



DETAILED PROJECT REPORT
PALM OIL PROCESSING UNIT
UNDER PMFME SCHEME



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Ministry of Food Processing Industries

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1. PROJECT SUMMARY

1. Name of the proposed project	:	Palm Oil Processing Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	360000 Kg/annum (60,65,70,75&80% capacity utilization in 1 st to 5 th Year respectively)
4. Raw material	:	Oil Palm bunch
5. Major product outputs	:	Palm Oil
6. Total project cost	:	Rs. 38.79 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 26.26 Lakh
• Miscellaneous Fixed Assets	:	Rs. 2.00 Lakh
• Working capital	:	Rs. 10.53 Lakh
7. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 9.89 Lakh
• Promoter's contribution (min10%)	:	Rs. 3.87 Lakh
• Term loan	:	Rs. 15.54 Lakh
• Working Capital Requirement	:	Rs. 9.48 Lakh
8. Profit after Depreciation, Interest & Tax		
• 1 st year	:	Rs. 2.17 Lakh
• 2 nd year	:	Rs. 3.90 Lakh
• 3 rd year	:	Rs. 5.09 Lakh
• 4 th year	:	Rs. 7.34 Lakh
• 5 th year	:	Rs. 9.62 Lakh
9. Average DSCR	:	Rs. 2.39
10. Term loan repayment	:	5 Years with 6 months grace period

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

The most widely used vegetable oil in the world is palm oil. Palm oil is made from the pulp of the oil palm tree's fruit (*Elaeis Guineensis*). Because of its high beta-carotene content, this tropical fruit has a reddish color. It's the size of a large olive. Palm kernel oil is made from the fruit's single seed or kernel. The oil content of each palm fruit is approximately 30-35 percent. The fatty acid composition of palm fruit oil and palm kernel oil differs significantly, but they share the same botanical origin. Palm oil and palm kernel oil represent 32 per cent of the global vegetable oil production.

Palm oil can be used as crude oil or as refined oil. Only one-quarter of the palm oil and palm kernel oil worldwide is used as crude oil. Crude palm oil is commonly used for domestic cooking in Southeast Asia, Africa, and parts of Brazil. Many food products, such as margarine, confectionery, chocolate, ice cream, and bakery products, use refined palm oil as an inexpensive ingredient. It is also present in non-food products like soap, candles, and cosmetics.

2.2. MARKET POTENTIAL:

Palm Oil vegetable edible oil extracted from the mesocarp of an oil palm fruit. In 2019, the size of the Palm Oil market is projected at \$81.9 billion and in the 2020-2025 forecast periods at the CAGR by 6.0%. Two types of oil can be produced, crude palm oil comes from squeezing the fleshy fruit, and palm kernel oil which comes from crushing the kernel, or the stone in the middle of the fruit. It is free of cholesterol and easy to digest and high in carotenoids and vitamin A. Palm oil offers various health benefits that improve energy levels, prevent early aging, improve

eye vision, boost the immune system, and reduce the risk of cancer and heart diseases. Palm oil offers several benefits for your health. Consumer awareness of these health benefits is one of the key factors contributing to market growth. Moreover, the prosperous food industry drives the product demand, because it is widely used for frying and for the preparation of healthy food products. The food industry is an important component. Besides, palm oil is an effective alternative in the transport and energy industries to replace oil-based products readily. It is also used in power plants for energy production as a substitute for mineral oil. In addition, initiatives by governments in different countries like Denmark and other Western European nations, together with World Health Organization awareness campaigns to cut trans-fat consumption, are envisaged to boost the market growth. The global market for palm oil in 2021-2026 to show moderate growth.

2.3. RAW MATERIAL DESCRIPTION:

- Oil palm bunch: Fresh fruit arrives from the field as bunches or loose fruit.

3. PROCESS FLOW CHART

Harvesting

The fruit's oil content is very low at the early stages of fruit formation. The growth of oil is fast up to about 50% of the mesocarp weight as the fruit approaches maturity. In the mature fruit, however, the exocarp becomes soft and lipolytic enzymes are more easily attacked, especially when the fruit is removed from the bunch. Cutting the bunch from the tree and allowing it to fall to the ground by gravity is the harvesting process. Harvesting activities like Harvesting, transportation, and handling of bunches can cause fruit to be damaged, to prevent spoilage fruits

are processed as soon as possible after harvest, within 48 hours. Generally bunches are transported to processing unit in wooden baskets .

