



DETAILED PROJECT REPORT

MUSTARD OIL 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	:	Mustard Oil Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	180000 bottles/annum (40,45,50,55&60% capacity utilization in 1 st to 5 th Year respectively)
4. Raw material	:	Mustard Seed.
5. Major product outputs	:	Mustard Oil
6. Total project cost	:	Rs. 17.87 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 7.84 Lakh
• Miscellaneous Fixed Assets	:	Rs. 3.50 Lakh
• Working capital	:	Rs. 6.53 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 3.97 Lakh
• Promoter's contribution (min10%)	:	Rs. 1.78 Lakh
• Term loan	:	Rs. 6.24 Lakh
• Working Capital Requirement	:	Rs. 5.88 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1 st year	:	Rs. 1.66 Lakh
• 2 nd year	:	Rs. 3.50 Lakh
• 3 rd year	:	Rs. 5.65 Lakh
• 4 th year	:	Rs. 7.85Lakh
• 5 th year	:	Rs. 10.06 Lakh
11. Average DSCR	:	Rs. 4.49
12. Term loan repayment	:	5 Years with 6 months grace period

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

Mustard oil is made from pressing the seeds of a mustard plant to produce spicy oil. Mustard oil is popular in Eastern cooking, although some American chefs have begun experimenting with the oil, which has a heat and distinctive flavour to it. Mustard essential oil has been found to be a powerful antibacterial agent. Source found that mustard essential oil effectively killed off common and harmful bacteria such as salmonella, staph, listeria,

and even a certain type of yeast. It can also be used as an antifungal. Mustard oil contains a compound that could be useful for reducing inflammation. Mustard Oil uses are:

- As cooking Oil
- Treat Arthritis
- Soothe aches & Pains
- Relieves body pain

Benefits of Mustard Oil

1. Mustard essential oil has been found to be a powerful antibacterial agent. Source found that mustard essential oil effectively killed off common and harmful bacteria such as salmonella, staph, listeria, and even a certain type of yeast. It can also be used as an antifungal.
2. Mustard oil is rich in monounsaturated fatty acids. Researchers have consistently found that including monounsaturated fatty acids in the diet can reduce the risk of

cardiovascular disease.

3. Mustard oil contains a compound that could be useful for reducing inflammation: allyl isothiocyanate.

2.2. MARKET POTENTIAL:

On the record, production of mustard seeds, a winter crop cultivated in the northern States was very high as compared to last year. Rajasthan is the major producer contributing up to 47 per cent of the domestic production, followed by Madhya Pradesh (11.44 per cent), Haryana (12 per cent) and Uttar Pradesh (10.41 per cent).

Consumption of mustard oil has grown about 5 percent per year for the past 40 years and currently stands at approximately 2.3 million metric tons annually. Although consumption of mustard oil is typically more prevalent in rural areas, total consumption is usually higher in urban areas. Most mustard oil (around 90 percent) is used for cooking, and the rest is used for pickling and consumption as raw oil (sareson-ka-thal, “oil of mustard”) directly on foods.

2.3. RAW MATERIAL DESCRIPTION:

Mustard seeds are required as raw material for the production of Mustard oil. Mustard seeds are the small round seeds of various mustard plants. Mostly Black seeds are used for the production of mustard oil.

3. PROCESS FLOW CHART

Seeds Drying

Mustard seed drying is essential to reduce the moisture content from the seed. moisture in the seed could deteriorate the oil. Generally, seeds are dried in the sun.

Cleaning

The dried mustard seeds are then cleaned by removing the dirt and foreign particles from the seed in order to improve the oil quality of mustard.

