

# **REVISED PROJECT PROFILES FOR PMEGP Volume- II**

*Prepared for:*

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*Prepared by:*

**NORTH EASTERN INDUSTRIAL CONSULTANTS LTD.**  
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Agartala :: Aizawl :: Dimapur :: Imphal :: Silchar

## CONTENT

Sl.No.	Project Profile on	Page No.
	<b>ELECTRICAL/ ELECTRONIC PRODUCTS</b>	
01.	Boosters & Voltage stabilizers	1
02.	Black Insulating tape	5
03.	PVC coated electrical wire	9
04.	Assembling unit of emergency lights	12
05.	Inverters manufacturing unit	16
06.	UPS Assembling	20
	<b>JUTE &amp; TEXTILE INDUSTRIES</b>	
07.	Garments	25
08.	Hosiery	28
09.	Jute Bag Manufacturing Unit	32
10.	Surgical Bandages	36
11.	Mosquito Net	39
12.	Diversified Jute Handicrafts	42
	<b>MISCELLANEOUS INDUSTRIES</b>	
12.	Paper Dish, Plates, Cup etc.	47
13.	Offset printing press	52
14.	Exercise Book, Register, File Covers etc.	57
15.	Umbrella assembling	61
16.	Leather shoe manufacturing	64
17.	Vermicompost	68
18.	Corrugated Cardboard boxes	72
19.	Wooden furniture	76
20.	Confectionery	79
21.	Paper Bags	83
22.	Carbon paper	86
23.	Decorative Paper	90
24.	Gummed Paper tape	93
25.	School Chalk	97
26.	Pottery	101
27.	School Bag/ rain ware etc.	105
28.	Marble/ granite cutting, Polishing and fitting	108
29.	Rubber Stamp	112
30.	Paper Napkin, Toilet roll, Tissue paper etc.	116
31.	Decorative Glassware/ glass toys	119
32.	Flexographic Printing	122
33.	Leather/ Rexene/ Foam canvas bags	126
34.	Dustbin	129
	<b>PLASTIC INDUSTRIES</b>	
35.	Pilfer-proof Plastic Caps for Water-Bottles	134
36.	Disposable Plastic Cup, Glass etc.	137
37.	Plastic files, albums & folder	141
38.	Blow moulded Plastic container/ bottles etc.	145

Sl.No.	Project Profile on	Page No.
39.	Rigid PVC pipes of smaller diameters	148
40.	Disposable Plastic syringe	151
41.	Low density polythene films and bags	155
42.	Plastic moulded household items	158
	SERVICE UNIT	
43.	Two Wheeler repairing & Servicing Unit	163
44.	Automobile Workshop	166
45.	Laundry & Dry cleaning Service	170
46.	Gym & Fitness centre	173
47.	Creche	176
48.	Pathological Laboratory	179
49.	Dhaba	182
50.	Tent House/Decorator Service	185
51.	Beauty Parlour	188
52.	Watch repairing & servicing	191
53.	Sound System rental services	194
54.	Photocopying/ Lamination/ PCO	197
55.	Tyre Re-Treading	200
56.	Testing and grinding of Diesel Engine Pump nozzle	204
57.	Screen Printing (on fabric) unit	207
58.	Refrigerator & AC Repairing	212
59.	Repair & Maintenance of TV Radio etc.	216
60.	Ceiling Fan assembling & repairing	219
61.	Mobile Set Repairing	222
62.	Fax Photocopier etc. repairing & servicing	225

# ELECTRICAL/ ELECTRONIC PRODUCTS

## BOOSTERS AND VOLTAGE STABILISERS

**Introduction:** Booster is an electric apparatus commonly used with various electronic equipments like TVs, refrigerators, air conditioners etc. The booster safeguards these equipments against incoming voltage variations and boosts the voltage from lower to the required level automatically.

**Installed Capacity:** The minimum economic capacity of a unit manufacturing boosters and voltage stabilizers is 3,000 nos boosters and 7,500 nos. stabilizers per annum based on a single shift operation of 300 days working schedule in a year.

**Process of Manufacture: Booster:** The assembling of boosters involves manufacture of three sub-assemblies. Various electronic components and electromagnetic relays are first assembled to form a circuit which operates the relays to choose the proper tapping of the voltage when the input voltage varies in limits. The second operation involves assembling of the transformer and finally the assembling of the transformer and finally the assembling of transformer and electronic circuit is done. This is followed by testing of the assembly on various parameters e.g the output voltage. Etc. **Stabilizer:** The core of the stabilizer is wound with predetermined number of turns with the help of a coil winding machine and stampings are fitted inside the coil. The whole core is impregnated with varnish and dried. Then all the components are assembled and fixed in a box type container with indicators and connections are made with switches. Finally the assembly is tested for ripple, stability, temperature coefficient, transient recovery time. etc.

**Raw Materials:** The Unit shall need following raw materials for the manufacture of 3000 nos boosters and 7500 nos voltage stabilizers at 100% capacity utilization is estimated as follows.

<b>a. Boosters :</b>	1. Stamping	350kgs
	2. Chassis	3,000kgs
	3. Dial and name plate	6,000kgs
	4. Voltmeter	3,000kgs
	5. Rotary switch	3,000kgs
	6. Electric circuit	3,000kgs
	7. Lead, knobs, plugs etc	3,000 sets
	8. Super enameled copper wire electromagnetic relays, etc	as required.
<b>b. Boosters :</b>	1. Copper wire	240kgs
	2. Voltmeters	7500kgs
	3. Fuse	7500kgs
	4. Cabinets	7500kgs
	5. Switch	7500kgs
	6. Knobs, hardware, fuse wire, etc.	as required

And these will be cost Rs. 45,08,000/- and It is available indigenously and dealers such as the following:

1. Artisan Industries Inc. 73 Pond Street, Waltham, MA 02451, U.S.A..
2. GAYATRI ENGINEER, 30, Electronic Estate, Ground Floor, Satara Rd., Pune – 411009

**Power:** The Unit will need a total connected Load of 15 KW at 400/440 Volts, 50 HC, AC, three phase & 4 wire. The annual consumption of power is estimated at 10, 295 KWHrs. Costing Rs. 20,384/=. The power is readily available from the State Electricity supply Corporation through its Grid.

**Water:** The Unit will need 500 liters of water per day is estimated. It is available from both ground water sources and public supply.

**Manpower:** Apart from the two skilled persons all manpower is readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 92,400
2	Office Assistants	2	Rs, 1,05,600
3.	Skilled Worker	2	Rs.1,32,000
4.	Unskilled Workers	4	Rs. 1,32,000
	Total	9	Rs. 4,62,000

### **CAPITAL COST ESTIMATE**

1. <b>Land &amp; Building</b> with a covered area of 120 Sq. Mtrs.:	<b>On rent</b>
2. <b>Plant &amp; Machinery</b>	
(a) Winding machine Impregnation tank	Rs. 6,00,000
(b) Baking oven, Hand drill, testing equipments	Rs. 1,80,000
(c) Variable transformer	Rs. 60,000
(d) Freight, Tax,etc. on above	<u>Rs. 1,20,000</u>
	<b>Rs. 9,60,000</b>
3. <b>Miscellaneous Fixed Assets</b>	
(a) Electrification	Rs. 1,10,000
(b) Water Installation	Rs. 27,500
© Furniture & Miscellaneous others	Rs. 22,500
	<u>Rs. 2,20,000</u>
4. <b>Provision for c contingencies</b>	<b>Rs. 55,000</b>
5. <b>Preliminary &amp; Pre-operative expenses</b>	<b>Rs. 1,37,500</b>
	<b><u>Total fixed Costs: Rs. 13,72,500</u></b>
6. <b>Working Capital:</b>	
(a) Raw Materials for 1 months	Rs. 4,12,500
(b) Utilities for 1 month	Rs. 1,698
(c) Wages & Salaries for 1 Month	Rs. 38,500
(d) Other expenses for 1 month	<u>Rs. 98,402</u>
	<b>Total Working Capital:Rs. 5,51,000</b>
	<b>TOTAL PROJECT COST: Rs. 19,23,600</b>

### **Means of finance:**

	URBAN	RURAL
1. Composite Loan:	Rs. 13,46,520	Rs. 11,54,160
2. Subsidy:	Rs. 4,80,900	Rs. 6,73,260
3. Promoters' Contribution:	Rs. 96,180	Rs. 96,180
4. Debt. Equity Ratio:	2.33:1	1.50:1

### **Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	Annual sales Realization	4782	5579	6376	6376	6376
3.	<b>Annual Costs in</b>					
	(a) Raw Materials	2970	3465	3960	3960	3960
	(b) Power	15	18	21	21	21
	(c) Wages & Salaries	429	451	462	474	486
	(d) Repair & Maintenance	53	53	53	53	53
	(e) Administrative overheads	132	139	145	153	161

	(f) Selling expenses	712	837	956	956	956
	(g) Depreciation	132	132	132	132	132
	(h) Interest on Composite Loan	150	122	89	54	22
	<b>Total Cost</b>	<b>4593</b>	<b>5217</b>	<b>6818</b>	<b>5803</b>	<b>5791</b>
	Variable Costs	3697	4320	4937	4937	4937
4.	<b>Annual Profit</b>	<b>189</b>	<b>362</b>	<b>558</b>	<b>573</b>	<b>585</b>
5.	<b>Return on Investment</b>	<b>982%</b>	<b>18.82%</b>	<b>29.01%</b>	<b>28.79%</b>	<b>30.42%</b>
6.	<b>Return on sales</b>	<b>3.95%</b>	<b>6.48%</b>	<b>8.75%</b>	<b>8.98%</b>	<b>9.17%</b>
7.	Annual Contribution	1085	-	-	-	-
8.	<b>Break Even Point</b>	<b>49.54%</b>	-	-	-	-
9.	Cash Accrual	321	494	690	705	717
10.	Debt Servicing Capacity	471	616	779	759	739
11.	Repayment of Loan	218	255	291	291	292
12.	Debt Serviced	364	377	380	345	313
13.	<b>Pay Back Period</b>	<b>1 Years 2 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:28:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	96	-	-	-	-	-
2.	Increase in subsidy	480	-	-	-	-	-
3.	Increase in Composite Loan	1346	-	-	-	-	-
4.	Depreciation	-	132	132	132	132	132
5.	Profit before interests	-	339	489	647	627	607
<b>A.</b>	<b>Total Sources</b>	<b>1923</b>	<b>471</b>	<b>616</b>	<b>779</b>	<b>759</b>	<b>739</b>
6.	Increase in capital investments	1372	-	-	-	-	-
7.	Increase in Working Capital	551	-	-	-	-	-
8.	Interests	-	150	122	89	54	22
9.	Repayment of Loan	-	218	255	291	291	292
<b>B.</b>	<b>Total Disposals</b>	<b>1923</b>	<b>368</b>	<b>377</b>	<b>380</b>	<b>345</b>	<b>314</b>
<b>C.</b>	<b>Opening Balance</b>	-	-	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>
<b>D.</b>	<b>Net Surplus</b>	-	<b>103</b>	<b>239</b>	<b>399</b>	<b>414</b>	<b>425</b>
<b>E.</b>	<b>Closing Balance</b>	-	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>	<b>1580</b>

**Projected Balance Sheets**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	96	285	647	1205	1778
2.	Surplus from operation	189	362	558	573	585
	<b>NET WORTH</b>	<b>285</b>	<b>647</b>	<b>1205</b>	<b>1778</b>	<b>2363</b>
3.	Subsidy	480	480	480	480	480
	Composite Loan	1129	874	583	292	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>
1.	Gross Fixed Assets	1372	1372	1372	1372	1372
	<b>Less Depreciation</b>	<b>132</b>	<b>264</b>	<b>396</b>	<b>528</b>	<b>660</b>
	<b>NET BLOCK</b>	<b>1240</b>	<b>1108</b>	<b>976</b>	<b>844</b>	<b>712</b>
2.	Current Assets/W/C	551	551	551	551	551
3.	Cash & Bank Balance	103	342	741	1155	1580
<b>B.</b>	<b>Total Assets</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>

**Sources of Machinery**

1. **ZEAL SERVICES**, 13, Konark Udyog, Off Karve Rd., Nr.Satyam Indl.Est., B / H.RESCON, Erandawane, Pune – 411038. Phone : (020 ) 25421547 / 32940517
2. **PIPE TECH HYDRAULIC**, Shop No.110, A - 2, Swapnanagari, Udyam Ngr., Nehru Ngr., Telco Rd., Pimpri, Pune - 411018, Phone : (020 ) 27502091



## BLACK INSULATING TAPE

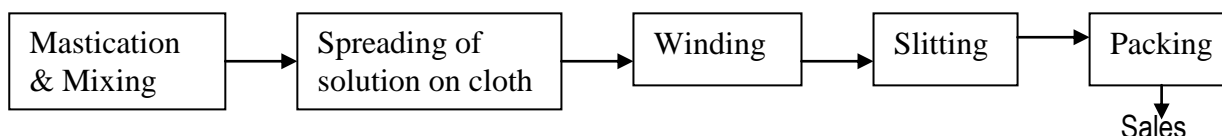
**Introduction:** Cotton selvage tape for electrical insulation purposes as per IS:1923-1973 and IS:2448 (Part-I)-1963 of Bureau of Indian standards are often referred to as Black Tape. These are used in manufacture of ovens, Furnaces, Motors, etc. and in household electrical wirings & equipments. These are resistant to pressure & temperature. Electrical insulation is the main feature of Black Tapes. It is also used by cable manufacturers to cover conductors.

**Market:** Black insulating tapes are used to cover joints of two conductors and hence an item of everyday use of all electrifications. Joining of more than one cable/ conductor is unavoidable in electrification works and hence Black Tape is a need for electrification works. With massive Electric generation and hence distribution network under implementation in Tripura, therefore, large demand for Black insulating tapes exist. These are sold through all Electrical stores in the state.

**Installed Capacity:** Operating for single shift of 8 hours per day for 300 working days per annum, the unit shall have an annual installed capacity to produce 2.64 Lakh rolls of Black insulation tapes.

**Process of Manufacture:** The unit will purchase 54 inch wide evenly and firmly woven cotton fabrics, free from weaving defects. Normally the fabric is Black in colour. Rubber compound with 12.50 percent Crepe Rubber, 5 percent National Rubber, 49.50 percent asbestos powder, 12.50 percent Resin, 0.50 percent Carbon Black and 20 percent castor oil are made in Mixing Mill so that the Rubber mix is made into a homogeneous mass. This Rubber mass is mixed with turpentine oil/ Benzene in the same Mixing Mill. This fluid is spread over the cotton fabric in a spreading Machine by using Doctors Blade Technique so that the cost of Rubber solution is uniform. The coated fabric is cut to the required width on a slitting Machine and wound on a winding machine into rolls of desired length. These are then labeled on sides of Rolls and packed in polyethylene.

### Process Flow Sheet:



**Raw Materials:** The principal raw material of the unit will be petroleum based solvent as double the quantum of all other raw materials taken together shall be solvent. It will be available from Assam Oil Division of Indian Oil Corporation. All other raw materials are available comparatively cheap in Bagra market and China Market in Kolkata. The annual requirement at the installed capacity and costs are shown below:

Sl.No.	Description	Quantity required	Cost in Rs.
1.	Benzene	3000 Liters	2,14,500/-
2.	Asbestos Powder	743 kilograms	49,368/-
3.	Castor oil	300 Liters	18,150/-
4.	Crepe Rubber	188 kilograms	31,020/-
5.	Resin	187 kilograms	5,143/-
6.	National Rubber	75 kilograms	6,600/-
7.	Carbon Black	8 kilograms	220/-
8.	Zinc oxide	8 kilograms	1,100/-
9.	Labels	1,50,000 Numbers	5,500/-
10.	Polyethylene films	100 kilograms	33,000/-
		<b>Total:</b>	46,427/-

**Power:** At 400/440 Volts, 50 Hz, AC, 3 Phase and 4 Wire the Unit will need 7KW of total connected load, which is locally available. The annual consumption of power is estimated at 10,800KWHrs costing Rs. 19,440/=.

**Water:** The Unit will need 1000 Liters of water per day, the cost of drawing of which is shown with power cost.

**Manpower:** The Unit will need to obtain a production chemist from outside the state. All other manpower are locally available. The requirement and annual cost of manpower is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager cum Chemist	1	1,32,000/-
2.	Administrative & Sales Staff	3	1,78,200/-
3.	Skilled Worker	2	1,32,000/-
4.	Unskilled Worker	4	1,32,000/-
	Total:	10	5,71,200/-

**Capital Cost Estimate:**

1.	<b>Land &amp; Building:</b> Covered area 186 sq.M.	<b>On Rent</b>
2.	<b>Plant &amp; Machinery</b>	
a)	25 Cmx50 Cm Mixing Mill with all accessories	3,84,000/-
b)	Double Roll Spreading Machine	2,70,000/-
c)	Slitting Machine	54,000/-
d)	Sigma Mixer	54,000/-
e)	Misc. tools & equipments	60,000/-
f)	H.V. Break Down Tester, Laboratory Oven, adhesion Test & Pin hole testing equipments	78,000/-
		<b>Rs. 9,00,000/-</b>
3.	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 93,500/-
b)	Water Installation	Rs. 11,000/-
c)	Furniture & Miscellaneous others	Rs. 60,500/-
		<b>Rs. 1,65,000/-</b>
4.	<b>Provision for contingencies</b>	<b>Rs. 49,500/-</b>
5.	<b>Preliminary &amp; pre-operative expenses</b>	<b>Rs. 82,500/-</b>
		<b>Total Fixed Investment Rs. 11,97,000/-</b>
6.	<b>Working Capital (for 3 months)</b>	
a)	Raw Materials	Rs. 91,068/-
b)	Power	Rs. 5,346/-
c)	Salary & Wages	Rs.1,43,550/-
d)	Miscellaneous expenses	Rs. 62,536/-
		<b>Total: Rs.3,02,500/-</b>
		<b>Total Project Cost: Rs.14,99,500/-</b>

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
a.	Composite loan under PMEGP	Rs. 10,49,650/-
b.	Subsidy	Rs. 3,74,875/-
c.	Promoters contribution	Rs. 74,975/-
d.	Debt Equity Ratio	2.33:1
		Rs.8,99,700/-
		Rs.5,24,825/-
		Rs. 74,975/-
		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl. No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization	1,529	1,783	2,038	2,038	2,038
3.	<b>Annual Costs</b>					
(a)	Raw Materials	219	255	292	292	292
(b)	Power	18	18	19	19	19
(c)	Wages & Salaries	521	546	570	520	570
(d)	Repair & Maintenance	78	78	78	78	78
(e)	Administrative overheads	110	115	121	127	134
(f)	Selling expenses	230	267	306	306	306
(g)	Depreciation	119	119	119	119	119
(h)	Interest	120	98	72	44	15
	Total:	1414	1496	1577	1555	1533
	<b>Total Variable Cost</b>	<b>466</b>	<b>540</b>	<b>617</b>	<b>617</b>	<b>617</b>
4.	<b>Annual profit</b>	<b>115</b>	<b>287</b>	<b>461</b>	<b>483</b>	<b>505</b>
5.	Return on investment	7.67	19.14	30.75	32.22	33.68
6.	Return on sales	7.52	16.09	22.13	23.69	24.77
7.	Annual Contribution	1063	-	-	-	-
8.	Break Even Point as percent of capacity	56.16	-	-	-	-
9.	Cash accrual	234	406	580	602	602
10.	Debt servicing capacity	354	604	652	646	639
11.	Repayment of Composite Loan	170	198	227	227	227
12.	Debt serviced	290	296	299	271	242
13.	<b>Pay Back Period</b>	<b>1 years 8 months 19 days</b>				
14.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.22:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	75	-	-	-	-	-
2.	Increase in subsidy	375	-	-	-	-	-
3.	Increase in loan	1050	-	-	-	-	-
4.	Depreciation	-	119	119	119	119	119
5.	Profit before interests	-	235	385	533	527	520
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1500</b>	<b>354</b>	<b>504</b>	<b>652</b>	<b>646</b>	<b>639</b>
6.	Increase in capital investment	1197	-	-	-	-	-
7.	Increase in Current Assets	303	-	-	-	-	-
8.	Interests	-	120	98	72	44	15
9.	Repayment of loan	-	170	198	227	227	227
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1500</b>	<b>290</b>	<b>296</b>	<b>299</b>	<b>271</b>	<b>242</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>64</b>	<b>272</b>	<b>625</b>	<b>1000</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>64</b>	<b>208</b>	<b>353</b>	<b>375</b>	<b>397</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>64</b>	<b>272</b>	<b>625</b>	<b>1000</b>	<b>1397</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	75	190	477	938	1421
2.	Surplus from operations	115	287	461	483	505
	<b>NET WORTH:</b>	<b>190</b>	<b>477</b>	<b>988</b>	<b>1421</b>	<b>1926</b>
3.	Subsidy	375	375	375	375	375
4.	Loan Account	880	687	455	228	-
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1445</b>	<b>1534</b>	<b>1768</b>	<b>2024</b>	<b>2301</b>
1.	Gross Fixed Assets	1197	1197	1197	1197	1197
	<b>Less</b> Depreciation	119	236	357	476	595
	<b>NET BLOCK</b>	<b>1078</b>	<b>959</b>	<b>840</b>	<b>721</b>	<b>602</b>
2	Current Assets	303	303	303	303	303
3.	Cash & Bank Balance	64	272	625	1000	1397
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1445</b>	<b>1534</b>	<b>1768</b>	<b>2024</b>	<b>2301</b>

**Machinery Suppliers:**

1. Baranagore Metal Casting Co., 109 B.T. Road, Kolkata-700035
2. H.P. Singh & Co., 75, Ganesh Chandra Avenue, Kolkata-700013.
3. Premier Engineers, Post Box No. 11, SIRHIND-140406.

## PVC COATED ELECTRICAL WIRES

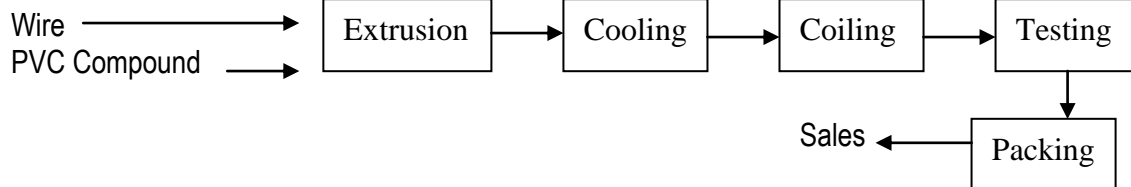
**Introduction:** Electrical wires need coating for insulation and hence safety. Coated Wires and Cables form Electrical use need to confirm to Bureau of Indian standards specification IS:694-1977, IS:5831-1970 and IS:8130-1976.

**Market:** PVC coated Electrical wires/ cables are used primarily in house wiring and other internal wiring works. With better coverage of Electric grid, increased housing activities for residence, commercial and industrial purposes the market for PVC coated Electrical cables have increased manifold.

**Installed Capacity:** Assuming that the unit will work for single shift of 8 hours per day for 300 working days per annum that the coverage size of wire shall be 1.5 sq.mm the annual installed capacity is estimated at 36,000 coils of 100 Meters of length each.

**Process of Manufacture:** The PVC compound granules and E.C. grade Aluminium wire are fed to the PVC Extruder. The machine cost the wire with PVC Compound and exlude the coated wire through the water cooling tank where the PVC hardens. The wire is printed and winded into costs of 100 meters of length. These are then tested as per Bureau of Indian Standard specifications and packed for sales.

**Process Flow:**



**Raw Material:** The unit will need E.C. grade Aluminium wires, cable grade PVC Compound and Polyethylene Films as its raw materials, all of which need to be purchased from outside the state. Cables can be purchased from dealers in Pollock street Kolkata or M/s Kothari Brothers, 55, Ezra Street (4<sup>th</sup> Floor), Kolkata-700001. PVC Compound is available from National Organic Chemical Industries Ltd, BoB Building, Parliament Street, New Delhi besides others. The requirement and annual cost of raw-materials at the installed capacity is shown below:

Sl.No.	Raw/ Packing Material	Quantity per year	Cost per annum
1.	E.C. Grade Aluminium wire	24 M.T.	23,00,000/-
2.	Cable Grade PVC Compound	36 M.T.	20,00,000/-
3.	LDPE Film for packing	L.S.	2,08,000/-
		Total:	45,08,000/-

**Power:** The Unit will need a total connected Load of 15 KW at 400/440 Volts, 50 HC, AC, three phase & 4 wire. The annual consumption of power is estimated at 10, 295 KWHrs. Costing Rs. 18,531/=. The power is readily available from the State Electricity supply Corporation through its Grid.

**Water:** The Unit will need 500 liters of water per day. It is available from both ground water sources and public supply.

**Manpower:** Apart from the two skilled persons all manpower is readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 84,000
2	Office Assistants	2	Rs, 96,000
3.	Skilled Worker	2	Rs. 1,20,000
4.	Unskilled Workers	4	Rs. 1,20,000
	Total	9	Rs. 4,20,000

**Capital Cost Estimate:**

1. Land & Building : Covered area 74 sq.M. On Rent
2. **Plant & Machinery**
- a). PVC Extruder & 65 mm Srew Diameter with cooling tank Rs. 4,75,000/-

	take-off & take up system and other accessories	
b)	Coil winding and measuring machine	Rs. 30,000/-
c)	Cable stamping/ printing machine	Rs. 20,000/-
d)	Extrusion Dies	Rs. 25,000/-
e)	Spark Tester, Double Kelvin Bridge, 250 kg Tensile Testing equipment, vottage Test sets, Heating oven, Fire resistance testing apparatus, Heat deformation test ket, etc. testing equipments	Rs. 2,50,000/-
		<u>Rs. 8,00,000/-</u>
3)	<b><u>Miscellaneous Fixed Asset</u></b>	
a)	Electrification	Rs. 95,000/-
b)	Water Installation	Rs. 50,000/-
c)	Furniture & Miscellaneous others	Rs. 55,000/-
		<u>Rs. 2,00,000/-</u>
4.	Provision for contingencies	<u>Rs. 50,000/-</u>
5.	Preliminary & pre-operative expenses	<u>Rs. 50,000/-</u>
	<b>Total</b>	<u>Rs. 1,75,000/-</u>
	<b>Total fixed Costs:</b>	<u>Rs.11,75,000/-</u>
6.	<b><u>Working Capital:</u></b>	
(a)	Raw Materials for 1 months	Rs. 3,75,000/-
(b)	Utilities for 1 month	Rs. 1,544/-
(c)	Wages & Salaries for 1 Month	Rs. 35,000/-
(d)	Other expenses for 1 month	Rs. 89,456/-
	<b>Total Working Capital:</b>	<u>Rs. 5,01,000/-</u>
	<b>TOTAL PROJECT COST:</b>	<u>Rs.16,76,000/-</u>

**Means of finance:**

	<b>URBAN</b>	<b>RURAL</b>
1. Composite Loan:	Rs. 11,73,200	Rs.10,05,600
2. Subsidy:	Rs. 4,19,000	Rs. 5,86,600
3. Promoters' Contribution:	Rs. 83,800	Rs. 83,800
4. Debt. Equity Ratio:	2.33:1	1.50:1

**Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	<b>Annual sales Realization</b>	<b>4347</b>	<b>5072</b>	<b>5796</b>	<b>5796</b>	<b>5796</b>
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2700	3150	3600	3600	3600
	(b) Power	14	16	19	19	19
	(c) Wages & Salaries	390	410	420	431	442
	(d) Repair & Maintenance	48	48	48	48	48
	(e) Administrative overheads	120	126	132	139	146
	(f) Selling expenses	652	761	869	869	869
	(g) Depreciation	110	110	110	110	110
	(h) Interest on Composite Loan	136	111	81	49	20
	<b>Total Cost</b>	<b>4170</b>	<b>4732</b>	<b>5279</b>	<b>5265</b>	<b>5254</b>
	Variable Costs	3366	3927	4488	4488	4488
4.	<b>Annual Profit</b>	<b>177</b>	<b>340</b>	<b>517</b>	<b>531</b>	<b>542</b>
5.	Return on Investment	10.56	20.29	30.85	31.68	32.34
6.	Return on sales	4.07	6.70	8.92	9.16	9.35
7.	Annual Contribution	981	-	-	-	-

8.	Break Even Point	49.17	-	-	-	-
9.	Cash Accrual	2.87	450	627	641	652
10.	Debt Servicing Capacity	423	561	708	690	672
11.	Repayment of Loan	173	220	260	260	260
12.	Debt Serviced	309	331	341	309	280
13.	Pay Back Period	2 Years 8 months 11 days				
14.	Debt Service Coverage Ratio	1:95:1				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	84	-	-	-	-	-
2.	Increase in subsidy	419	-	-	-	-	-
3.	Increase in Composite Loan	1173	-	-	-	-	-
4.	Depreciation	-	110	110	110	110	110
5.	Profit before interests	-	313	451	508	580	562
<b>A.</b>	<b>Total Sources</b>	<b>1676</b>	<b>423</b>	<b>561</b>	<b>708</b>	<b>690</b>	<b>672</b>
6.	Increase in capital investments	1175	-	-	-	-	-
7.	Increase in Working Capital	501	-	-	-	-	-
8.	Interests	-	136	111	81	49	20
9.	Repayment of Loan	-	173	220	260	260	260
<b>B.</b>	<b>Total Disposals</b>	<b>1676</b>	<b>309</b>	<b>331</b>	<b>341</b>	<b>309</b>	<b>280</b>
<b>C.</b>	<b>Opening Balance</b>	<b>-</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>
<b>D.</b>	<b>Net Surplus</b>	<b>-</b>	<b>114</b>	<b>230</b>	<b>367</b>	<b>381</b>	<b>392</b>
<b>E.</b>	<b>Closing Balance</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>	<b>1484</b>

**Projected Balance Sheets:**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	84	261	601	1118	1649
2.	Surplus from operation	177	340	517	531	542
	<b>NET WORTH</b>	<b>261</b>	<b>601</b>	<b>1118</b>	<b>1649</b>	<b>2191</b>
3.	Subsidy	419	419	419	419	419
	Composite Loan	1000	780	520	260	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1680</b>	<b>1800</b>	<b>2657</b>	<b>2328</b>	<b>2610</b>
1.	Gross Fixed Assets	1175	1175	1175	1175	1175
	<b>Less Depreciation</b>	<b>110</b>	<b>220</b>	<b>330</b>	<b>440</b>	<b>550</b>
	<b>NET BLOCK</b>	<b>1065</b>	<b>955</b>	<b>845</b>	<b>735</b>	<b>625</b>
2.	Current Assets/W/C	501	501	501	501	501
3.	Cash & Bank Balance	114	344	711	1092	1484
<b>B.</b>	<b>Total Assets</b>	<b>1680</b>	<b>1800</b>	<b>2057</b>	<b>2328</b>	<b>2610</b>

**Machinery Suppliers:**

1. Kolsite Industries, P.B. No. 7368, 31, Shah Industrial Estate, Andheri (W), Mumbai-400058
2. R.H. Windsor (India) Ltd, E-6, U Road, Thana Industrial Estate, Thana.
3. Brimco Pvt. Ltd, Brimco House, 55, Government Industrial Estate, Kandivli Estate, Mumbai.
4. Boolani Engineering Corporation, 402, Veer Savarkar Road, Pravadevi estate, Mumbai-400025.

## ASSEMBLING OF EMERGENCY LIGHTS

**Introduction:** In our country power cuts is a common problem whether it is a rural area or an urban one. Besides, this common problem, there are many places which suffer from insufficient current supply. Therefore, such conditions lead to suspension in the work of offices, shops, hotels, schools, hospitals, etc. Solution to this problem (at least to an extent) is emergency lights. Usually emergency light has a lamp fitted in it 60 watt and has a change over relay circuit-with the help of which as soon as the normal current stops, lamp of this light lits. When the normal current gets back, relay lamp stops and the circuit get disconnected as well. A battery and a battery charging unit is also fitted into the unit and when emergency light is not required, it keeps getting charged. Emergency light is mainly a combination of tube light and reflector having following factors:-

1. 6 Volts 20 Watt tubelight
2. Change-over relay circuit (when the normal current supply stops, lamp gets started.)
3. Charging unit
4. Back up battery for emergency light.
5. Other hardware components.

**Market:** Since, power cuts is troublesome for every one, hence emergency light is the most appropriate solution especially for offices, shops, departmental stores, hotels, hospitals and others. It would not be wrong even if we say that it is a requirement of every house. These are possibilities of constant increase in the demand for emergency light considering the unpredictability of power supply. Hence, these are bright channels for success if the entrepreneur makes these following the exact procedure and taking care of the quality of his product.

**Production Process:** The production process is mainly of assembling work. Different components are assembled according to the circuit diagram. A lamp and a reflector is fitted into the front portion of the unit. Then the assembled plate is fitted into the cover, finally, these equipments are tested and sent to the markets.

**Production Target:** About 3600 emergency lights would be made annually. Usually the cost of emergency light is between Rs. 600 to 800 with the battery. In the given unit back-up battery would be used and each piece of emergency light would cost Rs. 700/- making the total annual income to be Rs. 25,20,000/-.

**Raw Materials:** Raw Materials required by the Unit are locally available in Agartala and Silchar in Assam. The monthly costs of raw materials are shown below:

Sl.No.	Description	No	Rate	Cost
i)	On-off switch	600	20/-	12,000/-
ii)	Transformer	150	250/-	37,500/-
iii)	Diody by 127	225	15/-	3,375/-
iv)	Transistor 2 N 3055	125	30/-	3,750/-
v)	Transistor SL 100	125	10/-	1,250/-
vi)	Transistors B C-109C	125	20/-	2,500/-
vii)	Resistors 470 ohms	125	1/-	125/-
viii)	Resistors 680 ohms	125	1/-	125/-
ix)	Resistors 1 K	125	1/-	125/-
x)	Resistors 220 hms 2 w	125	300/-	37,500/-



xi)	6V/SA Dry Accumulator	125	110/-	13,750/-
xii)	10 W Tube light	225	80/-	18,000/-
xiii)	Flexible wire	-	-	500/-
xiv)	LED 5 mm with holder	125	5/-	625
xv)	Soldering wire	-	-	1,000/-
xvi)	Soldering flux	125	15/-	1,875/-
xvii)	Printed circuit board	125	20/-	2,500/-
xviii)	Plastic casings	125	100/-	12,500/-
xix)	Bulb 6 watt	125	5/-	625/-
xx)	Packing material			38,99500/-
	<b>Total Raw Material:</b>			<b>1,84,870/-</b>

**Power:** The Unit shall need 10KW of total connected Load at 400/440 Volts, 50Hz,AC, 3 Phase & 4 Wire. The power is available from the State Electric Supply Corporation Grid. Annual consumption of power at the installed capacity is estimated at 18,000 KW Hrs. Costing Rs. 33,300/-

**Water:** The Unit will need 1000 Ltrs. of clean and Soft Water per day, which may be locally available.

**Manpower:** The requirements and costs of Manpower for the Unit at the installed capacity is shown below. Manpower shall be locally available.

Sl. No.	Category of Manpower	No. of persons	Annual Costs
1.	Manager	1	Self
2.	Administrative & Sales Clerk	1	Rs. 48,000
3.	Skilled Workers	2	Rs. 72,000
4.	Unskilled Workers	1	Rs. 24,000
	<b>Total:</b>	<b>6</b>	<b>Rs. 1,44,000/-</b>

### **Financial Aspect of the Unit**

#### **A. Capital Cost Estimate:**

- 1) Land & Building 500 sq.ft. On Rent
- 2) Plants & Machinery

Sl.No.	Description	Quantity	Cost
i)	Digital MultiMatre	5	1,00,000/-
ii)	Soldering Iron	2	7,000/-
iii)	Portable drilling machine	1	10,500/-
iv)	D.C. power supply	1	7,000/-
v)	Hand drilling machine	1	3,31,500/-
vi)	Single coil winding	1	6,000/-
vii)	Hand operated tools like nose pliers, tape set, side cutter, pliers, screw driver spanner set, bendi wise, de-solder gun etc.		1,25,000/-
ix)	Packing and forwarding of machines, electric charges, over transportation		25,000/-
		<b>Total:</b>	<b>Rs.5,80,000/-</b>

#### **3. Miscellaneous Fixed Assets**

- (a) Electrification Rs. 75,000/-
- (b) Water Installations Rs. 40,000/-

(c)Miscellaneous others	Rs. 35,000/-
	<b>Rs. 1,50,000/-</b>
4. Provision for contingencies	Rs. 40,000/-
5. Preliminary & Pre-operative expenses	Rs. 80,000/-
	<b>Total fixed Costs: Rs. 8, 50,000/-</b>

**6. Working Capital:**

(a) Raw Materials for three months	Rs. 5,54,612/-
(b) Power cost for three months	Rs. 8,325/-
(c)Wages & Salaries for three months	Rs. 73,500/-
(d) Other expenses for three months	Rs. 1,84,175/-

**Total Working Capital: Rs. 8,20,612/-****TOTAL PROJECT COST:Rs.16,70,612/-****(Say Rs. 16,71,000)****Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Loan:	Rs. 10,86,000	Rs. 9,19,050
2. Subsidy:	Rs. 4,18,000	Rs. 5,84,850
3. Promoters' Capital:	Rs. 1,67,000	Rs. 1,67,100
4. Debt. : Equity Ratio:	2.33:1	1.50: 1

**Profitability:**

(Rs in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilization	60%	70%	80%	80%	80%
2.	<b>Annual sales Realization</b>	<b>2495</b>	<b>2911</b>	<b>3326</b>	<b>3326</b>	<b>3326</b>
3.	<b>Annual Costs in</b>					
	(a) Raw Materials	1331	1553	1775	1775	1775
	(b) Power	25	29	33	33	33
	(c)Wages & Salaries	294	301	309	317	325
	(d) Repair & Maintenance	32	32	32	32	32
	(e) Administrative overheads	150	158	165	174	182
	(f) Selling expenses	374	437	499	499	499
	(g) Depreciation	80	80	80	80	80
	(h) Interest	109	88	64	38	13
	<b>Total costs</b>	<b>2395</b>	<b>2678</b>	<b>2957</b>	<b>2948</b>	<b>2939</b>
	Total Variable Costs	1730	-	-	-	-
4.	<b>Annual Operating Profit</b>	<b>100</b>	<b>233</b>	<b>369</b>	<b>378</b>	<b>387</b>
5.	Annual Contribution	765	-	-	-	-
6.	<b>Break Even Point</b>	<b>52.16%</b>				
7.	<b>Return on Investment</b>	<b>5.98%</b>	<b>13.94%</b>	<b>22.08%</b>	<b>22.62%</b>	<b>23.16%</b>
8.	<b>Return on sales</b>	<b>4.01%</b>	<b>8.00%</b>	<b>11.09%</b>	<b>11.37%</b>	<b>11.64%</b>
9.	Cash Accrual	180	313	449	458	467
10.	Debt Servicing Capacity	289	401	513	496	480
11.	Repayment of Loan	176	205	235	235	235
12.	Debt Serviced	285	293	299	273	248
13.	<b>Pay Back Period</b>	<b>3 Years 3 Months 20 Days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1.56 : 1</b>				

**Cash Flow Statement:**

(Rs. in Thousands)

Sl. No.	Description	Pre-operative period	Operating years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in Promoters' Capital	167	-	-	-	-	-
2.	Increase in Subsidy	418	-	-	-	-	-
3.	Increase in Loan	1086	-	-	-	-	-
4.	Depreciation	-	80	80	80	80	80
5.	Profit before interest	-	209	321	433	416	400
<b>A</b>	<b>Total Sources</b>	<b>1671</b>	<b>289</b>	<b>401</b>	<b>513</b>	<b>496</b>	<b>480</b>
6.	Increase in Capital Investment	850	-	-	-	-	-
7.	Increase in Current Assets	821	-	-	-	-	-
8.	Interests	-	109	88	64	38	13
9.	Repayment of Loan	-	176	205	235	235	235
<b>B</b>	<b>Total Assets</b>	<b>1671</b>	<b>285</b>	<b>293</b>	<b>299</b>	<b>273</b>	<b>248</b>
<b>C</b>	<b>Opening balance</b>	-	-	<b>4</b>	<b>112</b>	<b>326</b>	<b>549</b>
<b>D</b>	<b>Net Surplus</b>	-	<b>4</b>	<b>108</b>	<b>214</b>	<b>223</b>	<b>232</b>
<b>E</b>	<b>Closing Balance</b>	-	<b>4</b>	<b>112</b>	<b>326</b>	<b>549</b>	<b>781</b>

**Projected Balance Sheets:**

Sl. No.	Description	Amount in Rupees Thousand as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoters	167	267	500	869	1247
2.	Surplus from operations	100	233	369	378	387
	<b>Net Worth</b>	<b>267</b>	<b>500</b>	<b>869</b>	<b>1247</b>	<b>1634</b>
3.	Subsidy	418	418	418	418	418
4.	Loan Account	910	705	470	235	-
<b>A</b>	<b>Total Liabilities</b>	<b>1595</b>	<b>1623</b>	<b>1757</b>	<b>1900</b>	<b>2052</b>
1.	Gross Fixed Assets	850	850	850	850	850
	Less Depreciation	80	160	240	320	400
	<b>Net Block</b>	<b>770</b>	<b>690</b>	<b>610</b>	<b>530</b>	<b>450</b>
2.	Current Assets	821	821	821	821	821
3.	Cash & Bank balance	4	112	326	549	781
<b>B</b>	<b>Total Assets</b>	<b>1595</b>	<b>1623</b>	<b>1757</b>	<b>1900</b>	<b>2052</b>

## INVERTERS

**Introduction :** Various sophisticated electronic and mechanical equipment require continuous and un-fluctuating power supply for effective functioning. Computer, fax machine, automatic teller machines, ATM counter, process control equipment tolerate break in AC power supply even for 1/10<sup>th</sup> of a second. Any power supply aberration would result in erasement of data in computers and cause process disorders in industries. Hence these equipment/ system should be backed up by alternate power source, which should be instantly supply the required power in case of power breakdown to run the computers / process uninterrupted.

**Product :** Invertors consists of a converter , the converter is a battery chargers which has a step down transformer. The AC output from this transformer is converted to DC by passing through a rectifier, when the mains are on this DC output is issued to charge the battery and also an input to inverter which converts DC into AC output when the mains fail, charged battery acts as the input sources for the inverter.

**Market;** The electrical power production in our country is much less than the demand. Through government is making efforts to bridge the gap between demand and supply by inviting private sector participation , the condition is expected to continue as demand is growing at a much further pace. It is clear that the demand the shortfall in power generation would continue is carrying years and there is growing need to have continuous power for sophisticated equipment in railway, telecom, computer institute, Post Office, Bank, ATM counter, Medical equipment etc. the usage of ups is household sector where PCS are installed is also increasing.

**Suggested Capacity:** The minimum economic capacity for Inverter is 15,000 nos. per annum. On one shift basis on a 300 days working schedule in year.

**Raw Materials;** The main raw materials required for manufacture of UPS are Capacitors, b. Resistors, c. PCB, d. Potentiometers etc, e. ICs Transistors IGBT Diodes, thyristors, f. Transformer coils, Chokes, Really, Mosfet, g. Switches, Buttons, Fuse, Circuit breaker, h. Cabinet etc. Raw materials are to be sourced mainly from the open market at present availability and supply of the raw materials is not problem e.g Capacitors, b. Resistors, c. PCB, d. Potentiometers etc, e. ICs Transistors IGBT Diodes, thyristors, f. Transformer coils, Chokes, Really, Mosfet, g. Switches, Buttons, Fuse, Circuit breaker, h. Cabinet etc. to be sourced from open local markets and out side of Tripura.

**Utilities :** The unit will require a total connected load of 200 KVA and a maximum demand of 190 KVA. Water requirement is about 500KL per annum.

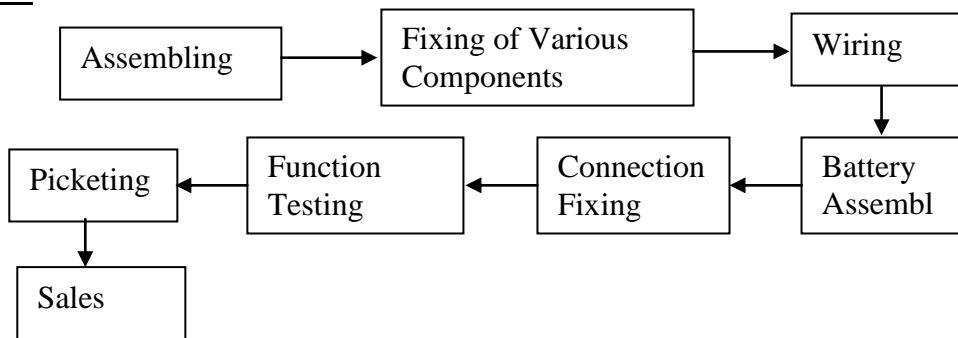
**Manpower:** The unit will provide employment to the following 7 persons and all of whom are locally available.

1	Manager cum Supervisor	<b>Self</b>	<b>Self</b>
2.	Skilled Engineer	4nos	Rs.22,500/-
3.	Office Boy	1 no	Rs. 2,200/-
4.	Sales Man	1no	<u>Rs. 3,300/-</u>
		<b>Total</b>	<b><u>Rs.27,500/-</u></b>

**Manufacturing Process:** UPS consists of components like transformer switches power devices and PCBs. The electronic control is in PCB, which consists of components like KS, transistors, resistors etc. The process of assembly of UPS involved the following steps.

1. Assembly
2. Fixing of various components.
3. Wiring
4. Battery assembly
5. Functional testing

**Flow Chart :**



**CAPITAL COST ESTIMATE:**

**Land and Building:** 1000Sq. ft.

**On Rent**

**Plant & Machinery :**

1. Colour Poltter curve tracer for CAD/CAM computer optical & other accessories.	<b>Rs. 1,02,000/-</b>
2. Programmed multiple drilling Machine.	Rs. 8,400/-
3. Winding Machine	Rs. 1,800/-
4. Flow soldering machine	Rs. 6,600/-
5. Surface mounting equipment	Rs. 9,000/-
6. Storage oscilloscope 150 Mhz	Rs. 8,200/-
7. CAD/CAM computer for PCB design	Rs. 8,400/-
8. Testing equipment, Power analyzer	Rs. 8,400/-
9. Impregnation & vacuum machine.	Rs. 7,200/-
	<b>Total Rs. 1,60,000/-</b>
	Add Vat 4% Rs. 18,334/-
	Transportation Rs. 6,600/-
	<b>Net Rs. 1,84,934/-</b>

**Miscellaneous Fixed Assets:**

1. Chair & Working Table	Rs. 16,500/-
2. Fan & Lighting and wearing	Rs. 16,500/-
3. Interior decoration	Rs. 38,500/-
	<b>Total Rs. 71,500/-</b>
	Add Vat 12.5% Rs. 8,935/-
	Installation Charges Rs. 2,063/-
	<b>Total Rs. 82,498/-</b>

**Preliminary & Preoperative Exp.:**

**Total Fixed Capital: Rs. 2,72,382/-**

**Working Capital:**

1. Salary & Wages	Rs. 27,500/-
2. Administrative expenses	Rs. 13,666/-
3. Selling expenses	Rs. 3,300/-

4.	Raw Materials	Rs. 2,20,000/-
5.	Utilities	Rs. 3,850/-
	<b>Total:</b>	<b>Rs. 2,68,316/-</b>
	<b>Total Cost of the Project:</b>	<b>Rs. 5,40,698/-</b>

**Means of Finance**

		Urban		Rural	
a.	Composite loan under PMEGP	70%	Rs. 3,78,488/-	60%	Rs. 3,24,419/-
b.	Subsidy	25%	Rs. 1,35,175/-	35%	Rs. 1,89,243/-
c.	Margin Money	5%	Rs. 27,035/-	5%	Rs. 27,035/-
		<b>Total</b>	<b>Rs. 5,40,698 /-</b>		<b>Rs. 5,40,698/-</b>
d.	Debt Equity Ratio		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	<b>Annual Sales</b>	<b>2138</b>	<b>2495</b>	<b>2851</b>	<b>2851</b>	<b>2851</b>
3.	<b>Annual Costs</b>					
(a)	Raw Materials	1584	1793	2112	2112	2112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	23	28	32	32	32
4	<b>Variable Cost</b>	<b>1634</b>	<b>1858</b>	<b>2181</b>	<b>2181</b>	<b>2181</b>
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	34	25	15	5
5	<b>Fixed &amp; Semi Variable Cost</b>	<b>367</b>	<b>407</b>	<b>447</b>	<b>437</b>	<b>427</b>
6	<b>Total Cost</b>	<b>2001</b>	<b>2260</b>	<b>2628</b>	<b>2618</b>	<b>2608</b>
7.	<b>Annual profit</b>	<b>137</b>	<b>235</b>	<b>223</b>	<b>233</b>	<b>243</b>
8	<b>Return on investment</b>	<b>25.37%</b>	<b>43.51%</b>	<b>41.29%</b>	<b>43.14%</b>	<b>45.00%</b>
9.	<b>Return on sales</b>	<b>6.40%</b>	<b>9.41%</b>	<b>7.82%</b>	<b>8.17%</b>	<b>8.52%</b>
10.	Annual Contribution	504				
11	Break Even Point in percent	43.69%				
12	Cash accrual	164	262	250	260	270
13.	Debt servicing capacity	208	296	275	275	275
14	Repayment of Composite Loan	61	71	82	82	82
15.	Debt serviced	105	105	106	96	86
16	<b>Pay Back Period</b>	<b>1 years 11 month 22 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.98:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	378	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	135	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27

5.	Profit before interests		181	269	248	248	248
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>540</b>	<b>208</b>	<b>296</b>	<b>275</b>	<b>275</b>	<b>275</b>
6.	Increase in capital investment	272	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	34	25	15	5
9.	Repayment of loan	NIL	61	71	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>540</b>	<b>105</b>	<b>105</b>	<b>107</b>	<b>97</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>103</b>	<b>294</b>	<b>462</b>	<b>640</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>103</b>	<b>191</b>	<b>168</b>	<b>178</b>	<b>188</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>103</b>	<b>294</b>	<b>462</b>	<b>640</b>	<b>828</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousand as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	164	399	622	855
2.	Surplus from operations	137	235	223	233	243
	<b>NET WORTH:</b>	<b>164</b>	<b>399</b>	<b>622</b>	<b>855</b>	<b>1098</b>
3.	Composite loan	317	246	164	82	nil
4.	Subsidy	135	135	135	135	135
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>616</b>	<b>780</b>	<b>921</b>	<b>1072</b>	<b>1233</b>
1.	Gross Block	272	272	272	272	272
	Less Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>245</b>	<b>218</b>	<b>191</b>	<b>164</b>	<b>137</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	103	294	462	640	828
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>616</b>	<b>780</b>	<b>921</b>	<b>1072</b>	<b>1233</b>

**Supplies of Machinery & Equipments :**

**A.D.S. POWER SYSTEMS (P) LTD.** A-1, Flatted Factory Complex, Okhla Phase-3, New Delhi - 110020, India. Phone : 91-11-26435111 , Mobile : +919312306910 , Fax : 91-11-26435111

**S.B. Electronic Industries** 15/105, Subhash Nagar, New Delhi- 110 027, India. Phone:91-11-25142963/25142964/25145222 Mobile+919899670300 Fax : 91-11-45565865

## UPS ASSEMBLING UNIT

**Introduction :** Various sophisticated electronic and mechanical equipment require continuous and un-fluctuating power supply for effective functioning. Computer, fax machine, automatic teller machines, ATM counter, process control equipment tolerate break in AC power supply even for 1/10<sup>th</sup> of a second. Any power supply aberration would result in easement of data in computers and cause process disorders in industries. Hence these equipment/ system should be backed up by alternate power source, which should be instantly supply the required power in case of power breakdown to run the computers /process uninterrupted.

**Market;** The electrical power production in our country is much less than the demand. Through government is making efforts to bridge the gap between demand and supply by inviting private sector participation , the condition is expected to continue as demand is growing at a much further pace. It is clear that the demand the shortfall in power generation would continue is carrying years and there is growing need to have continuous power for sophisticated equipment in railway, telecom, computer institute, Post Office, Bank, ATM counter, Medical equipment etc. the usage of ups is household sector where PCS are installed is also increasing.

**Suggested Capacity:** The minimum economic capacity for UPS is 15,000 nos per annum On one shift basis on a 300 days working schedule in year.

**Manufacturing Process:** UPS consists of components like transformer switches power devices and PCBs. The electronic control is in PCB, which consists of components like KS, transistors, resistors etc. The process of assembly of UPS involved the following steps.

1. Assembly
2. Fixing of various components.
3. Wiring
4. Battery assembly
5. Functional testing

**Raw Materials;** The main raw materials required for manufacture of UPS are Capacitors, b. Resistors, c. PCB, d. Potentiometers etc, e. ICs Transistors IGBT Diodes, thyristors, f. Transformer coils, Chokes, Really, Mosfet, g. Switches, Buttons, Fuse, Circuit breaker, h. Cabinet etc. Raw materials are to be sourced mainly from the open market. Raw materials may be sourced from open indigenous markets. These may cost Rs.2,20,000/- per annum.

**Utilities :** The unit will require a total connected load of 5 KVA. The annual consumption of power is estimated at 11,356 KWHrs costing Rs. 46,560/-. Water requirement is about 500 Liters per day.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available from local area.

1. Manager cum Supervisor	Self	Self
2. Skilled	4nos	Rs.22,500/-
3. Office Boy/Peon	1 no	Rs. 2,200/-
4. Sales Man	1no	Rs. 3,300/-
	<b>Total</b>	<b><u>Rs.27,500/-</u></b>



**CAPITAL COST ESTIMATE:****Land and Building:** 200Sq. Mtrs.**On Rent****Plant & Machinery :**

1.	Colour Plotter curve tracer for CAD/CAM computer optical & other accessories.	<b>Rs. 1,87,200/-</b>
2.	Programmed multiple drilling Machine.	
3.	Winding Machine	
4.	Flow soldering machine	
5.	Surface mounting equipment	
6.	Storage oscilloscope 150 Mhz	
7.	CAD/CAM computer for PCB design	
8.	Testing equipment	
9.	Power analyzer	
10.	Impregnation & vacuum machine.	
<b>Total:</b>		<b>Rs. 1,87,200/-</b>

**Miscellaneous Fixed Assets:**

1.	Chair & Working Table	Rs. 32,500/-
2.	Fan & Lighting and wearing	Rs. 15,000/-
3.	Interior decoration	Rs. 35,000/-
<b>Total:</b>		<b>Rs. 82,500/-</b>
<b>Total:</b>		<b>Rs. 4,950/-</b>

**Preliminary & Preoperative Exp.:****Total Fixed Capital: Rs. 2,74,650/-****Working Capital (P.m)**

1.	Salary & Wages	Rs. 27,500/-
2.	Administrative expenses	Rs. 13,666/-
3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs. 2,20,000/-
5.	Utilities	Rs. 3,880/-
<b>Total:</b>		<b>Rs. 2,68,316/-</b>

**Total Cost of the Project :Rs. 5,42,966/-****Means of Finance:**

		<b>Urban</b>		<b>Rural</b>	
a.	Composite loan under PMEGP	70%	Rs. 3,80,076/-	60%	Rs. 3,25,780/-
b.	Subsidy	25%	Rs. 1,35,742/-	35%	Rs. 1,90,038/-
c.	Margin Money	5%	Rs. 27,148/-	5%	Rs. 27,148/-
		<b>Total</b>	<b>Rs. 5,42,966/-</b>		<b>Rs. 5,42,966/-</b>
d.	Debt Equity Ratio		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	<b>Annual Sales</b>	<b>2,138</b>	<b>2,495</b>	<b>2,851</b>	<b>2,851</b>	<b>2,851</b>
3.	<b>Annual Costs</b>					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(d)	Wages & Salaries	198	231	264	264	264
(e)	Administrative expenses	98	115	131	131	131

(f)	Depreciation	27	27	27	27	27
(g)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
7.	<b>Annual profit</b>	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
8	<b>Return on investment</b>	<b>25.04</b>	<b>32.78</b>	<b>41.06</b>	<b>42.90</b>	<b>44.93</b>
9.	<b>Return on sales</b>	<b>6.36</b>	<b>7.13</b>	<b>7.82</b>	<b>8.17</b>	<b>8.55</b>
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
13.	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
15.	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
16	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	Nil	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less Depreciation</b>	<b>27</b>	<b>54</b>	<b>81</b>	<b>108</b>	<b>135</b>
2	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

1. A. D. S. POWER SYSTEMS (P) LTD. A-1, Flatted Factory Complex, Okhla Phase-3, New Delhi - 110020, Phone : 91-11-26435111 , Mobile : +919312306910 , Fax : 91-11-26435111
2. S. B. Electronic Industries, 15/105, Subhash Nagar, New Delhi – 110027. Phone : 91-11-25142963/ 25142964/25145222, Mobile : +919899670300, Fax : 91-11-45565865

# JUTE & TEXTILES INDUSTRIES

## GARMENTS

**Introduction:** The business of Garments is now a developed business in its own right. Peoples' indication towards the readymade clothes is rising day-by-day. This indication can be attributed to their busy schedules and the attractive designs as well as variety in the readymade clothes. Although there is a considerably big range under 'readymade' clothes but here we shall deal with children wear and Ladies Garments. Market of such clothes is quite large and material required for making such clothes is also not a problem even on local level.

**Market:** As it is an item of daily use and necessity, their marketing will not be problem provided the consumers are properly educated above the gains and advantages of readymade garments vis-à-vis made to order only. These items have got bright export potential and at present this industry is thriving on exports only.

**Target:** Target set in the given unit is of sales worth Rs. 34,68,000/-.

**Process of Manufacture:** Fabrics are cut to proper size & shapes. These are stitched together as per specification. These are then interlocked. Button holes are made. Buttons are stitched manually. The finished products are then manually Ironed and packed.

**Raw Materials:** Fabrics, appliquéés, Packing Boxes, Polythene Bags, Buttons, Yarn, etc shall be the raw materials for the Unit. Product-wise cost estimates of them are shown below:

Sl.No.	Details	Cost (in Rs.)
1.	Jeans Pants (for children)	15,000/-
2.	Gaberdine Pants (for children)	13,500/-
3.	Tericot Pants (for children)	15,000/-
4.	Tericot shirts (for children)	6,000/-
5.	Baba suits	12,000/-
6.	Frock (for children)	17,500/-
7.	T- shirt	25,500/-
8.	Salwar – kurta sets	44,500/-
9.	Ladies Gowns	15,000/-
10.	other products	50,000/-
	Total:	2,14,000/-

### **Raw Materials Suppliers:**

- 1) Ankur, 208/5, Rash Behari Avenue, Kolkata – 29.
- 2) GIRIRAJ GARMENTS READYMADE HOUSE, 13, Ganguly Lane, Burrabazar, Kolkata – 700 007.
- 3) Goenkas, Shikh Mandir, H.B.Road, Fancy Bazar, Ghy – 781001.

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 17,400/-.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Sales & Administrative staff	3	1,38,600/-
3.	Skilled Workers	5	2,97,000/-
4.	Unskilled Workers	2	66,000/-
	<b>Total</b>	<b>11</b>	<b>5,01,600/-</b>

**Financial Aspect of the unit:**

1)	<b>Land &amp; Building:</b> 92 Sq. Mtrs.	<b>Rented</b>
2)	<b>Plant &amp; Machinery</b>	
a)	4 No.s of Sewing Machine	Rs. 34,560/-
b)	Misc. Hand Tools	Rs. 3,840/-
		<b>Rs. 38,400/-</b>
3)	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 27,500/-
b)	Furniture & Miscellaneous others	Rs. 82,500/-
		<b>Rs.1,10,000/-</b>
4.	<b>Provision for contingencies</b>	<b>Rs. 8,800/-</b>
5.	<b>Preliminary &amp; pre-operative expenses</b>	<b>Rs. 16,500/-</b>
		<b>Total Fixed Investment Rs. 1,70,500/-</b>
6.	<b>Working Capital</b>	
a)	Raw Material	Rs. 1,04,720/-
b)	Utilities	Rs. 1,595/-
c)	Salary & Wages	Rs. 1,25,565/-
d)	Other expenses	Rs. 27,005/-
		<b>Total working capital: Rs. 2,58,885/-</b>
		<b>Total Project Cost: Rs. 4,29,385/-</b>

**Means of Finance:**

	<u>Urban</u>	<u>Rural</u>
1. Composite loan	3,00,570/-	2,57,631/-
2. Promoter's contribution	21,469 /-	21,469/-
3. Subsidy	1,07,346/-	1,50,285/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization.	1288	2670	3051	3051	3051
3.	<b>Annual Costs</b>					
a)	Raw Materials	1256	1537	1784	1784	1784
b)	Utilities	11	13	15	15	15
c)	Selling expenses	181	211	242	242	242
	<b>Variable Cost</b>	<b>1448</b>	<b>1761</b>	<b>2041</b>	<b>2041</b>	<b>2041</b>
d)	Wages & Salaries	501	514	527	559	560
e)	Administrative expenses	198	231	264	264	264
f)	Depreciation	17	17	17	17	17
g)	Interest on Composite Loan	34525	27925	20309	12186	4062
4.	<b>Total Cost</b>	<b>2199</b>	<b>2551</b>	<b>2869</b>	<b>2893</b>	<b>2886</b>
5.	<b>Annual Profit</b>	<b>89</b>	<b>119</b>	<b>182</b>	<b>158</b>	<b>165</b>
6.	<b>Return on Investment</b>	<b>20.74%</b>	<b>27.73%</b>	<b>42.42%</b>	<b>36.82%</b>	<b>38.46%</b>

7.	<b>Return on sales</b>	<b>3.89%</b>	<b>4.46%</b>	<b>5.96%</b>	<b>5.17%</b>	<b>5.40%</b>
8.	Annual contribution	840	-	-	-	-
9.	Break Even Point					
10.	Cash accrual	106	136	199	1751	182
11.	Debt Servicing Capacity	141	164	202	187	186
12.	Repayment of Composite Loan	49	57	65	65	65
13.	Debt Serviced	83	84	85	77	69
14.	<b>Pay Back Period</b>	<b>1 year 7 months 27 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.69:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	21	-	-	-	-	-
2.	Increase in Term loan	300	-	-	-	-	-
3.	Subsidy	107	-	-	-	-	-
4.	Depreciation	-	17	17	17	17	17
5.	Profit before interests	-	124	147	202	170	169
<b>A.</b>	<b>TOTAL SOURCES</b>		<b>429</b>	<b>141</b>	<b>164</b>	<b>219</b>	<b>187</b>
186	Increase in capital investment	170	-	-	-	-	-
6.	Increase in working capital	259	-	-	-	-	-
7.	Interest	-	35	28	20	12	4
8.	Repayment of Loan	-	49	57	65	65	65
9.	Repayment of Loan	-	49	57	65	65	65
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>429</b>	<b>84</b>	<b>85</b>	<b>85</b>	<b>77</b>	<b>69</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>57</b>	<b>136</b>	<b>270</b>	<b>380</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>57</b>	<b>79</b>	<b>134</b>	<b>110</b>	<b>117</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>551</b>	<b>136</b>	<b>270</b>	<b>380</b>	<b>497</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees Thousand as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	21	110	229	411	569
2.	Surplus from operation	89	119	182	158	165
	<b>NET WORTH:</b>	<b>110</b>	<b>229</b>	<b>411</b>	<b>569</b>	<b>734</b>
3.	Subsidy	<b>107</b>	<b>107</b>	<b>107</b>	<b>107</b>	<b>107</b>
4.	Loan Account	252	196	130	65	-
	<b>TOTAL LIABILITIES</b>	<b>469</b>	<b>531</b>	<b>648</b>	<b>741</b>	<b>841</b>
1.	Gross Block	170	170	170	170	170
	Less Depreciation	17	34	51	68	85
	<b>NET BLOCK</b>	<b>153</b>	<b>136</b>	<b>119</b>	<b>102</b>	<b>85</b>
2.	Working capital	259	259	259	259	259
3.	Cash & Bank Balance	57	136	270	380	497
	<b>TOTAL ASSETS</b>	<b>469</b>	<b>531</b>	<b>648</b>	<b>741</b>	<b>841</b>

**Suppliers of Machinery:**

1. Giribala Udyog, Bottola, Agartala
2. Oriental Machineries Pvt. Ltd., Lake Road, Haradhan Sangha, Agartala

## HOSIERY

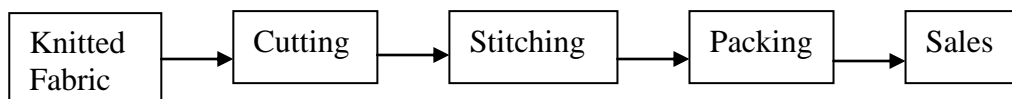
**Introduction:** Hosiery projects including knitting of yarn into fabric and use of such fabrics for manufacturing Garments and undergarments have excellent domestic and export market. Products like undergarments and children wear from knitted fabrics are comparatively cheap and comfortable. Because of these properties Hosiery products are consumed in all strata of society. Bureau of Indian standards has specified IS:4964(P-II)- 1975, IS:4965-1975, IS-298, IS-13003 and IS-1895 for cotton knitted and stitched Hosiery products. Till recently cotton knitwear produced were only undergarments. However, now Children wear and Sports wear is added to product range of cotton knitwear. Cotton knitwear are more elastic, sweat absorbing and these provide better comfort to wearer compared to woven fabrics.

**Market:** Seventy five percent of Indian export of knitwear is of cotton as Indian Cotton Knitwear has found wide acceptance in Europe, USA, Middle East & Canada. At present about twenty five percent of Indian apparel export is constituted by cotton knitwear. Most of the production of cotton knitted fabrics in India is located in North-Western India while cotton knitted garments manufacturers are located all over the country. The domestic market for cotton knitted undergarments is also very large as items like vests (Baryan/ Ganjee) and Briefs are consumed all over the country. In Tripura alone annually more than 5 Million vests (Ganjee) and 2.5 Million Underwear Briefs are consumed. There is also excellent export potential to Bangladesh for these products. Therefore, a cotton knitwear unit may have good marketing scope in Tripura.

**Capacity:** Operating single shift of 8 hours per day for 300 working days per annum the proposed Unit may have an annual installed capacity to produce 16250 Dozens of vests and 8750 Dozens of Briefs.

**Process of Manufacture:** Knitted Cotton fabrics shall be purchased by the unit from manufacturers. These fabrics are cut as per design. These are stitched, over locked and chain locked. In case of Briefs elastic tapes are attached, where necessary. Finished vests/Briefs are tested, packed and then bulk-packed.

**Process Flow:**



**Raw Materials:** Bleached Cotton Knitted Fabrics of 34 Count & Ribbed 40 counts are the principal raw materials of the Unit. These are available from M/S Bombay Textiles, 82/1A, G.T. Road, Kolkata-700 002, M/S Sham Lal Dev Raj, Banjman Road, Ludhiana, M/S S.K. Oswal Hosiery. Purnabazar, Ludhiana, M/s Popular Hosiery mill, Near Model basti, New Delhi- 110 006 etc. Packing Material including Brown Board, Polyethylene Bags, Printed Duplex Board Boxes, etc. need to be of best possible quality. These are available in Kolkata & Guwahati. Other inputs like 20s cotton yarn, Sewing thread, needles, Lubricants for machinery, etc. are locally available. The requirement at the installed capacity and annual costs are shown below:

Sl.No.	Raw/ Packing material	Quantity	Cost
1.	Bleached Cotton knitted fabrics of 34 counts	16,250 kilograms	35,75,000/-
2.	Bleached Cotton Ribbed knitted fabrics of 40 counts	4,375 kilograms	7,33,907/-
3.	Twisted Sewing Threads	660 cones	1,08,900/-
4.	Packing Material	50,000 sets	5,50,000/-
5.	Elastic Tapes	5,105 Meters	42,116/-
6.	Consumable like Lubricants, needles, betts etc.	L.S.	1,65,000/-
		<b>Total:</b>	<b>51,74,924/-</b>



**Power:** The unit will need 11 KVA of total connected load at Single phase, AC, 50 Hz, 200/220 volts & 3 wires. The annual consumption of power is estimated at 20,640 KWHrs costing Rs. 63,984.

