



## **DETAILED PROJECT REPORT**

### **GHEE MAKING UNIT**

### **UNDER PMFME SCHEME**



National Institute of Food Technology Entrepreneurship and Management

Ministry of Food Processing Industries

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**1. PROJECT SUMMARY**

1. Name of the proposed project	:	Ghee Making Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	64800 Kg/annum(40,45,50,55&60% capacity utilization in 1 <sup>st</sup> to 5 <sup>th</sup> Year respectively)
4. Raw material	:	Milk
5. Major product outputs	:	Ghee
6. Total project cost	:	Rs. 27.82 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 19.38 Lakh
• Miscellaneous Fixed Assets	:	Rs. 2.50 Lakh
• Working capital	:	Rs. 5.94 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 7.66 Lakh
• Promoter's contribution (min10%)	:	Rs. 2.77 Lakh
• Term loan	:	Rs.12.03 Lakh
• Working Capital Requirement	:	Rs. 5.34 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1 <sup>st</sup> year	:	Rs. 1.84 Lakh
• 2 <sup>nd</sup> year	:	Rs. 4.26 Lakh
• 3 <sup>rd</sup> year	:	Rs. 6.58 Lakh
• 4 <sup>th</sup> year	:	Rs. 9.07Lakh
• 5th year	:	Rs. 11.19 Lakh
11. Average DSCR	:	Rs. 3.14
12. Term loan repayment	:	5 Years with 6 months grace period

## **2. ABOUT THE PRODUCT**

### **2.1. PRODUCT INTRODUCTION:**

The word ghee is evolved from Sanskrit word ghrita. Ghee, the most famous traditional dairy product in India and many countries in Middle East. It is made from milk, cream, or butter of several animal species. Ghee is a common Indian name for clarified butter fat that originated in India and is commonly used in South Asian cuisine. Ghee is also lactose-free and contains no salt. Ghee or pure butterfat, looks like liquid gold and is the most soothing and delicious ingredient imaginable. Ghee has rich, sweet and deliciously nutty flavour. A little amount of ghee adds a lot of flavour to the food. It is a dairy product and as such it is gluten free.

#### **Uses & Benefits:**

Ghee being a dairy product has several uses:

- It is used as cooking fat.
- In ice-cream manufacturing
- It is used in confectionery industry.
- It is used in manufacturing of various types of fat spreads.
- It contains fat soluble vitamins such as A, D, E and hence can benefit vegetarian.
- It helps in increasing intelligence, memory power and boost body energy.

## **2.2. MARKET POTENTIAL:**

Ghee, which is widely used in Indian cooking, is the pure butter fat left over after the milk solids and water are removed from butter. It is very fragrant with a rich nutty taste and represents the second largest consumed dairy product in India, after liquid milk. The healthy growth of the market can be attributed to numerous forces. Population growth, rising disposable incomes, easy availability, and growing awareness about the benefits/ uses of ghee are some of the factors that are broadening the growth aspects of the market. As a considerable part of population consists of vegetarians, ghee emerges as a viable option. Apart from this, factors such as increasing population, urbanization rates, improved cold supply chain and growing deep freezer penetration are also influencing the market growth. We can expect the market to exhibit strong growth during 2020-2025. This product is consumed in every household and there is always a significant demand in both rural as well as in urban sector.

## **2.3. RAW MATERIAL DESCRIPTION:**

The only raw material that is required for Ghee making unit is Milk and is easily available in the local market.

