



## **DETAILED PROJECT REPORT**

### **SESAME SEED 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	:	Sesame Seed Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	342000 Kg/annum (30,35,40,45&50% capacity utilization in 1 <sup>st</sup> to 5 <sup>th</sup> Year respectively)
4. Raw material	:	Field Harvested Sesame seeds
5. Major product outputs	:	Sesame seeds
6. Total project cost	:	Rs. 25.30 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 16.20 Lakh
• Miscellaneous Fixed Assets	:	Rs. 3.50 Lakh
• Working capital	:	Rs. 5.60 Lakh
7. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 6.90 Lakh
• Promoter's contribution (min10%)	:	Rs. 2.52 Lakh
• Term loan	:	Rs.10.84 Lakh
• Working Capital Requirement	:	Rs. 5.04 Lakh
8. Profit after Depreciation, Interest & Tax		
• 1 <sup>st</sup> year	:	Rs. 1.53 Lakh
• 2 <sup>nd</sup> year	:	Rs. 4.89 Lakh
• 3 <sup>rd</sup> year	:	Rs. 7.99 Lakh
• 4 <sup>th</sup> year	:	Rs. 11.66Lakh
• 5 <sup>th</sup> year	:	Rs. 15.39 Lakh
9. Average DSCR	:	Rs. 3.98
10. Term loan repayment	:	5 Years with 6 months grace period

## **2. ABOUT THE PRODUCT**

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

Sesame (*Sesamum indicum* L.) is India's oldest indigenous oilseed crop and has been cultivated for the longest time in India. In Hindi sesame or gingelly is known as Til. The crop is grown in almost all parts of the country. West Bengal, Madhya Pradesh, Rajasthan, Uttar Pradesh, Gujarat, Andhra Pradesh, and Telangana account for more than 85% of sesame output. India is the world's leading producer, with 19.47 million hectares area and 8.66 million tonnes produced. India's average sesame yield (413 kg/ha) is low as compared to other countries (535 kg/ha). Improved sesame varieties and agro-production technologies capable of rising sesame productivity are now being established for various agro-ecological situations in the region. In irrigated conditions, a well-managed sesame crop can yield 1200 - 1500 kg/ha, and in rain fed conditions, 800 - 1000 kg/ha.

Sesame is Produces primarily for its edible seeds and oil, with 65 percent of the seeds used for oil extraction and 35 percent for human consumption. Sesame seeds have a high oil content and a pleasant nutty taste when cooked. They are highly valued in the bakery, candy industry, and other food specialties for these purposes.

Two distinct types of seed are recognized, the white and the black. There are also intermediate coloured varieties varying from red to rose or from brown or grey.

## **2.2. MARKET POTENTIAL:**

Sesame seeds are one of the most common and nutritious seeds grown primarily in Asia and the Pacific. India is well-known in the Asia Pacific region as a large-scale producer and exporter of sesame seeds. The outer husk has been extracted from sesame seeds, giving them a tiny flat creamy white look (hulled). Sesame seeds are used to make cooking oils that are used in a number of foods. They are also used in the baking industry for baked treats and bun decoration. Sesamin, sesaminol, sesamolin, and sesaminol glucosides, which are important ingredients for better health, are found in organic sesame seeds. Sesame seed oil is used as a preservative in a variety of food items to help them last longer. Organic sesame seeds are mainly used in confectionery in Western countries. Organic sesame seed oil is processed and widely used in cosmetics around the world.

Colour, seed shape, application, and area are all used to segment the global organic sesame seed industry. The sesame seed market is divided into three categories based on colour: white, black, and brown sesame seed. Since white sesame seeds are widely used in Asian countries, the organic sesame seed market in the Asia Pacific region is expected to develop rapidly.

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

Sesame seeds are the seed that is obtained from farmer fields that are separated and cleaned by winnowing to remove chaff, dust, and dirt as possible. The moisture content of the seeds should be 9%.