Mustard Seeds Heating

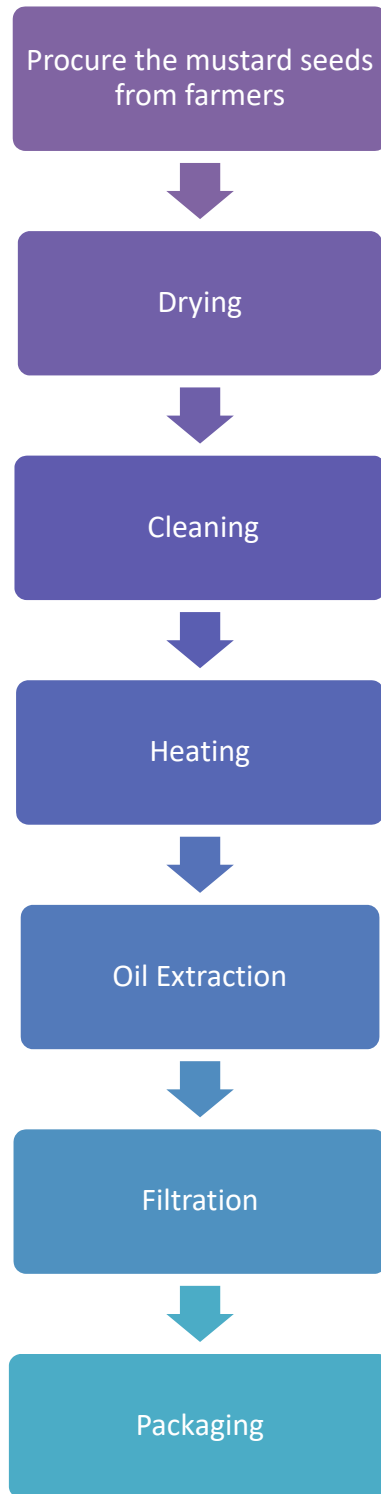
After the cleaning, the mustard seeds are then heated. the quantity of yield is increased by heating the seeds. The heating also improves the protein supply in the by-product seed cake that is used for animal feed processing.

Mustard Oil Extraction

Well-prepared mustard seeds are automatically fed into the mustard oil pressing machine where, depending on the volume to produce approximately 26 -30 % oil, the crushing and pressing are continued further to extract all the oil from the seed cake.

Mustard Oil filtration

The final step involves filtering the extracted oil to remove impurities from the oil before the oil is bottled and stored. After filtration, the mustard oil is ready for filling, sealing, and packaging, now the mustard oil is filled in different sizes of a bottle according to market demand and sent for the market.



4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity is 150 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 10 days and Finished goods Closing Stock has been taken for 7 days.
4. Credit period to Sundry Debtors has been given for 20 days.
5. Credit period by the Sundry Creditors has been provided for 10 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 12 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

COMPUTATION OF PRODUCTION OF MUSTARD OIL		
Items to be Manufactured		
Mustard Oil		
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	15%	
Raw material requirement	360000	Kg
By Product%	40%	
Final Output per annum after wastage & by-product	162000	Kg
Density of 1 Ltr.	0.9	kg
Final Product to be packed in 1 Ltr Bottle		
Number of Bottles per annum	1,80,000	1 Ltr. Bottle

Production of Mustard Oil		
Production	Capacity	Ltr
1st year	40%	72,000
2nd year	45%	81,000
3rd year	50%	90,000
4th year	55%	99,000
5th year	60%	1,08,000

Raw Material Cost			
Year	Capacity Utilisation	Rate (per Kg)	Amount (Rs. in lacs)
1st year	40%	30.00	43.20
2nd year	45%	32.00	51.84
3rd year	50%	34.00	61.20
4th year	55%	36.00	71.28
5th year	60%	38.00	82.08



COMPUTATION OF SALE					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	1,680	1,890	2,100	2,310
Production	72,000	81,000	90,000	99,000	1,08,000
Less : Closing Stock	1,680	1,890	2,100	2,310	2,520
Net Sale	70,320	80,790	89,790	98,790	1,07,790
Sale price per bottle	90.00	95.00	100.00	105.00	110.00
Sales (in Lacs)	63.29	76.75	89.79	103.73	118.57