### **3. PROCESS FLOW CHART**

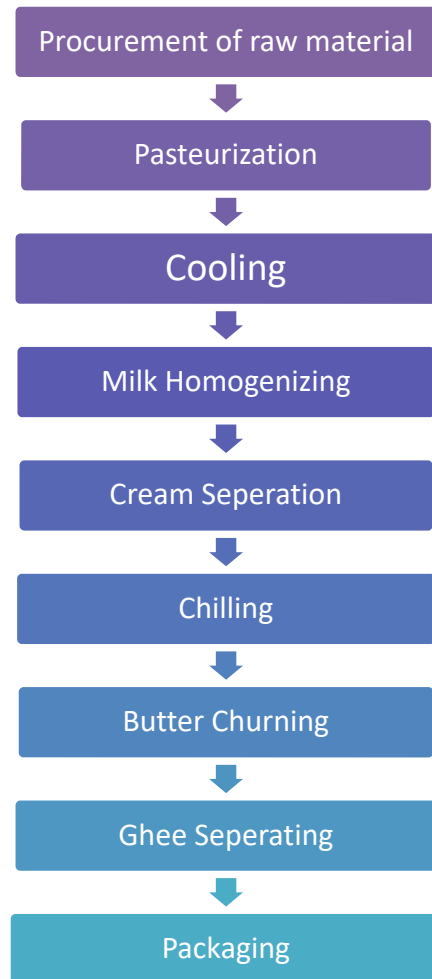
The milk is procured from vendor and stored in storage tanks prior to primary processing of milk, boiler is utilized to generate steam which is utilized in various process of plant which generally includes heating of milk and milk products as and when required.

This steam is initially utilized in pasteurizer to heat the milk for pasteurization, after appropriate holding time the milk is sent to another holding tank which stores the milk prior to cooling this is essential to reduce load on milk cooler as well as provide a uniform feed to milk cooler.

After cooling of milk its stored within a holding tank from where its supplied to milk homogenizer, which ensures uniform globule size in milk, followed by which milk is stored in a balance tank, from where it's feed to cream separator which essentially extracts cream from milk which is stored in another balance tank while toned milk is supplied to holding tank of pouch filling machine which packs the toned milk into packets of appropriate quantity which are then stored in IBT prior to dispatch for sale.

The cream on the other hand is cooled in another chiller, so as to reduce its temperature to 4 to 5 degree Celsius. The cream is then feed to butter churning machine.

The butter churning machine churns out butter from cream which is then feed to a heating vessel which heats the butter in order to obtain the ghee. This ghee is supplied to another pouch packaging machine which packs ghee in appropriate size packs, which are then stored in cold room till they are sent for sale.



## 4. ECONOMICS OF THE PROJECT

### 4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Ghee is 30 kg per hr. First year, Capacity has been taken @ 40%.
2. Working shift of 8 hours per day has been considered.

3. Raw Material stock is for 2 days and Finished goods Closing Stock has been taken for 5 days.
4. Credit period to Sundry Debtors has been given for 20 days.
5. Credit period by the Sundry Creditors has been provided for 7 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 10 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

#### 4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

<b><u>COMPUTATION OF PRODUCTION OF GHEE</u></b>		
<b>Items to be Manufactured</b>		
Ghee		
Machine capacity Per hour	30	Kg
Total working Hours	8	
Machine capacity Per Day	240	Kg
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	10%	
Raw material requirement	72000	Kg
Final Output per annum after wastage	64800	Kg
Final Product to be packed in 1 kg Packet		
Number of Packets per annum	64800	1 Kg Packet



<b>Production of Ghee</b>		
<b>Production</b>	<b>Capacity</b>	<b>KG</b>
1st year	40%	25,920
2nd year	45%	29,160
3rd year	50%	32,400
4th year	55%	35,640
5th year	60%	38,880



<b>Raw Material Cost</b>			
<b>Year</b>	<b>Capacity</b>	<b>Rate</b>	<b>Amount</b>
	<b>Utilisation</b>	<b>(per Kg)</b>	<b>(Rs. in lacs)</b>
1st year	40%	180.00	51.84
2nd year	45%	189.00	61.24
3rd year	50%	198.00	71.28
4th year	55%	208.00	82.37
5th year	60%	218.00	94.18






<b>COMPUTATION OF SALE</b>					
<b>Particulars</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
Op Stock	-	432	486	540	594
Production	25,920	29,160	32,400	35,640	38,880
Less : Closing Stock	432	486	540	594	648
<b>Net Sale</b>	<b>25,488</b>	<b>29,106</b>	<b>32,346</b>	<b>35,586</b>	<b>38,826</b>
Sale price per packet	330.00	347.00	364.00	382.00	401.00
<b>Sales (in Lacs)</b>	<b>84.11</b>	<b>101.00</b>	<b>117.74</b>	<b>135.94</b>	<b>155.69</b>






### 4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 2000-2500 Sq. ft. for smooth production including storage area. It is expected that the premises will be on rental.