Bunch receiving:

Fresh fruit is delivered in bunches or loose form from the field. The quality of the bunches that arrive at the mill determines the quality standard of the products. Genetic, tree age, agronomic, environmental, harvesting technique, handling, and transport are all field factors that influence the composition and final quality of palm oil.

Sterilization of bunches

Sterilization or cooking means the use of high-temperature wet-heat treatment of loose fruit. Sterilization uses pressurized steam to destroy bacteria and thus oil-splitting enzymes and stop hydrolysis and autoxidation.

Threshing

The fresh fruit bunch consists of fruit embedded in spikelets growing on the main stem. After sterilization of the bunches of fruit the first process is to detach the fruit from the bunch, leaving the spikelets on the stem.

Digestion of the fruit

Digestion is the process of breaking down or rupturing the oil-bearing cells in the fruit to release the palm oil. A steam-heated cylindrical vessel with a central rotating shaft carrying a number of beaters arms is the most common digester used in palm oil industry, about 20 minutes, the fruit-lets will be stirred and steam will be continuously injected into the digester to maintain a temperature of 95-100°C. The aim of digestion to loosen the mesocarp from palm nut and break oil cells.

Extraction the palm oil

By applying mechanical pressure to the digested mash, the extraction stage aims to squeeze the oil out of a mixture of oil, moisture, fibre, and nut.

Clarification of oil

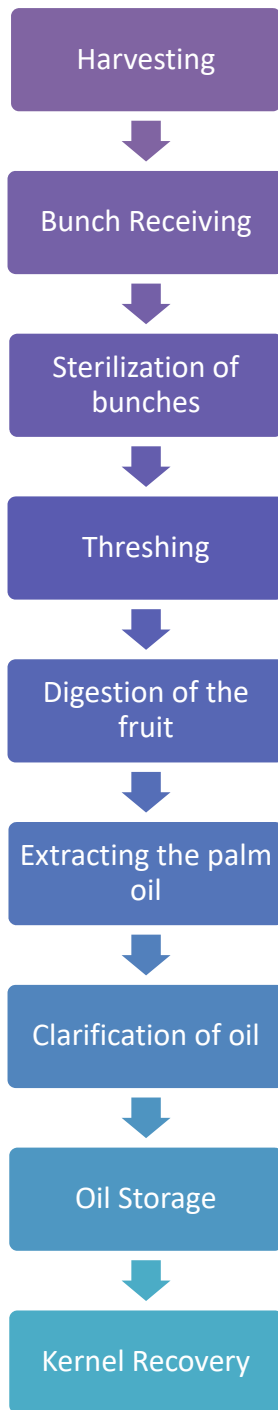
Clarification's main objective is to separate the oil from any entrained impurities. Palm oil, water, cell debris, fibrous material, and 'non-oily solids' are the impurities that come out of the press. The mixture is very thick (viscous) due to the non-oily materials. As a result, hot water is added to the press output mixture to thin it out. Water is added in a 3:1 ratio. To remove coarse fibre, the diluted mixture is filtered through a screen. The screened mixture is boiled for one or two hours before being allowed to settle by gravity in the large tank. The palm oil rising to the top because it is lighter than water. Decant the clear oil into a reception tank. There are still traces of water and dirt in this clarified oil. The moisture content of the oil must be reduced to 0.15 to 0.25 percent to avoid increasing (Free fatty acids) FFA through autocatalytic hydrolysis. Any remaining moisture is removed by reheating the decanted oil in a cooking pot and carefully skimming off the oil from any encrusted dirt.

Oil storage

Prior to being dispatched from the mill for further refining processes, the purified and dried oil is transferred to a tank for storage. Because the rate of oxidation of the oil increases with storage temperature, it's usually kept at 50°C using hot water or low-pressure steam-heating coils to avoid solidification and fractionation.

Kernel recovery

The press residue is consisting of a mixture of fibre and palm nuts. The sorted fibre is covered and allowed to heat up for two or three days using its own internal exothermic reactions. The fibre is then pressed in spindle presses to extract second-grade oil, which is commonly used in soap production. The nuts are separated from the fibre by hand or mechanically. Before packing, the kernels are dried in silos to a moisture content of about 7%. The nuts are usually dried before being sold to industries that process them into palm kernel oil.