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

#### **Raw Material Procurement:**

Raw materials should be received & stored in hygienic condition. The quality of the raw material should be checked carefully. Raw materials are stored in ambient temperature for further processing.

#### **Vibratory pre- cleaning:**

Vibratory pre-cleaning is the first step in the process of removing large and small impurities from farm produce. Pre-cleaning is a cleaning operation that removes impurities such as stones, leaves, sticks, sand, fine dust, and other contaminants before silo storage.

#### **Magnetic separation:**

The Sesame seeds first pass by a magnetic separator that removes ferrous metal particles. It is also necessary to ensure that no metal pieces are in the finished product.

#### **Aspirator:**

Air currents act as a vacuum to remove dust and lighter impurities.

#### **De-stoning:**

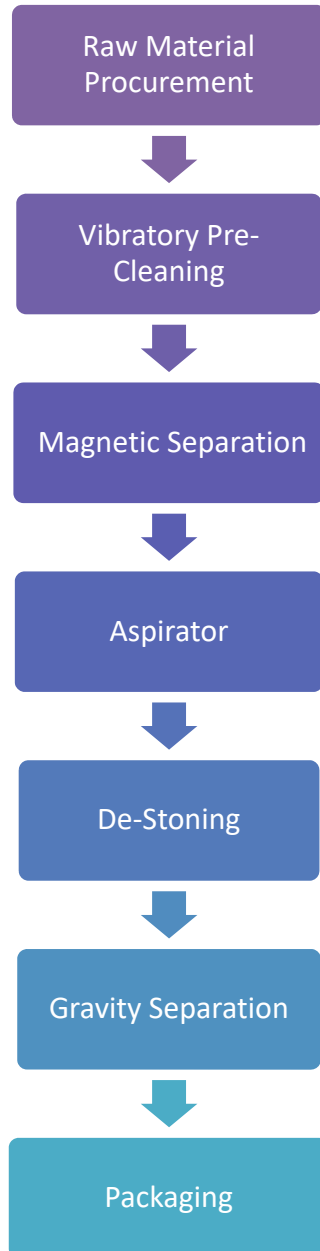
The aim of this process is that removes stones and other particles impurities from the Sesame seed.

#### **Gravity separation**

The gravity separator separates products of same size but with difference in specific weight.

### **Weighing Packaging**

The packaging is done in a simple manner: the Sesame seed are fed into the packaging machine's holding tank, which then weighs and fills the Sesame seed into the sacs. It simply fills the sacs to the desired weight and sews the other end.



## **4. ECONOMICS OF THE PROJECT**

### **4.1. BASIS & PRESUMPTIONS**

1. Production Capacity of Sesame Seed is 150 kg per hr. First year, Capacity has been taken @ 30%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 7 days and Finished goods Closing Stock has been taken for 7 days.
4. Credit period to Sundry Debtors has been given for 10 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 14 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.



## 4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

<b>COMPUTATION OF PRODUCTION OF SESAME SEEDS</b>		
<b>Items to be Manufactured</b>		
Sesame Seeds		
Machine capacity Per hour	150	Kg
Total working Hours	8	
Machine capacity Per Day	1,200	Kg
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	5%	
Raw material requirement	360000	Kg
Final Output per annum after wastage	342000	Kg
Final Product to be packed in 1 kg Packet		
Number of Packets per annum	342000	1 Kg Packet

<b>Production of Sesame Seeds</b>		
<b>Production</b>	<b>Capacity</b>	<b>KG</b>
1st year	30%	1,02,600
2nd year	35%	1,19,700
3rd year	40%	1,36,800
4th year	45%	1,53,900
5th year	50%	1,71,000

<b>Raw Material Cost</b>			
<b>Year</b>	<b>Capacity Utilisation</b>	<b>Rate (per Kg)</b>	<b>Amount (Rs. in lacs)</b>
1st year	30%	55.00	59.40
2nd year	35%	58.00	73.08
3rd year	40%	61.00	87.84
4th year	45%	64.00	103.68
5th year	50%	67.00	120.60