### 4.4. MACHINERY & EQUIPMENTS

Machine Name	Description	Machine Image.
Milk Pasteurizer	There are two distinct purposes for the process of milk pasteurization: Public Health Aspect - to make milk and milk products safe for human consumption by destroying all bacteria that may be harmful to health (pathogens) Keeping Quality Aspect - to improve the keeping quality of milk and milk products.	
IBT (Ice Bank Tank) Type Chilling Machine	Ice Bank Tank (IBT) is a system which is used to store energy in the form of ice. It is applicable in dairy industry for quick process in short time with certain limit of power load.	

<p>Milk Storage Tank</p>	<p>The milk storage tank is ideal for cooling and holding milk at a cold temperature until it's further processed. The machine is made of stainless steel and used to store the raw milk in good condition. The milk storage tank is specifically selected based on the needs and requirements of each individual customer.</p>	
<p>Boiler</p>	<p>Boilers are used to produce steam. The generation part of a steam system uses a boiler to add energy to a feedwater supply to generate steam.</p>	
<p>Balance Tank</p>	<p>These tanks are used for storing ghee safely. Capacity Processed ghee is transferred to ghee balancing tank through ghee pump, then ghee is allowed to settle in the tank.</p>	
<p>Milk Homogenizer</p>	<p>Milk homogenizer perform a simple process that mixes and disperses that milkfat by using a high-pressure procedure to break it down into smaller particles.</p>	
<p>Cream Separator</p>	<p>Creamseparator, machine for separating and removing cream from whole milk; its operation is based on the fact that skim milk (milk with no butterfat) is heavier</p>	

	than cream.	
Chiller	A chiller is a refrigeration system used to lower the temperature of machinery, industrial spaces, and process fluids by removing heat from the system and transferring it somewhere else.!	
Butter Churning Machine	Churning physically agitates the cream until it ruptures the fragile membranes surrounding the milk fat.	
Ghee Boiling Kettle	It will be used for the manufacturing of ghee from butter or cream.	
Pouch Filling Machine	This machine is used to fill ghee in pouches of different sizes.	
Material handling and other Equipments	These Equipments are used for material handling. Other equipments like water pumps, weighing machine, etc are also used.	

<b>Machine</b>	<b>Unit</b>	<b>Rate</b>	<b>Price</b>
Milk storage tank	1	35000	35000
Balance Tank	1	15000	15000
Milk Homogenizer	1	195000	195000
Milk Pasteurizer	1	275000	275000
Cream Separator	1	31000	31000
Boiler	1	165000	165000
Pump	1	17000	17000
Chiller	1	275000	275000
Butter Churning Machine	1	135000	135000
Ghee Boiling Kettle	1	85000	85000
IBT Type chilling machine	1	145000	145000
Pouch Filling Machine	1	215000	215000
Material handling and other Equipment's	-	350000	350000

**Note:** Total Machinery cost shall be Rs19.38 lakh including equipment's but excluding GST and Transportation Cost.

#### **4.5. MISCELLANEOUS FIXED ASSETS**

- Water Supply Arrangements
- Furniture & Fixtures
- Computers & Printers

**4.6. TOTAL COST OF PROJECT**

<b>COST OF PROJECT</b>	
	(in Lacs)
<b>PARTICULARS</b>	<b>Amount</b>
Land & Building	Owned/Rented
Plant & Machinery	19.38
Miscellaneous Assets	2.50
Working capital	5.94
<b>Total</b>	<b>27.82</b>

