

MODEL 'DETAILED PROJECT REPORT' (DPR) FOR SETTING UP SMALL-SCALE DAIRY PRODUCT(S) MANUFACTURING UNIT

1.0: Overview of the operational context:

Describe the details of the proposed operational area in terms of:

- Estimated demand for the proposed product
- Availability/ deficit of the product in the target market

2.0: Rationale for the proposed project:

As per your assessment what is the need for putting up the dairy product manufacturing plant of the desired capacity.

Indicative manufacturing capacities for small-scale manufacturing unit is processing of 100 litres of milk per day. One, two or more products can be made using this small-scale dairy plant. The entrepreneur may describe availability of milk, product market situation, demand and supply situation, etc.

3.0: Project objectives:

Indicative project objectives are specified below. The entrepreneur may wish to expand on the same and add new ones.

- Preparation and supply of quantity of desired product to institutional buyers/ retailers / direct to customers.
- Creation of a demand-base for speciality/ common dairy products among buyers.

4.0: SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the proposer with justification of the plans to capitalize on the strengths and opportunities while mitigating risks and weaknesses.

This may broadly cover the following aspects:

4.1: Product related.

4.2: Price related.

4.3: Extension/marketing related.

4.4: Organic product manufacturing feasibility.

5.0: Necessary pre-requisites (check-list) for success in this activity are given below.

You may indicate in the project report, the status of the below mentioned features and plans for the same.

- Availability of milk
- Availability of land for setting up the unit.
- Feasibility of organic product manufacturing.
- Availability of utilities such as electricity connection, water supply power back-up, etc.
- Access to expert guidance / training with regard to product selection, knowledge of manufacturing methods, quality criteria, food safety rules, packaging requirements, organic criteria (if applicable), pollution control guidelines, occupational safety guidelines and labour laws.
- Access to the right machinery for product manufacturing and packaging.
- Robust demand generation activity to ensure easy sales of the product.

6.0: Project details:

6.1 Proposed product

The entrepreneur needs to select product(s) based on the availability of milk, market demand of product, cost effectiveness of product, etc.

6.2 Proposed location:

The entrepreneur needs to specify the location of the proposed dairy plant, land area available for setting up of the plant, road connectivity, proximity to market, water resources, availability of electricity, etc.

6.3 Proposed capacity of manufacturing plant:

Indicative manufacturing capacity of the plant is 100 litre per day. However, it can be varied based upon the availability of milk, market demand and the future expansion plans of the entrepreneur.

6.4 Land availability:

Indicative land requirement is 1000 sqft for 100 litre per day. It can be varied based on the desired capacity of the manufacturing unit.

6.5 Details of machinery required:

- Based on the product(s) to be manufactured
- Capacity of the various equipment for product manufacturing

6.6 Manpower recruitment/hiring plans:

Manpower would be required for production, sale, etc. The arrangement for recruitment/hiring of manpower may be mentioned (if required).

7.0: Project viability:

Estimates of capital expenditure, revenue expenditure, operational costs, gross margin, net margin etc. may be mentioned.

Also, other financial parameters such as Break-even period etc. may be mentioned.

An indicative format for the same is provided in Annexure I.

Annexure II provides indicative estimates of the capital expenditure, revenue expenditure and income for cottage scale production of a few dairy products.

Annexure I

Particulars	Unit	Figure	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Capacity of product making unit in Kilo Grams Per Day (KGPD)							
Annual Production (KG)							
Total Production							
Sales							
Average Sales (KG)							
Total							
Operating Revenue (Rs Lakh)							
Product 1	Rs/KG						
Product 2 (if any)	Rs/KG						
Product 3 (if any)	Rs/KG						
Total Operating Income							
Raw Materials							
Milk	Rs/KG						
Sugar	Rs/KG						
Culture	Rs/KG						
Total Raw Material Cost							
Gross Margin							
Variable Costs :							
Processing Cost -							
Cost of Power (electricity)	Rs/KG						
Cost of Fuel	Rs/KG						
Packing Cost	Rs/KG						
Repairs & Maintenance	Rs/KG						
Freight	Rs/KG						
Material Handling	Rs/KG						
Labour & Overheads - Variable	Rs/KG						
Distribution Channel Commission	Rs/KG						
Other Variable Cost	Rs/KG						
Total Variable Costs							