<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	-	2,394	2,793	3,192	3,591
Production	1,02,600	1,19,700	1,36,800	1,53,900	1,71,000
Less : Closing Stock	2,394	2,793	3,192	3,591	3,990
<b>Net Sale</b>	<b>1,00,206</b>	<b>1,19,301</b>	<b>1,36,401</b>	<b>1,53,501</b>	<b>1,70,601</b>
Sale price per packet	105.00	110.00	116.00	122.00	128.00
<b>Sales (in Lacs)</b>	<b>105.22</b>	<b>131.23</b>	<b>158.23</b>	<b>187.27</b>	<b>218.37</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
Vibrating Pre-Cleaner	It consists of a vibrating sieve that is powered by an exciter, which is powered by an appropriate motor, and it is used to remove the majority of dirt and large impurities from a given grain.	
Aspirator	It's a more fine-tuned separator designed to remove finer impurities like remaining dirt, similar sized impurities, leaves etc.	
De-stoner	It's a machine which is used to remove stones from the given grain, widely used in various grain mills in cleaning section.	
Magnetic Separator	It's a type of separator which is used to magnetic impurities from given seed using powerful electromagnets, used in wide range of industries for separation.	

<p>Gravity separator</p>	<p>The gravity separator is used to separate any type of kernel or granular product that is nearly identical in size but differs in weight.</p>	
<p>Packaging Machine</p>	<p>This machine is used to pack the processed sesame seed for market sale.</p>	
<p>Unloading Bins</p>	<p>These are large bins designed for unloading of grains &amp; similar product; they are equipped with large rod mess to prevent big impurities from entering system.</p>	
<p>Belt conveyers</p>	<p>Belt conveyers are most commonly used in transportation of bulk materials</p>	
<p>Silos</p>	<p>This Equipment are class of storage Equipment which are specifically designed for dry grain raw material of small granule composition. Usually used to store grains but can also be used to store cement &amp; aggregate.</p>	

Bucket Elevator	A bucket lift is also a grain leg and is a device for vertical transport, often grain materials.	
Material handling and other Equipment's	These Equipment's are used for material handling. Other equipment's like water pumps, weighing machine, etc are also used.	

Machine	Unit	Rate	Price
Vibrating Pre-Cleaner	1	125000	125000
Aspirator	1	150000	150000
De-stoner	1	100000	100000
Magnetic Separator	1	200000	200000
Gravity separator	1	165000	165000
Packaging machine	1	380000	380000
Material handling and other equipment's (Bins, trolley, silos, weighing machine, bucket elevator, belt conveyors, etc.)	-	500000	500000

**Note:** Total Machinery cost shall be Rs 16.20 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	16.20
Miscellaneous Assets	3.50
Working capital	5.60
<b>Total</b>	<b>25.30</b>

#### 4.7. MEANS OF FINANCE

<b>MEANS OF FINANCE</b>	
<b>PARTICULARS</b>	<b>AMOUNT</b>
Own Contribution (min 10%)	2.52
Subsidy @35%(Max. Rs 10 Lac)	6.90
Term Loan @ 55%	10.84
Working Capital (Bank Finance)	5.04
<b>Total</b>	<b>25.30</b>

