DETAILED PROJECT REPORT

ITTAR 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	:	Ittar Making Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	34200 Ltr/annum(60,65,70,75&80% capacity utilization in 1st to 5th Year respectively)
4. Raw material	:	Liquid Paraffin, Rose Petals
5. Major product outputs	:	Ittar
6. Total project cost	:	Rs. 23.48 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 13.90 Lakh
• Miscellaneous Fixed Assets	:	Rs. 1.80 Lakh
• Working capital	:	Rs. 7.78 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 5.50 Lakh
• Promoter's contribution (min10%)	:	Rs. 2.34 Lakh
• Term loan	:	Rs. 8.64 Lakh
• Working Capital Requirement	:	Rs.7.00 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1st year	:	Rs. 1.66 Lakh
• 2nd year	:	Rs. 3.29 Lakh
• 3rd year	:	Rs. 5.04 Lakh
• 4th year	:	Rs. 6.65 Lakh
• 5th year	:	Rs. 8.26 Lakh
11. Average DSCR	:	Rs. 3.25
12. Term loan repayment	:	5 Years with 6 months grace period

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

Perfume is a mixture of fragrant essential oils or aroma compounds, fixatives and solvents, used to give the human body, animals, food, objects, and living-spaces an agreeable scent. It is usually in liquid form and used to give a pleasant scent to a person's body. Ancient texts and archaeological excavations show the use of perfumes in some of the earliest human civilizations. Modern perfumery began in the late 19th century with the commercial synthesis of aroma compounds such as vanillin or coumarone, which allowed for the composition of perfumes with smells previously unattainable solely from natural aromatics alone.

The word perfume derives from the Latin perfumer, meaning "to smoke through". Perfumery, as the art of making perfumes, began in ancient Mesopotamia, Egypt, the Indus Valley Civilization and maybe Ancient China. It was further refined by the Romans and the Arabs. In India, perfume and perfumery existed in the Indus civilization.

2.2. MARKET POTENTIAL:

According to industry estimates, the overall size of the Indian perfume industry is currently estimated at Rs. 2000 crores,projected to grow by 50 percent (Rs.3000 crores) by the year 2020. The current online perfume market is estimated at Rs.148 crores projected to grow by approximately 120% to Rs 345 crores.

2.3. RAW MATERIAL DESCRIPTION:

Following raw material is required as the major raw material for ittar manufacturing process.

- Base Material: Liquid Paraffin
- Floral Material: Rose Petals

S.N.	Particulars	Rate
1	Liquid Paraffin	Rs. 60-65 Per Ltr
2	Rose Petals	Rs. 300-400 Per Kg

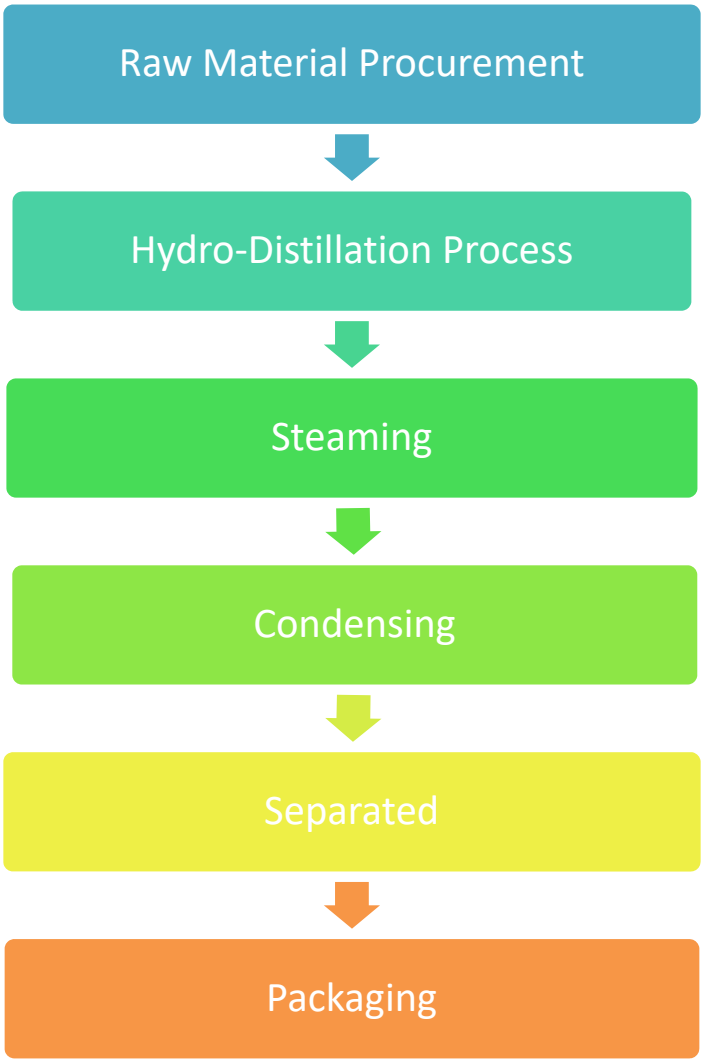
Average raw material cost per Ltr. of Ittar: Rs. 350-450