4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Palm Oil is 500 Kg. per hr. First year, Capacity has been taken @ 60%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 10 days and Finished goods Closing Stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 7 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 22 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

<u>COMPUTATION OF PRODUCTION OF PALM OIL</u>		
Items to be Manufactured		
Palm Oil		
Machine capacity Per hour	500	Kg
Total working Hours	8	
Machine capacity Per Day	4,000	Kg
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	70%	
Raw material requirement	1200000	Kg
Final Output per annum after wastage	360000	Ltr
Final Product to be packed in 1 Ltr packet		
Number of Packets per annum	360000	1 Ltr packet

Production of Palm Oil		
Production	Capacity	Packets
1st year	60%	2,16,000
2nd year	65%	2,34,000
3rd year	70%	2,52,000
4th year	75%	2,70,000
5th year	80%	2,88,000




Raw Material Cost			
Year	Capacity Utilisation	Rate (per kg)	Amount (Rs. in lacs)
1st year	60%	16.00	115.20
2nd year	65%	17.00	132.60
3rd year	70%	18.00	151.20
4th year	75%	19.00	171.00
5th year	80%	20.00	192.00




COMPUTATION OF SALE					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	7,200	7,800	8,400	9,000
Production	2,16,000	2,34,000	2,52,000	2,70,000	2,88,000
Less : Closing Stock	7,200	7,800	8,400	9,000	9,600
Net Sale	2,08,800	2,33,400	2,51,400	2,69,400	2,87,400
Sale price per packet	85.00	89.00	93.00	98.00	103.00
Sales (in Lacs)	177.48	207.73	233.80	264.01	296.02

4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 3000-4000 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.
Pressurized vessel sterilizer	The objectives of this machine are sterilization of the fruit bunches for 90-120 minutes to eliminate the contamination, easily releasing fruit from bunches and fruit softening.	
Rotating Drum Thresher	The uses of this machine are to separate the fruit from bunches. Sterilized bunches are fed in this machine and the fruits are extracted from the bunch and exit through the holes.	
Mechanical Digester machine	The prime objective of these digester machines is to break down the oil-bearing cells in the fruits in order to release the palm oil.	
Screw press	The uses of this press are to extract oil from the mesocarp of digested oil palm fruit.	
Filter press machine	The filter press are used in liquid/solid separation.	

Jacketed heating vessels	The use of this vessel to boil the screened mixture is for one or two hours before being allowed to settle by gravity in the large tank.	
Oil clarification and storage Tank	These tanks are used for Clarification and storage of extracted oil, the mixture of oil, water, and non-solids are stored to allow the sludge to settle to the bottom.	
Material handling and other Equipment's	These Equipment's are used for material handling. Other equipment's like boiler, industrial pumps, testing equipment's, etc are also used.	

Machine	Unit	Rate	Price
Pressurized vessel sterilizer	1	600000	600000
Rotating Drum Thresher	1	478000	478000
Mechanical Digester machine	1	280000	280000
Screw press	1	225000	225000
Filter press machine	1	255000	255000
Jacketed heating vessels	1	198000	198000
Oil clarification and storage Tank	1	240000	240000

Material handling and other equipment's (Trolley, weighing machine, boiler, industrial pumps, etc.)	-	350000	350000
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Note: Total Machinery cost shall be Rs 26.26 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

COST OF PROJECT	
	(in Lacs)
PARTICULARS	Amount
Land & Building	Owned/Rented
Plant & Machinery	26.26
Miscellaneous Assets	2.00
Working capital	10.53
Total	38.79

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	3.87
Subsidy @35%(Max. Rs 10 Lac)	9.89
Term Loan @ 55%	15.54
Working Capital (Bank Finance)	9.48
Total	38.79

4.8. TERM LOAN: Term loan of Rs. 15.54 Lakh is required for project cost of Rs. 38.79 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	
1st	Opening Balance							
	1st month	-	15.54	15.54	-	-	15.54	
	2nd month	15.54	-	15.54	0.14	-	15.54	
	3rd month	15.54	-	15.54	0.14	-	15.54	
	4th month	15.54	-		0.14		15.54	