**4.8. TERM LOAN:** Term loan of Rs. 10.84 Lakh is required for project cost of Rs. 25.30 Lakh

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

REPAYMENT SCHEDULE OF TERM LOAN							
						Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
<b>1st</b>	Opening Balance						
	1st month	-	10.84	10.84	-	-	10.84
	2nd month	10.84	-	10.84	0.10	-	10.84
	3rd month	10.84	-	10.84	0.10	-	10.84
	4th month	10.84	-	10.84	0.10	-	10.84
	5th month	10.84	-	10.84	0.10	-	10.84
	6th month	10.84	-	10.84	0.10	-	10.84
	7th month	10.84	-	10.84	0.10	0.20	10.63
	8th month	10.63	-	10.63	0.10	0.20	10.43
	9th month	10.43	-	10.43	0.10	0.20	10.23
	10th month	10.23	-	10.23	0.09	0.20	10.03
	11th month	10.03	-	10.03	0.09	0.20	9.83
	12th month	9.83	-	9.83	0.09	0.20	9.63
					1.06	1.20	
<b>2nd</b>	Opening Balance						
	1st month	9.63	-	9.63	0.09	0.20	9.43
	2nd month	9.43	-	9.43	0.09	0.20	9.23
	3rd month	9.23	-	9.23	0.08	0.20	9.03

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4th month	9.03	-	9.03	0.08	0.20	8.83
5th month	8.83	-	8.83	0.08	0.20	8.63
6th month	8.63	-	8.63	0.08	0.20	8.43
7th month	8.43	-	8.43	0.08	0.20	8.23
8th month	8.23	-	8.23	0.08	0.20	8.03
9th month	8.03	-	8.03	0.07	0.20	7.83
10th month	7.83	-	7.83	0.07	0.20	7.62
11th month	7.62	-	7.62	0.07	0.20	7.42
12th month	7.42	-	7.42	0.07	0.20	7.22
				<b>0.94</b>	<b>2.41</b>	
<b>3rd</b>	<b>Opening Balance</b>					
1st month	7.22	-	7.22	0.07	0.20	7.02
2nd month	7.02	-	7.02	0.06	0.20	6.82
3rd month	6.82	-	6.82	0.06	0.20	6.62
4th month	6.62	-	6.62	0.06	0.20	6.42
5th month	6.42	-	6.42	0.06	0.20	6.22
6th month	6.22	-	6.22	0.06	0.20	6.02
7th month	6.02	-	6.02	0.06	0.20	5.82
8th month	5.82	-	5.82	0.05	0.20	5.62
9th month	5.62	-	5.62	0.05	0.20	5.42
10th month	5.42	-	5.42	0.05	0.20	5.22
11th month	5.22	-	5.22	0.05	0.20	5.02
12th month	5.02	-	5.02	0.05	0.20	4.82
				<b>0.67</b>	<b>2.41</b>	



PM FME- Detailed Project Report of Sesame Seed Unit

<b>4th</b>	Opening Balance						
	1st month	4.82	-	4.82	0.04	0.20	4.61
	2nd month	4.61	-	4.61	0.04	0.20	4.41
	3rd month	4.41	-	4.41	0.04	0.20	4.21
	4th month	4.21	-	4.21	0.04	0.20	4.01
	5th month	4.01	-	4.01	0.04	0.20	3.81
	6th month	3.81	-	3.81	0.03	0.20	3.61
	7th month	3.61	-	3.61	0.03	0.20	3.41
	8th month	3.41	-	3.41	0.03	0.20	3.21
	9th month	3.21	-	3.21	0.03	0.20	3.01
	10th month	3.01	-	3.01	0.03	0.20	2.81
	11th month	2.81	-	2.81	0.03	0.20	2.61
	12th month	2.61	-	2.61	0.02	0.20	2.41
					<b>0.41</b>	<b>2.41</b>	
<b>5th</b>	Opening Balance						
	1st month	2.41	-	2.41	0.02	0.20	2.21
	2nd month	2.21	-	2.21	0.02	0.20	2.01
	3rd month	2.01	-	2.01	0.02	0.20	1.81
	4th month	1.81	-	1.81	0.02	0.20	1.61
	5th month	1.61	-	1.61	0.01	0.20	1.40
	6th month	1.40	-	1.40	0.01	0.20	1.20
	7th month	1.20	-	1.20	0.01	0.20	1.00
	8th month	1.00	-	1.00	0.01	0.20	0.80
	9th month	0.80	-	0.80	0.01	0.20	0.60
	10th month	0.60	-		0.01	0.20	0.40