**4.7. MEANS OF FINANCE**

<b>MEANS OF FINANCE</b>	
<b>PARTICULARS</b>	<b>AMOUNT</b>
Own Contribution (min 10%)	2.77
Subsidy @35%(Max. Rs 10 Lac)	7.66
Term Loan @ 55%	12.03
Working Capital (Bank Finance)	5.34
<b>Total</b>	<b>27.82</b>

**4.8. TERM LOAN:** Term loan of Rs. 12.03 Lakh is required for project cost of Rs. 27.82 Lakh

**4.9. TERM LOAN REPAYMENT& INTEREST SCHEDULE**

<b>REPAYMENT SCHEDULE OF TERM LOAN</b>								
							Interest	11.00%
<b>Year</b>	<b>Particulars</b>	<b>Amount</b>	<b>Addition</b>	<b>Total</b>	<b>Interest</b>	<b>Repayment</b>	<b>Closing Balance</b>	
<b>1st</b>	Opening Balance							
	1st month	-	12.03	12.03	-	-	12.03	
	2nd month	12.03	-	12.03	0.11	-	12.03	
	3rd month	12.03	-	12.03	0.11	-	12.03	
	4th month	12.03	-	12.03	0.11	-	12.03	
	5th month	12.03	-	12.03	0.11	-	12.03	
	6th month	12.03	-	12.03	0.11	-	12.03	
	7th month	12.03	-	12.03	0.11	0.22	11.81	
	8th month	11.81	-	11.81	0.11	0.22	11.59	
	9th month	11.59	-	11.59	0.11	0.22	11.37	
	10th month	11.37	-	11.37	0.10	0.22	11.14	
	11th month	11.14	-	11.14	0.10	0.22	10.92	
	12th month	10.92	-	10.92	0.10	0.22	10.70	
					1.18	1.34		
<b>2nd</b>	Opening Balance							
	1st month	10.70	-	10.70	0.10	0.22	10.47	
	2nd month	10.47	-	10.47	0.10	0.22	10.25	
	3rd month	10.25	-	10.25	0.09	0.22	10.03	
	4th month	10.03	-	10.03	0.09	0.22	9.81	

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	5th month	9.81	-	9.81	0.09	0.22	9.58
	6th month	9.58	-	9.58	0.09	0.22	9.36
	7th month	9.36	-	9.36	0.09	0.22	9.14
	8th month	9.14	-	9.14	0.08	0.22	8.91
	9th month	8.91	-	8.91	0.08	0.22	8.69
	10th month	8.69	-	8.69	0.08	0.22	8.47
	11th month	8.47	-	8.47	0.08	0.22	8.25
	12th month	8.25	-	8.25	0.08	0.22	8.02
					<b>1.04</b>	<b>2.67</b>	
<b>3rd</b>	Opening Balance						
	1st month	8.02	-	8.02	0.07	0.22	7.80
	2nd month	7.80	-	7.80	0.07	0.22	7.58
	3rd month	7.58	-	7.58	0.07	0.22	7.35
	4th month	7.35	-	7.35	0.07	0.22	7.13
	5th month	7.13	-	7.13	0.07	0.22	6.91
	6th month	6.91	-	6.91	0.06	0.22	6.69
	7th month	6.69	-	6.69	0.06	0.22	6.46
	8th month	6.46	-	6.46	0.06	0.22	6.24
	9th month	6.24	-	6.24	0.06	0.22	6.02
	10th month	6.02	-	6.02	0.06	0.22	5.79
	11th month	5.79	-	5.79	0.05	0.22	5.57
	12th month	5.57	-	5.57	0.05	0.22	5.35
					<b>0.75</b>	<b>2.67</b>	
<b>4th</b>	Opening Balance						
	1st month	5.35	-		0.05	0.22	5.13