3. PROCESS FLOW CHART

Attar-making industry even more interesting is that despite the passage of time, they still follow the traditional method, a highly labor-intensive and time-consuming hydro-distillation process, called 'deg bhapka'.

- The attars are manufactured traditionally 'Degs & Bhapka system', which is a hydro distillation process. The still is heated form below by lighting a fire with the help of wood or cow dung. Yet with the advent of technology the process has improved to next gen preparation with modified machines.

- The flowers/herbs are put into the distillation unit with water together to get steamed together.
- Distillation Process: The essential oil as well water is evaporated in the heating vessel. Followed by this the steam is collected and transferred to the condenser.
- In this process the condenser condenses the steam along with the fragrance oil vapors present in it.
- Managing the still is highly skilled job, as the operator must keep the boiling in the still at a level that matches the condensation in the receiver, in order to keep the pressure under control.
- When the desire quantity of vapors has condensed, these condensed liquid is then collected in a separator, which is designed to separate fragrance oil from water based on their specific density.
- The receiver is then allowed to cool and may remain idle for one or two days depending on the pressure of work. The mixture of oil and water is then separated either directly form the receiver through a hole at the bottom or pouring the whole mixture in an open trough, After the oil and water have separated into two layers, the water is removed from an opening in the bottom, and the same is cohobated. The base material remains in the receiver.
- After desired concentration of the attar has been reached, then same is poured into leather bottles for sedimentation and removal of moisture. Sometimes liquid paraffin is used for the manufacture of cheaper attars. The mouth of the receiver is sealed by wrapping coarse cloth around the bamboo pipe and pushing it inside the condenser. The receiver may contain up to 5-10 kilos of base materials and is kept in a small water tank.


Raw Material Procurement
Hydro-Distillation Process
Steaming
Condensing
Separated
Packaging

4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Ittar is 15 Ltr per hr. First year, Capacity has been taken @ 50%.

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 15 days.

4. Credit period to Sundry Debtors has been given for 7days.

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

COMPUTATION OF PRODUCTION OF ITTAR		
Items to be Manufactured		
Ittar		
Machine capacity Per hour	15	Ltr
Total working Hours	8	
Machine capacity Per Day	120	Ltr
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	5%	
Raw material requirement	36000	Ltr
Final Output per annum after wastage	34200	Ltr
Final Product to be packed in 100 ml Bottles		
Number of Bottles per annum	342000	100 ml Bottle

Production of Ittar		
Production	**Capacity**	**Ltr**
1st year	60%	2,05,200
2nd year	65%	2,22,300
3rd year	70%	2,39,400
4th year	75%	2,56,500
5th year	80%	2,73,600

Raw Material Cost Year	Capacity Utilisation	Rate (per ltr.)	Amount (Rs. in lacs)
1st year	60%	350.00	75.60
2nd year	65%	368.00	86.11
3rd year	70%	386.00	97.27
4th year	75%	405.00	109.35
5th year	80%	425.00	122.40