			0.60			
11th month	0.40	-	0.40	0.00	0.20	0.20
12th month	0.20	-	0.20	0.00	0.20	-
			<b>0.14</b>	<b>2.41</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><u>Finished Goods</u></b>					
	2.10	2.52	2.99	3.49	4.02
<b><u>Raw Material</u></b>					
	1.39	1.71	2.05	2.42	2.81
<b>Closing Stock</b>	<b>3.48</b>	<b>4.23</b>	<b>5.04</b>	<b>5.91</b>	<b>6.84</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	3.48				
Less : Creditors	1.39				
<b>Paid stock</b>	<b>2.10</b>	<b>10%</b>	<b>0.21</b>	<b>90%</b>	<b>1.89</b>
<b>Sundry Debtors</b>	<b>3.51</b>	<b>10%</b>	<b>0.35</b>	<b>90%</b>	<b>3.16</b>
	<b>5.60</b>		<b>0.56</b>		<b>5.04</b>
<b>MPBF</b>					<b>5.04</b>
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>					<b>5.04</b>
<b>Working Capital Margin</b>					<b>0.56</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	15,000	3	45,000
Supervisor	18,000	1	18,000
Skilled (in thousand rupees)	12,000	3	36,000
Unskilled (in thousand rupees)	8,000	4	32,000
<b>Total salary per month</b>			<b>1,31,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>15.72</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	6,500	2	13,000
Manager	18,000	1	18,000
Accountant	15,000	1	15,000
<b>Total salary per month</b>			<b>46,000</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>5.52</b>

## 4.12 POWER REQUIREMENT

<b>Utility Charges (per month)</b>		
<b>Particulars</b>	<b>value</b>	<b>Description</b>
Power connection required	14	KWH
consumption per day	112	units
Consumption per month	2,800	units
Rate per Unit	10	Rs.
power Bill per month	28,000	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	16.20	3.50	19.70
Total	16.20	3.50	19.70
Less : Depreciation	2.43	0.35	2.78
<b>WDV at end of Year</b>	<b>13.77</b>	<b>3.15</b>	<b>16.92</b>
Additions During The Year	-	-	-
Total	13.77	3.15	16.92
Less : Depreciation	2.07	0.32	2.38
<b>WDV at end of Year</b>	<b>11.70</b>	<b>2.84</b>	<b>14.54</b>
Additions During The Year	-	-	-
Total	11.70	2.84	14.54
Less : Depreciation	1.76	0.28	2.04
<b>WDV at end of Year</b>	<b>9.95</b>	<b>2.55</b>	<b>12.50</b>
Additions During The Year	-	-	-
Total	9.95	2.55	12.50
Less : Depreciation	1.49	0.26	1.75
<b>WDV at end of Year</b>	<b>8.46</b>	<b>2.30</b>	<b>10.75</b>
Additions During The Year	-	-	-
Total	8.46	2.30	10.75
Less : Depreciation	1.27	0.23	1.50
<b>WDV at end of Year</b>	<b>7.19</b>	<b>2.07</b>	<b>9.25</b>