COMPUTATION OF SALE OF BY-PRODUCT					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Production	57,600	64,800	72,000	79,200	86,400
Net Sale	57,600	64,800	72,000	79,200	86,400
Sale price per Kg	22.00	23.00	24.00	25.00	26.00
Sales (in Lacs)	12.67	14.90	17.28	19.80	22.46

4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 1500-2000 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.
Heavy duty Oil Expeller	Oil Expeller machine which is specially designed to be used for Edible oil plant. This machines can extract oil from the most of seeds/nuts. Moreover it can crush ground nut, linseeds, mustard seeds, palm kernels, seeds, castor, neem, sun flower seeds etc.	
Heavy duty round cooking/feeding kettle	It is used to cook the mustard seeds initially prior to oil extraction in order to enhance oil yield.	
Filter press 18"×18" - 18 taps with Filter cloth, oil collection tray, complete	It's an array of filtration membrane which are arranged such that when the oil is forced through this array via a pump it gets filtered.	

with all accessories oil pump.		
Material handling and other Equipments	These Equipment's are used for material handling. Other equipment's like water pumps, weighing machine, pipelines, belts, other spare parts etc are also used.	

Machine	Unit	Rate	Price
Heavy duty Oil Expeller chamber size 30"× 5.5" crushing capacity Up to 250*kg/hr with oil collection tank	1	260000	260000
Heavy duty round cooking/feeding kettle	1	38000	38000
Filter press 18"×18" - 18 taps with Filter cloth,oil collection tray, complete with all accessories oil pump.	1	125000	125000
Essential spare parts worm set cage set filter cloth	1	30000	30000
Crompton electric motor 3 phase 20HP with L&T starter	1	65000	65000
Acce. pulley, v belts, pipelines, pipe fittings,valves,etc.	-	16000	16000
Material handling and other equipment's (Bins, trolley, weighing machine, etc.)	-	250000	250000

Note: Total Machinery cost shall be Rs 7.84 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	7.84
Miscellaneous Assets	3.50
Working capital	6.53
Total	17.87

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	1.78
Subsidy @35%(Max. Rs 10 Lac)	3.97
Term Loan @ 55%	6.24
Working Capital (Bank Finance)	5.88
Total	17.87

4.8. TERM LOAN: Term loan of Rs. 6.24 Lakh is required for project cost of Rs. 17.87 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	-	6.24	6.24	-	-	6.24
	2nd month	6.24	-	6.24	0.06	-	6.24
	3rd month	6.24	-	6.24	0.06	-	6.24
	4th month	6.24	-	6.24	0.06		6.24
	5th month	6.24	-	6.24	0.06		6.24
	6th month	6.24	-	6.24	0.06		6.24
	7th month	6.24	-	6.24	0.06	0.12	6.12
	8th month	6.12	-	6.12	0.06	0.12	6.01
	9th month	6.01	-	6.01	0.06	0.12	5.89
	10th month	5.89	-	5.89	0.05	0.12	5.78
	11th month	5.78	-	5.78	0.05	0.12	5.66
	12th month	5.66	-	5.66	0.05	0.12	5.54

PM FME- Detailed Project Report of Mustard Oil Unit

				0.61	0.69		
2nd	Opening Balance						
	1st month	5.54	-	5.54	0.05	0.12	5.43
	2nd month	5.43	-	5.43	0.05	0.12	5.31
	3rd month	5.31	-	5.31	0.05	0.12	5.20
	4th month	5.20	-	5.20	0.05	0.12	5.08
	5th month	5.08	-	5.08	0.05	0.12	4.97
	6th month	4.97	-	4.97	0.05	0.12	4.85
	7th month	4.85	-	4.85	0.04	0.12	4.74
	8th month	4.74	-	4.74	0.04	0.12	4.62
	9th month	4.62	-	4.62	0.04	0.12	4.50
	10th month	4.50	-	4.50	0.04	0.12	4.39
	11th month	4.39	-	4.39	0.04	0.12	4.27
	12th month	4.27	-	4.27	0.04	0.12	4.16
				0.54	1.39		
3rd	Opening Balance						
	1st month	4.16	-	4.16	0.04	0.12	4.04
	2nd month	4.04	-	4.04	0.04	0.12	3.93
	3rd month	3.93	-	3.93	0.04	0.12	3.81
	4th month	3.81	-	3.81	0.03	0.12	3.70
	5th month	3.70	-	3.70	0.03	0.12	3.58
	6th month	3.58	-	3.58	0.03	0.12	3.47
	7th month	3.47	-	3.47	0.03	0.12	3.35
	8th month	3.35	-	3.35	0.03	0.12	3.23
	9th month	3.23	-		0.03	0.12	3.12