COMPUTATION OF SALE

Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	10,260	11,115	11,970	12,825
Production	2,05,200	2,22,300	2,39,400	2,56,500	2,73,600
Less : Closing Stock	10,260	11,115	11,970	12,825	13,680
Net Sale	**1,94,940**	**2,21,445**	**2,38,545**	**2,55,645**	**2,72,745**
Sale price per 100 ml	55.00	58.00	61.00	64.00	67.00
Sales (in Lacs)	107.22	128.44	145.51	163.61	182.74

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
Hydro distillation unit	Steam cum hydro distillation unit comprises of a set of separators having a unique design, where both the low as well as high density oils can be separated from water.	
Blender	Mixing Vessels are very similar with the Mixing Tanks. Mixing Vessels combine the quality and customization of pressure.	
Filling and packaging machine	The machine is called Vacuumetric filler. Very useful filling machine designed for Alcohol, perfumes, and distillery industries.	
Material handling and other Equipments	These are set of equipments which are used in various supporting roles in various operations of plant.	

Machine	Unit	Rate	Price
Hydro distillation unit	1	450000	450000
Blender	1	480000	480000
Packing, Filling and Sealing Machine	1	210000	210000
Material handling and other equipments (Bins, trolley, conveyor, weighing balance, pumps, etc.)	-	250000	250000

Note: Total Machinery cost shall be Rs 13.90 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	13.90
Miscellaneous Assets	1.80
Working capital	7.78
Total	**23.48**

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	**AMOUNT**
Own Contribution (min 10%)	2.34
Subsidy @35%(Max. Rs 10 Lac)	5.50
Term Loan @ 55%	8.64
Working Capital (Bank Finance)	7.00
Total	**23.48**

4.8. TERM LOAN: Term loan of Rs. 8.64 Lakh is required for project cost of Rs. 23.48 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	-	8.64	8.64	-	-	8.64
	2nd month	8.64	-	8.64	0.08	-	8.64
	3rd month	8.64	-	8.64	0.08	-	8.64
	4th month	8.64	-	8.64	0.08		8.64
	5th month	8.64	-	8.64	0.08		8.64
	6th month	8.64	-	8.64	0.08		8.64
	7th month	8.64	-	8.64	0.08	0.16	8.48
	8th month	8.48	-	8.48	0.08	0.16	8.32
	9th month	8.32	-	8.32	0.08	0.16	8.16
	10th month	8.16	-	8.16	0.07	0.16	8.00
	11th month	8.00	-	8.00	0.07	0.16	7.84
	12th month	7.84	-	7.84	0.07	0.16	7.68
					0.85	0.96	
2nd	Opening Balance						
	1st month	7.68	-	7.68	0.07	0.16	7.52
	2nd month	7.52	-	7.52	0.07	0.16	7.36
	3rd month	7.36	-	7.36	0.07	0.16	7.20

	4th month	7.20	-	7.20	0.07	0.16	7.04
	5th month	7.04	-	7.04	0.06	0.16	6.88
	6th month	6.88	-	6.88	0.06	0.16	6.72
	7th month	6.72	-	6.72	0.06	0.16	6.56
	8th month	6.56	-	6.56	0.06	0.16	6.40
	9th month	6.40	-	6.40	0.06	0.16	6.24
	10th month	6.24	-	6.24	0.06	0.16	6.08
	11th month	6.08	-	6.08	0.06	0.16	5.92
	12th month	5.92	-	5.92	0.05	0.16	5.76
					0.75	**1.92**	
3rd	Opening Balance						
	1st month	5.76	-	5.76	0.05	0.16	5.60
	2nd month	5.60	-	5.60	0.05	0.16	5.44
	3rd month	5.44	-	5.44	0.05	0.16	5.28
	4th month	5.28	-	5.28	0.05	0.16	5.12
	5th month	5.12	-	5.12	0.05	0.16	4.96
	6th month	4.96	-	4.96	0.05	0.16	4.80
	7th month	4.80	-	4.80	0.04	0.16	4.64
	8th month	4.64	-	4.64	0.04	0.16	4.48
	9th month	4.48	-	4.48	0.04	0.16	4.32
	10th month	4.32	-	4.32	0.04	0.16	4.16
	11th month	4.16	-	4.16	0.04	0.16	4.00
	12th month	4.00	-	4.00	0.04	0.16	3.84
					0.54	**1.92**	