**Water:** The unit will need 2000 Liters of water per day, the cost of which is shown with power cost.

**Manpower:** The manpower required by the Unit are locally available. Requirement and annual cost of manpower is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	1,05,600/-
2.	Sales Executive	2	1,58,400 /-
3.	Administrative & Sales staff	5	2,31,000/-
4.	Skilled worker	25	14,85,000/-
5.	Unskilled worker	27	8,91,000/-
	Total:	60	28,71,000/-

**Capital Cost Estimate:**

<b>1. Land &amp; Building:</b> Covered area 186 Sq. Mtrs.	On Rent
<b>2. Plant &amp; Machinery:</b>	
a) 20 No.s of Three Thread over lock Sewing Machine	1,80,000/-
b) 2 Nos. of Single Chain stitch machine	30,000/-
c) 2 No.s of Double Chain Stitch Machine	30,000/-
d) Flat- lock stitching machine	36,000/-
e) 24 Dozen Capacity Ball Press	21,600/-
f) 10 No.s of 16lb Electric Irons	14,400/-
g) 3.5 HP Electric Motor with accessories	18,000/-
h) Folding Machine	19,800/-
i) Rib-Cutting Machine	21,000/-
j) Small Tools, Bobbin Stand, Stands for machines, Ironing, Cutting, Scissors, Working seats, etc.	97,200/-
	<u>4,68,000/-</u>
<b>3. Miscellaneous Fixed Assets:</b>	
a. Electrification	82,500/-
b. Water Installation	22,000/-
c. Other Fixed Assets	88,000/-
	<u>1,92,500/-</u>
<b>4. Provision for Contingency</b>	<b>33,000/-</b>
<b>5. Preliminary &amp; Pre-Operative Expenses</b>	<b>44,000/-</b>
	<b><u>Total Fixed Investments: 7,37,500/-</u></b>
<b>6. Working Capital: (for 3 Months)</b>	
a. Raw Materials	12,93,731/-
b. Power	17,596/-
c. Wages & Salaries	7,17,750/-
d. Miscellaneous expenses	22,423/-
	<u>20,51,000/-</u>
	<b><u>Total Project Cost: 27,89,000/-</u></b>

**Means of Finance:**

1. Composite Loan Under PMEGP
2. Subsidy
3. Promoter's Capital
4. Debt: Equity Ratio

**Urban**

- Rs. 19,52,300/-  
 Rs. 6,97,250/-  
 Rs. 1,39,450/-  
 2.33: 1

**Rural**

- Rs. 16,73,400/-  
 Rs. 9,76,150/-  
 Rs. 1,39,450/-  
 1.50: 1

**Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	<b>Capacity Utilization</b>	<b>60%</b>	<b>70%</b>	<b>80%</b>	<b>80%</b>	<b>80%</b>
2.	<b>Annual Sales Realization</b>	<b>6782</b>	<b>7912</b>	<b>9042</b>	<b>9042</b>	<b>9042</b>
3.	<b>Annual Costs in</b>					
a.	Raw Materials	3105	3622	4140	4140	4140
(b)	Power	46	53	59	59	59
©	Wages & Salaries	1921	2170	2420	2482	2543
(d)	Repair & Maintenance	25	25	25	25	25
(e)	Administrative overheads	110	116	121	128	134
(f)	Selling expenses	1018	1187	1356	1356	1356
(g)	Depreciation	73	73	73	73	73
(h)	Interest	231	187	137	82	28
	Total:	6529	7433	8331	8345	8358
	<b>Total Variable Cost</b>	<b>4169</b>	<b>4862</b>	<b>5555</b>	<b>5555</b>	<b>5555</b>
4.	<b>Annual profit</b>	<b>253</b>	<b>479</b>	<b>711</b>	<b>697</b>	<b>684</b>
5.	Return on investment	9.88%	18.04%	26.36%	25.80%	25.20%
6.	Return on sales	4.01%	6.27%	8.02%	7.85%	7.66%
7.	Annual Contribution	2613				
8.	<b>Break Even Point</b>	<b>54.19%</b>				
9.	Cash accrual	326	552	784	770	757
10.	Debt servicing capacity	557	739	921	852	785
11.	Repayment of Loan	317	369	422	422	422
12.	Debt serviced	548	556	559	504	450
13.	<b>Pay Back Period</b>	<b>3 years 3 months 19 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1.50:1</b>				

**Cash Flow Statement:**

(Rs. in Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	140	-	-	-	-	-
2.	Increase in subsidy	697	-	-	-	-	-
3.	Increase in loan	1952	-	-	-	-	-
4.	Depreciation	-	73	73	73	73	73
5.	Profit before interests	-	484	666	848	779	712
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>2789</b>	<b>557</b>	<b>739</b>	<b>921</b>	<b>852</b>	<b>785</b>
6.	Increase in fixed investment	738	-	-	-	-	-
7.	Increase in Working Capital	2051	-	-	-	-	-
8.	Interests	-	231	187	137	82	28
9.	Repayment of loan	-	317	369	422	422	422
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>2789</b>	<b>548</b>	<b>556</b>	<b>559</b>	<b>504</b>	<b>450</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>192</b>	<b>554</b>	<b>902</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>9</b>	<b>183</b>	<b>362</b>	<b>348</b>	<b>335</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>9</b>	<b>192</b>	<b>554</b>	<b>902</b>	<b>1237</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	140	393	872	1583	2280
2.	Surplus from operations	253	479	711	697	684
	<b>NET WORTH:</b>	<b>393</b>	<b>872</b>	<b>1583</b>	<b>2280</b>	<b>2964</b>
3.	Subsidy	697	697	697	697	697
4.	Loan Account	1635	1266	844	422	-
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>2725</b>	<b>2835</b>	<b>3124</b>	<b>3399</b>	<b>3661</b>
1.	Gross Fixed Assets	738	738	738	738	738
	<b>Less</b> Depreciation	73	146	219	292	365
	<b>NET BLOCK</b>	<b>665</b>	<b>592</b>	<b>519</b>	<b>446</b>	<b>373</b>
2	Closing Stocks	2051	2051	2051	2051	2051
3.	Cash & Bank Balance	9	192	554	902	1237
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>2725</b>	<b>2835</b>	<b>3124</b>	<b>3399</b>	<b>3661</b>

**Suppliers of Machinery:**

1. Giribala Udyog, Agartala.
2. H.P. Singh & Co., B.G.C. Avenue, Kolkata.

## JUTE BAGS

**Introduction:** Decorated, coloured, Silky-lustre, light in weight jute bags (Both for ladies and school going children) are being preferred in the society due to their good appearance, durability and reasonable cost. As it is easy to their fabricate the jute bags, so jute bags of various shapes and sizes can be manufactured. In modern days packing/ carrying materials are playing a prominent and distinctive role in domestic as well as export fields. The jute bags (Tea bags) are used to carry the precise article of daily use and tea in various quantities. All the machinery and raw material used for manufacturing id such products are available from indigenous sources.

**Marketing:** These items have a very good demand in the domestic market. Much emphasis is given to this Industry to cater to the growing demand of foreign buyers. The products like any other consumer durable have the prospect of attracting wide range of people from all walks of life. With more than cores of population in the country and with the rising standards of living and economic up-liftment of the people from the poverty line, there exists an ever increasing demand of the products both in the internal as well as the external market

**Monthly Production & Sales :** Assuming that the Unit will operate for single shift per day for 25 working days per month the following capacity and sales are estimated:

<u>Sl.No</u>	<u>Descriptions</u>	<u>Rate</u>	<u>Qty</u>	<u>Total</u>
1.	Different types of ladies bag	181.50/-	1000	Rs.1,81,500/-
2.	Tea Bag	46.75	500	Rs. 23,375/-
3.	Shopping Bag	27.5/-	1000	Rs. 27,500/-
4.	Water battle./ Carry bag.	16.5/-	500	Rs 8,250/-.
5.	Different types of folder etc	33/-	500	Rs 16,500/-
6.	Other Jute product (wall designe, etc)			Rs. 39,875/-
<b>Total</b>				<b>Rs. 2,97,000/-</b>

**Production Procedure:** Components are first cut as per design and then stitched together as per specifications

**Raw Materials:** Raw materials are to be sourced mainly from the open market and JRMB Agartala Requirements and costs of Raw Materials are shown below:

<u>SINo</u>	<u>Details</u>	<u>Mtr./Doz/Qty</u>	<u>Rate</u>	<u>Amount (Rs.)</u>
1.	Laminated Jute cloth	500 mtr	52.80/-	26,400/-
2.	Cloth/PVC buckle, nylon bit	25mtr	550/-	13,750/-
3.	Sewing thread	1000	6.60/-	6,600/-
4.	Zip fastener	1000	27.50/-	27,500/-
5.	Packing materials.			16,500/-
6.	Closely woven jute fabric	200	49.50/-	9,900/-
7.	Belerow	200	55/-	11,000/-
8.	Card/ Paste board			3,300/-
9.	Rubber coated Jute fabrics Chain, Rivets, still frame, handle, wax, salutation flour, dyes, labels, lock, Roap			22,000/-
10.	Jute Cotton cloth	500mtr	80/-	44,000/-
11.	Eyelete, Runner			5,500/-
<b>Total</b>				<b>1,86,450/-</b>

Add:Vat 12.5% Rs. 23,306/-

Add; Freights Rs. 10,243/-  
 Total Rs. 2,19,999/-

**Power:** Consumption of power is estimated at 4756 KWHrs. costing Rs.19,500/- per annum.

**Water:** Requirement of water mainly for washing and cleaning of Raw Jute, Silk Screen print developing etc and drinking purpose. The unit shall avail of the PHE water supply already available at the site and it can also install its own tube well supply for the purpose.

**Manpower:** The unit will employ 7 persons and all man power to be arranged from local area.

1.	Manager cum Supervisor	Self	Self
2.	Skilled Engineer	3nos	Rs.16,500/-
3.	Office Boy	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
5.	Designer	1 no	Rs. 5,500/-
	<b>Total</b>		<b><u>Rs.27,500/-</u></b>

**Capital Cost Estimate:**

**Land and Building;** 60 Sq. Mtrs of covered area

**On Rent**

**Plant & Machinery**

<u>Sl.No.</u>	<u>Descriptions</u>	<u>Rate (Rs.)</u>	<u>Qty</u>	<u>Total</u>
1.	Lock stitch sewing machine (Foot operated)	13,200/-	5	66,000/-
2.	Tape, Scissors, Needles etc	2,400/-	5 sets	12,000/-
3.	Weighing scale	1,680/-	5 sets	8,400/-
4.	Electric Heater	1,200/-	5 nos	6,000/-
5.	Screen Printing Machine (Equipments)			<u>69,600/-</u>
				<b>1,62,000/-</b>
			<b>Add Vat 12.5%</b>	<b>20,250/-</b>
			<b>Add Freights</b>	<b>4,950/-</b>
			<b>Total</b>	<b><u>1,87,200/-</u></b>

**Miscellaneous Fixed Assets :**

1.	Different types of racks & furniture (Iron make)	Rs.22,000/-
2.	Show case one no	Rs.27,500/-
3.	Chair, Working Table and Signboard	Rs.11,000/-
4.	Fan& Lightings	Rs.11,000/-
		<b>Rs. 71,500/-</b>
		<b>Add Vat 12.5% Rs. 8,938/-</b>

**Installation Charges Rs. 2,062/-**

**Total: Rs.82,500/-**

**Preliminary & Preoperative Exp.:**

**Rs. 4,950/-**

**Fixed Capital : Rs.2,59,050/-**

**Working Capital (P.m)**

1.	Salary & Wages	Rs. 27,500/-
2.	Administrative expenses	Rs. 13,666/-
3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs.2,20,000/-
5.	Utilities	Rs. 3,850/-
	<b>Total</b>	<b><u>Rs.2,68,316/-</u></b>

**Total Cost of the Project: Rs.5,42,966/-**

**Means of Finance:**

		<b>Urban</b>		<b>Rural</b>	
a.	Composite loan under PMEGP	70%	Rs.3,80,076/-	60%	Rs.3,25,780/-
b.	Subsidy	25%	Rs.1,35,742/-	35%	Rs.1,90,038/-
c.	Margin Money	5%	Rs. 27,148/-	5%	Rs. 27,148/-
		<b>Total</b>	<b>Rs.5,42,966/-</b>		<b>Rs.5,42,966/-</b>
d.	Debt Equity Ratio		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
6.	Total Cost	2002	2317	2628	2618	2607
7.	Annual profit	136	178	223	233	244
8	Return on investment in %	25.04	32.78	41.06	42.90	44.93
9.	Return on sales in %	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of installed capacity	43.77				
12	Cash accrual	163	205	250	260	271
13.	Debt servicing capacity	207	241	276	276	276
14	Repayment of Composite Loan	62	72	82	82	82
15.	Debt serviced	106	108	108	98	87
16	Pay Back Period	1 years 6 month 10 days				
17.	Debt Service Coverage Ratio (DSCR)	1.53:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27

5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	Less Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

1. M/s Giribala Udyog, Agartala, Tripura,

**Supplies of Raw Materials :**

2. Simantani, Agartala JRMB, Near Apanjan Club, Agartala

3. **Bhagabati Udyog**, 44, Burtolla Street, Kolkata-700 007, West Bengal, India

Phone : +(91)-(33)-22731046/22692855, Mobile : +(91)-9830616860

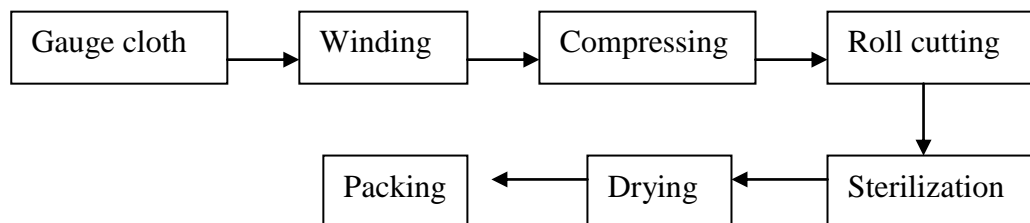
## SURGICAL BANDAGES

**Introduction:** A surgical dressing is a continuous strip or piece of woven material used to bandage wounds and burns. The length, width and shape of the bandage varies according to requirements. The main characteristics of a good bandage are capability to absorb discharges from a wound, comfortable to the wound, permit loss of moisture, etc.

**Market:** Surgical bandage industry has grown with the growth of medical/ veterinary facilities. It is one of the basic requirements of medical/ veterinary institutions. It is also a basic input of sanitary pad and filter industry. With more than of 638 states- run medical institutions Tripura has large demand for surgical bandage. It has six hospitals out of which two are attached to medical colleges. 82 PHC/ RH, 539 Dispensaries and six satellite dispensaries/ health sub centres also functions in the state. Besides 42 Ayurvedic and 76 Homeopathic medical institutions function in the state. All the institutions consume surgical bandage.

**Manufacturing Process:** Good quality bleached cotton gauge cloth made from 4 S to 24 S coarse cotton yarn is used for the manufacture of surgical bandages. The cloth is manually wound on rolls in lengths of about 3 to 10 metres each. The cloth in rolled form is then removed from the rolls and compressed. The compressed rolls are then cut into rolls of varying widths (45 mm to 150 mm) depending upon the requirements and sterilized with high pressure steam. The rolls are then dried and packed individually by wrapping with paper.

**Process Flow:**



**Suggested Capacity:** The minimum economic capacity of a unit manufacturing surgical bandages is 1 million pcs. Per annum based on a 30 days working schedule in a year.

**Raw Material:** The unit will require 2 lakh meters of bleached gauge cloth per annum for the manufacture of 1 million pcs of surgical bandages (basis 150 mm wide x 3 meters long bandages) per annum at 100 % capacity utilization. These can be obtained locally.

**Utility:** The unit may require a total amount of electricity and water annually Rs. 18,000/-. Its annual requirement of water is estimated at about 1,000 kl.

**Manpower:** Three skilled person and one sales man will need for the unit, all of whom are locally available. The annual cost of manpower is estimated Rs. 1,92,000/-.

Sl.No.	Type of Manpower	No. of Persons	Annual Costs
1.	Manager	1	Self
2.	Skilled worker	3	1,44,000/-
3.	Sales man	1	48,000/-
	<b>Total:</b>	<b>5</b>	<b>1,92,000/-</b>



**Financial Aspect of the Unit**

<b>A. Fixed Capital</b>		
1. Land & Building	500 sq.ft.	Rented
2. Plant & Machinery		
i) Cloth winding machine		
ii) Rolling & bandages making machine		
iii) Bandage compressing machine		
iv) Bandage rolls cutting machine		
v) Baby boiler		
vi) Sterilizer		
vii) Centrifugal dehydrating unit		
		<b>Total: 4,80,000/-</b>
3. Preliminary & pre-operative expenditure		Rs. 27,500/-
4. Furniture & fixture		Rs. 27,500/-
5. Electrification & water installation		Rs. 13,200/-
6. Misc. fixed asset		Rs. 11,000/-
	<b>Total Fixed Cost</b>	<b>Rs. 5,59,200/-</b>
<b>B. Working Capital</b>		
1) Raw Material		Rs. 4,40,000/-
2) Salary & Wages		Rs. 17,600/-
3) Utilities		Rs. 1,650/-
4) Misc. expenditure		Rs. 22,000/-
	<b>Total Working Capital: Rs. 4,81,250/-</b>	
	<b>Total Project Cost: Rs.10,40,450/-</b>	

**Means of Finance**

	<b>Urban</b>	<b>Rural</b>
1. Composite Loan	7,28,315/-	6,24,270/-
2. Promoter's contribution	52,022/-	52,022/-
3. Subsidy	2,60,113/-	3,64,158/-
4. Debt equity ratio	2.33:1	1.5:1

**Profitability:**

(Rs. In Thousands)

Sl. No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization	3795	4428	5060	5060	5060
3.	<b>Annual Costs</b>					
a)	Raw Materials	3168	3696	4224	4224	4224
b)	Utilities	12	13	15	15	15
c)	Selling expenses	16	18	21	21	21
	<b>Variable Cost</b>	<b>3196</b>	<b>3777</b>	<b>4260</b>	<b>4260</b>	<b>4260</b>
d)	Wages & Salaries	126	147	169	169	169
e)	Administrative expenses	142	166	190	190	190
f)	Depreciation	55	55	55	55	55
g)	Interest on Composite Loan	84	68	47	27	7
	Fixed & Semi Variable Cost	407	436	461	441	421
4.	<b>Total Cost</b>	<b>3603</b>	<b>4163</b>	<b>4721</b>	<b>4701</b>	<b>4681</b>
5.	<b>Annual Profit</b>	<b>192</b>	<b>265</b>	<b>339</b>	<b>359</b>	<b>379</b>

6.	Return on Investment	18.46%	25.48%	32.59%	34.51%	36.44%
7.	Return on sales	5.05%	5.98%	6.69%	7.09%	7.49%
8.	Annual contribution	599	701	800	800	800
9.	Break Even Point as percent of capacity	40.76%				
10.	Cash accrual	247	320	394	414	434
11.	Debt Servicing Capacity	331	388	441	441	441
12.	Repayment of Composite Loan	118	138	157	157	157
13.	Debt Serviced	202	206	204	184	164
14.	Pay Back Period	1 year 7 months 20 days				
15.	Debt Service Coverage Ratio	1.64:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	52	-	-	-	-	-
2.	Increase in Term loan	728	481	-	-	-	-
3.	Subsidy	260	-	-	-	-	-
4.	Depreciation	-	55	55	55	55	55
5.	Profit before interests	-	276	333	386	386	386
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1040</b>	<b>812</b>	<b>388</b>	<b>441</b>	<b>441</b>	<b>441</b>
6.	Increase in capital investment	1040	-	-	-	-	-
7.	Increase in working capital	-	481	-	-	-	-
8.	Interest	-	84	69	47	27	7
9.	Repayment of Term Loan	-	118	138	159	157	157
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1040</b>	<b>683</b>	<b>206</b>	<b>204</b>	<b>184</b>	<b>164</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>129</b>	<b>311</b>	<b>548</b>	<b>805</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>129</b>	<b>182</b>	<b>237</b>	<b>257</b>	<b>277</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>129</b>	<b>311</b>	<b>549</b>	<b>805</b>	<b>1082</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	52	244	509	848	1207
2.	Surplus from operation	192	265	339	359	379
	<b>NET WORTH:</b>	<b>244</b>	<b>509</b>	<b>848</b>	<b>1207</b>	<b>1586</b>
<b>3.</b>	<b>Subsidy</b>	<b>260</b>	<b>260</b>	<b>260</b>	<b>260</b>	<b>260</b>
4.	Term loan outstanding	610	472	315	158	-
	<b>TOTAL LIABILITIES</b>	<b>1114</b>	<b>1241</b>	<b>1423</b>	<b>1625</b>	<b>1847</b>
1.	Gross Block	559	559	559	559	559
	Less Depreciation	55	110	165	220	275
	<b>NET BLOCK</b>	<b>504</b>	<b>449</b>	<b>324</b>	<b>339</b>	<b>284</b>
2.	Working capital	481	481	481	481	481
3.	Cash & Bank Balance	129	311	548	805	1082
	<b>TOTAL ASSETS</b>	<b>1114</b>	<b>1241</b>	<b>1423</b>	<b>1625</b>	<b>1847</b>

**Suppliers of Machinery**

- 1) Goldman Automatics Pvt. Ltd. 1, Vardhaman Industrial Estate, Village Road, Mumbai-400078
- 2) A.D. International, No.- 12, Surekha Building, 2423/29, Shardha Nand Marg, Delhi – 710006.

## MOSQUITO NET

**INTRODUCTION:** Mosquito causes various diseases including Malaria and Dengue. Therefore, prevention of these diseases is of utmost importance. Mosquito net is a proven device for preventing mosquito bites. Having realized the importance of Mosquito nets in prevention of Malaria the Government is supplying Mosquito nets among the poorer section of the population. This has created an opportunity of utilizing the local skills in tailoring with the excellent market for Mosquito nets.

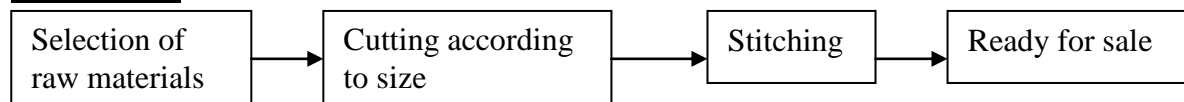
**MARKET:** The main product of the proposed unit is Mosquito Net of double-bed size. However in compliance with demand the unit may also produce nets of single as well as extra large sizes. The primary market of the product is the Tripura State itself. The unit also plan to sell the products in Assam as well. Bulk supply of mosquito nets to the State Health Department may boost the marketing of the product. The market is fast expanding as a result of creation of awareness to prevent Malaria, Filariasis, Dengue, etc diseases and distribution of Mosquito Nets by both State and Central Governments.

**PRODUCTION CAPACITY:** The annual installed capacity is estimated on the basis of the following assumption:

Working hours/shift	- 8		
No. of shift/day	- 1		
Working days	- 300 days/ year		
Capacity utilization	-1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year & onwards
	60%	70%	80%
Installed Capacity	- 20,000 mosquito nets per year		

**MANUFACTURING PROCESS:** In conformity with the size, colour and design of the mosquito net to be manufactured, the raw materials like net, markin cloths, lace, etc. are cut in measured sizes. Then the parts of the cut raw materials are stitched together carefully to yield the final product.

**Process Flow:**



**RAW MATERIALS:** The main raw materials required for the proposed unit include net, mar kin cloths, lace, yarn etc. Such raw materials are readily available at Agartala. However for more varieties of quality and design of products the unit envisages import of nets from Bangladesh against the license already possessed by the proprietor.

Raw Materials required by the Unit

a)	Net	1,65,000/-
b)	Markin cloth	40,500/-
c)	Lace	13,500/-
d)	Reels of yarn	1,800/-
		<u>2,20,800/-</u>

**MANPOWER:** the Unit shall need the following manpower all of whome are locally available:

Sl.No.	Particulars	Amount
a)	Cutting Master & Tailor 10 person @2500 p.m.	Rs. 25,000/-
b)	Sales man 2 person @ Rs. 3,000/-	Rs. 6,000/-
	<b>12 Persons</b>	<u>Rs. 31,000/-</u>

**PROJECT COST:**

1.	<b>Land &amp; Building</b> admeasuring 1,250 Sq. Ft.	<b>Rented</b>
2.	<b>Plant &amp; Machinery :</b> 10 nos. feet operated Sewing Machine with Standard tools @ Rs. 3,800/- per machine and Rs. 200/- per tool set inclusive of scales, Scissors etc. for each unit.	Rs. 48,000/-
3.	<b>Miscellaneous Fixed Assets:</b> i. Wooden tools, cutting tables, office furniture, Working & storage etc. (LS) ii. Electrification for lighting and air circulation iii. Water installation for drinking and ablution	Rs. 30,800/- Rs. 5,500/- Rs. 2,200/-
		<b>Sub Total:Rs. 38,500/-</b>
4.	Preliminary & Preoperative Expenses	Rs. 6,600/-
5.	Provision for contingencies	Rs. 4,400/-
		<b>Total Fixed Cost: Rs. 97,500/-</b>
6.	<b>Working Capital</b>	
a)	Raw Material	Rs. 2,42,880/-
b)	Repair & Maintenance:	Rs. 550/-
c)	Salary & Wages	Rs. 34,100/-
d)	Utilities	Rs. 550/-
e)	Administrative expenditure	Rs. 13,750/-
f)	Selling expenses	Rs. 1,870/-
		<b>Total working capital: Rs. 2,93,700/-</b>
		<b>Total Project Cost: Rs. 3,91,200/-</b>

**Means of Finance**

		<b>Urban</b>	<b>Rural</b>
1.	Composite loan	2,73,840 /-	2,34,720 /-
2.	Promoters Capital	19,560/-	19,560/-
3.	Subsidy	97,800/-	1,36,920/-
4.	Debt Equity ratio	2.33:1	1.5:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization	2310	2695	3080	3080	3080
3.	<b>Annual Costs</b>					
a)	Raw Materials	1749	2040	2332	2332	2332
b)	Utilities	4	5	5	5	5
c)	Selling expenses	13	16	18	18	18
	<b>Variable Cost</b>	<b>1766</b>	<b>2061</b>	<b>2355</b>	<b>2355</b>	<b>2355</b>
d)	Wages & Salaries	245	286	327	327	327
e)	Administrative expenses	99	115	132	132	132
f)	Depreciation	9	9	9	9	9
g)	Interest on Composite Loan	33	26	18	10	3
	Fixed & Semi Variable Cost	386	436	486	478	471
4.	<b>Total Cost</b>	<b>2152</b>	<b>2497</b>	<b>2841</b>	<b>2833</b>	<b>2826</b>
5.	Annual Profit	158	198	239	247	254
6.	Return on Investment	40.40%	50.63%	61.12%	63.62%	64.96%

7.	Return on sales	6.83%	7.35%	7.76%	8.01%	8.25%
8.	Annual contribution	544	634	725	725	725
9.	Break Even Point as percent of capacity	42.57%				
10.	Cash accrual	167	207	248	256	263
11.	Debt Servicing Capacity	200	233	266	266	266
12.	Repayment of Composite Loan	44	52	59	59	59
13.	Debt Serviced	77	78	77	69	62
14.	Pay Back Period	2 year 7 month 2 days				
15.	Debt Service Coverage Ratio	2.59:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	20	-	-	-	-	-
2.	Increase in Term loan	274	-	-	-	-	-
3.	Subsidy	97	-	-	-	-	-
4.	Depreciation	-	9	9	9	9	9
5.	Profit before interests	-	191	224	257	257	257
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>391</b>	<b>200</b>	<b>233</b>	<b>266</b>	<b>266</b>	<b>266</b>
5.	Increase in capital investment	98	-	-	-	-	-
6.	Increase in working capital	293	-	-	-	-	-
7.	Interest	-	33	26	18	10	3
8.	Repayment of Term Loan	-	44	52	59	59	59
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>391</b>	<b>77</b>	<b>78</b>	<b>77</b>	<b>69</b>	<b>62</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>123</b>	<b>278</b>	<b>467</b>	<b>664</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>123</b>	<b>18</b>	<b>189</b>	<b>197</b>	<b>204</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>123</b>	<b>278</b>	<b>467</b>	<b>664</b>	<b>868</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	20	178	376	615	862
2.	Surplus from operation	158	198	239	247	254
	<b>NET WORTH:</b>	<b>178</b>	<b>376</b>	<b>615</b>	<b>862</b>	<b>1116</b>
<b>3.</b>	<b>Subsidy</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>
4.	Term loan outstanding	229	177	118	59	-
	<b>TOTAL LIABILITIES</b>	<b>504</b>	<b>650</b>	<b>830</b>	<b>1018</b>	<b>1213</b>
1.	Gross Block	98	98	98	98	98
	Less Depreciation	9	18	27	36	45
	<b>NET BLOCK</b>	<b>88</b>	<b>79</b>	<b>70</b>	<b>61</b>	<b>52</b>
2.	Working capital	293	293	293	293	293
3.	Cash & Bank Balance	123	278	467	664	868
	<b>TOTAL ASSETS</b>	<b>504</b>	<b>650</b>	<b>830</b>	<b>1018</b>	<b>1213</b>

**Suppliers of Machinery:**

1. M/s S.R.Brothers, Motor-Stand Road, AGARTALA- 799 001.
2. Giribala Udyog, HGB Road, AGARTALA- 799 001.

## DIVERSIFIED JUTE HANDICRAFTS

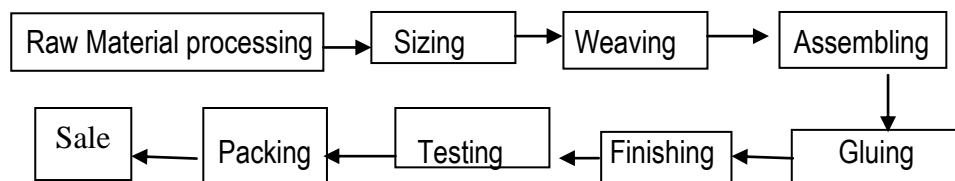
**Introduction:** Handicrafts yield very good prices in markets away from the location of production and hence these are better exportable products. Even within India Urban areas are proven to be better markets for Handicrafts. Dyed Jute Yarn and fabrics with Bamboo and other materials are used for manufacturing Handicrafts items. With excellent local skills in Bamboo Handicrafts and Boutique designs the State shows tremendous potential in Handicrafts manufacturing, especially by using Jute and Bamboo. As Bamboo Handicrafts produced in Tripura needs widening of product range, diversified Jute Handicrafts may cash on the handicrafts market already developed.

**Market:** Jute Handicrafts have excellent domestic and export markets. Normally sales in metropolitan cities and other larger cities yield better sales realization for Handicrafts. Tripura with its reputation for quality artistic handicrafts have better marketing scope for Handicrafts.

**Installed Capacity:** Assuming operations for Single Shift per day for 300 working days per annum the annual installed capacity of 15,000 pieces of Jute Handicrafts is estimated. These may yield an annual sales realization of Rs.7,50,00/-.

**Manufacturing Process:** Braid making, weaving, making of Bamboo sticks, weaving of Mats on frame, Yarn and product Dyeing, Assembling, finishing and packing are the operations involved to manufacture Handicrafts.

### Process Flow Chart



**Raw Materials:** All the raw- materials required by the Unit are locally available. Jute Yarn, Raw Jute and Fabrics with accessories are available at the Jute Raw- Materials Depot operated by M/s Simantini, Near Aponjon Club, Bhattapukur, Agartala at subsidized rates. The monthly requirement and costs of raw- materials are shown below:

1. Raw Jute and Jute Yarn	Rs. 15,000/-
2. Jute Fabrics	Rs. 1,000/-
3. Cane and Bamboo	Rs. 5,000/-
4. Cotton Thread	Rs. 1,000/-
5. Dyes	Rs. 3,000/-
6. Chemicals	Rs. 2,000/-
7. Beads	Rs. 1,500/-
8. Fevicol	Rs. 500/-
9. Needles, Glass bands, Hook, etc accessories	Rs. 500/-
10. Miscellaneous others	Rs. 1,500/-
<b>Total:</b>	<b>Rs. 31,000/-</b>

**Power:** As the process does not need any power a domestic connection of 1 KW Load may suffice. The annual consumption of power is estimated at 2857KWHrs costing Rs. 6,000/- at the installed capacity.

**Water:** The Unit will need 1000 Liters of water per day, cost of which is shown in power cost.

**Manpower:** Manpower required by the Unit are locally available. The requirement and annual cost of manpower is shown below:

Sl. No.	Description of Manpower	No of Person	Annual Cost
1	Skilled Worker	1	Rs. 52,800/-
2	Weaver (Part Time)	1	Rs. 26,400/-
3	Tailor (Part Time)	1	Rs. 26,400/-
4.	Wages for Katha Stitch, Bandhani, etc	1	Rs. 6,600/-
	<b>Total:</b>	<b>4</b>	<b>Rs. 1,12,200/-</b>

**CAPITAL COST ESTIMATE:**

**1. Land & Building:** Covered area 56 Sq. Mtrs.

**On rent**

**2. Machinery & Equipments:**

- |  |              |
|--|--------------|
| a) Two No.s of Stitching Machine       | Rs. 22,800/- |
| b) Two No.s of Small sized Frame Looms | Rs. 12,000/- |
| c) One Colour mixing Pot               | Rs. 6,000/-  |
| d) One Combined Wood Working Machine   | Rs. 66,000/- |
| e) Miscellaneous Hand Tools            | Rs. 12,000/- |

**Total: Rs. 1,18,800/-**

**1. Miscellaneous Fixed Assets:**

- |                         |              |
|-------------------------|--------------|
| a) Electrification      | Rs. 11,000/- |
| b) Water Installation   | Rs. 5,500/-  |
| c) Miscellaneous others | Rs. 4,950/-  |

**Total: Rs. 21,450/-**

**4. Provision for Contingency**

**Rs. 6,600/-**

**5. Preliminary & Preoperative Expenses**

**Rs. 6,050/-**

**Total Fixed Costs: Rs. 1,52,900/-**

**4. Working Capital (For Three Months):**

- |                                 |                |
|---------------------------------|----------------|
| a) Raw Materials                | Rs. 1,02,300/- |
| b) Utilities                    | Rs. 1,650/-    |
| c) Wages and Salaries           | Rs. 28,050/-   |
| d) Miscellaneous other expenses | Rs. 5,500/-    |

**Total Working Capital: Rs. 1,37,500/-**

**TOTAL PROJECT COST: Rs. 2,90,400/-**

**Means of Finance:**

1. Composite Loan Under PMEGP
2. Subsidy
3. Promoter's Contribution
4. Debt: Equity Ratio

**Urban**

- Rs. 2,03,280/-  
Rs. 72,600/-  
Rs. 14,520/-  
2.33: 1

**Rural**

- Rs. 1,88,760/-  
Rs. 1,01,640/-  
Rs. 14,520/-  
1.50: 1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized in percent	60%	70%	80%	80%	80%
2.	Annual Sales Rs.	495	577	660	660	660
3.	Annual Costs in Rs.					
(a)	Raw Materials	216	286	327	327	327
(b)	Utilities	4	5	6	6	6
(c)	Wages & Salaries	67	79	90	90	90
(d)	Administrative expenses	32	37	42	42	42
(e)	Selling expenses	34	40	46	46	46
(f)	Depreciation	15	15	15	15	15
(g)	Interest on Composite Loan	22	17	13	8	3
	<b>Total Cost</b>	<b>420</b>	<b>479</b>	<b>339</b>	<b>534</b>	<b>529</b>
	Variable Cost	284	331	379	379	379
4	<b>Annual profit</b>	<b>75</b>	<b>98</b>	<b>121</b>	<b>126</b>	<b>131</b>
5	Return on investment	25.84%	33.79%	41.72%	43.44%	45.17%
6	Return on sales	15.15%	16.98%	18.33%	19.09%	19.84%
7	Annual Contribution	211				
8	Break Even Point in percent	38.67%				
9	Cash accrual	90	113	136	141	146
10.	Debt servicing capacity	112	130	149	149	149
11	Repayment of Loan	33	38	44	44	44
12	Debt serviced	55	55	57	52	47
13	<b>Pay Back Period</b>	<b>Two Years Two Months One Day</b>				
14	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.71 : 1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	14	-	-	-	-	-
2.	Increase in composite loan	203	-	-	-	-	-
3	Increase in Subsidy	73	-	-	-	-	-
4.	Depreciation	-	15	15	15	15	15
5.	Profit before interests	-	97	115	134	134	134
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>290</b>	<b>112</b>	<b>130</b>	<b>149</b>	<b>149</b>	<b>149</b>
6.	Increase in capital investment	153	-	-	-	-	-
7.	Increase in working capital	137	-	-	-	-	-
8.	Interests	-	22	17	13	8	3
9.	Repayment of loan	-	23	38	44	44	44
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>290</b>	<b>55</b>	<b>55</b>	<b>57</b>	<b>52</b>	<b>47</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>57</b>	<b>132</b>	<b>224</b>	<b>321</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>57</b>	<b>75</b>	<b>92</b>	<b>97</b>	<b>102</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>57</b>	<b>132</b>	<b>224</b>	<b>321</b>	<b>423</b>



**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	14	89	187	308	434
2.	Surplus from operations	75	98	121	126	131
	<b>NET WORTH:</b>	<b>89</b>	<b>187</b>	<b>308</b>	<b>434</b>	<b>565</b>
3.	Composite loan	170	132	88	44	---
4.	Subsidy	73	73	73	73	73
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>332</b>	<b>392</b>	<b>469</b>	<b>551</b>	<b>638</b>
1.	Gross Block	153	153	153	153	153
	Less Depreciation	15	30	45	60	75
<b>2</b>	<b>NET BLOCK</b>	<b>138</b>	<b>123</b>	<b>108</b>	<b>93</b>	<b>78</b>
3	Current Assets	137	137	137	137	137
4.	Cash & Bank Balance	57	132	224	321	423
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>332</b>	<b>392</b>	<b>469</b>	<b>551</b>	<b>638</b>

**Suppliers of Plant & Machinery:**

1. Giribala Udyog, Agartala
2. NSIC Ltd., Kunjaban, Agartala
3. Weavers Providers, Ranibari, Panbazar, Guwahati- 781 001

# **MISCELLANEOUS INDUSTRIES**

## PAPER DISH, PLATES, CUP ETC

**INTRODUCTION:** Paper crockery such as paper plates, dish, cups, saucers etc is finding extensive usages these days for serving eatables in parties, functions and social gathering. Paper cups also are widely used as containers for ice-cream. These are also used as curd cups and coffee cups. In India paper cups, dish, plates and saucers are the mostly commonly used disposable crockery.

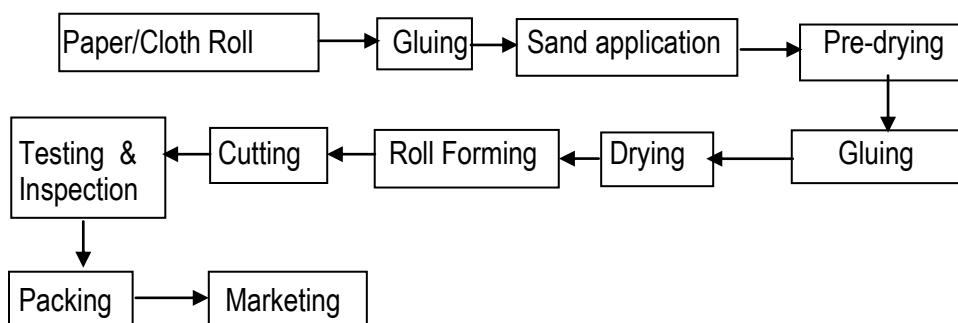
**Market:** Besides general market requirements, paper crockery is required in large quantities by the caterers of railways and other establishments. Because of their disposables nature and comparatively much lower prices, these are quite often preferred over porcelain, glass or metal containers for certain specific requirements. The demand for paper plates, dish and cups and saucers is likely to grow substantially in future both in urban as well as rural areas.

**Installed Capacity:** Assuming operations for Single Shift per day for 300 working days per annum the following annual installed capacity and turnover is estimated:

<u>Sl.No</u>	<u>Descriptions</u>		<u>Rate</u>	<u>Amount (Rs.)</u>
1.	Plate / Dish Best quality	40,000 nos.	2.20	88,000/-
2.	Plate /Dish Normal quality	30,000 nos	1.60	43,500/-
3.	Cup Normal	35,000 nos	0.05	33,250/-
4.	Ice cream Cup	25,000 nos	1.10	27,500/-
<b>Total:</b>				<b><u>1,99,925 /-</u></b>

**Manufacturing Process for Paper Cup:** Paper is first printed on the printing press. The printed part is cut to size and given the desired shape by die cutting. The bottom part and the upper part of the cup are then assembled to cup chape in screw press. For wax coating machine. For paper plates (saucers) the paper is printed and cut to circles. The cut circles are passed in screw press for obtaining the desired shape.

### Process Flow Chart

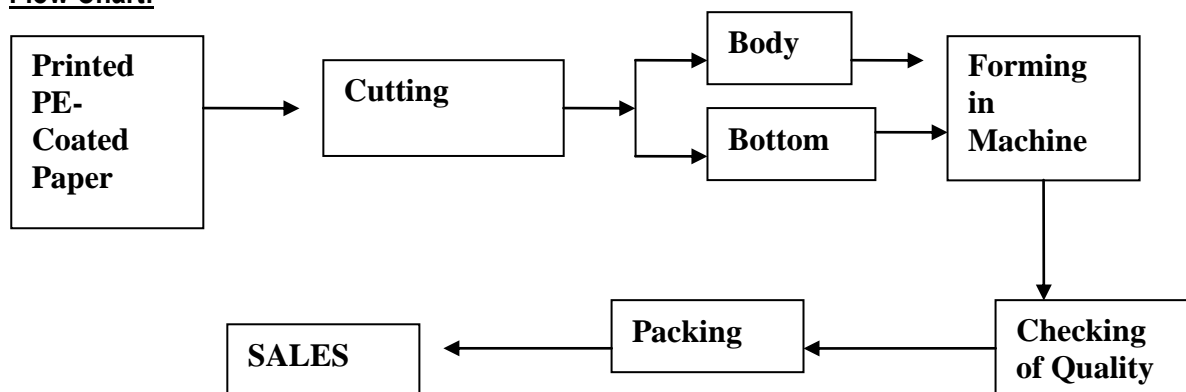


### Manufacturing Process for Paper Dish/Plate:

Feed the pre printing and pre cutting cup-fan-wall paper to the entrance,	
	Feed the rolling cup-bottom paper to the entrance,
	The cup-fan-wall paper auto sealing on the body sealing mold >>>become cone shape, the cup-bottom auto punching(cutting) in the machine

	After pre-heating, bottom heating, then the cup-bottom knurling to the cup cone body,	
	Curling process: curling the cup top to circular shape,	
	Pattern rolling, in here, you can add another system to send the finished paper cups to the working desk.	
	Package the finished paper cups in plastic bag or other hermetic Pc bags to protect the cup top shape becoming ugly or breached.	
	Package the plastic bags in a cardboard box.....	
	The general structure of paper cup (bowl) shaping machine is composed of five parts. They are the first stage, the middle stage, the second stage, the third stage and its outer shell.	
	The first stage: mainly finishes transmission of the paper cup's sidewall paper, shaping sidewall and transferring them to the middle stage after shaped.	
	The medium stage: mainly finishes transmission of the cup-bottom paper, shaping cup-bottom, joining the shaped sidewall and cup-bottom, automatic transmission and discharging of the shaped cup, and curling the shaped cup's edge.	
	The third stage: mainly includes 45 angle separating, preheating, curing bottom, rouletting, curling rim and so on mechanisms, which are the important parts in finishing paper cup machines	
	The fourth stage: mainly includes motor, reduction gear and so on. A frequency converter used to finish adjusting machine production speed and providing power.	

**Flow Chart:**



**Raw Materials;** The raw materials required for the unit are mainly Paper, paraffin wax, ink, gum and packaging materials required per month is as below and the materials available from Sony Industries, 196-A-6, 52 House Colony, S.N. Puram Road, Thiruthangal-626130, SIVAKASI. Tamil Nadu, India.

<u>Sl.No</u>	<u>Descriptions</u>	<u>Qty/ Kg /Ton</u>	<u>Amount</u>
1.	Paper ;Grey Board, Mill Board,	66,000/-	66,000/-
2.	Card Board Single PE Cup paper Single colour printing ton	3,850/-	3,850/-

2.	Paraffin wax	on L.S	11,000/-	11,000/-
3.	Ink, Gum etc	on L.S	5,500/-	5,500/-
4.	Packing cost	on L.S	5,500/-	<u>5,500/-</u>
				91,850/-
			Add Tax 12.5%:	11,481/-
			Add Transportation:	<u>2,200/-</u>
			<b>TOTAL:</b>	<b><u>1,05,531/-</u></b>

**Power:** Electricity power requirement for the unit is only for administration and production and generator is only use for office. Monthly 1340 KWHrs of power shall be consumed which may cost **Rs.5,500/-** and Electricity power is available from Tripura Sate Electric Crop. Ltd.

**Water;** Water required by the unit is mainly for production and office. The amount required for this purpose **Rs.1,100/-** per month.

**Manpower:** The requirement and cost of manpower to be recruited locally are shown below:

<u>Sl.No</u>	<u>Descriptions</u>	<u>No</u>	<u>Amount(Rs.)</u>
1.	Manager / Accountant cum Supervisor	Self	Self
2.	Skilled Worker	2	6,600/-
3.	Semi skilled worker	1	2,200/-
4.	Sales Representative	1	3,850/-
5.	Helper	<u>1</u>	<u>1,650/-</u>
		<b><u>5</u></b>	<b>Total</b> <b><u>14,300/-</u></b>

**CAPITAL COST ESTIMATE:**

**A. LAND & BUILDING** with a built up area 1000sq. mtrs.

**On rent**

**B. PLANT AND MACHINERY ;**

<u>SL. NO</u>	<u>DESCRIPTIONS</u>	<u>QTY</u>	<u>AMOUNT</u>
1.	LBZ-LA Single Side PE Coated paper Cup machine.	01	5,61,000/-
2.	HZ-D paper Plate Machine	01	4,50,000/-
3.	Gen Set	01	<u>1,00,410/-</u>
			<b>Total: <u>11,11,410/-</u></b>

**Miscellaneous Fixed Assets**

1.	Electrification	44,000/-
2.	Water installation	16,500/-
3.	Furniture & Fixtures including a Computer set	<u>69,300/-</u>
		<b>Total: <u>1,29,800/-</u></b>

**Total Fixed Assets: 12,41,210/-**

**Working Capital (P.m)**

1.	Raw Materials	1,05,600/-
2.	Salary & Wages	14,300/-
3.	Miscellaneous exp	16,500/-
5.	Utilities & water	<u>6,600/-</u>

**Total : 1,43,000/-**

**Total Project Cost: 13,84,210/-**

**Means of Finance :**

		<u>Urban</u>	<u>Rural</u>
1.	Composite Loan under PMEGP	70% 9,68,948/-	60% 8,30,526/-
2.	Subsidy	25% 3,46,052/-	35% 4,84,474/-
3.	Margin Money	5% 69,210/-	5% 69,210/-
4.	Debt Equity Ratio :	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Rs.	1439	1679	1919	1919	1919
3.	Annual Costs in Rs.					
(a)	Raw Materials	760	886	1013	1013	1013
(b)	Utilities	48	55	63	63	63
(c)	Wages & Salaries	103	120	137	137	137
(d)	Administrative expenses	94	98	103	108	114
(e)	Selling expenses	72	84	96	96	96
(f)	Depreciation	124	124	124	124	124
(g)	Interest on Composite Loan	109	88	65	39	13
4.	<b>Total Cost</b>	<b>1310</b>	<b>1455</b>	<b>1601</b>	<b>1580</b>	<b>1560</b>
	<b>Variable Cost</b>	<b>880</b>	<b>1025</b>	<b>1172</b>	<b>1172</b>	<b>1172</b>
5.	<b>Annual profit</b>	<b>129</b>	<b>224</b>	<b>318</b>	<b>339</b>	<b>359</b>
8	Return on investment	9.32	16.18	22.97	24.49	25.93
9.	Return on sales	8.96	13.34	16.57	17.66	18.70
10.	Annual Contribution	559	-	-	-	-
11	Break Even Point as percent of capacity	46.15%	-	-	-	-
12	<b>Cash accrual</b>	253	348	442	463	483
13.	<b>Debt servicing capacity</b>	362	436	507	502	496
14	Repayment of Composite Loan	157	183	209	209	209
15.	<b>Debt serviced</b>	266	271	274	248	222
16	<b>Pay Back Period</b>	<b>2 Years 7 Months 24 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.36 : 1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	69	-	-	-	-	-
2.	Increase in composite loan	969	-	-	-	-	-
3	Increase in Subsidy	346	-	-	-	-	-
4.	Depreciation	-	124	124	124	124	124
5.	Profit before interests	-	238	312	383	378	370
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1384</b>	<b>362</b>	<b>436</b>	<b>507</b>	<b>502</b>	<b>494</b>

6.	Increase in capital investment	1241	-	-	-	-	-
7.	Increase in working capital	143	-	-	-	-	-
8.	Interests	-	109	88	65	39	13
9.	Repayment of loan	-	157	183	209	209	209
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1384</b>	<b>266</b>	<b>271</b>	<b>274</b>	<b>248</b>	<b>222</b>
<b>C.</b>	<b>OPENING BALANCE</b>	-	-	<b>96</b>	<b>261</b>	<b>454</b>	<b>148</b>
<b>D.</b>	<b>NET SURPLUS</b>	-	<b>96</b>	<b>165</b>	<b>233</b>	<b>254</b>	<b>272</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	-	<b>96</b>	<b>261</b>	<b>494</b>	<b>748</b>	<b>1020</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	69	198	422	740	1079
2.	Surplus from operations	<b>123</b>	<b>224</b>	<b>318</b>	<b>339</b>	<b>359</b>
	<b>NET WORTH:</b>	<b>198</b>	<b>422</b>	<b>740</b>	<b>1079</b>	<b>1438</b>
3.	Composite loan	812	629	420	211	nil
4.	Subsidy	346	346	346	346	346
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>
1.	Gross Block (F C)	1241	1241	1241	1241	1241
	Less Depreciation	124	248	372	496	620
<b>2</b>	<b>NET BLOCK</b>	<b>1117</b>	<b>993</b>	<b>869</b>	<b>745</b>	<b>621</b>
3	Current Assets	143	143	143	143	143
4.	Cash & Bank Balance	<b>96</b>	<b>261</b>	<b>494</b>	<b>748</b>	<b>1020</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>

**Suppliers of Machinery & Equipments :**

1. Sony Industries,  
196-A-6, 52 House Colony, S.N Puram Road,  
Thruthangal-626130, Sivakasi, Tamilnadu, 04562-232695

## OFFSET PRINTING PRESS

**Introduction:** The introduction of the offset process has revolutionized the printing industry and nowadays all modern printing process are of the offset type. The offset printing process has a number of advantages, being the most speedy and economical for large scale printing requirements besides offering excellent quality of print.

**Market Prospect:** The State of Tripura is maximum area surrounded by Bangladesh, measuring near about 839 Km with Bangladesh. One side attested with Assam and Mizoram area covered 53 KM, 109 KM respectively. The State of Tripura has four districts, such as West, South, Dhalai and North Tripura and now the estimated population of Tripura approximately 35 lacks. The demand for printing press or works are directly related to the development programmes particularly of education, industry, trade and commerce, etc. day to day increasing population give an indication of the increases in demand for paper based allied activities. Thereafter day by day living standard of men trend towards high and due to this reason in marriage party celebration programme, birthday, meeting etc. purpose people are using printing materials.

**Raw Materials availability:** Raw materials are to be sourced mainly from the open market. At present availability and supply of the raw materials is not problem e.g newsprint to be sourced from open markets or government supply while inks, chemicals etc are to be supplied from the markets or directly from outside sources. The unit required raw materials will be Rs.54,48,000/- per annum.

**OFFSET PRINTING PROCESS:** Offset printing process involves the following sub process:

**A. Composing:** With the induction of computers in the typesetting industry (Commonly referred to as D.T.P), the job of the typesetter which involves the lying-out of the text and graphics in a printable format to create Master or C.R.C (Camera Ready Copies) has become highly efficient and cost effective. This function which requires a very high level precision and skill has become highly automated with the proper induction of computers and computer based technology.

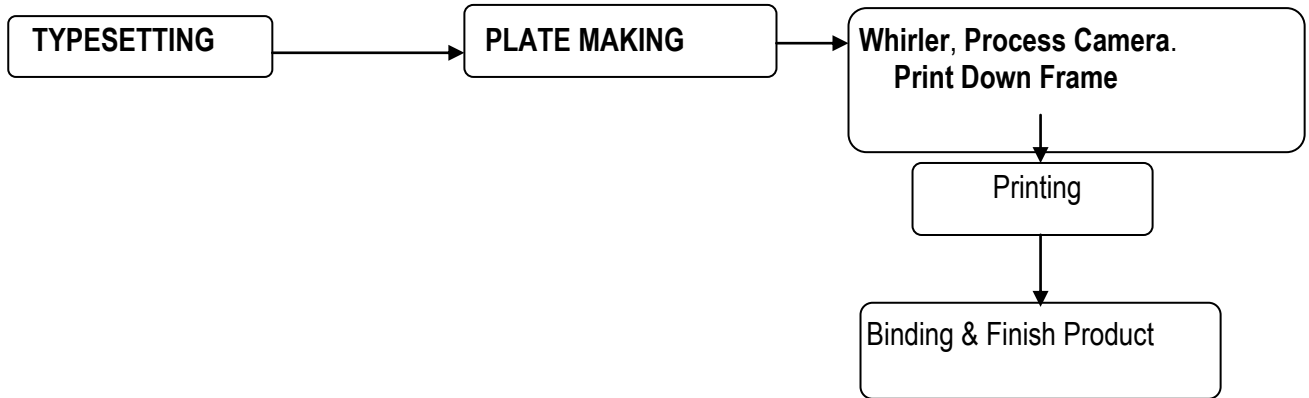
**B. Plate making;** The plates are in the common – mans parlance which are used to print multiple copies of the Masters or CRC s. Such masters are first prepared by the DTP section of the press by the use of computers. The plates are prepared by electro-chemical processes using

1. **Whirler:** to apply photo sensitive chemicals on the plates.
2. **Process Camera** – to produce the negatives of the original masters.
3. **Print Down Frame** – to expose the negatives of the plates. Thus the negatives are exposed on to the plates which are then installed on the offset press to create the final impressions on paper.

**C. Printing:** This job involves the transfer of the image on the plates to paper. The paper of stock in printers or Stock in printers parlance is first trimmed to the required size with the use of the paper guillotine and the required fed to the press for final printing.

**D. Binding & finishing:** This part of the printing process is the most labor intensive as it involves the manual folding & collating of the printed paper . Various types of binding methods (wire stitching, thread binding, perfect binding , spiral binding etc) may be used as per the choice of the customers. Finishing involves the final trimming of the bound book to the required dimensions.



**Flow Chart :**

**Raw Materials:** The raw materials required for the unit are mainly various types of Paper, Ink, gum and packaging materials required per month is as below:

Sl.No	Descriptions	Qty / Reem	Rate	Amount
1.	<b><u>Different types of Paper :</u></b>			
	Demai sheet single	560	380/-	2,12,800/-
	Demai sheet double	150	950/-	1,42,500/-
	Glosy paper	100	20/- per sheet	2,000/-
	Ivory sheet	100	15/- per sheet	1,500/-
	Xerox paper A4 size	100	215 /-	21,500/-
2.	<b><u>INK</u></b>			
	Yellow	05	395	1,975/-
	Green	05	480	2,400/-
	Black	10	4,20/-	4,200/-
	Cyan	10	4,20/-	4,200/-
	Magenta	10	3,95/-	3,950/-
	Blue	10	315/-	3,150/-
3.	<b><u>Multicolor ink set</u></b>	02	4,000/-	8,000/-
4.	Laser printer Toner			<b><u>45,825/-</u></b>
			<b>Total</b>	<b><u>4,54,000/-</u></b>

**Power:** Consumption of power and fuel have been arrived at on the basis of consumption norms of the industry. The energy rate has been considered on the basis of existing power tariffs of the electricity department. Electricity power requirement for the unit is only for administration and production and generator is only use for office and also requirement oil, lubricants for machine. The amount required for this purpose **Rs.48,600/-** on lum sump per month.

**Water:** The unit will need 4000 Liters of water per day the cost of drawing of which is shown with power cost.

**Manpower:** The requirements and costs of manpower, to be recruited locally are shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	72,000/-
2.	Administrative & Sales Staff	3	1,26,000/-
3.	Skilled Worker	1	60,000/-
4.	Unskilled Worker	3	60,000/-
	Total:	7	3,18,000/-

**CAPITAL COST ESTIMATE:****A. LAND & BUILDING****On Rent.****B. PLANT AND MACHINERY :**

1	DTP System Comprising of Computers	03nos	30,000/-	90,000/-
	Laser Printer Mono	01no	9,000/-	9,000/-
	Laser printer Colour all in one	01	35,000/-	35,000/-
	Scanner	01	4,000/-	4,000/-
2.	<b><u>Prepress equipment:</u></b>			
	Plate developer & etc	01	40,000/-	40,000/-
3.	Colour Off set Press	01	3,00,000/-	3,92,000/-
4.	10 KVA Gen Set Honda Make	01		80,000/-
5.	Furniture & Fixtures and office Decoration		on LS	1,00,000/-
				<b>Total <u>7,50,000/-</u></b>

**C. Miscellaneous Fixed Assets**

1	Working Table	1	25,000/-	25,000/-
2.	Showcase	1	25,000/-	25,000/-
3.	Decoration of Machine Room & office			45,000/-
4.	Signboard/ Fan /Chair etc			35,000/-
5.	Paper Cutting Machine	02		20,000/-
6.	Wire stitching machine treadle operated	01		9,000/-
7.	Perforating Machine		01	3,000/-
8.	Hand Numbering Machine		01	13,000/-
				<b>Total <u>1,75,000/-</u></b>

1. **Provision for contingencies****Rs. 50,000/-**2. **Preliminary & Preoperative expenses****Rs. 50,000/-****Total Rs.1,00,000/-****Total Fixed Capital Rs.10,25,000/-****E. Working Capital (for 3 months)**

a)	Raw Materials	Rs. 4,54,000/-.
b)	Power	Rs. 4,050/-
c)	Salary & Wages	Rs. 26,500/-
d)	Miscellaneous expenses	Rs. 10,450/-

**Total: Rs. 4,95,000/-****Total Project Cost: Rs.15,20,000/-****Means of Finance:**

	<b><u>Urban</u></b>	<b><u>Rural</u></b>
a. Composite loan under PMEGP	Rs.10,64,000/-	Rs. 9,12,000/-
b. Subsidy	Rs. 3,80,000/-	Rs. 5,32,000/-
c. Promoters contribution	Rs. 76,000/-	Rs. 76,000/-
d. Debt Equity Ratio	2.33:1	1.50:1

**Profitability:****(Rs. in Thousands)**

Sl. No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization	4,828	5,632	6,437	6,437	6,437

<b>3. Annual Costs in Rs.</b>						
(a)	Raw Materials	3,269	3,814	4,358	4,358	4,358
(b)	Power	36	39	41	41	41
(c)	Wages & Salaries	294	306	319	327	335
(d)	Repair & Maintenance	41	41	41	41	41
(e)	Administrative overheads	50	53	55	58	61
(f)	Selling expenses	724	845	966	966	966
(g)	Depreciation	100	100	100	100	100
(h)	Interest	122	99	72	43	14
	Total:	4,636	5,297	5,952	5,934	5,916
	<b>Total Variable Cost</b>	<b>4,029</b>	<b>4,698</b>	<b>5,365</b>	<b>5,365</b>	<b>5,365</b>
<b>4.</b>	<b>Annual profit</b>	<b>192</b>	<b>335</b>	<b>485</b>	<b>503</b>	<b>521</b>
5.	Return on investment	12.63%	22.04%	31.91%	33.09%	34.28%
6.	Return on sales	3.98%	5.95%	7.53%	7.81%	8.09%
7.	Annual Contribution	799	-	-	-	-
8.	Break Even Point	45.58%	-	-	-	-
9.	Cash accrual	292	435	585	603	621
<b>10.</b>	<b>Debt servicing capacity</b>	<b>414</b>	<b>534</b>	<b>657</b>	<b>646</b>	<b>635</b>
11.	Repayment of Loan	169	205	230	230	230
<b>12.</b>	<b>Debt serviced</b>	<b>291</b>	<b>304</b>	<b>302</b>	<b>273</b>	<b>244</b>
<b>13.</b>	<b>Pay Back Period</b>	<b>2 years 6 months 23 days</b>				
<b>14.</b>	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.04:1</b>				

**Cash Flow Statement:**

(Rs. in Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	76	-	-	-	-	-
2.	Increase in subsidy	380	-	-	-	-	-
3.	Increase in loan	1,064	-	-	-	-	-
4.	Depreciation	-	100	100	100	100	100
5.	Profit before interests	-	314	434	557	546	535
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1,520</b>	<b>414</b>	<b>534</b>	<b>657</b>	<b>646</b>	<b>635</b>
6.	Increase in capital investment	1,025	-	-	-	-	-
7.	Increase in Current Assets	495	-	-	-	-	-
8.	Interests	-	122	99	72	43	14
9.	Repayment of loan	-	169	205	230	230	230
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1,520</b>	<b>291</b>	<b>304</b>	<b>302</b>	<b>273</b>	<b>244</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>123</b>	<b>353</b>	<b>708</b>	<b>1,081</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>123</b>	<b>230</b>	<b>355</b>	<b>373</b>	<b>391</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>123</b>	<b>353</b>	<b>708</b>	<b>1,081</b>	<b>1,472</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousand as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	76	268	603	1,088	1,591
2.	Surplus from operations	192	335	485	503	521
	<b>NET WORTH:</b>	<b>268</b>	<b>603</b>	<b>1,088</b>	<b>1,591</b>	<b>2,112</b>
3.	Subsidy	380	380	380	380	380
4.	Loan Account	895	690	460	230	-
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1,543</b>	<b>1,673</b>	<b>1,928</b>	<b>2,201</b>	<b>2,492</b>
1.	Gross Fixed Assets	1,025	1,025	1,025	1,025	1,025
	<b>Less Depreciation</b>	100	200	300	400	500
	<b>NET BLOCK</b>	<b>925</b>	<b>825</b>	<b>725</b>	<b>625</b>	<b>525</b>
2.	Current Assets	495	495	495	495	495
3.	Cash & Bank Balance	123	353	708	1,081	1,472
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1,543</b>	<b>1,673</b>	<b>1,928</b>	<b>2,201</b>	<b>2,492</b>

Names and Address of Machinery and Equipments Suppliers:

G. B. Tech (India) 51, Emca Chamber Daryaganj, Opposite Hotel Atithi Palace,, Darya Ganj, New Delhi - 011 2324 3661 & Creed Engineering Pvt Ltd. 4, South Patel Nagar Mk, New Delhi - 011 25847206

## EXERCISE BOOK, REGISTERS , FILE COVERS ETC

**Introduction:** File covers, file boards and letter pads are the items of common use in the various government offices Government of India undertakings, private sector and other intuitions, These are generally sold in the printed forms.

**Market Potential;** Due to the rapid industrialization taking place in the country, the demand for office stationery is increasing day by day. File covers and file boards assume an important position as a stationery materials. These are used for keeping the day to day correspondence , old office records, important papers etc, in order, These are used in huge quantity by governmental offices/ establishments, various commercial establishments, traders, schools, colleges etc every year. Letter heads can be printed on the printing press utilizing its spare capacity.

**Production Targets / Suggested Capacity:** The economic capacity per annum by working one shift for 300 working days per annum

File cover	8,40,000 nos.	Rs. 25,41,000/-
File Boards	3,60,000 nos.	Rs. 7,92,000/-
Jib work (Printing of letters heads)	2,10,000 nos.	<u>Rs. 2,31,000/-</u>
		<u>Rs. 35,64,000/-</u>

**Raw Materials;** The main raw materials required for manufacture of Exercise Book, Registers, File Cover Manufacturing Unit Require Mill Board/Gray Board/ Card Board/ White Paper, Cotton tape, File covers Fitting and Miscellaneous items. The above Raw materials are to be sourced mainly from the open market at present availability and supply of the raw materials is not a problem e.g Mill Board/Gray Board/ card Board/ White Paper, Cotton tape, File covers Fitting and Miscellaneous items etc. to be sourced from open local markets and out side of Tripura. The requirement and costs of raw materials are as below:

Mill Board/Gray Board/ card Board/ White Paper, Cotton tape,	Rs.1,87,000/-
File covers Fitting and Miscellaneous items	
	Add:Vat 12.5% Rs. 23,375/-
	Add; Freights: <u>Rs. 9,625/-</u>
	<b>Total: <u>Rs.2,20,000/-</u></b>

**Utilities :** The unit will require a total connected load of 300 KWH and Water requirement is about 500KL per annum.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available from local area.

1. Manager cum Supervisor	Self	Self
2. Skilled	4nos	Rs.22,500/-
3. Office Boy/Peon	1 no	Rs. 2,200/-
4. Sales Man	1no	<u>Rs. 3,300/-</u>
	<b>Total</b>	<b><u>Rs.27,500/-</u></b>

**Manufacturing Process:** Board is first cut to the required size of the file covers or for file board. For the covers, it is printed as desired and then creased and bonded on the bending machine. Necessary attachments if desired, are fixed on the covers. File boards cut to size are pasted with paper. Flaps and tapes are then fixed on the board to give it final shape.

**CAPITAL COST ESTIMATE:****Land & Building:** 60 Sq. Mtrs.**On Rent.****Plant & Machinery :**

- |    |   |                      |
|----|---|----------------------|
| 1. | Board Cutter Food, operated, dab front and guides 42" optical & other accessories.  | <b>Rs.1,87,200/-</b> |
| 2. | Programmed multiple bending, Creasing Machine for office file with five step metal gauge treadle drive 24' size with extra die cliper.              |                      |
| 3. | Adjustable file bending machine to suit off ice clip or lever files without changing dies with cast iron machine finished table, treadle driven 24" |                      |
| 4. | Punching and Pressing Machine for lever files treadle driven with two hole punching for clip or ring and corner pressing dies 24'                   |                      |
| 5. | Deb press with two pillers size 15"x20"x12  |                      |
| 6. | Chandleir type plates printing press complete with all standard equipments and accessories with 2HP Motor with starter size 11"x16"                 |                      |
| 7. | Gumming machine   |                      |
| 8. | Backing press Compression type with Geared type size 18".   |                      |

**Total: Rs.1,87,200/-****Miscellaneous Fixed Assets:**

- |    |                            |                            |
|----|----------------------------|----------------------------|
| 1. | Chair & Working Table      | Rs. 16,500/-               |
| 2. | Fan & Lighting and wearing | Rs. 16,500/-               |
| 3. | Interior decoration        | <b><u>Rs. 38,500/-</u></b> |

Total **Rs. 71,500/-**Add Vat 12.5% **Rs. 8,938/-****Installation Charges Rs. 2,062/-**Total **Rs. 82,500/-****Preliminary & Preoperative Exp.:****Total Fixed Capital :****Rs. 4,950/-****Rs.2,74,650/-****Working Capital (P.m)**

- |    |                         |                    |
|----|-------------------------|--------------------|
| 1. | Salary & Wages          | Rs. 27,500/-       |
| 2. | Administrative expenses | Rs. 13,666-        |
| 3. | Selling expenses        | Rs. 3,300/-        |
| 4. | Raw Materials           | Rs.2,20,000/-      |
| 5. | Utilities               | <u>Rs. 3,880/-</u> |

Total **Rs.2,68,316/-****Total Cost of the Project: Rs.5,42,966/-****Means of Finance:**

	Urban		Rural
a. Composite loan under PMEGP	70% Rs.3,80,076/-		60% Rs.3,25,780/-
b. Subsidy	25% Rs.1,35,742/-		35% Rs.1,90,038/-
c. Margin Money	5% <u>Rs. 27,148/-</u>		5% <u>Rs. 27,148/-</u>
	<b>Total Rs.5,42,966/-</b>		<b><u>Rs.5,42,966/-</u></b>
d. Debt Equity Ratio	2.33:1		1.5:1

**Name & Address of machinery and Equipments Suppliers:**

1. M/S Indo Europa Trading Co. Pvt Ltd, 9 Dalal Street, fort, Bombay 4000023.
2. M/S Akemo Paper machines, D23 NDSE part I, New Delhi, 110004
3. M/S Nagpal Industries, Bartan Market, Sadar Bazar , Delhi 110006

**Names and Address of Raw Materials Suppliers:**

1. Titaghur paper Mills Co Ltd, Chartered Bank Building, Kalkata,
2. Bengal paper Mills Co ltd, 14 Netaji Subhash Road, kolkata,
3. Rohtas Industries Ltd, Dalmia Nagar.

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs in Rs.					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
6.	Total Cost	2002	2317	2628	2618	2607
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93
9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
13.	Debt servicing capacity	207	241	276	276	276
14	Repayment of Composite Loan	62	72	82	82	82
15.	Debt serviced	106	108	108	98	87
16	Pay Back Period	1 years 6 month 10 days				
17.	Debt Service Coverage Ratio (DSCR)	1.53:1				

**Cash Flow Statement:**

(Rs. In Thousand)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3.	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousand as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less Depreciation</b>	<b>27</b>	<b>54</b>	<b>81</b>	<b>108</b>	<b>135</b>
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>



## UMBRELLA ASSEMBLING

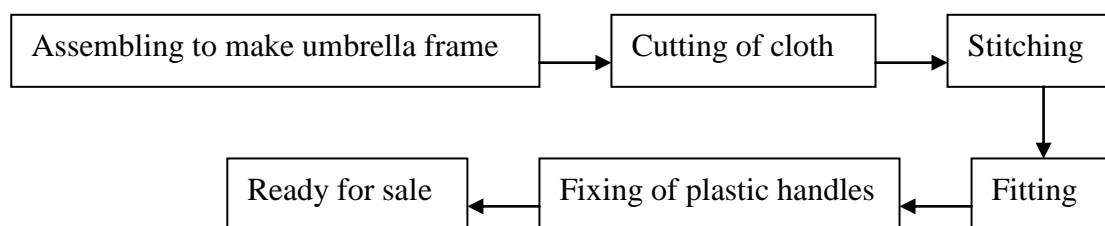
**Introduction:** Umbrella is a portable device to protect a person from sun, rain and snow. It is made of silk, cotton or synthetic fibre fastened on slender ribs which are joined to a stick and raised to form a circular canopy. Different types & sizes of umbrellas are available varying on the basis of use i.e. Gents, Ladies or children, on the basis of cloth i.e. old type or folding etc.

**Market:** Mostly the umbrellas parts are manufactured and assembled by unorganized sector. Demand for umbrella depends upon climate conditions and standard of living. Umbrellas are in good demand during summer and rainy season by men & women & children. Folding, fancy and printed umbrellas are becoming more popular these days. Besides domestic market there exists good export potential also for the umbrellas.

**Production Target:** The scheme envisages for the manufacture of 20,000 umbrellas (worth Rs. 19,00,000) per annum on single shift basis.

**Process:** Main ribs, M.S. pipe and other parts are assembled to make umbrella frame. The cloth is cut & stitched on the ribs and handles are fixed in the stick of umbrella.

### Process Flow:



**Raw Material:** For this manufacturing unit main raw materials are ribs, sticks and cloths. The umbrella cloth is made of dyed or printed water proof cotton, Art silk or Nylon. The colour is fast against sunlight and water. Sticks are made of steel tubes, hold the structure of ribs. Ribs are made of M.S. Wire and the main ribs are made from high carbon steel wires having circular cross section. Monthly requirements and costs of raw materials are shown below:

1)	Cloth	1,875 mt.	@ Rs. 3575	Rs. 67,016/-
2)	Umbrella ribs (painted)	10,000 no.	@ Rs. 0.55	Rs. 5,500/-
3)	Brassing	1,250 no.	@ Rs. 2.20	Rs. 2,750/-
4)	Seamless M.S. Pipe (painted)	1,250 no.	@ Rs. 11.00	Rs. 13,750/-
5)	Runners	1,250 no.	@ Rs. 2.75	Rs. 3,430/-
6)	Plastic handles	1,250 no.	@ Rs.13.20	Rs. 16,500/-
7)	Spring and dips	1,250 no.	@ Rs. 1.21	Rs. 1,512/-
8)	Slotted cap pipe	1,250 no.	@ Rs. 2.20	Rs. 2,750/-
9)	Thread spools	1,250 rolls	@ Rs. 8.80	Rs. 11,000/-
10)	Elastic taps	200 mtrs.	@ Rs.16.5	Rs. 3,300/-

**Total: Rs. 1,27,408/-**

**Power:** The process does not call for any power or fuel. A domestic connection of 1 KW may suffice.

**Water:** The unit will need 15 litre of water daily for drinking purpose only. Such water is readily available in sites.