PM FME- Detailed Project Report of Mustard Oil Unit

				3.23			
	10th month	3.12	-	3.12	0.03	0.12	3.00
	11th month	3.00	-	3.00	0.03	0.12	2.89
	12th month	2.89	-	2.89	0.03	0.12	2.77
					0.39	1.39	
4th	Opening Balance						
	1st month	2.77	-	2.77	0.03	0.12	2.66
	2nd month	2.66	-	2.66	0.02	0.12	2.54
	3rd month	2.54	-	2.54	0.02	0.12	2.43
	4th month	2.43	-	2.43	0.02	0.12	2.31
	5th month	2.31	-	2.31	0.02	0.12	2.19
	6th month	2.19	-	2.19	0.02	0.12	2.08
	7th month	2.08	-	2.08	0.02	0.12	1.96
	8th month	1.96	-	1.96	0.02	0.12	1.85
	9th month	1.85	-	1.85	0.02	0.12	1.73
	10th month	1.73	-	1.73	0.02	0.12	1.62
	11th month	1.62	-	1.62	0.01	0.12	1.50
	12th month	1.50	-	1.50	0.01	0.12	1.39
					0.24	1.39	
5th	Opening Balance						
	1st month	1.39	-	1.39	0.01	0.12	1.27
	2nd month	1.27	-	1.27	0.01	0.12	1.16
	3rd month	1.16	-	1.16	0.01	0.12	1.04
	4th month	1.04	-	1.04	0.01	0.12	0.92
	5th month	0.92	-	0.92	0.01	0.12	0.81

6th month	0.81	-	0.81	0.01	0.12	0.69
7th month	0.69	-	0.69	0.01	0.12	0.58
8th month	0.58	-	0.58	0.01	0.12	0.46
9th month	0.46	-	0.46	0.00	0.12	0.35
10th month	0.35	-	0.35	0.00	0.12	0.23
11th month	0.23	-	0.23	0.00	0.12	0.12
12th month	0.12	-	0.12	0.00	0.12	-
				0.08	1.39	
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>					
	1.46	1.72	1.98	2.27	2.57
<u>Raw Material</u>					
	1.44	1.73	2.04	2.38	2.74
Closing Stock	2.90	3.44	4.02	4.64	5.30

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	2.90				
Less : Creditors	1.44				
Paid stock	1.46	10%	0.15	90%	1.32
Sundry Debtors	5.06	10%	0.51	90%	4.56
	6.53		0.65		5.88
MPBF					5.88
WORKING CAPITAL LIMIT DEMAND (from Bank)					5.88
Working Capital Margin					0.65

4.11. SALARY & WAGES

<u>BREAK UP OF LABOUR CHARGES</u>			
Particulars	Wages	No of	Total
	Rs. per Month	Employees	Salary
Plant Operator	15,000	2	30,000
Supervisor	18,000	1	18,000
Skilled (in thousand rupees)	12,000	2	24,000
Unskilled (in thousand rupees)	7,500	3	22,500
Total salary per month			94,500
Total annual labour charges	(in lacs)		11.34

<u>BREAK UP OF STAFF SALARY CHARGES</u>			
Particulars	Salary	No of	Total
	Rs. per Month	Employees	Salary
Administrative Staff	8,500	3	25,500
Manager	18,000	1	18,000
Accountant	15,000	1	15,000
Total salary per month			58,500
Total annual Staff charges	(in lacs)		7.02