PM FME- Detailed Project Report of Palm Oil Processing Unit

			15.54				
5th month	15.54	-	15.54	0.14			15.54
6th month	15.54	-	15.54	0.14			15.54
7th month	15.54	-	15.54	0.14	0.29		15.26
8th month	15.26	-	15.26	0.14	0.29		14.97
9th month	14.97	-	14.97	0.14	0.29		14.68
10th month	14.68	-	14.68	0.13	0.29		14.39
11th month	14.39	-	14.39	0.13	0.29		14.10
12th month	14.10	-	14.10	0.13	0.29		13.82
				1.53	1.73		
2nd	Opening Balance						
1st month	13.82	-	13.82	0.13	0.29		13.53
2nd month	13.53	-	13.53	0.12	0.29		13.24
3rd month	13.24	-	13.24	0.12	0.29		12.95
4th month	12.95	-	12.95	0.12	0.29		12.66
5th month	12.66	-	12.66	0.12	0.29		12.38
6th month	12.38	-	12.38	0.11	0.29		12.09
7th month	12.09	-	12.09	0.11	0.29		11.80
8th month	11.80	-	11.80	0.11	0.29		11.51
9th month	11.51	-	11.51	0.11	0.29		11.23
10th month	11.23	-	11.23	0.10	0.29		10.94
11th month	10.94	-	10.94	0.10	0.29		10.65
12th month	10.65	-	10.65	0.10	0.29		10.36
				1.35	3.45		
3rd	Opening Balance						

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1st month	10.36	-	10.36	0.09	0.29	10.07
2nd month	10.07	-	10.07	0.09	0.29	9.79
3rd month	9.79	-	9.79	0.09	0.29	9.50
4th month	9.50	-	9.50	0.09	0.29	9.21
5th month	9.21	-	9.21	0.08	0.29	8.92
6th month	8.92	-	8.92	0.08	0.29	8.64
7th month	8.64	-	8.64	0.08	0.29	8.35
8th month	8.35	-	8.35	0.08	0.29	8.06
9th month	8.06	-	8.06	0.07	0.29	7.77
10th month	7.77	-	7.77	0.07	0.29	7.48
11th month	7.48	-	7.48	0.07	0.29	7.20
12th month	7.20	-	7.20	0.07	0.29	6.91
				0.97	3.45	
4th	Opening Balance					
1st month	6.91	-	6.91	0.06	0.29	6.62
2nd month	6.62	-	6.62	0.06	0.29	6.33
3rd month	6.33	-	6.33	0.06	0.29	6.04
4th month	6.04	-	6.04	0.06	0.29	5.76
5th month	5.76	-	5.76	0.05	0.29	5.47
6th month	5.47	-	5.47	0.05	0.29	5.18
7th month	5.18	-	5.18	0.05	0.29	4.89
8th month	4.89	-	4.89	0.04	0.29	4.61
9th month	4.61	-	4.61	0.04	0.29	4.32
10th month	4.32	-	4.32	0.04	0.29	4.03

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	11th month	4.03	-	4.03	0.04	0.29	3.74
	12th month	3.74	-	3.74	0.03	0.29	3.45
					0.59	3.45	
5th	Opening Balance						
	1st month	3.45	-	3.45	0.03	0.29	3.17
	2nd month	3.17	-	3.17	0.03	0.29	2.88
	3rd month	2.88	-	2.88	0.03	0.29	2.59
	4th month	2.59	-	2.59	0.02	0.29	2.30
	5th month	2.30	-	2.30	0.02	0.29	2.01
	6th month	2.01	-	2.01	0.02	0.29	1.73
	7th month	1.73	-	1.73	0.02	0.29	1.44
	8th month	1.44	-	1.44	0.01	0.29	1.15
	9th month	1.15	-	1.15	0.01	0.29	0.86
	10th month	0.86	-	0.86	0.01	0.29	0.58
	11th month	0.58	-	0.58	0.01	0.29	0.29
	12th month	0.29	-	0.29	0.00	0.29	-
					0.21	3.45	
	DOOR TO DOOR MORATORIUM PERIOD	60		MONTHS			
	REPAYMENT PERIOD	6		MONTHS			
		54		MONTHS			

4.10. WORKING CAPITAL CALCULATIONS

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	5.24	5.90	6.60	7.38	8.21
<u>Raw Material</u>					
	3.84	4.42	5.04	5.70	6.40
Closing Stock	9.08	10.32	11.64	13.08	14.61

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	9.08				
Less : Creditors	2.69				
Paid stock	6.39	10%	0.64	90%	5.75
Sundry Debtors	4.14	10%	0.41	90%	3.73
	10.53		1.05		9.48
MPBF					9.48
WORKING CAPITAL LIMIT DEMAND (from Bank)					9.48
Working Capital Margin					1.05