**Manpower:** The unit will need 3 skilled workers and one helper, which are readily available in Tripura. The annual cost of these 4 workers is estimated at Rs. 1,97,000/-.

**Financial Aspect:**

i)	<b>Land &amp; Building</b>	500 sq.ft.	<b>Rented</b>
(ii)	<b>Plant &amp; Machinery:</b>		
1.	Sewing machine	2 no.	Rs. 14,400/-
2.	Hand tools	L.S.	Rs. 6,000/-
3.	Testing equipments	L.S.	Rs. 18,000/-
4.	Workshop & office furniture		Rs. 30,000/-
			<b>Total:Rs. 68,400/-</b>
(iii)	<b>Preliminary &amp; pre-operative</b>		Rs. 11,000/-
(iv)	<b>Electrification &amp; Installation</b>		Rs. 5,500/-
(v)	<b>Other fixed assets</b>		Rs. 5,500/-
			<b>Total Fixed Cost: Rs. 90,400/-</b>
B.	<b>Working Capital</b>		
(i)	Raw Materials		Rs. 1,27,408/-
(ii)	Salary & Wages		Rs. 16,500/-
(iii)	Utilities		Rs. 330/-
(iv)	Misc. expenditure		Rs. 11,000/-
			<b>Total working capital: Rs. 1,55,238/-</b>
			<b>Total Project Cost: Rs. 2,45,638/-</b>

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1) Composite loan	Rs. 1,71,947/-	Rs. 1,47,383/-
2) Promoters contribution	Rs. 12,282/-	Rs. 12,282/-
3) Subsidy	Rs. 61,409/-	Rs. 85,973/-
4) Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization	1254	1463	1672	1672	1672
3.	<b>Annual Costs</b>					
a)	Raw Materials	917	1070	1223	1223	1223
b)	Utilities	2	3	3	3	3
c)	Selling expenses	24	28	32	32	32
	<b>Variable Cost</b>	<b>943</b>	<b>1101</b>	<b>1258</b>	<b>1258</b>	<b>1258</b>
d)	Wages & Salaries	119	139	158	158	158
e)	Administrative expenses	55	65	74	74	74
f)	Depreciation	9	9	9	9	9
g)	Interest on Composite Loan	20	17	12	7	3
	Fixed & Semi Variable Cost	203	230	253	248	244
4.	<b>Total Cost</b>	<b>1146</b>	<b>1331</b>	<b>1511</b>	<b>1506</b>	<b>1502</b>
5.	<b>Annual Profit</b>	<b>108</b>	<b>132</b>	<b>161</b>	<b>166</b>	<b>170</b>
6.	<b>Return on Investment</b>	<b>44.0</b>	<b>53.87</b>	<b>65.71</b>	<b>67.75</b>	<b>69.38</b>
7.	<b>Return on sales</b>	<b>8.61</b>	<b>9.02</b>	<b>9.62</b>	<b>9.92</b>	<b>10.16</b>
8.	Annual contribution	311	-	-	-	-
9.	Break Even Point as percent of			39.16%		

	capacity					
10.	Cash accrual	117	141	170	175	179
11.	Debt Servicing Capacity	137	158	182	182	182
12.	Repayment of Composite Loan	28	33	37	37	37
13.	Debt Serviced	48	50	49	44	40
14.	Pay Back Period	2 year 10 month 20 days				
15.	Debt Service Coverage Ratio	2.89:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	12	-	-	-	-	-
2.	Increase in Term loan	172	-	-	-	-	-
3.	Subsidy	61	-	-	-	-	-
4.	Depreciation	-	9	9	9	9	9
5.	Profit before interests	-	128	149	173	173	173
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>245</b>	<b>137</b>	<b>158</b>	<b>182</b>	<b>182</b>	<b>182</b>
6.	Increase in capital investment	90	-	-	-	-	-
7.	Increase in working capital	155	-	-	-	-	-
8.	Interest	-	20	17	12	7	3
9.	Repayment of Term Loan	-	28	33	37	37	37
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>245</b>	<b>48</b>	<b>50</b>	<b>49</b>	<b>44</b>	<b>40</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>89</b>	<b>197</b>	<b>330</b>	<b>468</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>89</b>	<b>108</b>	<b>133</b>	<b>138</b>	<b>142</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>89</b>	<b>197</b>	<b>330</b>	<b>468</b>	<b>610</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousands as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	12	120	252	413	579
2.	Surplus from operation	108	132	161	166	170
	<b>NET WORTH:</b>	<b>120</b>	<b>252</b>	<b>413</b>	<b>579</b>	<b>749</b>
3.	<b>Subsidy</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>61</b>
4.	Term loan outstanding	144	111	74	37	-
	<b>TOTAL LIABILITIES</b>	<b>325</b>	<b>424</b>	<b>548</b>	<b>677</b>	<b>810</b>
1.	Gross Block	90	90	90	90	90
	Less Depreciation	9	18	27	36	45
	<b>NET BLOCK</b>	<b>81</b>	<b>72</b>	<b>63</b>	<b>54</b>	<b>45</b>
2.	Working capital	155	155	155	155	155
3.	Cash & Bank Balance	89	197	330	468	610
	<b>TOTAL ASSETS</b>	<b>325</b>	<b>424</b>	<b>548</b>	<b>677</b>	<b>810</b>

**Supplier of Umbrella Component**

- (1) Arun & Company, 157 Netaji Subhas Road, 3<sup>rd</sup> Floor, Kolkata – 700 001.
- (2) Mohendra Dutta Grand Sons Pvt. Ltd. 25 A, Benia Tola Lane, Kolkata – 9,
- (3) Parashnath Industries pvt. Ltd. 147 M.G. Road, Kolkata – 7.

## LEATHER SHOE MANUFACTURING

**Introduction:** In India, shoes are manufactured by cottage, small-scale and large scale industries. The 14 large scale industries produce less than 7%. Rest of the 93% of the production is done by cottage and small-scale industries and most of the work in these units are done by hand. There is not much difference in between cottage and small-scale industries, except the fact that in the cottage industries there are only 3 to 4 workers while in small-scale industries the number of workers is much more. Certain small scale units have installed machines which bring quality in shoe manufacturing and also increase the production. Making shoes manually requires a lot of skill and time. The demand both in India and on international front has increased along with increased importance of punctuality of export commitments has led to a requirements, partial mechanization of these units. This change has long come in western countries and the production process has also significantly developed.

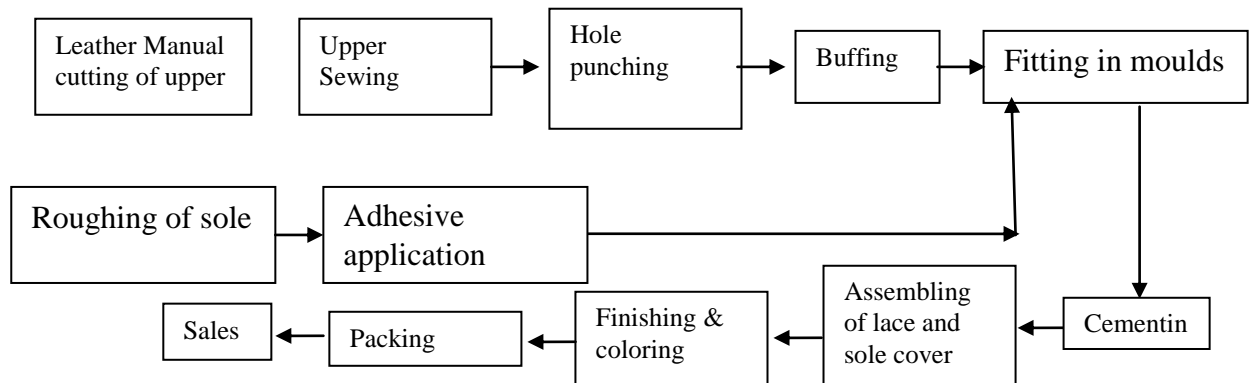
**Market:** Due to high increase in demand for shoes and considerable change in the manufacturing process, the shoe-making units can be established anywhere. It is quite an appropriate units for concentrated production and can be established at the district level. Along with the indigeneous market, it has a high demand outside. Leather shoe manufacturing units that daily produce 20 to 50 pairs are viable. In the given unit initially 20 pairs would be manufactured daily and the production can be increased eventually keeping the increased demand in view.

**Capacity:** The project aims at manufacturing 500 pairs of shoes in a month considering 25 working days in a month and 8 hrs. as the working time in a day. Considering the varying design and the raw materials used in the manufacturing process the selling price would differ accordingly.

**Process:** Various new manufacturing methods are in trend these days like joint method, transparent vulcanization etc. By employing such method we can manufacture light shoes. In the joint process, a small nail is hammered on the upper part of the shoe. Meanwhile the lunar surface of upper part and the sole is made rough, adhesive is applied to these two surfaces, the pointed position of the nail that pierces from the upper portion of the shoe is pressed against the sole. Finally both surfaces are put in cementing press and thus the whole shoe is manufactured. Specialties of manufacturing the shoe with this process are following:

1. Production process is quite an easy one
2. Less time is consumed in production
3. It is easy to connect the parts and do away with the unwanted strips.
4. Shoes are light and comfortable.

The inner surface of the upper part are cut cleanly to avoid any stretches and shrinks. The portion of the shoe to be given shape is first drawn on the leather, later the edge are made thin. The upper part of the shoe and sole is reasonably made rough. If the roughness is more then the leather fibre would weaken while it is less rough, the adhesive would not stick to it. One important point the thin edges of the upper part of the shoe should not be roughed much otherwise the mistake would rather be permanent and apparent and cannot be mended. To spread the adhesive eventually, it is important to apply it with a brush which would eventually give a stronger point. After applying adhesive on the sole and inner surface of the upper part of the shoe, it is not disturbed until the nails cover part is not shown, this would happen depending upon the moisture and temperature.

**Process Flow:**

**Raw Material:** The raw material for the unit is mainly various types of leathers and sole. The sole is made of either rubber or leather. The raw material can be obtained from local tanneries or from the following addresses.

- 1) AGRA FINE LEATHER TANNERY  
23/A, Chandranath Roy Road, Kolkata – 39.
- 2) Leather & Leather  
45 Roffi Ahmed Kidwai Road, Kolkata – 16.

**Power:** The annual consumption of power is estimated at 4240 kw Hr. costing rs.16,324.

**Water:** The unit will need 50 Ltrs. Of water per day, which may be readily available at site.

**Manpower:** The unit will need 2 skilled worker and a helper which are readily available in the state. The annual cost of these 3 workers is estimated at Rs. 1,45,200/-.

**Financial aspect of the Unit****A. Fixed Cost**

i) <b>Land &amp; Building</b>	100 sq.ft. of open space and shed is required.	<b>Rented</b>	
2) <b>Plants &amp; Machinery</b>			
(i) Upper sewing machine	1 No.	Rs.	21,600/-
(ii) Sewing machine	1 No.	Rs.	11,400/-
(iii) Pores and small holes making Machine (for putting lacs)	1 No.	Rs.	6,000/-
(iv) Tools for correcting the stitch	1 No	Rs.	1,440 /-
(v) Seal cutting machine	1 No.	Rs.	4,200/-
(vi) Butting machine with exhaust Machine (polishing machine)		Rs.	12,000/-
(vii) Cementing machine	1	Rs.	18,600/-
(viii) Machine for making the covers even	1	Rs.	12,000/-
(ix) Machine for making the shoe comfortable	1	Rs.	6,000/-
(x) <b>Mould costs</b>			
(i) Wooden mould	100 pieces	Rs.	19,200/-
(ii) mould for other pair	100 pieces	Rs.	1,440/-
		<b>Total: Rs.</b>	<b>1,13,880/-</b>

3.	Electrification & Installation charges			Rs.	27,500/-
4.	Office furniture			Rs.	16,500/-
5.	Preliminary & Preoperative expenditure			Rs.	8,250/-
				<b>Total Fixed Cost:</b>	<b>Rs. 1,66,130 /-</b>
6.	Working Capital: (3 months)				
a.	<b>Raw Material</b>	<b>Quantity</b>	<b>Rate</b>	<b>Cost</b>	
(i)	Chrome leather for the upper Part of the shoe	3000 sq.ft.	26	Rs.	85,800/-
(ii)	Lining leather cream of goat/ sheep E.E.I. leather	3000 sq.ft.	17	Rs.	56,100/-
(iii)	Bark leather for the front part of the shoe	300 kg.	43	Rs.	14,190/-
(iv)	Sole	600 kg.	52	Rs.	34,320/-
(v)	Other raw materials			Rs.	16,500/-
				<b>Total Raw Material:</b>	<b>Rs. 2,06,910/-</b>
b.	Salary & Utilities:			Rs.	36,300/-
c.	Utility			Rs.	5,500/-
d.	Misc. expenditure			Rs.	16,500/-
				<b>Total Working Capital:</b>	<b>Rs.2,65,210/-</b>
				<b>Total Project Cost:</b>	<b>Rs 4,31,340/-</b>

**Means of Finance:**

		<b>Urban</b>	<b>Rural</b>
1)	Composite loan	Rs. 3,01,938/-	Rs. 2,58,804/-
2)	Promoter's contribution	Rs. 21,567/-	Rs. 21,567/-
3)	Subsidy	Rs. 1,07,835/-	Rs. 1,50,969/-
4)	Debt equity ratio	2..33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization in Rs.	792	924	1056	1056	1056
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	497	579	662	662	662
b)	Utilities	13	15	18	18	18
c)	Selling expenses	12	14	16	16	16
	<b>Variable Cost</b>	<b>522</b>	<b>608</b>	<b>696</b>	<b>696</b>	<b>696</b>
d)	Wages & Salaries	87	102	116	116	116
e)	Administrative expenses	28	32	37	37	37
f)	Depreciation	16	16	16	16	16
g)	Interest on Composite Loan	35	29	21	13	4
	Fixed & Semi Variable Cost	166	179	190	182	173
4.	<b>Total Cost</b>	<b>688</b>	<b>787</b>	<b>886</b>	<b>878</b>	<b>869</b>
5.	<b>Annual Profit</b>	<b>104</b>	<b>137</b>	<b>170</b>	<b>178</b>	<b>187</b>
6.	<b>Return on Investment</b>	<b>25.10%</b>	<b>35.39%</b>	<b>43.31%</b>	<b>45.20%</b>	<b>47.09%</b>
7.	<b>Return on sales</b>	<b>13.37%</b>	<b>16.15%</b>	<b>17.30%</b>	<b>18.05%</b>	<b>18.81%</b>
8.	Annual contribution	270	-	-	-	-
9.	<b>Break Even Point as percent of</b>	<b>36.88%</b>				

	capacity					
10.	Cash accrual	120	153	186	194	203
11.	Debt Servicing Capacity	155	182	207	207	207
12.	Repayment of Composite Loan	49	57	66	65	65
13.	Debt Serviced	84	86	87	78	69
14.	Pay Back Period	1 year 10 months 24 days				
15.	Debt Service Coverage Ratio	1.90:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	21	-	-	-	-	-
2.	Increase in Term loan	302	-	-	-	-	-
3.	Subsidy	108	-	-	-	-	-
4.	Depreciation	-	16	16	16	16	16
5.	Profit before interests	-	139	166	191	191	191
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>431</b>	<b>155</b>	<b>182</b>	<b>207</b>	<b>207</b>	<b>207</b>
6.	Increase in capital investment	166	-	-	-	-	-
7.	Increase in working capital	265	-	-	-	-	-
8.	Interest	-	35	29	21	13	4
9.	Repayment of Term Loan	-	49	57	66	65	65
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>431</b>	<b>84</b>	<b>86</b>	<b>87</b>	<b>78</b>	<b>69</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>71</b>	<b>167</b>	<b>287</b>	<b>416</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>71</b>	<b>96</b>	<b>120</b>	<b>129</b>	<b>138</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>71</b>	<b>167</b>	<b>287</b>	<b>416</b>	<b>554</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	21	125	262	432	610
2.	Surplus from operation	104	137	170	178	187
	<b>NET WORTH:</b>	<b>125</b>	<b>262</b>	<b>432</b>	<b>610</b>	<b>797</b>
<b>3.</b>	<b>Subsidy</b>	<b>108</b>	<b>108</b>	<b>108</b>	<b>108</b>	<b>108</b>
4.	Term loan outstanding	253	196	130	65	-
	<b>TOTAL LIABILITIES</b>	<b>486</b>	<b>566</b>	<b>670</b>	<b>783</b>	<b>905</b>
1.	Gross Block	166	166	166	166	166
	Less Depreciation	16	32	48	64	80
	<b>NET BLOCK</b>	<b>150</b>	<b>134</b>	<b>118</b>	<b>102</b>	<b>86</b>
2.	Working capital	265	265	265	265	265
3.	Cash & Bank Balance	71	167	287	416	554
	<b>TOTAL ASSETS</b>	<b>486</b>	<b>566</b>	<b>670</b>	<b>783</b>	<b>905</b>

**Suppliers of Machinery**

- 1) Bata India Company Ltd. Engineering Division, 24 Parganas, Bata Nagar- 743873.
- 2) Leather & Packing Machine Corporation, ½ 3, B, Asafali Road, New Delhi – 110002.

## VERMICOMPOST

**Introduction:** Vermi-compost is a measure produced by composting waste materials by using earthworm. Earthworm digest as low as two percent of the food consumed by it and hence excrete about ninety eight percent of food consumed. The excreta of earthworm is always considered as a natural manure. The modern method of controlled feeding and collection of excreta is known as vermin-composting. It has already become a popular process of manufacturing Bio-fertilizer and in some places like Bangalore municipal waste is processed by Vermi-composting techniques.

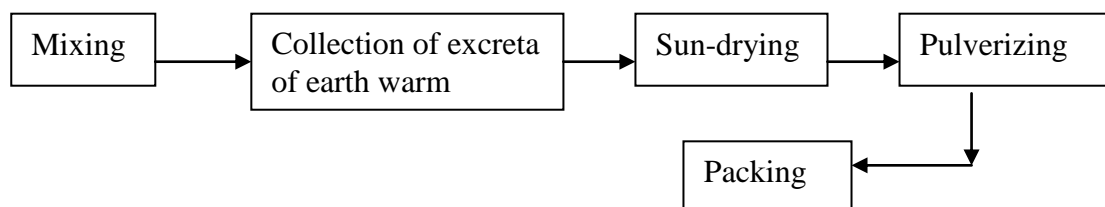
**Market:** With massive propagation of Chemical fertilizer and pesticides in last few decades demerits of such fertilizer and pesticides came into focus of the world. It was found that such fertilizers and pesticides harm not only human health but also the environment and the very soil on which agriculture is done. Alternatives like manure and compost are therefore found to be better fertilizer. Balanced fertilizer can be achieved by vermi-composting where right balance of N.P. and K can be ensured. Other natural fertilizers find it difficult. Thus vermi-compost is one step ahead in natural fertilizers. By mixing Neem and Tobacco extracts with others vermi-compost can be made to serve properties of fertilizer as well as pesticide.

In Tripura vermicompost is propagated by Spice Board and Khadi & Village Industries Commission. These Agencies are not promoting NPK Balanced vermicomposting, though it is possible within the technology propagated. Plantations are bulk consumers of vermicomposts. Tea gardens and Rubber plantations in the state prefer bio-fertilizer including compost, manure and vermicompost. Out of 10.42 thousand Tonnes of fertilizer consumed in Tripura in 1997-98 plantations consume 2,500 Tonnes. At present about 900 Tonnes of the fertilizer consumed in bio-fertilizer. The state had 375 recognised resellers of fertilizer in 1996-97.

**Capacity:** The unit shall need to work 365 days for three shifts. Worker shall however work for single shift per day, where they will mix the feed in tank, collect and pack vermicompost. As care need not be taken every-day all unskilled workers shall be employed on daily contract basis. The annual installed capacity is estimated at 30 Tonnes of vermicompost.

**Process:** The process of vermicomposting already adopted in Tripura involve preparation of feedstock in vermicomposting pits, mixing them occasionally, collection of excreta of earthworms by brush, sundrying vermicompost to semi-dry condition, pulverizing and packing.

### **Process Flow:**



**Raw Materials:** Though bio-degradable solid wastes of kitchen, farm, etc. enable one to produce vermicompost, these become rich in N but slightly deficient in P & K. Therefore, mixing of materials rich in P & K helps. Also to enhance porosity of the raw materials use of Saw dust/cut hay are done. These are available locally. Proper species of Earthworm are also available at Agartala. The unit annually required raw materials will be Rs.2,20,800/-



**Water:** Vermicomposting calls for keeping solid waste mix wet for better health of earthworms. Daily sprinkling calls for 60 Ltrs. of water. Such water is readily available in vermicomposting sites.

**Power:** The process do not call for any power or fuel

**Manpower:** One unskilled person can take care of mixing, collection of vermicompost and its sun drying. Breaking and packing calls for two more unskilled workers. Marketing and accounting shall however call for regular workers. The cost of manpower shall be Rs.31,000/- per quarter.

**Capital Cost estimate:**

1.	Land admeasuring 1728 sq.ft.		<b>Own</b>
2.	Shed and vermicomposting tanks	<b>Rs.</b>	<b>40,000/-</b>
3.	Water installation	<b>Rs.</b>	<b>7,500/-</b>
4.	Electrification	<b>Rs.</b>	<b>7,500/-</b>
5.	Office furniture & equipments	<b>Rs.</b>	<b>20,000/-</b>
6.	Provision for contingency	<b>Rs.</b>	<b>7,500/-</b>
7.	Preliminary & pre-operative expenses	<b>Rs.</b>	<b>2,500/-</b>
8.	<b><u>Working Capital</u></b>		
a)	Raw Material	Rs.	2,20,800/-
b)	Repair & Maintenance:	Rs.	500/-
c)	Salary & Wages	Rs.	31,000/-
d)	Utilities	Rs.	500/-
e)	Administrative expenditure	Rs.	12,500/-
f)	Selling expenses	Rs.	1,700/-
	<b>Total working capital:</b>	<b>Rs.</b>	<b>2,67,000/-</b>
	<b>Total Project Cost:</b>	<b>Rs.</b>	<b>3,52,000/-</b>

**Means of Finance**

	<b><u>Urban</u></b>	<b><u>Rural</u></b>
1. Composite loan	2,46,400/-	2,11,200/-
2. Promoters Capital	17,600/-	17,600/-
3. Subsidy	88,000/-	1,23,200/-
4. Debt Equity ratio	2.33:1	1.50:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization in Rs.	21,00,000	24,50,000	28,00,000	28,00,000	28,00,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	15,89,760	18,54,720	21,19,680	21,19,680	21,19,680
b)	Utilities	3,600	4,200	4,800	4,800	4,800
c)	Selling expenses	12,240	14,280	16,320	16,320	16,320
	<b>Variable Cost</b>	<b>16,05,600</b>	<b>18,73,200</b>	<b>21,40,800</b>	<b>21,40,800</b>	<b>21,40,800</b>
d)	Wages & Salaries	2,23,200	2,60,400	2,97,600	2,97,600	2,97,600
e)	Administrative expenses	90,000	1,05,000	1,20,000	1,20,000	1,20,000
f)	Depreciation	8,500	8,500	8,500	8,500	8,500

g)	Interest on Composite Loan	28,302	22,892	15,816	9,157	24,97
	Fixed & Semi Variable Cost	3,59,002	3,96,792	4,41,916	4,35,257	4,28,597
<b>4.</b>	<b>Total Cost</b>	<b>19,64,602</b>	<b>22,69,992</b>	<b>25,82,716</b>	<b>25,76,057</b>	<b>25,69,397</b>
<b>5.</b>	<b>Annual Profit</b>	<b>1,35,398</b>	<b>1,80,008</b>	<b>2,17,284</b>	<b>2,23,943</b>	<b>2,30,603</b>
<b>6.</b>	<b>Return on Investment</b>	<b>38.46%</b>	<b>51.13%</b>	<b>61.12%</b>	<b>63.62%</b>	<b>65.51%</b>
<b>7.</b>	<b>Return on sales</b>	<b>6.45%</b>	<b>7.35%</b>	<b>7.76%</b>	<b>7.99%</b>	<b>8.2%</b>
8.	Annual contribution	4,94,400	5,76,800	6,59,200	6,59,200	6,59,200
9.	Break Even Point as percent of capacity	43.56%				
10.	Cash accrual	1,43,898	1,88,508	2,25,784	2,32,443	2,39,103
11.	Debt Servicing Capacity	1,72,200	2,11,400	2,41,600	2,40,943	2,41,600
12.	Repayment of Composite Loan	39,957	46,616	53,276	53,276	53,276
13.	Debt Serviced	68,259	69,508	69,092	62,433	55,773
<b>14.</b>	<b>Pay Back Period</b>	<b>2 year 6 month 7 days</b>				
<b>15.</b>	<b>Debt Service Coverage Ratio</b>	<b>2.52:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	17,600	-	-	-	-	-
2.	Increase in Term loan	2,46,400	-	-	-	-	-
3.	Subsidy	88,000	-	-	-	-	-
4.	Depreciation	-	8,500	8,500	8,500	8,500	8,500
5.	Profit before interests	-	1,63,700	2,02,900	2,33,100	2,33,100	2,33,100
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,52,000</b>	<b>4,39,200</b>	<b>2,11,400</b>	<b>2,41,600</b>	<b>2,41,600</b>	<b>2,41,600</b>
5.	Increase in capital investment	3,52,000	-	-	-	-	-
6.	Increase in working capital		2,67,000	-	-	-	-
7.	Interest	-	28,302	22,892	15,816	9,157	2,497
8.	Repayment of Term Loan	-	39,957	46,616	53,276	53,276	53,275
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,52,000</b>	<b>3,35,259</b>	<b>69,508</b>	<b>69,092</b>	<b>62,433</b>	<b>55,773</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>1,03,941</b>	<b>2,45,833</b>	<b>4,18,341</b>	<b>5,97,508</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>1,03,941</b>	<b>1,41,892</b>	<b>1,72,508</b>	<b>1,79,167</b>	<b>1,85,828</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>1,03,941</b>	<b>2,45,833</b>	<b>4,18,341</b>	<b>5,97,508</b>	<b>7,83,336</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	17,600	1,52,998	3,33,006	5,50,290	7,74,233
2.	Surplus from operation	1,35,398	1,80,008	2,17,284	2,23,943	2,30,603
	<b>NET WORTH:</b>	<b>1,52,998</b>	<b>3,33,006</b>	<b>5,50,290</b>	<b>7,74,233</b>	<b>10,04,836</b>
<b>3.</b>	<b>Subsidy</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>
4.	Term loan outstanding	2,06,443	1,59,827	1,06,551	53,275	-
	<b>TOTAL LIABILITIES</b>	<b>4,47,441</b>	<b>5,80,833</b>	<b>7,44,841</b>	<b>9,15,508</b>	<b>10,92,836</b>
1.	Gross Block	85,000	85,000	85,000	85,000	85,000

	Less Depreciation	8,500	17,000	25,500	34,000	42,500
	<b>NET BLOCK</b>	<b>76,500</b>	<b>68,000</b>	<b>59,500</b>	<b>51,000</b>	<b>42,500</b>
2.	Working capital	2,67,000	2,67,000	2,67,000	2,67,000	2,67,000
3.	Cash & Bank Balance	1,03,941	2,45,833	4,18,341	5,97,508	7,83,336
	<b>TOTAL ASSETS</b>	<b>4,47,441</b>	<b>5,80,833</b>	<b>7,44,841</b>	<b>9,15,508</b>	<b>10,92,836</b>

**Suppliers of Machineries & Equipments**

- 1) M/s Archana Machinery stores, M.S. Road, Fancybazar, Guwahati- 781001.
- 2) M/s S.D. Nanda & Sons, 50, Shradhananda Marg,, New Delhi.
- 3) M/s International Machines Tools Corporation, 5, Bank street, Mumbai-23.

## CORRUGATED CARDBOARD BOXES

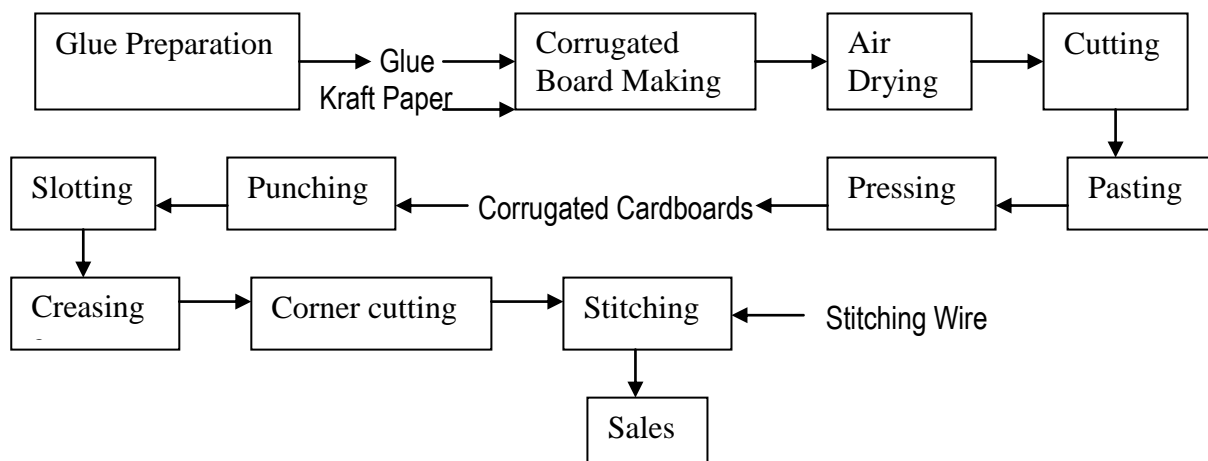
**Introduction:** Corrugated Cardboard Boxes are important packaging material with the use of containers for shipping & Railway transport its use has increased manifold. These need to conform to IS: 2771- 1965 of Bureau of Indian Standards. Corrugated cardboard boxes have replaced conventional wooden boxes as transport/ shipping containers, primarily because of their light-weight and get good strengths.

**Market:** Corrugated Cardboard Boxes are consumed en-bulk in Biscuit, Cosmetics, Medicines, Preserved Fruits, Electrical, Electronics, Chemical etc. industries. The all-India demand for Corrugated Cardboard Boxes is of the order of 16, 50, 000 Tonnes per annum. The demand is growing at the rate of 10 percent per annum. In Tripura Corrugated Cardboard boxes are bulk-consumed by two Biscuit factories, one Medicine formulary, Two Fruit preservation Units, North Eastern Regional Agricultural Marketing Corporation Ltd., One IMFL Bottling Plant, etc. besides other smaller consumers. The annual demand for Corrugated Cardboard Boxes from bulk consumers alone is of the order of 1000 Tonnes, which is equivalent to about 15, 00, 000 Numbers of Boxes. There is no Unit in the State catering to this demand. Corrugated Cardboard Boxes have good export potential to Bangladesh as well.

**Installed Capacity:** Assuming that the Unit will operate for single shift of eight hours per day for three hundred working days per annum, the annual installed capacity is estimated at 240 Tonnes.

**Process of Manufacture:** Corrugated Cardboard is made of One Corrugated paper sheet pasted on another liner paper. Depending upon the strength requirement the number of Corrugated Sheets and hence liner sheets are increased. Two Kraft Paper Rolls are fed to the Corrugation Machine. Glue, prepared by boiling Corn Starch with water, is also fed to the Corrugation Machine. The Corrugated Cardboard obtained from the Corrugation Machine has one Corrugated Sheet with one liner. It is allowed to dry naturally for two and half hours. These Boards are cut in Board Cutter. These sized Boards are then pasted in the Sheet Pasting Machine to obtain thicker Boards and to paste the liner at the unlined side of Corrugated Sheet. Pasted boards are kept in the Sheet Press. The Boards are then Punched, Slotted, Creased and Corners are cut mechanically. Then these are stitched into Boxes. Printing on Boards is done after Sheet Pressing. Printing shall be out- sourced by the Unit.

### Process Flow Sheet:



**Raw Materials:** Kraft Paper shall be the principal raw material of the unit, it is available from (i) Saraogi paper Mills (P) Ltd, Kishanganj – 855 107. (ii) Kamrup Paper Mills (P) Ltd, Amingaon, Guwahati – 781031 etc. starch is the other principal raw-material available from M/S Anil Starch Ltd; Mumbai. The other raw materials are available in Agartala market. The annual requirement at the installed capacity and costs are shown below:

Sl.No.	Raw Material	Quantity per year	Cost per annum
1	Kraft Paper in Rolls	235 MT.	51,70,000
2.	Starch Glue	5.10 MT.	11,22,000
3.	Stitching wire	2.90 MT	8,13,450
4.	Misc. consumables	L.S.	17,050
		Total: Rs.	71,22,500

**Power:** The unit will need a total connected Load of 26.4 KW at 400/440 volts, 50 Ha, AC, 3 phase & 4 wires. The power shall be available from the State Power Supply Corporation through a Step-Down-Transformer. The annual consumption of power is estimated at 26,856 KW Hrs costing Rs. 53,175/-.

**Water:** The unit shall need 3000 Liters of water per day, which may be readily available at the site.

**Manpower:** Apart from the production supervisor and Corrugation machine operator all the manpower required are locally available. The annual requirement and cost of manpower are shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	99,000
2.	Clerk cum Typist	1	46,200
3.	Production Supervisor	1	84,700
4.	Skilled Workers	3	1,78,200
5.	Unskilled workers	9	2,97,000
	Total:	15	6,99,600

**Capital Cost Estimate:**

1.	Land & Building : Covered Area 260 sq. Mtrs.	<b>On Rent</b>
2.	<u>Plant &amp; Machinery</u>	
(a)	52" Size Corrugated Machine	Rs. 6,00,000/-
(b)	52" x 62" Board Cutter	Rs. 49,500/-
(c)	72" sheet Pasting Machine	Rs. 82,500/-
(d)	55" x 75" sheet Press	Rs. 1,10,000 /-
(e)	75" creasing-cutting Machine	Rs. 2,20,000/-
(f)	12" size corner cutting cum slotting machine	Rs. 55,000/-
(g)	Two No.s of Board stitching machine	Rs. 55,000/-
(h)	Miscellaneous hand tools, glue preparation stove, vessel etc.	Rs. 55,000/-
		<b>Rs. 13,97,000/-</b>
3.	<u>Miscellaneous Fixed assets</u>	
(a)	Electrification	Rs. 1,10,000/-
(b)	Water Installation	Rs. 27,500/-
(c)	Furniture & fixtures	Rs. 82,500/-
		<b>Rs. 2,20,000/-</b>
4.	<u>Provision for contingencies</u>	<b>Rs. 82,500/-</b>
5.	<u>Preliminary &amp; Pre-operative expenses</u>	<b>Rs. 82,500/-</b>
	<b>Total Fixed Costs</b>	<b>Rs. 17,82,000/-</b>
6.	<u>Working Capital (for 1 month)</u>	
(a)	Raw Materials	Rs. 5,93,541/-
(b)	Power	Rs. 4,431/-
(c)	Wages & Salaries	Rs. 58,300/-
(d)	Miscellaneous expenses	Rs. 20,228/-
	<b>Total: Rs.</b>	<b>6,76,500/-</b>
	<b>Total Project Cost: Rs.</b>	<b>24,58,500/-</b>

**Means of Finance:**

1.	Composite Loan under PMEGP	Rs. 17,20,950/-	Rs. 14,75,100/-
2.	Subsidy	Rs. 6,14,625/-	Rs. 8,60,475/-
3.	Promoter's Contribution	Rs. 1,22,925/-	Rs. 1,22,925/-
4.	Debt Equity Ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	6732	7854	8976	8976	8976
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	4274	4986	5698	5698	5698
b)	Power	32	37	43	43	43
c)	Wages & Salaries	581	620	661	678	694
d)	Repair & Maintenance	75	75	75	75	75
e)	Administrative expenses	110	116	121	128	134
f)	Selling expenses	1010	1178	1346	1346	1346
g)	Depreciation	128	178	178	178	178
h)	Interest	198	161	117	70	23
	Total:	6458	7351	8239	8216	8191
	<b>Total variable Cost</b>	<b>5316</b>	<b>6201</b>	<b>7087</b>	<b>7087</b>	<b>7087</b>
4.	Annual Profit	274	503	737	760	785
5.	Return on Investment	11.14%	20.46%	29.98%	30.91%	31.93%
6.	Return on sales	4.07	6.40	8.21	8.46	8.74
7.	Annual contribution	1416	-	-	-	-
8.	Break Even Point as percent of capacity	48.38%				
9.	Cash accrual	452	681	915	938	963
10.	Debt Servicing Capacity	650	842	1032	1008	986
11.	Repayment of Composite Loan	279	326	372	372	372
12.	Debt Serviced	477	487	489	442	395
13.	Pay Back Period	2 years 7 months 18 days				
14.	Debt Service Coverage Ratio	1.97:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	123	-	-	-	-	-
2.	Increase in Subsidy	614	-	-	-	-	-
3.	Increase in Loan	1721	-	-	-	-	-
4.	Depreciation	-	178	178	178	178	178
5.	Profit before interests	-	472	664	854	830	808
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>2458</b>	<b>650</b>	<b>842</b>	<b>1032</b>	<b>1008</b>	<b>986</b>
6.	Increase in Fixed Assets	1782	-	-	-	-	-
7.	Increase in Current Assets	676	-	-	-	-	-

8.	Interest	-	198	161	117	70	23
9.	Repayment of Term Loan	-	279	326	372	372	372
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>2458</b>	<b>477</b>	<b>487</b>	<b>489</b>	<b>442</b>	<b>395</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>173</b>	<b>528</b>	<b>1071</b>	<b>1637</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>173</b>	<b>355</b>	<b>543</b>	<b>566</b>	<b>591</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>173</b>	<b>528</b>	<b>1071</b>	<b>1637</b>	<b>2228</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	123	397	900	1637	2397
2.	Surplus from operation	274	503	737	760	785
	<b>NET WORTH:</b>	<b>397</b>	<b>900</b>	<b>1637</b>	<b>2397</b>	<b>3182</b>
<b>3.</b>	<b>Subsidy</b>	<b>614</b>	<b>614</b>	<b>614</b>	<b>614</b>	<b>614</b>
4.	Loan Account	1442	1116	744	372	-
	<b>TOTAL LIABILITIES</b>	<b>2453</b>	<b>2630</b>	<b>2995</b>	<b>3383</b>	<b>3796</b>
1.	Gross Fixed Assets	1782	1782	1782	1782	1782
	Less Depreciation	178	350	534	712	890
	<b>NET BLOCK</b>	<b>1604</b>	<b>1426</b>	<b>1248</b>	<b>1070</b>	<b>892</b>
2.	Current Assets	676	676	676	676	676
3.	Cash & Bank Balance	173	528	1071	1637	2228
	<b>TOTAL ASSETS</b>	<b>2453</b>	<b>2630</b>	<b>2995</b>	<b>3383</b>	<b>3796</b>

**Machinery Suppliers:**

1. Assam Printers House, Parameswari Building, Tokoubari, Guwahati – 781001.
2. Raman Industries, 33 & 33/1, Biplabi Barin Ghosh Sarani, Kolkata – 700 067.
3. Well man machinery Corporation, 43/3, Feeder Road, Belgharia, Kolkata – 700056.

## WOODEN FURNITURE/ CARPENTRY

**Introduction:** Carpentry units manufacture wooden articles of everyday use including furniture. With the scarcity of wood as a basic material optimum use of wood has become important. A good carpentry unit reduces waste of wood while enhancing value addition on wood for manufacturing wooden articles. Normally consumer preference ensures quality of wooden articles.

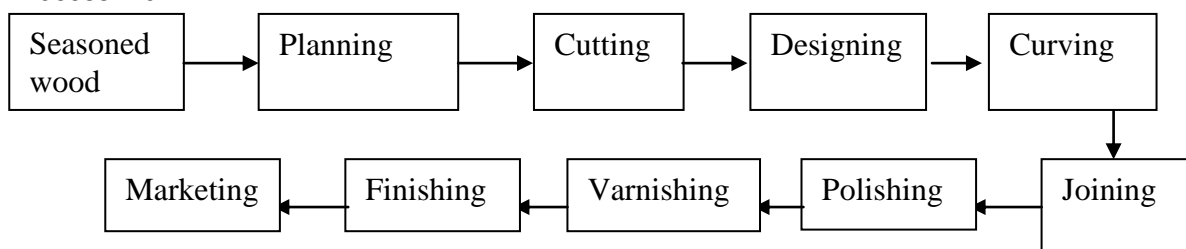
**Market:** Knife handles, Hangers, Furniture, Ladles, etc. wooden articles are used by mankind since time immemorial. Carpentry units manufacture these articles as per consumer specifications. Use of wooden frames and panels for Doors, Windows, Ventilator, etc. as building material are also very popular. However, wooden furniture such as sofa sets, Dining sets, Cots, etc. are more popular carpentry products. Tripura with 6,62,023 households as per 2001 census have demand for more than Rs. 1000.00 crore worth of wooden furniture. Besides, various offices and establishments have demand for carpentry articles such as tables, chairs, almirah, etc.

**Capacity:** The proposed unit shall work for single shift of 8 hours per day for 300 working days per annum. Though some of the operations are to be mechanized the overall productivity will depend on product mix and skills of operators. Accordingly the annual installed capacity is estimates as below.

1.	Cots	-	36 No.s
2.	Almirah	-	18 No.s
3.	Recks	-	18 No.s
4.	Sofa sets	-	30 sets
5.	Dining sets	-	30 sets
6.	Others	-	60 No.s

**Process:** The process of manufacture suggested is the one universally used all over India. The sawn timbers are sized, planned and given shape manually. These are then assembled together and varnished. After finishing operations these are made ready for sales.

### **Process Flow:**



**Power:** The annual consumption of power is estimated at 4240 KWHr. costing Rs. 14,840/-

**Water:** The unit will need 50 Liters of water per day, which may be readily available at site.

**Manpower:** The unit will need 2 skilled workers and a helper which are readily available in the state. The annual cost of these 3 workers is estimated at Rs. 1,32,000/-.

### **Capital Cost Estimate:**

1.	Land & Building admeasuring 1000 sq.ft.	On rent
2.	<b>Plant &amp; Machinery</b>	
(a)	Two No.s of Automatic wood-working machine with surface & thickness planners, circular saw, drill and grinding attachment and 2 HP Motor	Rs. 72,000/-



(b)	Miscellaneous hand tools	Rs. 10,000/-
(c)	CST, freight, etc	Rs. 10,000/-
(d)	Erection & installation costs	Rs. 2,900/-
		<b>Rs. 94,900/-</b>

### 3. Miscellaneous Fixed Assets

(a)	Electrification for a connected load of 2 KW	Rs. 27,000/-
(b)	Water installations for one kiloleter	Rs. 10,500/-
(c)	Furniture, fixtures, etc.	Rs. 10,000/-
		<b>Rs. 47,500/-</b>

**Total Fixed Cost: Rs.1,42,400/-**

### 4. Working Capital: (3 months)

a.	Raw Material	Rs.1,88,100/-
b.	Salary & Utilities:	Rs. 33,000/-
c.	Utility	Rs. 5,000/-
d.	Misc. expenditure	Rs. 15,000/-

**Total Working Capital: Rs. 2,41,100/-**

**Total Project Cost:Rs. 3,83,500/-**

### Means of Finance:

	<u>Urban</u>	<u>Rural</u>
1) Composite loan	2,68,450/-	2,30,100/-
2) Promoter's contribution	19,175/-	19,175/-
3) Subsidy	95,875/-	1,34,225/-
4) Debt equity ratio	2..33:1	1.5:1

### Profitability:

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization in Rs.	7,20,000	8,40,000	9,60,000	9,60,000	9,60,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	4,51,440	5,26,680	6,01,920	6,01,920	6,01,920
b)	Utilities	12,000	14,000	16,000	16,000	16,000
c)	Selling expenses	10,800	12,600	14,400	14,400	14,400
	<b>Variable Cost</b>	<b>4,74,240</b>	<b>5,43,280</b>	<b>6,22,320</b>	<b>6,22,320</b>	<b>6,22,320</b>
d)	Wages & Salaries	79,200	92,400	1,05,600	1,05,600	1,05,600
e)	Administrative expenses	25,200	29,400	33,600	33,600	33,600
f)	Depreciation	14,240	14,240	14,240	14,240	14,240
g)	Interest on Composite Loan	30,836	24,941	18,139	10,883	3,628
	Fixed & Semi Variable Cost	1,49,476	1,60,981	1,71,579	1,64,323	1,57,068
4.	<b>Total Cost</b>	<b>6,23,716</b>	<b>7,04,261</b>	<b>7,93,899</b>	<b>7,86,643</b>	<b>7,79,388</b>
5.	<b>Annual Profit</b>	<b>96,284</b>	<b>1,35,739</b>	<b>1,66,101</b>	<b>1,73,357</b>	<b>1,80,612</b>
6.	<b>Return on Investment</b>	<b>25.10%</b>	<b>35.39%</b>	<b>43.31%</b>	<b>45.20%</b>	<b>47.09%</b>
7.	<b>Return on sales</b>	<b>13.37%</b>	<b>16.15%</b>	<b>17.30%</b>	<b>18.05%</b>	<b>18.81%</b>
8.	Annual contribution	2,45,760	2,96,720	3,37,680	3,37,680	3,37,680
9.	Break Even Point as percent of capacity	36.49%				
10.	Cash accrual	1,10,524	1,49,979	1,84,240	1,87,597	1,94,852
11.	Debt Servicing Capacity	1,41,360	1,74,920	2,02,379	1,98,480	1,98,480
12.	Repayment of Composite Loan	43,532	50,788	58,043	58,043	58,044
13.	Debt Serviced	74,368	75,729	76,182	68,926	61,672

14.	Pay Back Period	1 year 10 months 24 days
15.	Debt Service Coverage Ratio	1.90:1

**Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	19,175	-	-	-	-	-
2.	Increase in Term loan	2,68,450	2,41,100	-	-	-	-
3.	Subsidy	95,875	-	-	-	-	-
4.	Depreciation	-	14,240	14,240	14,240	14,240	14,240
5.	Profit before interests	-	1,27,120	1,60,680	1,84,240	1,84,240	1,84,240
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,83,500</b>	<b>3,82,460</b>	<b>1,74,920</b>	<b>1,98,480</b>	<b>1,98,480</b>	<b>1,98,480</b>
6.	Increase in capital investment	3,83,500	-	-	-	-	-
7.	Increase in working capital	-	2,41,100	-	-	-	-
8.	Interest	-	30,836	24,941	18,139	10,883	3,628
9.	Repayment of Term Loan	-	43,532	50,788	58,043	58,043	58,044
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,83,500</b>	<b>3,15,468</b>	<b>75,729</b>	<b>76,182</b>	<b>68,926</b>	<b>61,672</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>66,992</b>	<b>1,66,183</b>	<b>2,88,481</b>	<b>4,18,035</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>66,992</b>	<b>99,191</b>	<b>1,22,298</b>	<b>1,29,554</b>	<b>1,36,808</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>66,992</b>	<b>1,66,183</b>	<b>2,88,481</b>	<b>4,18,035</b>	<b>5,54,843</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	19,175	15,459	2,51,198	-	-
2.	Surplus from operation	96,284	1,35,739	1,66,101	1,73,357	1,80,612
	<b>NET WORTH:</b>	<b>1,15,459</b>	<b>2,51,198</b>	<b>4,17,299</b>	<b>5,90,656</b>	<b>7,71,268</b>
<b>3.</b>	<b>Subsidy</b>	<b>95,875</b>	<b>95,875</b>	<b>95,875</b>	<b>95,875</b>	<b>95,875</b>
4.	Term loan outstanding	2,24,918	1,74,130	1,16,087	58,044	-
	<b>TOTAL LIABILITIES</b>	<b>4,36,252</b>	<b>5,21,203</b>	<b>6,29,261</b>	<b>7,44,575</b>	<b>8,67,143</b>
1.	Gross Block	1,42,400	1,42,400	1,42,400	1,42,400	1,42,400
	Less Depreciation	14,240	28,480	42,720	56,960	71,200
	<b>NET BLOCK</b>	<b>1,28,160</b>	<b>1,13,920</b>	<b>99,680</b>	<b>85,440</b>	<b>71,200</b>
2.	Working capital	2,41,100	2,41,100	2,41,100	2,41,100	2,41,100
3.	Cash & Bank Balance	66,992	1,66,183	2,88,481	4,18,035	5,54,843
	<b>TOTAL ASSETS</b>	<b>4,36,252</b>	<b>5,21,203</b>	<b>6,29,261</b>	<b>7,44,575</b>	<b>8,67,143</b>

**Suppliers of Machinery:**

1. Maneklal and Sons, 115/116, Narayan Dhuru Street, Bombay 400 03,
2. Jayems Engg, Co, M.G. Road, Ernakulam, Cochin 682019, Kerala.
3. Batliboi & Co (P) Ltd, M.G Road, Ernakulam, Cochin 682019, Kerala

## CONFECTIONARY

**Introduction:** Confectionary products have been in existence from time immemorial. Confectionary products are generally divided into hard candy (sugar cream), lozenges, caramels, toffee, chocolates & sugar coated candies. The development of confectionary industry is linked with the progress of sugar industry and its production fluctuates with the availability of sugar and its price. Confectionary Industry thus comprises an important segment of industrial activity in the food processing industry and has made considerable progress in the country, since Independence. Confectionary is mainly consumed by children as their most favourable edible sweets. It is also distributed on different festivals to the guests like birthday parties, marriage-celebrations, parties, etc. The consumption of these sweets is increasing day by day. To meet this ever growing demand, many units in urban and the semi-urban areas have come up. But there is a still good scope for new small scale units to manufacture quality production to meet the ever growing demand in the country.

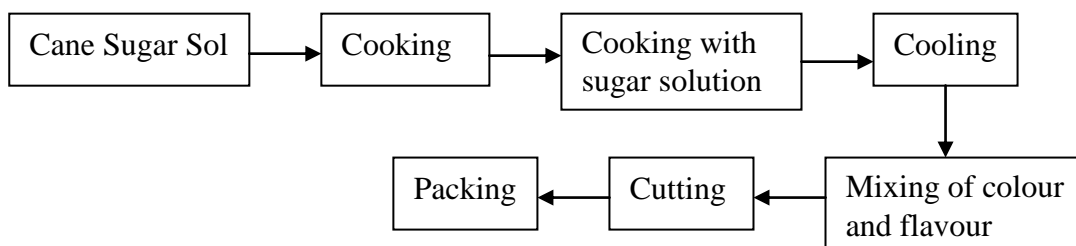
**Market:** Quality confectionary is of great nutritional value and forms an important part of a balanced diet for all age groups particularly amongst the children. Confectionary is one of the important mass consumption items and has a demand in urban and rural areas. It is estimated that there are at present over 5,000 small and cottage scale units in the country manufacturing a wide range of products. Most of the small scale confectionary units are catering to the semi-urban and the rural markets, whereas large units are marketing their products mostly in the urban areas and export markets. Manufacture of confectionery products is techno-economically feasible in the small scale sector and offers a substantial scope for further development in the small towns, villages and backward areas of the country to provide additional employment and better utilization of the surplus sugar resources available presently in the country to meet the local demands.

**Target:** Assuming that the Unit shall operate for single shift of eight hours per day for three hundred days per annum

(a) Quantity	66000 Kg.
(b) Value	Rs. 37,62,000/-

**Process:** These are manufactured by preparing a solution of cane sugar to which invert sugar or glucose syrup or a chemical reagent (doctor), for bringing about partial inversion, is added. The syrup is cooked to a temperature of 310-320°F, in an open pan or a steam jacketed kettle. In the open fire boiling process, however, a certain amount of caramelisation takes place which imparts characteristic flavour to the product. Alternative process, therefore, consists of cooking the syrup in a steam jacketed kettle to a temperature of 310-320°F, in an open pan or a vacuum cooker under suction and cooked under vacuum to 310-320°F. Vacuum cooking gives a light coloured products and prevents caramelisation. A supersaturated sugar solution with a glass like consistency is obtained. The product is then quickly cooled by spreading on an oiled, water cooled table, plat or cast iron slab. Flavouring and colouring materials are added and the product is thoroughly mixed. It is cut into various shapes by frame cutters worked manually.

**Process Flow:**



**Raw Material:** The requirement at installed capacity and cost of Raw Materials are shown below:

Sl.No.	Item	Total
1.	Sugar	1,31,250/-
2.	Glucose Syrup commercial	52,500/-
3.	Condensed Milk, coca powder, butter etc.	15,000/-
4.	Chemical flavour & colour etc.	7,500/-
5.	Packing Material	20,000/-
	Total;	2,26,250/-

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 6,000/-

**Water:** The unit need to use very clean water for the process as it is producing food items. The unit will need 5000 liters of clean and soft water. It is available from both ground water sources and public supply.

**Fuel:** Total amount required for fuel is estimated Rs. 60,000/-.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	self
2.	Skilled Worker	2	96,000/-
3.	Sales man	1	48,000/-
4.	Unskilled Worker	2	84,000/-
	Total:	6	2,28,000/-

**Financial Aspect:**

1.	Land & Building :			<b>On Rent</b>
2.	<b>Plant &amp; Machinery</b>			
(1)	Furnace	2 No.	Rs.	12,000/-
(2)	Toffee sizing machine	1 No.	Rs.	3,000/-
(3)	Pedal press with one set of die	1 No.	Rs.	5,000/-
(4)	Plasto plast rotary machine with motor cutter and an drying unit	1 No.	Rs.	52,000/-
(5)	Lozenges machine hand driver	1 No.	Rs.	1,500/-
(6)	Extro roller for lozenges machine	5 No.	Rs.	4,000/-
(7)	Toffee cutter (High speed steel blade)		Rs.	500/-
(8)	Boiling Pan	2 No.	Rs.	4,000/-
(9)	Wooden working table with aluminium top	1 No.	Rs.	2,000/-
(10)	Sugar grinder	1 No.	Rs.	5,000/-
(11)	Mixer machine small size	1 No.	Rs.	5,500/-
(12)	Cooling table	1 No.	Rs.	1,200/-
(13)	Polythene bag sealing machine	1 No.	Rs.	1,000/-
(14)	Packing machine	1 No.	Rs.	50,000/-
(15)	Platform weighing scale	1 No.	Rs.	1,800/-
(16)	Misc. equipment eg. Siever, lablles, spartula, thermometer, jugs Buckets drums etc.			Rs. 2,500/-
				<b>Rs. 1,51,000/-</b>

3.	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 5,000/-
b)	Water installation	Rs. 5,000/-
c)	Furniture & Miscellaneous others	Rs. 15,000/-
		<b>Rs. 25,000/-</b>
4.	<b>Provision for contingencies</b>	<b>Rs. 8,800/-</b>
5.	<b>Preliminary &amp; pre-operative expenses</b>	<b>Rs. 23,000/-</b>
		<b>Total Fixed Investment: Rs. 2,07,800/-</b>
6.	<b><u>Working Capital (P.M.)</u></b>	
a)	Raw Material	Rs. 2,26,250/-
b)	Utilities	Rs. 7,000/-
c)	Salary & Wages	Rs. 19,000/-
d)	Other expenses	Rs. 15,000/-
		<b>Total working capital: Rs. 2,67,250/-</b>
		<b>Total Project Cost: Rs. 4,75,050/-</b>

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Composite loan	3,32,535/-	2,85,030/-
2. Promoter's contribution	23,753/-	23,753/-
3. Subsidy	1,18,762/-	1,66,267/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	22,57,200	26,33,400	30,09,600	30,09,600	30,09,600
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	16,29,000	19,00,500	21,72,000	21,72,000	21,72,000
b)	Utilities	50,400	58,800	67,200	67,200	67,200
c)	Selling expenses	1,78,485	2,08,233	2,37,981	2,37,981	2,37,981
	<b>Variable Cost</b>	<b>18,57,885</b>	<b>21,67,533</b>	<b>24,77,181</b>	<b>24,77,181</b>	<b>24,77,181</b>
d)	Wages & Salaries	1,36,800	1,59,600	1,82,400	1,82,400	1,82,400
e)	Administrative expenses	1,08,000	1,26,000	1,44,000	1,44,000	1,44,000
f)	Depreciation	20,780	20,780	20,780	20,780	20,780
g)	Interest on Composite Loan	38,197	30,894	22,469	13,481	4,494
	Fixed & Semi Variable Cost	3,03,777	3,37,274	3,69,649	3,60,661	3,51,674
4.	<b>Total Cost</b>	<b>21,61,662</b>	<b>25,04,807</b>	<b>28,47,130</b>	<b>28,37,842</b>	<b>28,28,855</b>
5.	<b>Annual Profit</b>	<b>95,538</b>	<b>1,28,593</b>	<b>1,62,470</b>	<b>1,71,758</b>	<b>1,80,745</b>
6.	<b>Return on Investment</b>	<b>20.11%</b>	<b>27.06%</b>	<b>34.20%</b>	<b>36.15%</b>	<b>38.04%</b>
7.	<b>Return on sales</b>	<b>2.54%</b>	<b>3.42%</b>	<b>4.32%</b>	<b>4.57%</b>	<b>4.80%</b>
8.	Annual contribution	3,99,315	-	-	-	-
9.	Break Even Point	45.64%				
10.	Cash accrual	1,16,318	1,49,373	1,83,250	1,92,538	2,01,525
11.	Debt Servicing Capacity	1,54,515	1,80,267	2,05,719	2,06,019	2,06,019
12.	Repayment of Composite Loan	53,925	62,912	71,899	71,899	71,900
13.	Debt Serviced	92,122	93,806	94,368	85,380	76,394
14.	<b>Pay Back Period</b>	<b>1 year 8 months 1 day</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.67:1</b>				

**Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	23,753	-	-	-	-	-
2.	Increase in Term loan	3,32,535	2,67,250	-	-	-	-
3.	Subsidy	1,18,762	-	-	-	-	-
4.	Depreciation	-	20,780	20,780	20,780	20,780	20,780
5.	Profit before interests	-	1,33,735	1,59,487	1,84,939	1,85,239	1,85,239
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>-</b>	<b>4,21,765</b>	<b>1,80,267</b>	<b>2,05,719</b>	<b>2,06,019</b>	<b>2,06,019</b>
6.	Increase in capital investment	-	-	-	-	-	-
7.	Increase in working capital	-	2,67,250	-	-	-	-
8.	Interest	-	38,197	30,894	22,469	13,481	4,494
9.	Repayment of Term Loan	-	53,925	62,912	71,899	71,899	71,900
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>NIL</b>	<b>NIL</b>	<b>93,806</b>	<b>94,368</b>	<b>85,380</b>	<b>76,394</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>62,393</b>	<b>1,48,854</b>	<b>2,60,205</b>	<b>3,80,844</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>62,393</b>	<b>86,461</b>	<b>1,11,351</b>	<b>1,20,639</b>	<b>1,29,625</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>62,393</b>	<b>1,48,854</b>	<b>2,60,205</b>	<b>3,80,844</b>	<b>5,10,469</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	23,753	-	-	-	-
2.	Surplus from operation	95,538	1,28,593	1,62,470	1,71,758	1,80,745
	<b>NET WORTH:</b>	<b>1,19,291</b>	<b>2,47,884</b>	<b>4,10,354</b>	<b>5,82,112</b>	<b>7,62,857</b>
<b>3.</b>	<b>Subsidy</b>	<b>1,18,762</b>	<b>1,18,762</b>	<b>1,18,762</b>	<b>1,18,762</b>	<b>1,18,762</b>
4.	Term loan outstanding	2,78,610	2,15,698	1,43,799	71,900	-
	<b>TOTAL LIABILITIES</b>	<b>5,16,663</b>	<b>5,82,344</b>	<b>6,72,915</b>	<b>7,72,774</b>	<b>8,81,619</b>
1.	Gross Block	2,07,800	2,07,800	2,07,800	2,07,800	2,07,800
	Less Depreciation	20,780	41,560	62,340	83,120	1,03,900
	<b>NET BLOCK</b>	<b>1,87,020</b>	<b>1,66,240</b>	<b>1,45,460</b>	<b>1,24,680</b>	<b>1,03,900</b>
2.	Working capital	2,67,250	2,67,250	2,67,250	2,67,250	2,67,250
3.	Cash & Bank Balance	<b>62,393</b>	<b>1,48,854</b>	<b>2,60,205</b>	<b>3,80,844</b>	<b>5,10,469</b>
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>5,16,663</b>	<b>5,82,344</b>	<b>6,72,915</b>	<b>7,72,774</b>	<b>8,81,619</b>

**Machinery Suppliers:**

- 1) Oriental Machinery Pvt. Ltd.  
Mission Court, 15, Rajendra nath Mukherjee Road,  
Kolkata-700 001.
- 2) Gurbachan Singh Mistri  
3605, Merigate, Delhi-110 006.

## PAPER BAGS

**Introduction:** Paper bags are common packaging material being used by bakers and confectioners, grocers, textile and cloth merchants, dry cleaners, sweet-meat dealers etc. Due to some distinct advantages particularly lower prices over the other conventional packaging medium, paper bags are even used by the hawkers and vendors on the footpath of packing fruits, vegetable and candies etc.

**Market Potential :** The introduction of shopping complex and consumers stores in the semi-urban and rural areas are creating additional demand for paper bags. Paper bags manufactures , therefore, may be taken up as a profitable manufacturing activity in selected areas.

**Installed Capacity:** Assuming that the Unit shall operate for single shift of eight hours per day for three hundred days per annum. It is also assumed that the annual sales realization at the installed capacity is estimated 1,50,00,000 nos. number of various sizes bags with a sales value of Rs. 32,40,000/-

**Manufacturing Process:** The whole process involved in the manufacture of paper bags is automatic starting with printing and ending with stacking up of finished bags. The paper rolls may be initially cut in to proper width and they are fed into the printing unit first. After the printing work, the roll goes into the bag making section, where it is folded, pasted , shared and stacked. The bag making machine also have automatic mechanism for glueing.

**Raw Material:** The requirement at installed capacity and cost of Raw Materials are shown below:

1)	Paper sheets 40"x60", 18000 sheets,	1,00,000/-
2)	Paper in Roll colours & White 500 Reams	75,000/-
3)	Printing Ink, Chemicals etc	25,000/-
4)	Packing Materials, etc.	<u>20,000/-</u>
		<u>2,20,000/-</u>

The required Raw materials for this unit can be obtained from local wholesale market.

**Power :** Consumption of power and fuel have been arrived at on the basis of consumption norms of the industry. The unit will require a total connected load of 30 KWH and Water requirement is about 50KL per annum.

**Water:** Requirement of water mainly for washing of film developing etc and drinking purpose. The unit shall avail of the PHE water supply already available at the site and it can also install its own tube well supply for the purpose.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available locally.

1.	Manager cum Supervisor	Self	Self
2.	Skilled	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	<u>Rs. 3,300/-</u>
		<b>Total</b>	<b><u>Rs.27,500/-</u></b>

**CAPITAL COST ESTIMATE:****Land & Building:** 500 Sq. ft. **On Rent****Plant & Machinery:**

a.	Automatic paper bags making machine ball bearing type with high speed rollers with two colour printing units	Rs.1,20,000/-
b.	Stereo Press	Rs. 15,000/-
c.	Stereo Grinder	Rs. 15,000/-
d.	Rolls slitter motorized machine	Rs. 30,000/-
e.	Testing equipment scale etc	Rs. 7,200/-
<b>Total:</b>		<b>Rs.1,87,200/-</b>

**Miscellaneous Fixed Assets:**

1.	Chair & Working Table	Rs. 15,000/-
2.	Fan & Lighting and wearing	Rs. 22,500/-
3.	Interior decoration	Rs. 45,000/-
<b>Total:</b>		<b>Rs. 82,500/-</b>

**Preliminary & Preoperative Exp.:****Rs. 4,950/-****Total Fixed Capital :Rs. 2,74,650/-****Working Capital (P.m)**

1.	Salary & Wages	Rs. 27,500/-
2.	Administrative expenses	Rs. 13,666/-
3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs.2,20,000/-
5.	Utilities	Rs. 3,880/-
<b>Total:</b>		<b>Rs.2,68,316/-</b>

**Total Cost of the Project : Rs.5,42,966/-****Means of Finance :**

		Urban		Rural	
a.	Composite loan under PMEGP	70%	Rs.3,80,076/-	60%	Rs.3,25,780/-
b.	Subsidy	25%	Rs.1,35,742/-	35%	Rs.1,90,038/-
c.	Margin Money	5%	Rs. 27,148/-	5%	Rs. 27,148/-
<b>Total</b>			<b>Rs. 5,42,966/-</b>		<b>Rs. 5,42,966/-</b>
d.	Debt Equity Ratio		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,584	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93
9.	Return on sales	6.36	7.13	7.82	8.17	8.55



10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
<b>13.</b>	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
<b>15.</b>	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>16</b>	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
<b>17.</b>	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	Less Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

1. Titaghur paper Mills Co Ltd , Titaghur , Bihar,
2. Paper & Pulp Conversion Ltd, 376 Shukrawar Peth, Poona,
3. Rohtas Industries Ltd, Dalmianagar, Bihar.

## CARBON PAPER

**Introduction:** Type writer carbon paper is a plain, pigment coated, tissue paper sheet used for duplicating typewritten manuscript. Due to its being a consumable item and with the increase in the number of offices, banks, commercial establishment etc. Carbon paper is a form of copying paper. The first carbon paper was produced by crudely coating a heavy absorbent paper with a mixture of grease and carbon black. India has also done a tremendous improvement in this sector since 1950. when most of the carbon papers were imported. Now we are in a position to export the same also.

**Product ;** The best paper used for the preparation of the carbon paper is the tissue paper. Which is specially produced for the purpose. The tissue must have a smooth surface, uniformly high density and good formation and must be free from porosity. A wide variety of carbon papers are produced to satisfy different end use into two broad classes, these are :

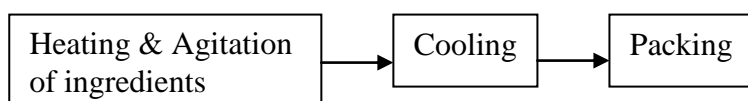
1. Single use carbon and 2 Multiple use carbon.

**Market :** The typewriter carbon paper is the most important of the carbon paper family and therefore, finest materials and methods are used for its manufacture. These carbon paper can be used from 3 to 30 times depending upon the quality of the paper and ink formulation and coated weights. The producers of carbon paper is increasing with a 4.5% compound growth rate. The growth rate in demand is about 5%.

**Installed Capacity:** Operating single shift of 8 hours per day for 300 working days per annum the unit shall have an annual installed capacity to produce 6,00,000 boxes per annum.

**Process of Manufacture:** Manufacture of carbon paper involves manufacturing of coating ink and coating of the tissue paper base with ink. This ink is manufactured by dispersing or grounding the pigment with the ink vehicle. This operation is carried out in the heated mill.

### Process Flow:



**Raw Materials:** The main raw materials required for manufacture of carbon paper is paper, Pigment, Oils, Waxes etc. packing materials. Raw materials are to be sourced mainly from the open market and other way the same product may be collected from Bandana International, mangalmurti Appartments, Opp NKGSB, Thane, Maharastra, 401105, India. The annual requirement at the installed capacity and costs of Raw Materials will be Rs. **64,75,000/-**

**Power:** The unit will need a total connected Load of 26.4 KW at 400/440 volts, 50 Ha, AC, 3 phase & 4 wires. The power shall be available from the State Power Supply Corporation through a Step-Down-Transformer. The annual consumption of power is estimated at 26,856 KW Hrs costing Rs. 48,341/-.