PM FME- Detailed Project Report of Ghee Making Unit

				5.35			
2nd month	5.13	-	5.13	0.05	0.22	4.90	
3rd month	4.90	-	4.90	0.04	0.22	4.68	
4th month	4.68	-	4.68	0.04	0.22	4.46	
5th month	4.46	-	4.46	0.04	0.22	4.23	
6th month	4.23	-	4.23	0.04	0.22	4.01	
7th month	4.01	-	4.01	0.04	0.22	3.79	
8th month	3.79	-	3.79	0.03	0.22	3.57	
9th month	3.57	-	3.57	0.03	0.22	3.34	
10th month	3.34	-	3.34	0.03	0.22	3.12	
11th month	3.12	-	3.12	0.03	0.22	2.90	
12th month	2.90	-	2.90	0.03	0.22	2.67	
				<b>0.45</b>	<b>2.67</b>		
<b>5th</b>	<b>Opening Balance</b>						
1st month	2.67	-	2.67	0.02	0.22	2.45	
2nd month	2.45	-	2.45	0.02	0.22	2.23	
3rd month	2.23	-	2.23	0.02	0.22	2.01	
4th month	2.01	-	2.01	0.02	0.22	1.78	
5th month	1.78	-	1.78	0.02	0.22	1.56	
6th month	1.56	-	1.56	0.01	0.22	1.34	
7th month	1.34	-	1.34	0.01	0.22	1.11	
8th month	1.11	-	1.11	0.01	0.22	0.89	
9th month	0.89	-	0.89	0.01	0.22	0.67	
10th month	0.67	-	0.67	0.01	0.22	0.45	
11th month	0.45	-		0.00	0.22	0.22	

			0.45			
12th month	0.22	-	0.22	0.00	0.22	-
				<b>0.16</b>	<b>2.67</b>	
DOOR TO DOOR MORATORIUM PERIOD	60	MONTHS				
REPAYMENT PERIOD	6	MONTHS				
	54	MONTHS				

#### 4.10. WORKING CAPITAL CALCULATIONS

<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b>					(in Lacs)
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
<b>Finished Goods</b>					
	1.19	1.38	1.59	1.82	2.07
<b>Raw Material</b>					
	0.35	0.41	0.48	0.55	0.63
<b>Closing Stock</b>	<b>1.54</b>	<b>1.79</b>	<b>2.07</b>	<b>2.37</b>	<b>2.70</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>					
<b>TRADITIONAL METHOD</b>					(in Lacs)
<b>Particulars</b>	<b>Amount</b>	<b>Own Margin</b>		<b>Bank Finance</b>	
Finished Goods & Raw Material	1.54				
Less : Creditors	1.21				
<b>Paid stock</b>	<b>0.33</b>	<b>10%</b>	<b>0.03</b>	<b>90%</b>	<b>0.30</b>
<b>Sundry Debtors</b>	<b>5.61</b>	<b>10%</b>	<b>0.56</b>	<b>90%</b>	<b>5.05</b>
	<b>5.94</b>		<b>0.59</b>		<b>5.34</b>
<b>MPBF</b>					<b>5.34</b>
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>					<b>5.34</b>
<b>Working Capital Margin</b>					<b>0.59</b>

**4.11. SALARY & WAGES**

<b><u>BREAK UP OF LABOUR CHARGES</u></b>			
<b>Particulars</b>	<b>Wages</b>	<b>No of</b>	<b>Total</b>
	<b>Rs. per Month</b>	<b>Employees</b>	<b>Salary</b>
Plant Operator	14,000	2	28,000
Supervisor	16,000	1	16,000
Skilled (in thousand rupees)	12,000	2	24,000
Unskilled (in thousand rupees)	7,000	2	14,000
<b>Total salary per month</b>			<b>82,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>9.84</b>

<b><u>BREAK UP OF STAFF SALARY CHARGES</u></b>			
<b>Particulars</b>	<b>Salary</b>	<b>No of</b>	<b>Total</b>
	<b>Rs. per Month</b>	<b>Employees</b>	<b>Salary</b>
Administrative Staff	7,000	1	7,000
Manager	18,000	1	18,000
Accountant	15,000	1	15,000
<b>Total salary per month</b>			<b>40,000</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>4.80</b>

## 4.12 POWER REQUIREMENT

<b>Utility Charges (per month)</b>		
<b>Particulars</b>	<b>value</b>	<b>Description</b>
Power connection required	10	KWH
consumption per day	80	units
Consumption per month	2,000	units
Rate per Unit	10	Rs.
power Bill per month	20,000	Rs.

