50 lacs. It has a capital expenditure component of Rs. 23.50 lacs which will entitle the promoter a grant of Rs. 8 lacs under the scheme (PMFME). The project size may be increased or decreased as per the existing state of the promoter's business. The scheme will limit the grant component to a maximum of Rs. 10 lakhs or 35% of capital expenditure whichever is lower.

The project highlights are as under:

Table 1: Source and Uses of Fund

USE OF FUND		
	Particular	(Rs. in Lakh)
1	Plant & Machinery (see Table 2)	22.50
2	Furniture & Fixtures	0.50
3	Computer and Peripherals	0.50
4	Working Capital requirement (see Table 3)	16.00
	Total	39.50
SOURCE OF FUND		
	Particular	(Rs. in Lakh)
1	Promoter's Equity (Term Loan and CC limit margin)	9.50
2	Grant from Govt schemes (central/state)	8.00
3	Bank Term Loan	10.00
4	Bank CC Limit	12.00
	Total	40.00

Tentatively, the following capital expenditure is deemed fit for expansion of a small unit dealing up to 500 litres of milk per day to 1500 litres per day. The following capital expenditure is envisaged for plant and machinery:

Table 2: Break-up of capital expenditure (Fixed Assets)

S.NO.	Description	Qty.	Price	Amount
1	Production Section			
	Weighing Scale (upto 100 Kg)	2	4000	8000
	Pasteuriser (2500 litre/hr)	1	100000	100000
	Butter Churn (20 Litre)	1	60000	60000
	Kettle (50 Litre-for Ghee making)	1	150000	150000
	Multipurpose Vat (100-2000 Litre)	2	150000	300000
	Milk Storage Tank (1000-2000 Litre)	2	100000	200000
	Cream Separator (2HP)	1	30000	30000
	Khoya Making machine (300 ltr)	1	100000	100000
	Paneer press with hoops	1	27000	27000
	Vaccum Packing machine and Moulds	1	25000	25000
			Total (1)	1000000
2	Cold Storage (Chiller-Section)			
	Kirloskar D.G.Set 25KVA	1	200000	200000
	Walk In Freezer (2000 Litre)	2	200000	400000
	Boiler and accessories	1	500000	500000
	Air-compressor and accessories	1	100000	100000
	Electrification work			50000
			Total (2)	1250000
3	Furniture & Fixture		50000	50000
4	Computer/ Printer/ Scanner	2	25000	50000
	Grand Total (1) + (2) + (3) + (4)			2350000

The Working capital estimates are calculated as under:

S.No.	Particular	Amount in Rs. Lakhs
1	Raw Material Cost	12.71
2	Power Charges	1.25
3	Indirect Expenses	0.79
4	Salary to staff	1.34
	Total Working Capital / Month	16.09

	Rounded off	16.00
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The Unit will sell the following products:

- a) Pasteurized Milk
- b) Plain Dahi
- c) Paneer
- d) Ghee
- e) Khoya

The Unit on 100%capacity utilization may earn the following revenue:

PRODUCT	Output in Litre	Rate in Rs. /Litre	Amount rounded off in Rs. lacs
Peasteurized toned Milk	365000	48	175
Dahi Plain	18250	55	10
Paneer	9125	280	25
Ghee	9125	350	32
Khoya	10950	500	55
Total			297

The unit may be assumed to be functioning at 70% of capacity in the first year and touching 100% by the end of three years. The break even is estimated at around 65% of projected sales. The profitability of the unit is ascertained as under:

STATEMENT OF PROFIT & LOSS A/C						
					(Rupees in Lakh)	
S.NO.	PARTICULAR	YEAR				
		1	2	3	4	5
1	INCOME					
	Sales	208.23	237.98	267.73	297.48	297.48
	Total Revenue	208.23	237.98	267.73	297.48	297.48
2	DIRECT EXPENSES					
	Raw Material Consumed	121.36	138.70	156.04	173.38	173.38
	Power Charges	11.45	13.74	15.45	17.17	17.17
	Salary to Production Staff	10.68	11.21	11.77	12.36	12.98

	Packing cost (3% of Sale)	8.33	9.52	10.71	11.90	11.90
	Total Direct Expenses	151.82	173.17	193.97	214.81	215.43
3	GROSS PROFIT	56.41	64.81	73.75	82.67	82.05
4	INDIRECT EXPENSES					
	(a) Salary to Other Staff	3.84	4.03	4.23	4.45	4.67
	(b) Indirect Exp. - Admi & Selling	7.72	8.49	9.34	10.28	11.30
	(c) Interest on Working Capital	1.32	1.32	1.32	1.32	1.32
	(d) Interest on Term Loan	1.10	0.81	0.29	0.00	0.00
	(e) Taxes, Rent & Duty (12,5%)	26.03	29.75	33.47	37.18	37.18
	Total Indirect Expenses	40.01	44.41	48.65	53.22	54.47
5	OPERATING PROFIT (3-4)	16.41	20.41	25.11	29.44	27.58
6	Less: Depreciation	3.73	3.03	2.53	2.13	1.80
7	Profit before tax	12.68	17.37	22.58	27.31	25.77
8	Income tax	0	0	0	0	0
9	PROFIT AFTER TAX	12.68	17.37	22.58	27.31	25.77

The projected balance sheet is presented as under:

PARTICULARS	YEAR				
	1	2	3	4	5
A. LIABLITIES & EQUITY					
Share Capital	9.50	9.50	9.50	9.50	9.50
Capital reserve (Govt. Grant)	8.00	8.00	8.00	8.00	8.00
General Reserve	12.68	32.04	54.62	81.94	107.71
W.C. Limit	12	12	12	12	12
Term Loan	10.00	5.20	0	0	0

TOTAL	52.18	66.74	84.12	111.44	137.21
B. ASSETS					
Fixed Assets	19.78	16.74	14.21	12.09	10.28
Preliminary Expenses	0.00	0.00	0.00	0.00	0.00
Investment in Land	0.00	0.00	0.00	0.00	0.00
Inventory	5.13	5.87	6.60	7.34	7.34
Debtors	17.12	19.56	22.01	24.45	24.45
Cash in Hand	10.16	24.57	41.30	67.57	95.14
TOTAL	52.18	66.74	84.12	111.44	137.21

MAJOR PARAMETERS

Based on the above calculations, the major financial parameters (broad average) are as under:

1. Net Profit Ratio: 7.5%
2. Debt Service Coverage Ratio: 4 times
3. Break Even Point: 65%
4. D/E Ratio: 0.4

ASSUMPTIONS

The following assumptions have been considered for this project report:

1. This analysis is based on a template which will change as per the unique requirement of the existing dairy plant.
2. The Unit will have easy access to milk acquisition in the vicinity and able to sell the produce at the desirable rate within the stipulated time.
3. Bank financing for will be available for working capital on a projection basis.
4. The cost estimates for plant and machinery has been obtained from e-commerce platforms.
5. We assumed that the existing Refrigeration and ETP system shall be utilized for the new product line with the expansion or modification. The same can be done by the promoters at their cost.
6. The input as well as sale prices may vary geographically as per market dynamics.