4.11. SALARY & WAGES

<u>BREAK UP OF LABOUR CHARGES</u>			
Particulars	Wages	No of	Total
	Rs. per Month	Employees	Salary
Plant Operator	16,000	3	48,000
Supervisor	20,000	1	20,000
Skilled (in thousand rupees)	15,000	3	45,000
Unskilled (in thousand rupees)	7,500	5	37,500
Total salary per month			1,50,500
Total annual labour charges	(in lacs)		18.06

<u>BREAK UP OF STAFF SALARY CHARGES</u>			
Particulars	Salary	No of	Total
	Rs. per Month	Employees	Salary
Administrative Staff	9,500	4	38,000
Manager	25,000	1	25,000
Accountant	20,000	2	40,000
Total salary per month			1,03,000
Total annual Staff charges	(in lacs)		12.36

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	value	Description
Power connection required	22	KWH
consumption per day	176	units
Consumption per month	4,400	units
Rate per Unit	10	Rs.
power Bill per month	44,000	Rs.

4.13. DEPRECIATION CALCULATION

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	Plant & Machinery	Miss. Assets	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	26.26	2.00	28.26
Total	26.26	2.00	28.26
Less : Depreciation	3.94	0.20	4.14
WDV at end of Year	22.32	1.80	24.12
Additions During The Year	-	-	-
Total	22.32	1.80	24.12
Less : Depreciation	3.35	0.18	3.53
WDV at end of Year	18.97	1.62	20.59
Additions During The Year	-	-	-
Total	18.97	1.62	20.59
Less : Depreciation	2.85	0.16	3.01
WDV at end of Year	16.13	1.46	17.58
Additions During The Year	-	-	-
Total	16.13	1.46	17.58
Less : Depreciation	2.42	0.15	2.56
WDV at end of Year	13.71	1.31	15.02
Additions During The Year	-	-	-
Total	13.71	1.31	15.02
Less : Depreciation	2.06	0.13	2.19
WDV at end of Year	11.65	1.18	12.83

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 4.0% of Gross Sale.

4.15. PROJECTIONS OF PROFITABILITY ANALYSIS:

<u>PROJECTED PROFITABILITY STATEMENT</u>					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	60%	65%	70%	75%	80%
<u>SALES</u>					
Gross Sale					
Palm Oil	177.48	207.73	233.80	264.01	296.02
Total	177.48	207.73	233.80	264.01	296.02
<u>COST OF SALES</u>					
Raw Material Consumed	115.20	132.60	151.20	171.00	192.00
Electricity Expenses	5.28	5.81	6.10	6.40	6.72
Depreciation	4.14	3.53	3.01	2.56	2.19
Wages & labour	18.06	18.96	20.10	21.71	23.12
Repair & maintenance	7.10	8.31	9.35	10.56	11.84
Packaging	7.45	7.89	8.18	9.24	10.36
Cost of Production	157.23	177.10	197.94	221.48	246.23
Add: Opening Stock /WIP	-	5.24	5.90	6.60	7.38
Less: Closing Stock /WIP	5.24	5.90	6.60	7.38	8.21
Cost of Sales	151.99	176.44	197.25	220.69	245.41
GROSS PROFIT	25.49	31.29	36.55	43.32	50.61
	14.36%	15.06%	15.63%	16.41%	17.10%
Salary to Staff	12.36	14.83	17.80	20.47	23.54
Interest on Term Loan	1.53	1.35	0.97	0.59	0.21
Interest on working Capital	1.04	1.04	1.04	1.04	1.04
Rent	3.60	4.25	4.76	5.71	6.39
selling & adm exp	4.79	5.92	6.71	7.39	8.29
TOTAL	23.32	27.39	31.27	35.20	39.47
NET PROFIT	2.17	3.90	5.28	8.12	11.14
	1.22%	1.88%	2.26%	3.08%	3.76%
Taxation	-	-	0.19	0.78	1.53
PROFIT (After Tax)	2.17	3.90	5.09	7.34	9.62