## 4.13. DEPRECIATION CALCULATION

<b>COMPUTATION OF DEPRECIATION</b>			(in Lacs)
<b>Description</b>	<b>Plant &amp; Machinery</b>	<b>Miss. Assets</b>	<b>TOTAL</b>
Rate of Depreciation	<b>15.00%</b>	<b>10.00%</b>	
<b>Opening Balance</b>	-	-	-
Addition	19.38	2.50	21.88
Total	19.38	2.50	21.88
Less : Depreciation	2.91	0.25	3.16
<b>WDV at end of Year</b>	<b>16.47</b>	<b>2.25</b>	<b>18.72</b>
Additions During The Year	-	-	-
Total	16.47	2.25	18.72
Less : Depreciation	2.47	0.23	2.70
<b>WDV at end of Year</b>	<b>14.00</b>	<b>2.03</b>	<b>16.03</b>
Additions During The Year	-	-	-
Total	14.00	2.03	16.03
Less : Depreciation	2.10	0.20	2.30
<b>WDV at end of Year</b>	<b>11.90</b>	<b>1.82</b>	<b>13.72</b>
Additions During The Year	-	-	-
Total	11.90	1.82	13.72
Less : Depreciation	1.79	0.18	1.97
<b>WDV at end of Year</b>	<b>10.12</b>	<b>1.64</b>	<b>11.76</b>
Additions During The Year	-	-	-
Total	10.12	1.64	11.76
Less : Depreciation	1.52	0.16	1.68
<b>WDV at end of Year</b>	<b>8.60</b>	<b>1.48</b>	<b>10.08</b>

**4.14. REPAIR & MAINTENANCE:** Repair & Maintenance is 3.0 % of Gross Sale.

#### 4.15. PROJECTIONS OF PROFITABILITY ANALYSIS

<b>PROJECTED PROFITABILITY STATEMENT</b>					<b>(in Lacs)</b>
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
Capacity Utilisation %	<b>40%</b>	<b>45%</b>	<b>50%</b>	<b>55%</b>	<b>60%</b>
<b><u>SALES</u></b>					
<b>Gross Sale</b>					
Ghee	84.11	101.00	117.74	135.94	155.69
<b>Total</b>	<b>84.11</b>	<b>101.00</b>	<b>117.74</b>	<b>135.94</b>	<b>155.69</b>
<b><u>COST OF SALES</u></b>					
Raw Material Consumed	51.84	61.24	71.28	82.37	94.18
Electricity Expenses	2.40	2.76	3.17	3.65	4.02
Depreciation	3.16	2.70	2.30	1.97	1.68
Wages & labour	9.84	11.32	12.90	14.58	16.76
Repair & maintenance	2.52	3.03	3.53	4.08	4.67
Packaging	1.85	2.02	2.35	2.72	3.11
<b>Cost of Production</b>	<b>71.61</b>	<b>83.06</b>	<b>95.54</b>	<b>109.36</b>	<b>124.42</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>1.19</b>	<b>1.38</b>	<b>1.59</b>	<b>1.82</b>
<b>Less: Closing Stock /WIP</b>	<b>1.19</b>	<b>1.38</b>	<b>1.59</b>	<b>1.82</b>	<b>2.07</b>
Cost of Sales	70.42	82.87	95.34	109.13	124.17
<b>GROSS PROFIT</b>	<b>13.69</b>	<b>18.13</b>	<b>22.40</b>	<b>26.81</b>	<b>31.52</b>
	<b>16.28%</b>	<b>17.95%</b>	<b>19.03%</b>	<b>19.72%</b>	<b>20.25%</b>
Salary to Staff	4.80	5.76	7.20	7.92	8.87
Interest on Term Loan	1.18	1.04	0.75	0.45	0.16
Interest on working Capital	0.59	0.59	0.59	0.59	0.59
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	1.68	2.52	2.35	2.77	3.27
<b>TOTAL</b>	<b>11.85</b>	<b>13.87</b>	<b>15.25</b>	<b>16.53</b>	<b>18.16</b>
<b>NET PROFIT</b>	<b>1.84</b>	<b>4.26</b>	<b>7.16</b>	<b>10.28</b>	<b>13.36</b>
	<b>2.19%</b>	<b>4.21%</b>	<b>6.08%</b>	<b>7.56%</b>	<b>8.58%</b>
Taxation	-	-	0.57	1.21	2.17
<b>PROFIT (After Tax)</b>	<b>1.84</b>	<b>4.26</b>	<b>6.58</b>	<b>9.07</b>	<b>11.19</b>