4th	Opening Balance						
	1st month	3.84	-	3.84	0.04	0.16	3.68
	2nd month	3.68	-	3.68	0.03	0.16	3.52
	3rd month	3.52	-	3.52	0.03	0.16	3.36
	4th month	3.36	-	3.36	0.03	0.16	3.20
	5th month	3.20	-	3.20	0.03	0.16	3.04
	6th month	3.04	-	3.04	0.03	0.16	2.88
	7th month	2.88	-	2.88	0.03	0.16	2.72
	8th month	2.72	-	2.72	0.02	0.16	2.56
	9th month	2.56	-	2.56	0.02	0.16	2.40
	10th month	2.40	-	2.40	0.02	0.16	2.24
	11th month	2.24	-	2.24	0.02	0.16	2.08
	12th month	2.08	-	2.08	0.02	0.16	1.92
					0.33	**1.92**	
5th	Opening Balance						
	1st month	1.92	-	1.92	0.02	0.16	1.76
	2nd month	1.76	-	1.76	0.02	0.16	1.60
	3rd month	1.60	-	1.60	0.01	0.16	1.44
	4th month	1.44	-	1.44	0.01	0.16	1.28
	5th month	1.28	-	1.28	0.01	0.16	1.12
	6th month	1.12	-	1.12	0.01	0.16	0.96
	7th month	0.96	-	0.96	0.01	0.16	0.80
	8th month	0.80	-	0.80	0.01	0.16	0.64
	9th month	0.64	-	0.64	0.01	0.16	0.48
	10th month	0.48	-		0.00	0.16	0.32

			0.48			
11th month	0.32	-	0.32	0.00	0.16	0.16
12th month	0.16	-	0.16	0.00	0.16	-
				0.11	**1.92**	
DOOR TO DOOR	60	MONTHS				
MORATORIUM PERIOD	6	MONTHS				
REPAYMENT PERIOD	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**
Finished Goods					
	4.89	5.54	6.23	6.96	7.72
Raw Material					
	2.52	2.87	3.24	3.65	4.08
Closing Stock	**7.41**	**8.41**	**9.47**	**10.61**	**11.80**

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	**Amount**	**Own Margin**		**Bank Finance**	
Finished Goods & Raw Material	7.41				
Less : Creditors	1.76				
Paid stock	**5.65**	**10%**	**0.56**	**90%**	**5.08**
Sundry Debtors	**2.50**	**10%**	**0.25**	**90%**	**2.25**
	8.15		**0.82**		**7.34**
MPBF					**7.34**
WORKING CAPITAL LIMIT DEMAND (from Bank)					**7.00**
Working Capital Margin					**0.78**

4.11. SALARY & WAGES

BREAK UP OF LABOUR CHARGES

Particulars	Wages Rs. per Month	No of Employees	Total 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)	8,500	3	25,500
Total salary per month			**97,500**
Total annual labour charges	**(in lacs)**		**11.70**

BREAK UP OF STAFF SALARY CHARGES

Particulars	Salary Rs. per Month	No of Employees	Total Salary
Administrative Staff	6,500	2	13,000
Manager	20,000	1	20,000
Accountant	15,000	1	15,000
Total salary per month			**48,000**
Total annual Staff charges	**(in lacs)**		**5.76**

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	**value**	**Description**
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