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

#### 4.15. PROJECTIONS OF PROFITABILITY ANALYSIS

<b><u>PROJECTED PROFITABILITY STATEMENT</u></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>30%</b>	<b>35%</b>	<b>40%</b>	<b>45%</b>	<b>50%</b>
<b><u>SALES</u></b>					
<b>Gross Sale</b>					
Sesame Seeds	105.22	131.23	158.23	187.27	218.37
<b>Total</b>	<b>105.22</b>	<b>131.23</b>	<b>158.23</b>	<b>187.27</b>	<b>218.37</b>
<b><u>COST OF SALES</u></b>					
Raw Material Consumed	59.40	73.08	87.84	103.68	120.60
Electricity Expenses	3.36	3.86	4.44	5.11	5.62
Depreciation	2.78	2.38	2.04	1.75	1.50
Wages & labour	15.72	17.92	20.61	23.70	27.26
Repair & maintenance	3.16	3.94	4.75	5.62	6.55
Packaging	5.47	6.82	8.39	9.74	10.92
<b>Cost of Production</b>	<b>89.89</b>	<b>108.01</b>	<b>128.06</b>	<b>149.59</b>	<b>172.44</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>2.10</b>	<b>2.52</b>	<b>2.99</b>	<b>3.49</b>
<b>Less: Closing Stock /WIP</b>	<b>2.10</b>	<b>2.52</b>	<b>2.99</b>	<b>3.49</b>	<b>4.02</b>
Cost of Sales	87.79	107.58	127.60	149.09	171.91
<b>GROSS PROFIT</b>	<b>17.43</b>	<b>23.65</b>	<b>30.63</b>	<b>38.18</b>	<b>46.46</b>
	<b>16.56%</b>	<b>18.02%</b>	<b>19.36%</b>	<b>20.39%</b>	<b>21.28%</b>
Salary to Staff	5.52	6.62	8.21	9.04	10.12
Interest on Term Loan	1.06	0.94	0.67	0.41	0.14
Interest on working Capital	0.55	0.55	0.55	0.55	0.55
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	5.16	6.55	7.90	9.34	10.90
<b>TOTAL</b>	<b>15.90</b>	<b>18.63</b>	<b>21.69</b>	<b>24.13</b>	<b>26.99</b>
NET PROFIT	1.53	5.02	8.94	14.04	19.47
	<b>1.45%</b>	<b>3.83%</b>	<b>5.65%</b>	<b>7.50%</b>	<b>8.92%</b>
Taxation	-	0.13	0.94	2.39	4.08
<b>PROFIT (After Tax)</b>	<b>1.53</b>	<b>4.89</b>	<b>7.99</b>	<b>11.66</b>	<b>15.39</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>	105.22	131.23	158.23	187.27	218.37
Less : Op. WIP Goods	-	2.10	2.52	2.99	3.49
Add : Cl. WIP Goods	2.10	2.52	2.99	3.49	4.02
<b>Total Sales</b>	<b>107.31</b>	<b>131.65</b>	<b>158.69</b>	<b>187.77</b>	<b>218.90</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material Consumed	59.40	73.08	87.84	103.68	120.60
Electricity Exp/Coal Consumption at 85%	2.86	3.28	3.78	4.34	4.78
Wages & Salary at 60%	12.74	14.73	17.29	19.64	22.42
Selling & administrative Expenses 80%	4.12	5.24	6.32	7.48	8.72
Interest on working Capital	0.554854	0.554854	0.554854	0.554854	0.554854
Repair & maintenance	3.16	3.94	4.75	5.62	6.55
Packaging	5.47	6.82	8.39	9.74	10.92
<b>Total Variable &amp; Semi Variable Exp</b>	<b>88.31</b>	<b>107.65</b>	<b>128.91</b>	<b>151.05</b>	<b>174.54</b>
<b>Contribution</b>	<b>19.01</b>	<b>24.01</b>	<b>29.78</b>	<b>36.72</b>	<b>44.36</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Electricity Exp/Coal Consumption at 15%	0.50	0.58	0.67	0.77	0.84
Wages & Salary at 40%	8.50	9.82	11.53	13.09	14.95
Interest on Term Loan	1.06	0.94	0.67	0.41	0.14
Depreciation	2.78	2.38	2.04	1.75	1.50