#### 4.16. BREAK EVEN POINT ANALYSIS

<b>BREAK EVEN POINT ANALYSIS</b>					
<b>Year</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>Net Sales &amp; Other Income</b>	84.11	101.00	117.74	135.94	155.69
Less : Op. WIP Goods	-	1.19	1.38	1.59	1.82
Add : Cl. WIP Goods	1.19	1.38	1.59	1.82	2.07
<b>Total Sales</b>	<b>85.30</b>	<b>101.19</b>	<b>117.95</b>	<b>136.17</b>	<b>155.94</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material Consumed	51.84	61.24	71.28	82.37	94.18
Electricity Exp/Coal Consumption at 85%	2.04	2.35	2.70	3.10	3.41
Wages & Salary at 60%	8.78	10.25	12.06	13.50	15.38
Selling & administrative Expenses 80%	1.35	2.02	1.88	2.22	2.62
Interest on working Capital	0.58775	0.58775	0.58775	0.58775	0.58775
Repair & maintenance	2.52	3.03	3.53	4.08	4.67
Packaging	1.85	2.02	2.35	2.72	3.11
<b>Total Variable &amp; Semi Variable Exp</b>	<b>68.97</b>	<b>81.49</b>	<b>94.40</b>	<b>108.57</b>	<b>123.96</b>
<b>Contribution</b>	<b>16.33</b>	<b>19.70</b>	<b>23.55</b>	<b>27.60</b>	<b>31.99</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Electricity Exp/Coal Consumption at 15%	0.36	0.41	0.48	0.55	0.60
Wages & Salary at 40%	5.86	6.83	8.04	9.00	10.25
Interest on Term Loan	1.18	1.04	0.75	0.45	0.16
Depreciation	3.16	2.70	2.30	1.97	1.68
Selling & administrative Expenses 20%	0.34	0.50	0.47	0.55	0.65
Rent	3.60	3.96	4.36	4.79	5.27
<b>Total Fixed Expenses</b>	<b>14.49</b>	<b>15.45</b>	<b>16.39</b>	<b>17.31</b>	<b>18.62</b>
<b>Capacity Utilization</b>	<b>40%</b>	<b>45%</b>	<b>50%</b>	<b>55%</b>	<b>60%</b>
<b>OPERATING PROFIT</b>	<b>1.84</b>	<b>4.26</b>	<b>7.16</b>	<b>10.28</b>	<b>13.36</b>
<b>BREAK EVEN POINT</b>	<b>35%</b>	<b>35%</b>	<b>35%</b>	<b>35%</b>	<b>35%</b>
<b>BREAK EVEN SALES</b>	<b>75.69</b>	<b>79.33</b>	<b>82.10</b>	<b>85.43</b>	<b>90.79</b>