**Water:** The unit shall need 3000 Liters of water per day, which may be readily available at the site.

**Manpower:** The chemist for the unit shall need to be recruited from outside the state. Other manpower are locally available. The requirement and annual cost of manpower is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	90,000
2.	Clerk cum Typist	1	42,000
3.	Production Supervisor	1	77,000
4.	Skilled Workers	3	1,62,000
5.	Unskilled workers	9	2,70,000
	Total:	15	6,36,000

### **Capital Cost Estimate:**

1)	<b>Land &amp; Building</b> : Covered area 190 sq. Mtrs.	<b>On Rent</b>
2)	<b>Plant &amp; Machinery</b>	
a.	Coating Machine	Rs. 5,75,000/-
b.	Chilling Plant	Rs. 1,75,000/-
c.	Printing Machine	Rs. 2,00,000/-
d.	Sheeting machine etc.	Rs. 1,45,000/-
e)	Analytical instruments, weighing/ measuring equipments etc.	<u>Rs. 1,75,000/-</u>
		<u>Rs.12,70,000/-</u>
3)	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 1,00,000/-
b)	Water Installation	Rs. 50,000/-
c)	Furniture, Fixtures, etc.	<u>Rs. 50,000/-</u>
		<b>Rs. 2,00,000/-</b>
4.	Provision for contingencies	<b>Rs. 85,000/-</b>
5.	Preliminary & pre-operative expenses	<b>Rs. 65,000/-</b>
		<u>Rs. 1,50,000/-</u>
	<b>Total Fixed Capital</b>	<b>Rs. 16,20,000/-</b>
6.	Working Capital (for 1 month)	
(a)	Raw Materials	Rs. 5,39,583/-
(b)	Power	Rs. 4,028/-
(c)	Wages & Salaries	Rs. 53,000/-
(d)	Miscellaneous expenses	<u>Rs. 18,389/-</u>
	Total:	<u>Rs. 6,15,000/-</u>
	<b>Total Project Cost</b>	<b>Rs. 22,35,000/-</b>

### **Means of Finance:**

1.	Composite Loan under PMEGP	Rs. 15,64,000/-	Rs. 13,41,000/-
2.	Subsidy	Rs. 5,59,000/-	Rs. 7,82,250/-
3.	Promoter's Contribution	Rs. 1,12,000/-	Rs. 1,11,750/-
4.	Debt Equity Ratio	2.33:1	1.50:1

### **Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	6120	7140	8160	8160	8160
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	3885	4533	5180	5180	5180
b)	Power	29	34	39	39	39

c)	Wages & Salaries	528	564	601	616	631
d)	Repair & Maintenance	68	68	68	68	68
e)	Administrative expenses	100	105	110	116	122
f)	Selling expenses	918	1071	1224	1224	1224
g)	Depreciation	155	155	155	155	155
h)	Interest	180	146	106	64	21
	Total:	5863	6676	7483	7462	7440
	<b>Total variable Cost</b>	<b>4832</b>	<b>5641</b>	<b>6443</b>	<b>6443</b>	<b>6443</b>
4.	Annual Profit	257	464	677	698	720
5.	Return on Investment	11.50%	20.76%	30.29%	31.23%	32.21%
6.	Return on sales	4.20%	6.50%	8.30%	8.55%	8.82%
7.	Annual contribution	1288	-	-	-	-
8.	Break Even Point as percent of capacity	48.03%				
9.	Cash accrual	412	619	832	853	875
10.	Debt Servicing Capacity	592	765	938	917	896
11.	Repayment of Composite Loan	244	300	340	340	340
12.	Debt Serviced	424	446	446	404	361
13.	Pay Back Period	2 years 7 months 18 days				
14.	Debt Service Coverage Ratio	1.97:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	112	-	-	-	-	-
2.	Increase in Subsidy	559	-	-	-	-	-
3.	Increase in Loan	1564	-	-	-	-	-
4.	Depreciation	-	155	155	155	155	155
5.	Profit before interests	-	437	610	783	762	741
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>2235</b>	<b>592</b>	<b>765</b>	<b>938</b>	<b>917</b>	<b>896</b>
6.	Increase in Fixed Assets	1620	-	-	-	-	-
7.	Increase in Current Assets	615	-	-	-	-	-
8.	Interest	-	180	146	106	64	21
9.	Repayment of Term Loan	-	244	300	340	340	340
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>2235</b>	<b>424</b>	<b>446</b>	<b>446</b>	<b>404</b>	<b>361</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>168</b>	<b>487</b>	<b>979</b>	<b>1492</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>168</b>	<b>319</b>	<b>492</b>	<b>513</b>	<b>535</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>168</b>	<b>487</b>	<b>979</b>	<b>1492</b>	<b>2027</b>

**Projected Balance sheet:**

(Rs. In Thousands)

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	112	369	833	1510	2208
2.	Surplus from operation	257	464	677	698	720
	<b>NET WORTH:</b>	<b>369</b>	<b>833</b>	<b>1510</b>	<b>2208</b>	<b>2928</b>
3.	Subsidy	559	559	559	559	559
4.	Loan Account	1320	1020	680	340	-

	<b>TOTAL LIABILITIES</b>	<b>2248</b>	<b>2412</b>	<b>2749</b>	<b>3107</b>	<b>3487</b>
1.	Gross Fixed Assets	1620	1620	1620	1620	1620
	Less Depreciation	155	310	465	620	775
	<b>NET BLOCK</b>	<b>1465</b>	<b>1310</b>	<b>1155</b>	<b>1000</b>	<b>845</b>
2.	Current Assets	615	615	615	615	615
3.	Cash & Bank Balance	<b>168</b>	<b>487</b>	<b>979</b>	<b>1492</b>	<b>2027</b>
	<b>TOTAL ASSETS</b>	<b>2248</b>	<b>2412</b>	<b>2749</b>	<b>3107</b>	<b>3487</b>

**Machine Suppliers:**

1. Pioneer papers, Uco Bank Lane, Vpo Jugiana, G. T. Road, Ludhiana, Punjab India
2. Divyabharti Enterprises Pvt. Ltd. - India. 406, Adamji Building, 4th Floor, 413, Narsi Natha Street, Mumbai - 400009., Maharashtra India
3. Vandana International - India . 301, Mangalmurti Apts, Navghar Road, Bhayandar (E), Thane, Thane-401105, Maharashtra India.
4. Shalin Sales - India , 3, Celler, Khadia Shopping Center, Khadia Old Gate, Khadia, Ahnedabad, Gujarat India.

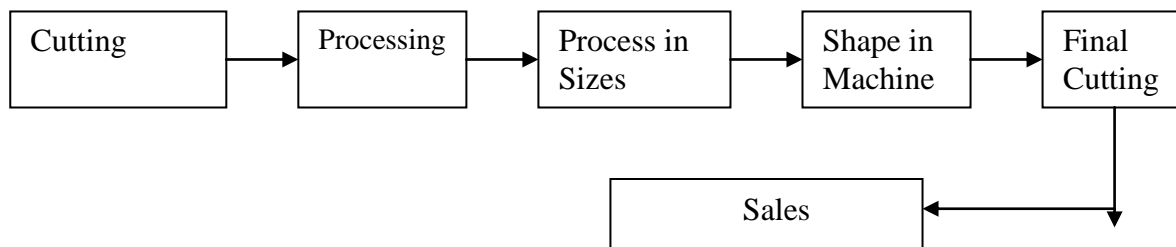
## DECORATIVE PAPER

**Introduction :** Decorative papers are widely employed for packing of presentation articles and gifts. These are also used for nursery education for creating colour sense in the children. Children of higher classes can utilize it for their artistic skill.

**Market potential :** The decorative papers are used for marketing paper decorations like flowers etc. during festive season. Thus there appears to be a fairly good demand for the decorative papers in the country.

**Manufacturing process of Decorative Papers:** Paper in the form of rolls is fed to a rotogravure printing machine where in it is coated with a colour on one side. These are then cut into sheets of suitable sizes, which are passed through a varnishing machine for giving it a gloss and shine and making it more pleasing and presentable.

**Flow Chart :**



**Production Capacity:** The production target has been kept as **108 MT** per annum which will be total value s of Rs. 30,05,000 p.a.

**Manpower:** The unit will need the following manpower, all of whom are locally available.

Sl.No.	Type of Manpower	No. of Persons	Annual Costs
1.	Part-time pathologist	1	Rs. 96,000
2.	Receptionist cum Clerk	2	Rs. 84,000
3.	Paramedical staff	2	Rs. 1,08,000
4.	Unskilled worker	2	Rs. 48,000
	<b>Total:</b>	<b>7</b>	<b>Rs. 3,36,000</b>

### **Capital Cost Estimate:**

(a)	Land & Building: 800 sq.ft	Rented
(b)	<b>Plant &amp; Machinery</b>	
(i)	Roto- Grauvre Printing Machine 30" for 2 colour printing with	1,20,500/-
(ii)	Paper Cutting Machine 43"	45,000/-
(iii)	Paper varnishing machine with drying arrangement 30'x40'	34,000/-
(iv)	Cost of Knives, tanks etc	45,500/-
(v)	Cost of office equipments and machinery tools	35,000/-
	<b>Total</b>	<b>2,80,000/-</b>

(c)	<b>Misc. fixed assets</b>	
(i)	Electrification & water installation	85,000/-
(ii)	Furniture & fixture	15,000/-
	<b>Total</b>	<b>1,00,000/-</b>
(d)	Preliminary & pre-operative expenses	<b>25,000/-</b>
(e)	Contingency	<b>15,000/-</b>
	<b>Total Fixed Costs</b>	<b>4,20,000/-</b>
<b>Working Capital</b>		
(a)	Raw Material	
1.	Paper	40,417/-
2.	Ink, varnish, thinners etc	2,000/-
3.	Other consumables and packing materials	3,000/-
	<b>Total : Rs.</b>	<b>45,417/-</b>
(b)	Salary & Wages	29,680
(c)	Misc. expenses	<u>4,903</u>
	<b>Total Project Cost</b>	<b>5,00,000/-</b>

**Means of Finance**

	<b>Urban</b>	<b>Rural</b>
1. Composite Loan	3,50,000/-	3,00,000/-
2. Promoter's contribution @ 5%	25,000/-	25,000/-
3. Subsidy	1,25,000/-	1,75,000/-
4. Debt Equity Ratio	2.33:1	1.5:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization in Rs.	8,70,000	10,15,000	11,60,000	11,60,000	11,60,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	3,27,002	3,81,503	4,36,003	4,36,003	4,36,003
b)	Utilities	12,096	14,112	16,128	16,128	16,128
c)	Selling expenses	1,26,000	1,47,000	1,63,000	1,68,000	1,68,000
	<b>Variable Cost</b>	<b>4,65,098</b>	<b>5,42,615</b>	<b>6,20,131</b>	<b>6,20,131</b>	<b>6,20,131</b>
d)	Wages & Salaries	2,01,600	2,35,200	2,68,800	2,68,800	2,68,800
e)	Administrative expenses	35,302	41,185	47,069	47,069	47,069
f)	Depreciation	42,000	42,000	42,000	42,000	42,000
g)	Interest on Composite Loan	40,203	32,517	22,466	13,007	3,547
	Fixed & Semi Variable Cost	3,19,105	3,50,902	3,80,335	3,70,876	3,61,416
4.	<b>Total Cost</b>	<b>7,84,203</b>	<b>8,93,517</b>	<b>10,00,466</b>	<b>9,91,007</b>	<b>9,81,547</b>
5.	<b>Annual Profit</b>	<b>85,797</b>	<b>1,21,483</b>	<b>1,59,534</b>	<b>1,68,993</b>	<b>1,78,453</b>
6.	<b>Return on Investment</b>	<b>17.15%</b>	<b>24.29%</b>	<b>31.90%</b>	<b>33.79%</b>	<b>35.69%</b>
7.	<b>Return on sales</b>	<b>9.86%</b>	<b>11.96%</b>	<b>13.75%</b>	<b>14.56%</b>	<b>15.38%</b>
8.	Annual contribution	4,04,902				
9.	Break Even Point as percent of capacity	47.28%				
10.	Cash accrual	1,27,797	1,63,483	2,01,534	2,10,993	2,20,453
11.	Debt Servicing Capacity	1,68,000	1,96,000	2,24,000	2,24,000	2,24,000
12.	Repayment of Composite Loan	56,757	66,216	75,676	75,676	75,675
13.	Debt Serviced	96,960	98,733	98,142	88,683	79,222

14.	Pay Back Period	1 year 8 month 22 days
15.	Debt Service Coverage Ratio	1.73:1

### Cash Flow Statement

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	25,000	-	-	-	-	-
2.	Increase in Term loan	3,50,000	80,000	-	-	-	-
3.	Subsidy	1,25,000	-	-	-	-	-
4.	Depreciation	-	42,000	42,000	42,000	42,000	42,000
5.	Profit before interests	-	1,26,000	1,54,000	1,82,000	1,82,000	1,82,000
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>5,00,000</b>	<b>2,48,000</b>	<b>1,96,000</b>	<b>2,24,000</b>	<b>2,24,000</b>	<b>2,24,000</b>
6.	Increase in capital investment	5,00,000	-	-	-	-	-
7.	Increase in working capital	-	80,000	-	-	-	-
8.	Interest	-	40,203	32,517	22,466	13,007	3,547
9.	Repayment of Term Loan	-	56,757	66,216	75,676	75,676	75,676
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>5,00,000</b>	<b>1,76,960</b>	<b>98,733</b>	<b>98,142</b>	<b>88,683</b>	<b>79,222</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>71,040</b>	<b>1,68,307</b>	<b>2,94,165</b>	<b>4,29,482</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>71,040</b>	<b>97,267</b>	<b>1,25,858</b>	<b>1,35,317</b>	<b>1,44,778</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>71,040</b>	<b>1,68,307</b>	<b>2,94,165</b>	<b>4,29,482</b>	<b>5,74,260</b>

### Projected Balance sheet:

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	25,000	1,10,797	2,32,280	3,91,814	8,60,807
2.	Surplus from operation	85,797	1,21,483	1,59,354	1,68,993	1,78,453
	<b>NET WORTH:</b>	<b>1,10,797</b>	<b>2,32,280</b>	<b>3,91,814</b>	<b>5,60,807</b>	<b>7,39,260</b>
<b>3.</b>	<b>Subsidy</b>	<b>1,25,000</b>	<b>1,25,000</b>	<b>1,25,000</b>	<b>1,25,000</b>	<b>1,25,000</b>
4.	Term loan outstanding	2,93,243	2,27,027	1,51,351	75,675	-
	<b>TOTAL LIABILITIES</b>	<b>5,29,040</b>	<b>5,84,307</b>	<b>6,68,165</b>	<b>7,61,482</b>	<b>8,64,260</b>
1.	Gross Block	4,20,000	4,20,000	4,20,000	4,20,000	4,20,000
	Less Depreciation	42,000	84,000	1,26,000	1,68,000	2,10,000
	<b>NET BLOCK</b>	<b>3,78,000</b>	<b>3,36,000</b>	<b>2,94,000</b>	<b>2,52,000</b>	<b>2,10,000</b>
2.	Working capital	80,000	80,000	80,000	80,000	80,000
3.	Cash & Bank Balance	71,040	1,68,307	2,94,165	4,29,482	5,74,260
	<b>TOTAL ASSETS</b>	<b>5,29,040</b>	<b>5,84,307</b>	<b>6,68,165</b>	<b>7,61,482</b>	<b>8,64,260</b>

### Suppliers of Machinery:

1. Indo Europa Trading Co, 1390 Chandni Chowk, Delhi-6.
2. Industrial Paper machines (P) Ltd, 32 Phase I, Naraina Industrial Area, New Delhi..
3. Laxmi Board and paper Mills Pvt Ltd, 23 Raman street, 3<sup>rd</sup> floor, Bombay.



## GUMMED PAPER TAPE

**Introduction :** Gummed Paper Tapes afford security against pilferage and tamper as it cannot be peeled off. These types are easy to stick and give attractive look to the cartons and packages. These tapes can be printed attractively in any colour of choice and after an excellent advertising value, identification and individuality. Almost all the raw materials used for the manufacture of gummed tapes i.e kraft paper, adhesives, cores, printing inks and other allied materials are available indigenously.

**Market:** The gummed paper type plays an important role in the field of packaging industries. The demand of tapes is increasing with the increasing outputs of the industries. With more and more sophistication being introduced in packaging and trend for displaying and advertising contents on package the demand for gummed paper tape is likely to increase considerably in future.

**Suggested Capacity:** The minimum economic capacity for Gummed paper tape is 215MT and approximately value will be Rs.32,40,000/- per annum on one shift basis on a 300 days working schedule in year.

**Raw Materials:** The main raw materials required for manufacture of Gummed Paper Tape are Kraft paper in rolls, Animal Glue of standard quality, Glycerine preservatives and other miscellaneous chemicals, Plastic cores, Bituminised packaging paper reels, labels etc. Raw materials are to be sourced mainly from the open market at present availability and to be sourced from and out side of Tripura. ( 1. Orient Paper Mills Ltd, Brajraj Nagar, Orissa, 2. Star paper Mills Ltd, Sahranpur U.P, 3. Andhra Paper Mills Ltd, Rajanahendry, A.P), The unit required raw materials Rs.2,20,000/-p.a.

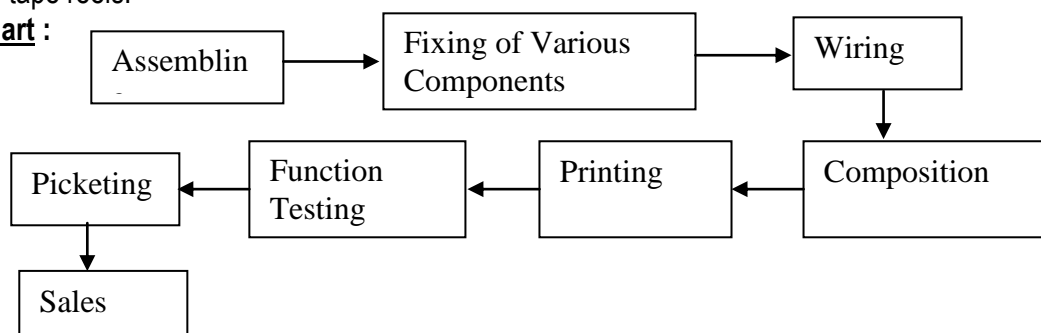
**Utilities :** The unit will require a total connected load of 200 KVA and a maximum demand of 190 KVA. Water requirement is about 500KL per annum.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available from local area.

1.	Manager cum Supervisor	Self	Self
2.	Skilled	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
	<b>Total</b>		<b><u>Rs.27,500/-</u></b>

**Manufacturing Process:** Kraft paper in reels is coated uniformly in one side with a water soluble adhesive composition on a coating machine. It is dried in a drying chamber and wound. The coated rolls are then slit into various sizes (width and length). If required, printing is done on the uncoated side of the gummed tape reels.

**Flow Chart :**



**CAPITAL COST ESTIMATE:****Land and Building:** 1000Sq. ft.**On Rent****Plant & Machinery :**

- |    |  |              |
|----|--|--------------|
| 1. | Glue preparation tank ( stainless steel, fitted with stirrer for mixing glue, valves for unloading, reduction gear, heaters etc.)  | Rs. 75,000/- |
| 2. | Complete coating & rewinding machine size 40" with rollers and adjustments, glue coating stainless steel tank with mild steel jacket, main drive with V-Belts and chain, extra mild steel core for the rewinding unit. | Rs. 65,000/- |
| 3. | Complete drying chamber  | Rs. 34,000/- |
| 4. | Complete slitting, Printed rewinding unit equipped with necessary steel rolls for printing, reduction drive etc.   | Rs. 13,200/- |

Total: **Rs.1,87,200/-****Miscellaneous Fixed Assets:**

- |    |                            |              |
|----|----------------------------|--------------|
| 1. | Chair & Working Table      | Rs. 17,000/- |
| 2. | Fan & Lighting and wearing | Rs. 20,500/- |
| 3. | Interior decoration        | Rs. 45,000/- |

Total: **Rs. 82,500/-****Preliminary & Preoperative Exp.:****Rs. 4,950/-****Total Fixed Capital: Rs.2,74,650/-****Working Capital (P.m)**

- |    |                         |               |
|----|-------------------------|---------------|
| 1. | Salary & Wages          | Rs. 27,500/-  |
| 2. | Administrative expenses | Rs. 13,666-   |
| 3. | Selling expenses        | Rs. 3,300/-   |
| 4. | Raw Materials           | Rs.2,20,000/- |
| 5. | Utilities               | Rs. 3,880/-   |

Total **Rs. 2,68,316/-****Total Cost of the Project : Rs. 5,42,966/-****Means of Finance:**

	Urban	Rural
a. Composite loan under PMEGP	70% Rs.3,80,076/-	60% Rs.3,25,780/-
b. Subsidy	25% Rs.1,35,742/-	35% Rs.1,90,038/-
c. Margin Money	5% <u>Rs. 27,148/-</u>	5% <u>Rs. 27,148/-</u>
	<b>Total</b> <b>Rs. 5,42,966/-</b>	<b>Rs. 5,42,966/-</b>
d. Debt Equity Ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs in Rs.					
(a)	Raw Materials	1,584	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5

5	Fixed & Semi Variable Cost	367	409	448	438	427
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
7.	<b>Annual profit</b>	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
8	Return on investment	25.04	32.78	41.06	42.90	44.93
9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
13.	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
15.	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
16	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	275	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

1.	Gross Block	275	275	275	275	275
	<b>Less</b> Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

1. Knit Bone and Fertilizer Co, Jaboyr, UP, 2. Raymond Chemical Mfg Co, Near Oshiwara Bridge, Bombay-62. 3. Spin Tex Products, 463, Ideal Indl, Estate, Lower Parel Bridge, Bombay-13.

## SCHOOL CHALK

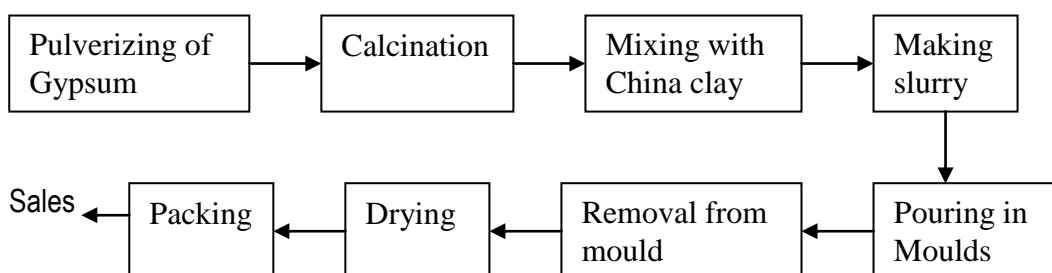
**Introduction:** Chalk crayons are round and tapered sticks of different colours. Chalks are used for writing on Black Board and making on coloured surfaces. IS: 2694-1963 specify Indian standard for Moulded white school chalks. IS: 4222-1967 specifies Indian standard for Moulded coloured chalks.

**Market:** Chalks have an indispensable role in all educational institutions including Schools, Colleges and Universities. Besides, in informal education like Adult education chalks are required. In Tripura 1849 primary/ Jr. Basic, 1005 Middle/ Sr. Basic, 416 High School, 245 Higher Secondary Schools, 31 colleges and two Universities exist. Besides 3877 Anganwadi centres and 1225 Social Education Centres are using chalk crayon. These educational institutions annually consume about 2, 00,000 boxes of white chalks per annum. Besides, small quantities of coloured chalks are also used. Thus there is good marketing scope for chalk crayon manufacturing units.

**Installed Capacity:** Operating single shift of 8 hours per day for 300 working days per annum the unit will have an installed capacity to produce 90,000 boxes of chalk crayon containing 100 sticks per box.

**Process of Manufacture:** Gypsum is washed, dried and then pulverized in Atta Chakki to a fineness of 100 to 120 meshes. The gypsum powder is calcined powder is calcinations drum at 120°C to 130°C for half an hour. This calcined Gypsum powder is mixed with china-clay/ ball clay in an enamel bowl. Whitening and colours are also mixed here. Water is added to the mix and vigorously stirred to form homogeneous slurry. Meanwhile moulds are lubricated with lard oil & kerosene in 1:4 proportion. The homogeneous slurry is poured in these moulds so that no air bubble is formed. The slurry is allowed to get set in moulds and excess slurry is manually removed. Chalks are removed from moulds and placed on wooden trays so that no breakage takes place. These trays are kept in shade for natural drying. After chalks are dry enough these are sun-dried. Dry chalks are tested and packed in Cardboard Boxes. Inter-chalk gaps are filled by saw dust or paddy husks. Boxes are then labeled and made ready for sales.

### Process Flow:



**Raw Material:** Gypsum and China/Ball clay are the principal raw-materials of the unit. Gypsum of Blutan are available from M/s Chamin Eastern, Bonda, Guwahati. Quality Ball Clay is available in Meghalaya Mineval Development Corporation, Laitunkhra, Shillong. This corporation is also selling China Clay. However, Ball clay is a cheaper alternative available in Coal Mines. Cardboard boxes are available in Kolkata. Gypsum and China Clay are also available in Kolkata in Chinabazar and Bawni Market. The annual requirement and cost of Raw Materials at the installed capacity are shown below:

Sl.No.	Raw/ Packing Material	Quantity	Cost
1.	Gypsum	34,000 kilograms	2,67,800/-
2.	China/ Ball Clay	2,600 kilograms	50,200/-
3.	Colours/ whitening agent	100 kilograms	99,000/-
4.	Lurd Oil & kerosene	225 Liters	30,000/-
5.	Cardboard boxes & Labels	91,000 sets	1,05,000/-
		Total:	5,52,000/-

**Water:** There should be a tube well or water supply tap connection near the unit for arrangement of water. Annual requirement of water is estimated at about 3000 Ltrs.

**Power:** The annual expenditure will be Rs.24,000/- for 13,333 KWHrs of electricity consumed.

**Manpower:** The manpower required by the unit is locally available. The requirement and annual cost of manpower is shown below:

<u>Sl.No.</u>	<u>Category</u>	<u>No of persons</u>	<u>Annual Cost</u>
1.	Manager	1	Self
2.	Skilled worker	3	Rs.1,44,000/-
3.	Assistant	2	Rs. 72,000/-
	<b>Total</b>	<b>6</b>	<b>Rs.2,16,000/-</b>

**Capital Cost Estimate:**

1.	Land & Building : Covered area 935 sq.M.	On Rent
2.	Plant & Machinery	
a)	Small Atta Chakki (stone Grinder) with Motor & other accessories	60,000/-
b)	Calcination Drums with heating stove & pans	15,000/-
c)	Eleven Numbers of 100 cavity Aluminium moulds	25,000/-
d)	Platform balance, wooden trays and other hand tools	8,000/-
e)	Seive of 100 mesh, slurry making enamel bowl, ladle, slurry pouring vessel, etc	5,000/-
		<b>Rs. 1,13,000/-</b>
3.	<b><u>Miscellaneous Fixed Asset</u></b>	
a)	Electrification	Rs.10,000/-
b)	Water Installation	Rs.10,000/-
c)	Furniture & Miscellaneous others	Rs.30,000/-
		<b>Rs.50,000/-</b>
		<b><u>Total Fixed Costs: Rs.1,63,000/-</u></b>
B.	<b><u>Working Capital</u></b> :for 3 months	
1.	Raw materials	Rs. 1,38,000/-
2.	Power	Rs. 6,000/-
3.	Wages and salaries	Rs. 23,000/-
4.	Misc. expenses	Rs. 2,500/-
		<b><u>Total Working Capital: Rs. 1,69,500/-</u></b>
		<b><u>Total Project Cost: Rs.3,32,500/-</u></b>

**Means of Finance:**

		Urban		Rural
a.	Composite loan under PMEGP 70%	Rs.2,32,750/-	60%	Rs.1,99,500/-
b.	Subsidy 25%	Rs. 83,125/-	35%	Rs.1,16,375/-
c.	Margin Money 5%	Rs. 16,625/-	5%	Rs. 16,625/-
d.	Debt Equity Ratio	2.33:1		1.5:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	7,22,100	8,42,450	9,62,800	9,62,800	9,62,800
3.	Annual Costs in Rs.					
(a)	Raw Materials	3,31,200	3,86,400	4,41,600	4,41,600	4,41,600
(b)	Utilities	25,200	29,400	33,600	33,600	33,600
(c)	Selling expenses	3,600	4,200	4,800	4,800	4,800
4	<b>Variable Cost</b>	<b>3,60,000</b>	<b>4,20,000</b>	<b>4,80,000</b>	<b>4,80,000</b>	<b>4,80,000</b>
(a)	Wages & Salaries	1,29,600	1,51,200	1,72,800	1,72,800	1,72,800
(b)	Administrative expenses	72,000	84,000	96,000	96,000	96,000
(c)	Depreciation	16,300	16,300	16,300	16,300	16,300
(d)	Interest on Composite Loan	26,735	21,624	15,726	9,436	3,145
5	<b>Fixed &amp; Semi Variable Cost</b>	<b>2,44,635</b>	<b>2,73,124</b>	<b>3,00,826</b>	<b>2,94,536</b>	<b>2,88,245</b>
6	<b>Total Cost</b>	<b>6,04,635</b>	<b>6,93,124</b>	<b>7,80,826</b>	<b>7,74,536</b>	<b>7,68,245</b>
7.	<b>Annual profit</b>	<b>1,17,465</b>	<b>1,49,326</b>	<b>1,81,974</b>	<b>1,88,264</b>	<b>1,94,555</b>
8	<b>Return on investment</b>	<b>35.32</b>	<b>44.91</b>	<b>54.72</b>	<b>56.62</b>	<b>58.57</b>
9.	<b>Return on sales</b>	<b>16.26</b>	<b>17.72</b>	<b>18.90</b>	<b>19.55</b>	<b>20.20</b>
10.	Annual Contribution	3,62,100	4,22,450	4,82,800	4,82,800	4,82,800
11	Break Even Point as percent of capacity	40.53				
12	Cash accrual	1,33,765	1,65,626	1,98,274	2,04,564	2,10,855
13.	<b>Debt servicing capacity</b>	<b>1,60,500</b>	<b>1,87,250</b>	<b>2,14,000</b>	<b>2,14,000</b>	<b>2,14,000</b>
14	Repayment of Composite Loan	37,743	44,034	50,324	50,324	50,325
15.	<b>Debt serviced</b>	<b>54,478</b>	<b>65,658</b>	<b>66,050</b>	<b>59,760</b>	<b>53,470</b>
16	<b>Pay Back Period</b>	<b>2 yrs 5 month 22 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.48:1</b>				

**Cash Flow Statement**

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	16,625	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	2,32,750	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	83,125	NIL	NIL	NIL	NIL	NIL
4.	Depreciation	---	16,300	16,300	16,300	16,300	16,300
5.	Profit before interests	---	1,44,200	1,70,950	1,97,700	1,97,700	1,97,700
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,32,500</b>	<b>3,30,000</b>	<b>1,87,250</b>	<b>2,14,000</b>	<b>2,14,000</b>	<b>2,14,000</b>
6.	Increase in capital investment	<b>3,32,500</b>	NIL	NIL	NIL	NIL	NIL

7.	Increase in working capital	NIL	169500	NIL	NIL	NIL	NIL
8.	Interests	NIL	26735	21624	15726	9436	3145
9.	Repayment of loan	NIL	37743	44034	50324	50324	50325
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>332500</b>	<b>233978</b>	<b>65658</b>	<b>66050</b>	<b>59760</b>	<b>53470</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>96022</b>	<b>217614</b>	<b>365564</b>	<b>519804</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>96022</b>	<b>121592</b>	<b>147950</b>	<b>154240</b>	<b>160530</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>96022</b>	<b>217614</b>	<b>365564</b>	<b>519804</b>	<b>680334</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	16625	134090	283416	465390	653654
2	Surplus from operations	117465	149326	181974	188264	194555
	<b>NET WORTH:</b>	<b>134090</b>	<b>283416</b>	<b>465390</b>	<b>653654</b>	<b>848209</b>
3.	Composite loan	195007	150973	100649	50325	Nil
4.	Subsidy	83125	83125	83125	83125	83125
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>412222</b>	<b>517514</b>	<b>649164</b>	<b>787104</b>	<b>931334</b>
1.	Gross Block	163000	163000	163000	163000	163000
	<b>Less Depreciation</b>	<b>16300</b>	<b>32600</b>	<b>48900</b>	<b>65200</b>	<b>81500</b>
<b>2</b>	<b>NET BLOCK</b>	<b>146700</b>	<b>130400</b>	<b>114100</b>	<b>97800</b>	<b>81500</b>
3	Current Assets	169500	169500	169500	169500	169500
4.	Cash & Bank Balance	96022	217614	365564	519804	680334
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>412222</b>	<b>517514</b>	<b>649164</b>	<b>787104</b>	<b>931334</b>

**Machinery Suppliers:**

1. K.C. Trunk Factory, Fancybazar, Guwahati.
2. Archana Machinery Stores, M.S. Road, Near Alka Hotel, Fancy bazaar, Guwahati-781001.
3. Small Machinery Manufacturing Co., 22, R.C. Kar Road, Shyambazar, Kolkata-700004



## POTTERY

**Introduction:** Pottery is a traditional industry. It provided earthenware like Drinking Glass, Cooking pots, earthen plates, Diya (Pradip), Pots for water (Kalash), Pots for storage etc to do traditional villagers. With replacement of earthen fragile utensils by steel, Brass, Plastic, china-clay, etc made utensils these products have lost their market. However, certain earthen products like Diya, Kalash and pot for dahi still have substantial demand. Besides, for Hindu religions functions small quantities of earthen cooking pots, drinking glasses, etc. are still consumed. As such traditional potters are now producing those products of sizeable demand with Images for Hindu festivals. The Khadi & Village Industries Commission in its Training cum Production Centre at Dharamtul in Assam has experimented with some new products with success. Such products include earthen water Filter, Piggybank, Flower, Pots, etc. These and Blue pottery were attempted to be propagated in Tripura through a Khadi & Village Industries Board operated Training cum Production Centre at Teliamurah. This scheme envisages production of these along with some traditional products.

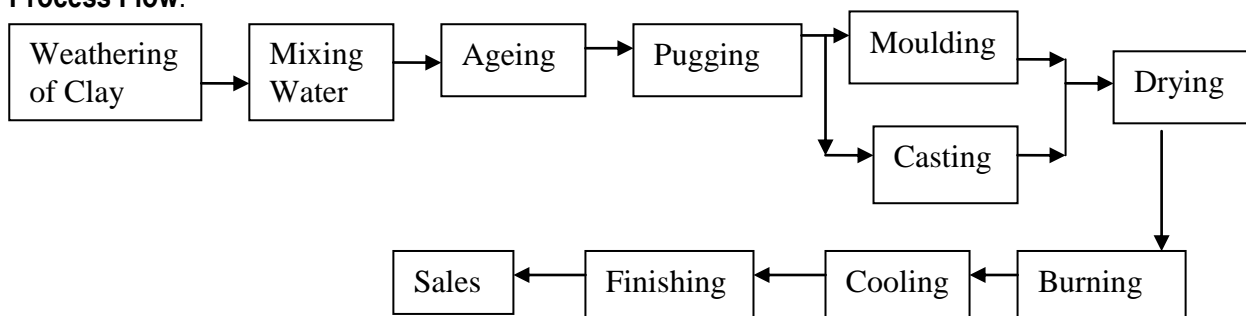
**Market:** Earthen Lamp (Diya/Pradip) is a popular product associated with worship and festivals of Hindus. Its demand peaks just before Diwali festival. Sweetmeat makers make Curd (Dahi) in earthen pots of one liter, 500 milliliter and 250 Milliliter earthen pots. Curd pots demand is steady throughout the year. Earthen water Filter also keeps the filtered water cool. Thus these shall be preferred. Also in seasons Earthen Drinking glasses, plates, pot (kalash) etc. shall be in demand. These may enable a number of pottery units to survive.

**Installed Capacity:** The unit shall operate for single shift of 8 hours per day for 300 working days per annum to have an annual installed capacity to produce the following:

1.	Earthen Lamp	60,000 Nos.	Worth Rs. 60,000/-
2.	<u>Curd-Pots</u>		
a)	1 Ltr. Capacity	10,500 Nos.	Worth Rs. 84,000/-
b)	500 ml capacity	19,500 Nos.	Worth Rs. 97,500/-
c)	250 ml capacity	30,000 Nos.	Worth Rs. 1,05,000/-
3.	Water Filter	30 Nos.	Worth Rs. 2,89,500/-
4.	Misc. others	750 Nos.	Worth Rs. 26,250/-

**Process of Manufacture:** The Red-burning Plastic clays are weathered and mixed with water allowed to age for about a week. These clays are then crushed and mixed homogeneously by use of wooden hammer. Wet clay is placed in potters wheel to give the clay shape. The moulded products are carefully collected on wooden plants and allowed to dry in sheds. Then these are dried in Sun again. When these claywares are dry these are burned in coal fired updraft kiln to 600°C to 700°C so that partial vitrification takes place and products get a pleasing light red colour. In case of water Filter the two parts are cast in Moulds and dried in shade before burning. After burning the top part is filled with Water-Filter-Candle and placed over the bottom part.

**Process Flow:**



**Raw Materials:** The Clay required for pottery is available in most localities in the State. Clay is dug out and stored in the Pottery Unit site for use as and when required. The unit required Rs. 2,00,000/-p.a.

**Utilities :** The unit will require a total connected load of 200 KVA and a maximum demand of 190 KVA. Water requirement is about 500KL per annum.

**Water:** The water required for the unit per day shall be 100 Liters.

**Manpower:** The unit will provide employment to the following 6 persons and all of whom are locally available.

1	Manager cum Supervisor	Self	Self
2.	Skilled Engineer	4nos	Rs.20,000/-
3.	Office Boy	1 no	Rs. 2,000/-
4.	Sales Man	1no	Rs. 3,000/-
	<b>Total</b>		<b><u>Rs.25,000/-</u></b>

**Capital Cost Estimate:**

1)	<b>Land &amp; Building</b> : Covered area 56 sq. Mtrs.	<b>On Rent</b>
2)	<b>Plant &amp; Machinery</b>	
a)	Two Potters wheel	Rs. 35,000/-
b)	One Up-draft coal fired kiln of 5 diameter	Rs. 45,000/-
c)	Wooden pallets, planks, Misc. hand tools	Rs. 55,000/-
d)	3 moulds for water filter	<u>Rs. 21,000/-</u>
		<u>Rs.1,56,000/-</u>
3.	<b>Miscellaneous Fixed Assets</b>	
a)	Electrification	Rs. 17,500/-
b)	Water Installation	Rs. 5,500/-
c)	Furniture & Miscellaneous others	Rs. 55,000/-
		<u>Rs.75,000/-</u>
4.	<b>Provision for contingencies</b>	<u>Rs. 2,000/-</u>
5.	<b>Preliminary &amp; pre-operative expenses</b>	<u>Rs. 2,500/-</u>
		<b><u>Total Fixed Capital: Rs.2,35,500/-</u></b>

**6. Working Capital:**

1.	Salary & Wages	Rs. 25,000/-
2.	Administrative expenses	Rs. 12,424/-
3.	Selling expenses	Rs. 3,000/-
4.	Raw Materials	Rs.2,00,000/-
5.	Utilities	<u>Rs. 3,500/-</u>
	<b>Total</b>	<b><u>Rs.2,43,924/-</u></b>
	<b><u>Total Cost of the Project :</u></b>	<b><u>Rs.4,94,424/-</u></b>

**Means of Finance**

a.	<b>Composite loan under PMEGP</b>	70%	<b>Urban</b>	60%	<b>Rural</b>
			Rs.3,35,597/-		Rs.2,87,654/-
b.	<b>Subsidy</b>	25%	Rs.1,19,856/-	35%	Rs.1,67,799/-
c.	<b>Margin Money</b>	5%	<u>Rs. 23,971/-</u>	5%	<u>Rs. 23,971/-</u>
			<u>Rs.4,79,424/-</u>		<u>Rs. 4,79,424/-</u>
d.	<b>Debt Equity Ratio</b>		2.33:1		1.50:1

**Profitability:**

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	19,44,000	22,68,000	25,92,000	25,92,000	25,92,000
3.	Annual Costs in Rs.					
(a)	Raw Materials	14,40,000	16,80,000	19,20,000	19,20,000	19,20,000
(b)	Utilities	25,200	29,400	33,600	33,600	33,600
(c)	Selling expenses	21,600	25,200	28,800	28,800	28,800
4	<b>Variable Cost</b>	<b>14,86,800</b>	<b>17,34,600</b>	<b>19,82,400</b>	<b>19,82,400</b>	<b>19,82,400</b>
(a)	Wages & Salaries	1,80,000	2,10,000	2,40,000	2,40,000	2,40,000
(b)	Administrative expenses	89,453	1,04,362	1,19,270	1,19,270	1,19,270
(c)	Depreciation	23,550	23,550	23,550	23,550	23,550
(d)	Interest on Composite Loan	38,548	31,179	22,675	13,605	4,535
5	<b>Fixed &amp; Semi Variable Cost</b>	<b>3,31,551</b>	<b>3,69,091</b>	<b>4,05,495</b>	<b>3,96,425</b>	<b>3,87,355</b>
6	<b>Total Cost</b>	<b>18,18,351</b>	<b>21,03,691</b>	<b>23,87,895</b>	<b>23,78,825</b>	<b>23,69,755</b>
7.	<b>Annual profit</b>	<b>1,25,649</b>	<b>1,64,309</b>	<b>2,04,105</b>	<b>2,13,175</b>	<b>2,22,245</b>
8	Return on investment					
9.	Return on sales					
10.	Annual Contribution	4,57,200	5,33,400	6,09,600	6,09,600	6,09,600
11	Break Even Point as percent of capacity	43.51	48.44			
12	Cash accrual	1,49,199	1,87,859	2,22,655	2,23,725	2,45,795
13.	<b>Debt servicing capacity</b>	<b>1,87,749</b>	<b>2,19,038</b>	<b>2,50,330</b>	<b>2,50,330</b>	<b>2,50,330</b>
14	Repayment of Composite Loan	54,420	63,491	72,562	72,562	72,562
15.	<b>Debt serviced</b>	<b>92,968</b>	<b>94,670</b>	<b>95,237</b>	<b>86,167</b>	<b>77,097</b>
16	Pay Back Period	2 years 7 month 6 days				
17.	Debt Service Coverage Ratio (DSCR)	4.6:1				

**Cash Flow Statement**

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	23,971	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	3,35,597	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	1,19,856	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		23,550	23,550	23,550	23,550	23,550
5.	Profit before interests		1,64,197	1,95,488	2,26,780	2,26,780	2,26,780
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>4,79,424</b>	<b>1,87,747</b>	<b>2,19,038</b>	<b>2,50,330</b>	<b>2,50,330</b>	<b>2,50,330</b>
6.	Increase in capital investment	2,35,500	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	2,43,924	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	38,548	31,179	22,675	13,605	4,535
9.	Repayment of loan	NIL	54,420	63,491	72,562	72,562	72,562
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>4,79,424</b>	<b>92,968</b>	<b>94,670</b>	<b>95,237</b>	<b>86,237</b>	<b>77,097</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>94,779</b>	<b>2,19,147</b>	<b>3,74,240</b>	<b>5,38,403</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>94,779</b>	<b>1,24,368</b>	<b>1,55,093</b>	<b>1,64,163</b>	<b>1,73,233</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>94,779</b>	<b>2,19,147</b>	<b>3,74,240</b>	<b>5,38,403</b>	<b>7,71,636</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	23,971	1,49,620	3,13,929	5,18,034	7,31,209
2.	Surplus from operations	<b>1,25,649</b>	<b>1,64,309</b>	<b>2,04,105</b>	<b>2,13,175</b>	<b>2,22,245</b>
	<b>NET WORTH:</b>	1,49,620	3,13,929	5,18,034	7,31,209	<b>9,53,454</b>
3.	Composite loan	2,81,177	2,17,686	1,45,124	72,562	nil
4.	Subsidy	1,19,856	1,19,856	1,19,856	1,19,856	1,19,856
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>5,50,653</b>	<b>6,51,471</b>	<b>7,83,014</b>	<b>9,23,627</b>	<b>10,73,310</b>
1.	Gross Block	2,35,500	2,35,500	2,35,500	2,35,500	2,35,500
	Less Depreciation	23,550	47,100	70,650	94,200	117750
<b>2</b>	<b>NET BLOCK</b>	<b>211950</b>	<b>188400</b>	<b>164850</b>	<b>141300</b>	<b>117750</b>
3	Current Assets	243924	243924	243924	243924	243924
4.	Cash & Bank Balance	<b>94,779</b>	<b>2,19,147</b>	<b>3,74,240</b>	<b>5,38,403</b>	<b>7,71,636</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>5,50,653</b>	<b>6,51,471</b>	<b>7,83,014</b>	<b>9,23,627</b>	<b>10,73,310</b>

**Sources of Machinery:**

1. KVIC, Tripura State Office, Kamarpukurpar, Agartala
2. Kusum Engineering Co. 25, Swallow Lane, Kolkata
3. Amic Industries Pvt. Ltd. 10, Bt. Road, Kolkata – 700056.

## SCHOOL BAGS/ RAIINWARE

**Introduction :** Decorated, coloured, Silky-lustre, light in weight jute and Rexin bags (Both for ladies and school going children) and rain ware are being preferred in the society due to their good appearance, durability and reasonable cost. In modern days packing/ carrying materials are playing a prominent and distinctive role in domestic as well as export fields. The Jute and Rexin rain ware bags are used to carry the precise article of daily use and tea in various quantities. All the machinery and raw material used for manufacturing of such products are available from indigenous sources.

**Marketing:** These items have a very good demand in the domestic market. Much emphasis is given to this industry to cater to the growing demand of foreign buyers. The products like any other consumer durable have the prospect of attracting wide range of people from all walks of life. With more than cores of population in the country and with the rising standards of living and economic up-liftment of the people from the poverty line, there exists an ever increasing demand of the products both in the internal as well as the external market

**Monthly Production & Sales :** Assuming that the Unit will operate for single shift per day for 25 working days per month the following capacity and sales are estimated:

<u>Sl.No</u>	<u>Descriptions</u>	<u>Rate</u>	<u>Qty</u>	<u>Total</u>
1.	School Bags	85/-	1000	Rs. 85,000/-
2.	Design School Bags	125/-	1,000	Rs. 1,25,000/-
3.	Children's Rain ware	100/-	300	Rs. 30,000/-
5.	Adult Rain ware	200/-	150	Rs. 30,000/-
<b>Total</b>				<b>Rs. 2,70,000/-</b>

**Production Procedure:** Components are first cut as per design and then stitched together as per specifications.

**Raw Materials:** The main raw materials required for manufacture of School Bags and Rain ware are Rubber Laminated Jute cloth, Cloth/PVC buckle, nylon bit, Sewing thread, Zip fastener Packing materials, Rexin, Card/ Paste board, Chain, Rivets, still frame, handle, wax, salutation flour, dyes, labels, lock, Jute Cotton cloth, Eyelete, Runner to be sourced from open local markets and out side of Tripura. The above materials cost would be **Rs. 2.20 lacks**.

**Utilities:** The unit will require a total connected load of 3 KW and Water requirement is about 50KL per annum.

**Water:** Requirement of water mainly for washing and cleaning, Silk Screen print developing etc and drinking purpose. The unit shall avail of the PHE water supply. It can also install its own tube well for the purpose.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available from local area.

1.	Manager cum Supervisor	Self	Self
2.	Skilled Workers	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
		<b>Total</b>	<b>Rs.27,500/-</b>

**Capital Cost Estimate:****Land and Building:** 500 Sq. ft of covered area**On Rent****Plant & Machinery**

1.	Lock stitch sewing machine	15,000/-	5	Rs. 75,000/-
2.	Tape, Scissors, Needles etc	5,000/-	5 sets	Rs. 25,000/-
3.	Weighing scale	2,000/-	5 sets	Rs. 10,000/-
4.	Electric Heater	2,000/-	5 nos	Rs. 10,000/-
5.	Screen Printing Machine (Equipments)			Rs. 67,200/-
<b>Total:</b>				<b>Rs.1,87,200/-</b>

**Miscellaneous Fixed Assets :**

1.	Different types of racks & furniture (Iron make)	Rs. 50,000/-
2.	Show case one no	Rs. 15,000/-
3.	Chair, Working Table and Signboard	Rs. 10,000/-
4.	Fan & Lightings	Rs. 7,500/-
<b>Total:</b>		<b>Rs. 82,500/-</b>

**Preliminary & Preoperative Expenses**

**Rs. 4,950/-**  
**Fixed Capital: Rs.2,74,650/-**

**Working Capital (P.m)**

1.	Salary & Wages	Rs. 27,500/-
2.	Administrative expenses	Rs. 13,666/-
3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs. 2,20,000/-
5.	Utilities	Rs. 3,880/-
<b>Total:</b>		<b>Rs. 2,68,316/-</b>

**Total Cost of the Project: Rs. 5,42,966/-****Means of Finance:**

	Urban	Rural
a. Composite loan under PMEGP	70% Rs.3,80,076/-	60% Rs.3,25,780/-
b. Subsidy	25% Rs.1,35,742/-	35% Rs.1,90,038/-
c. Margin Money	5% Rs. 27,148/-	5% Rs. 27,148/-
	<b>Total</b> <b>Rs.5,42,966/-</b>	<b>Rs. 5,42,966/-</b>
d. Debt Equity Ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs in Rs.					
(a)	Raw Materials	1,584	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	<b>Variable Cost</b>	<b>1,635</b>	<b>1,908</b>	<b>2,180</b>	<b>2,180</b>	<b>2,180</b>
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	<b>Fixed &amp; Semi Variable Cost</b>	<b>367</b>	<b>409</b>	<b>448</b>	<b>438</b>	<b>427</b>
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
7.	<b>Annual profit</b>	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
8	<b>Return on investment</b>	<b>25.04</b>	<b>32.78</b>	<b>41.06</b>	<b>42.90</b>	<b>44.93</b>

9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
<b>13.</b>	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
<b>15.</b>	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>16</b>	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
<b>17.</b>	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	Less Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	101	234	402	580	769
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments:** 1. M/s Giribala Udyog, Agartala, Tripura,**Supplies of Raw Materials:** 1. Simantini, Agartala JRMB, Near Apanjan Club, Agartala**2. Bhagabati Udyog, 44, Burtolla Street, Kolkata-700 007. Phone : +(91)-(33)-22731046/22692855,**

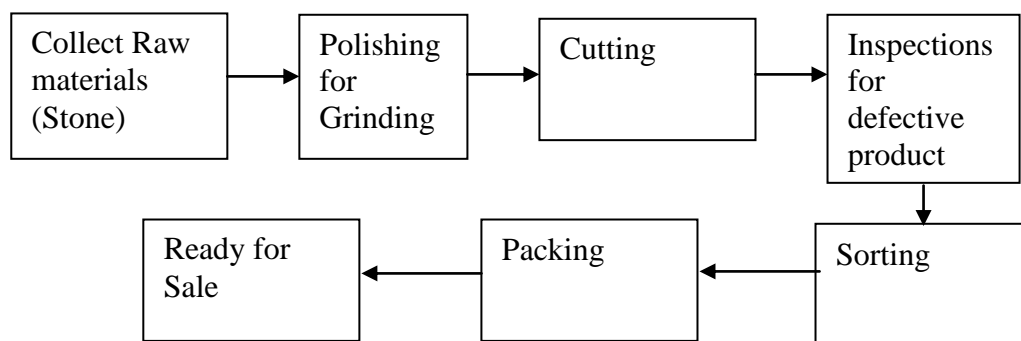
## Marble /Granite Cutting, Polishing & Fitting

**Introduction:** Granite tiles are manufactured from natural granite blocks. They are produced in a variety of colours depending upon the colour of granite block from which they are produced. They have a highly polished surface and are manufactured in different sizes, the common sizes being 300mmx300mmx10mm, 300mmx600mmx12mm, 450mmx450mmx12mm and 600mmx600mmx12mm. Polished granite tile is a decorative building material and is used as substitute for marble. Polished Granite tiles are preferred because of their glossy finish, durability and aesthetic value. In addition to being used as a flooring material, granite is also used for building, gravestones, table tops, craftworks, etc. Marble is a crystalline form of limestone, but commercially any carbonate rock capable of taking a polish is called marble. Marble is an excellent architectural material and is used as a roofing and flooring material in addition of building, hotels, auditoriums etc.

**Demand:** There is a good demand for these burnt clay tiles at present. In certain cases where cement flooring is considered as high investment, clay flooring tiles are ideally suited. The market for these tiles is spread all over the country. The glass flooring tiles are easy to wash and clean. They are brilliant in appearances, attractive and durable. Owing to the rise of standard of living of people, Industrial revolution there is a great market for these tiles. It is also visualized that the demand of these tiles will increase in future.

**Manufacturing Process; Marbles:** It is proposed to process marble slabs into tiles. Sawed marble slabs of required thickness are procured from block sawing units and fed to a polishing machine for grinding and polishing. These are then inspected for surface defects and cut into the desired tile dimensions with the help of an edge cutting machine. Subsequently the tiles are sorted out and packed. Flooring tiles – Granite: It is proposed to process granite slabs into tiles. The manufacturing operations involve: grinding and polishing of sawed granite slabs procured from outside units: edge cutting of the slabs to set the required tile dimensions and inspection of surface defects, imperfections, etc. sorting and packing.

### Flow Chart:



**Raw Materials:** All the raw materials are available indigenously. The annual requirement of main raw materials for the manufacturer of 20,000 sq ft each granite tiles and marble tiles per annum at 100% capacity utilization is estimated as follows

- a. Roofing/ flooring tiles-marble
  1. Marble slabs
  2. Grinding and polishing material
- b. Flooring tiles-granite
  1. Granite slabs
  2. Consumables like polishing abrasives as required.



The above materials cost would be **Rs. 45,00,000/-** and above machinery collected from **Silica on Traders**, 115 Sabita Bagh, Allahabad, and D.K. Trivedi & Sons, Gandhi Nagar, Abu Road.

**Power:** Power requirement for the unit is only for administration and production and generator is only use for office and also requirement oil, lubricants for machine. The amount required for this purpose **Rs.20,384/-** per month.

**Water:** The Unit will need 1000 liters of water per day. It is available from both ground water sources and public supply.

**Manpower:** The unit will provide employment to 9 persons, all of whom are readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

SI.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 92,400
2	Office Assistants	2	Rs, 1,05,600
3.	Skilled Worker	2	Rs. 1,32,000
4.	Unskilled Workers	4	Rs. 1,32,000
	Total	9	Rs. 4,62,000

### **CAPITAL COST ESTIMATE**

1. <b>Land &amp; Building</b> with a covered area of 500 Sq. Mtrs.	<b>On rent</b>
2. <b>Plant &amp; Machinery</b>	
(a) <b>Flooring/Roofing tiles –Marble:</b>	<b>Rs.4,32,000/-</b>
1. Grinding and Polishing machines with 3HP motor	
2. Edge cutting machine with 7.5HP motor	
3. Overhead water tank 500 ltrs cap with pump machine	
4. Misc tools and fixtures	
(b) <b>Flooring tiles-Granite :</b>	<b>Rs.3,90,000/-</b>
1. Grinding and polishing machines	
2. Cross cutter with disc motor	
3. chamfering/ finishing machine	
(c) Installation	Rs. 18,000/-
(d) Freight, Taxes, etc. on above	<u>Rs. 1,20,000/-</u>
	<b><u>Rs. 9,60,000/-</u></b>
3. <b>Miscellaneous Fixed Assets</b>	
(a) Electrification	Rs. 1,10,000/-
(b) Water Installation	Rs. 27,500/-
(c) Furniture & Miscellaneous others	<u>Rs. 82,500/-</u>
	<b>Total : <u>Rs. 2,20,000/-</u></b>
4. <b>Provision for c contingencies</b>	<b>Rs. 55,000/-</b>
5. <b>Preliminary &amp; Pre-operative expenses</b>	<b>Rs. 1,37,500/-</b>
	<b>Total fixed Costs: <u>Rs.13,72,500/</u></b>
6. <b>Working Capital:</b>	
(a) Raw Materials for 1 months	Rs. 4,12,500/-
(b) Utilities for 1 month	Rs. 1,698/-
(c) Wages & Salaries for 1 Month	Rs. 38,500/-
(d) Other expenses for 1 month	<u>Rs. 98,402/-</u>
	<b>Total Working Capital: <u>Rs. 5,51,100/-</u></b>
	<b><u>TOTAL PROJECT COST: Rs.19,23,600/-</u></b>

**Means of finance:**

1. Composite Loan:

2. Subsidy:

3. Promoters' Contribution:

4. Debt. Equity Ratio:

**URBAN**

Rs. 13,46,520

Rs. 4,80,900

Rs. 96,180

2.33:1

**RURAL**

Rs.11,54,160

Rs. 6,73,260

Rs. 96,180

1.50:1

**Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	Annual sales Realization	4782	5579	6376	6376	6376
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2970	3465	3960	3960	3960
	(b) Power	15	18	21	21	21
	(c) Wages & Salaries	429	451	462	474	486
	(d) Repair & Maintenance	53	53	53	53	53
	(e) Administrative overheads	132	139	145	153	161
	(f) Selling expenses	712	837	956	956	956
	(g) Depreciation	132	132	132	132	132
	(h) Interest on Composite Loan	150	122	89	54	22
	<b>Total Cost</b>	<b>4593</b>	<b>5217</b>	<b>6818</b>	<b>5803</b>	<b>5791</b>
	Variable Costs	3697	4320	4937	4937	4937
4.	<b>Annual Profit</b>	<b>189</b>	<b>362</b>	<b>558</b>	<b>573</b>	<b>585</b>
5.	<b>Return on Investment</b>	<b>982</b>	<b>18.82</b>	<b>29.01</b>	<b>28.79</b>	<b>30.42</b>
6.	<b>Return on sales</b>	<b>3.95</b>	<b>6.48</b>	<b>8.75</b>	<b>8.98</b>	<b>9.17</b>
7.	Annual Contribution	1085	-	-	-	-
8.	<b>Break Even Point</b>	<b>49.54</b>	-	-	-	-
9.	Cash Accrual	321	494	690	705	717
10.	Debt Servicing Capacity	471	616	779	759	739
11.	Repayment of Loan	218	255	291	291	292
12.	Debt Serviced	364	377	380	345	313
13.	<b>Pay Back Period</b>	<b>1 Years 2 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:28:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	96	-	-	-	-	-
2.	Increase in subsidy	480	-	-	-	-	-
3.	Increase in Composite Loan	1346	-	-	-	-	-
4.	Depreciation	-	132	132	132	132	132
5.	Profit before interests	-	339	489	647	627	607
<b>A.</b>	<b>Total Sources</b>	<b>1923</b>	<b>471</b>	<b>616</b>	<b>779</b>	<b>759</b>	<b>739</b>
6.	Increase in capital investments	1372	-	-	-	-	-
7.	Increase in Working Capital	551	-	-	-	-	-
8.	Interests	-	150	122	89	54	22
9.	Repayment of Loan	-	218	255	291	291	292

B.	Total Disposals	1923	368	377	380	345	314
C.	Opening Balance	-	-	103	342	741	1155
D.	Net Surplus	-	103	239	399	414	425
E.	Closing Balance	-	103	342	741	1155	1580

### Projected Balance Sheets

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	96	285	647	1205	1778
2.	Surplus from operation	189	362	558	573	585
	<b>NET WORTH</b>	285	647	1205	1778	<b>2363</b>
3.	Subsidy	480	480	480	480	480
	Composite Loan	1129	874	583	292	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>
1.	Gross Fixed Assets	1372	1372	1372	1372	1372
	<b>Less Depreciation</b>	<b>132</b>	<b>264</b>	<b>396</b>	<b>528</b>	<b>660</b>
	<b>NET BLOCK</b>	<b>1240</b>	<b>1108</b>	<b>976</b>	<b>844</b>	<b>712</b>
2.	Current Assets/W/C	551	551	551	551	551
3.	Cash & Bank Balance	103	342	741	1155	1580
<b>B.</b>	<b>Total Assets</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>

#### Address for Plant & Machinery:

1. Kanaiya Lal Ghatiwala, Partania Ka Mandir, Johari Baxar, Jaipur,
2. Raj Kamal Silica Works, PO Shankergarh, Distt Allahabad.
3. Premnath Engineering Works, B-4 (G.I.), Industrial Area, Wazirpur, 91-11-27372684

## RUBBER STAMP

**Introduction:** The word "stamp," as used in historical documents, is not particularly explanatory. Neither is its cousin phrase "hand stamp." Early historical references to either can easily be mistaken for references to rubber stamps though this is not always correct. The small, round vulcanizer called "dental pot" vulcanizer was used to manufacture the first rubber stamps. A rubber stamp used to be something that people would only use for putting their return address label on an envelope. But now they are being used for all kinds of applications, both for business and arts and crafts. We've had different kinds of stamps come online over the years, including signature stamps, holiday stamps, thank you stamps, and other custom messaging. Truly the customers are limited only by their imagination. But overall the trend has been that more and more customers are willing to design and customize their own stamps, for whatever their needs, and use them more frequently. It's definitely become a very popular option on a number of levels. The ease of getting stamps has also increased, so people are more apt to use them as an option. What was once a very standard, rigid product has become much more personal.

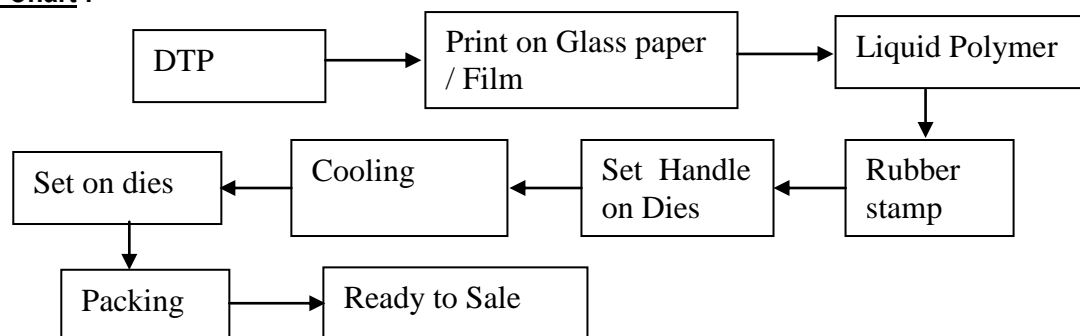
**Market Potential:** Rubber stamps have become popular over the last few years. Previously, rubber stamps were used for business purposes only. Today rubber stamps are used extensively for crafts. Nowadays, one can create all sorts of designs by using rubber stamps. For this purpose, rubber stamps carved with different designs is essential, as well as ink pad that is used to transfer the designs from these rubber stamps onto a medium like pieces of cloth, paper, or card. Decorative rubber stamps, also called art stamps, are used extensively in homemade craft projects. Art stamps can be used to decorate scrapbooks or to add color and variety to photo albums. Art stamps are also used on letters, greetings cards, birthday and Christmas cards, banners and flyers to give a personalized touch. Art stamps can also be used to decorate notebooks, stationery and holiday wrapping paper. Art rubber stamps can be painted with fabric paint to create a decorative border design on a piece of fabric or an existing garment. The paint used should blend nicely with the fabric to give a personal touch to items such as T-Shirts, tablecloths and napkins. Since rubber stamps can also be used on hard surfaces like wood or metal, hard items such as trunks, jewelry boxes and picture frames can also be decorated with rubber stamps. One can create elegant decorative borders, decorate a child's room, or design walls and ceilings with rubber stamps. Pocket stamp, Rubber hand stamp, Wood rubber stamp, Dater stamps, Magnetic rubber stamp, Self inking stamp, Pre inked rubber stamp, Number rubber stamps, Mini stamp set, Stamp pad, Rubber stamp pad, Handy stamp, Custom rubber stamp, Toy stamp, Craft stamp, etc is the product range of Rubber Stamp.

**Production Target:** Assuming that the Unit will operate for Single Shift of 8 hours per day for 300 working days the annual installed capacity is estimated 30,000 nos. and estimated sales value will be **Rs.32,40,000/-**

**Manufacturing Process:** After a rubber stamp design is selected for manufacture, a drawing of the design is photographed, and multiple copies of the image are transferred to an aluminum plate. The plate is then bathed in acid that eats away the exposed metal so the design is etched or raised above the plate. The engraved plate (a positive image) is placed on a sheet of Bakelite, a registered brand of resins and plastics that can be used to produce finely detailed molds, in the rubber stamp press or vulcanizer. Under heat and pressure in the vulcanizer, the engraved plate leaves a negative mold in the resin sheet. A sheet of rubber is then laid over the Bakelite mold, and both are heated in a vulcanizer to produce the final positive image in rubber. Typically, a sheet of rubber stamps is subjected to 900 lb (408.6 kg) per square inch of pressure for about 3 minutes to complete vulcanization. The mold or rubber sheet is then removed

and set aside to cool. The sheets of formed rubber are pressed onto sheets of adhering material with adhesive on both sides. The mounted rubber sheets are cut into individual stamps by workers using scissors. They must cut the stamp so that the design is not damaged but also so that enough excess material is trimmed away to limit the likelihood that they will pick up ink and spread unwanted impressions. Some designs are cut on a clicker press, which is a die press that cuts predetermined shapes by applying pressure to dies with razor-sharp edges. The backside of the adhering material supporting the trimmed rubber stamp is mounted on a specially sized block of maple. The wood blocks are made in standard sizes by an offsite manufacturer. Only hard rock maple is used so that the design will not bow or be distorted by natural aging of the wood or by changes in temperature and humidity. The blocks of wood are hand-rubbed with linseed oil, which helps protect the wood. The designs are mounted by hand, and exceptional care is required to mount the designs squarely. A clear piece of adhesive plastic is placed on the top of the maple block. The stamp design is imprinted on this label, which is called an index. The manufacturer Hero Arts developed a color index to show the design of the rubber stamp and suggest ways in which it can be colored to best convey the design. These labels are also made by outside suppliers. Finished rubber stamps are sorted and stored by type. As orders are received from retailers, the stamps are selected individually for packing and shipping. In some cases, sets of stamps are made and pre packed for sale only as sets.

**Flow Chart :**



**Raw Materials:** The main raw materials required for manufacture of rubber stamps Liquid Polymer Rubber Stamp Raw Materiel, Liquid photo polymer, base film, cover film, pre ink stamp, handle for pre ink stamp, self ink stamp, cover film, glass paper, computer paper, Laser tonner, Packing materials, etc. Raw materials are to be sourced mainly from the open market at present availability and the same materials will be collected from Dhanlakshmi Stamps & Signages Pvt. Ltd. 5, Csc, Pocket 'J' Market, Sarita Vihar, New Delhi - 110076, India Phone 91-11-26943996 and Bee Tee Mart, Shop No.16, 405, J.B.K. Complex, Avenue Road, Bangalore – 560002. Phone : 91-80-65901258/65737700 and Kanchan Arts, 417, Shukrawar Peth, Shivaji Road, Opposite Khadak Police Station, Pune - 411002, Maharashtra, India , Phone: 91-20-24432234. The unit shall require Rs.2,20,000/- worth of raw- materials per annum.

**Utilities :** The unit will require a total connected load of 2KW and a maximum demand of 190 KWHrs of power per month. Water requirement is about 50KL per annum.

**Manpower:** The unit will provide employment to the following 7 persons and all of whom are locally available.

1.	Manager cum Supervisor	Self	Self
2.	Skilled	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
		<b>Total</b>	<b><u>Rs.27,500/-</u></b>

**CAPITAL COST ESTIMATE:****Land and Building:** 1000Sq. ft.**On Rent****Plant & Machinery :**

1. A4 FL Photopolymer Plate Making	Rs. 47,000/-
2. A4 LR Liquid Resin Stamp Making	Rs. 38,000/-
3. A4 FB Flexobag Stamp Making	Rs. 47,000/-
4. A4 LT Rubber Stamp Making Machine (Model LY340 and DC-K40 laser)	Rs. 19,000/-
5. Desktop Computer with laser printer & UPS	Rs. 36,200/-
	<b>Rs.1,87,200/-</b>

**Miscellaneous Fixed Assets:**

1. Chair & Working Table	Rs. 35,500/-
2. Fan & Lighting and wiring	Rs. 12,000/-
3. Interior decoration	Rs. 35,000/-
	<b>Rs. 82,500/-</b>

**Preliminary & Preoperative Exp.:**

Total	<b>Rs. 4,950/-</b>
<b>Total Fixed Capital:</b>	<b>Rs.2,74,650/-</b>

**Working Capital (P.m)**

1. Salary & Wages	Rs. 27,500/-
2. Administrative expenses	Rs. 13,666/-
3. Selling expenses	Rs. 3,300/-
4. Raw Materials	Rs.2,20,000/-
5. Utilities	Rs. 3,880/-
	<b>Rs.2,68,316/-</b>

**Total Cost of the Project:Rs.5,42,966/-****Means of Finance:**

	Urban	Rural
a. Composite loan under PMEGP	70% Rs.3,80,076/-	60% Rs.3,25,780/-
b. Subsidy	25% Rs.1,35,742/-	35% Rs.1,90,038/-
c. Margin Money	5% Rs. 27,148/-	5% Rs. 27,148/-
	<b>Total Rs.5,42,966/-</b>	<b>Rs.5,42,966/-</b>
d. Debt Equity Ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	Total Cost	2002	2317	2628	2618	2607
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93

9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
<b>13.</b>	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
<b>15.</b>	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>16</b>	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
<b>17.</b>	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	Nil	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less Depreciation</b>	<b>27</b>	<b>54</b>	<b>81</b>	<b>108</b>	<b>135</b>
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	101	234	402	580	769
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

Addprint India Enterprises Private Limited, 40-42, 2nd Floor, Image House, Manohardas Street, 1st Cross-lane of Bora Bazar, Fort, Mumbai- 400 001.

Niral Business Institute, 230, Gala Complex, 2nd Floor, Gala Industrial Estate, Dumping Road, Mulund(West), Mumbai, Maharashtra, India, 400 080.

## PAPER NAPKIN, TOILET ROLL, TISSUE PAPER, ETC

**Introduction:** Paper napkins, toilet roll and tissues are physical form of the basic material paper and fall in the category of light weight sanitary tissues. Paper napkins have become increasingly popular with the catering industry due to its manifold usages and special qualities. These include high absorption, hygienic and lightweight characteristics. Facial tissue paper through recently introduced in the India market has fast become popular due to its lightness, absorbent and hygienic characteristics. Disposable nature of these paper products further adds to their popular appeal. As these napkins and facial tissues can be printed in attractive colours bearing the name and insignia of concerns, they are widely used by almost all the big hotels, restaurants, cinema houses etc.

**Market Potential:** Paper napkin, toilet and tissue paper are wide usage in hotels, restaurants, cinema houses and homes. With the government's increased emphasis for popularizing tourism, a number of new hotels, tourist resorts, holiday homes etc. are fast coming up the country. This is bound to increase the demands for paper conversion products like toilet paper rolls sheet etc.

**Installed Capacity:** The minimum economic capacity of a unit producing paper napkin, toilet paper and tissue paper 600MT per annum based on a single shift operation, for 300 operating days working schedule in a year.

**Process of Manufacture:** Paper napkins including tissue and Tissues. Tissue paper rolls are fed to the two colour flexographic printing, where the printing, the paper is cut as per the required size with the help of an attachment provided in the printing machine. The machine process of imparting softness, strength and smoothness to the paper. This is achieved by passing the tissue through a nip formed between a brush roll and patterned backing roll. Toilet paper rolls are slitted on a roll making machine and rewound on the paper or wooden core to the required sizes. These are then packed in numbers as desired.

**Raw Materials:** All the raw materials including a. Paper napkins including tissue napkins, paper cartons, Cores, Inks, Thinners, Tissue paper packing materials etc. are available indigenously. The above raw materials are to be sourced mainly from the open market. At present availability and supply of the raw materials is not a problem and Annual Cost will be Rs. 45,08,000/= and also the same materials to be collect from Birla Hi Tech Machines, 92 DSIDC Shed Scheme - 1, Okhla Industrial Area, Phase II, New Delhi - 110 020 (India), Phone : +(91)-(11)-26389665 / 26220875, Mobile : +(91)-9811019798.

**Power:** Power requirement for the unit per month is 4,971 KWHrs. costing **Rs.20,384/-** per month.

**Water:** The Unit will need 500 liters of water per day out of which 4000 Liters. It is available from both ground water sources and public supply.