Selling & administrative Expenses 20%	1.03	1.31	1.58	1.87	2.18
Rent	3.60	3.96	4.36	4.79	5.27
<b>Total Fixed Expenses</b>	<b>17.48</b>	<b>18.99</b>	<b>20.84</b>	<b>22.68</b>	<b>24.88</b>
<b>Capacity Utilization</b>	<b>30%</b>	<b>35%</b>	<b>40%</b>	<b>45%</b>	<b>50%</b>
<b>OPERATING PROFIT</b>	<b>1.53</b>	<b>5.02</b>	<b>8.94</b>	<b>14.04</b>	<b>19.47</b>
<b>BREAK EVEN POINT</b>	<b>28%</b>	<b>28%</b>	<b>28%</b>	<b>28%</b>	<b>28%</b>
<b>BREAK EVEN SALES</b>	<b>98.67</b>	<b>104.11</b>	<b>111.07</b>	<b>115.96</b>	<b>122.80</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		7.95	9.34	11.33	13.99
Add:- Own Capital	2.52				
Add:- Retained Profit	1.53	4.89	7.99	11.66	15.39
Less:- Drawings	3.00	3.50	6.00	9.00	13.00
Subsidy/grant	6.90				
Closing Balance	7.95	9.34	11.33	13.99	16.38
Term Loan	9.63	7.22	4.82	2.41	-
Working Capital Limit	5.04	5.04	5.04	5.04	5.04
Sundry Creditors	1.39	1.71	2.05	2.42	2.81
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
<b>TOTAL :</b>	<b>24.41</b>	<b>23.81</b>	<b>23.84</b>	<b>24.58</b>	<b>25.10</b>
<b><u>Assets</u></b>					
<b>Fixed Assets ( Gross)</b>	19.70	19.70	19.70	19.70	19.70
Gross Dep.	2.78	5.16	7.20	8.95	10.45
<b>Net Fixed Assets</b>	<b>16.92</b>	<b>14.54</b>	<b>12.50</b>	<b>10.75</b>	<b>9.25</b>
<b>Current Assets</b>					
Sundry Debtors	3.51	4.37	5.27	6.24	7.28
Stock in Hand	3.48	4.23	5.04	5.91	6.84
Cash and Bank	0.50	0.67	1.03	1.67	1.73
<b>TOTAL :</b>	<b>24.41</b>	<b>23.81</b>	<b>23.84</b>	<b>24.58</b>	<b>25.10</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	2.52				
Net Profit	1.53	5.02	8.94	14.04	19.47
Depriciation & Exp. W/off	2.78	2.38	2.04	1.75	1.50
Increase in Cash Credit	5.04	-	-	-	-
Increase In Term Loan	10.84	-	-	-	-
Increase in Creditors	1.39	0.32	0.34	0.37	0.39
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	6.90				
<b>TOTAL :</b>	<b>31.39</b>	<b>7.82</b>	<b>11.42</b>	<b>16.28</b>	<b>21.51</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	19.70				
Increase in Stock	3.48	0.74	0.81	0.87	0.93
Increase in Debtors	3.51	0.87	0.90	0.97	1.04
Repayment of Term Loan	1.20	2.41	2.41	2.41	2.41
Drawings	3.00	3.50	6.00	9.00	13.00
Taxation	-	0.13	0.94	2.39	4.08
<b>TOTAL :</b>	<b>30.89</b>	<b>7.65</b>	<b>11.06</b>	<b>15.63</b>	<b>21.45</b>
Opening Cash & Bank Balance	-	0.50	0.67	1.03	1.67
Add : Surplus	0.50	0.18	0.36	0.65	0.06
Closing Cash & Bank Balance	<b>0.50</b>	<b>0.67</b>	<b>1.03</b>	<b>1.67</b>	<b>1.73</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	4.31	7.27	10.03	13.41	16.89
Interest on Term Loan	1.06	0.94	0.67	0.41	0.14
<b>Total</b>	<b>5.38</b>	<b>8.21</b>	<b>10.70</b>	<b>13.81</b>	<b>17.03</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	1.20	2.41	2.41	2.41	2.41
Interest on Term Loan	1.06	0.94	0.67	0.41	0.14
<b>Total</b>	<b>2.27</b>	<b>3.35</b>	<b>3.08</b>	<b>2.82</b>	<b>2.55</b>
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.37</b>	<b>2.45</b>	<b>3.47</b>	<b>4.91</b>	<b>6.68</b>
<b>AVERAGE D.S.C.R.</b>	<b>3.98</b>				