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	value	Description
Power connection required	12	KWH
consumption per day	96	units
Consumption per month	2,400	units
Rate per Unit	10	Rs.
power Bill per month	24,000	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	7.84	3.50	11.34
Total	7.84	3.50	11.34
Less : Depreciation	1.18	0.35	1.53
WDV at end of Year	6.66	3.15	9.81
Additions During The Year	-	-	-
Total	6.66	3.15	9.81
Less : Depreciation	1.00	0.32	1.31
WDV at end of Year	5.66	2.84	8.50
Additions During The Year	-	-	-
Total	5.66	2.84	8.50
Less : Depreciation	0.85	0.28	1.13
WDV at end of Year	4.81	2.55	7.37
Additions During The Year	-	-	-
Total	4.81	2.55	7.37
Less : Depreciation	0.72	0.26	0.98
WDV at end of Year	4.09	2.30	6.39
Additions During The Year	-	-	-
Total	4.09	2.30	6.39
Less : Depreciation	0.61	0.23	0.84
WDV at end of Year	3.48	2.07	5.55

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 2.5% of Gross Sale.

4.15. PROJECTIONS OF PROFITABILITY ANALYSIS

PROJECTED PROFITABILITY STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	40%	45%	50%	55%	60%
<u>SALES</u>					
Gross Sale					
Mustard Oil	63.29	76.75	89.79	103.73	118.57
Oil Cake (By-Product)	12.67	14.90	17.28	19.80	22.46
Total	75.96	91.65	107.07	123.53	141.03
COST OF SALES					
Raw Material Consumed	43.20	51.84	61.20	71.28	82.08
Electricity Expenses	2.88	3.31	3.81	4.38	4.82
Depreciation	1.53	1.31	1.13	0.98	0.84
Wages & labour	11.34	12.47	13.47	14.35	15.28
Repair & maintenance	2.28	2.75	3.21	3.71	4.23
Packaging	1.52	1.83	2.14	2.47	2.82
Cost of Production	62.74	73.52	84.97	97.16	110.07
Add: Opening Stock /WIP	-	1.46	1.72	1.98	2.27
Less: Closing Stock /WIP	1.46	1.72	1.98	2.27	2.57
Cost of Sales	61.28	73.27	84.70	96.88	109.77
GROSS PROFIT	14.68	18.38	22.37	26.65	31.26
	19.33%	20.06%	20.89%	21.58%	22.17%
Salary to Staff	7.02	8.07	9.28	10.21	11.23
Interest on Term Loan	0.61	0.54	0.39	0.24	0.08
Interest on working Capital	0.65	0.65	0.65	0.65	0.65
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	1.14	1.67	1.71	2.01	2.30
TOTAL	13.02	14.89	16.39	17.89	19.53
NET PROFIT	1.66	3.50	5.98	8.76	11.73
	2.19%	3.81%	5.59%	7.09%	8.32%
Taxation	-	-	0.33	0.91	1.66
PROFIT (After Tax)	1.66	3.50	5.65	7.85	10.06