**Manpower:** The unit will provide employment to 9 persons, all of whom are readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 92,400
2	Office Assistants	2	Rs. 1,05,600
3.	Skilled Worker	2	Rs. 1,32,000
4.	Unskilled Workers	4	Rs. 1,32,000
	Total	9	Rs. 4,62,000



**CAPITAL COST ESTIMATE**

1. <b>Land &amp; Building</b> with a covered area of 120 Sq. Mtrs.:	<b>On rent</b>
2. <b>Plant &amp; Machinery</b>	
(a) Multi-Pieces Wet Tissue Folding Machine, PX-SJZ-ZD200,	Rs. 3,00,000/-
(b) PAPER NAPKIN MACHINE :(SPM-33612/4D)	Rs. 1,80,000/-
(c) AUTOMATIC TOILET PAPER MACHINERY	Rs. 2,10,000/-
(d) Gen Set	Rs. 1,21,000/-
(f) Installation	Rs. 18,000/-
(e) Freight, Taxes, etc. on above	Rs. 1,20,000/-
	<b><u>Rs. 9,60,000/-</u></b>
3. <b>Miscellaneous Fixed Assets</b>	
(a) Electrification	Rs. 1,10,000/-
(b) Water Installation	Rs. 27,500/-
(c) Furniture & Miscellaneous others	Rs. 82,500/-
	<b>Total: <u>Rs. 2,20,000/-</u></b>
4. <b>Provision for c contingencies</b>	<b>Rs. 55,000/-</b>
5. <b>Preliminary &amp; Pre-operative expenses</b>	<b>Rs. 1,37,500/-</b>
	<b>Total fixed Costs: <u>Rs.13, 72,500/-</u></b>

**6. Working Capital:**

(a) Raw Materials for 1 months	Rs. 4,12,500/-
(b) Utilities for 1 month	Rs. 3,698/-
(c) Wages & Salaries for 1 Month	Rs. 38,500/-
(d) Other expenses for 1 month	Rs. 98,402/-

**Total Working Capital: Rs. 5,51,100/-****TOTAL PROJECT COST: Rs.19,23,600/-****Means of finance:**

1. Composite Loan:	<b>URBAN</b>	<b>RURAL</b>
2. Subsidy:	Rs. 13,46,520/-	Rs.11,54,160/-
3. Promoters' Contribution:	Rs. 4,80,900/-	Rs. 6,73,260/-
4. Debt. Equity Ratio:	Rs. 96,180/-	Rs. 96,180/-
	2.33:1	1.50:1

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	<b>Annual sales Realization</b>	<b>4782</b>	<b>5579</b>	<b>6376</b>	<b>6376</b>	<b>6376</b>
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2970	3465	3960	3960	3960
	(b) Power	15	18	21	21	21
	(c) Wages & Salaries	429	451	462	474	486
	(d) Repair & Maintenance	53	53	53	53	53
	(e) Administrative overheads	132	139	145	153	161
	(f) Selling expenses	712	837	956	956	956
	(g) Depreciation	132	132	132	132	132
	(h) Interest on Composite Loan	150	122	89	54	22
	<b>Total Cost</b>	<b>4593</b>	<b>5217</b>	<b>6818</b>	<b>5803</b>	<b>5791</b>
	Variable Costs	3697	4320	4937	4937	4937
4.	<b>Annual Profit</b>	<b>189</b>	<b>362</b>	<b>558</b>	<b>573</b>	<b>585</b>
5.	Return on Investment	982	18.82	29.01	28.79	30.42
6.	Return on sales	3.95	6.48	8.75	8.98	9.17

7.	Annual Contribution	1085	-	-	-	-
8.	<b>Break Even Point</b>	<b>49.54</b>	-	-	-	-
9.	<b>Cash Accrual</b>	<b>321</b>	<b>494</b>	<b>690</b>	<b>705</b>	<b>717</b>
10.	<b>Debt Servicing Capacity</b>	<b>471</b>	<b>616</b>	<b>779</b>	<b>759</b>	<b>739</b>
11.	Repayment of Loan	218	255	291	291	292
12.	<b>Debt Serviced</b>	<b>364</b>	<b>377</b>	<b>380</b>	<b>345</b>	<b>313</b>
13.	<b>Pay Back Period</b>	<b>1 Years 2 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:28:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	96	-	-	-	-	-
2.	Increase in subsidy	480	-	-	-	-	-
3.	Increase in Composite Loan	1346	-	-	-	-	-
4.	Depreciation	-	132	132	132	132	132
5.	Profit before interests	-	339	489	647	627	607
<b>A.</b>	<b>Total Sources</b>	<b>1923</b>	<b>471</b>	<b>616</b>	<b>779</b>	<b>759</b>	<b>739</b>
6.	Increase in capital investments	1372	-	-	-	-	-
7.	Increase in Working Capital	551	-	-	-	-	-
8.	Interests	-	150	122	89	54	22
9.	Repayment of Loan	-	218	255	291	291	292
<b>B.</b>	<b>Total Disposals</b>	<b>1923</b>	<b>368</b>	<b>377</b>	<b>380</b>	<b>345</b>	<b>314</b>
<b>C.</b>	<b>Opening Balance</b>	-	-	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>
<b>D.</b>	<b>Net Surplus</b>	-	<b>103</b>	<b>239</b>	<b>399</b>	<b>414</b>	<b>425</b>
<b>E.</b>	<b>Closing Balance</b>	-	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>	<b>1580</b>

**Projected Balance Sheets**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	96	285	647	1205	1778
2.	Surplus from operation	189	362	558	573	585
	<b>NET WORTH</b>	<b>285</b>	<b>647</b>	<b>1205</b>	<b>1778</b>	<b>2363</b>
3.	Subsidy	480	480	480	480	480
	Composite Loan	1129	874	583	292	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>
1.	Gross Fixed Assets	1372	1372	1372	1372	1372
	<b>Less Depreciation</b>	<b>132</b>	<b>264</b>	<b>396</b>	<b>528</b>	<b>660</b>
	<b>NET BLOCK</b>	<b>1240</b>	<b>1108</b>	<b>976</b>	<b>844</b>	<b>712</b>
2.	Current Assets/W/C	551	551	551	551	551
3.	Cash & Bank Balance	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>	<b>1580</b>
<b>B.</b>	<b>Total Assets</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>

**Suppliers Address:**

- PEIXIN INTERANTIONAL GROUP FUJIAN PEIXIN MACHINERY MAKING INDUSTRIAL CO. LTD.  
Shuangyang Overseas Chinese Economic-Develop Area, Luojiang, Quanzhou, Fujian, P.C: 362000, Tel: (86)-(0595)22458888/ 22456588 /22456988/22456782, Fax: (86)-(0595)22456781, Website: www.peixin.com, E-mail: peixin@pub1.qz.fj.cn
- Mr. Ashwani Birla, Birla Hi Tech Machines, 92 DSIDC Shed Scheme - 1, Okhla Industrial Area, Phase-II, New Delhi-110 020 (India) Phone : +(91)-(11)-26389665 / 26220875, Mobile : +(91)-9811019798

## DECORATIVE GLASS WARE/GLASS TOYS

**Introduction:** Glass toys and biological birds, animals and model sets are decorative articles made out of glass tubes either transparent or colored. These can very well be produced in small scale sector only with the help of a few equipment and little techniques. They are used for the decoration purpose of displaying in all the houses, throughout the world. There is good prospect of the self employment in this industry as the capita investment for this industry is proportionately low.

**Market Potential:** Decorative Glassware and toys and hollow biological birds, animals and models have get good demand in the market and the taste for this item is increasing with medium and affluent class of people.

**Process of Manufacture:** Soda and amber glass tubes of different sizes and colours should be used for different types of toys. The glass tubes are softened over the burner flame of petrol gas blow drawn and bent so as to get the desired shape to the legs, body, feet, hands and so on and so forth. The parts are attached by lowing process. Available charts of animals and birds in the market can also serve as guide. Articles made out of glass tubes are more attractive and valuable, if they are silvered.

**Production Target:** Assuming that the Unit will operate for Single Shift of 8 hours per day for 300 working days the annual installed capacity is estimated 60,000 nos of hollow glass toys per annum is envisaged in this project and estimated sales value will be Rs.3,60,000/-

**Raw Materials:** The main raw materials required for manufacture of Decorative Glassware/ Glass Toys are Soda glass tube clear, amber glass tubes, other colored tubes and rods and chemical for silvering, packing materials, cardboards etc. to be sourced from open local markets and out side of Tripura.

Sl.No.	Details	Cost (in Rs.)
1.	Additional parts (for replacements)	10,000/-
2.	Soldering wire, soldering paste	2,000/-
3.	others	2,500/-
	Total:	14,500/-

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated at 1390 KWHrs costing Rs. 5,700/-

**Water:** The unit will need 500 liters of clean and soft water per day. It is available from both ground water sources and public supply.

**Manpower:** In the unit, is required a good technician whose remuneration would be Rs. 5,000/- per month.

### CAPITAL COST ESTIMATE

1. **Land & Building** with a covered area of 120 Sq. Mtrs.:

**On Rent**

2. **Plant & Machinery**

**Rs.1,00,500/-**

(a) Petrol gas plant – direct blow

(b) oxygen regulators & 1 cylinder

(c) Blowing work benches & stools etc

(d) Burners

(f) Racks, beakers, conical flasks, measuring cylinder for silvering work,

(g) Cost of office equipments & other installation charges

**3. Miscellaneous Fixed Assets**

(a) Electrification

Rs. 3,000/-

(b) Furniture & Miscellaneous others

Rs. 15,000/-

**Total: Rs. 18,000/-**

**4. Provision for contingencies**

**5. Preliminary & Pre-operative expenses**

**Rs. 2,500/-**

**Total fixed Costs: Rs. 20,500/-**

**Total Fixed Investment Rs. 1,21,000/-**

**6. Working Capital (P.M.)**

a) Raw Material

Rs. 14,500/-

b) Utilities

Rs. 500/-

c) Salary & Wages

Rs. 5,000/-

d) Other expenses

Rs. 10,000/-

**Total: Rs. 30,000/-**

**Total working capital for 3 months: Rs. 90,000/-**

**Total Project Cost: Rs. 2,11,000/-**

**Means of Finance:**

1. Composite loan
2. Promoter's contribution
3. Subsidy
4. Debt equity ratio

**Urban**

- 1,47,700/-
- 10,550/-
- 52,750/-
- 2.33:1

**Rural**

- 1,26,600/-
- 10,550/-
- 73,850/-
- 1.50:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	3,30,00	3,85,000	4,40,000	4,40,000	4,40,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	1,04,400	1,21,800	1,39,200	1,39,200	1,39,200
b)	Utilities	3,600	4,200	4,800	4,800	4,800
c)	Selling expenses	22,000	25,700	29,000	29,000	29,000
	<b>Variable Cost</b>	<b>1,30,000</b>	<b>1,51,700</b>	<b>1,73,000</b>	<b>1,73,000</b>	<b>1,73,000</b>
d)	Wages & Salaries	36,000	42,000	48,000	48,000	48,000
e)	Administrative expenses	72,000	84,000	96,000	96,000	96,000
f)	Depreciation	12,100	12,100	12,100	12,100	12,100
g)	Interest on Composite Loan	16,966	13,722	9,980	5,988	1,996
4.	<b>Total Cost</b>	<b>2,67,066</b>	<b>3,03,522</b>	<b>3,39,080</b>	<b>3,35,088</b>	<b>3,31,096</b>
5.	<b>Annual Profit</b>	<b>62,934</b>	<b>81,478</b>	<b>1,00,920</b>	<b>1,04,912</b>	<b>1,08,904</b>
6.	Return on Investment	29.82%	38.61%	47.82%	49.72%	51.61%
7.	Return on sales	11.44%	14.81%	18.34%	19.07%	19.80%
8.	Annual contribution	2,00,000/-	-	-	-	-
9.	Break Even Point	41.11%				
10.	Cash accrual	75,034	93,578	1,13,020	1,17,012	1,21,004
11.	Debt Servicing Capacity	92,000	1,07,300	1,23,000	1,23,000	1,23,000
12.	Repayment of Composite Loan	23,951	27,943	31,935	31,935	31,936
13.	Debt Serviced	40,917	41,665	41,915	37,923	33,931
14.	<b>Pay Back Period</b>	<b>2 year 2 months 26 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>2.25:1</b>				

**Cash Flow Statement**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	10,550	-	-	-	-	-
2.	Increase in Term loan	1,47,700	90,000	-	-	-	-
3.	Subsidy	52,750	-	-	-	-	-
4.	Depreciation	-	12,100	12,100	12,100	12,100	12,100
5.	Profit before interests	-	79,900	95,200	1,10,900	1,10,900	1,10,900
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>2,11,000</b>	<b>1,82,000</b>	<b>1,07,300</b>	<b>1,23,000</b>	<b>1,23,000</b>	<b>1,23,000</b>
6.	Increase in capital investment	2,11,000	-	-	-	-	-
7.	Increase in working capital	-	90,000	-	-	-	-
8.	Interest	-	16,966	13,722	9,980	5,988	1,996
9.	Repayment of Term Loan	-	23,951	27,943	31,935	31,935	31,936
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>2,11,000</b>	<b>1,30,917</b>	<b>41,665</b>	<b>41,915</b>	<b>37,923</b>	<b>33,932</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>51,083</b>	<b>1,16,718</b>	<b>1,97,803</b>	<b>2,82,880</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>51,083</b>	<b>65,635</b>	<b>81,085</b>	<b>85,077</b>	<b>89,068</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>51,083</b>	<b>1,16,718</b>	<b>1,97,803</b>	<b>2,82,880</b>	<b>3,71,948</b>

**Projected Balance Sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	10,550	73,484	1,54,962	2,55,882	3,60,794
2.	Surplus from operation	62,934	81,478	1,00,920	1,04,912	1,08,904
	<b>NET WORTH:</b>	<b>73,484</b>	<b>1,54,962</b>	<b>2,55,882</b>	<b>3,60,794</b>	<b>4,69,698</b>
<b>3.</b>	<b>Subsidy</b>	<b>52,750</b>	<b>52,750</b>	<b>52,750</b>	<b>52,750</b>	<b>52,750</b>
4.	Term loan outstanding	1,23,749	95,806	63,871	31,936	-
	<b>TOTAL LIABILITIES</b>	<b>2,49,983</b>	<b>3,03,518</b>	<b>3,72,503</b>	<b>4,45,480</b>	<b>5,22,448</b>
1.	Gross Block	1,21,000	1,21,000	1,21,000	1,21,000	1,21,000
	Less Depreciation	12,100	24,200	36,300	48,400	60,500
	<b>NET BLOCK</b>	<b>1,08,900</b>	<b>96,800</b>	<b>84,700</b>	<b>72,600</b>	<b>60,500</b>
2.	Working capital	90,000	90,000	90,000	90,000	90,000
3.	Cash & Bank Balance	51,083	1,16,718	1,97,803	2,82,880	3,71,948
	<b>TOTAL ASSETS</b>	<b>2,49,983</b>	<b>3,03,518</b>	<b>3,72,503</b>	<b>4,45,480</b>	<b>5,22,448</b>

**Address of Suppliers of Machinery Equipments :**

1. M/S Toshniwal Brothers Pvt Ltd, 607 A, 1<sup>st</sup> Main, 2<sup>nd</sup> srage, Rajajingar, Bangalore,
2. M/S Jain Scientific Glass Works, Ambala Cantt, Panjab
3. M/S Monohar Glass Works, Station Road, Ferozabad, UP,

## FLEXOGRAPHIC PRINTING

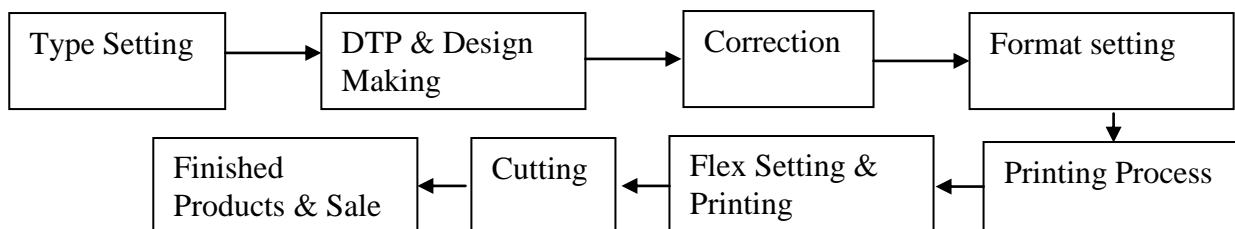
**Introduction:** Now-a-days Flexographic Printing is a popular printing technology. Solvent Flexographic printing is one of the most economic form of outdoor advertisement where visuals can be customized according to the space available. Flexographic printing can be used in hoarding printing, vinyl printing , board printing , canvas printing , glass lamination printing wall wrap printing , banner printing , backdrop printing , it comes under the category of large format flex printing in which there is no need of pre- press process .

**Market Potential:** Flex printing is used for the outdoor publicity in the form of hoardings, dealer boards, kiosks, flex printing can also be used for banner printing, out door banner printing is for short time , banner printing is very cheap and effective, banner printing is used for instant impact in the market, flex printing banner are far better then hand made banners as they have better results and long life. Wide format digital Flex printing services for a wide range of high quality promotional materials such as billboards, advertising hoardings, building wraps, vehicle wraps and point-of-sale displays. we do graphic design services, high resolution scanning, mounting and laminating. Prints from digital printing are created for indoor uses or outdoor uses, for digital printing using UV inks for outdoors, dye pigmented inks for indoors and solvent inks for indoor or outdoor without having to laminate the prints. Large format digital Flex printing services are popular printing services for promotional displays, advertising signage, portable displays, display panels, banners, in-store points of sale, showcases, presentations, posters and interior design

**Raw Materials:** Raw materials are to be sourced mainly from the open market. At present availability and supply of the raw materials is not problem e.g. (for digital flex printing we use inkjet media, traslite, common paper, art paper, photographic paper, vinyl, canvas, backlit and many more, ink, Tonner, CD, etc) Cost will be **Rs. 3,75,000/-** and also the same materials to be collect from Fujifilm Sericol India Pvt Ltd Shirur, Pune-412216 and Third Eye Technologies, 372, vr lay out, kr. puram, Coimbatore, Tamil Nadu, India, Zip/Postal : 641006, Telephone : 91-422-256-9442.

**Flex Printing Process:** Flex printing process involves Type Setting: with computers (Commonly referred to as D.T.P), the job of the typesetter which involves the lying-out of the text and graphics in a printable format to create Master or C.R.C (Camera Ready Copies) has become highly efficient and cost effective. This function which requires a very high level precision and skill has become highly automated with the proper induction of computers and computer based technology. After DTP and design setting in computer and then the same use some special design and completion of the total processing go for printing.

### Flow Chart :



**Power:** Power requirement for the unit shall be 3.75 KW. The monthly consumption of power is estimated at 4520KWHrs costing **Rs.18,531/-**.

**Water:** The Unit will need 500 liters of water per day. It is available from both ground water sources and public supply.

**Manpower:** The monthly requirements and costs of manpower, to be recruited locally are shown below:

1.	Manager / Accountant cum Supervisor	Self		Self
2.	Skilled Worker	4	4,000/-	16,000/-
3.	Semi skilled worker	4	3,000/-	12,000/-
4.	Sales Representative	1	3,500/-	3,500/-
5.	Helper	1	3,500/-	3,500/-
			<b>Total:</b>	<b><u>35,000/-</u></b>

**CAPITAL COST ESTIMATE:**

**A. Land & Building**

On Rent.

**B. Plant & Machinery:**

1.	DTP System Comprising of			
	Computers	02nos	30,000/-	Rs. 60,000/-
	Laser Printer Mono	01no	9,000/-	Rs. 9,000/-
	Laser printer Colour all in one	01	35,000/-	Rs. 35,000/-
	Scanner	01	4,000/-	Rs. 4,000/-
2.	Digital Flex Machine D420	01	5,79,000/-	Rs. 5,79,000/-
3.	Automatic Cutting Machine	02	10,000/-	Rs. 20,000/-
4.	Perforating Machine	01	3,000/-	Rs. 3,000/-
5.	Other equipments		one set	Rs. 10,000/-
6.	10 KVA Gen Set Honda Make	01	63,480/-	<u>Rs. 63,480/-</u>
				<b>Total: Rs. 8,00,000/-</b>

**C. Miscellaneous Fixed Assets**

1.	Decoration of Machine Room & office			Rs. 95,000/-
2.	Signboard/ Fan /Chair etc			Rs. 25,000/-
3.	Wiring/Electrification/			Rs. 40,000/-
4.	1.5 Ton LG A/C	1		<u>Rs. 40,000/-</u>
				<b>Total:Rs 2,00,000/-</b>

**D. Preliminary & Preoperative expenses**

Rs. 50,000/-

**E. Provision for c contingencies**

**Rs.1,25,000/-**

**Total Fixed Capital: Rs.11,75,000/-**

**F. Working Capital:**

(a)	Raw Materials for 1 months	Rs. 3,75,000/-
(b)	Utilities for 1 month	Rs. 1,544/-
(c)	Wages & Salaries for 1 Month	Rs. 35,000/-
(d)	Other expenses for 1 month	<u>Rs. 89,456/-</u>

**Total Working Capital: Rs. 5,01,000/-**

**TOTAL PROJECT COST: Rs. 16,76,000/-**

**Means of finance:**

	<b>URBAN</b>	<b>RURAL</b>
1. Composite Loan:	Rs. 11,73,200	Rs.10,05,600
2. Subsidy:	Rs. 4,19,000	Rs. 5,86,600
3. Promoters' Contribution:	Rs. 83,800	Rs. 83,800
4. Debt. Equity Ratio:	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	<b>Annual sales Realization</b>	<b>4347</b>	<b>5072</b>	<b>5796</b>	<b>5796</b>	<b>5796</b>
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2700	3150	3600	3600	3600
	(b) Power	14	16	19	19	19
	(c) Wages & Salaries	390	410	420	431	442
	(d) Repair & Maintenance	48	48	48	48	48
	(e) Administrative overheads	120	126	132	139	146
	(f) Selling expenses	652	761	869	869	869
	(g) Depreciation	110	110	110	110	110
	(h) Interest on Composite Loan	136	111	81	49	20
	<b>Total Cost</b>	<b>4170</b>	<b>4732</b>	<b>5279</b>	<b>5265</b>	<b>5254</b>
	Variable Costs	3366	3927	4488	4488	4488
4.	<b>Annual Profit</b>	<b>177</b>	<b>340</b>	<b>517</b>	<b>531</b>	<b>542</b>
5.	<b>Return on Investment</b>	<b>10.56</b>	<b>20.29</b>	<b>30.85</b>	<b>31.68</b>	<b>32.34</b>
6.	<b>Return on sales</b>	<b>4.07</b>	<b>6.70</b>	<b>8.92</b>	<b>9.16</b>	<b>9.35</b>
7.	Annual Contribution	981	-	-	-	-
8.	Break Even Point	49.17	-	-	-	-
9.	Cash Accrual	2.87	450	627	641	652
10.	Debt Servicing Capacity	423	561	708	690	672
11.	Repayment of Loan	173	220	260	260	260
12.	Debt Serviced	309	331	341	309	280
13.	<b>Pay Back Period</b>	<b>2 Years 8 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:95:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	84	-	-	-	-	-
2.	Increase in subsidy	419	-	-	-	-	-
3.	Increase in Composite Loan	1173	-	-	-	-	-
4.	Depreciation	-	110	110	110	110	110
5.	Profit before interests	-	313	451	508	580	562
<b>A.</b>	<b>Total Sources</b>	<b>1676</b>	<b>423</b>	<b>561</b>	<b>708</b>	<b>690</b>	<b>672</b>
6.	Increase in capital investments	1175	-	-	-	-	-
7.	Increase in Working Capital	501	-	-	-	-	-
8.	Interests	-	136	111	81	49	20
9.	Repayment of Loan	-	173	220	260	260	260
<b>B.</b>	<b>Total Disposals</b>	<b>1676</b>	<b>309</b>	<b>331</b>	<b>341</b>	<b>309</b>	<b>280</b>
<b>C.</b>	<b>Opening Balance</b>	<b>-</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>
<b>D.</b>	<b>Net Surplus</b>	<b>-</b>	<b>114</b>	<b>230</b>	<b>367</b>	<b>381</b>	<b>392</b>
<b>E.</b>	<b>Closing Balance</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>	<b>1484</b>



**Projected Balance Sheets:**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	84	261	601	1118	1649
2.	Surplus from operation	177	340	517	531	542
	<b>NET WORTH</b>	<b>261</b>	<b>601</b>	<b>1118</b>	<b>1649</b>	<b>2191</b>
3.	Subsidy	419	419	419	419	419
	Composite Loan	1000	780	520	260	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1680</b>	<b>1800</b>	<b>2657</b>	<b>2328</b>	<b>2610</b>
1.	Gross Fixed Assets	1175	1175	1175	1175	1175
	Less Depreciation	110	220	330	440	550
	<b>NET BLOCK</b>	<b>1065</b>	<b>955</b>	<b>845</b>	<b>735</b>	<b>625</b>
2.	Current Assets/W/C	501	501	501	501	501
3.	Cash & Bank Balance	114	344	711	1092	1484
<b>B.</b>	<b>Total Assets</b>	<b>1680</b>	<b>1800</b>	<b>2057</b>	<b>2328</b>	<b>2610</b>

**Suppliers of Machinery**

1. Admark, G 98 3rd Floor K K Market, Nr Shankar Maharaj Math, Pune Satara Road, Balaji Nagar, Pune – 411043, +(91)-20-66239071

2. **Horizon Graphics**, A -5, 1 St Floor Shreeyash Complex, Opp Mandar Lodge, 597 Narayan Peth N C Kelkar Marg, Narayan Peth, Pune – 411030, +(91)-20-66821236

## LEATHER / REXIN/ FOAM CANVAS BAG

**Introduction :** Decorated, coloured, Silky-lustre, light in weight Leather, Rexin and foam bags (Both for ladies and school going children) are being preferred in the society due to their good appearance, durability and reasonable cost. All the machinery and raw material used for manufacturing of such products are available from indigenous sources.

**Marketing:** These items have a very good demand in the domestic market. Much emphasis is given to this industry to cater to the growing demand of foreign and local buyers. The products like any other consumer durable have the prospect of attracting wide range of people from all walks of life.

**Production Target:** Assuming that the Unit will operate for Single Shift of 8 hours per day for 300 working days and the annual installed capacity of sales value will be **Rs.35,64,000/-**

**Production Procedure:** Components are first cut as per design and then stitched together as per specifications.

**Raw Materials:** The main raw materials required for manufacture of School Bags and Rain ware are Laminated Jute cloth, Cloth/PVC buckle, nylon bit, Sewing thread, Zip fastener Packing materials, Closely woven jute fabric, Belerow, Rexin, Card/ Paste board Rubber coated Jute fabrics, Chain, Rivets, still frame, handle, wax, salutation flour, dyes, labels, lock, Roop, Jute Cotton cloth, Eyelete, Runner to be sourced from open local markets and out side of Tripura. The above materials cost would be **Rs. 2.20,000/-** per month.

**Power:** Consumption of power and fuel have been arrived at on the basis of consumption norms of the industry. The energy rate has been considered on the basis of existing power tariffs of the electricity department and approximately it will be cost Rs.21,450/- per annum.

**Water :** Requirement of water mainly for washing and cleaning of Raw Jute, Silk Screen print developing etc and drinking purpose. The unit shall avail of the PHE water supply already available at the site and it can also install its own tube well supply for the purpose.

**Manpower:** The unit will employ 7 persons and all man power to be arranged from local area.

1.	Manager cum Supervisor	Self	Self
2.	Skilled worker	3nos	Rs.16,500/-
3.	Office Boy	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
5.	Designer	1 no	Rs. 5,500/-
	<b>Total</b>		<b><u>Rs.27,500/-</u></b>

### **Capital Cost Estimate:**

<b><u>Land and Building;</u></b>		500 Sq. ft of covered area		<b>On Rent</b>
<b><u>Plant &amp; Machinery</u></b>				
1.	Lock stitch sewing machine (Foot operated)	11,000/-	5	66,000/-
2.	Tape, Scissors, Needles etc	2,000/-	5 sets	12,000/-
3.	Weigning scale	1,400/-	5 sets	8,400/-

4.	Electric Heater	1,000/-	5 nos	6,000/-
5.	Screen Printing Machine (Equipments)			<u>69,600/-</u>
				<b>1,62,000/-</b>
				<b>Add Vat 12.5% 20,250/-</b>
				<b>Add Freights <u>4,950/-</u></b>
				<b>Total <u>Rs.1,87,200/-</u></b>

**Miscellaneous Fixed Assets :**

1.	Different types of racks & furniture (Iron make)			Rs.22,000/-
2.	Show case one no			Rs.27,500/-
3.	Chair, Working Table and Signboard			Rs.11,000/-
4.	Fan& Lightings			<u>Rs.11,000/-</u>
				<b>Rs.71,500/-</b>
				<b>Add Vat 12.5% Rs. 8,937/-</b>
				<b>Installation Charges: <u>Rs. 2,063/-</u></b>
				<b>Total: <u>Rs.82,500/-</u></b>
				<b>Rs. 4,950/-</b>
				<b>Rs.2,74,650/-</b>

**Preliminary & Preoperative Exp.:****Fixed Capital :****Working Capital (P.m)**

1.	Salary & Wages			Rs. 27,500/-
2.	Administrative expenses			Rs. 13,666/-
3.	Selling expenses			Rs. 3,300/-
4.	Raw Materials			Rs.2,20,000/-
5.	Utilities			<u>Rs. 3,850/-</u>
				<b>Total <u>Rs.2,68,316/-</u></b>
				<b>Total Cost of the Project: <u>Rs.5,42,966/-</u></b>

**Means of Finance:**

		<b>Urban</b>		<b>Rural</b>
a.	Composite loan under PMEGP 70%	Rs.3,80,075/-	60%	Rs.3,25,780/-
b.	Subsidy 25%	Rs.1,35,742/-	35%	Rs.1,90,038/-
c.	Margin Money 5%	<u>Rs. 27,148/-</u>	5%	<u>Rs. 27,148/-</u>
		<b>Total <u>Rs.5,42,966/-</u></b>		<b><u>Rs.5,42,966/-</u></b>
d.	Debt Equity Ratio	2.33:1		1.5:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	Total Cost	2002	2317	2628	2618	2607
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93

9.	<b>Return on sales</b>	<b>6.36</b>	<b>7.13</b>	<b>7.82</b>	<b>8.17</b>	<b>8.55</b>
10.	Annual Contribution	503				
11.	Break Even Point as percent of capacity	43.77				
12.	Cash accrual	163	205	250	260	271
13.	Debt servicing capacity	207	241	276	276	276
14.	Repayment of Composite Loan	62	72	82	82	82
15.	Debt serviced	106	108	108	98	87
16.	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3.	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less</b> Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments** :1. M/s Giribala Udyog, Agartala, Tripura,**Supplies of Raw Materials** :1. Simantani, Agartala JRMB, Near Apanjan Club, Agartala

2. Bhagabati Udyog, 44, Burtolla Street, Kolkata-700 007. Phone : +(91)-(33)-22731046/22692855.

## DUST BIN

**Introduction:** Dust bin is a metallic container and mainly used in office, hospitals and also in road sides for dropping unwanted articles, papers and broken pieces of various articles. These are produced in different sizes depending upon their use. This item is reserved exclusively to be manufactured in small scale sectors.

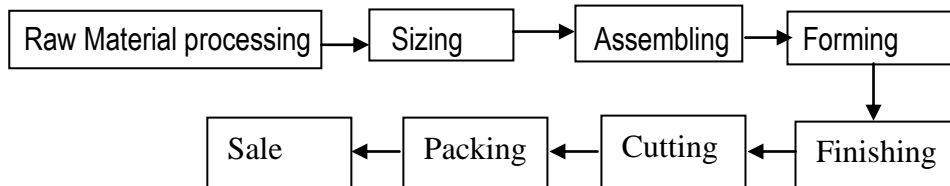
**Market:** With the increases in number of commercial as well as government establishments the demand for this product is also ever on increase. Although, these are being partially replaced by dust bins made of plastic material, still due to their rigidity and long life they are preferred particularly in Government establishments. Further in view of this item being exclusively reserved for purchase from all scale sector, there appear to be a good market for this product particularly in rural and backward areas.

**Installed Capacity:** Assuming operations for Single Shift per day for 300 working days per annum the annual installed capacity of 15,000 numbers of dust bins metallic office type per annum. The unit has annual turnover will be 18,35,00/-p.a

**Manufacturing Process:** This item is to be produced with the help of proper sheet metal machines and avoid manual work wherever necessary. These are to be produced cut of 18 gauge to 22 gauge B.P /C.R sheet. The manufacturing process broadly involves the following operations:

1. Marking and cutting of sheets to size
2. Forming of sheet by bending
3. Assembling and Finishing

### Process Flow Chart



**Raw Materials:** All the raw- materials required by the Unit are locally available (such as B.P/C.R sheet, M.S Rivets, Paints & Primer and packing materials etc) and monthly requirement and costs of raw-materials will be Rs. 92,500/-

**Power:** As the process does not need any power a domestic connection of 1 KW Load may suffice. The annual consumption of power is estimated at 2857KWHrs costing Rs. 24,000/- at the installed capacity.

**Water:** The Unit will need 100 Liters of water per day, cost of which is shown in power cost.

**Manpower:** Manpower required by the Unit are locally available. The requirement and annual cost of manpower is shown below:

Sl. No.	Particulars	Qty	Rate	Amount (Rs.)
1	Manager / Supervisor	Self		---
2	Skilled worker	2	5,000/-	1,20,000/-
3.	Sales man	1	3,500/-	42,000/-
4.	Helper	1	2,000/-	24,000/-
	<b>Total</b>			<b>1,86,000/-</b>

**CAPITAL COST ESTIMATE:****1. Land & Building:** Covered area 150 Sq. Mtrs.**On rent****2. Machinery & Equipments:**

a. Hand lever shearing machine 300mmx3mm cutting machine	2nos	Rs. 46,000/-
b. Hand operated bending machine with rollers, size 36'x18" guage	2nos	Rs. 40,000/-
c. Sheet metal Welding tools & equipments		Rs. 35,026/-
d. Installation of Machinery charges		Rs. 29,000/-
<b>Total:</b>		<b>Rs.150,026/-</b>

**3. Miscellaneous Fixed Assets:**

a) Electrification		Rs. 10,000/-
b) Water Installation		Rs. 5,500/-
c) Miscellaneous others		Rs. 4,500/-
<b>Total:</b>		<b>Rs. 20,000/-</b>

**Total Fixed Costs: Rs. 170,026/-****B. WORKING CAPITAL:**

Sl. No.	Particulars	Amount (Rs.)
1.	Raw Materials	92,500/-
2.	Salary & Wages	15,500/-
3.	Utilities	2,000/-
4.	Misc. Exp.	20,500/-
	<b>Total:</b>	<b>1,30,500/-</b>

**PROJECT COST**

Sl. No.	Description	Amount (Rs.)
1	Land & building	On Rent
2	Plant & Machineries	1,50,526.00
3	Miscellaneous Fixed Assets	20,000.00
4	Working Capital	1,30,500.00
	<b>Total</b>	<b>3,01,026.00</b>
	<b>Say</b>	<b>Rs. 3,00,000/-</b>

**F. MEANS OF FINANCE**

Sl. No.	Sources of Funds	Urban	Rural
1	Composite Loan	2,10,000/-	1,80,000/-
2	Promoter's contribution	15,000/-	15,000/-
3.	Subsidy	<b>75,000/-</b>	<b>1,05,000/-</b>
4.	Debt Equity Ratio	<b>2.33:1</b>	<b>1.5:1</b>

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	<b>Capacity utilized as percent of installed capacity</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>80</b>	<b>80</b>
2.	<b>Annual Sales Realization</b>	<b>11,01,000</b>	<b>12,84,500</b>	<b>14,68,000</b>	<b>14,68,000</b>	<b>14,68,000</b>
3.	<b>Annual costs in Rs.</b>					
(a)	Raw Materials	6,66,000	7,77,000	8,88,000	8,88,000	8,88,000
(b)	Utilities	14,400	16,800	19,200	19,200	19,200
(c)	Wages & Salaries	1,76,400	1,82,850	1,89,401	1,93,656	1,98,017

(d)	Repair & maintenance	4,800	4,800	4,800	4,800	4,800
(e)	Administrative overheads	36,000	37,800	39,690	41,675	43,758
(f)	Selling expenses	1,10,100	1,28,450	1,46,800	1,46,800	1,46,800
(g)	Depreciation	16,385	16,385	16,385	16,385	16,385
(h)	Interest on Composite Loan	24,122	19,510	14,189	8,514	2,838
	<b>Total:</b>	<b>10,48,207</b>	<b>11,83,595</b>	<b>13,37,840</b>	<b>13,30,655</b>	<b>13,24,642</b>
	<b>Total variable costs</b>	<b>7,90,500</b>	-	-	-	-
<b>4.</b>	<b>Annual profit</b>	<b>52,793</b>	<b>1,00,905</b>	<b>1,30,160</b>	<b>1,37,345</b>	<b>1,43,358</b>
5.	Net cash Accrual	69,178	1,17,290	1,46,545	1,53,730	1,59,743
6.	Return on investment in	17.59%	33.63%	43.38%	45.78%	47.79%
7.	Return on sales	4.80%	7.85%	8.86%	9.35%	9.77%
<b>8.</b>	<b>Contribution</b>	<b>1,48,500/-</b>	-	-	-	-
<b>9.</b>	<b>Break Even Point as % of installed capacity</b>	<b>38.66%</b>	-	-	-	-
<b>10.</b>	<b>Debt servicing capacity</b>	<b>93,300</b>	<b>1,36,800</b>	<b>1,60,734</b>	<b>1,62,244</b>	<b>1,62,581</b>
11.	Repayment of Term Loan	34,054	39,730	45,405	45,405	45,405
<b>12.</b>	<b>Debt serviced</b>	<b>58,176</b>	<b>59,240</b>	<b>59,594</b>	<b>53,919</b>	<b>48,243</b>
<b>13.</b>	<b>Pay back:</b>	<b>1 year 7 months 6 days</b>				
<b>13.</b>	<b>D S C R</b>	<b>1.60:1</b>				

#### L. Cash Flow Statement

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	15,000	-	-	-	-	-
2.	Increase in composite loan	2,10,000	1,30,500	-	-	-	-
3.	Subsidy	75,000	-	-	-	-	-
4.	Depreciation	-	16,385	16,385	16,385	16,385	16,385
5.	Profit before interests	-	76,915	1,20,415	1,44,349	1,45,852	1,46,196
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,00,000</b>	<b>2,23,800</b>	<b>1,36,800</b>	<b>1,60,734</b>	<b>1,62,244</b>	<b>1,62,581</b>
6.	Increase in capital investment	3,00,000	-	-	-	-	-
7.	Increase in working capital	-	1,30,500	-	-	-	-
8.	Interest	-	24,122	19,510	14,189	8,514	2,838
9.	Repayment of Term Loan	-	34,054	39,730	45,405	45,405	45,406
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,00,000</b>	<b>1,88,676</b>	<b>59,240</b>	<b>59,594</b>	<b>53,919</b>	<b>48,244</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>Nil</b>	<b>Nil</b>	<b>35,124</b>	<b>1,12,684</b>	<b>2,13,824</b>	<b>3,22,149</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>Nil</b>	<b>35,124</b>	<b>77,560</b>	<b>1,01,140</b>	<b>1,08,325</b>	<b>1,44,337</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>Nil</b>	<b>35,124</b>	<b>1,12,684</b>	<b>2,13,824</b>	<b>3,22,149</b>	<b>4,36,486</b>

#### Projected Balance sheet:

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	15,000	67,793	1,68,698	2,98,858	4,36,203
2.	Reserve & Surplus from operation	52,793	1,00,905	1,30,160	1,37,345	1,43,358
	<b>NET WORTH:</b>	<b>67,793</b>	<b>1,68,698</b>	<b>2,98,858</b>	<b>4,36,205</b>	<b>5,79,561</b>

3.	Term loan outstanding	1,75,946	1,36,216	90,811	45,406	-
	<b>TOTAL LIABILITIES</b>	<b>3,18,739</b>	<b>3,79,914</b>	<b>4,64,669</b>	<b>5,56,609</b>	<b>6,54,561</b>
1.	Gross Block	94,500	94,500	94,500	94,500	94,500
	Less Depreciation	16,385	32,770	49,155	65,540	81,925
	<b>NET BLOCK</b>	<b>1,53,115</b>	<b>1,36,730</b>	<b>1,20,345</b>	<b>1,03,960</b>	<b>87,575</b>
2.	Working Capital	1,30,500	1,30,500	1,30,500	1,30,500	1,30,500
3.	Cash & Bank Balance	35,124	1,12,684	2,13,824	3,22,149	4,36,486
	<b>TOTAL ASSETS</b>	<b>3,18,739</b>	<b>3,79,914</b>	<b>4,64,669</b>	<b>5,56,609</b>	<b>6,54,561</b>

**Suppliers of Plant & Machinery:**

4. Maneklal & Sons, 119, Narayan dhuru Street, Bombay,
5. Cimotee, 44B, Seshdare Purna, Main Road, Calcutta,
3. Ashok Metal Industries, Tagore Road, Rajkot, Gujrat.



# **PLASTIC PRODUCTS**

## Pilfer Proof Plastic Cap for Mineral Water Bottles

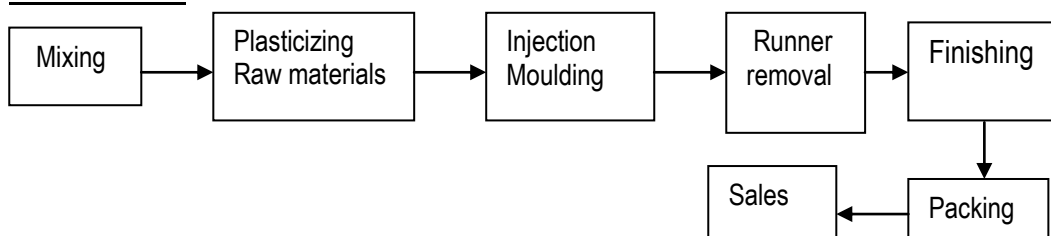
**Introduction:** In the recent years a number of Units manufacturing Purified Drinking Water has come up all over the Country. These Units need to pack Purified Drinking Water in PET Bottles with Pilfer Proof Plastic tear- Off Caps. In Tripura four such Units are selling more than 20, 000 Bottles of Purified Drinking Water per day.

**Product :** Plastic Caps for Mineral Water Bottles are made of Food Grade Polyethylene. These are normally of Blue colour. These caps are meant for one use only. These are Pilfer Proof with a tear off ring at the bottom/ open end.

**Market :** Pilfer proof Plastic Caps for Purified Drinking Water Bottles are now procured by local Mineral Water Plants from Kolkata. These are high volume, Light Weight products involving high transportation costs. The average daily requirements of such caps in Tripura is 20,000 Numbers. Besides more Mineral Water Plants are coming up in the State. Therefore there is high marketing scope for such caps in the State.

**Manufacturing Process:** Food Grade Polyethylene granules are fed into the barrel of the injection moulding machine through a hopper. The barrel carries a screw or ram/plunger which applies a pressure to make a fluid in melted resin towards the nozzle. The molten Polyethylene is forced into moulds to shape Caps. Moulds are cooled and caps are ejected by the machine. Extra runner are removed manually and caps are fed into rotary drums for polishing. Caps are counted and packed in Corrugated Cardboard Boxes for sales

### Process Flow:



**Raw Materials:** The principal raw materials shall be 30, 000 Kilograms of Food- Grade Polyethylene and its cost will be Rs.17,90,000/- per annum including the cost of Corrugated Cardboard boxes. Raw Materials shall be available from Indian Petrochemicals Pvt Ltd, Vadodara and Guwahati Office of the Reliance Industries.

**Power & Water :** The unit will need a connected load of 16 KW at 400/440 volts, 50 Hz, AC, 3 phase & 4wires. The annual consumption of power is estimated at 19,200 KWHrs costing Rs. 78,720/-. It will need 1,000 Liters of water per day costing Rs. 12,000 per annum.

**Manpower:** The Chemist cum Manager of the unit may not be locally available. All other manpower may be available in Tripura. The requirement and annual cost of manpower, is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager cum Chemist	1	96,000/-
2.	Administrative & Sales Staff	2	84,000/-
3.	Skilled Worker	2	1,20,000/-
4.	Unskilled Worker	4	1,20,000/-
	Total:	9	4,20,000/-

**Financial Aspect of the unit:**

1)	Land & Building		<b>Rented</b>
2)	<b>Plant &amp; Machinery:</b>		
a.	Hydraulic injection Moulding Machine		Rs.5,65,000/-
b.	Moulds		Rs. 50,000/-
c.	Chilling plant		Rs. 35,000/-
d.	High speed mixer		Rs. 35,000/-
e.	Grinder		Rs. 30,000/-
		<b>Total</b>	<b>Rs.7,15,000/-</b>
3)	<b>Miscellaneous Fixed Asset</b>		
a)	Electrification		Rs. 60,000/-
b)	Furniture & Miscellaneous others		Rs. 45,000/-
		<b>Total</b>	<b>Rs. 1,05,000/-</b>
4.	Provision for contingencies		<b>Rs. 44,000/-</b>
5.	Preliminary & pre-operative expenses		<b>Rs. 56,000/-</b>
		<b>Total Fixed Investment</b>	<b>Rs. 9,20,000/-</b>
6.	<b>Working Capital (for 3 months)</b>		
a)	Raw Materials		Rs. 4,47,500/-
b)	Power & Water		Rs. 22,680/-
c)	Salary & Wages		Rs. 1,05,000/-
d)	Miscellaneous expenses		Rs. 14,820/-
		<b>Total:</b>	<b>Rs. 5,90,000/-</b>
		<b>Total Project Cost:</b>	<b>Rs.15,10,000/-</b>

**Means of Finance**

		<b>Urban</b>	<b>Rural</b>
a.	Composite loan under PMEGP	Rs10,57,000/-	Rs. 9,06,000/-
b.	Subsidy	Rs.3,77,500/-	Rs. 5,28,500/-
c.	Promoters contribution	Rs. 75,500/-	Rs. 75,500/-
d.	Debt Equity Ratio	2.33:1	1.50:1

**Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	<b>Capacity utilized</b>	<b>60%</b>	<b>70%</b>	<b>80%</b>	<b>80%</b>	<b>80%</b>
2.	<b>Annual Sales Realization</b>	<b>2,343</b>	<b>2733</b>	<b>3123</b>	<b>3123</b>	<b>3123</b>
3.	<b>Annual Costs in Rs.</b>					
(a)	Raw Materials	1074	1253	1432	1432	1432
(b)	Power & water	68	77	86	86	86
(c)	Wages & Salaries	372	392	411	421	432
(d)	Repair & Maintenance	46	46	46	46	46
(e)	Administrative overheads	100	105	110	116	122
(f)	Selling expenses	351	410	468	468	468
(g)	Depreciation	92	92	92	92	92
(h)	Interest	122	99	72	43	18
	<b>Total:</b>	<b>2225</b>	<b>2474</b>	<b>2717</b>	<b>2704</b>	<b>2696</b>
	Total Variable Cost	1493	1740	1986	1986	1986
4.	<b>Annual profit</b>	<b>118</b>	<b>259</b>	<b>406</b>	<b>419</b>	<b>427</b>
5.	Return on investment	7.81%	17.15%	26.88%	27.75%	28.28%
6.	Return on sales	5.04%	9.48%	13.00%	13.42%	13.67%

7.	Annual Contribution	850	-	-	-	-
8.	Break Even Point in percent	51.67 %	-	-	-	-
9.	Cash accrual	210	351	498	511	519
10.	<b>Debt servicing capacity</b>	<b>332</b>	<b>450</b>	<b>570</b>	<b>554</b>	<b>537</b>
11.	Repayment of Loan	167	200	230	230	230
12.	<b>Debt serviced</b>	<b>289</b>	<b>299</b>	<b>302</b>	<b>273</b>	<b>248</b>
13.	<b>Pay Back Period</b>	<b>2 years 10 months 12 days</b>				
123	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.75:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	76	-	-	-	-	-
2.	Increase in subsidy	377	-	-	-	-	-
3.	Increase in loan	1057	-	-	-	-	-
4.	Depreciation	-	92	92	92	92	92
5.	Profit before interests	-	240	358	478	462	445
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1510</b>	<b>332</b>	<b>450</b>	<b>570</b>	<b>554</b>	<b>537</b>
6.	Increase in capital investment	920	-	-	-	-	-
7.	Increase in Current Assets	590	-	-	-	-	-
8.	Interests	-	122	99	72	43	18
9.	Repayment of loan	-	167	200	230	230	230
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1510</b>	<b>289</b>	<b>299</b>	<b>302</b>	<b>273</b>	<b>248</b>
<b>C.</b>	<b>OPENING BALANCE</b>	-	-	<b>43</b>	<b>194</b>	<b>462</b>	<b>743</b>
<b>D.</b>	<b>NET SURPLUS</b>	-	<b>43</b>	<b>151</b>	<b>268</b>	<b>281</b>	<b>289</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	-	<b>43</b>	<b>194</b>	<b>462</b>	<b>743</b>	<b>1032</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	76	194	453	859	1278
2.	Surplus from operations	118	259	406	419	427
	<b>NET WORTH:</b>	<b>194</b>	<b>453</b>	<b>859</b>	<b>1278</b>	<b>1705</b>
3.	Subsidy	377	377	377	377	377
4.	Loan Account	890	690	460	230	-
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1461</b>	<b>1520</b>	<b>1696</b>	<b>1885</b>	<b>2082</b>
1.	Gross Fixed Assets	920	920	920	920	920
	Less Depreciation	92	184	276	368	460
	<b>NET BLOCK</b>	<b>828</b>	<b>736</b>	<b>644</b>	<b>552</b>	<b>460</b>
2.	Current Assets	590	590	590	590	590
3.	Cash & Bank Balance	43	194	462	743	1032
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1461</b>	<b>1520</b>	<b>1696</b>	<b>1885</b>	<b>2082</b>

**Machinery Suppliers:** 1. Taizhou Shengda Plastic Machinery Co., Ltd. Airport road, Jiaoyang Industry Area, Jiaojang district, Taizhou City, Zhejiang province, China, (Mainland)

2. National Plastic Industries Limited, A-59, MIDC, Industrial Estate, Marol, Andheri (East), Mumbai-400 093  
Phone: +(91)-(22)-67669999/67669924/67669912 Fax: +(91)-(22)-28360422

3. Nova Plasmold Private Limited, 103 Hargovind Enclave, New Delhi- 110 092. Phone: (11) 27782279/47061979 Fax: +(91)-(11)-22375223

## DISPOSABLE PLASTIC CUP & GLASS

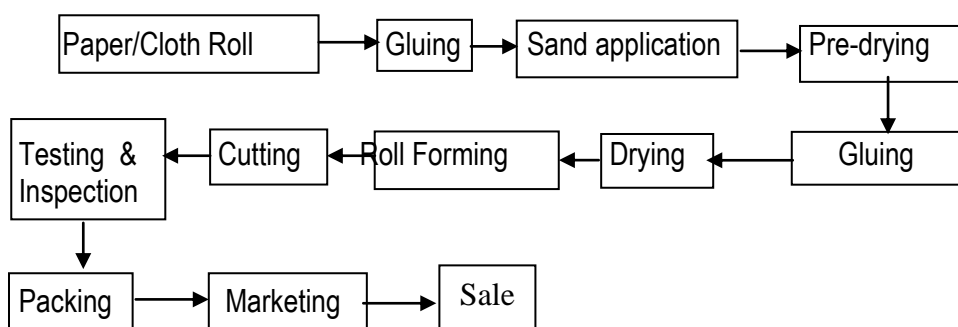
**INTRODUCTION:** Disposable Plastic Cup, Glass is a great innovation in our modern age. Plastic cup, glass also are widely used as containers for ice-cream. These are also used as curd cups and coffee cups. In India plastic cups, dish, plates and saucers are the mostly commonly used disposable crockery.

**Market:** Besides general market requirements, plastic crockery is required in large quantities by the caterers of railways and other establishments. Because of their disposables nature and comparatively much lower prices, these are quite often preferred over porcelain, glass or metal containers for certain specific requirements. The demand for paper plates, dish and cups and saucers is likely to grow substantially in future both in urban as well as rural areas.

**Installed Capacity:** Assuming operations for Single Shift per day for 300 working days per annum and installed capacity and turnover is estimated Rs.1,99,925/-

**Manufacturing Process for Plastic Glass/Cup:** Plastic is first printed on the printing press. The printed part is cut to size and given the desired shape by die cutting. The bottom part and the upper part of the Glass/ cup are then assembled to cup shape in screw press. For wax coating machine For plastic Glass/Cup / plates (saucers) the plastic is printed and cut to circles. The cut circles are passed in screw press for obtaining the desired shape.

### Process Flow Chart



**Raw Materials;** The raw materials required for the unit are mainly Paper, paraffin wax, ink, gum and packaging materials required per month is as below and the materials available from Shree Raj Rajendra,A/35, Patel Sizing Estate, Opposite Jay Chemical Industries, Ahmedabad, Gujarat, India- 380 023, Telephone: +(91)-(79)-22972509. Mobile: +(91)-8141555255 / 9099250000.

<u>Sl.No</u>	<u>Descriptions</u>	<u>Qty/ Kg /Ton</u>	<u>Rate</u>	<u>Amount</u>
1.	Paper ;Grey Board, Mill Board, Card Board	Single PE Cup paper	66,000/-	Rs. 66,000/-
	Single colour printing ton		3,850/-	Rs. 3,850/-
2.	Paraffin wax	on L.S	40,000/-	Rs. 11,000/-
3.	Ink, Gum etc	on L.S	5,000/-	Rs. 800/-
4.	Packing cost	on L.S	5,000/-	Rs. 1,850/-
				<u>Rs. 83,500/-</u>
			Add Tax 12.5%:	Rs. 11,480/-
			Add Transportation:	Rs. 2,200/-
			<b>TOTAL:</b>	<b><u>Rs. 1,05,530/-</u></b>

**Power:** Electric Connected Load requirement for the unit is 8.75 KW only. The annual consumption of power is estimated at 16098 KWHrs costing Rs 5,500/- per month. Power available from Tripura Sate Electric Crop. Ltd.

**Water;** Water required by the unit is mainly for production and office. The amount required for this purpose **Rs.1,100/-** on lum sump per month.

**Manpower:** The requirement and cost of manpower to be recruited locally are shown below:

<u>Sl.No</u>	<u>Descriptions</u>	<u>No</u>	<u>Amount(Rs.)</u>
1.	Manager / Accountant cum Supervisor	Self	Self
2.	Skilled Worker	2	6,600/-
3.	Semi skilled worker	1	2,200/-
4.	Sales Representative	1	3,850/-
5.	Helper	1	1,650/-
		<u>5</u>	
		<b>Total</b>	<b><u>14,300/-</u></b>

**CAPITAL COST ESTIMATE:**

**A. LAND & BUILDING** with a built up area 1000sq. mtrs.

**On rent**

**B. PLANT AND MACHINERY :**

1.	Plastic Cup & Glass making machine Model: FJL-660SB-C	01	Rs.4,55,000/-
2.	Plastic Glass making machine	01	Rs.5,60,000/-
3.	Gen Set	01	Rs. 96,400/-
			<b><u>Total: Rs.11,11,400/-</u></b>

**Miscellaneous Fixed Assets:**

1.	Electrification		Rs. 44,000/-
2.	Water installation		Rs. 16,500/-
3.	Furniture & Fixtures including a Computer set		Rs. 69,300/-
			<b><u>Total: Rs. 1,29,800/-</u></b>

**Total Fixed Assets: Rs. 12,41,200/-**

**Working Capital (P.m)**

1.	Raw Materials		Rs. 1,05,600/-
2.	Salary & Wages		Rs. 14,300/-
3.	Miscellaneous exp		Rs. 16,500/-
5.	Utilities & water		Rs. 6,600/-

**Total : Rs. 1,43,000/-**

**Total Project Cost: Rs. 13,84,200/-**

**Means of Finance :**

	<u>Urban</u>	<u>Rural</u>
1. Composite Loan under PMEGP	70% 9,68,948/-	60% 8,30,526/-
2. Subsidy	25% 3,46,052/-	35% 4,84,474/-
3. Margin Money	5% 69,210/-	5% 69,210/-
	<b><u>Total: 11,75,000/-</u></b>	<b><u>11,75,000/-</u></b>
5. Debt Equity Ratio :	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales	1439	1679	1919	1919	1919
3.	Annual Costs					
(a)	Raw Materials	760	886	1013	1013	1013
(b)	Utilities	48	55	63	63	63
(c)	Wages & Salaries	103	120	137	137	137
(d)	Administrative expenses	94	98	103	108	114
(e)	Selling expenses	72	84	96	96	96
(f)	Depreciation	124	124	124	124	124
(g)	Interest on Composite Loan	109	88	65	39	13
4.	<b>Total Cost</b>	<b>1310</b>	<b>1455</b>	<b>1601</b>	<b>1580</b>	<b>1560</b>
	<b>Variable Cost</b>	<b>880</b>	<b>1025</b>	<b>1172</b>	<b>1172</b>	<b>1172</b>
5.	<b>Annual profit</b>	<b>129</b>	<b>224</b>	<b>318</b>	<b>339</b>	<b>359</b>
6.	<b>Return on investment</b>	<b>9.32</b>	<b>16.18</b>	<b>22.97</b>	<b>24.49</b>	<b>25.93</b>
7.	<b>Return on sales</b>	<b>8.96</b>	<b>13.34</b>	<b>16.57</b>	<b>17.66</b>	<b>18.70</b>
8.	Annual Contribution	559	-	-	-	-
9.	Break Even Point as percent of capacity	46.15%	-	-	-	-
10	Cash accrual	253	348	442	463	483
11	Debt servicing capacity	362	436	507	502	496
12	Repayment of Composite Loan	157	183	209	209	209
13	Debt serviced	266	271	274	248	222
14	<b>Pay Back Period</b>	<b>2 Years 7 Months 24 days</b>				
15	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.36 : 1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	69	-	-	-	-	-
2.	Increase in composite loan	969	-	-	-	-	-
3	Increase in Subsidy	346	-	-	-	-	-
4.	Depreciation	-	124	124	124	124	124
5.	Profit before interests	-	238	312	383	378	370
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1384</b>	<b>362</b>	<b>436</b>	<b>507</b>	<b>502</b>	<b>494</b>
6.	Increase in capital investment	1241	-	-	-	-	-
7.	Increase in working capital	143	-	-	-	-	-
8.	Interests	-	109	88	65	39	13
9.	Repayment of loan	-	157	183	209	209	209
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1384</b>	<b>266</b>	<b>271</b>	<b>274</b>	<b>248</b>	<b>222</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>96</b>	<b>261</b>	<b>454</b>	<b>148</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>96</b>	<b>165</b>	<b>233</b>	<b>254</b>	<b>272</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>96</b>	<b>261</b>	<b>494</b>	<b>748</b>	<b>1020</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	69	198	422	740	1079
2.	Surplus from operations	<b>123</b>	<b>224</b>	<b>318</b>	<b>339</b>	<b>359</b>
	<b>NET WORTH:</b>	<b>198</b>	<b>422</b>	<b>740</b>	<b>1079</b>	<b>1438</b>
3.	Composite loan	812	629	420	211	nil
4.	Subsidy	346	346	346	346	346
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>
1.	Gross Block (F C)	1241	1241	1241	1241	1241
	<b>Less</b> Depreciation	124	248	372	496	620
<b>2</b>	<b>NET BLOCK</b>	1117	993	869	745	621
3	Current Assets	143	143	143	143	143
4.	Cash & Bank Balance	<b>96</b>	<b>261</b>	<b>494</b>	<b>748</b>	<b>1020</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>

**Suppliers of Plant & Machinery :**

1.The Techno House, 10/B-2, Road-3/A, Khulshi Hills, Chittagong, Chittagong, Bangladesh ctg-4225, 880-31-2555-341



## PLASTIC FILES /ALBUMS /AND FOLDERS

**Introduction:** Plastic File covers, file boards and albums etc. are the items of common use in the various government offices, Government of India undertakings, Private sector and other intuitions, College, School and houses These are generally sold in the printed forms also.

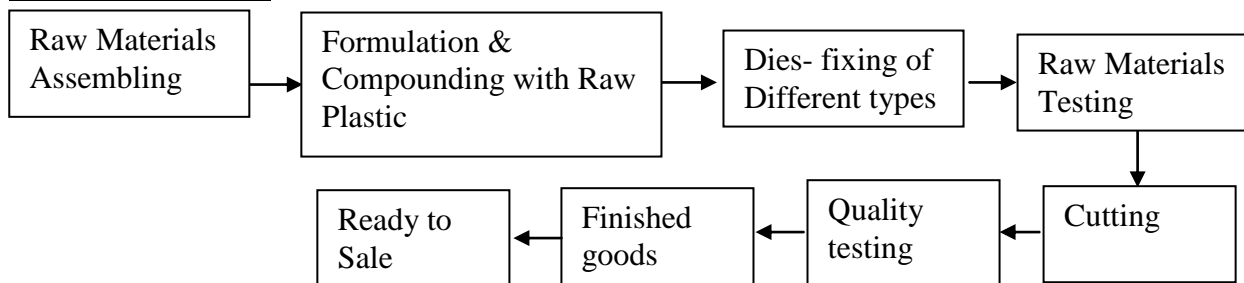
**Market Potential;** Due to the rapid industrialization taking place in the country, the demand for office stationery is increasing day by day. File covers and file boards assume an important position as a stationery materials. These are used for keeping the day to day correspondence, old office records, important papers etc, in order, These are used in huge quantity by governmental offices/ establishments, various commercial establishments, traders, schools, colleges etc every year.

**Production Targets / Suggested Capacity:** The installed capacity by working one shift for 300 working days per annum shall be as follows:

Plastic File cover	8,40,000 nos.	Rs. 23,10,000/-
Albums	3,60,000 nos.	Rs. 7,20,000/-
Printed Folders	14,000 nos.	Rs. 2,10,000/-
	<b>Total</b>	<b><u>Rs.32,40,000/-</u></b>

**Manufacturing Process:** Board is first cut to the required size of the file covers or for file board. For the covers, it is printed as desired and then creased and bonded on the bending machine. Necessary attachments if desired, are fixed on the covers. File boards cut to size are pasted with paper. Flaps and tapes are then fixed on the board to give it final shape.

### **Process Flow Chart :**



**Raw Materials:** The main raw materials required for manufacture of File, Album, Folders are Raw plastic, Various colour, Chemicals, dies, Cotton tape, File covers Fitting and Miscellaneous items, clips etc. The above Raw materials are to be sourced mainly from the open market at present availability and supply of the raw materials is not a problem. The costs of raw materials will be Rs.2,20,000/-

**Utilities :** The unit will require a total connected load of 1 KW and Water requirement is about 500KL per annum.

**Manpower:** The unit will need to provide employment to the following 7 persons and all man power is available from local area.

1. Manager cum Supervisor	Self	Self
2. Skilled	4nos	Rs.22,500/-
3. Office Boy/Peon	1 no	Rs. 2,200/-
4. Sales Man	1no	<u>Rs. 3,300/-</u>
	<b>Total</b>	<b><u>Rs.27,500/-</u></b>

**CAPITAL COST ESTIMATE:****Land & Building:** 160 Sq. Mtrs.**On Rent.****Plant & Machinery :**

1. Plastic Cutter Food, operated, dab front and guides 42" optical & other accessories.
2. Programmed multiple bending, Creasing Machine for office file with five step metal gauge treadle drive 24' size with extra die cliper.
3. Adjustable file bending machine to suit off ice clip or lever files without changing dies with cast iron machine finished table, treadle driven 24"
4. Punching and Pressing Machine for lever files treadle driven with two hole punching for clip or ring and corner pressing dies 24'
5. Deb press with two pillers size 15"x20"x12
6. Chandleir type plates printing press complete with all standard equipments and accessories with 2HP Motor with starter size 11"x16"
7. Gumming machine
8. Backing press Compression type with Geared type size 18".

**Total: Rs. 1,87,200/-****Miscellaneous Fixed Assets:**

1. Chair & Working Table
2. Fan & Lighting and wearing
3. Interior decoration

Rs. 27,500/-

Rs. 20,000/-

**Rs. 35,000/-**Total **Rs. 82,500/-****Preliminary & Preoperative Exp.:****Total Fixed Capital :****Rs. 4,950/-****Rs. 2,74,650/-****Working Capital (P.m)**

1. Salary & Wages
2. Administrative expenses
3. Selling expenses
4. Raw Materials
5. Utilities

Rs. 27,500/-

Rs. 13,666-

Rs. 3,300/-

Rs. 2,20,000/-

Rs. 3,880/-

**Total: Rs. 2,68,316/-****Total Cost of the Project: Rs. 5,42,966/-****Means of Finance:**

- a. Composite loan under PMEGP
- b. Subsidy
- c. Margin Money

**Urban**

70% Rs.3,80,076/-

25% Rs.1,35,742/-

5% Rs. 27,148/-**Total Rs.5,42,966/-****Rural**

60% Rs.3,25,780/-

35% Rs.1,90,038/-

5% Rs. 27,148/-**Rs.5,42,966/-**

- d. Debt Equity Ratio

2.33:1

1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	Total Cost	2002	2317	2628	2618	2607
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93
9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				
11	Break Even Point as percent of capacity	43.77				
12	Cash accrual	163	205	250	260	271
13.	Debt servicing capacity	207	241	276	276	276
14	Repayment of Composite Loan	62	72	82	82	82
15.	Debt serviced	106	108	108	98	87
16	Pay Back Period	1 years 6 month 10 days				
17.	Debt Service Coverage Ratio (DSCR)	1.53:1				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
A.	TOTAL SOURCES	543	207	241	276	276	276
6.	Increase in capital investment	275	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
B.	TOTAL DISPOSALS	543	106	108	108	98	87
C.	OPENING BALANCE	NIL	NIL	101	234	402	580
D.	NET SURPLUS	NIL	101	133	168	178	189
E.	CLOSING BALANCE	NIL	101	234	402	580	769

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less</b> Depreciation	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Name & Address of machinery and Equipments :**

1. M/S Indo Europa Trading Co. Pvt Ltd, 9 Dalal Street, fort, Bombay 4000023.
2. M/S Akemo Paper machines, D23 NDSE part I, New Delhi, 110004
3. M/S Nagpal Industries, Bartan Market, Sadar Bazar , Delhi 110006

**Names and Address of Raw Materials :**

1. Titaghur paper Mills Co Ltd, Chartered Bank Building, Kalkata,
2. Bengal paper Mills Co ltd, 14 Netaji Subhash Road, kolkata,
3. Rohtas Industries Ltd, Dalmia Nagar.

## BLOW MOULDED PLASTIC CONTAINER/BOTTLES

**INTRODUCTION:** Thermo-Plastic materials like high density polythene, polypropylene, PVC, PET, etc. can be blow moulded into containers of different shapes and sizes for packing pharmaceuticals, chemicals, solvents, acids etc. These are light weight, flexible, chemical resistance and attractive with colour possibilities for packing's applications. Presently Blow Moulded plastic containers up to 1/2/5/10 /20 ltrs. capacity are reserved for small scale sector.

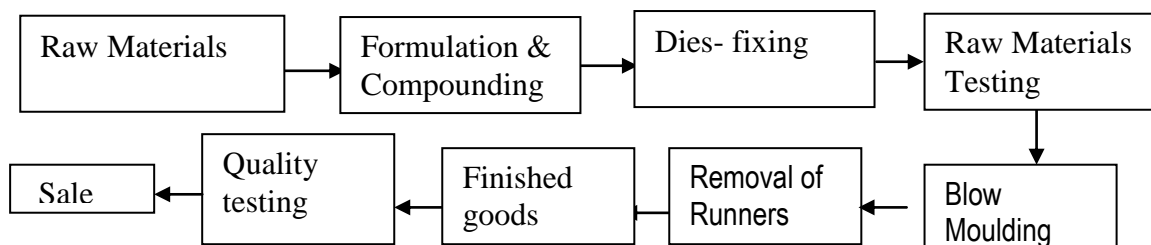
**Market Potential:** There is very good demand for Blow Moulded containers and bottles in our country. Now-a-days these containers are used for storage of water and other commodities by every household even in villages and are replacing conventional brass and copper containers. They are cheap, light in weight and durable.

**Installed Capacity:** Assuming operations for Single Shift per day for 300 working days per annum the following annual installed capacity and turnover is estimated:

**Containers and bottle**                      **70 MT**                      **Rs. 16,00,000/-**

**Process of manufacture:** Plastic material in the form of granules are subjected to heat and pressure in an extruder and the semi molten plastic is extruded through the nozzle in form of hollow tube known as parison. Adjustments have been provided in the machine to vary wall thickness of the parison. Suitable parison is then inserted in a female mould and air blow into parison to force it against the sides of the mould. The material is then cooled before removal from the mould. The article is then trimmed to remove flashes & Runners.

### Process Flow Chart :



**Raw Materials:** The raw materials required for the unit are mainly HDPE/Polypropylene / PVC granule, colours pigments, screen printing accessories, etc. Raw materials are to be sourced mainly from the open market . The cost of the raw materials required per month will be Rs. 2,20,000/-

**Power:** The unit will require a total connected load of 5.5 KW. Annual Consumption of Power is estimated at 10580KWHr.s costing Rs. 46,560.

**Water:** The unit shall avail of the PHE water supply already available at the site. Daily requirement of water is estimated at 2,000 Liters, cost of which is shown with power cost.