Particulars	Unit	Figure	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Contribution							
Per contribution	KG						
Fixed Costs -							
Salaries							
Salaries of outsourced manpower							
General & Admin exp							
Total Fixed Cost							
EBITDA							
Financing Cost							
Interest on New Investments							
Interest on working capital							
Depreciation							
Depreciation							
Profit Before Tax							
Tax							
Profit After Tax (PAT)							
VIABILITY Analysis:							
PAT + INT on term loan							
Cash Profit (PAT + Dep)							
PAT + Dep + INT on term loan							
Total Investment							
Return on Investment	ROI						
IRR							

Annexure II

1. Economics of Mozzarella Cheese and Artisan Ghee manufacturing unit				
Sl. No.	Particulars	Unit	Unit rate (INR)	Amount (INR)
A Capital Expenditure				
1.	Multipurpose vat for milk pasteurization-cum-coagulation tank (120 liters volume), with stirring, heating and chilling services	1	300000	300000
2.	Vacuum packing machine/sealing machine	1	200000	200000
3.	Cream separator	1	100000	100000
4.	Butter churn, 25 liters volume	1	25000	25000
5.	Ghee vat	1	25000	25000
6.	Other capital cost	Lumpsum	-	71500
Total				721500
B Revenue Expenditure				
		Production per day, kg	Cost of production/kg, Rs.	Total cost, Rs.
1	Cost of Mozzarella Cheese Production including 5% process losses	9.4	203	1908
2	Cost of Ghee Production including 5% process losses	3.6	729	2624
C Income				
1	Total income from sale of Mozzarella Cheese per day @ Rs 400 per KG for 9.4 kg			1852
2	Total income from sale of Artisan Ghee per day @ Rs 750 per KG for 3.6 kg			76
3	Net income on both the product per day			1928

2. Economics of <i>Shrikhand (Mattha)</i> manufacturing unit				
Sl. No.	Particulars	Unit	Unit rate	Amount (Rs.)
A	Capital Expenditure			
1	Multipurpose vat for pasteurization-cum-coagulation cum incubation tank (150 liters volume), with stirring, heating and chilling services	1	300000	300000
2	Chakka/Maska hanger	1	30000	30000
3	Planetary Mixer	1	100000	100000
4	Other capital cost	Lumpsum	-	161100
			Total	591100
B	Revenue Expenditure			
		Production per day, kg	Cost of production/kg, Rs.	Total cost, Rs.
1	Cost of <i>Shrikhand (Mattha)</i> 5% process losses	50	124	6200
C	Income			
1	Total income from sale @ Rs 210 per kg for 50 kg			10500
2	Net income on 50 kg production/day			4300

3. Economics of Organic Artisan Cow Ghee and Organic Buttermilk manufacturing unit				
Sl. No.	Particulars	Unit	Unit rate	Amount (Rs.)
A	Capital Expenditure			
1	Multipurpose vat for pasteurization-cum-coagulation cum incubation tank (150 liters volume), with stirring, heating and chilling services	1	300000	300000
2	Milk/ curd storage tank (100 litre)	1	50000	50000
3	Ghee vat	1	25000	25000
4	Mechanical churn	1	25000	25000
5	Filling machine	1	50000	50000
6	Other capital cost	Lumpsum	-	81300
			Total	531300
B	Revenue Expenditure			
		Production per day, kg	Cost of production/kg, Rs.	Total cost, Rs.
1	Cost of organic artisan cow ghee production including 5% process losses	3.0	770	2310
2	Cost of Buttermilk Production including 5% process losses	139	9.2	1279
C	Income			
1	Total income from sale of Organic Artisan Ghee @ Rs 1200 per kg for 3 kg			1290
2	Total income from sale of Organic Buttermilk @ Rs 15 per ltr for 139 kg			806
3	Net income on both the product per day			2096