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	**Plant & Machinery**	**Miss. Assets**	**TOTAL**
Rate of Depreciation	**15.00%**	**10.00%**	
Opening Balance	-	-	-
Addition	13.90	1.80	15.70
Total	13.90	1.80	15.70
Less : Depreciation	2.09	0.18	2.27
WDV at end of Year	**11.82**	**1.62**	**13.44**
Additions During The Year	-	-	-
Total	11.82	1.62	13.44
Less : Depreciation	1.77	0.16	1.93
WDV at end of Year	**10.04**	**1.46**	**11.50**
Additions During The Year	-	-	-
Total	10.04	1.46	11.50
Less : Depreciation	1.51	0.15	1.65
WDV at end of Year	**8.54**	**1.31**	**9.85**
Additions During The Year	-	-	-
Total	8.54	1.31	9.85
Less : Depreciation	1.28	0.13	1.41
WDV at end of Year	**7.26**	**1.18**	**8.44**
Additions During The Year	-	-	-
Total	7.26	1.18	8.44
Less : Depreciation	1.09	0.12	1.21
WDV at end of Year	**6.17**	**1.06**	**7.23**

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 3 % 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 %	**60%**	**65%**	**70%**	**75%**	**80%**
SALES					
Gross Sale					
Ittar	107.22	128.44	145.51	163.61	182.74
Total	**107.22**	**128.44**	**145.51**	**163.61**	**182.74**
COST OF SALES					
Raw Material Consumed	75.60	86.11	97.27	109.35	122.40
Electricity Expenses	2.40	2.76	3.17	3.65	4.02
Depreciation	2.27	1.93	1.65	1.41	1.21
Wages & labour	11.70	12.87	14.41	15.86	16.65
Repair & maintenance	3.22	3.85	4.37	4.91	5.48
Packaging	2.68	3.21	3.64	4.09	4.57
Cost of Production	97.86	110.74	124.52	139.27	154.32
Add: Opening Stock /WIP	-	4.89	5.54	6.23	6.96
Less: Closing Stock /WIP	4.89	5.54	6.23	6.96	7.72
Cost of Sales	92.97	110.10	123.83	138.53	153.57
GROSS PROFIT	**14.25**	**18.34**	**21.69**	**25.08**	**29.17**
	13.29%	**14.28%**	**14.90%**	**15.33%**	**15.96%**
Salary to Staff	5.76	6.62	7.62	8.38	9.22
Interest on Term Loan	0.85	0.75	0.54	0.33	0.11
Interest on working Capital	0.77	0.77	0.77	0.77	0.77
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	1.61	2.95	3.20	3.60	4.57
TOTAL	**12.59**	**15.06**	**16.48**	**17.87**	**19.94**
NET PROFIT	1.66	3.29	5.20	7.22	9.23
	1.55%	**2.56%**	**3.58%**	**4.41%**	**5.05%**
Taxation	-	-	0.17	0.57	0.97
PROFIT (After Tax)	1.66	3.29	5.04	6.65	8.26

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	**I**	**II**	**III**	**IV**	**V**
Net Sales & Other Income	107.22	128.44	145.51	163.61	182.74
Less : Op. WIP Goods	-	4.89	5.54	6.23	6.96
Add : Cl. WIP Goods	4.89	5.54	6.23	6.96	7.72
Total Sales	**112.11**	**129.08**	**146.20**	**164.35**	**183.49**
Variable & Semi Variable Exp.					
Raw Material Consumed	75.60	86.11	97.27	109.35	122.40
Electricity Exp/Coal Consumption at 85%	2.04	2.35	2.70	3.10	3.41
Wages & Salary at 60%	10.48	11.70	13.22	14.54	15.52
Selling & adminstrative Expenses 80%	1.29	2.36	2.56	2.88	3.65
Interest on working Capital	0.77	0.77	0.77	0.77	0.77
Repair & maintenance	3.22	3.85	4.37	4.91	5.48
Packaging	2.68	3.21	3.64	4.09	4.57
Total Variable & Semi Variable Exp	**96.07**	**110.35**	**124.52**	**139.64**	**155.81**
Contribution	**16.04**	**18.73**	**21.68**	**24.71**	**27.68**
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.36	0.41	0.48	0.55	0.60
Wages & Salary at 40%	6.98	7.80	8.81	9.69	10.35
Interest on Term Loan	0.85	0.75	0.54	0.33	0.11
Depreciation	2.27	1.93	1.65	1.41	1.21
Selling & adminstrative Expenses 20%	0.32	0.59	0.64	0.72	0.91
Rent	3.60	3.96	4.36	4.79	5.27
Total Fixed Expenses	**14.38**	**15.44**	**16.47**	**17.49**	**18.45**
Capacity Utilization	**60%**	**65%**	**70%**	**75%**	**80%**
OPERATING PROFIT	**1.66**	**3.29**	**5.20**	**7.22**	**9.23**
BREAK EVEN POINT	**54%**	**54%**	**53%**	**53%**	**53%**
BREAK EVEN SALES	**100.50**	**106.44**	**111.10**	**116.34**	**122.31**