**Manpower:** The unit will provide employment to 6 persons, all of whom are available locally. Requirement and monthly costs of manpower is shown below:

1.	Manager cum Supervisor	Self	Self
2.	Skilled	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
			<b>Total: <u>Rs.27,500/-</u></b>

**CAPITAL COST ESTIMATE:****A. Land & Building** with a covered area of 650Sq. Mtrs.

On rent

**B. Plant & Machinery**

1.	Blow- moulding Machine with all accessories	Rs. 1,14,000/-
2.	Moulds, dies, tools etc,	Rs. 73,200/-

**Total: Rs. 1,87,200/-****C. Miscellaneous Fixed Assets :**

1.	Different types of racks & furniture (Iron make)	Rs. 30,000/-
2.	Show case one no	Rs. 20,000/-
3.	Chair, Working Table and Signboard	Rs. 20,000/-
4.	Fan & Lightings	Rs. 12,500/-

**Rs. 82,500/-****D. Preliminary & Preoperative Exp.:****Rs. 4,950/-****Total Fixed Cost: Rs. 2,74,650/-****E. Working Capital (P.m)**

1.	Salary & Wages	Rs. 27,500/-
2.	Administrative expenses	Rs. 13,666/-
3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs. 2,20,000/-
5.	Utilities	Rs. 3,880/-

**Total: Rs. 2,68,316/-****Total Cost of the Project: Rs. 5,42,966/-****Means of Finance:**

a.	Composite loan under PMEGP	Urban 70%	Rs.3,80,076/-	Rural 60%	Rs.3,25,780/-
b.	Subsidy	Urban 25%	Rs.1,35,742/-	Rural 35%	Rs.1,90,038/-
c.	Margin Money	Urban 5%	Rs. 27,148/-	Rural 5%	Rs. 27,148/-
		<b>Total</b>	<b>Rs.4,79,424/-</b>		<b>Rs. 4,79,424/-</b>

**d. Debt Equity Ratio**

2.33:1

1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	2,138	2,495	2,851	2,851	2,851
3.	Annual Costs					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
4	Variable Cost	1,635	1,908	2,180	2,180	2,180
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
5	Fixed & Semi Variable Cost	367	409	448	438	427
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
7.	Annual profit	136	178	223	233	244
8	Return on investment	25.04	32.78	41.06	42.90	44.93
9.	Return on sales	6.36	7.13	7.82	8.17	8.55
10.	Annual Contribution	503				

11	Break Even Point as percent of capacity	<b>43.77</b>				
12	Cash accrual	163	205	250	260	271
<b>13.</b>	<b>Debt servicing capacity</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
14	Repayment of Composite Loan	62	72	82	82	82
<b>15.</b>	<b>Debt serviced</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>16</b>	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
<b>17.</b>	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3.	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27
5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less Depreciation</b>	27	54	81	108	135
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Raw Materials Suppliers:** Hoechst dyes & Chemical Ltd, Hoechst House, 193 Backbay Reclamation, Scheme III, nariman point, Bombay 21.

**Machinery Suppliers;** Brimco machinery Corporation, Plot 55 Govt, Kandivil Industrial Estate, Kandivil (West), Bombay 67.

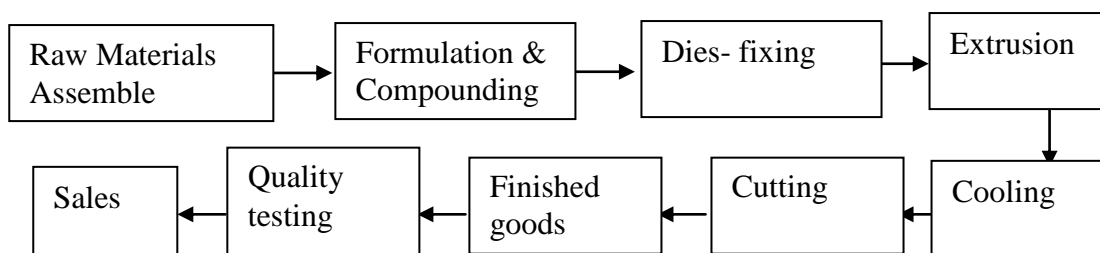
## RIGID PVC PIPES

**Introduction:** By virtue of their certain intrinsic values of processing the combinations of excellent properties the rigid PVC pipes are fast replacing the conventional metal pipes in many applications. There are as electrical conduit is well established in the building construction PVC conduits have been accepted by all the electricity boards. Their use in tube wells is a recent innovation and due to their chemical resistant properties, these may find applications in chemical plants also.

**Market Potential:** The demand of PVC pipe and fittings is related to the consumption of PVC pipes and keeping in view the growing trends in the utilization of PVC pipes for a variety of applications, the demand for fittings is likely to grow substantially.

**Manufacturing Process for PVC Pipes:** PVC pipes are made from polyvinyl chloride (PVC). This rigidity can be controlled by controlling the percentage of plasticizer at the time of compounding. The production of rigid PVC pipes consists of plasticizing and homogenizing PVC compound and extrusion of it by the extruder through its circular slit. This circular slit governs the size of the pipe to be extruded. Different dies are used for manufacturing different sizes of pipes. The pipe is then passed through a vacuum sizing tank where in the dimensions of the pipe can be accurately set. This also helps in the surface finish of the pipe. The rigid pipe is cut in an in-line motorized cutting device into required sizes.

### Process Flow Chart :



**Raw Materials;** The raw materials required for the unit are mainly PVC Resin, DOP, Stabilizer, Colourant, etc. Raw materials are to be sourced mainly from the open market or directly from Manufacturers. The unit will require Raw Materials worth **Rs.1,05,600/-** per month.

**Power:** Connected Load requirement for the unit is 25 KW. Annual consumption of Power is estimated at 39,000 KWHrs costing Rs. 1,59,900. Power is available from Tripura Sate Electric Crop. Ltd.

**Water;** Water required by the unit is 3000 Liters per day. The amount required for this purpose is **Rs.1,100/-** per month.

**Manpower:** The requirement and cost of manpower to be recruited locally are shown below:

<u>Sl.No</u>	<u>Descriptions</u>	<u>No</u>	<u>Amount(Rs.)</u>
1.	Manager / Accountant cum Supervisor	Self	Self
2.	Skilled Worker	2	6,600/-
3.	Semi skilled worker	1	2,200/-
4.	Sales Representative	1	3,850/-
5.	Helper	1	1,650/-
		<b>5</b>	<b>Total 14,600/-</b>

### CAPITAL COST ESTIMATE:

**A. LAND & BUILDING** with\_a built up area1000sq. mtrs.

**On rent**



**B. PLANT AND MACHINERY :**

2.	High Speed (Mixer), Honschel type	01	Rs. 42,600/-
2	Dies and Mandrel sets	01	Rs. 36,000/-
3.	Sharp grinder, heavy duty, fitted with elect. Motor,		Rs. 12,000/-
4.	Weighting Balance	01	Rs. 6,000/-
5.	65MM PVC RIGID pipe extrusion Plant	01	Rs. 9,13,400/-
6.	Instrument laboratory equipped with testing facilities		Rs. 48,000/-
7.	Chemical testing laboratory consisting of chemical balance etc		Rs. 53,000/-
			<b>Total: Rs.11,11,000/-</b>

**C. Miscellaneous Fixed Assets**

1	Electrification		Rs. 44,000/-
2.	Water installation		Rs. 16,500/-
3.	Furniture & Fixtures including a Computer set		Rs. 69,500/-

**Total: Rs. 1,30,000/-****Total Fixed Assets: Rs. 12,41,000/-****D. Working Capital (P.m)**

1.	Raw Materials		Rs. 1,05,600/-
2.	Salary & Wages		Rs. 14,300/-
3.	Miscellaneous exp		Rs. 16,500/-
5.	Utilities & water		Rs. 6,600/-

**Total : Rs. 1,43,000/-****Total Project Cost:Rs. 13,84,000/-****Means of Finance:**

		<u>Urban</u>		<u>Rural</u>	
1.	Composite Loan under PMEGP	70%	9,69,000/-	60%	8,31,000/-
2.	Subsidy	25%	3,46,000/-	35%	4,84,000/-
3.	Margin Money	5%	69,000/-	5%	69,000/-
			<b>Total: 13,84,000/-</b>		<b>13,84,000/-</b>
4.	Debt Equity Ratio:		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales	1439	1679	1919	1919	1919
3.	Annual Costs					
(a)	Raw Materials	760	886	1013	1013	1013
(b)	Utilities	48	55	63	63	63
(c)	Wages & Salaries	103	120	137	137	137
(d)	Administrative expenses	94	98	103	108	114
(e)	Selling expenses	72	84	96	96	96
(f)	Depreciation	124	124	124	124	124
(g)	Interest on Composite Loan	109	88	65	39	13
4.	Total Cost	1310	1455	1601	1580	1560
	Variable Cost	880	1025	1172	1172	1172
5.	Annual profit	129	224	318	339	359
6.	Return on investment	9.32	16.18	22.97	24.49	25.93
7.	Return on sales	8.96	13.34	16.57	17.66	18.70
8.	Annual Contribution	559	-	-	-	-

9.	Break Even Point as percent of capacity	46.15%	-	-	-	-
10	Cash accrual	253	348	442	463	483
11	Debt servicing capacity	362	436	507	502	496
12	Repayment of Composite Loan	157	183	209	209	209
13	Debt serviced	266	271	274	248	222
14	<b>Pay Back Period</b>	<b>2 Years 7 Months 24 days</b>				
15	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.36 : 1</b>				

**Cash Flow Statement:**

(Rs. In Thousand)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	69	-	-	-	-	-
2.	Increase in composite loan	969	-	-	-	-	-
3	Increase in Subsidy	346	-	-	-	-	-
4.	Depreciation	-	124	124	124	124	124
5.	Profit before interests	-	238	312	383	378	370
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>1384</b>	<b>362</b>	<b>436</b>	<b>507</b>	<b>502</b>	<b>494</b>
6.	Increase in capital investment	1241	-	-	-	-	-
7.	Increase in working capital	143	-	-	-	-	-
8.	Interests	-	109	88	65	39	13
9.	Repayment of loan	-	157	183	209	209	209
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>1384</b>	<b>266</b>	<b>271</b>	<b>274</b>	<b>248</b>	<b>222</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>-</b>	<b>-</b>	<b>96</b>	<b>261</b>	<b>454</b>	<b>148</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>-</b>	<b>96</b>	<b>165</b>	<b>233</b>	<b>254</b>	<b>272</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>-</b>	<b>96</b>	<b>261</b>	<b>494</b>	<b>748</b>	<b>1020</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	69	198	422	740	1079
2.	Surplus from operations	123	224	318	339	359
	<b>NET WORTH:</b>	<b>198</b>	<b>422</b>	<b>740</b>	<b>1079</b>	<b>1438</b>
3.	Composite loan	812	629	420	211	nil
4.	Subsidy	346	346	346	346	346
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>
1.	Gross Block (F C)	1241	1241	1241	1241	1241
	<b>Less Depreciation</b>	<b>124</b>	<b>248</b>	<b>372</b>	<b>496</b>	<b>620</b>
<b>2</b>	<b>NET BLOCK</b>	<b>1117</b>	<b>993</b>	<b>869</b>	<b>745</b>	<b>621</b>
3	Current Assets	143	143	143	143	143
4.	Cash & Bank Balance	96	261	494	748	1020
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>1356</b>	<b>1397</b>	<b>1506</b>	<b>1636</b>	<b>1784</b>

**Suppliers of Machinery & Equipments :**

- 1.RH Windsor (India) Ltd, Plot E-16, U Road, Thana Industrial Estate, Thana, Bombay,
- 2.Precision Plastic Tools & Products Co. 1<sup>st</sup> floor, Room no;9,19 India Exchange Place, Kalkata

## **DISPOSABLE PLASTIC SYRINGE**

**Introduction:** Disposable syringes are a great innovation in the field of medical equipment. They are used for infrastructures injections and are disposed off immediately after usage. The major advantage of using disposable syringes is that no in-faction is transmitted since the injections is disposed off immediately after use. Many attributes are attached to the fast growing popularity of disposable syringes. The cost effectiveness, light weight, break resistance, design flexibility and fast production cycle of these have encouraged industries to convert from the manufacture of conventional glass syringes to disposable syringes. Made of plastic with nozzle and with one needle for each syringes these are available in sterilized from with the help of Ethylene oxide or gamma rays thereby avoiding the cumbersome process of sterilization required by glass syringes. Thus such disposable syringes offer complete protection against any infection like the virus of AIDS to be communicated through the blood to another patient. In India even though the concept is still based-cally restricted to urban areas, the production of disposable syringes is lamentably poor, With growing popularity, there exists a tremendous market potential for the disposable syringes. Disposable plastic syringes are basically injection moulded from polypropylene. The syringes are made in various sizes viz 1ml, 2mk,5ml and 10 ml and in different designs. The syringes are made by assembling three components are packed sterilized conditions.

**Market :** With the replacement of traditional glass syringes by disposable syringes for convenience, safety. The demand for plastic disposable syringes is growing at very fast rate. Due to the fear of AIDS and other infections it is now have become a common practice to use sterilized disposable plastic syringes. Uses:

- Veterinary Pharmaceuticals – multiple and single dose products for small and large animals; oral, intramammary, and rectal administration
- Industrial – primary disposable product packaging for adhesives, sealants, caulks, greases, lubricants, inks, colorants, additives, catalysts, and abrasives
- Consumer – DIY adhesives, sealants, lubricants, flavoring, and marinades
- Sample Collection – packaging, dispensing, and testing of toxic substances and soil
- Human Health – disposable plastic syringes medication dispensers for oral, pediatric, geriatric, and feminine care
- Pesticide and Insecticides – disposable plastic syringes and packaging for controlled dispensing of pastes and baits

**Suggested Capacity:** The minimum economic capacity of a unit producing disposable plastic syringes is 70 lakhs pieces per annum based on two shift operation for 300 operating days working schedule in a year.

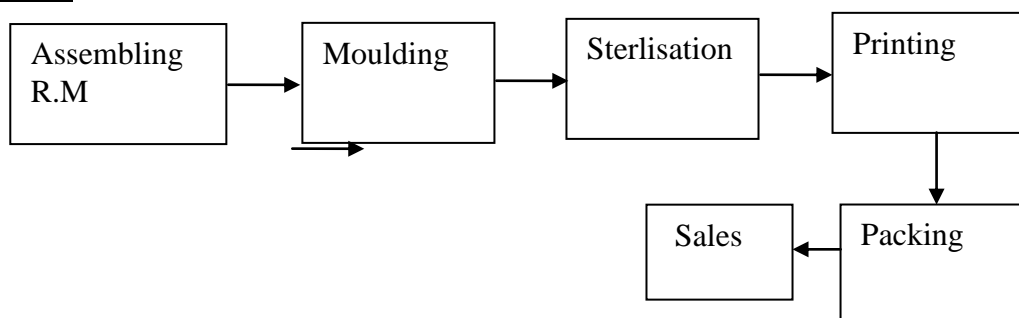
**Manufacturing Process:** The production process comprises of manufacturing a two piece syringe consisting of a barrel or cylinder and a plunger. The raw materials are fed with an automatic feeding arrangement for moulding. The injection moulding machines used for the purpose are fully automatic and give mass production with uninterrupted output out put. The moulds which are used are interchangeable and have appropriate cavities for the different sizes and also have a facility for proper cooling systems. The camping stroke , the hydraulic mould heights adjustment, hydraulic ejector with multi stroking facility, clamping force regulating etc. are employed suitably to manufacture the product. The syringes are marked and calibrated by lines indicating measuring space or volume.

**Sterilisation:** Sterilisation of the syringes is proposed to be carried out using Ethylene oxide plant. Glass is available in cylinders as well as in tankers from **M/S National Organic & Chemical Ltd, Bombay.**

**Printing:** Printing machines are employed to print and label each individual pack, inner packs and transit boxes, descriptions, date and other relevant information related to the product usages and safety.

**Packing:** Packing machines for packaging the product are of automatic type of producing soft blister packing.

**Flow Chart:**



**Raw Materials;** All the raw materials required are available indigenously. Polypropylene, b. Ethylene Oxide gas, c. Printing Ink, d. Miscellaneous stores, e. Packing materials. These Raw materials are sourced mainly from the open market. At present availability and supply of the raw materials is not a problem and Cost will be **Rs. 3,75,000/-** and also the same materials can be imported from **Dakumar machinery Co.Ltd**, 369# XinJiang Rd, Xinqian Street, Huangyan Taizhou, Zhejiang, China, P.C. 318020. Tel:86-576-81106895,/86-576-81106937, Fax: 86-576- 84018996 and Ajit Enterprises, D-145 Industrial Focal Point Patiala,

**Power:** Electricity requirement for the unit is 4 KW. The annual consumption of Power is estimated at 4,520 KWHrs. Costing Rs. 18,528/-

**Water:** The Unit will need 500 liters of water per day. It is available from both ground water sources and public supply.

**Manpower:** The unit will provide employment to around 9 persons. Monthly requirements and costs of manpower, to be recruited locally are shown below:

<u>Sl.No</u>	<u>Descriptions</u>	<u>No</u>	<u>Rate</u>	<u>Amount(Rs.)</u>
1.	Manager / Accountant cum Supervisor	Self		Self
2.	Skilled Worker	2	4,500/-	9,000/-
3.	Semi skilled worker	2	4,000/-	8,000/-
4.	Sales Representative	1	3,500/-	3,500/-
5.	Helper	1	1,500/-	1,500/-
6.	Machine operator	3	3,000/-	9,000/-
7.	Computer operator	1	2,000/-	2,000/-
8.	Watch & Guard	1	2,000/-	2,000/-
<b>Total</b>				<b>35,000/-</b>

**CAPITAL COST ESTIMATE:**

**A. LAND & BUILDING**

**On Rent.**

**B. PLANT AND MACHINERY :**

1.	Automatic Plastic Injections Moulding Machine Plastic Injection Molding Machine (AIM 680-1380)	01	Rs. 2,65,000/-
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2.	Ethylene Oxide gas Sterilizer	01	Rs. 1,00,000/-
3.	Bilster Packing Machine	01	Rs. 65,000/-
4.	Set of Mouldes & dies	01	Rs. 93,000/-
5.	Laboratory testing equipment	01	Rs. 65,000/-
6.	Desktop Computer, Printer & UPS	01	Rs. 40,000/-
7.	Gen Set	01	Rs. <u>1,72,000/-</u>
	<b>Total</b>		<b>Rs. 8,00,000/-</b>

**C. Miscellaneous Fixed Assets**

1.	Decoration of Machine Room & office		Rs. 85,000/-
2.	Signboard/ Fan /Chair etc		Rs. 45,000/-
3.	Wiring/Electrification/		Rs. 30,000/-
4.	1.5 Ton LG A/C		Rs. <u>40,000/-</u>
	<b>Total</b>		<b>Rs. 2,00,000/-</b>

**D. Preliminary & Preoperative expenses:** Rs. 50,500/-

**E. Provision for c contingencies** Rs. 1,25,000/-

**Total Fixed Capital:** Rs.11,75,000/-

**F. Working Capital:**

(a)	Raw Materials for 1 months	Rs. 3,75,000/-
(b)	Utilities for 1 month	Rs. 1,544/-
(c)	Wages & Salaries for 1 Month	Rs. 35,000/-
(d)	Other expenses for 1 month	Rs. <u>89,456/-</u>

**Total Working Capital:** Rs. 5,01,000/-

**TOTAL PROJECT COST: Rs.16,76,000/-**

**Means of finance:**

	URBAN	RURAL
1. Composite Loan:	Rs. 11,73,200	Rs.10,05,600
2. Subsidy:	Rs. 4,19,000	Rs. 5,86,600
3. Promoters' Contribution:	Rs. 83,800	Rs. 83,800
4. Debt. Equity Ratio:	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	Annual sales Realization	4347	5072	5796	5796	5796
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2700	3150	3600	3600	3600
	(b) Power	14	16	19	19	19
	(c) Wages & Salaries	390	410	420	431	442
	(d) Repair & Maintenance	48	48	48	48	48
	(e) Administrative overheads	120	126	132	139	146
	(f) Selling expenses	652	761	869	869	869
	(g) Depreciation	110	110	110	110	110
	(h) Interest on Composite Loan	136	111	81	49	20
	<b>Total Cost</b>	<b>4170</b>	<b>4732</b>	<b>5279</b>	<b>5265</b>	<b>5254</b>
	Variable Costs	3366	3927	4488	4488	4488
4.	<b>Annual Profit</b>	<b>177</b>	<b>340</b>	<b>517</b>	<b>531</b>	<b>542</b>
5.	<b>Return on Investment</b>	<b>10.56</b>	<b>20.29</b>	<b>30.85</b>	<b>31.68</b>	<b>32.34</b>
6.	<b>Return on sales</b>	<b>4.07</b>	<b>6.70</b>	<b>8.92</b>	<b>9.16</b>	<b>9.35</b>
7.	Annual Contribution	981	-	-	-	-

8.	Break Even Point	49.17	-	-	-	-
9.	Cash Accrual	2.87	450	627	641	652
10.	Debt Servicing Capacity	423	561	708	690	672
11.	Repayment of Loan	173	220	260	260	260
12.	Debt Serviced	309	331	341	309	280
13.	<b>Pay Back Period</b>	<b>2 Years 8 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:95:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	84	-	-	-	-	-
2.	Increase in subsidy	419	-	-	-	-	-
3.	Increase in Composite Loan	1173	-	-	-	-	-
4.	Depreciation	-	110	110	110	110	110
5.	Profit before interests	-	313	451	508	580	562
<b>A.</b>	<b>Total Sources</b>	<b>1676</b>	<b>423</b>	<b>561</b>	<b>708</b>	<b>690</b>	<b>672</b>
6.	Increase in capital investments	1175	-	-	-	-	-
7.	Increase in Working Capital	501	-	-	-	-	-
8.	Interests	-	136	111	81	49	20
9.	Repayment of Loan	-	173	220	260	260	260
<b>B.</b>	<b>Total Disposals</b>	<b>1676</b>	<b>309</b>	<b>331</b>	<b>341</b>	<b>309</b>	<b>280</b>
<b>C.</b>	<b>Opening Balance</b>	<b>-</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>
<b>D.</b>	<b>Net Surplus</b>	<b>-</b>	<b>114</b>	<b>230</b>	<b>367</b>	<b>381</b>	<b>392</b>
<b>E.</b>	<b>Closing Balance</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>	<b>1484</b>

**Projected Balance Sheets:**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	84	261	601	1118	1649
2.	Surplus from operation	177	340	517	531	542
	<b>NET WORTH</b>	<b>261</b>	<b>601</b>	<b>1118</b>	<b>1649</b>	<b>2191</b>
3.	Subsidy	419	419	419	419	419
	Composite Loan	1000	780	520	260	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1680</b>	<b>1800</b>	<b>2657</b>	<b>2328</b>	<b>2610</b>
1.	Gross Fixed Assets	1175	1175	1175	1175	1175
	Less Depreciation	110	220	330	440	550
	<b>NET BLOCK</b>	<b>1065</b>	<b>955</b>	<b>845</b>	<b>735</b>	<b>625</b>
2.	Current Assets/W/C	501	501	501	501	501
3.	Cash & Bank Balance	114	344	711	1092	1484
<b>B.</b>	<b>Total Assets</b>	<b>1680</b>	<b>1800</b>	<b>2057</b>	<b>2328</b>	<b>2610</b>

**Address:** ASHOK MACHINE, KANTA GAS STREET, NEHRUNAGER, DHEBER ROAD, ATIKA, RAJKOT.

## **LOW DENSITY POLYETHYLENE FILMS AND BAGS**

**Introduction:** Low Density Polyethylene (LDPE) is Thermoplastic raw material used for packaging. LDPE sheets are transparent, tough, non-toxic, Chemically fairly inert and impermeable by moisture. It is therefore, popular material for packing food, textile, etc. It is used primarily as Bags. Bureau of Indian Standard Specify its quality as per IS-LDPE-2508-1977 and IS-2508-1977.

**Market:** LDPE Films and Bags are used for packing by Small Bakeries, Confectionery, Textile Shops, Hosiery producers, Grocery shops, etc. in Tripura. Bakeries, Dal-mutt manufacturers, Bag wholesalers are bulk consumers of LDPE Bags in Tripura. In Tripura even curry is packed in LDPE Bags by small restaurants and hence LDPE Bags are very popular packaging material. Thus there is excellent scope for marketing LDPE Bags in the State.

**Installed Capacity:** Assuming that the Unit will operate for Single Shift of 8 hours per day for 300 working days the annual installed capacity is estimated at 90 MT of LDPE Blown Films & /or equivalent quantum of Bags.

**Process of Manufacture:** LDPE Granules are matter and extruded though the Die of the Blown Film plant. In the plant air is blown into the molten LDPE to form blown films. Films are cooled to give permanent shape in the Plant by the air. Sizing rings of the Plant cuts the film to sizes. The film is then drawn through a pair of nip-rolls in the plant to the winding machine. The cooled blown film winded in rolls is then placed in the Bag-making machine, where bags of various sizes are made by use of dies. Bags so made are packed so that each package contain are kilogram of Bags.

**Raw Materials:** The Unit shall need 95 MT of LDPE Granules per annum at the installed capacity costing Rs. 45,08,000/=. It is available indigenously from Petrochemical Units and dealers such as the following:

1. Alkali & chemical corporation of India, 24, Chowranghee, Kolkata
2. Satyam Plastic Works, 2, JB Market, Jail Road, Guwahati, 781 001.
3. Classic Plastic Pvt. Ltd., 32, Ezra Street, R-668, Sixth Floor, Kolkata, - 700 001.
4. Sunny Deys, 129/1, Bangur Avenue, Block-B, 1<sup>st</sup> Floor, Kolkata- 700 055.
5. Unitech Plastics Pvt. Ltd., 25 A & B, Radha Madhab Dutta Garden Lane, Kolkata- 700 010.

**Power:** The Unit will need a total connected Load of 15 KW at 400/440 Volts, 50 HC, AC, three phase & 4 wire. The annual consumption of power is estimated at 10, 295 KWHrs. Costing Rs. 20,384/=. The power is readily available from the State Electricity supply Corporation through its Grid.

**Water:** The Unit will need 5000 liters. Of water per day out of which 4000 Liters. Shall be recycled by using a 0.5 HP pump of the blown film Plant. Therefore, the consumption of 1000 Liters. of water per day is estimated. It is available from both ground water sources and public supply.

**Manpower:** Apart from the two skilled persons operating the blown films & Bag Making Plant all manpower is readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 92,400
2	Office Assistants	2	Rs. 1,05,600
3.	Skilled Worker	2	Rs. 1,32,000
4.	Unskilled Workers	4	Rs. 1,32,000
	<b>Total</b>	<b>9</b>	<b>Rs. 4,62,000</b>

**CAPITAL COST ESTIMATE**

1. <b>Land &amp; Building</b> with a covered area of 120 Sq. Mtrs.:	<b>On rent</b>
2. <b>Plant &amp; Machinery</b>	
(a) One Blown Film Plant with 65 mm extruder, 42" nip rollers, Air Computers or, water pump, etc. with 12 HP Motors.	Rs. 6,00,000
(b) One Automatic Bag Making machine with dies	Rs. 1,80,000
(c) Testing equipments	Rs. 60,000
(d) Freight, Tax, etc. on above	Rs. 1,20,000
	<b><u>Rs. 9,60,000</u></b>
3. <b>Miscellaneous Fixed Assets</b>	
(a) Electrification	Rs. 1,10,000
(b) Water Installation	Rs. 27,500
© Furniture & Miscellaneous others	Rs. 82,500
	<b>Total: Rs. 2,20,000</b>
4. <b>Provision for c contingencies</b>	<b>Rs. 55,000</b>
5. <b>Preliminary &amp; Pre-operative expenses</b>	<b><u>Rs. 1,37,500</u></b>
	<b><u>Total fixed Costs: Rs.13, 72,500</u></b>
6. <b>Working Capital:</b>	
(a) Raw Materials for 1 months	Rs. 4,12,500
(b) Utilities for 1 month	Rs. 1,698
© Wages & Salaries for 1 Month	Rs. 38,500
(d) Other expenses for 1 month	Rs. 98,402
	<b>Total Working Capital: Rs. 5,51,100</b>
	<b><u>TOTAL PROJECT COST: Rs.19,23,600</u></b>

**Means of finance:**

	<b>URBAN</b>	<b>RURAL</b>
1. Composite Loan:	Rs. 13,46,520	Rs. 11,54,160
2. Subsidy:	Rs. 4,80,900	Rs. 6,73,260
3. Promoters' Contribution:	Rs. 96,180	Rs. 96,180
4. Debt. Equity Ratio:	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	Annual sales Realization	4782	5579	6376	6376	6376
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2970	3465	3960	3960	3960
	(b) Power	15	18	21	21	21
	(c) Wages & Salaries	429	451	462	462	462
	(d) Repair & Maintenance	53	53	53	53	53
	(e) Administrative overheads	132	139	145	153	161
	(f) Selling expenses	712	837	956	956	956
	(g) Depreciation	132	132	132	132	132
	(h) Interest on Composite Loan	150	122	89	54	22
	<b>Total Cost</b>	<b>4593</b>	<b>5214</b>	<b>5818</b>	<b>5803</b>	<b>5791</b>
	Variable Costs	3697	4320	4937	4937	4937
4.	<b>Annual Profit</b>	<b>189</b>	<b>362</b>	<b>558</b>	<b>573</b>	<b>585</b>
5.	<b>Return on Investment</b>	<b>9.82%</b>	<b>18.82%</b>	<b>29.01%</b>	<b>29.79%</b>	<b>30.42%</b>
6.	<b>Return on sales</b>	<b>3.95%</b>	<b>6.48%</b>	<b>8.75%</b>	<b>8.98%</b>	<b>9.17%</b>



7.	Annual Contribution	1085	-	-	-	-
8.	Break Even Point	49.54	-	-	-	-
9.	Cash Accrual	321	497	690	705	717
10.	Debt Servicing Capacity	471	616	779	759	739
11.	Repayment of Loan	218	225	291	291	292
12.	Debt Serviced	368	377	380	345	313
13.	<b>Pay Back Period</b>	<b>1 Years 2 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:28:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	96	-	-	-	-	-
2.	Increase in subsidy	480	-	-	-	-	-
3.	Increase in Composite Loan	1346	-	-	-	-	-
4.	Depreciation	-	132	132	132	132	132
5.	Profit before interests	-	339	489	647	627	607
<b>A.</b>	<b>Total Sources</b>	<b>1925</b>	<b>471</b>	<b>616</b>	<b>779</b>	<b>759</b>	<b>739</b>
6.	Increase in capital investments	1372	-	-	-	-	-
7.	Increase in Working Capital	551	-	-	-	-	-
8.	Interests	-	150	122	89	54	22
9.	Repayment of Loan	-	218	225	291	291	292
<b>B.</b>	<b>Total Disposals</b>	<b>1923</b>	<b>368</b>	<b>371</b>	<b>380</b>	<b>345</b>	<b>314</b>
<b>C.</b>	<b>Opening Balance</b>	-	-	<b>103</b>	<b>342</b>	<b>791</b>	<b>1155</b>
<b>D.</b>	<b>Net Surplus</b>	-	<b>103</b>	<b>239</b>	<b>399</b>	<b>414</b>	<b>425</b>
<b>E.</b>	<b>Closing Balance</b>	-	<b>103</b>	<b>342</b>	<b>741</b>	<b>1155</b>	<b>1580</b>

**Projected Balance Sheets:**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	96	285	647	1205	1778
2.	Surplus from operation	189	362	558	573	585
	<b>NET WORTH</b>	<b>285</b>	<b>647</b>	<b>1205</b>	<b>1778</b>	<b>2363</b>
3.	Subsidy	480	480	480	480	480
	Composite Loan	1129	874	583	292	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>
1.	Gross Fixed Assets	1372	1372	1372	1372	1372
	<b>Less Depreciation</b>	<b>132</b>	<b>264</b>	<b>396</b>	<b>528</b>	<b>660</b>
	<b>NET BLOCK</b>	<b>1240</b>	<b>1108</b>	<b>976</b>	<b>844</b>	<b>712</b>
2.	Current Assets/W/C	551	551	551	551	551
3.	Cash & Bank Balance	103	342	741	1155	1580
<b>B.</b>	<b>Total Assets</b>	<b>1894</b>	<b>2001</b>	<b>2268</b>	<b>2550</b>	<b>2843</b>

**Sources of Machinery**

1. Kolsite Industries, 31, Shah Industrial Estate, Andheri (W), Mumbai – 400 058
2. Neptune Plastic & Metal Industries, 18, R.N. Mukherjee Road, 7<sup>th</sup> Floor, Kolkata- 700011.
3. R.H. Winsor (India) Ltd., E-6, U Road, Thana Industrial Estate, THANE.

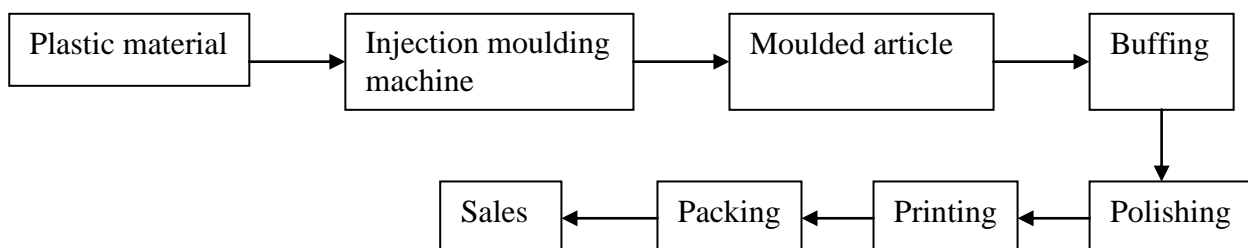
### PLASTIC MOULDED HOUSEHOLD ITEMS.

**Introduction:** In human life, plastic items have great utility. There is hardly, any aspect of human activity which is untouched by the use of plastics. Light weight, durables, reasonable costs, fine finishing and different colours are the qualities found in plastic and are the reasons as well for replacing wood, iron and other metallic items. Seeing the wide use of plastic these days, it is also called the 'plastic era'.

**Market:** There are a no. of objects of daily use that are made of plastic. In the context, certain small objects made out of less than 45 gms-soap case, pencil box, plastic spoons, comb, battery caps, taps furniture parts or the wheels of coolers etc. If set up at home, this unit, can be reasonable lucrative. In the given unit such small plastic objects have been discussed.

**Production process:** The plastic material is fed into the hopper of the injection moulding machine, which essentially has a injection unit and a multifamily mould system. The mould is held in between the two platens which are kept closed by the locking pressure and the material which get plasticized in the barrel, is injected under higher pressure into the mould which results in a moulded article. The article. The articles are then finished by removing the injection feed etc. Then the second stage processing operation viz. butting, polishing, printing are carried out on the articles. These are then kept inside plastic water proof paper covers and packed.

**Process flow:**



**Production Target:**

Sl.No.	Products	Quantity	Rate
1.	Soap Case	35,000/-	Rs. 5,25,000/-
2.	Tiffin Box	20,000/-	Rs. 5,00,000/-
3.	Pencil Box	25,000/-	Rs. 5,00,000/-
4.	Mug	35,000/-	Rs. 5,25,000/-
5.	Jug	2,000/-	Rs. 7,00,000/-
6.	Combs	80,000/-	Rs. 4,00,000/-
		<b>Total:</b>	<b>Rs. 31,50,000/-</b>

**Raw Materials:** The principal raw material of the Unit is Injection Moulding Grade Polypropylene, which is available from M/s Indian Petrochemicals Ltd, Vadodara. The annual requirements and costs of raw-materials at the installed capacity is shown below:

a)	Polypropylene: Injection moulding grade	36 M.T.	Rs. 20,00,000/-
b)	Mould releasing agent/lubricant	L.S.	Rs. 23,18,000/-
c)	Packing Boxes & Paper etc.	L.S.	Rs. 1,90,000/-

**Total Raw Material: Rs. 45,08,000/-**

**Power:** The Unit will need a total connected Load of 15 KW at 400/440 Volts, 50 HC, AC, three phase & 4 wire. The annual consumption of power is estimated at 10, 295 KWHrs. Costing Rs. 18,531/=. The power is readily available from the State Electricity supply Corporation through its Grid.

**Water:** The Unit will need 5000 liters. Of water per day out of which 4000 Liters. Shall be recycled by using a 0.5 HP pump. Therefore, the consumption of 1000 Liters. of water per day is estimated. It is available from both ground water sources and public supply.

**Manpower:** Apart from the two skilled persons operating the blown films & Bag Making Plant all manpower is readily available in Tripura. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager	1	Rs. 84,000
2	Office Assistants	2	Rs, 96,000
3.	Skilled Worker	2	Rs. 1,20,000
4.	Unskilled Workers	4	Rs. 1,20,000
	Total	9	Rs. 4,20,000

### **Capital Cost Estimate:**

<b>A. Fixed Capital</b>		
1) Land & Building	1,000 sq.ft.	Rented
2) Plant & Machinery		
i) Semi automatic hydraulic injection moulding machine with all accessories		Rs. 2,00,000/-
ii) Scrap grinder		Rs. 75,000/-
iii) Buffing, polishing and hot stamping machine		Rs. 75,000/-
iv) Moulds (4 sets)		Rs. 2,00,000/-
v) Small hand tools, greasing and costing equipments		Rs. 10,000/-
vi) Testing instruments such as micrometer, balance etc.		Rs. 15,000/-
vii) Installation and electrification		Rs. 2,00,000/-
viii) Office equipments and workshop furniture		Rs. 25,000/-
		<b>Total: Rs. 8,00,000/-</b>
<b>3. Miscellaneous Fixed Assets</b>		
(a) Electrification		Rs. 1,00,000/-
(b) Water Installation		Rs. 25,000/-
© Furniture & Miscellaneous others		Rs. 75,000/-
		<b>Total: Rs. 2,00,000/-</b>
<b>4. Provision for c contingencies</b>		<b>Rs. 50,000/-</b>
<b>5. Preliminary &amp; Pre-operative expenses</b>		<b>Rs. 1,25,000/-</b>
		<b>Total fixed Costs: Rs.11, 75,000/-</b>
<b>6. Working Capital:</b>		
(a) Raw Materials for 1 months		Rs. 3,75,000/-
(b) Utilities for 1 month		Rs. 1,544/-
(c) Wages & Salaries for 1 Month		Rs. 35,000/-
(d) Other expenses for 1 month		Rs. 89,456/-
		<b>Total Working Capital: Rs. 5,01,000/-</b>
		<b>TOTAL PROJECT COST: Rs.16,76,000/-</b>

**Means of finance:**

	<b>URBAN</b>	<b>RURAL</b>
1. Composite Loan:	Rs. 11,73,200	Rs.10,05,600
2. Subsidy:	Rs. 4,19,000	Rs. 5,86,600
3. Promoters' Contribution:	Rs. 83,800	Rs. 83,800
4. Debt. Equity Ratio:	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilized	60%	70%	80%	80%	80%
2.	Annual sales Realization	4347	5072	5796	5796	5796
3.	<b>Annual Costs</b>					
	(a) Raw Materials	2700	3150	3600	3600	3600
	(b) Power	14	16	19	19	19
	(c) Wages & Salaries	390	410	420	431	442
	(d) Repair & Maintenance	48	48	48	48	48
	(e) Administrative overheads	120	126	132	139	146
	(f) Selling expenses	652	761	869	869	869
	(g) Depreciation	110	110	110	110	110
	(h) Interest on Composite Loan	136	111	81	49	20
	<b>Total Cost</b>	<b>4170</b>	<b>4732</b>	<b>5279</b>	<b>5265</b>	<b>5254</b>
	Variable Costs	3366	3927	4488	4488	4488
4.	<b>Annual Profit</b>	<b>177</b>	<b>340</b>	<b>517</b>	<b>531</b>	<b>542</b>
5.	Return on Investment	10.56	20.29	30.85	31.68	32.34
6.	Return on sales	4.07	6.70	8.92	9.16	9.35
7.	Annual Contribution	981	-	-	-	-
8.	<b>Break Even Point</b>	<b>49.17</b>	-	-	-	-
9.	<b>Cash Accrual</b>	<b>2.87</b>	<b>450</b>	<b>627</b>	<b>641</b>	<b>652</b>
10.	<b>Debt Servicing Capacity</b>	<b>423</b>	<b>561</b>	<b>708</b>	<b>690</b>	<b>672</b>
11.	Repayment of Loan	173	220	260	260	260
12.	<b>Debt Serviced</b>	<b>309</b>	<b>331</b>	<b>341</b>	<b>309</b>	<b>280</b>
13.	<b>Pay Back Period</b>	<b>2 Years 8 months 11 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:95:1</b>				

**Cash Flow Statement:**

(Rs. in thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in promoter's capital	84	-	-	-	-	-
2.	Increase in subsidy	419	-	-	-	-	-
3.	Increase in Composite Loan	1173	-	-	-	-	-
4.	Depreciation	-	110	110	110	110	110
5.	Profit before interests	-	313	451	508	580	562
<b>A.</b>	<b>Total Sources</b>	<b>1676</b>	<b>423</b>	<b>561</b>	<b>708</b>	<b>690</b>	<b>672</b>
6.	Increase in capital investments	1175	-	-	-	-	-
7.	Increase in Working Capital	501	-	-	-	-	-
8.	Interests	-	136	111	81	49	20
9.	Repayment of Loan	-	173	220	260	260	260
<b>B.</b>	<b>Total Disposals</b>	<b>1676</b>	<b>309</b>	<b>331</b>	<b>341</b>	<b>309</b>	<b>280</b>
<b>C.</b>	<b>Opening Balance</b>	<b>-</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>
<b>D.</b>	<b>Net Surplus</b>	<b>-</b>	<b>114</b>	<b>230</b>	<b>367</b>	<b>381</b>	<b>392</b>
<b>E.</b>	<b>Closing Balance</b>	<b>-</b>	<b>114</b>	<b>344</b>	<b>711</b>	<b>1092</b>	<b>1484</b>

**Projected Balance Sheets:**

(Rs. in thousand)

Sl. No.	Description	Amount as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the promoters	84	261	601	1118	1649
2.	Surplus from operation	177	340	517	531	542
	<b>NET WORTH</b>	<b>261</b>	<b>601</b>	<b>1118</b>	<b>1649</b>	<b>2191</b>
3.	Subsidy	419	419	419	419	419
	Composite Loan	1000	780	520	260	-
<b>A.</b>	<b>Total Liabilities</b>	<b>1680</b>	<b>1800</b>	<b>2657</b>	<b>2328</b>	<b>2610</b>
1.	Gross Fixed Assets	1175	1175	1175	1175	1175
	<b>Less Depreciation</b>	<b>110</b>	<b>220</b>	<b>330</b>	<b>440</b>	<b>550</b>
	<b>NET BLOCK</b>	<b>1065</b>	<b>955</b>	<b>845</b>	<b>735</b>	<b>625</b>
2.	Current Assets/W/C	501	501	501	501	501
3.	Cash & Bank Balance	114	344	711	1092	1484
<b>B.</b>	<b>Total Assets</b>	<b>1680</b>	<b>1800</b>	<b>2057</b>	<b>2328</b>	<b>2610</b>

**Suppliers of Plastic moulds and machinery**

- 1) Bijali Industries  
77/1 Bidhan Sarani, Kolkata – 6
- 2) Luna Plastic Works Pvt. Ltd.  
8, Cossipore Road, Kolkata – 2.
- 3) J.L. Enterprises, 50/1, Tanupukur Road, Dhakuria, Kolkata – 31.

# **SERVICE UNITS**

## TWO WHEELER REPAIRING & SERVICING UNIT

**Introduction:** Two wheelers in the present time have become a necessity of every lower middle and middle class. Various new models have been introduced in the market. Even in the village two wheelers have become a necessity. With departments and various organizations ending the loan facility to all the employees the number of two wheelers has registered a sharp increase.

**Market:** The efficiency and workability of every vehicle depends on its regular servicing and through examinations by the specialist of two wheelers. Every vehicle should be compulsory taken for examination and servicing on a quarterly basis. Besides, frequent repair work is also required due to frequent wear & tear in the vehicles. Therefore, if a servicing and repairing unit is set up there are good possibilities of its success. Since servicing & repairing of vehicles requires a specific type of training / experience, it is expected of entrepreneurs to be fully trained in the job.

**Capacity:** Various types of services will be provided in the unit for example, complete of the vehicles, washing, oiling/ greasing and job on engine, etc, besides these services, replacement of spare parts will be also be done. Overall services provided to the customers in a year will amount to total receipts of about Rs.12,03,500/-

**Process:** The process of servicing / Repairing of two wheeler vehicles first & foremost involves complete examination to detect the defect in the vehicles. After thoroughly examining the vehicle, a complete estimate, of all the expenditures involved and the components/ spare parts to be fitted in the vehicles is given to the customer and then the vehicle is serviced / repaired as per the requirements.

**Raw Materials:** Raw materials to be used in the unit are available in the local market. The annual requirements and costs of raw- materials are shown below:

a. Gear oil	Rs. 52,800/-
b. Lubrication grease	Rs. 26,400/-
c. Spare parts like grip cover, head light, break shoes, fluid pin, nut, gear, wires, cloth wires, rubber mats, silencer, seat covers, other rubber parts, wipe cloth for vehicles etc.	Rs.5,28,000/-
<b>Total</b>	<b><u>Rs. 6,07,200 /-</u></b>

**Water:** There should be a tube well or water supply tap connection near the unit for arrangement of water. Annual requirement of water is estimated at about 3000 Ltrs.

**Power:** The annual expenditure will be Rs.26,400/- for 13,333 KWHrs of electricity consumed..

**Manpower;** Three skilled worker / labour and two assistant labour can take care of the unit. Management, Marketing and accounting the promoter can do himself the activities. The requirement cost of manpower is shown below:

<u>Sl.No.</u>	<u>Category</u>	<u>No of persons</u>	<u>Annual Cost</u>
1.	Manager	1	Self
2.	Skilled worker	3	Rs.1,58,400/-
3.	Assistant	2	Rs. 79,200/-
	<b>Total</b>	<b><u>6</u></b>	<b><u>Rs.2,37,600 /-</u></b>

**CAPITAL COST ESTIMATE:**

<b>A. Fixed Capital</b>			
1. Land & Building	1000 sq .ft		<b>Rented</b>
2. Plant & Machinery			
a. Air Compressor			Rs. 18,000/-
b. Service machine/ Pressure machine to wash vehicles			Rs. 19,800/-
c. Water pump			Rs. 10,800/-
d. Water tank			Rs. 15,000/-
e. Work place for servicing			Rs. 24,000/-
f. Tools (6-7)no 32 nos, spanners/ fixes, screw drivers ( 3 sizes), hammers, Tyres, and other equipments like compressor, tester such grinder, Hand grinder, hand drill etc.			Rs. 48,000/-
			-----
			<b>Rs. 1,35,600/-</b>
3. Furniture & Fixtures			Rs. 11,000/-
4. Preliminary & Preoperative expenses			Rs. 16,500/-
5. Electrification & Water			Rs. 27,500/-
			<b>Total Fixed Costs: Rs. 1,90,600/-</b>
<b>B. Working Capital</b> :for 3 months			
1. Raw materials			Rs. 1,51,800/-
2. Power			Rs. 6,600/-
3. Wages and salaries			Rs. 25,300/-
4. Misc. expenses			Rs. 2,750/-
			<b>Total Working Capital: Rs. 1,86,450/-</b>
			<b>Total Project Cost: Rs. 3,77,050/-</b>

**Means of Finance:**

	<b>Urban</b>		<b>Rural</b>
a. Composite loan under PMEGP	70% Rs.2,63,935 /-	60%	Rs. 2,26,230/-
b. Subsidy	25% Rs. 94,263/-	35%	Rs. 1,31,968/-
c. Margin Money	5% Rs. 18,852/-	5%	Rs. 18,852/-
<b>Debt Equity Ratio</b>	<b>2.33:1</b>		<b>1.50:1</b>

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales	794	927	1059	1059	1059
3.	Annual Costs in					
(a)	Raw Materials	364	425	486	486	486
(b)	Utilities	28	32	37	37	37
(c)	Selling expenses	4	5	5	5	5
4	Variable Cost	396	462	528	528	528
(a)	Wages & Salaries	143	166	190	190	190
(b)	Administrative expenses	79	92	106	106	106
(c)	Depreciation	19	19	19	19	19
(d)	Interest on Composite Loan	31	25	18	11	4
5	Fixed & Semi Variable Cost	272	283	333	326	319
6	Total Cost	668	745	861	854	847
7.	Annual profit	126	182	198	205	212



8	Return on investment	33.42%	48.27%	52.51%	54.37%	56.23%
9.	Return on sales	15.86%	19.63%	18.69%	19.35%	20.01%
10.	Annual Contribution	398	-	-	-	-
11	Break Even Point as percent of capacity	41.00%	-	-	-	-
12	Cash accrual	145	201	217	224	231
13.	<b>Debt servicing capacity</b>	<b>176</b>	<b>226</b>	<b>235</b>	<b>235</b>	<b>235</b>
14	Repayment of Composite Loan	43	50	57	57	57
15.	<b>Debt serviced</b>	<b>54478</b>	<b>65658</b>	<b>66050</b>	<b>59760</b>	<b>53470</b>
16	<b>Pay Back Period</b>	<b>2 yrs 5 month 22 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.48:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	19	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	264	NIL	NIL	NIL	NIL	NIL
3	Increase in Subsidy	94	NIL	NIL	NIL	NIL	NIL
4.	Depreciation	---	19	19	19	19	19
5.	Profit before interests	----	157	207	216	216	216
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>377</b>	<b>176</b>	<b>226</b>	<b>235</b>	<b>235</b>	<b>235</b>
6.	Increase in capital investment	191	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	186	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	31	25	18	11	4
9.	Repayment of loan	NIL	43	50	57	57	57
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>377</b>	<b>74</b>	<b>75</b>	<b>75</b>	<b>68</b>	<b>61</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>102</b>	<b>253</b>	<b>413</b>	<b>560</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>102</b>	<b>151</b>	<b>160</b>	<b>167</b>	<b>174</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>102</b>	<b>253</b>	<b>413</b>	<b>580</b>	<b>754</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	19	145	327	525	730
2	Surplus from operations	126	182	198	205	212
	<b>NET WORTH:</b>	<b>145</b>	<b>327</b>	<b>525</b>	<b>730</b>	<b>942</b>
3.	Composite loan	221	171	114	57	Nil
4.	Subsidy	94	94	94	94	94
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>460</b>	<b>592</b>	<b>733</b>	<b>881</b>	<b>1036</b>
1.	Gross Block	191	191	191	191	191
	<b>Less Depreciation</b>	<b>19</b>	<b>38</b>	<b>57</b>	<b>76</b>	<b>95</b>
<b>2</b>	<b>NET BLOCK</b>	<b>172</b>	<b>153</b>	<b>134</b>	<b>115</b>	<b>96</b>
3	Current Assets	186	186	186	186	186
4.	Cash & Bank Balance	102	253	413	580	754
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>460</b>	<b>592</b>	<b>733</b>	<b>881</b>	<b>1036</b>

## **AUTOMOBILE WORKSHOP**

**Introduction:** In land locked hilly areas Road Transport is the principal mode of transport. As such in NE Region “vehicle- on- road” is very large. These vehicles need regular repair & maintenance. Automobile Workshop (Repair & Servicing) is therefore an important servicing industry for ensuring better transport services in locations like NE Region. Automobile Workshop provides services of preventive maintenance of motor vehicles as well as for repairs and overhauls. Preventive maintenance cuts the down time and increases life of the vehicle a reliable and well equipped automobile workshop is a must for this purpose. Usually such Workshop particularly undertakes servicing of cars with the active collaboration of car manufactures as an authorized station.

**Market:** Automobile servicing, Auto-electric repair, Engine alignment & repair, body repair & denting works etc are frequently required services of any vehicle. Vehicles need to use roads in various conditions and hence often breaks down. Such vehicles are pulled by crane to repair & service centers. The skill of the mechanic/engineer is the key to trouble-shooting in vehicles. In Tripura in 2001 as many as 45,199 vehicles were operating. The number has increased many- fold since then. From mere 415 accidents by various types of vehicles the average annual accidents have increased to more than 1300 per annum. The demand for Automobile repair & servicing has increase by 5 times since 2001. Therefore, there is good scope for Automobile repair & servicing workshops, especially along the National Highway and larger towns.

**Capacity:** The proposed automobile repairing and servicing unit shall operate for single shift of 8 hours per day for 300 working days per annum. Based on average need of services during this period the unit may be able to repair & service 2400 vehicles per annum at the full capacity.

**Process:** The process of repair & service of automobile depend or the extent of damage of vehicle. This is assessed by expert mechanic/engineer of the unit. As per this assessment denting, repair, etc works are done.

**Raw Materials:** Raw materials are to be sourced mainly from the open market. At present availability and supply of the raw materials is not problem e.g spare parts, paints etc to be sourced from open markets. The requirements of raw materials for automobile workshop operations are as under:

- a. Spare parts
- b. Lubricants & Greases
- c. Electrical accessories
- d. Paints
- e. Detergents & Chemicals
- f. Upholstery & other consumable materials.

**Power:** The unit will require a total connected load of 12.5 KVA. Annual consumption of power is estimated at 14,634 KWHrs costing Rs. 60,000/-.

**Water:** The unit shall avail of the PHE water supply already available at the site and it can also install its own tube well for the purpose. Water requirements is 2000 Liters per day.

**Products:** The workshop will have facilities for a. General Servicing of the motor car, b. Car washing and cleaning, c. Cleaning of upholstery, d. Wheel alignment and balancing, e. Exhaust gas checking and tuning of engine, f. Change of oils (Engine oil and gear), g. Engine overhaul & re-boring, h. Removal of

dents and painting, i. Repair & Replacement of components, j. Greasing of components and k. Electrical repair and replacement.

**Manpower:** Manpower required by the Unit are locally available. The requirements and costs of manpower is shown below:

Sl.No.	Designation	Nos.	Amount (Rs.)
1.	Manager cum Chief Mechanic	Self	-
2.	Skilled worker	2	10,000/-
3.	Semi-skilled	1	3,000/-
4.	Helper	2	4,000/-
		<b>Total:</b>	<b>17,000/-</b>

**Capital Cost:**

1. **Land** : The unit requires about 5000 sq. mtrs of land. **On rent**
2. **Building** with covered area of 2000 sq. mtrs to be constructed: **Rs. 1,50,000/-**
3. **Plant & Machinery:**

Sl.No.	Machinery Equipments	Nos.	Amount (Rs.)
1.	Electro Mechanical 2 post Lift	1	1,51,112
2.	Car washer (LL03)	1	65,334
3.	Compressor TS07	1	88,889
4.	Pneumatic gun	2	16,889
5.	Spark plug Tester	1	16,445
6.	Hydrolic Jack (Troly Type)	2	8,000
7.	Double Ended Spanner (6x7-30x32mm)	2	1,065
8.	Ring Spanner (6x7-30x32mm)	2	1,760
9.	Ball pin hammer	2	365
10.	Plus 165mm long	2	311
11.	Socket set 9-14m(22 sockets+5Accessories) (2,9,10,11,12,13,14,15,16,17,18,19,21,22)	2	5,387
12.	Plug Wrench	2no	116
13.	Screw Drivers: 902, 824, 827, 929,etc	2 each	500
		<b>Total</b>	<b>3,56,173</b>
		VAT, Installation, etc	69,454
		<b>Total</b>	<b>4,25,627</b>

4. **Miscellaneous Fixed Assets:**
  - i) Electrification **Rs. 6,000/-**
  - ii) Furniture & fixture **Rs. 5,500/-**
  - iii) First aid box **Rs. 2,000/-**

5. **Preliminary & Pre-operative expenses** **Rs. 5,000/-**

**Total Fixed Capital: Rs. 5,94,127/-**

6. **Working Capital (P.M.)**

**Raw Materials**

- (A) Diesel, Petrol, Kerosine, Lubricants, Painting materials, Grease, other consumable materials **L.S. Rs. 22,000/-**
- (B) Spare parts **Rs. 15,500**
- (C) Salary & Wages **Rs. 17,000/-**

(D) Utilities	Rs. 5,000/-
(E) Misc. Overheads:	Rs. 15,788/-

**Total Working Capital per month: Rs. 75,288/-**

**Total Cost of the Project : Rs. 6,69,415/-**

**Means of Finance:**

		<u>Urban</u>	<u>Rural</u>
1. Composite Loan under PMEGP	70%	Rs. 4,68,591/-	60%Rs. 4,01,649/-
2. Subsidy	25%	Rs. 1,67,354/-	35%Rs. 2,34,295/-
3. Margin Money	5%	Rs. 33,470/-	5%Rs. 33,471/-
	<b>Total</b>	<b>Rs. 6,69,415/-</b>	<b>Rs. 6,69,415/-</b>
4. Debt equity Ratio:		<b>2.33:1</b>	<b>1.50:1</b>

**Profitability:**

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Rs.	7,92,000	9,24,000	10,56,000	10,56,000	10,56,000
3.	Annual Costs in Rs.					
(a)	Raw Materials	2,70,000	3,15,000	3,60,000	3,60,000	3,60,000
(b)	Utilities	36,000	42,000	48,000	48,000	48,000
(c)	Interest on Working capital	6,647	6,588	7,529	7,529	7,529
(d)	Selling expenses	36,000	42,000	48,000	48,000	48,000
4	Variable Cost	3,48,647	4,05,588	4,63,529	4,63,529	4,63,529
(a)	Wages & Salaries	1,22,400	1,42,800	1,63,200	1,63,200	1,63,200
(b)	Administrative expenses	77,674	90,619	1,03,565	1,03,565	1,03,565
(c)	Depreciation	59,412	59,412	59,412	59,412	59,412
(d)	Interest on Composite Loan	53,825	43,535	31,661	18,997	6,332
5	Fixed & Semi Variable Cost	3,13,311	3,36,366	3,57,838	3,45,174	3,32,509
6	<b>Total Cost</b>	<b>6,61,958</b>	<b>7,41,954</b>	<b>8,21,367</b>	<b>8,08,703</b>	<b>7,96,038</b>
7.	<b>Annual profit</b>	<b>1,30,042</b>	<b>1,82,046</b>	<b>2,34,633</b>	<b>2,47,297</b>	<b>2,59,962</b>
8	Return on investment	13.13%	21.45%	31.59%	33.30%	35.00%
9.	Return on sales	9.88%	13.79%	17.76%	18.73%	19.69%
10.	Annual Contribution	4,43,353	5,18,412	5,92,471	5,92,471	5,92,471
11	Break Even Point as percent of capacity	42.40	45.42	48.31	46.61	44.88
12	Cash accrual	1,89,454	2,41,458	2,94,045	3,06,709	3,19,374
13.	Debt servicing capacity	2,43,279	2,84,993	3,25,706	3,25,706	3,25,706
14	Repayment of Composite Loan	75,988	88,652	1,01,317	1,01,317	1,01,317
15.	Debt serviced	1,29,813	1,32,187	1,32,978	1,20,314	1,07,649
16	<b>Pay Back Period</b>	<b>2 years 5 month 2 days</b>				
17.	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.42:1</b>				

**Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	33,470	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	4,68,591	NIL	NIL	NIL	NIL	NIL
3.	Increase in Subsidy	1,67,354	NIL	NIL	NIL	NIL	NIL
4.	Depreciation	NIL	59,412	59,412	59,412	59,412	59,412
5.	Profit before interests	NIL	1,83,867	2,25,581	2,66,294	2,66,294	2,66,294
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>6,69,415</b>	<b>2,43,279</b>	<b>2,84,993</b>	<b>3,25,706</b>	<b>3,25,706</b>	<b>3,25,706</b>
6.	Increase in capital investment	5,94,127	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	75,288	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	53,825	43,535	31,661	18,997	6,332
9.	Repayment of loan	NIL	75,988	88,652	1,01,317	1,01,317	1,01,317
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>6,69,415</b>	<b>1,29,813</b>	<b>1,32,187</b>	<b>1,32,978</b>	<b>1,20,314</b>	<b>1,07,649</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>1,13,466</b>	<b>2,66,272</b>	<b>4,59,000</b>	<b>6,64,392</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>1,13,466</b>	<b>1,52,806</b>	<b>1,92,728</b>	<b>2,05,392</b>	<b>2,18,057</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>1,13,466</b>	<b>2,66,272</b>	<b>4,59,000</b>	<b>6,64,392</b>	<b>8,82,449</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rupees as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of the Promoter	33,470	1,63,512	3,45,558	5,80,191	8,27,488
2.	Surplus from operations	1,30,042	1,82,046	2,34,633	2,47,297	2,59,962
	<b>NET WORTH:</b>	<b>1,63,512</b>	<b>3,45,558</b>	<b>5,80,191</b>	<b>8,27,488</b>	<b>10,87,450</b>
3.	Composite loan	3,92,603	3,03,951	2,02,634	1,01,317	NIL
4.	Subsidy	1,67,354	1,67,354	1,67,354	1,67,354	1,67,354
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>7,23,469</b>	<b>8,16,863</b>	<b>9,50,179</b>	<b>10,96,159</b>	<b>12,54,804</b>
1.	Gross Block	5,94,127	5,94,127	5,94,127	5,94,127	5,94,127
	<b>Less Depreciation</b>	<b>59,412</b>	<b>1,18,824</b>	<b>1,78,236</b>	<b>2,37,648</b>	<b>2,97,060</b>
<b>2</b>	<b>NET BLOCK</b>	<b>5,34,715</b>	<b>4,75,303</b>	<b>4,15,891</b>	<b>3,56,479</b>	<b>2,97,067</b>
3.	Current Assets	75,288	75,288	75,288	75,288	75,288
4.	Cash & Bank Balance	1,13,466	2,66,272	4,59,000	6,64,392	8,82,449
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>7,23,469</b>	<b>8,16,863</b>	<b>9,50,179</b>	<b>10,96,159</b>	<b>12,54,804</b>

**Names and Address of Machinery and Equipments Suppliers: 1. MODERN MACHINE TOOLS,**  
DHEBAR ROAD, OPPOSITE MEHTA PETROL PUMP, RAJKOT - 360 001, **Phone:** +(91)-(281)-2234640

**2. JUPITER MACHINE TOOLS,** JUPITER HOUSE, ROAD NO- 27, SHANTI NAGAR, WAGLE ESTATE  
THANE - 400 604. **Phone:** +(91)-(22)-25803729/25820843 **Fax:** +(91)-(22)-25804823

**3. KANCHAN MACHINE TOOLS,** S. NO. 1, KUDALE PATIL COMPLEX, OPPOSITE PUSHPAK MANGAL  
KARYALYA, MANIKBAUG, PUNE - 411 051. **Phone:** +(91)-(20)-56286812

## LOUNDRY & DRY CLEANING SERVICE

**Introduction:** Dry cleaning is an important Service enterprise which caters to the requirements of washing and cleaning of garments. It is especially suited in the urban areas, where demand from middle and upper middle class households exists. Dry cleaning is mainly suitable for cleaning of costly fabrics and garments like Suits, Silk and Acrylic garments, Saries, Blankets, Sweaters, Coats, Jackets, etc. Dry cleaning is also suitable to clean clothes and garments made of sensitive fabrics.

**Market/Demand:** The market mainly exists in the urban and sub-urban areas with comparatively higher income levels. The demand will come mainly from the households and institutions like hotels, hospitals, boarding homes, etc. Dry cleaning services have always had a good scope in the urban areas. In such areas, many working couples and families regularly use dry cleaning and laundry services due to its convenience. Considering the increasing urbanization and rise of income levels, the demand for dry cleaning services has increased. Dry cleaning is also becoming important as it saves time and removes the drudgery of washing/ cleaning clothes. Besides households and the hotel and tourism industry, there is also good demands from organizations like police/military etc.

**Capacity:** Various types of press of Sharee Shirt/ pant etc. Coat and Dry cleaning of Garments Jacket Coat Pant Sharee will be provided in the unit. Overall services provided to the customers in a year will amount to total receipts of about Rs.12,03,500/-

**Raw Materials:** Various types of raw materials (i.e Detergents, Chemicals, acid etc. Patching papers and consumables to be used in the unit. These are available in the local market. Rs.31,350/- to be required for this unit.

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 1,80,000/-.

**Water :** There should be a tube well or water supply tap connection near the unit for arrangement of water. Annual requirement of water is estimated at 450000 Ltrs.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost in Rs.
1.	Manager	1	Self
2.	Skilled Worker	2	1,20,000/-
3.	Helper	2	96,000/-
	Total	5	2,16,000/-

### Financial Aspects of the Projects:

#### A. Fixed Capital

##### 1. Land & Building

3000 sq .ft      Rented

##### 2. Plant & Machinery

Sl.No.	Descriptions	Qty.	Amount
i)	Dry cleaning machine of 10 kg capacity automatic reversing with timer	1	55,000/-
ii)	Hydro extractor 10 kg capacity complete with single phase motor	1	33,000/-

iii)	Drying tumbler 10 kg capacity automatic reversing, electrically heated with timer, blower etc.	1	35,000/-
iv)	Electric Irons	5	15,000/-
v)	Wiring & Installation charges		4,550/-
	<b>Total</b>		<b>1,42,550/-</b>

**B. Miscellaneous Fixed Assets**

SI.No.	Particulars		Amount (Rs.)
i)	Different types of Racks with Glass and wooden make	1 No	20,000/-
ii)	Showcase	1no	15,000/-
iii)	Chair/Working Table and Signboard/ Air condition, fan, Lighting	1 no	22,700/-
	<b>Total</b>		<b>57,700/-</b>

**6. Working Capital (P.M.)**

a)	Raw Material	Rs.	31,350/-
b)	Utilities	Rs.	1,800/-
c)	Salary & Wages	Rs.	18,000/-
d)	Other expenses	Rs.	15,000/-

**Total: Rs. 66,150/-**

**Total working capital for 3 months: Rs. 1,98,450/-**

**Total Project Cost: Rs. 3,98,700/-**

**Means of Finance:**

	<u>Urban</u>	<u>Rural</u>
1. Composite loan	2,79,090/-	2,39,220/-
2. Promoter's contribution	19,935/-	19,935/-
3. Subsidy	99,675/-	1,39,545/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

SI.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	6,45,000	7,52,500	8,60,000	8,60,000	8,60,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	2,25,720	2,63,340	3,00,960	3,00,960	3,00,960
b)	Utilities	12,960	15,120	17,280	17,280	17,280
c)	Selling expenses	47,550	55,470	63,400	63,400	63,400
	<b>Variable Cost</b>	<b>2,86,230</b>	<b>3,33,930</b>	<b>3,81,640</b>	<b>3,81,640</b>	<b>3,81,640</b>
d)	Wages & Salaries	1,29,600	1,51,200	1,72,800	1,72,800	1,72,800
e)	Administrative expenses	1,08,000	1,26,000	1,44,000	1,44,000	1,44,000
f)	Depreciation	20,025	20,025	20,025	20,025	20,025
g)	Interest on Composite Loan	32,058	25,929	17,915	10,372	2,829
	Fixed & Semi Variable Cost	2,89,683	3,23,154	3,54,740	3,47,197	3,39,654
<b>4.</b>	<b>Total Cost</b>	<b>5,75,913</b>	<b>6,57,084</b>	<b>7,36,380</b>	<b>7,28,837</b>	<b>7,21,294</b>
5.	Annual Profit	69,087	95,416	1,23,620	1,31,163	1,38,706
6.	Return on Investment	17.32%	23.93%	31.00%	32.89%	34.78%
7.	Return on sales	6.42%	8.87%	11.49%	12.20%	12.90%
8.	Annual contribution	3,58,770	-	-	-	-
9.	Break Even Point			48.44%		
10.	Cash accrual	89,112	1,15,441	1,43,645	1,51,188	1,58,731
11.	Debt Servicing Capacity	1,21,170	1,41,370	1,61,560	1,61,560	1,61,560

12.	Repayment of Composite Loan	45,258	52,801	60,344	60,344	60,344
13.	Debt Serviced	77,316	78,730	78,259	70,716	63,173
14.	Pay Back Period	1 year 6 months 21 days				
15.	Debt Service Coverage Ratio	1.56:1				

Cash Flow Statement:

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	19,935	-	-	-	-	-
2.	Increase in Term loan	2,79,090	1,98,450	-	-	-	-
3.	Subsidy	99,675	-	-	-	-	-
4.	Depreciation	-	20,025	20,025	20,025	20,025	20,025
5.	Profit before interests	-	1,01,145	1,21,345	1,41,535	1,41,535	1,41,535
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,98,700</b>	<b>3,19,620</b>	<b>1,41,370</b>	<b>1,61,560</b>	<b>1,61,560</b>	<b>1,61,560</b>
6.	Increase in capital investment	<b>3,98,700</b>	-	-	-	-	-
7.	Increase in working capital	-	1,98,450	-	-	-	-
8.	Interest	-	32,058	25,929	17,915	10,372	2,829
9.	Repayment of Term Loan	-	45,258	52,801	60,344	60,344	60,344
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,98,700</b>	<b>2,75,766</b>	<b>78,730</b>	<b>78,259</b>	<b>70,716</b>	<b>63,173</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>43,854</b>	<b>62,640</b>	<b>83,301</b>	<b>90,844</b>	<b>98,387</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>	<b>3,79,026</b>

Projected Balance sheet:

Sl.No.	Description	Amount in Rupees as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	19,935	89,022	1,84,438	3,08,058	4,39,221
2.	Surplus from operation	69,087	95,416	1,23,620	1,31,163	1,38,706
	<b>NET WORTH:</b>	<b>89,022</b>	<b>1,84,438</b>	<b>3,08,058</b>	<b>4,39,221</b>	<b>5,77,927</b>
<b>3.</b>	<b>Subsidy</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>
4.	Term loan outstanding	2,33,832	1,81,031	1,20,687	60,343	-
	<b>TOTAL LIABILITIES</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>
1.	Gross Block	2,00,250	2,00,250	2,00,250	2,00,250	2,00,250
	Less Depreciation	20,025	40,050	60,075	80,10	1,00,125
	<b>NET BLOCK</b>	<b>1,80,225</b>	<b>1,60,200</b>	<b>1,40,175</b>	<b>1,20,150</b>	<b>1,00,125</b>
2.	Working capital	1,98,450	1,98,450	1,98,450	1,98,450	1,98,450
3.	Cash & Bank Balance	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>	<b>3,79,026</b>
	<b>TOTAL ASSETS</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>



## GYMNESSIUM & FITNESS CENTRE

**Introduction:** Health and beautiful body is desired by everyone youth. From ancient times, many techniques have been in use to achieve the objective. Earlier, akhadas (traditional wrestling centres) were the local point of body building and similar activities but as time changed, health clubs and gymnasiums have replaced them. Men have been attracted towards health clubs/ gyms mainly for body building purpose while women seek a slim and trim body that is fit in all sense. This is the reason why health clubs for women are often called as slimming centres or body shaping centres. Not only have women become more and more health conscious but they are also viewing fitness as a major problem. With the urge to look beautiful and healthy, increasing health clubs and gyms are here to stay.