**4.17. PROJECTED BALANCE SHEET**

<b>PROJECTED BALANCE SHEET</b>					<b>(in Lacs)</b>
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
<b><u>Liabilities</u></b>					
Capital					
opening balance		9.77	11.03	12.61	14.68
Add:- Own Capital	2.77				
Add:- Retained Profit	1.84	4.26	6.58	9.07	11.19
Less:- Drawings	2.50	3.00	5.00	7.00	8.50
Subsidy/grant	7.66				
Closing Balance	9.77	11.03	12.61	14.68	17.37
Term Loan	10.70	8.02	5.35	2.67	-
Working Capital Limit	5.34	5.34	5.34	5.34	5.34
Sundry Creditors	1.21	1.43	1.66	1.92	2.20
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
<b>TOTAL :</b>	<b>27.42</b>	<b>26.32</b>	<b>25.56</b>	<b>25.34</b>	<b>25.77</b>
<b><u>Assets</u></b>					
<b>Fixed Assets ( Gross)</b>	21.88	21.88	21.88	21.88	21.88
Gross Dep.	3.16	5.85	8.16	10.12	11.80
<b>Net Fixed Assets</b>	<b>18.72</b>	<b>16.03</b>	<b>13.72</b>	<b>11.76</b>	<b>10.08</b>
<b>Current Assets</b>					
Sundry Debtors	5.61	6.73	7.85	9.06	10.38
Stock in Hand	1.54	1.79	2.07	2.37	2.70
Cash and Bank	1.55	1.77	1.92	2.15	2.62
<b>TOTAL :</b>	<b>27.42</b>	<b>26.32</b>	<b>25.56</b>	<b>25.34</b>	<b>25.77</b>

**4.18. CASH FLOW STATEMENT**

<b>PROJECTED CASH FLOW STATEMENT</b>					<b>(in Lacs)</b>
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
<b><u>SOURCES OF FUND</u></b>					
Own Margin	2.77				
Net Profit	1.84	4.26	7.16	10.28	13.36
Depriciation & Exp. W/off	3.16	2.70	2.30	1.97	1.68
Increase in Cash Credit	5.34	-	-	-	-
Increase In Term Loan	12.03	-	-	-	-
Increase in Creditors	1.21	0.22	0.23	0.26	0.28
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	7.66				
<b>TOTAL :</b>	<b>34.41</b>	<b>7.27</b>	<b>9.79</b>	<b>12.63</b>	<b>15.47</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	21.88				
Increase in Stock	1.54	0.25	0.28	0.30	0.33
Increase in Debtors	5.61	1.13	1.12	1.21	1.32
Repayment of Term Loan	1.34	2.67	2.67	2.67	2.67
Drawings	2.50	3.00	5.00	7.00	8.50
Taxation	-	-	0.57	1.21	2.17
<b>TOTAL :</b>	<b>32.86</b>	<b>7.05</b>	<b>9.64</b>	<b>12.40</b>	<b>15.00</b>
Opening Cash & Bank Balance	-	1.55	1.77	1.92	2.15
Add : Surplus	1.55	0.22	0.16	0.22	0.47
Closing Cash & Bank Balance	<b>1.55</b>	<b>1.77</b>	<b>1.92</b>	<b>2.15</b>	<b>2.62</b>



**4.19. DEBT SERVICE COVERAGE RATIO**

<b><u>CALCULATION OF D.S.C.R</u></b>					
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
CASH ACCRUALS	5.00	6.95	8.89	11.04	12.87
Interest on Term Loan	1.18	1.04	0.75	0.45	0.16
<b>Total</b>	<b>6.18</b>	<b>7.99</b>	<b>9.63</b>	<b>11.49</b>	<b>13.03</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	1.34	2.67	2.67	2.67	2.67
Interest on Term Loan	1.18	1.04	0.75	0.45	0.16
<b>Total</b>	<b>2.52</b>	<b>3.72</b>	<b>3.42</b>	<b>3.13</b>	<b>2.83</b>
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.45</b>	<b>2.15</b>	<b>2.82</b>	<b>3.67</b>	<b>4.60</b>
<b>AVERAGE D.S.C.R.</b>	<b>3.14</b>				