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	177.48	207.73	233.80	264.01	296.02
Less : Op. WIP Goods	-	5.24	5.90	6.60	7.38
Add : Cl. WIP Goods	5.24	5.90	6.60	7.38	8.21
Total Sales	182.72	208.39	234.50	264.80	296.85
Variable & Semi Variable Exp.					
Raw Material Consumed	115.20	132.60	151.20	171.00	192.00
Electricity Exp/Coal Consumption at 85%	4.49	4.94	5.18	5.44	5.71
Wages & Salary at 60%	18.25	20.28	22.74	25.31	27.99
Selling & administrative Expenses 80%	3.83	4.74	5.37	5.91	6.63
Interest on working Capital	1.042894	1.042894	1.042894	1.042894	1.042894
Repair & maintenance	7.10	8.31	9.35	10.56	11.84
Packaging	7.45	7.89	8.18	9.24	10.36
Total Variable & Semi Variable Exp	157.37	179.80	203.07	228.51	255.59
Contribution	25.35	28.59	31.43	36.29	41.26
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.79	0.87	0.91	0.96	1.01
Wages & Salary at 40%	12.17	13.52	15.16	16.87	18.66
Interest on Term Loan	1.53	1.35	0.97	0.59	0.21
Depreciation	4.14	3.53	3.01	2.56	2.19
Selling & administrative Expenses 20%	0.96	1.18	1.34	1.48	1.66
Rent	3.60	4.25	4.76	5.71	6.39
Total Fixed Expenses	23.19	24.70	26.15	28.17	30.12
Capacity Utilization	60%	65%	70%	75%	80%
OPERATING PROFIT	2.17	3.90	5.28	8.12	11.14
BREAK EVEN POINT	55%	56%	58%	58%	58%
BREAK EVEN SALES	167.11	179.98	195.09	205.55	216.67

4.17. PROJECTED BALANCE SHEET

PROJECTED BALANCE SHEET					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		13.43	14.32	15.42	17.76
Add:- Own Capital	3.87				
Add:- Retained Profit	2.17	3.90	5.09	7.34	9.62
Less:- Drawings	2.50	3.00	4.00	5.00	7.00
Subsidy/grant	9.89				
Closing Balance	13.43	14.32	15.42	17.76	20.38
Term Loan	13.82	10.36	6.91	3.45	-
Working Capital Limit	9.48	9.48	9.48	9.48	9.48
Sundry Creditors	2.69	3.09	3.53	3.99	4.48
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	39.81	37.76	35.93	35.40	35.20
<u>Assets</u>					
Fixed Assets (Gross)	28.26	28.26	28.26	28.26	28.26
Gross Dep.	4.14	7.67	10.68	13.24	15.43
Net Fixed Assets	24.12	20.59	17.58	15.02	12.83
Current Assets					
Sundry Debtors	4.14	4.85	5.46	6.16	6.91
Stock in Hand	9.08	10.32	11.64	13.08	14.61
Cash and Bank	2.47	2.00	1.26	1.14	0.85
TOTAL :	39.81	37.76	35.93	35.40	35.20

4.18. CASH FLOW STATEMENT

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	3.87				
Net Profit	2.17	3.90	5.28	8.12	11.14
Depriciation & Exp. W/off	4.14	3.53	3.01	2.56	2.19
Increase in Cash Credit	9.48	-	-	-	-
Increase In Term Loan	15.54	-	-	-	-
Increase in Creditors	2.69	0.41	0.43	0.46	0.49
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	9.89				
TOTAL :	48.18	7.93	8.82	11.27	13.97
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	28.26				
Increase in Stock	9.08	1.24	1.31	1.44	1.53
Increase in Debtors	4.14	0.71	0.61	0.70	0.75
Repayment of Term Loan	1.73	3.45	3.45	3.45	3.45
Drawings	2.50	3.00	4.00	5.00	7.00
Taxation	-	-	0.19	0.78	1.53
TOTAL :	45.71	8.40	9.57	11.38	14.25
Opening Cash & Bank Balance	-	2.47	2.00	1.26	1.14
Add : Surplus	2.47	-0.47	-0.74	-0.12	-0.29
Closing Cash & Bank Balance	2.47	2.00	1.26	1.14	0.85

4.19. DEBT SERVICE COVERAGE RATIO

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	6.31	7.43	8.10	9.91	11.80
Interest on Term Loan	1.53	1.35	0.97	0.59	0.21
Total	7.83	8.77	9.07	10.49	12.01
<u>REPAYMENT</u>					
Instalment of Term Loan	1.73	3.45	3.45	3.45	3.45
Interest on Term Loan	1.53	1.35	0.97	0.59	0.21
Total	3.25	4.80	4.42	4.04	3.66
DEBT SERVICE COVERAGE RATIO	2.41	1.83	2.05	2.60	3.28
AVERAGE D.S.C.R.	2.39				