**Market:** Today body shaping and fitness has attained scientific approach, with machines and exercises being prescribed for different parts of the body. Individual attention and personalized treatment according to the needs by professionally trained instructor and glitter to this service industry. Customers are not only told and shown the right way to use machines and exercise, they are also prescribed the right kind and amount of exercises depending upon individual needs and capacity. Since the objective of health clubs of men and women are different, men need health clubs for body building while women go to health clubs for weight reduction, the machinery used in both are different. Entrepreneur can establish a health club for men or women depending upon the local demand.

**Raw Material:** This unit does not have any raw material as such consumables like powder, Oil, towels/ napkins etc. will be the only things required. On which Rs. 5,500/- will be spent monthly and the raw materials can be obtained from local whole-sale markets.

### **Manpower:**

Two trained trainer and one assistant will need for the unit, all of whom are locally available. The annual cost of manpower is estimated Rs. 1,58,400/-.

SI.No.	Particulars	No.	Salary per month
1.	Manager/ Trainer	1	5,500/-
2.	Assistant Trainer	1	4,400/-
3.	Assistant	1	3,300/-
	<b>Total:</b>	<b>3</b>	<b>13,200/-</b>

**Service Target:** The revenue from this unit will be generated through the fee paid by customers in lieu of services provided. Generally monthly fee is charged with a one timer registration fee or security deposit charged at the time of admission. People coming to the club will be divided into 8-10 batches, each having a maximum time of 1-2 hours at the machines Rs. 385/- per month will be charged per person for this. Total receipts of Rs. 6,00,600/- are expected if 130 customers are given admission every month.

### **CAPITAL COST ESTIMATE:**

1)	<b>Land &amp; Building</b>		Rented
2)	<b>Machinery &amp; equipments</b>		
	<b><u>Gym/ Fitness centre for Men</u></b>		
i)	Bench press		Rs. 22,482/-
ii)	Single pulley pull down	1	Rs. 21,456/-
iii)	Leg press	1	Rs. 21,048/-
iv)	Arm wrestling machine	1	Rs. 19,470/-

v)	Bicep machine	1	Rs. 19,134/-
vi)	Hip flexer with parallel fans	1	Rs. 10,725/-
vii)	Walker machine	1	Rs. 22,656/-
viii)	Cycle	2	Rs. 7,780/-
ix)	Dumbels	200	Rs. 14,400/-
x)	Abdominal Board	1	Rs. 9,480/-
xi)	Twister	1	Rs. 2,730/-
			<b>Total: Rs. 1,72,416/-</b>

**Fitness centre for Women**

(i)	Rock climber	1	Rs. 34,200/-
(ii)	Ski machine	1	Rs. 17,160/-
(iii)	Body jacks	1	Rs. 16,800/-
(iv)	Tread mill	1	Rs. 30,000/-
(v)	Recumbent bike	1	Rs. 6,000/-
(vi)	Rowing machine	1	Rs. 24,000/-
(vii)	Step tech.	1	Rs. 11,400/-
(viii)	Double burner	1	Rs. 11,400/-
			<b>Total: Rs. 1,50,260/-</b>

3)	Expenditure on interiors:	Rs. 25,000/-
4)	Preliminary & pre-operative expenditure:	Rs. 22,000/-
5)	Electrification & installation	Rs. 13,200/-
		<b>Total Fixed Cost: Rs. 3,86,076/-</b>

**Working capital:**

1)	Raw Material:	-	Rs. 5,500/-
2)	Salary & Wages	-	Rs. 13,200/-
3)	Utilities	-	Rs. 2,750/-
4)	Misc. expenditure	-	Rs. 8,250/-

**Total Working Capital: Rs. 29,700/-****Total Project Cost: Rs. 4,15,776/-****Means of Finance**

		<b>Urban</b>	<b>Rural</b>
1.	Composite Loan	Rs. 2,91,043/-	Rs. 2,49,465/-
2.	Promoter's contribution	Rs. 20,789/-	Rs. 20,789/-
3.	Subsidy	Rs. 1,03,944/-	Rs. 1,45,522/-
4.	Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	Annual Sales Realization in Rs.	360	420	480	480	480
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	40	46	53	53	53
b)	Utilities	20	23	26	26	26
c)	Selling expenses	12	14	16	16	16
d)	Wages & Salaries	95	111	127	127	127
e)	Administrative overheads	59	69	79	79	79
f)	Depreciation	38	38	38	38	38
g)	Interest on Composite Loan	30	25	18	11	4
4.	<b>Total Cost</b>	<b>294</b>	<b>326</b>	<b>357</b>	<b>350</b>	<b>343</b>
	Variable Cost	46	69	79	79	79

5.	<b>Annual Profit</b>	<b>66</b>	<b>94</b>	<b>123</b>	<b>130</b>	<b>137</b>
6.	<b>Return on Investment</b>	<b>15.86%</b>	<b>22.59%</b>	<b>29.56%</b>	<b>31.25%</b>	<b>32.93%</b>
7.	<b>Return on sales</b>	<b>18.33%</b>	<b>22.38%</b>	<b>25.12%</b>	<b>27.08%</b>	<b>28.54%</b>
8.	Annual contribution	314				
9.	Break Even Point as percent of capacity	47.38%				
10.	Cash accrual	104	132	161	168	175
11.	Debt Servicing Capacity	134	157	179	179	179
12.	Repayment of Composite Loan	47	55	63	63	63
13.	Debt Serviced	77	80	81	74	67
14.	<b>Pay Back Period</b>	<b>1 year 11 months 1 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.92:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	21	-	-	-	-	-
2.	Increase in Term loan	291		-	-	-	-
3.	Subsidy	104	-	-	-	-	-
4.	Depreciation	-	38	38	38	38	38
5.	Profit before interests	-	96	119	141	141	141
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>416</b>	<b>134</b>	<b>157</b>	<b>179</b>	<b>179</b>	<b>179</b>
6.	Increase in capital investment	386	-	-	-	-	-
7.	Increase in working capital	30	-	-	-	-	-
8.	Interest	-	30	25	18	11	4
9.	Repayment of Term Loan	-	47	55	63	63	63
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>416</b>	<b>77</b>	<b>80</b>	<b>81</b>	<b>74</b>	<b>67</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>57</b>	<b>134</b>	<b>232</b>	<b>337</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>57</b>	<b>77</b>	<b>98</b>	<b>105</b>	<b>112</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>57</b>	<b>134</b>	<b>232</b>	<b>337</b>	<b>449</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	21	87	181	304	434
2.	Surplus from operation	66	94	123	130	137
	<b>NET WORTH:</b>	<b>87</b>	<b>181</b>	<b>304</b>	<b>434</b>	<b>571</b>
<b>3.</b>	<b>Subsidy</b>	<b>104</b>	<b>104</b>	<b>104</b>	<b>104</b>	<b>104</b>
4.	Term loan outstanding	244	189	126	63	-
	<b>TOTAL LIABILITIES</b>	<b>435</b>	<b>477</b>	<b>534</b>	<b>601</b>	<b>675</b>
1.	Gross Block	386	386	386	386	386
	Less Depreciation	38	76	114	152	190
	<b>NET BLOCK</b>	<b>348</b>	<b>310</b>	<b>272</b>	<b>234</b>	<b>196</b>
2.	Working capital	30	30	30	30	30
3.	Cash & Bank Balance	<b>57</b>	<b>134</b>	<b>232</b>	<b>337</b>	<b>449</b>
	<b>TOTAL ASSETS</b>	<b>435</b>	<b>477</b>	<b>534</b>	<b>601</b>	<b>675</b>

**Machinery Supplier**

- 1) UNITED IMPORTERS CORPORATION, 26, Jawaharlal Nehru Road, 1<sup>st</sup> Floor, Kolkata – 87.
- 2) COMMERCE INTERNATIONAL, 8, Camac Street, Kolkata – 17.
- 3) G.S. MARKETING ASSOCIATES, 108/9, Monohar Pukur Road, Kolkata – 2

## CRECHE

**Introduction:** The society of today has seen a see-saw-change in working patterns. Now-a-days both husband and wife work and due to the single family system, day care of small kids is a big problem. Women cannot take long leaves while domestic maids are not easily available. Therefore, rearing-up of children has become a major problem. This has given birth to baby crèche or child care centres where working women leave their children while going to work and pick them up when they return. These centres have become an essential part of the modern society and work culture.

**Market:** Baby crèche are meant for 3 month old to 4 years old children. The services rendered to children of different age group are different. Cleaning and personal hygiene, bathing, milk feeding etc. are the requirement of children below the age of 3 years, while older children require to be fed, taught and entertained. Milk and eatables are mostly sent by parents and the staff of a crèche feeds them to children. These services can also be provided by the crèche. Timing of the crèche may vary according to the needs of the parents. It may be from 7 am to 6 pm or any other suitable timing. Besides many children are left at crèche after their school and stay at crèche till their parents return.

<b>Raw Material:</b>	(i) Milk, Milk powder, sugar etc.	Rs. 55,000/-
	(ii) Books, chalk, crayon etc.	Rs. 8,800/-
	(iii) Medicines	Rs. 1,100/-
	(iv) Soap etc.	Rs. 1,100/-
<b>Total Raw Material:</b>		<b>Rs. 66,000/-</b>

Raw materials such as Milk, Milk powder, medicines, books etc. can also be obtained from local market.

**Manpower:** The following manpower required by the Unit are locally available.

1)	Teacher	Rs. 13,200/-
2)	Asstt.	Rs. 11,550/-
3)	Maid servant	Rs. 8,250/-
<b>Total:</b>		<b>Rs. 33,000/-</b>

**Services to be provided by the unit and expected revenue:** The unit will provide service of looking after and feeding children and providing elementary education and entertainment. It is estimated that about 100 children will be admitted monthly charging Rs. 600/- per month per child will fetch an annual receipts of Rs. 7,20,000/-.

### CAPITAL COST ESTIMATE:

- A) **Fixed Capital:**
- (1) Land & Building 2800 sq.ft. **Rented**
- (2) Equipments needed to run the unit:

Sl.No.	Particulars	No.	Total Cost (Rs.)
1.	Gas cylinder & Burner	1	4,800/-
2.	Aqua guard for clean water	1	9,000/-
3.	Bed and other necessities	20 set	1,08,000/-
4.	Utensils	20 set	24,000/-
5.	Other kitchen utensils	1	2,400/-
6.	Music system	1	4,200/-
7.	T.V.	1	16,800/-
8.	Swings		6,000/-
9.	Toys		6,000/-

10.	Bucket/ tub/ water storage equipment		6,000/-
11.	Blackboard		1,200/-
12.	Books for children		6,000/-
13.	Chairs for children		6,000/-
14.	Other facilities		24,000/-
		<b>Total:</b>	<b>2,24,400/-</b>

- 3) Electrification Rs. 5,300/-  
 4) Preliminary & pre-operative expenses Rs. 5,500/-  
 5) Other Misc. Fixed assets Rs. 22,000/-

**Total fixed assets: Rs. 2,55,200/-**

**B. Working capital: (For 3 months)**

- 1) Raw Material Rs. 66,000/-  
 2) Salary & Wages Rs. 33,000/-  
 3) Utilities Rs. 3,300/-  
 4) Misc. expenses Rs. 29,700/-

**Total Working Capital: Rs. 1,32,000/-**

**Total Project Cost: Rs. 3,87,200/-**

**Means of Finance**

- |                            | <u>Urban</u>   | <u>Rural</u>   |
|----------------------------|----------------|----------------|
| 1. Composite Loan          | Rs. 2,71,040/- | Rs. 2,32,320/- |
| 2. Promoter's contribution | Rs. 19,360/-   | Rs. 19,360/-   |
| 3. Subsidy                 | Rs. 96,800/-   | Rs. 1,35,520/- |
| 4. Debt equity ratio       | 2.33:1         | 1.50:1         |

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60	70	80	80	80
2.	<b>Annual Sales Realization</b>	<b>475</b>	<b>554</b>	<b>634</b>	<b>634</b>	<b>634</b>
3.	<b>Annual Costs</b>					
a)	Raw Materials	158	185	211	211	211
b)	Utilities	8	9	11	11	11
c)	Selling expenses	12	14	16	16	16
	Variable Cost	178	208	238	238	238
d)	Wages & Salaries	79	92	106	106	106
e)	Administrative expenses	67	79	90	90	90
f)	Depreciation	25	25	25	25	25
g)	Interest on Composite Loan	31	25	18	11	4
	Fixed & Semi Variable Cost	202	221	239	232	225
4.	<b>Total Cost</b>	<b>380</b>	<b>429</b>	<b>477</b>	<b>470</b>	<b>465</b>
5.	<b>Annual Profit</b>	<b>95</b>	<b>125</b>	<b>157</b>	<b>164</b>	<b>171</b>
6.	<b>Return on Investment</b>	<b>26.37%</b>	<b>34.72%</b>	<b>43.30%</b>	<b>45.19%</b>	<b>47.08%</b>
7.	<b>Return on sales</b>	<b>20.45%</b>	<b>23.07%</b>	<b>25.18%</b>	<b>26.28%</b>	<b>27.38%</b>
8.	Annual contribution	2,70,000				
9.	Break Even Point as percent of capacity	40.36%				
10.	Cash accrual	1,09,864	1,37,814	1,66,555	1,72,893	1,79,231
11.	Debt Servicing Capacity	1,36,800	1,59,600	1,82,400	1,82,400	1,82,400
12.	Repayment of Composite Loan	44	51	59	59	59
13.	Debt Serviced	64,963	66,151	66,548	60,210	53,871
14.	<b>Pay Back Period</b>	<b>2 year 1 month 6 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>3.10:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	19	-	-	-	-	-
2.	Increase in Term loan	271	-	-	-	-	-
3.	Subsidy	97	-	-	-	-	-
4.	Depreciation	-	25	25	25	25	25
5.	Profit before interests	-	126	150	175	175	175
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>387</b>	<b>151</b>	<b>175</b>	<b>200</b>	<b>200</b>	<b>200</b>
6.	Increase in capital investment	255	-	-	-	-	-
7.	Increase in working capital	132	-	-	-	-	-
8.	Interest	-	31	25	18	11	4
9.	Repayment of Term Loan	-	44	51	59	59	59
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>387</b>	<b>75</b>	<b>76</b>	<b>77</b>	<b>70</b>	<b>63</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>76</b>	<b>175</b>	<b>298</b>	<b>428</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>76</b>	<b>99</b>	<b>123</b>	<b>130</b>	<b>137</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>76</b>	<b>175</b>	<b>298</b>	<b>428</b>	<b>565</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	19	114	239	396	560
2.	Surplus from operation	95	125	157	164	171
	<b>NET WORTH:</b>	114	239	396	560	731
<b>3.</b>	<b>Subsidy</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>
4.	Term loan outstanding	227	176	117	58	-
	<b>TOTAL LIABILITIES</b>	<b>438</b>	<b>512</b>	<b>610</b>	<b>715</b>	<b>828</b>
1.	Gross Block	255	255	255	255	255
	Less Depreciation	25	50	75	100	125
	<b>NET BLOCK</b>	<b>230</b>	<b>205</b>	<b>180</b>	<b>155</b>	<b>130</b>
2.	Working capital	132	132	132	132	132
3.	Cash & Bank Balance	76	175	298	428	565
	<b>TOTAL ASSETS</b>	<b>438</b>	<b>512</b>	<b>610</b>	<b>715</b>	<b>828</b>

**Suppliers of Raw Material/ Equipments**

These can be obtained locally.

## PATHOLOGICAL LABORATORY

**Introduction:** Modern Medical Science depends to a large extent on scientific tests for diagnosis of diseases. Tests of Blood, Sputum, Urine, etc is unavoidable to diagnose diseases. Importance of Radiology and Pathology as parts of Medical Science is increasing every day. With Computerization and development of modern diagnostic machinery Ultra-sound Scanning, X-Ray and Pathology has developed manifolds in the recent years. Besides, Medical Practitioners are relying on these branches of medical science reliable. These help in not only diagnosis of the exact nature of the disease but also the exact type of cause of it. A Pathological laboratory backed by modern machinery, expert Para-Medical manpower and good pathologist is not only a significant aid to the community health but also an excellent commercial venture. Pathological laboratory is considered as an industry for financing purpose.

**Market:** As indicated earlier Pathological Laboratory is an essential; infrastructure for community health as it assists in diagnosis of the exact nature of disease and its cause. Now-a-days all medical practitioner recommend tests before diagnosis and prescribing specific medicines. Prior to these tests only medicines meant for symptom cures are prescribed. Actual treatment commence after these tests and hence exact diagnosis. As such Pathological Laboratories, with or without Clinic/ Nursing Home/ Hospital, has come up all over the Country. In Tripura two Medical Colleges with Hospitals, four District Hospitals, five other Hospitals, 82 Public Health Centres and 540 Dispensaries exist. Besides, 38 Ayurvedic and 75 Homeopathic medical institutions exist. These engage more than 860 Doctors. Besides, almost equal number of Doctors is practicing privately, All these Doctors need services of Pathological Laboratories. In 2003- 04 Tripura treated 2, 215, 698 Patients, which may have increased to more than 3, 500, 000 patents in 2009- 10. Considering this as the number of Pathological tests required there is a demand enough to sustain more than 350 Pathological Laboratories. Against this demand mere 150 or so of Pathological Laboratories exist in the State. Therefore, there is very good marketing scope for Pathological Laboratories in the State.

**Capacity:** The Pathological laboratory shall operate for single shift of 8 hours per day for 300 working days per annum. The annual installed capacity is estimated at 40,000 Test valued at Rs. 20,00,000/-.

**Process of Manufacture:** Pathological tests are done by expert paramedical workers as per prescription of Medical Practitioners. Samples of Blood, Urine, Sputum etc are taken as per standard practices in sterilized containers under the supervision of paramedical staff. These are then either tested manually or by Auto analyzer or by using standard kits. Results are then interpreted by Registered pathologists.

**Inputs:** The Unit shall need Reagents & Chemicals with standard Test-kits for various pathological tests. The annual cost of these at the installed capacity is estimated at Rs. 3,76,200/-. Besides, papers, stationery and computer inputs worth Rs. 31,350/- shall be necessary.

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 1,80,000/-.

**Water:** The unit will need 3000 liters of clean and soft water. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Skilled Worker	2	1,20,000/-
3.	Helper	2	96,000/-
	Total	5	2,16,000/-

**Capital Cost Estimate:**

1. Land & Building admeasuring 30 Sq.Mtrs. Own
2. Plant & Machinery including one Auto-analyser, one Incubator, one Polarimeter, one Laboratory autoclave, one set of equipments, one Heamometer, Blood Pressure testing equipments, one Digital Analytical Balance, one pH-meter, one Hot Air Oven,two Water Bath,one Muffle Furnace, One Bioplan Research Microscope, one Hot-plate Rs. 1,42,550/-
3. Miscellaneous Fixed Assets including modification of Electrification & Water installation, initial set of Test kits, furniture & fixtures and a Computer set Rs. 27,000/-

**Total: Rs. 1,69,550/-**

4. Provision for contingencies Rs. 20,000/-

5. Preliminary & Preoperative expenses Rs. 10,700/-

**Total Fixed Investment: Rs. 2,00,250/-**6. **Working Capital (P.M.)**

- a) Raw Material Rs. 31,350/-
- b) Utilities Rs. 1,800/-
- c) Salary & Wages Rs. 18,000/-
- d) Other expenses Rs. 15,000/-

**Total: Rs. 66,150/-****Total working capital for 3 months: Rs. 1,98,450/-****Total Project Cost: Rs. 3,98,700/-****Means of Finance:**

- |                            | <u>Urban</u>   | <u>Rural</u>   |
|----------------------------|----------------|----------------|
| 1. Composite loan          | Rs. 2,79,090/- | Rs. 2,39,220/- |
| 2. Promoter's contribution | Rs. 19,935/-   | Rs. 19,935/-   |
| 3. Subsidy                 | Rs. 99,675/-   | Rs. 1,39,545/- |
| 4. Debt equity ratio       | 2.33:1         | 1.50:1         |

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	6,45,000	7,52,500	8,60,000	8,60,000	8,60,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	2,25,720	2,63,340	3,00,960	3,00,960	3,00,960
b)	Utilities	12,960	15,120	17,280	17,280	17,280
c)	Selling expenses	47,550	55,470	63,400	63,400	63,400
	Variable Cost	2,86,230	3,33,930	3,81,640	3,81,640	3,81,640
d)	Wages & Salaries	1,29,600	1,51,200	1,72,800	1,72,800	1,72,800
e)	Administrative expenses	1,08,000	1,26,000	1,44,000	1,44,000	1,44,000
f)	Depreciation	20,025	20,025	20,025	20,025	20,025
g)	Interest on Composite Loan	32,058	25,929	17,915	10,372	2,829
	Fixed & Semi Variable Cost	2,89,683	3,23,154	3,54,740	3,47,197	3,39,654
4.	<b>Total Cost</b>	<b>5,75,913</b>	<b>6,57,084</b>	<b>7,36,380</b>	<b>7,28,837</b>	<b>7,21,294</b>
5.	<b>Annual Profit</b>	<b>69,087</b>	<b>95,416</b>	<b>1,23,620</b>	<b>1,31,163</b>	<b>1,38,706</b>



6.	<b>Return on Investment</b>	<b>17.32%</b>	<b>23.93%</b>	<b>31.00%</b>	<b>32.89%</b>	<b>34.78%</b>
7.	<b>Return on sales</b>	<b>6.42%</b>	<b>8.87%</b>	<b>11.49%</b>	<b>12.20%</b>	<b>12.90%</b>
8.	Annual contribution	3,58,770	-	-	-	-
9.	Break Even Point	48.44%				
10.	Cash accrual	89,112	1,15,441	1,43,645	1,51,188	1,58,731
11.	Debt Servicing Capacity	1,21,170	1,41,370	1,61,560	1,61,560	1,61,560
12.	Repayment of Composite Loan	45,258	52,801	60,344	60,344	60,344
13.	Debt Serviced	77,316	78,730	78,259	70,716	63,173
14.	<b>Pay Back Period</b>	<b>1 year 6 months 21 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.56:1</b>				

### **Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	19,935	-	-	-	-	-
2.	Increase in Term loan	2,79,090	1,98,450	-	-	-	-
3.	Subsidy	99,675	-	-	-	-	-
4.	Depreciation	-	20,025	20,025	20,025	20,025	20,025
5.	Profit before interests	-	1,01,145	1,21,345	1,41,535	1,41,535	1,41,535
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,98,700</b>	<b>3,19,620</b>	<b>1,41,370</b>	<b>1,61,560</b>	<b>1,61,560</b>	<b>1,61,560</b>
6.	Increase in capital investment	3,98,700	-	-	-	-	-
7.	Increase in working capital	-	1,98,450	-	-	-	-
8.	Interest	-	32,058	25,929	17,915	10,372	2,829
9.	Repayment of Term Loan	-	45,258	52,801	60,344	60,344	60,344
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,98,700</b>	<b>2,75,766</b>	<b>78,730</b>	<b>78,259</b>	<b>70,716</b>	<b>63,173</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>43,854</b>	<b>62,640</b>	<b>83,301</b>	<b>90,844</b>	<b>98,387</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>	<b>3,79,026</b>

### **Projected Balance sheet:**

Sl. No.	Description	Amount in Rupees as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	19,935	89,022	1,84,438	3,08,058	4,39,221
2.	Surplus from operation	69,087	95,416	1,23,620	1,31,163	1,38,706
	<b>NET WORTH:</b>	<b>89,022</b>	<b>1,84,438</b>	<b>3,08,058</b>	<b>4,39,221</b>	<b>5,77,927</b>
3.	<b>Subsidy</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>
4.	Term loan outstanding	2,33,832	1,81,031	1,20,687	60,343	-
	<b>TOTAL LIABILITIES</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>
1.	Gross Block	2,00,250	2,00,250	2,00,250	2,00,250	2,00,250
	Less Depreciation	20,025	40,050	60,075	80,10	1,00,125
	<b>NET BLOCK</b>	<b>1,80,225</b>	<b>1,60,200</b>	<b>1,40,175</b>	<b>1,20,150</b>	<b>1,00,125</b>
2.	Working capital	1,98,450	1,98,450	1,98,450	1,98,450	1,98,450
3.	Cash & Bank Balance	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>	<b>3,79,026</b>
	<b>TOTAL ASSETS</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>

### **Supplies of Machinery & Equipments :**

**Blue Horizon**, Gopal Nivas, 135, S.G.Marg, Princess Street, Mumbai – 400002. Ph:022-22062887

**Biosystem International**, "India House", 56/6 Popatwadi, 1st Floor, Near Hanuman Temple,

Mumbai – 400002. Ph:022-22016510

## DHABA

**Introduction :** Way-side restaurant cum drivers' resting places are called Dhaba. Dhaba normally have good toilet, resting cots and restaurant facilities, besides Truck & Car parking space adjacent to arterial roads. Dhaba performs well if it is located midway between two major destinations about 6 to 12 hours journey apart.

**Market :** Dhaba are specially preferred by Truck operators. Therefore, Dhabas just outside towns with traffic restrictions, near truck parking bays and midway between two major towns have good sales. For example locations like outskirts of Agartala. Chakmaghat, Kumarghat to Sanitala and Churaibari along Assam-Agartala Road are good locations for Dhaba. In Agartala Subroom route locations between Matabari to Shantirbazar may have better scope for Dhabas. Operators of Truck, Bus and small vehicles prefer to park their vehicles, respond to natures' call and have refreshments in such locations. Truck Drivers and workers often take bath in Dhabas, with fast increasing vehicle population need for Dhabas have increased.

**Description:** The proposed Dhaba shall have excellent Toilet block with bath facilities and separate ladies & gentleman's toilets. It will have a restaurant, adequate parking facilities for six trucks or equivalent, an open shed with five cots for rest. Restaurant, Bathroom and Water closets shall be used against necessary payments. The restaurant shall have adequate facility to feed forty persons at a time. Apart from toilet block all facilities shall be in temporary sheds.

**Fuel:** The unit will use Commercial LPG Cylinders as its fuel for kitchen. Annually 48 cylinders costing Rs. 24,000/- may be required.

**Water:** The Dhaba shall consume 1500 Ltrs. of water per day which shall be available from ground water source at site. The water for drinking and cooking shall be filtered.

**Electricity :** Dhaba need to attract vehicle operators from distance and hence lighting of it is of importance. A connected load of 2 KW may suffice. Annually 5000 KWHrs of power may be consumed which may cost Rs. 17,500/-.

**Manpower :** The Dhaba will need one manager, one sweeper, one cook, two helpers of cook and two waiters. These may cost Rs. 2,10,000/- per annum.

### **Capital Cost Estimate:**

1.	Land admeasuring 1 kani or 17280 sq.ft.	<b>Own</b>
2.	Site development	<b>Rs. 24,000/-</b>
3.	Toilet block	<b>Rs. 60,000/-</b>
4.	Temporary sheds	<b>Rs. 1,20,000/-</b>
5.	Kitchen equipments	<b>Rs. 36,000/-</b>
6.	4 cots of steel with nylon rope bed	<b>Rs. 12,000/-</b>
7.	Provision for contingencies	<b>Rs. 18,000/-</b>
8.	Preliminary & Pre-operators expenses	<b><u>Rs. 18,000/-</u></b>
		<b>Rs. 2,88,000/-</b>
<b>B.</b>	<b><u>Working capital for 3 months</u></b>	
	(a) Fuel	Rs. 6,600/-
	(b) Food Articles & other raw materials	Rs. 1,48,500/-

(c) Electricity	Rs. 4,950/-
(d) Wages & salaries	Rs. 57,750/-
(e) Miscellaneous expenses	Rs. 16,500/-

**Total Working Capital: Rs. 2,34,300/-**  
**Total Project cost: Rs. 5,22,300/-**

**Means of Finance:**

	<u>Urban</u>	<u>Rural</u>
1. Composite loan under PMEGP	3,65,610/-	3,13,380/-
2. Promoters Capital	26,115/-	26,115/-
3. Subsidy	1,30,575/-	1,82,805/-
4. Debt equity ratio	2.33:1	11.5:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	<b>Annual Sales Realization</b>	<b>792</b>	<b>924</b>	<b>1056</b>	<b>1056</b>	<b>1056</b>
3.	<b>Annual Costs</b>					
a)	Raw Materials	356	416	475	475	475
b)	Utilities	16	18	21	21	21
c)	Selling expenses	4	5	5	5	5
	Variable Cost	376	439	501	501	501
d)	Wages & Salaries	139	162	185	185	185
e)	Administrative expenses	107	125	143	143	143
f)	Depreciation	28	28	28	28	28
g)	Interest on Composite Loan	42	34	25	15	5
	Fixed & Semi Variable Cost	316	349	381	371	361
4.	<b>Total Cost</b>	<b>692</b>	<b>788</b>	<b>882</b>	<b>872</b>	<b>862</b>
5.	<b>Annual Profit</b>	<b>100</b>	<b>136</b>	<b>174</b>	<b>184</b>	<b>194</b>
6.	<b>Return on Investment</b>	<b>20.83%</b>	<b>28.06%</b>	<b>35.53%</b>	<b>37.42%</b>	<b>39.31%</b>
7.	<b>Return on sales</b>	<b>13.10%</b>	<b>15.13%</b>	<b>16.78%</b>	<b>17.66%</b>	<b>18.55%</b>
8.	Annual contribution	416	-	-	-	-
9.	Break Even Point as percent of capacity	45.57%				
10.	Cash accrual	128	164	202	212	222
11.	Debt Servicing Capacity	170	198	227	227	227
12.	Repayment of Composite Loan	59	69	80	79	79
13.	Debt Serviced	101	103	105	94	84
14.	<b>Pay Back Period</b>	<b>1 year 9 month days</b>				
15.	<b>D.S.C.R.</b>	<b>1.76:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	26	-	-	-	-	-
2.	Increase in composite loan	366	-	-	-	-	-
3.	Subsidy	130	-	-	-	-	-
4.	Depreciation	-	28	28	28	28	28
5.	Profit before interests	-	142	170	199	199	199
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>522</b>	<b>170</b>	<b>198</b>	<b>227</b>	<b>227</b>	<b>227</b>

6.	Increase in capital investment	288	-	-	-	-	-
7.	Increase in working capital	234	-	-	-	-	-
8.	Interest	-	42	34	25	15	5
9.	Repayment of Term Loan	-	59	69	80	79	79
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>522</b>	<b>101</b>	<b>103</b>	<b>105</b>	<b>94</b>	<b>84</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>69</b>	<b>164</b>	<b>286</b>	<b>419</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>69</b>	<b>95</b>	<b>122</b>	<b>133</b>	<b>143</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>69</b>	<b>164</b>	<b>286</b>	<b>419</b>	<b>562</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	26	126	262	436	620
2.	Surplus from operation	100	136	174	184	194
	<b>NET WORTH:</b>	<b>126</b>	<b>262</b>	<b>436</b>	<b>620</b>	<b>814</b>
3.	Subsidy	130	130	130	130	130
4.	Term loan outstanding	307	238	158	79	-
	<b>TOTAL LIABILITIES</b>	<b>563</b>	<b>630</b>	<b>724</b>	<b>829</b>	<b>944</b>
1.	Gross Block	288	288	288	288	288
	Less Depreciation	28	56	84	112	140
	<b>NET BLOCK</b>	<b>260</b>	<b>232</b>	<b>204</b>	<b>176</b>	<b>148</b>
2.	Working capital	234	234	234	234	234
3.	Cash & Bank Balance	69	164	286	419	562
	<b>TOTAL ASSETS</b>	<b>563</b>	<b>630</b>	<b>724</b>	<b>829</b>	<b>944</b>

**Suppliers of Machinery & Raw Material**

Kitchen equipments, Bed and other raw materials such as oil, Rice, Pulses, wheat etc. can be obtained easily from local whole sale markets.

## DECORATOR/ TENT HOUSE SERVICE

**Introduction:** Decorator Service is a very useful enterprise in an urban area and even in the rural areas as well. It is a service unit which provides many useful articles like shamianas, utensils, etc. on hire/rented basis for organising functions like wedding receptions, gathering and various types of events. A decorator service unit is thus a very useful enterprise where all articles for organising an event successfully can be conveniently taken on hire.

**Market:** The number of festivals and other events in the social calendar of a state like Tripura, there is a large scope for such enterprises. At present there are very few units engaged this line of business. For organising numerous social cultural and religious events/festivals, the need for a decorator service unit is very important as all articles necessary for holding such a function are available under one roof. Now-a-days with increasing income levels and changing tastes many people prefer to hold large functions/gatherings of various events. This gives good scope for the services of a decorator service type of enterprise. Considering present trends, the market for such services is expected to grow further.

**Target:**

1) By renting of various articles:	Rs. 4,95,000/-
2) By decoration:	Rs. <u>1,10,000/-</u>
	<b>Total: Rs. <u>6,05,000/-</u></b>

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 1,980/-. Total amount required for fuel is estimated Rs. 4,620/-.

**Manpower:** manpower required by the unit are locally available. The annual needs and costs of manpower is shown below:

Sl.No.	Category of Manpower	No. of persons	Annual Costs
1	Manager cum Supervisor	1	Self
2	Helper	3	1,56,400/-
	<b>Total:</b>	<b>4</b>	<b>1,58,400/-</b>

**Financial Aspect:**

1)	Land & Building	-		Rented
2)	Plant & Machinery			
	i) 4 stroke Hero Honda Generator	1 No.		Rs. 72,000/-
	ii) V.I.P. Chair 50 nos. @ Rs. 750			Rs. 45,000/-
	iii) Ordinary chair	400 nos.		Rs. 60,000/-
	iv) Table	100 Nos.		Rs. 60,000/-
	v) Screens 4m x 2m for 1 ps. for	50 Nos.		Rs. 24,000/-
	vi) plastic drums 10 nos.			Rs. 18,000/-
	vii) PVC water tank 2000 ltr. Capacity for storage water	2 Nos.		Rs. 31,800/-
	viii) Utensils			Rs. 60,000/-
	ix) Other decorative item like flower set, karnish lamp etc.			Rs. 30,000/-
	x) Gas oven	3 Nos.		Rs. <u>18,000/-</u>
				<b>Total: Rs. <u>4,78,800/-</u></b>
3)	<b>Miscellaneous Fixed Asset</b>			
a)	Electrification			Rs. 550/-

b)	Furniture & Miscellaneous others	Rs. 5,500/-
		<b>Rs. 6,050/-</b>
4.	Provision for contingencies	Rs. 22,248/-
5.	Preliminary & pre-operative expenses	<b>Rs. 58,300/-</b>
		<b>Total Fixed Costs: Rs. 5,65,398/-</b>
6.	<b>Working Capital (P.M.)</b>	
a)	Utilities	Rs. 550/-
c)	Salary & Wages	Rs. 13,200/-
d)	Other expenses	Rs. 11,000/-
		<b>Total: Rs. 24,750/-</b>
		<b>Total Project Cost: Rs. 5,90,148/-</b>

**Means of Finance:**

		<b>Urban</b>	<b>Rural</b>
1.	Composite loan	Rs. 4,13,104/-	Rs. 3,54,089/-
2.	Promoter's contribution	Rs. 29,507/-	Rs. 29,507/-
3.	Subsidy	Rs. 1,47,537/-	Rs. 2,06,552/-
4.	Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization	363	424	484	484	484
3.	<b>Annual Costs in</b>					
a)	Raw Materials	-	-	-	-	-
b)	Utilities	4	5	5	5	5
c)	Selling expenses	24	28	33	33	33
	<b>Variable Cost</b>	<b>28</b>	<b>33</b>	<b>38</b>	<b>38</b>	<b>38</b>
d)	Wages & Salaries	95	111	127	127	127
e)	Administrative expenses	79	92	106	106	106
f)	Depreciation	56	56	56	56	56
g)	Interest on Composite Loan	46	37	26	15	4
	Fixed & Semi Variable Cost	276	296	315	304	293
4.	<b>Total Cost</b>	<b>304</b>	<b>329</b>	<b>352</b>	<b>342</b>	<b>331</b>
5.	<b>Annual Profit</b>	<b>59</b>	<b>95</b>	<b>131</b>	<b>142</b>	<b>153</b>
6.	<b>Return on Investment</b>	<b>10.00%</b>	<b>16.10%</b>	<b>22.20%</b>	<b>4.03%</b>	<b>25.93%</b>
7.	<b>Return on sales</b>	<b>16.25%</b>	<b>22.40%</b>	<b>27.06%</b>	<b>29.33%</b>	<b>31.61%</b>
8.	Annual contribution	335				
9.	Break Even Point	49.43%				
10.	Cash accrual	115	151	187	198	209
11.	Debt Servicing Capacity	161	188	213	213	213
12.	Repayment of Composite Loan	67	79	89	89	89
13.	Debt Serviced	113	116	115	104	93
14.	<b>Pay Back Period</b>	<b>1 year 8 months 12 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.02:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	30	-	-	-	-	-
2.	Increase in Term loan	413	-	-	-	-	-
3.	Subsidy	147	-	-	-	-	-
4.	Depreciation	-	56	56	56	56	56
5.	Profit before interests	-	105	132	157	157	157
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>590</b>	<b>161</b>	<b>188</b>	<b>215</b>	<b>213</b>	<b>213</b>
6.	Increase in capital investment	565	-	-	-	-	-
7.	Increase in working capital	215	-	-	-	-	-
8.	Interest	-	46	37	26	15	4
9.	Repayment of Term Loan	-	67	79	89	89	89
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>590</b>	<b>113</b>	<b>116</b>	<b>115</b>	<b>104</b>	<b>93</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>48</b>	<b>120</b>	<b>218</b>	<b>327</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>48</b>	<b>72</b>	<b>98</b>	<b>109</b>	<b>120</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>48</b>	<b>120</b>	<b>218</b>	<b>327</b>	<b>447</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	30	89	184	315	457
2.	Surplus from operation	59	95	131	142	153
	<b>NET WORTH:</b>	<b>89</b>	<b>184</b>	<b>315</b>	<b>457</b>	<b>610</b>
<b>3.</b>	<b>Subsidy</b>	<b>147</b>	<b>147</b>	<b>147</b>	<b>147</b>	<b>147</b>
4.	Term loan outstanding	346	267	178	89	-
	<b>TOTAL LIABILITIES</b>	<b>582</b>	<b>598</b>	<b>640</b>	<b>693</b>	<b>757</b>
1.	Gross Block	565	565	565	565	565
	Less Depreciation	56	112	168	224	280
	<b>NET BLOCK</b>	<b>509</b>	<b>453</b>	<b>397</b>	<b>341</b>	<b>285</b>
2.	Working capital	25	25	25	25	25
3.	Cash & Bank Balance	48	120	218	327	447
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>582</b>	<b>598</b>	<b>640</b>	<b>693</b>	<b>757</b>

## BEAUTY PARLOUR

**Introduction:** The urge to look beautiful has always been there in women. Earlier natural herbs were used to look beautiful but with modernization, came make-up and the beauty parlour culture. Beauty parlours have not only given women a self-employment opportunity but also has satisfied their urge to look beautiful. Though men and women have exclusive beauty parlours, the present unit will discuss only beauty parlours, the present unit will discuss only beauty parlour for women.

**Market:** The clientele of the beauty parlour would include young girls, working women and housewives who go to beauty parlour at least once a month. Bridal make-up and personalized services for special occasions also enhance business of beauty parlours. Besides training other women in the profession could also be yet another source of income.

**Target:** The targeted services and expected receipts

Sl.No.	Type of service	No. of customers	Rate per service	Total receipts in Rs
1.	Eye brow	100	10.00	1,000
2.	Manucure	25	80	2,000
3.	Padicure	15	100	1,500
4.	Head message	15	80	1,200
5.	Hair bleaching	30	100	3,000
6.	Arm bleaching	35	80	2,800
7.	Face bleaching	60	80	4,800
8.	Stomach bleaching	10	80	800
9.	Waxing	35	100	3,500
10.	Facial	50	150	7,500
11.	Hair style	115	55	6,325
12.	Hair cutting	110	65	7,150
13.	Synthetic dye	20	150	2,000
14.	Bridal make-up	5	600	3,000
15.	Perming	5	500	2,500
16.	Make-up	5	225	1,125
17.	Mehendi (drawing in hand & applying in hair)		225	5,000
18.	Other services	-	-	5,000
<b>Annual Receipt</b>		<b>60,200 x 12</b>		<b>7,22,400</b>

4. **Raw Material:** The Raw Materials can be obtained from local market. The requirement at installed capacity and cost of Raw Materials as different types of Cosmetics shall be Rs. 24,200/-

**Power:** The power is available from the state Electric supply corporation Grid. The consumption of power is estimated Rs. 6,600/-

**Water:** The unit will need 1,000 Liters of clean and soft water per day. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:



Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Beautician	2	1,05,600/-
2.	Assistant	1	39,600/-
	Total:	3	1,45,200/-

**Financial Aspect:**

1.	Land & Building :		Rented
2.	<b>Plant &amp; Machinery</b>		
	(a) Hydro dryer	1	Rs. 8,400/-
	(b) Ozone Machine	1	Rs. 3,600/-
	(c) Massage Machine	2	Rs. 3,600/-
	(d) Dyers table	2	Rs. 2,400/-
	(e) Mirror (big)	2	Rs. 1,800/-
	(f) Drressing table	2	Rs. 13,200/-
	(g) Revolving chair	3	Rs. 15,000/-
	(h) Other equipments	-	Rs. 30,000/-
			<b>Total: Rs. 78,000/-</b>
3)	<b>Miscellaneous Fixed Asset</b>		
a)	Electrification		Rs. 11,000/-
b)	Water Installation		Rs. 5,500/-
c)	Furniture & Miscellaneous others		Rs. 16,500/-
			<b>Rs. 33,000/-</b>
4.	Provision for contingencies		<b>Rs. 5,225/-</b>
5.	Preliminary & pre-operative expenses		<b>Rs. 13,750/-</b>
			<b>Total Fixed Cost: Rs. 1,29,975/-</b>
6.	<b>Working Capital (P.M.)</b>		
a)	Raw Material		Rs. 72,600/-
b)	Utilities		Rs. 2,640/-
c)	Salary & Wages		Rs. 36,300/-
d)	Other expenses		Rs. 26,400/-
			<b>Total: Rs. 1,37,940/-</b>
			<b>Total Project Cost: Rs. 2,67,915/-</b>

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Composite loan	Rs. 1,87,540/-	Rs. 1,60,749/-
2. Promoter's contribution	Rs. 13,396/-	Rs. 13,396/-
3. Subsidy	Rs. 66,979/-	Rs. 93,770/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization	477	556	636	636	636
3.	<b>Annual Costs</b>					
a)	Raw Materials	174	203	250	250	250
b)	Utilities	6	7	8	8	8
c)	Selling expenses	43	58	76	76	76
	<b>Variable Cost</b>	<b>223</b>	<b>268</b>	<b>334</b>	<b>334</b>	<b>334</b>
d)	Wages & Salaries	87	102	116	116	116
e)	Administrative expenses	63	74	84	84	84

f)	Depreciation	13	13	13	13	13
g)	Interest on Composite Loan	22	18	13	8	2
	Fixed & Semi Variable Cost	185	207	226	221	216
<b>4.</b>	<b>Total Cost</b>	<b>408</b>	<b>475</b>	<b>560</b>	<b>555</b>	<b>550</b>
<b>5.</b>	<b>Annual Profit</b>	<b>69</b>	<b>81</b>	<b>76</b>	<b>81</b>	<b>86</b>
<b>6.</b>	<b>Return on Investment</b>	<b>25.74%</b>	<b>30.22%</b>	<b>28.35%</b>	<b>30.22%</b>	<b>32.08%</b>
<b>7.</b>	<b>Return on sales</b>	<b>14.46%</b>	<b>14.58%</b>	<b>11.94%</b>	<b>12.73%</b>	<b>13.52%</b>
8.	Annual contribution	254	-	-	-	-
9.	Break Even Point	43.70				
10.	Cash accrual	82	94	89	94	99
11.	Debt Servicing Capacity	104	112	102	102	102
12.	Repayment of Composite Loan	30	36	41	41	41
13.	Debt Serviced	52	54	54	49	44
<b>14.</b>	<b>Pay Back Period</b>	<b>2 years 7 days</b>				
<b>15.</b>	<b>Debt Service Coverage Ratio</b>	<b>2.03:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	13	-	-	-	-	-
2.	Increase in Term loan	188	-	-	-	-	-
3.	Subsidy	67	-	-	-	-	-
4.	Depreciation	-	13	13	13	13	13
5.	Profit before interests	-	91	99	89	89	89
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>268</b>	<b>104</b>	<b>112</b>	<b>102</b>	<b>102</b>	<b>102</b>
6.	Increase in capital investment	130	-	-	-	-	-
7.	Increase in working capital	138	-	-	-	-	-
8.	Interest	-	22	18	13	8	2
9.	Repayment of Term Loan	-	30	36	41	41	41
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>268</b>	<b>52</b>	<b>54</b>	<b>54</b>	<b>49</b>	<b>43</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>52</b>	<b>110</b>	<b>158</b>	<b>211</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>52</b>	<b>58</b>	<b>48</b>	<b>53</b>	<b>59</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>52</b>	<b>110</b>	<b>158</b>	<b>211</b>	<b>270</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	13	82	163	239	320
2.	Surplus from operation	69	81	76	81	86
	<b>NET WORTH:</b>	<b>82</b>	<b>163</b>	<b>239</b>	<b>323</b>	<b>406</b>
<b>3.</b>	<b>Subsidy</b>	<b>67</b>	<b>67</b>	<b>67</b>	<b>67</b>	<b>67</b>
4.	Term loan outstanding	158	122	81	40	-
	<b>TOTAL LIABILITIES</b>	<b>307</b>	<b>352</b>	<b>387</b>	<b>427</b>	<b>473</b>
1.	Gross Block	130	130	130	130	130
	Less Depreciation	13	26	39	52	65
	<b>NET BLOCK</b>	<b>117</b>	<b>104</b>	<b>91</b>	<b>78</b>	<b>65</b>
2.	Working capital	138	138	138	138	138
3.	Cash & Bank Balance	52	110	158	211	270
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>307</b>	<b>352</b>	<b>387</b>	<b>427</b>	<b>473</b>

## WATCH REPAIRING & SERVICING

**Introduction & Market:** Now-a-days almost every office going personal, school/college going students, working class people are having their own wrist watch. A number of houses are having good looking wall clocks or table clocks. These watches require periodical servicing & repairing from time to time.

**Target:** Assuming that the Unit shall operate for single shift of eight hours per day for three hundred days per annum the annual installed capacity is estimated at

1) By repairing & servicing of watches	Rs. 2,47,500/-
2) By placement of spare parts assuming 10% marginal profit of purchase items	Rs. 10,72,500/-
	<b><u>Total: Rs. 13,20,000/-</u></b>

**Raw Material:** The requirement at installed capacity and cost of Raw Materials are shown below:

Auto wheel, rotter, balance, complete, lever escape wheel, Centre record wheel, S. L..S date wheel, minute wheel, setting lever, Match at wheel, key seam, button, coil, E.C.B., Battery plout, case, dial, hands main spring, battery set off, day spring, glass, winding pinion, straps, etc.

**Power:** The power is available from the state Electric supply corporation Grid. The consumption of power is estimated Rs. 4,620/-

**Water:** The unit will need 20 Liters of clean and soft water per day for drinking purpose. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	self
2.	Skilled worker	2	1,05,000/-
	<b>Total:</b>	<b>3</b>	<b>1,05,000/-</b>

### Financial Aspect:

1. Land & Building :			<b>Rented</b>
2. <b>Plant &amp; Machinery</b>	<b><u>No.</u></b>		<b><u>Amount(Rs.)</u></b>
a) Grinding & buffering machine	1		1,760/-
b) Gum for soldering "DEEKS" in wooden box 5 nozzles	1		1,100/-
c) Punch box, set of 80 riveting punches riveting tools & 10 stakes	2		2,750/-
d) Anvil, blow pipe, brushes, button cell tester, calipers, diamond poger set, draw tong, draw plates drills, eye glass, eye magnifier, file needle, file rafter, file burnisher, micrometer, glass fitting machine, grinder hand with handle, hammers, hand removers, pliers, spanner terry set, screw drivers, pin tongues, case opener etc.			<u>38,500/-</u>
			<b><u>Total: Rs. 44,110/-</u></b>
3) <b>Miscellaneous Fixed Asset</b>			
a) Electrification			Rs. 5,500/-
b) Furniture & Miscellaneous others			Rs. 16,500/-
			<b><u>Total: Rs. 22,000/-</u></b>
4. Provision for contingencies			Rs. 3,300/-
5. Preliminary & pre-operative expenses			Rs. 5,500/-
			<b><u>Total Rs. 74,910/-</u></b>

6. **Working Capital (P.M.)**

a)	Raw Material	Rs. 71,500/-
b)	Utilities	Rs. 550/-
c)	Salary & Wages	Rs. 8,800/-
d)	Other expenses	Rs. 7,700/-

Total: **Rs. 88,550/-**

**Total working capital for 3 months: Rs. 2,65,650/-**

**Total Project Cost: Rs. 3,40,560/-**

**Means of Finance:**

	<u>Urban</u>	<u>Rural</u>
1. Composite loan	Rs. 2,38,392/-	Rs. 2,34,336/-
2. Promoter's contribution	Rs. 17,028/-	Rs. 17,028/-
3. Subsidy	Rs. 85,140/-	Rs. 1,19,196/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization	792	924	1056	1056	1056
3.	<b>Annual Costs in</b>					
a)	Raw Materials	515	601	686	686	686
b)	Utilities	4	5	5	5	5
c)	Selling expenses	61	71	81	81	81
	<b>Variable Cost</b>	<b>580</b>	<b>677</b>	<b>772</b>	<b>772</b>	<b>772</b>
d)	Wages & Salaries	63	74	84	84	84
e)	Administrative expenses	55	65	74	74	74
f)	Depreciation	7	7	7	7	7
g)	Interest on Composite Loan	29	24	17	10	3
	Fixed & Semi Variable Cost	154	170	182	175	168
4.	<b>Total Cost</b>	<b>734</b>	<b>847</b>	<b>954</b>	<b>947</b>	<b>940</b>
5.	<b>Annual Profit</b>	<b>58</b>	<b>77</b>	<b>107</b>	<b>109</b>	<b>116</b>
6.	<b>Return on Investment</b>	<b>17.05</b>	<b>22.64</b>	<b>30.00</b>	<b>32.05</b>	<b>34.11</b>
7.	<b>Return on sales</b>	<b>7.32</b>	<b>8.33</b>	<b>9.65</b>	<b>10.32</b>	<b>10.98</b>
8.	Annual contribution	212	-	-	-	-
9.	Break Even Point	43.52%				
10.	Cash accrual	65	84	109	116	123
11.	Debt Servicing Capacity	94	108	126	126	126
12.	Repayment of Composite Loan	39	45	52	52	52
13.	Debt Serviced	68	69	69	62	55
14.	<b>Pay Back Period</b>	<b>1 year 4 months 24 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.51:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	17	-	-	-	-	-
2.	Increase in Term loan	238	-	-	-	-	-
3.	Subsidy	85	-	-	-	-	-
4.	Depreciation	-	7	7	7	7	7
5.	Profit before interests	-	87	101	119	119	119
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>340</b>	<b>94</b>	<b>108</b>	<b>126</b>	<b>126</b>	<b>126</b>
6.	Increase in capital investment	75	-	-	-	-	-
7.	Increase in working capital	265	-	-	-	-	-
8.	Interest	-	29	24	17	10	3
9.	Repayment of Term Loan	-	39	45	52	52	52
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>340</b>	<b>68</b>	<b>69</b>	<b>69</b>	<b>62</b>	<b>55</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>26</b>	<b>65</b>	<b>122</b>	<b>186</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>26</b>	<b>39</b>	<b>57</b>	<b>64</b>	<b>71</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>26</b>	<b>65</b>	<b>122</b>	<b>186</b>	<b>257</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	17	75	152	254	363
2.	Surplus from operation	58	77	102	109	116
	<b>NET WORTH:</b>	<b>75</b>	<b>152</b>	<b>254</b>	<b>363</b>	<b>479</b>
<b>3.</b>	<b>Subsidy</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>
4.	Term loan outstanding	199	154	102	50	-
	<b>TOTAL LIABILITIES</b>	<b>359</b>	<b>391</b>	<b>441</b>	<b>498</b>	<b>564</b>
1.	Gross Block	75	75	75	75	75
	Less Depreciation	7	14	21	28	35
	<b>NET BLOCK</b>	<b>68</b>	<b>61</b>	<b>54</b>	<b>47</b>	<b>40</b>
2.	Working capital	265	265	265	265	265
3.	Cash & Bank Balance	26	65	122	186	257
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>359</b>	<b>391</b>	<b>441</b>	<b>498</b>	<b>564</b>

## SOUND SYSTEM RENTAL SERVICES

**Introduction & Market:** The state of Tripura is buzzing with cultural activities. About hundreds of programmes are held every year during Puja season. However, lack of proper Music Sound system has affected the quality of such programmes. As artists are being hired from places like Kolkata, Mumbai and other parts of the country, the lack of proper arrangements have become a stumbling block towards pulling larger audiences for such programmes. The established singers and musians have also shown their reluctance in participating in the programmes in absence of adequate sound facilities.

**Target:** By providing music sound system on hire @ Rs. 8,250/- per programme (considering 50 programmes per year) the annual sales realization in estimated as Rs. 4,12,500/-.

**Power:** The power is available from the state Electric supply corporation Grid. The consumption of power is estimated Rs. 4,620/-.

**Manpower:** The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	self
2.	Assistant	1	52,800/-
	<b>Total:</b>	<b>2</b>	<b>52,800/-</b>

### Financial Aspect:

1. **Land & Building :** **Rented**
2. **Plant & Machinery**

Sl.No.	Description	Quantity	Amount (Rs.)
1.	Box (big)	2 nos.	36,000/-
2.	Box with Monitor	2 nos.	14,400/-
3.	Cable	2 coils	4,320/-
4.	Microphone 'Sure'-14 A	2 nos.	4,200/-
5.	Microphone 'Sure'-SM 58	2 nos.	12,600/-
6.	Stabilizer-5 KV	1 no.	6,000/-
7.	Relay-RV3	1 no	9,360/-
8.	Relay – DD3	1 no.	6,600/-
9.	Microphone 'Sure'-608	2 Nos.	3,120/-
10.	Wire	1 coil	1,680/-
11.	500 W stranger	1 no.	10,800/-
12.	250 W AHUJA	1 no.	12,360/-
13.	Mixing Machine		30,000/-
		<b>Total:</b>	<b>1,50,840/-</b>

### 3) **Miscellaneous Fixed Asset**

- a) Electrification Rs. 11,000/-
- b) Furniture & Miscellaneous others Rs. 16,500/-

**Total: Rs. 27,500/-**

4. Provision for contingencies Rs. 8,277/-
5. Preliminary & pre-operative expenses Rs. 21,753/-

**Total Fixed Costs: Rs. 1,95,800/-**

6. **Working Capital (P.M.)**

a)	Raw Material	Rs.	Nil
b)	Utilities	Rs.	550/-
c)	Salary & Wages	Rs.	4,400/-
d)	Other expenses	Rs.	7,700/-
		<b>Total:</b>	<b>Rs. 12,650/-</b>

**Total Project Cost: Rs. 2,08,450/-**

**Means of Finance:**

		<b>Urban</b>	<b>Rural</b>
1.	Composite loan	Rs. 1,45,915/-	Rs. 1,25,070/-
2.	Promoter's contribution	Rs. 10,422/-	Rs. 10,422/-
3.	Subsidy	Rs. 52,113/-	Rs. 72,958/-
4.	Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization	248	288	330	330	330
3.	<b>Annual Costs in</b>					
a)	Raw Materials	-	-	-	-	-
b)	Utilities	4	5	5	5	5
c)	Selling expenses	11	13	15	15	15
	<b>Variable Cost</b>	<b>15</b>	<b>18</b>	<b>20</b>	<b>20</b>	<b>20</b>
d)	Wages & Salaries	32	37	42	42	42
e)	Administrative expenses	55	65	74	74	74
f)	Depreciation	19	19	19	19	19
g)	Interest on Composite Loan	18	14	10	6	2
	Fixed & Semi Variable Cost	124	135	145	141	137
4.	<b>Total Cost</b>	<b>139</b>	<b>153</b>	<b>165</b>	<b>161</b>	<b>157</b>
5.	<b>Annual Profit</b>	<b>109</b>	<b>135</b>	<b>165</b>	<b>169</b>	<b>173</b>
6.	<b>Return on Investment</b>	<b>26.33%</b>	<b>32.96%</b>	<b>39.84%</b>	<b>70.79%</b>	<b>41.75%</b>
7.	<b>Return on sales</b>	<b>52.11%</b>	<b>65.23%</b>	<b>78.83%</b>	<b>80.23%</b>	<b>82.65%</b>
8.	Annual contribution	233	-	-	-	-
9.	Break Even Point	31.92%				
10.	Cash accrual	128	154	184	188	192
11.	Debt Servicing Capacity	146	168	194	194	194
12.	Repayment of Composite Loan	24	28	32	32	32
13.	Debt Serviced	42	42	42	38	34
14.	<b>Pay Back Period</b>	<b>3 years 6 months 28 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>3.04:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	10	-	-	-	-	-
2.	Increase in Term loan	146	-	-	-	-	-
3.	Subsidy	52	-	-	-	-	-
4.	Depreciation	-	19	19	19	19	19
5.	Profit before interests	-	127	149	175	175	175
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>208</b>	<b>146</b>	<b>168</b>	<b>194</b>	<b>194</b>	<b>194</b>
6.	Increase in capital investment	<b>196</b>	-	168	-	-	-
7.	Increase in working capital	-	12	-	-	-	-
8.	Interest	-	18	14	10	6	2
9.	Repayment of Term Loan	-	24	28	32	32	32
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>208</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>38</b>	<b>34</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>104</b>	<b>233</b>	<b>382</b>	<b>538</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>104</b>	<b>126</b>	<b>150</b>	<b>156</b>	<b>160</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>104</b>	<b>230</b>	<b>382</b>	<b>538</b>	<b>700</b>

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	10	119	254	419	588
2.	Surplus from operation	109	135	165	169	173
	<b>NET WORTH:</b>	119	254	419	588	761
<b>3.</b>	<b>Subsidy</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>52</b>	<b>52</b>
4.	Term loan outstanding	122	94	62	30	-
	<b>TOTAL LIABILITIES</b>	<b>293</b>	<b>400</b>	<b>533</b>	<b>670</b>	<b>813</b>
1.	Gross Block	196	196	196	196	196
	Less Depreciation	19	38	57	76	95
	<b>NET BLOCK</b>	<b>177</b>	<b>158</b>	<b>139</b>	<b>120</b>	<b>101</b>
2.	Working capital	12	12	12	12	12
3.	Cash & Bank Balance	<b>104</b>	<b>230</b>	<b>382</b>	<b>538</b>	<b>700</b>
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>293</b>	<b>400</b>	<b>533</b>	<b>670</b>	<b>813</b>



## PHOTOCOPYING/ LAMINATION/ PCO

**Introduction:** Photocopying/ Lamination/ PCO unit is now-a-days a popular service oriented enterprise, especially in the urban areas. Such a unit basically contains a photo copier commonly known as Xerox machine, which is used for producing true and instant copies of all types of text, document, certificates etc. The PCO centre serve as a facility for communication especially to those people who do not have telephone connections or fax machine. A photocopier/ lamination machine/ PCO/ Fax can be easily handled by practically anyone with hardly any training and requires little space for operation.

**Market:** There is a good market for the services of a photo copying/ lamination/ PCO unit especially in the urban areas where there is a large scale requirements of printed information and text. The demand is mainly from offices, schools, colleges and business establishments which increasingly require the services of photocopiers/ lamination/ Fax. Such a combined unit has a very good scope.

**Target:** Assuming that the Unit shall operate for single shift of eight hours per day for three hundred days per annum the annual installed capacity is estimated at

(1) By sale of 3,30,000 copies per annum @ Rs. 1.00 per copy	- Rs. 3,30,000/-
(2) By lamination of documents	- Rs. 2,50,000/-
(3) From Fax/ STD/ ISD/ Local call	- Rs. <u>2,40,000/-</u>
	<b>Total: Rs. 8,20,000/-</b>

**Raw Materials:** The requirement at installed capacity and cost of Raw Materials are shown below:

1. Paper	- Rs. 3,658/-
2. Toner	- Rs. 7,500/-
3. Lamination Paper	- Rs. 3,000/-
4. Xeroxing paper roll for telephone prill	- Rs. 10,000/-
5. Paper roll for fax machine	- Rs. 3,000/-
6. Miscellaneous others including replacement of Toner drum	- <u>Rs. 10,000/-</u>
	<b>Total: Rs. 37,158/-</b>

**Power:** The power is available from the State Electric supply corporation Grid. The consumption of power is estimated Rs. 14,400/-.

**Water:** The unit will need 20Liter of clean and soft water per day. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

SI.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Supervisor	1	Self
2.	Operator	1	42,000/-
		<b>Total:</b>	<b>42,000/-</b>

**Financial Aspect :**

1) Land & Building	-	<b>Rented</b>
2) Plant & Machinery		
a) Photo copying machine	-	Rs. 99,500/-
b) Stabilizer	-	Rs. 5,000/-
c) Lamination machine	-	Rs. 12,000/-

d)	Telephone system with billing equipments	-	Rs. 30,000/-
e)	Fax machine	-	Rs. 7,000/-
			<b>Total: Rs.1,53,500/-</b>
3)	<b>Miscellaneous Fixed Asset</b>		
a)	Electrification		Rs. 5,000/-
b)	Furniture & Miscellaneous others		Rs. 10,000/-
			<b>Rs. 15,000/-</b>
4.	<b>Provision for contingencies</b>		<b>Rs. 8,425/-</b>
5.	<b>Preliminary &amp; pre-operative expenses</b>		<b>Rs 22,125/-</b>
			<b>Total: Rs. 1,99,050/-</b>
6.	<b>Working Capital (P.M.)</b>		
a)	Raw Material		Rs. 37,200/-
b)	Utilities		Rs. 1,500/-
c)	Salary & Wages		Rs. 3,500/-
d)	Other expenses		Rs. 5,000/-
			<b>Total: Rs. 47,200/-</b>

**Total working capital for 3 months: Rs. 1,41,600/-**

**Total Project Cost: Rs. 3,40,650/-**

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Composite loan	Rs. 2,38,455/-	Rs.2,04,390/-
2. Promoter's contribution	Rs. 17,033/-	Rs. 17,033/-
3. Subsidy	Rs. 85,162/-	Rs.1,19,227/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	4,92,000	5,74,000	6,56,000	6,56,000	6,56,000
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	2,67,870	3,12,480	3,57,120	3,57,120	3,57,120
b)	Utilities	10,800	12,600	14,400	14,400	14,400
c)	Selling expenses	34,800	40,600	46,400	46,400	46,400
	<b>Variable Cost</b>	<b>3,13,440</b>	<b>3,65,680</b>	<b>4,17,920</b>	<b>4,17,920</b>	<b>4,17,920</b>
d)	Wages & Salaries	25,200	29,400	33,600	33,600	33,600
e)	Administrative expenses	36,000	42,000	48,000	48,000	48,000
f)	Depreciation	19,905	19,905	19,905	19,905	19,905
g)	Interest on Composite Loan	27,390	22,154	16,112	9,667	3,222
	Fixed & Semi Variable Cost	1,08,495	1,13,459	1,17,617	1,11,172	1,04,727
4.	<b>Total Cost</b>	<b>4,21,935</b>	<b>4,79,139</b>	<b>5,35,537</b>	<b>5,29,092</b>	<b>5,22,647</b>
5.	<b>Annual Profit</b>	<b>70,065</b>	<b>94,861</b>	<b>1,20,463</b>	<b>1,26,908</b>	<b>1,33,353</b>
6.	<b>Return on Investment</b>	<b>20.56%</b>	<b>27.84%</b>	<b>35.36%</b>	<b>37.25%</b>	<b>39.14%</b>
7.	<b>Return on sales</b>	<b>8.54%</b>	<b>11.56%</b>	<b>14.69%</b>	<b>15.47%</b>	<b>16.26%</b>
8.	Annual contribution	1,78,560	-	-	-	-
9.	Break Even Point	36.45%				
10.	Cash accrual	89,970	1,14,766	1,40,368	1,46,813	1,53,258
11.	Debt Servicing Capacity	1,17,360	1,36,920	1,56,480	1,56,480	1,56,480
12.	Repayment of Composite Loan	38,668	45,113	51,558	51,558	51,558
13.	Debt Serviced	66,058	67,267	67,670	67,670	67,670
14.	<b>Pay Back Period</b>	<b>1 year 9 months 7 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.78:1</b>				

**Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	17,033	-	-	-	-	-
2.	Increase in Term loan	2,38,455	1,41,600	-	-	-	-
3.	Subsidy	85,162	-	-	-	-	-
4.	Depreciation	-	19,905	19,905	19,905	19,905	19,905
5.	Profit before interests	-	97,455	1,17,015	1,36,575	1,36,575	1,36,575
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,40,650</b>	<b>2,58,960</b>	<b>1,36,920</b>	<b>1,56,480</b>	<b>1,56,480</b>	<b>1,56,480</b>
6.	Increase in capital investment	3,40,650	-	-	-	-	-
7.	Increase in working capital	-	1,41,600	-	-	-	-
8.	Interest	-	27,390	22,154	16,112	9,667	3,222
9.	Repayment of Term Loan	-	38,668	45,113	51,558	51,558	51,558
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,40,650</b>	<b>2,07,658</b>	<b>67,267</b>	<b>67,670</b>	<b>61,225</b>	<b>54,780</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>51,302</b>	<b>1,20,955</b>	<b>2,09,765</b>	<b>3,05,020</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>51,302</b>	<b>69,653</b>	<b>88,810</b>	<b>95,255</b>	<b>1,01,700</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>51,302</b>	<b>1,20,955</b>	<b>2,09,765</b>	<b>3,05,020</b>	<b>4,06,720</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	17,033	87,098	1,81,959	3,02,422	4,29,330
2.	Surplus from operation	70,065	94,861	1,20,463	1,26,908	1,33,353
	<b>NET WORTH:</b>	<b>87,098</b>	<b>1,81,959</b>	<b>3,02,422</b>	<b>4,29,330</b>	<b>5,62,683</b>
<b>3.</b>	<b>Subsidy</b>	<b>85,162</b>	<b>85,162</b>	<b>85,162</b>	<b>85,162</b>	<b>85,162</b>
4.	Term loan outstanding	1,99,787	1,54,674	1,03,116	51,558	-
	<b>TOTAL LIABILITIES</b>	<b>3,72,047</b>	<b>4,21,795</b>	<b>4,90,700</b>	<b>5,66,050</b>	<b>6,47,845</b>
1.	Gross Block	1,99,050	1,99,050	1,99,050	1,99,050	1,99,050
	Less Depreciation	19,905	39,810	59,715	79,620	99,525
	<b>NET BLOCK</b>	<b>1,79,145</b>	<b>1,59,240</b>	<b>1,39,335</b>	<b>1,19,430</b>	<b>99,525</b>
2.	Working capital	1,41,600	1,41,600	1,41,600	1,41,600	1,41,600
3.	Cash & Bank Balance	<b>51,302</b>	<b>1,20,955</b>	<b>2,09,765</b>	<b>3,05,020</b>	<b>4,06,720</b>
<b>4.</b>	<b>TOTAL ASSETS</b>	<b>3,72,047</b>	<b>4,21,795</b>	<b>4,90,700</b>	<b>5,66,050</b>	<b>6,47,845</b>

**Machinery Suppliers:**LAMINATION

- 1) Asha Enterprises, 44 A, Rafi Ahmed kidwai Road, Kolkata- 700 016
- 2) Graphic India, 8, Camac Street, Kolkata- 70 017

FAX

- 1) ATN TECHNOLOGIES, B, Satyam Bldg, 1<sup>st</sup> Floor, 46D, R.A.K. Road, Kolkata-16
- 2) BENGAL TRACOM PVT. LTD., Park Centre, 24, Park street, 1<sup>st</sup> Fl, Suite-123, Kolkata-16.

## TYRE RETREADING

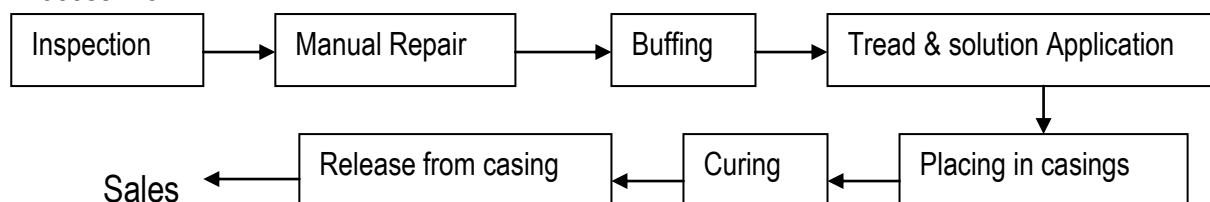
**Introduction:** Next to fuel, Tyre cost is the largest operating cost of vehicle operation. As such ways and means to reduce tyre cost are searched by all vehicle operators. Re-use of vehicle Tyres by Re-Treading at comparatively cheaper. Over the years technology for tyre retreading has improved to such an extent that now a retreaded tyre lasts more than a new tyre, whereas a retreaded tyre costs less than fifty percent of a new tyre. Due to nature of terrain and poor infrastructural development Tripura depend on Road for most of its goods and passenger transport. Therefore tyre retreading is a need in the State.

**Market:** Retreading of vehicle Tyres is a need for the landlocked state like Tripura depending more on roads for transport. As the State depends mostly on Road transport its vehicle population is increasing very fast. Besides, the State is increasing vehicles for public transport. From 90,454 vehicles in 2004-05 the vehicle population has increased to about 1,80,000 in 2009-10 and the increase has been very high in 2010-11. Out of these vehicles about 36.75 percent are using retreaded tyres. In pre-cured Tyre Retreading Brands like Indag, MRF etc. are preferred, and hence franchise agreement with such Brands are essential for better market penetration. Conventional 'hot' process tyre retreading, however, do not need such franchise. Market trend indicate preference to pre-cured (cold) Tyre Retreading.

**Installed Capacity:** Operating Single shift of 8 hours per day for 300 working days per annum the unit will annual installed capacity to retread 7200 Tyres.