4.17. PROJECTED BALANCE SHEET

PROJECTED BALANCE SHEET					**(in Lacs)**
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
Liabilities					
Capital					
opening balance		7.99	9.28	10.82	12.97
Add:- Own Capital	2.34				
Add:- Retained Profit	1.66	3.29	5.04	6.65	8.26
Less:- Drawings	1.50	2.00	3.50	4.50	5.50
Subsidy/grant	5.50				
Closing Balance	7.99	9.28	10.82	12.97	15.73
Term Loan	7.68	5.76	3.84	1.92	-
Working Capital Limit	7.00	7.00	7.00	7.00	7.00
Sundry Creditors	1.76	2.01	2.27	2.55	2.86
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	**24.83**	**24.55**	**24.53**	**25.16**	**26.45**
Assets					
Fixed Assets (Gross)	15.70	15.70	15.70	15.70	15.70
Gross Dep.	2.27	4.20	5.85	7.26	8.47
Net Fixed Assets	**13.44**	**11.50**	**9.85**	**8.44**	**7.23**
Current Assets					
Sundry Debtors	2.50	3.00	3.40	3.82	4.26
Stock in Hand	7.41	8.41	9.47	10.61	11.80
Cash and Bank	1.48	1.64	1.81	2.30	3.16
TOTAL :	**24.83**	**24.55**	**24.53**	**25.16**	**26.45**

4.18. CASH FLOW STATEMENT

PROJECTED CASH FLOW STATEMENT					**(in Lacs)**
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
SOURCES OF FUND					
Own Margin	2.34				
Net Profit	1.66	3.29	5.20	7.22	9.23
Depriciation & Exp. W/off	2.27	1.93	1.65	1.41	1.21
Increase in Cash Credit	7.00	-	-	-	-
Increase In Term Loan	8.64	-	-	-	-
Increase in Creditors	1.76	0.25	0.26	0.28	0.30
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	5.50				
TOTAL :	**29.56**	**5.57**	**7.22**	**9.03**	**10.89**
APPLICATION OF FUND					
Increase in Fixed Assets	15.70				
Increase in Stock	7.41	0.99	1.06	1.14	1.19
Increase in Debtors	2.50	0.50	0.40	0.42	0.45
Repayment of Term Loan	0.96	1.92	1.92	1.92	1.92
Drawings	1.50	2.00	3.50	4.50	5.50
Taxation	-	-	0.17	0.57	0.97
TOTAL :	**28.07**	**5.41**	**7.04**	**8.55**	**10.02**
Opening Cash & Bank Balance	-	1.48	1.64	1.81	2.30
Add : Surplus	1.48	0.16	0.17	0.48	0.86
Closing Cash & Bank Balance	**1.48**	**1.64**	**1.81**	**2.30**	**3.16**

4.19. DEBT SERVICE COVERAGE RATIO

CALCULATION OF D.S.C.R					
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
CASH ACCRUALS	3.93	5.22	6.69	8.06	9.47
Interest on Term Loan	0.85	0.75	0.54	0.33	0.11
Total	4.77	5.97	7.23	8.39	9.58
REPAYMENT					
Instalment of Term Loan	0.96	1.92	1.92	1.92	1.92
Interest on Term Loan	0.85	0.75	0.54	0.33	0.11
Total	1.81	2.67	2.46	2.24	2.03
DEBT SERVICE COVERAGE RATIO	**2.64**	**2.24**	**2.94**	**3.74**	**4.71**
AVERAGE D.S.C.R.					**3.25**