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	75.96	91.65	107.07	123.53	141.03
Less : Op. WIP Goods	-	1.46	1.72	1.98	2.27
Add : Cl. WIP Goods	1.46	1.72	1.98	2.27	2.57
Total Sales	77.42	91.91	107.34	123.81	141.33
Variable & Semi Variable Exp.					
Raw Material Consumed	43.20	51.84	61.20	71.28	82.08
Electricity Exp/Coal Consumption at 85%	2.45	2.82	3.24	3.72	4.10
Wages & Salary at 60%	11.02	12.33	13.65	14.74	15.91
Selling & administrative Expenses 80%	0.91	1.33	1.37	1.61	1.84
Interest on working Capital	0.646275	0.646275	0.646275	0.646275	0.646275
Repair & maintenance	2.28	2.75	3.21	3.71	4.23
Packaging	1.52	1.83	2.14	2.47	2.82
Total Variable & Semi Variable Exp	62.02	73.55	85.46	98.17	111.62
Contribution	15.40	18.36	21.88	25.65	29.71
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.43	0.50	0.57	0.66	0.72
Wages & Salary at 40%	7.34	8.22	9.10	9.82	10.61
Interest on Term Loan	0.61	0.54	0.39	0.24	0.08
Depreciation	1.53	1.31	1.13	0.98	0.84
Selling & administrative Expenses 20%	0.23	0.33	0.34	0.40	0.46
Rent	3.60	3.96	4.36	4.79	5.27
Total Fixed Expenses	13.74	14.86	15.89	16.89	17.98
Capacity Utilization	40%	45%	50%	55%	60%
OPERATING PROFIT	1.66	3.50	5.98	8.76	11.73
BREAK EVEN POINT	36%	36%	36%	36%	36%
BREAK EVEN SALES	69.07	74.41	77.98	81.52	85.55

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		5.41	6.70	8.36	10.71
Add:- Own Capital	1.78				
Add:- Retained Profit	1.66	3.50	5.65	7.85	10.06
Less:- Drawings	2.00	2.20	4.00	5.50	7.50
Subsidy/grant	3.97				
Closing Balance	5.41	6.70	8.36	10.71	13.27
Term Loan	5.54	4.16	2.77	1.39	-
Working Capital Limit	5.88	5.88	5.88	5.88	5.88
Sundry Creditors	1.44	1.73	2.04	2.38	2.74
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	18.67	18.96	19.64	21.07	22.75
<u>Assets</u>					
Fixed Assets (Gross)	11.34	11.34	11.34	11.34	11.34
Gross Dep.	1.53	2.84	3.97	4.95	5.79
Net Fixed Assets	9.81	8.50	7.37	6.39	5.55
Current Assets					
Sundry Debtors	5.06	6.11	7.14	8.24	9.40
Stock in Hand	2.90	3.44	4.02	4.64	5.30
Cash and Bank	0.88	0.91	1.12	1.80	2.50
TOTAL :	18.67	18.96	19.64	21.07	22.75

4.18. CASH FLOW STATEMENT

<u>PROJECTED CASH FLOW STATEMENT</u>					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.78				
Net Profit	1.66	3.50	5.98	8.76	11.73
Depreciation & Exp. W/off	1.53	1.31	1.13	0.98	0.84
Increase in Cash Credit	5.88	-	-	-	-
Increase In Term Loan	6.24	-	-	-	-
Increase in Creditors	1.44	0.29	0.31	0.34	0.36
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	3.97				
TOTAL :	22.89	5.20	7.53	10.19	13.08
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	11.34				
Increase in Stock	2.90	0.54	0.58	0.62	0.66
Increase in Debtors	5.06	1.05	1.03	1.10	1.17
Repayment of Term Loan	0.69	1.39	1.39	1.39	1.39
Drawings	2.00	2.20	4.00	5.50	7.50
Taxation	-	-	0.33	0.91	1.66
TOTAL :	22.00	5.17	7.32	9.51	12.38
Opening Cash & Bank Balance	-	0.88	0.91	1.12	1.80
Add : Surplus	0.88	0.03	0.21	0.68	0.70
Closing Cash & Bank Balance	0.88	0.91	1.12	1.80	2.50

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	3.19	4.81	6.79	8.83	10.91
Interest on Term Loan	0.61	0.54	0.39	0.24	0.08
Total	3.80	5.35	7.17	9.07	10.99
<u>REPAYMENT</u>					
Instalment of Term Loan	0.69	1.39	1.39	1.39	1.39
Interest on Term Loan	0.61	0.54	0.39	0.24	0.08
Total	1.31	1.93	1.77	1.62	1.47
DEBT SERVICE COVERAGE RATIO	2.91	2.78	4.05	5.59	7.48
AVERAGE D.S.C.R.	4.49				