**Process of Manufacture:** Casings/ damaged Tyres purchased/ received are inspected for detecting damages and repaired by patching with Readymade patches. The outer surface of the tyre is then buffed in the Buffing machine. The buffed tyre is coated by Rubber solution and pre-cured Treads are placed on the Rubber solution inside flexible casings. These casings are then placed in the curing machine where steam vulcanize and fix the tread on the tyre casing.

**Process Flow:**



**Raw Material:** It is assumed that out of 24 Tyres per day only 8 shall be retreading on job basis. Remaining 16 tyres shall be retreaded for sales by procuring worn-out Tyres/ casings shall be available from markets inside the State. Pre-cured Treads and solutions shall be purchased from franchise providers. The requirement and cost of raw-materials per annum at the installed capacity is shown below:

Sl.No.	Raw Material	Annual Requirement	Cost
1.	Pre-cured tread for Tyres of various sizes	65,000 kgs.	65,00,000/-
2.	Bonding Gum & solutions	6,500 Liters	12,00,000/-
3.	Patches, Buffing knives etc.	L.S.	4,00,000/-
		<b>Total:</b>	<b>81,00,000/-</b>

**Power:** The Unit will require a connected Load of 10 KW at 400/440 volts, 50Ha, AC, 3 Phase & 4 wire. The power is available from the state Electric Supply Corporation Grid. The Annual Consumption of power is estimated at 19200 KW Hrs. Costing Rs. 34,560/-

**Water:** The daily requirement of water is estimated at 500 liters.

**Manpower:** Apart from two machine operators all the manpower is available locally. The requirement of manpower and annual costs are shown below:

Sl. No.	Category of Manpower	No. of persons	Annual Costs
1.	Manager	1	Self
2.	Administrative & Sales Clerk	2	Rs. 96,000
3.	Skilled Workers	3	Rs. 1,80,000
4.	Unskilled Workers	3	Rs. 90,000
	<b>Total:</b>	<b>9</b>	<b>Rs. 3,66,000</b>

**Capital Cost Estimate:**

1)	<b>Land &amp; Building</b> : Covered area 186 sq. Mtrs.	<b>On Rent</b>
2)	<b>Plant &amp; Machinery</b>	
a)	One Tyre Buffing Machine with Motor & all accessories	Rs. 1, 50,000/-
b)	One Non IBR coal fired Boiler	Rs. 55,000/-
c)	One Tyre curing Machine	Rs. 75,000/-
d)	Aluminium moulds & casings for various sizes of Tyres : 1 Each	Rs. 78,000/-
		<b>Rs. 3,58,000/-</b>

**3. Miscellaneous Fixed Assets**

(a)	Electrification	Rs. 75,000/-
(b)	Water Installation	Rs. 10,000/-
©	Miscellaneous others	Rs. 40,000/-
		<b>Rs. 1,25,000/-</b>

**4. Provision for contingencies**

**Rs. 27,000/-**

**5. Preliminary & Pre-operative expenses**

**Rs. 25,000/-**

**Total fixed Costs: Rs.5, 10,000/-**

**6. Working Capital:**

(a)	Three months Raw Materials	Rs. 1,68,750/-
(b)	Three months power cost	Rs. 8,640/-
(c)	Three months Wages & Salaries	Rs. 91,500/-
(d)	One months Other expenses	Rs. 40,800/-

**Total Working Capital: Rs. 3,09,690/-**

**TOTAL PROJECT COST: Rs. 8,19,690/-**

**(Say Rs. 8,20,000/-)**

**Means of finance:**

1. Composite Loan:

**URBAN**

**RURAL**

2. Subsidy:

Rs. 5,74,000

Rs. 4,92,000

3. Promoters' Contribution:

Rs. 2,05,000

Rs. 2,87,000

4. Debt. Equity Ratio:

Rs. 41,000

Rs. 41,000

2.33:1

1.50:1

**Profitability:**

(Rs. in Thousands)

Sl. No.	Description	1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capacity Utilization	60%	70%	80%	80%	80%
2.	<b>Annual sales Realization</b>	<b>1206</b>	<b>1407</b>	<b>1608</b>	<b>1608</b>	<b>1608</b>
3.	<b>Annual Costs in</b>					
	(a) Raw Materials	405	473	540	540	540
	(b) Power	28	31	35	35	35
	(c) Repair & Maintenance	11	11	11	11	11
	(d) Wages and salaries	366	370	375	375	375
	(e) Administrative overheads	90	95	99	104	109
	(f) Selling expenses	119	139	158	158	158
	(g) Depreciation	60	60	60	60	60
	(h) Interest	66	54	39	23	10
	<b>Total Operating Costs</b>	<b>1145</b>	<b>1233</b>	<b>1317</b>	<b>1306</b>	<b>1298</b>
	<b>Total Variable Costs</b>	<b>552</b>	<b>643</b>	<b>733</b>	<b>733</b>	<b>733</b>
4.	<b>Annual Profit</b>	<b>61</b>	<b>174</b>	<b>291</b>	<b>302</b>	<b>310</b>
5.	<b>Return on Investment</b>	<b>7.44%</b>	<b>21.22%</b>	<b>35.37%</b>	<b>36.83%</b>	<b>37.80%</b>
6.	<b>Return on sales</b>	<b>5.06%</b>	<b>12.37%</b>	<b>18.10%</b>	<b>18.78%</b>	<b>19.28%</b>
7.	Annual Contribution	654	-	-	-	-
8.	Break Even Point	54.40%				
9.	Cash Accrual	121	234	351	362	370
10.	Debt Servicing Capacity	187	288	390	385	320
11.	Repayment of Loan	89	110	125	125	125
12.	Debt Serviced	155	164	164	148	135
13.	<b>Pay Back Period</b>	<b>2 Years 7 months 13 days</b>				
14.	<b>Debt Service Coverage Ratio</b>	<b>1:83:1</b>				

**Cash Flow Statement:**

(Rs in Thousands)

Sl. No.	Description	Pre-operative period	Operating years				
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.	Increase in Promoters' Capital	41	-	-	-	-	-
2.	Increase in Subsidy	205	-	-	-	-	-
3.	Increase in Loan	574	-	-	-	-	-
4.	Depreciation	-	60	60	60	60	60
5.	Profit before interest	-	127	228	330	325	320
<b>A.</b>	<b>Total Sources</b>	<b>820</b>	<b>187</b>	<b>288</b>	<b>390</b>	<b>385</b>	<b>380</b>
6.	Increase in Capital Investment	510	-	-	-	-	-
7.	Increase in Current Assets	310	-	-	-	-	-
8.	Interests	-	66	54	39	23	10
9.	Repayment of Loan	-	89	110	125	125	125
<b>B.</b>	<b>Total Disposals</b>	<b>820</b>	<b>155</b>	<b>164</b>	<b>164</b>	<b>148</b>	<b>135</b>
<b>C.</b>	<b>Opening balance</b>	<b>-</b>	<b>-</b>	<b>32</b>	<b>156</b>	<b>382</b>	<b>619</b>
<b>D.</b>	<b>Net Surplus</b>	<b>-</b>	<b>32</b>	<b>124</b>	<b>226</b>	<b>237</b>	<b>245</b>
<b>E.</b>	<b>Closing Balance</b>	<b>-</b>	<b>32</b>	<b>156</b>	<b>382</b>	<b>619</b>	<b>864</b>

**Projected Balance Sheets:**

Sl. No.	Description	Amount in Thousand Rs. Thousands as at the end of				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoters	41	102	276	567	869
2.	Surplus from operations	61	174	291	302	310
	<b>Net Worth</b>	<b>102</b>	<b>276</b>	<b>567</b>	<b>869</b>	<b>1179</b>
3.	Subsidy	205	205	205	205	205
4.	Loan	485	375	250	125	-
<b>A.</b>	<b>Total Liabilities</b>	<b>792</b>	<b>856</b>	<b>1022</b>	<b>1199</b>	<b>1384</b>
1.	Gross Fixed Assets	510	510	510	510	510
	Less Depreciation	60	120	180	240	300
	<b>Net Block</b>	<b>450</b>	<b>390</b>	<b>330</b>	<b>270</b>	<b>210</b>
2.	Current Assets	310	310	310	310	310
3.	Cash & Bank balance	32	156	382	619	864
<b>B.</b>	<b>Total Assets</b>	<b>792</b>	<b>856</b>	<b>1022</b>	<b>1199</b>	<b>1384</b>

## TESTING AND GRINDING OF DIESEL ENGINE PUMP NOZZLE

**Introduction:** Frequent test and grinding of Nozzle of Diesel Engine is a need. Nozzle of Diesel Engine gets choked due to deposits of Carbon and other materials. This is one of the most common problem of Diesel Engines and hence need remedies. Diesel Engines & Generators, Buses, Trucks, Cars, Tractors, motorcycles & other vehicles need these services very frequently.

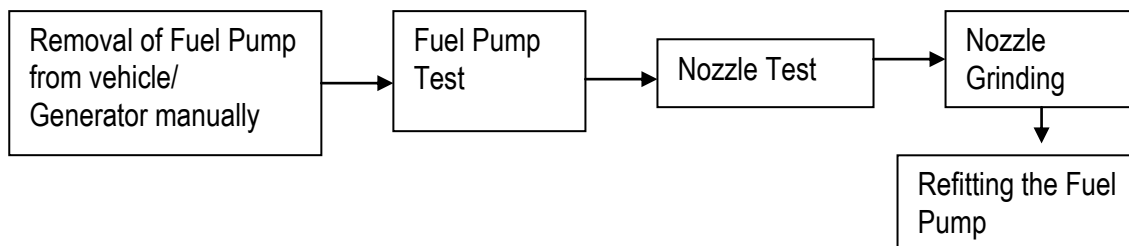
**Market:** With the increase in prices of Petrol, Diesel Engine driven vehicles have become very popular. Thus along with large vehicles like Bus, Truck, Minibus, Tractor, etc. smaller vehicles with Diesel Engines have increased manifold. Besides, Diesel Engine operated Generators are now providing services during Load-shedding in almost every urban localities. Therefore, the demand for testing of Diesel Engine Pumps and grinding/ reconditioning of Nozzle has increased manifold. This automobile servicing unit therefore have good marketing potential.

**Installed Capacity:** assuming that the unit will operate for single shift of 8 hours per day for 300 working days per annum the annual installed capacity is estimated at the following:

1. Diesel Pump Testing	3600 Nos. with a sales value of	Rs. 5,04,000/-
2. Nozzle testing	3600 Nos. with a sales value of	Rs. 72,000/-
3. Nozzle Grinding	3600 Nos. with a sales value of	Rs. 1,26,000/-
		<u>Total: Rs. 7,02,000/-</u>

**Process of Manufacture:** Diesel Engines of vehicles/ Generators are located on the Diesel Fuel pump test bench. After detecting fault the nozzle is also tested. Based on the findings Nozzle grinding and/ or reconditioning is done in the machine.

**Process Flow:**



**Raw Materials:** The unit do not need any raw-material as the job-work involved is that of testing & Grinding. However, small quantities of Diesel and Kerosene oils are required. Annually 500 Liters each of Diesel and Kerosene oil costing Rs. 31,350/- may be required at the installed capacity.

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 1,80,000/-.

**Water:** The unit will need 3000 liters of clean and soft water. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Skilled Worker	2	1,20,000/-
3.	Helper	2	96,000/-
Total		5	2,16,000/-



**Capital Cost Estimate:**

1)	<b>Land &amp; Building</b>	<b>On Rent</b>
2)	<b>Plant &amp; Machinery</b>	
i)	Diesel Fuel-Pump Test bench	Rs. 95,000/-
ii)	Nozzle grinding & reconditioning Machine	Rs. 30,000/-
iii)	Nozzle Tester	Rs. 7,000/-
iv)	Tools	Rs. 10,550/-
		<b>Rs. 1,42,550/-</b>
3)	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 6,000/-
b)	Water Installation	Rs. 6,000/-
c)	Furniture & Miscellaneous others	Rs. 15,000/-
		<b>Rs. 27,000/-</b>
4.	Provision for contingencies	<b>Rs. 10,000/-</b>
5.	Preliminary & pre-operative expenses	<b>Rs. 20,700/-</b>
		<b>Rs. 30,700/-</b>
		<b>Total Fixed Investment Rs. 2,00,250/-</b>
6.	<b>Working Capital (P.M.)</b>	
a)	Raw Material	Rs. 31,350/-
b)	Utilities	Rs. 1,800/-
c)	Salary & Wages	Rs. 18,000/-
d)	Other expenses	Rs. 15,000/-
		<b>Total: Rs. 66,150/-</b>
		<b>Total working capital for 3 months: Rs. 1,98,450/-</b>
		<b>Total Project Cost: Rs. 3,98,700/-</b>

**Means of Finance:**

		<b>Urban</b>	<b>Rural</b>
1.	Composite loan	Rs. 2,79,090/-	Rs. 2,39,220/-
2.	Promoter's contribution	Rs. 19,935/-	Rs. 19,935/-
3.	Subsidy	Rs. 99,675/-	Rs. 1,39,545/-
4.	Debt equity ratio	2.33:1	1.50:1

**Profitability:**

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	<b>Annual Sales Realization in Rs.</b>	<b>6,45,000</b>	<b>7,52,500</b>	<b>8,60,000</b>	<b>8,60,000</b>	<b>8,60,000</b>
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	2,25,720	2,63,340	3,00,960	3,00,960	3,00,960
b)	Utilities	12,960	15,120	17,280	17,280	17,280
c)	Selling expenses	47,550	55,470	63,400	63,400	63,400
	<b>Variable Cost</b>	<b>2,86,230</b>	<b>3,33,930</b>	<b>3,81,640</b>	<b>3,81,640</b>	<b>3,81,640</b>
d)	Wages & Salaries	1,29,600	1,51,200	1,72,800	1,72,800	1,72,800
e)	Administrative expenses	1,08,000	1,26,000	1,44,000	1,44,000	1,44,000
f)	Depreciation	20,025	20,025	20,025	20,025	20,025
g)	Interest on Composite Loan	32,058	25,929	17,915	10,372	2,829
	Fixed & Semi Variable Cost	2,89,683	3,23,154	3,54,740	3,47,197	3,39,654
4.	<b>Total Cost</b>	<b>5,75,913</b>	<b>6,57,084</b>	<b>7,36,380</b>	<b>7,28,837</b>	<b>7,21,294</b>
5.	<b>Annual Profit</b>	<b>69,087</b>	<b>95,416</b>	<b>1,23,620</b>	<b>1,31,163</b>	<b>1,38,706</b>

6.	<b>Return on Investment</b>	<b>17.32%</b>	<b>23.93%</b>	<b>31.00%</b>	<b>32.89%</b>	<b>34.78%</b>
7.	<b>Return on sales</b>	<b>6.42%</b>	<b>8.87%</b>	<b>11.49%</b>	<b>12.20%</b>	<b>12.90%</b>
8.	Annual contribution	3,58,770	-	-	-	-
9.	Break Even Point	48.44%				
10.	Cash accrual	89,112	1,15,441	1,43,645	1,51,188	1,58,731
11.	Debt Servicing Capacity	1,21,170	1,41,370	1,61,560	1,61,560	1,61,560
12.	Repayment of Composite Loan	45,258	52,801	60,344	60,344	60,344
13.	Debt Serviced	77,316	78,730	78,259	70,716	63,173
14.	<b>Pay Back Period</b>	<b>1 year 6 months 21 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.56:1</b>				

**Cash Flow Statement:**

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	19,935	-	-	-	-	-
2.	Increase in Term loan	2,79,090	1,98,450	-	-	-	-
3.	Subsidy	99,675	-	-	-	-	-
4.	Depreciation	-	20,025	20,025	20,025	20,025	20,025
5.	Profit before interests	-	1,01,145	1,21,345	1,41,535	1,41,535	1,41,535
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>3,98,700</b>	<b>3,19,620</b>	<b>1,41,370</b>	<b>1,61,560</b>	<b>1,61,560</b>	<b>1,61,560</b>
6.	Increase in capital investment	3,98,700	-	-	-	-	-
7.	Increase in working capital	-	1,98,450	-	-	-	-
8.	Interest	-	32,058	25,929	17,915	10,372	2,829
9.	Repayment of Term Loan	-	45,258	52,801	60,344	60,344	60,344
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>3,98,700</b>	<b>2,75,766</b>	<b>78,730</b>	<b>78,259</b>	<b>70,716</b>	<b>63,173</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>43,854</b>	<b>62,640</b>	<b>83,301</b>	<b>90,844</b>	<b>98,387</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>43,854</b>	<b>1,06,494</b>	<b>1,89,795</b>	<b>2,80,639</b>	<b>3,79,026</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.
1.	Capital Account of Promoter	19,935	89,022	1,84,438	3,08,058	4,39,221
2.	Surplus from operation	69,087	95,416	1,23,620	1,31,163	1,38,706
	<b>NET WORTH:</b>	89,022	1,84,438	3,08,058	4,39,221	5,77,927
<b>3.</b>	<b>Subsidy</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>	<b>99,675</b>
4.	Term loan outstanding	2,33,832	1,81,031	1,20,687	60,343	-
	<b>TOTAL LIABILITIES</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>
1.	Gross Block	2,00,250	2,00,250	2,00,250	2,00,250	2,00,250
	Less Depreciation	20,025	40,050	60,075	80,10	1,00,125
	<b>NET BLOCK</b>	<b>1,80,225</b>	<b>1,60,200</b>	<b>1,40,175</b>	<b>1,20,150</b>	<b>1,00,125</b>
2.	Working capital	1,98,450	1,98,450	1,98,450	1,98,450	1,98,450
3.	Cash & Bank Balance	43,854	1,06,494	1,89,795	2,80,639	3,79,026
	<b>TOTAL ASSETS</b>	<b>4,22,529</b>	<b>4,65,144</b>	<b>5,28,420</b>	<b>5,99,239</b>	<b>6,77,602</b>

## SCREEN PRINTING (ON FABRIC) UNIT

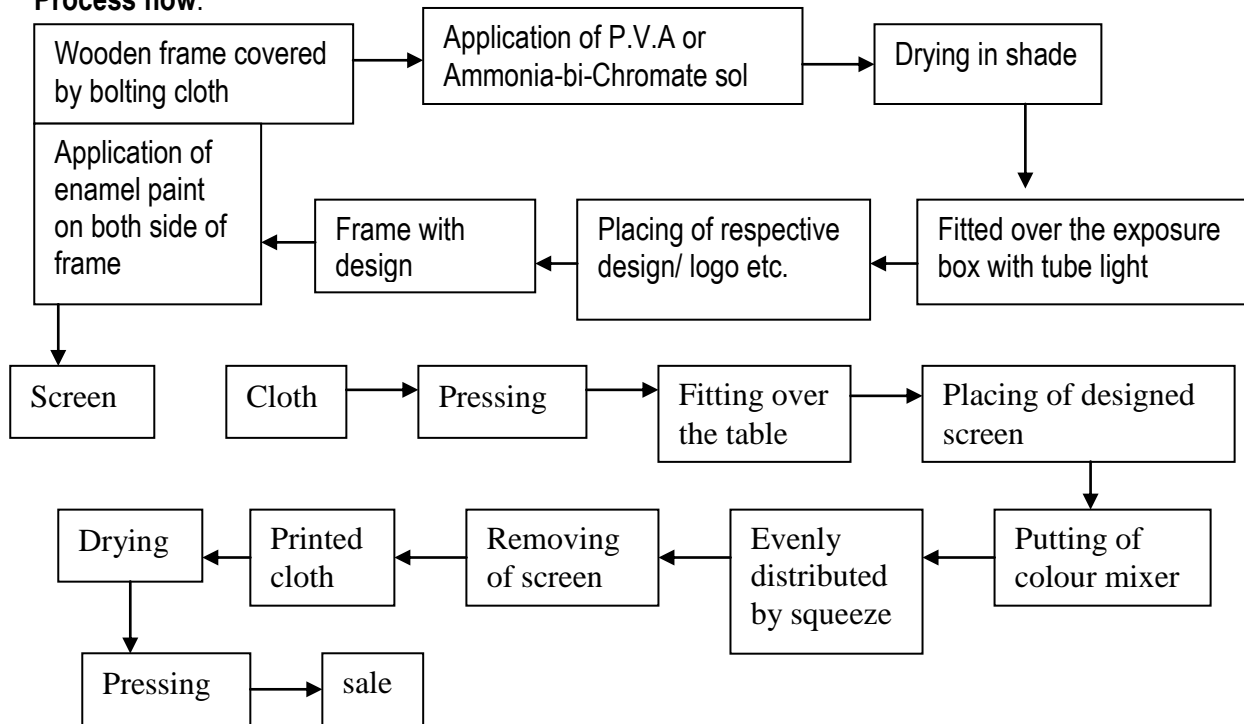
**Introduction:** The selection of clothes reflects a persons personally, and every persons has a different choice of taste for the specific colours and design of the clothes. In this context, we can say that the most commonly used and reasonable way to produce varying and favourite designs of people is screen printing.

**Market:** Screen printing is appropriate means for different kinds of clothes like sarees, its borders, T-shirts, vest coats, Dupattas, scarf, sport shirts, curtains, wall-hanging, banners and many other Screen-printing would be especially used in those cases where the printing work is limited and has considerable variety of designs involved. Therefore, this work is most appropriate for people who have creative inclinations. The work can be obtained by the entrepreneur from different schools, makers of ready-made clothes shop keepers, different business groups, entrepreneur from different business groups, entrepreneurs sports clubs etc., in addition to this group, the printer can also take up work given by college going girls and women, in general. Other than these sources, sufficient work can be obtained from the political parties.

**Installed Capacity:** In the given unit, it is presumed that screen printing is possible over 18000 metre cloth annually consisting of all kinds of clothes such sarees, sport shirts, advertisements, banners, dupattas, curtains, wall hanging and so on. Out of it 12000 metres cloth would be purchased while 6000 meters would be sponsored by the customer over which the artist would do his job of painting. Hence from both types of work, he would get following income.

a.	Purchasing & printing the cloth	Rs. 11,00,000/-
b.	Printing depending over the job work	Rs. <u>5,50,000/-</u>
		<u>Total Income: Rs. 16,50,000/-</u>

**Process:** The design, figure and others that has to be printed over the cloth/ fabric, their figure or photo is prepared by the artist. After this frames made out of light wood on conduit pipes are covered by bottling cloth. Then P.V.A. (silicate 63) and Ammonia bi-chromate solution are applied on the bottling cloth. This frame is used as negative & it is dried-up in shade. After this, it is placed over the exposure box fitted with tube light and respective design is taken over the frame. Over the exposure the space for the figure is created on the frame and the colours of only the figure are imposed on the frame as it is required. After exposure the Enamel paint is applied on both sides and thus the screen is prepared. After the screen is made, binding paste and pigment colours are mixed and prepared. Later the cloth to be printed, is well pressed and fitted over the table. After this, screen with a figure is placed over the cloth and then screen is removed. It is fixed on the table and the colour is put over it and evenly disturbed by a rubber squeezy so that the colour passes on the cloth through the exposed figure. The screen as mentioned is removed and cloth to be printed is placed over it. Similarly remaining clothes are printed. Printed cloths are dried & pressed before packing and sales.

**Process flow:**

**Raw Material:** Raw Materials to be used in this unit would be the following:

Sl. No.	Details	Total Cost
1.	Screen Printing film paper (roll of 10x2 feet)	13,200/-
2.	Different colours & chemicals	11,000/-
3.	Sponge	550/-
4.	Bowls for mixing spoon	550/-
5.	spoon	275/-
6.	Binder	5,500/-
7.	Fixer	2,200/-
8.	Cloth for printing	38,500/-
9.	Others like glue, nails, paper, pins, cotton, Kerosene, thinner, etc.	5,500/-
	<b>Total:</b>	<b>77,275/-</b>

Every month 500 mtrs. of cloth would be printed depending over job work and the rest would be purchased and worked over.

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 15,840/-.

**Water:** The unit will need 5000 liters of clean and soft water per day. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Trained worker	2	11,000/-
3.	Assistant	1	3,850/-
	<b>Total</b>	<b>4</b>	<b>14,850/-</b>

**Financial Aspect of the unit:**

- 1) Land & Building **Rented**  
 2) **Plant & Machinery**

Major Machineries to be used in this particular unit would be following:

Sl.No.	Details	No.	Total Cost (in Rs.)
1.	Enlarger	1	24,000/-
2.	Ink Drier	1	18,000/-
3.	Heater	1	1,800/-
4.	Dark Room (6x8")	1	12,000/-
5.	Colour Mixer	1	5,400/-
6.	Exposing table	1	9,000/-
7.	Wooden stand for screen	1	2,400/-
8.	Designing table	1	3,600/-
9.	Printing table	1	6,000/-
10.	Bolting cloth		6,600/-
11.	Display Board	1	1,800/-
12.	Masking Board	1	1,800/-
13.	Screen Frames 16x12", 18x24", 2x2 feet	30	5,400/-
14.	Squeezy 4", 6", 10", 12"	14	5,880/-
		<b>Total:</b>	<b>1,03,680/-</b>

3) **Miscellaneous Fixed Asset**

- a) Electrification Rs. 11,000/-  
 b) Water Installation Rs. 5,500/-  
 c) Furniture & Miscellaneous others Rs. 16,500/-

**Total: Rs. 33,000/-**

4. Provision for contingencies Rs. 6,402/-  
 5. Preliminary & pre-operative expenses Rs. 16,808/-

**Total Fixed Investment: Rs. 1,59,890/-**

6. **Working Capital**

- a) Raw Material Rs. 77,275/-  
 b) Utilities Rs. 1,650/-  
 c) Salary & Wages Rs. 14,850/-  
 d) Other expenses Rs. 16,500/-

**Total: Rs. 1,10,275/-**

**Total working capital for 3 months: Rs. 3,30,825/-**

**Total Project Cost: Rs. 4,90,715/-**

**Means of Finance:**

- |                            | <u>Urban</u>   | <u>Rural</u>   |
|----------------------------|----------------|----------------|
| 1. Composite loan          | Rs. 3,43,500/- | Rs. 2,94,429/- |
| 2. Promoter's contribution | Rs. 24,536/-   | Rs. 24,536/-   |
| 3. Subsidy                 | Rs. 1,22,679/- | Rs. 1,71,750/- |
| 4. Debt equity ratio       | 2.33:1         | 1.50:1         |

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	<b>Annual Sales Realization</b>	<b>990</b>	<b>1155</b>	<b>1320</b>	<b>1320</b>	<b>1320</b>
3.	<b>Annual Costs in</b>					
a)	Raw Materials	556	649	742	742	742
b)	Utilities	12	14	15	15	15
c)	Selling expenses	76	89	102	102	102
	<b>Variable Cost</b>	<b>644</b>	<b>752</b>	<b>852</b>	<b>859</b>	<b>859</b>
d)	Wages & Salaries	107	125	142	142	142
e)	Administrative expenses	119	138	158	158	158
f)	Depreciation	16	16	16	16	16
g)	Interest on Composite Loan	40	33	24	14	5
	<b>Fixed &amp; Semi Variable Cost</b>	<b>282</b>	<b>312</b>	<b>340</b>	<b>330</b>	<b>321</b>
4.	<b>Total Cost</b>	<b>926</b>	<b>1064</b>	<b>1199</b>	<b>1189</b>	<b>1189</b>
5.	<b>Annual Profit</b>	<b>64</b>	<b>91</b>	<b>121</b>	<b>131</b>	<b>140</b>
6.	<b>Return on Investment</b>	<b>13.03%</b>	<b>18.53%</b>	<b>24.64%</b>	<b>26.68%</b>	<b>28.51%</b>
7.	<b>Return on sales</b>	<b>6.46%</b>	<b>7.87%</b>	<b>9.16%</b>	<b>9.92%</b>	<b>10.60%</b>
8.	Annual contribution	335	-	-	-	-
9.	Break Even Point	48.53				
10.	Cash accrual	80	107	137	147	156
11.	Debt Servicing Capacity	120	140	161	161	161
12.	Repayment of Composite Loan	56	65	75	74	74
13.	Debt Serviced	96	98	99	88	79
14.	<b>Pay Back Period</b>	<b>1 year 3 months 10 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.28:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operativ e Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	24	-	-	-	-	-
2.	Increase in Term loan	344	-	-	-	-	-
3.	Subsidy	123	-	-	-	-	-
4.	Depreciation	-	16	16	16	16	16
5.	Profit before interests	-	104	124	145	145	145
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>491</b>	<b>120</b>	<b>140</b>	<b>161</b>	<b>161</b>	<b>161</b>
6.	Increase in capital investment	<b>160</b>	-	-	-	-	-
7.	Increase in working capital	331	-	-	-	-	-
8.	Interest	-	40	33	24	14	5
9.	Repayment of Term Loan	-	56	65	35	74	74
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>491</b>	<b>96</b>	<b>98</b>	<b>99</b>	<b>88</b>	<b>79</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>24</b>	<b>66</b>	<b>128</b>	<b>201</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>24</b>	<b>42</b>	<b>62</b>	<b>73</b>	<b>82</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>24</b>	<b>66</b>	<b>128</b>	<b>201</b>	<b>283</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	24	88	179	300	431
2.	Surplus from operation	64	91	121	131	140
	<b>NET WORTH:</b>	88	179	30	431	571
3.	<b>Subsidy</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>123</b>	<b>123</b>
4.	Term loan outstanding	288	223	148	74	-
	<b>TOTAL LIABILITIES</b>	<b>499</b>	<b>525</b>	<b>571</b>	<b>628</b>	<b>694</b>
1.	Gross Block	160	160	160	160	160
	Less Depreciation	16	32	48	64	80
	<b>NET BLOCK</b>	<b>144</b>	<b>128</b>	<b>112</b>	<b>96</b>	<b>80</b>
2.	Working capital	331	331	331	331	331
3.	Cash & Bank Balance	24	66	128	201	283
	<b>TOTAL ASSETS</b>	<b>499</b>	<b>525</b>	<b>571</b>	<b>628</b>	<b>694</b>

## Suppliers of Printing Material

- 1) Jain Silk Screen Centre, 3, Burtolla Street, Kolkata – 7
- 2) SHIVA CHEMICAL28, B.T. RD, Kolkata – 2.

## REFRIGERATOR & AC REPAIRING

**Introduction:** Refrigerators and air conditioners have become almost a necessity in every house, business establishment, shops, hospitals, offices, laboratories etc. the no. of which is constantly increasing. Along with this, there is a problem that these equipment often get out of order, repair of these require good workshops. Besides, the repairing regular maintenance of these equipments smooth functioning. Therefore, if unit are established in cities dealing with the repairs and servicing of refrigerators and air-conditions then it just not prove helpful to the customers but would also give sufficient work to the unit owners. But to start this unit a prerequisite condition for the entrepreneur is to either have technical knowledge himself or to have an expert in technical details in the repairing work of these equipments.

**Market:** Work can be obtained from different mediums for this unit. Customers come to the workshops to get their equipment repaired; owners can also keep in contact with the customers; owners can take an yearly maintenance contract from big organisations.

**Target:** 500 refrigerators and air conditions are estimated to be repaired in this unit. Every equipment's repairing/ servicing charges would vary from 100 to 500/- adding the charges of repair replacement of spare parts in actual basis. Thus, income from service charges and replacement would be Rs. 10.75 lakh.

### Raw Materials:

Sl.No.	Details	Quantity	Total Cost
1.	Cooling coil	1	3,300/-
2.	Fan motor	1	1,870/-
3.	Fan blade (clockwise and anticlock wise)	2	660/-
4.	Blower (Anticlockwise and clockwise)	2	1,100/-
5.	Starting capacitors (80-100 MFD. and 100-120 MFD)	4	1,760/-
6.	Running capacitors	4	2,035/-
7.	63 M.F.D. capacitors	2	165/-
8.	Relay	2	1,100/-
9.	Over load protector	4	770/-
10.	Selector switch	4	3,300/-
11.	Thermostert	2	935/-
12.	Air filter	6	825/-
13.	Filter	6	550/-
14.	Copper pipe (5/8, 5/16, 1/4, 3/16)	4	5,500/-
15.	Gas cylinder (10 kg. of 22 no.)	1	7,150/-
16.	Gas cylinder (12 no.)		2,750/-
17.	Welding rods	1 kg.	495/-
		<b>Total:</b>	<b>34,485/-</b>

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 1,98,000/-.

**Water:** The unit will need 3000 liters of clean and soft water. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:



Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Skilled Worker	2	1,32,000/-
3.	Helper	2	1,05,600/-
	Total	5	2,37,600/-

**Financial Aspect of the unit:**

- 1) **Land & Building** 50 sq.ft. **Rented**  
 2) **Plant & Machinery:**

Sl.No.	Details	No.	Cost
1.	Compressor (1.5 tonn)	1	33,600/-
2.	Vacuum pump (with motor)	1	18,000/-
3.	Hand grinder	1	18,000/-
4.	Motor winding machine	1	15,000/-
5.	Charging set	1	13,200/-
6.	Spray painting set	1	15,000/-
7.	Spanners set	2	13,200/-
8.	Electric welding set	1	11,400/-
9.	Drilling machine (Electrical)	1	8,400/-
10.	Gas welding set	1	6,600/-
11.	Clamp tester	1	5,040/-
12.	Wice	1	4,560/-
13.	Multi metre	1	3,240/-
14.	Squeezing and flaring tool set	1	1,200/-
15.	Hand shut off valve	2	540/-
16.	Ampier and volt. meter	4	960/-
17.	Tube cutter	1	660/-
18.	Blow lamp	1	600/-
19.	Punching pliers	1	480/-
20.	Pressure gauge	1	420/-
21.	Compound gauge	1	480/-
22.	Charging line	2	480/-
		<b>Total:</b>	<b>1,71,060/-</b>

3) **Miscellaneous Fixed Asset**

- a) Electrification Rs. 16,500/-  
 b) Furniture & Miscellaneous others Rs. 13,200/-

**Total: Rs. 29,700/-**4. **Provision for contingencies**

Rs. 9,795/-

5. **Preliminary & pre-operative expenses**

Rs. 24,475/-

**Total Fixed Investment Rs. 2,34,530/-**6. **Working Capital (P.M.)**

- a) Raw Material Rs. 34,485/-  
 b) Utilities Rs. 1,900/-  
 c) Salary & Wages Rs. 19,800/-  
 d) Other expenses Rs. 16,500/-

**Total: Rs. 72,765/-**

**Total working capital for 3 months: Rs. 2,18,295/-**

**Total Project Cost: Rs. 4,52,825/-**

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Composite loan	3,16,978/-	2,71,695/-
2. Promoter's contribution	22,641/-	22,641/-
3. Subsidy	1,13,206/-	1,58,489 /-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization	710	827	946	946	946
3.	<b>Annual Costs in</b>					
a)	Raw Materials	248	290	331	331	331
b)	Utilities	14	17	19	19	19
c)	Selling expenses	52	61	70	70	70
	<b>Variable Cost</b>	<b>314</b>	<b>368</b>	<b>420</b>	<b>420</b>	<b>420</b>
d)	Wages & Salaries	143	166	190	190	190
e)	Administrative expenses	119	139	158	158	158
f)	Depreciation	23	23	23	23	23
g)	Interest on Composite Loan	37	30	21	12	3
	<b>Fixed &amp; Semi Variable Cost</b>	<b>322</b>	<b>358</b>	<b>399</b>	<b>383</b>	<b>374</b>
4.	<b>Total Cost</b>	<b>636</b>	<b>726</b>	<b>812</b>	<b>803</b>	<b>794</b>
5.	<b>Annual Profit</b>	<b>74</b>	<b>101</b>	<b>134</b>	<b>143</b>	<b>152</b>
6.	<b>Return on Investment</b>	<b>16.33%</b>	<b>22.29%</b>	<b>29.58%</b>	<b>31.53%</b>	<b>33.53%</b>
7.	<b>Return on sales</b>	<b>10.42%</b>	<b>12.21%</b>	<b>14.16%</b>	<b>15.11%</b>	<b>16.06%</b>
8.	Annual contribution	396	-	-	-	-
9.	Break Even Point	48.78%				
10.	Cash accrual	97	124	157	166	175
11.	Debt Servicing Capacity	134	154	178	178	178
12.	Repayment of Composite Loan	51	60	69	69	68
13.	Debt Serviced	88	90	90	81	72
14.	<b>Pay Back Period</b>	<b>1 year 6 months 21 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.56:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	23	-	-	-	-	-
2.	Increase in Term loan	317	-	-	-	-	-
3.	Subsidy	113	-	-	-	-	-
4.	Depreciation	-	23	23	23	23	23
5.	Profit before interests	-	111	131	155	155	155
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>453</b>	<b>134</b>	<b>154</b>	<b>178</b>	<b>178</b>	<b>178</b>
6.	Increase in capital investment	235	-	-	-	-	-
7.	Increase in working capital	218	-	-	-	-	-
8.	Interest	-	37	30	21	12	3
9.	Repayment of Term Loan	-	51	60	69	69	68
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>453</b>	<b>88</b>	<b>90</b>	<b>90</b>	<b>81</b>	<b>71</b>

C.	OPENING BALANCE	NIL	NIL	46	110	198	295
D.	NET SURPLUS	NIL	46	64	88	97	107
E.	CLOSING BALANCE	NIL	46	110	198	295	402

**Projected Balance sheet:**

Sl. No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	23	97	198	332	475
2.	Surplus from operation	74	101	134	143	152
	<b>NET WORTH:</b>	97	198	337	475	627
3.	<b>Subsidy</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>
4.	Term loan outstanding	266	206	137	68	-
	<b>TOTAL LIABILITIES</b>	<b>476</b>	<b>517</b>	<b>582</b>	<b>656</b>	<b>740</b>
1.	Gross Block	235	235	235	235	235
	Less Depreciation	23	46	69	92	115
	<b>NET BLOCK</b>	<b>212</b>	<b>189</b>	<b>166</b>	<b>143</b>	<b>120</b>
2.	Working capital	218	218	218	218	218
3.	Cash & Bank Balance	46	110	198	295	402
	<b>TOTAL ASSETS</b>	<b>476</b>	<b>517</b>	<b>582</b>	<b>656</b>	<b>740</b>

**Suppliers of Machinery:**

1. Advance Refrigeration Corp. 3 Mangoe Lane, Kolkata-1.
2. Himalaya cooling Industry, 138 D, Picnic Garden Road, Kolkata-39.

## REPAIR & MAINTENANCE OF T.V., RADIO ETC.

**Introduction:** Asian Games in Delhi in the year 1982 saw the advent of Doordarshan. After that, television became an environment medium and lower-middle class people. Introduction of cable television has provided people with many channels at their disposal, increasing the television viewership. Moreover, the revolutionary changes in television has boosted to the demand for television. Now, T.V. sets is just not a common in urban areas but rural areas as well. Nonetheless, just like other electronic items T.V. sets also face problems, which calls for replacement/ repair certain parts of television sets. Since T.V. sets are not convenient to shift from one place to another, customer looks for some workshop at the locality. Before setting up this unit it is advisable for the entrepreneurs to acquire good knowledge or get good training from an institute of repute.

**Target:** In the given unit 700 colour T.V. sets and 400 radio sets etc. would be repaired in a year. Keeping the rate as Rs. 3,85,000/- for repairing colour T.V. sets and Rs. 88,000 for repairing others, would be additional income from sales of spare parts. Then the income from this unit per annum would be around Rs. 6,05,000/-.

**Process:** First of all, the television set, radio or other is checked with certain instruments and part that seems to be obsolete is taken out by solder iron or nose pliers. This work is done in accordance to customers needs and contention.

### Raw Material:

Sl.No.	Details	Cost (in Rs.)
1.	Additional parts (for replacements)	11,000/-
2.	Soldering wire, soldering paste	2,200/-
3.	others	2,750/-
	Total:	15,950/-

**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 6,270/-

**Water:** The unit will need 500 liters of clean and soft water. It is available from both ground water sources and public supply.

**Manpower:** In the unit, is required a good technician whose remuneration would be Rs. 5,500/- per month.

### Financial Aspect of the unit:

- 1) **Land & Building** 100-150 Sq.ft. **Rented**  
 2) **Plant & Machinery:**

Sl.No.	Details	No.	Cost
1.	Cathod ray oscilloscope	1	42,000/-
2.	A.M/ F.M. signal generators	1	12,000/-
3.	T.V. Pattern generator	1	45,600/-
4.	Multimetre	3	12,600/-
5.	Soldering Iron, cutter, noze plier		2,400/-
6.	Other hand tools		6,000/-
		Total:	1,20,600/-

3)	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 550/-
b)	Furniture & Miscellaneous others	Rs. 1,650/-
4.	Provision for contingencies	<b>Rs. 5,610/-</b>
5.	Preliminary & pre-operative expenses	<b>Rs. 14,740/-</b>
	<b>Total Fixed Investment</b>	<b>Rs. 1,43,150/-</b>
6.	<b>Working Capital (P.M.)</b>	
a)	Raw Material	Rs. 15,950/-
b)	Utilities	Rs. 550/-
c)	Salary & Wages	Rs. 5,500/-
d)	Other expenses	Rs. 11,000/-
	<b>Total:</b>	<b>Rs 33,000/-</b>
	<b>Total working capital for 3 months:</b>	<b>Rs. 99,000/-</b>
	<b>Total Project Cost:</b>	<b>Rs. 2,42,150/-</b>

**Means of Finance:**

	<u>Urban</u>	<u>Rural</u>
1. Composite loan	1,69,505/-	1,45,290/-
2. Promoter's contribution	12,108/-	12,108/-
3. Subsidy	60,537/-	84,752/-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization in Rs.	363	424	484	484	484
3.	<b>Annual Costs in Rs.</b>					
a)	Raw Materials	115	134	153	153	153
b)	Utilities	4	5	5	5	5
c)	Selling expenses	24	28	32	32	32
	<b>Variable Cost</b>	<b>143</b>	<b>167</b>	<b>190</b>	<b>190</b>	<b>190</b>
d)	Wages & Salaries	40	46	53	53	53
e)	Administrative expenses	79	92	106	106	106
f)	Depreciation	14	14	14	14	14
g)	Interest on Composite Loan	20	16	11	7	2
4.	<b>Total Cost</b>	<b>296</b>	<b>335</b>	<b>374</b>	<b>370</b>	<b>365</b>
5.	<b>Annual Profit</b>	<b>67</b>	<b>89</b>	<b>119</b>	<b>114</b>	<b>119</b>
6.	<b>Return on Investment</b>	<b>27.68%</b>	<b>26.77%</b>	<b>45.45%</b>	<b>47.10%</b>	<b>49.17%</b>
7.	<b>Return on sales</b>	<b>18.45%</b>	<b>20.99%</b>	<b>24.59%</b>	<b>23.55%</b>	<b>24.58%</b>
8.	Annual contribution	220	-	-	-	-
9.	Break Even Point	<b>41.72%</b>				
10.	Cash accrual	81	103	124	128	133
11.	Debt Servicing Capacity	101	119	135	135	135
12.	Repayment of Composite Loan	28	32	37	37	37
13.	Debt Serviced	48	48	48	44	40
14.	<b>Pay Back Period</b>	<b>1 year 8 months 26 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.68</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	12	-	-	-	-	-
2.	Increase in Term loan	170	-	-	-	-	-
3.	Subsidy	60	-	-	-	-	-
4.	Depreciation	-	14	14	14	14	14
5.	Profit before interests	-	87	105	121	121	121
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>242</b>	<b>101</b>	<b>119</b>	<b>135</b>	<b>135</b>	<b>135</b>
6.	Increase in capital investment	143	-	-	-	-	-
7.	Increase in working capital	99	-	-	-	-	-
8.	Interest	-	20	16	11	7	2
9.	Repayment of Term Loan	-	28	32	37	37	38
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>242</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>44</b>	<b>99</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>53</b>	<b>124</b>	<b>211</b>	<b>302</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>53</b>	<b>71</b>	<b>87</b>	<b>91</b>	<b>97</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>53</b>	<b>124</b>	<b>211</b>	<b>302</b>	<b>399</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	12	79	168	278	392
2.	Surplus from operation	67	89	110	114	119
	<b>NET WORTH:</b>	<b>79</b>	<b>168</b>	<b>278</b>	<b>392</b>	<b>511</b>
<b>3.</b>	<b>Subsidy</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>
4.	Term loan outstanding	142	110	73	36	-
	<b>TOTAL LIABILITIES</b>	<b>281</b>	<b>338</b>	<b>411</b>	<b>488</b>	<b>571</b>
1.	Gross Block	143	143	143	143	143
	Less Depreciation	14	28	42	56	70
	<b>NET BLOCK</b>	<b>129</b>	<b>115</b>	<b>101</b>	<b>87</b>	<b>73</b>
2.	Working capital	99	99	99	99	99
3.	Cash & Bank Balance	53	124	211	302	399
	<b>TOTAL ASSETS</b>	<b>281</b>	<b>338</b>	<b>411</b>	<b>488</b>	<b>571</b>

**Machinery Suppliers:**

1. Avenue Electricals, 3A, Madan Street, Kolkata-72.
2. SPACE –TEC, #B, Madan Street, Kolkata-72.

## CEILING FAN ASSEMBLING & REPAIRING

**Introduction:** Electric Ceiling fan is a common electrical appliance used for providing good air circulation. It is manufactured in sweep diameters of 900 mm, 1050mm, 1200mm,1400mm and 1500mm. Out of these fans of 1200 mm and 1400mm size are most commonly used. Ceiling fans employ fractional horse power AC motors to operate.

**Market :** Ceiling fans are now have become an integral part of any type of building viz hours, offices, schools, college, factories, hospitals and almost all types of commercial establishments. With the overall growth, urbanization and rural electrification the demand for ceiling and exhaust fan are growing day by day.

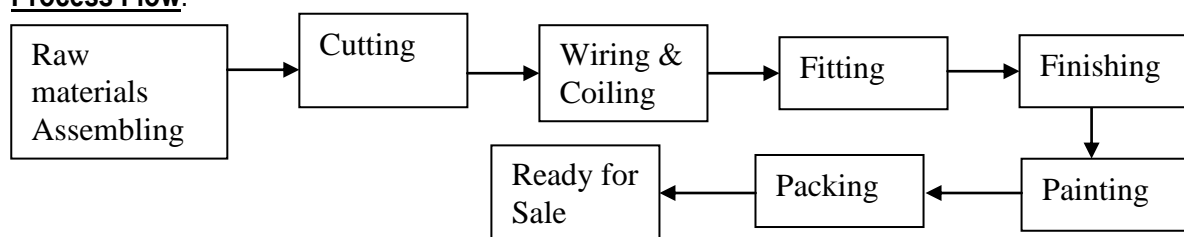
**Installed Capacity:** The minimum economic capacity of a unit manufacturing Ceiling fan is 5000 nos. and 2000 nos. servicing per annum based on one shift operation of 300 days working schedule in a year. Thus, income from service charges and production would be Rs. 24 lakh per annum.

**Raw Materials:** The main raw materials required for manufacture of Ceiling fan is steel sheet for stamping, aluminum casting for body and cover, aluminum sheets for blades assembly, copper winding wire, ball bearings, down rods, capacitor 4 UF for motor, regulators, bushes, resistance wires, insulated materials, painting materials, hardwares and other miscellaneous materials like nuts, bolts, ball, and packing materials etc. Thus cost would be Rs.16,20,000/- and Raw materials are to be sourced mainly from the open market at present availability in Tripura.

**Process:** Manufacturing Process / steps are as follows:

1. The rotor casting are purchased and turned to the required dimension.
2. The armature core is cleaned and coil winding is done on it with automatic coil winding machine.
3. The rotor casting and blades are painted and baked in the oven.
4. The armature and rotor are assembled along with body part.
5. Blades are fitted along with other fittings.

**Process Flow:**



**Power:** The power is available from the state Electric supply corporation Grid. The annual consumption of power is estimated Rs. 14,400/-

**Water:** The unit will need 5000 liters of clean and soft water per day. It is available from both ground water sources and public supply.

**Manpower:** Manpower required by the unit including skilled workers is locally available. The requirement and annual costs of manpower at the installed capacity is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Skilled Worker	2	96,000/-
3.	Unskilled Worker	1	36,000/-
	Total	4	1,32,000/-

**Financial Aspect of the unit:**

1)	Land & Building	<b>Rented</b>
2)	<b>Plant &amp; Machinery:</b>	<b>Rs. 78,000/-</b>
a.	SS and SC lathes, 6 bed length, heavy duty, with motors, cooling pump etc,	
b.	Coil winding machine, Power Hacksaw, Hand pressure, Air compressors,	
c.	A/C High Voltage testers, Maggers, etc,	
3)	<b>Miscellaneous Fixed Asset</b>	
a)	Electrification	Rs. 6,000/-
b)	Furniture & Miscellaneous others	Rs. 29,400/-
	<b>Total:</b>	<b>Rs. 35,400/-</b>
4.	Provision for contingencies	<b>Rs. 4,800/-</b>
5.	Preliminary & pre-operative expenses	<b>Rs. 12,600/-</b>
	<b>Total Fixed Investment</b>	<b>Rs. 1,30,800/-</b>
6.	<b>Working Capital (P.M.)</b>	
a)	Raw Material	Rs. 1,48,500/-
b)	Utilities	Rs. 1,320/-
c)	Salary & Wages	Rs. 12,100/-
d)	Other expenses	Rs. 16,500/-
	<b>Total:</b>	<b>Rs. 1,94,920/-</b>
	<b>Total working capital for 3 months :</b>	<b>Rs. 5,84,760/-</b>
	<b>Total Project Cost:</b>	<b>Rs. 7,15,560/-</b>

**Means of Finance:**

	<b>Urban</b>	<b>Rural</b>
1. Composite loan	5,00,892/-	4,29,336/-
2. Promoter's contribution	35,778/-	35,778/-
3. Subsidy	1,78,890/-	2,50,446 /-
4. Debt equity ratio	2.33:1	1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	<b>Annual Sales Realization</b>	<b>1584</b>	<b>1842</b>	<b>2112</b>	<b>2112</b>	<b>2112</b>
3.	<b>Annual Costs in</b>					
a)	Raw Materials	1069	1247	1496	1426	1426
b)	Utilities	10	11	13	13	13
c)	Selling expenses	121	142	162	162	162
	<b>Variable Cost</b>	<b>1200</b>	<b>1400</b>	<b>1601</b>	<b>1601</b>	<b>1601</b>
d)	Wages & Salaries	87	102	116	116	116
e)	Administrative expenses	119	139	158	158	158
f)	Depreciation	13	13	13	13	13
g)	Interest on Composite Loan	55	45	31	18	5
	<b>Fixed &amp; Semi Variable Cost</b>	<b>274</b>	<b>299</b>	<b>318</b>	<b>305</b>	<b>292</b>



4.	<b>Total Cost</b>	<b>1474</b>	<b>1699</b>	<b>1919</b>	<b>1906</b>	<b>1893</b>
5.	<b>Annual Profit</b>	<b>110</b>	<b>149</b>	<b>193</b>	<b>206</b>	<b>219</b>
6.	<b>Return on Investment</b>	<b>15.36%</b>	<b>20.81%</b>	<b>26.95%</b>	<b>28.77%</b>	<b>30.58%</b>
7.	<b>Return on sales</b>	<b>6.92%</b>	<b>8.11%</b>	<b>9.13%</b>	<b>9.75%</b>	<b>10.36%</b>
8.	Annual contribution	384	-	-	-	-
9.	Break Even Point as percent of capacity	<b>42.81%</b>				
10.	Cash accrual	123	162	206	219	232
11.	Debt Servicing Capacity	178	207	237	237	237
12.	Repayment of Composite Loan	82	95	108	108	108
13.	Debt Serviced	137	140	139	126	119
14.	<b>Pay Back Period</b>	<b>1 year 3 months 24 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.30:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	36	-	-	-	-	-
2.	Increase in Term loan	501	-	-	-	-	-
3.	Subsidy	179	-	-	-	-	-
4.	Depreciation	-	13	13	13	13	13
5.	Profit before interests	-	165	194	224	224	224
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>716</b>	<b>178</b>	<b>207</b>	<b>237</b>	<b>237</b>	<b>237</b>
6.	Increase in capital investment	131	-	-	-	-	-
7.	Increase in working capital	-	585	-	-	-	-
8.	Interest	-	55	45	31	18	5
9.	Repayment of Loan	-	82	95	108	108	108
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>716</b>	<b>137</b>	<b>140</b>	<b>139</b>	<b>126</b>	<b>113</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>41</b>	<b>108</b>	<b>206</b>	<b>317</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>41</b>	<b>67</b>	<b>98</b>	<b>111</b>	<b>124</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>41</b>	<b>108</b>	<b>206</b>	<b>317</b>	<b>441</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	36	146	295	488	694
2.	Surplus from operation	110	149	193	206	219
	<b>NET WORTH:</b>	146	295	488	694	913
<b>3.</b>	<b>Subsidy</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>
4.	Term loan outstanding	419	324	216	108	-
	<b>TOTAL LIABILITIES</b>	<b>744</b>	<b>798</b>	<b>883</b>	<b>981</b>	<b>1092</b>
1.	Gross Block	131	131	131	131	131
	Less Depreciation	13	26	39	52	65
	<b>NET BLOCK</b>	<b>118</b>	<b>105</b>	<b>92</b>	<b>79</b>	<b>66</b>
2.	Working capital	585	585	585	585	585
3.	Cash & Bank Balance	41	108	206	317	441
	<b>TOTAL ASSETS</b>	<b>744</b>	<b>798</b>	<b>883</b>	<b>981</b>	<b>1092</b>

**Machinery Suppliers:**

1. Rinki Engineering Works, Wz-88, Ramgarth Colony, Gali No. 11, Near Moti Nagar, 011-25410966
2. K.D.Dowls & Keys, 9-A, Sanjay Colony, Sec-22, 91-129-2233616/4019500/4120842

## MOBILE SET REPAIRING

**Introduction:** Now-a-days MOBILE is a most popular and necessity item in our daily life. The Mobile Industry has shown quick response in bringing new products to the market. The Mobile industry has started making serious globalization effects. It is building up a critical class of skills and knowledge which is expected to enable than to help achieve globalization.

**Market:** Considering the growth and demand of mobile in the country, there will be good demand for mobile Servicing Unit in the country. This industry has grown both in terms of physical output as well as range of products introduced in the market.

**Suggested Capacity:** The minimum economic capacity of a Mobile Servicing Centre shall be to installation , software, downloading etc 50,000 per annum based on one /two shift operation (8 hours) for 300 days working schedule in a year.

**Raw Materials:** Raw materials are to be sourced mainly from the open market. The annual requirements and costs of raw materials, to be sourced from local market, is shown below.

- |    |   |                      |
|----|---|----------------------|
| 1. | Mobile Testing equipments, (Line tester), connector, Networking software, Blank CD, Flash . | <b>Rs.1,35,000/-</b> |
|----|---|----------------------|

**Power:** Consumption of power and fuel have been arrived at on the basis of consumption norms of the industry. The energy rate has been considered on the basis of existing power tariffs of the electricity department and approximately it will be cost Rs.14,400/- per annum.

**Water:** Requirement of water mainly for washing of film developing etc and drinking purpose. The unit shall avail of the PHE water supply already available at the site.

**Manpower:** The unit will provide employment to 4 persons including staff and engineers for factory administration and sales, labour etc. and all man power to be arrange from local area. The annual needs and costs of manpower is shown below:

Sl.No.	Category of Manpower	No. of Persons	Annual Cost
1.	Manager	1	Self
2.	Skilled Worker	2	96,000/-
3.	Unskilled Worker	1	36,000/-
	Total	4	1,32,000/-

### **CAPITAL COST ESTIMATE:**

- |    |  |               |
|----|--|---------------|
| 1) | Land & Building : Covered area 950 Sq. Mtrs  | <b>Rented</b> |
| 2) | <b>Plant &amp; Machinery:</b><br>Product Number: 4202R, Model: Willtek 4202R<br>Product Number / Model: 4107M/S / Willtek 4107M/S<br>(Description: Radio communication service analyzer, GSM900/1800/1900, level accuracy 1dB. | Rs.78,000/-   |
| 3) | <b>Miscellaneous Fixed Asset</b>   |               |
| a) | Electrification  | Rs. 11,000/-  |
| b) | Furniture & Miscellaneous others   | Rs. 22,550/-  |
| 4. | Provision for contingencies  | Rs. 4,800/-   |

5.	Preliminary & pre-operative expenses	Rs. 10,450/-
	<b>Total Fixed Investment</b>	<b>Rs. 1,30,800/-</b>
6.	<b>Working Capital (P.M.)</b>	
a)	Raw Material	Rs. 1,48,500/-
b)	Utilities	Rs. 1,320/-
c)	Salary & Wages	Rs. 12,100/-
d)	Other expenses	Rs. 16,500/-
	<b>Total:</b>	<b>Rs. 1,94,920/-</b>
	<b>Total working capital for 3 months:</b>	<b>Rs. 5,84,760/-</b>
	<b>Total Project Cost:</b>	<b>Rs. 5,15,560/-</b>

<b>Means of Finance:</b>		<b>Urban</b>	<b>Rural</b>
1.	Composite loan	5,00,892/-	4,29,336/-
2.	Promoter's contribution	35,778/-	35,778/-
3.	Subsidy	1,78,890/-	2,50,446 /-
4.	Debt equity ratio	2.33:1	1.50:1

**Profitability:** (Rs. In Thousands)

Sl.No.	Description	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
1.	Capacity utilized	60%	70%	80%	80%	80%
2.	Annual Sales Realization	1584	1842	2112	2112	2112
3.	<b>Annual Costs in</b>					
a)	Raw Materials	1069	1247	1496	1426	1426
b)	Utilities	10	11	13	13	13
c)	Selling expenses	121	142	162	162	162
	<b>Variable Cost</b>	<b>1200</b>	<b>1400</b>	<b>1601</b>	<b>1601</b>	<b>1601</b>
d)	Wages & Salaries	87	102	116	116	116
e)	Administrative expenses	119	139	158	158	158
f)	Depreciation	13	13	13	13	13
g)	Interest on Composite Loan	55	45	31	18	5
	Fixed & Semi Variable Cost	274	299	318	305	292
4.	<b>Total Cost</b>	<b>1474</b>	<b>1699</b>	<b>1919</b>	<b>1906</b>	<b>1893</b>
5.	<b>Annual Profit</b>	<b>110</b>	<b>149</b>	<b>193</b>	<b>206</b>	<b>219</b>
6.	<b>Return on Investment</b>	<b>15.36%</b>	<b>20.81%</b>	<b>26.95%</b>	<b>28.77%</b>	<b>30.58%</b>
7.	<b>Return on sales</b>	<b>6.92%</b>	<b>8.11%</b>	<b>9.13%</b>	<b>9.75%</b>	<b>10.36%</b>
8.	Annual contribution	384	-	-	-	-
9.	Break Even Point as percent of capacity	<b>42.81%</b>				
10.	Cash accrual	123	162	206	219	232
11.	Debt Servicing Capacity	178	207	237	237	237
12.	Repayment of Composite Loan	82	95	108	108	108
13.	Debt Serviced	137	140	139	126	119
14.	<b>Pay Back Period</b>	<b>1 year 3 months 24 days</b>				
15.	<b>Debt Service Coverage Ratio</b>	<b>1.30:1</b>				

**Cash Flow Statement:** (Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's contribution	36	-	-	-	-	-
2.	Increase in Term loan	501	-	-	-	-	-

3.	Subsidy	179	-	-	-	-	-
4.	Depreciation	-	13	13	13	13	13
5.	Profit before interests	-	165	194	224	224	224
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>716</b>	<b>178</b>	<b>207</b>	<b>237</b>	<b>237</b>	<b>237</b>
6.	Increase in capital investment	131	-	-	-	-	-
7.	Increase in working capital	-	585	-	-	-	-
8.	Interest	-	55	45	31	18	5
9.	Repayment of Loan	-	82	95	108	108	108
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>716</b>	<b>137</b>	<b>140</b>	<b>139</b>	<b>126</b>	<b>113</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>41</b>	<b>108</b>	<b>206</b>	<b>317</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>41</b>	<b>67</b>	<b>98</b>	<b>111</b>	<b>124</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>41</b>	<b>108</b>	<b>206</b>	<b>317</b>	<b>441</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rupees as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of Promoter	36	146	295	488	694
2.	Surplus from operation	110	149	193	206	219
	<b>NET WORTH:</b>	146	295	488	694	913
<b>3.</b>	<b>Subsidy</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>
4.	Term loan outstanding	419	324	216	108	-
	<b>TOTAL LIABILITIES</b>	<b>744</b>	<b>798</b>	<b>883</b>	<b>981</b>	<b>1092</b>
1.	Gross Block	131	131	131	131	131
	Less Depreciation	13	26	39	52	65
	<b>NET BLOCK</b>	<b>118</b>	<b>105</b>	<b>92</b>	<b>79</b>	<b>66</b>
2.	Working capital	585	585	585	585	585
3.	Cash & Bank Balance	41	108	206	317	441
	<b>TOTAL ASSETS</b>	<b>744</b>	<b>798</b>	<b>883</b>	<b>981</b>	<b>1092</b>

**Suppliers of Machinery**

1. **Jianglong Industrial&Trading Co.Ltd**, Yangjiang South Rd. No.2 Industrial Zone Yangjiang. Guangdong. China 529500, Tel:(86 662) 3675778/(86 662) 3665286. Fax:(86 662) 3675779/(86 662) 3506528.E-mail:tinaleung@globalsources.com
2. **G. S. Hydraulics**, Mumbai – 400080.
3. **Paras Engineering Co**, Navi Mumbai - 410208,

## FAX PHOTOCOPIER ETC. REPAIRING & SERVICING

**Introduction;** Information Technology is becoming pervasive in the country as more organization take to using fax and photocopier. The Fax and Copier has shown quick response in bring new products to the market. The Fax and copier has started making serious globalization effects. It is building up a critical class of skills and knowledge which is expected to enable than to help achieve globalization.

**The unit Suggested Capacity;** The minimum economic capacity of a Fax & Copier Repairing and servicing Centre shall be to repair fax and copier 200 nos per annum based on one shift operation for 240 days working schedule in a year.

**Raw Materials availability:** Raw materials are to be sourced mainly from the open market. At present availability and supply of the raw materials is not problem e.g Fax & copier logic card, tonner head, drum, lenses, board, nozele of fax, Main Board, copier card, etc to be sourced from open local markets and cost will be Rs.26,40,000 p.a

**Power :** Consumption of power and fuel have been arrived at on the basis of consumption norms of the industry. The unit will require a total connected load of 300 KWH and Water requirement is about 500KL per annum.

**Water:** Requirement of water mainly for washing of film developing etc and drinking purpose. The unit shall avail of the PHE water supply already available at the site and it can also install its own tube well supply for the purpose.

**Manpower:** The unit will provide employment to the following 6 persons, all of whom are locally available:

1.	Manager cum Supervisor	Self	Self
2.	Skilled	4nos	Rs.22,500/-
3.	Office Boy/Peon	1 no	Rs. 2,200/-
4.	Sales Man	1no	Rs. 3,300/-
		<b>Total</b>	<b><u>Rs.27,500/-</u></b>

### CAPITAL COST ESTIMATE:

<b>Land &amp; Building:</b>	<b>500 Sq. ft.</b>	<b>On Rent</b>
<b>Plant &amp; Machinery:</b>		
a. Equipments		Rs. 45,000/-
b. Testing tools (Line tester etc)		Rs. 25,000/-
c. One KVA on line Numeric UPS,		Rs. 37,200/-
d. one Desktop Computer		Rs. 60,000/-
e. one Printer ( DMP )		<u>Rs. 20,000/-</u>
		<b>Total: <u>Rs. 1,87,200/-</u></b>
<b>Miscellaneous Fixed Assets:</b>		
1. Chair & Working Table		Rs. 35,000/-
2. Fan & Lighting and wearing		Rs. 12,500/-
3. Interior decoration		<u>Rs. 35,000/-</u>
		<b>Total: <u>Rs. 82,500/-</u></b>
<b>Preliminary &amp; Preoperative Exp.:</b>		<b><u>Rs. 4,950/-</u></b>
	<b>Total Fixed Capital :</b>	<b><u>Rs. 2,74,650/-</u></b>

### Working Capital:

1. Salary & Wages	Rs. 27,500/-
2. Administrative expenses	Rs. 13,666-

3.	Selling expenses	Rs. 3,300/-
4.	Raw Materials	Rs. 2,20,000/-
5.	Utilities	Rs. 3,880/-

**Total: Rs. 2,68,316/-**

**Total Cost of the Project: Rs. 5,42,966/-**

**Means of Finance:**

	Urban		Rural	
a. Composite loan under PMEGP	70%	Rs. 3,80,076/-	60%	Rs. 3,25,780/-
b. Subsidy	25%	Rs. 1,35,742/-	35%	Rs. 1,90,038/-
c. Margin Money	5%	Rs. 27,148/-	5%	Rs. 27,148/-
	<b>Total</b>	<b>Rs. 5,42,966/-</b>		<b>Rs. 5,42,966/-</b>
d. Debt Equity Ratio		2.33:1		1.50:1

**Profitability:**

(Rs. In Thousands)

Sl.No	Description	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
1.	Capacity utilized as percent of installed capacity	60%	70%	80%	80%	80%
2.	<b>Annual Sales</b>	<b>2,138</b>	<b>2,495</b>	<b>2,851</b>	<b>2,851</b>	<b>2,851</b>
3.	<b>Annual Costs in</b>					
(a)	Raw Materials	1,58	1,848	2,112	2,112	2,112
(b)	Utilities	27	32	37	37	37
(c)	Selling expenses	24	28	31	31	31
	<b>Variable Cost</b>	<b>1,635</b>	<b>1,908</b>	<b>2,180</b>	<b>2,180</b>	<b>2,180</b>
(a)	Wages & Salaries	198	231	264	264	264
(b)	Administrative expenses	98	115	131	131	131
(c)	Depreciation	27	27	27	27	27
(d)	Interest on Composite Loan	44	36	26	16	5
	<b>Fixed &amp; Semi Variable Cost</b>	<b>367</b>	<b>409</b>	<b>448</b>	<b>438</b>	<b>427</b>
	<b>Total Cost</b>	<b>2002</b>	<b>2317</b>	<b>2628</b>	<b>2618</b>	<b>2607</b>
4	<b>Annual profit</b>	<b>136</b>	<b>178</b>	<b>223</b>	<b>233</b>	<b>244</b>
5	<b>Return on investment</b>	<b>25.04%</b>	<b>32.78%</b>	<b>41.06%</b>	<b>42.90%</b>	<b>44.93%</b>
6	<b>Return on sales</b>	<b>6.36%</b>	<b>7.13%</b>	<b>7.82%</b>	<b>8.17%</b>	<b>8.55%</b>
7	Annual Contribution	503				
8	Break Even Point as percent of capacity	43.77%				
9	Cash accrual	163	205	250	260	271
10	Debt servicing capacity	207	241	276	276	276
11	Repayment of Composite Loan	62	72	82	82	82
12	Debt serviced	106	108	108	98	87
13	<b>Pay Back Period</b>	<b>1 years 6 month 10 days</b>				
14	<b>Debt Service Coverage Ratio (DSCR)</b>	<b>1.53:1</b>				

**Cash Flow Statement:**

(Rs. In Thousands)

Sl. No.	Description	Pre-operative Period	Operating Years				
			60%	70%	80%	80%	80%
			First	Second	Third	Fourth	Fifth
1.	Increase in Promoter's capital	27	NIL	NIL	NIL	NIL	NIL
2.	Increase in composite loan	380	NIL	NIL	NIL	NIL	NIL
3.	Increase in Subsidy	136	NIL	NIL	NIL	NIL	NIL
4.	Depreciation		27	27	27	27	27

5.	Profit before interests		180	214	249	249	249
<b>A.</b>	<b>TOTAL SOURCES</b>	<b>543</b>	<b>207</b>	<b>241</b>	<b>276</b>	<b>276</b>	<b>276</b>
6.	Increase in capital investment	<b>275</b>	NIL	NIL	NIL	NIL	NIL
7.	Increase in working capital	268	NIL	NIL	NIL	NIL	NIL
8.	Interests	NIL	44	36	26	16	5
9.	Repayment of loan	NIL	62	72	82	82	82
<b>B.</b>	<b>TOTAL DISPOSALS</b>	<b>543</b>	<b>106</b>	<b>108</b>	<b>108</b>	<b>98</b>	<b>87</b>
<b>C.</b>	<b>OPENING BALANCE</b>	<b>NIL</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>
<b>D.</b>	<b>NET SURPLUS</b>	<b>NIL</b>	<b>101</b>	<b>133</b>	<b>168</b>	<b>178</b>	<b>189</b>
<b>E.</b>	<b>CLOSING BALANCE</b>	<b>NIL</b>	<b>101</b>	<b>234</b>	<b>402</b>	<b>580</b>	<b>769</b>

**Projected Balance sheet:**

Sl.No.	Description	Amount in Rs. Thousands as at the end of the				
		1 <sup>st</sup> Yr.	2 <sup>nd</sup> Yr.	3 <sup>rd</sup> Yr.	4 <sup>th</sup> Yr.	5 <sup>th</sup> Yr.
1.	Capital Account of the Promoter	27	163	341	564	797
2.	Surplus from operations	136	178	223	233	244
	<b>NET WORTH:</b>	<b>163</b>	<b>341</b>	<b>564</b>	<b>797</b>	<b>1041</b>
3.	Composite loan	318	246	164	82	nil
4.	Subsidy	136	136	136	136	136
<b>A.</b>	<b>TOTAL LIABILITIES</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>
1.	Gross Block	275	275	275	275	275
	<b>Less Depreciation</b>	<b>27</b>	<b>54</b>	<b>81</b>	<b>108</b>	<b>135</b>
<b>2</b>	<b>NET BLOCK</b>	<b>248</b>	<b>221</b>	<b>194</b>	<b>167</b>	<b>140</b>
3	Current Assets	268	268	268	268	268
4.	Cash & Bank Balance	101	234	402	580	769
<b>B.</b>	<b>TOTAL ASSETS</b>	<b>617</b>	<b>723</b>	<b>864</b>	<b>1015</b>	<b>1177</b>

**Supplies of Machinery & Equipments :**

1. P&S UNIQUE SYSTEM, Lake Road, Agartala, Pin;799001,
2. Computer Link, Swasti Market, Agartala, Tripura
3. M/S Coral Business Systems Pvt Ltd, 73 Zone 2 , M.P. Nagar, Bhopal