

# PROJECT REPORT

## Of

# PLASTIC RAINCOATS

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Plastic Raincoats**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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**PROJECT AT A GLANCE**

- 1 Name of the Entrepreneur : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx
- Pin: xxxxxx State: xxxxxxxxx
- Mobile xxxxxx
- 5 Product and By Product : **PLASTIC RAINCOATS**
- 6 Name of the project / business activity proposed : **PLASTIC RAINCOATS MAKING UNIT**
- 7 Cost of Project : Rs.15.95 Lakhs
- 8 Means of Finance
- |                 |               |
|-----------------|---------------|
| Term Loan       | Rs.9.86 Lakhs |
| Own Capital     | Rs.1.6 Lakhs  |
| Working capital | Rs.4.5 Lakhs  |
- 9 Debt Service Coverage Ratio : 2.85
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 31%
- 13 Employment : 9 Persons
- 14 Power Requirement : 30.00 HP
- 15 Major Raw materials : Fabric Sheets, Button & chains, Packing material
- 16 Estimated Annual Sales Turnover (Max Capacity) : 132.26 Lakhs
- 17 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 1000 Sq ft	4.00
Plant & Machinery	5.45
Furniture & Fixtures	1.50
Working Capital	5.00
<b>Total</b>	<b>15.95</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution	1.60
Working Capital(Finance)	4.50
Term Loan	9.86
<b>Total</b>	<b>15.95</b>

# **PLASTIC RAINCOATS**

**Introduction:** A raincoat is water resistant or water proofing coat over the cloth to prevent them getting wet. They protect our body from rain may also be in the form of may be combined with a pair of rain pants to make a rain suit. The primary material in a raincoat is fabric that has been specially treated to repel water. The fabric of many raincoats is made of a blend of two or more of the following materials; cotton, polyester, nylon, PVC, and/or rayon. The Raincoat is perfect for long-term survival in wet conditions. The quickest killer in any survival situation is hypothermia, which causes muscle fatigue and makes regular survival tasks infinitely harder.



**Uses & Market Potential:** The raincoats are used to wear over cloth to protect the body getting wet during rain. People also wear raincoats during biking to protect the cloth getting dirty. Usually sometimes raincoats are also used in hiking and camping activities because of their temperature resistant properties where climate change or heavy rainfall is always a possibility. A rain jacket is generally combined with a pair of rain pants. Rain coats are lightweight and are useful for people during heavy rain. The trend of increasing globalization has led to increase in sale of goods in most developing economies. Advancement in product design and availability of a wide range of products is resulting in high demand for raincoats. The rain coat market can be segmented on the basis of product type, distribution channel, end-use, and geography. Based on product type, the market is bifurcated into plastic, nylon,

and vinyl. Nylon is expected to lead the market due to preference among consumers for nylon because of its comfort and affordability.

**Raw material:** The raincoats could be manufactured by using nylon, PVC, or polyester waterproof fabric materials. The cost of each raw material decides the overall product cost. Basic raw material requirement are as follows:

1. Fabric Sheet
2. Button & chains
3. Packing material

**Machinery Requirements:** Major machines & equipments are as follows:

<b>Description</b>	<b>Set</b>	<b>Amount</b>
PVC Welding Machine	5	325000
Button Snap Machine	1	15000
Cutting Machine	1	5000
Other equipments, dies, and hand tools	Ls	200000
<b>Total Amount</b>		<b>545000</b>

**Manufacturing Process:** In the first step, the raw material is procured from the local authorized vendor and stored in the inventory. After this, the raincoat design is prepared as per the customer requirement, current market trends and specific needs. After approval from the design department the design is send to the skilled operators for the sealing and fabrication purpose. In the next step, the fabrics are cut down as per required length and width of the rain coat using cutting machine. There is an arrangement of blades in the machine that cuts the resin at desired locations. A skilled operator is required to hold and guide the fabric.

After this, the PVC fabric is fed into the welding machine to weld the fabric as per the required dimension. The operator welds the two open ends of the fabric to meet the required design. This machine uses High frequency welding or Radio Frequency welding technology. Two pieces of material are placed on a table press that applies pressure to both surface areas. Dies are used to direct the welding process. When the press comes together, high

frequency waves are passed through the small area between the die or the mould and the table where the weld takes place.

The high frequency or radio frequency field causes the molecules in certain materials to oscillate and get hot up to the melting point of the material. The combination of this heat under pressure causes the weld to take the shape of the die. High Frequency welding is used in a variety of industries where a strong consistent leak-proof seal is required. HF welding can only be used with materials of which the molecules allow themselves to vibrate due to the alternating electrical field, therefore PVC (polyvinylchloride) and PU (polyurethane) are the most common thermoplastics to be welded with HF. In the next step, the raincoats are quality tested. After this they are packed and dispatched as per required quantity.

**Area:** The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000Sqft. Civil work cost will be Rs 4 Lac (Approx.)

**Power Requirement:** The power consumption required to run all the machinery could be approximated as 30 Hp

**Manpower Requirement:** There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 9 including 1 Supervisor, 1 Plant operator, 2 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

**Bank Term Loan:** Rate of Interest is assumed to be at 11%

**Depreciation:** Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

**Approvals & Registration Requirement:**

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board

**Implementation Schedule:**

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

**FINANCIALS**

<b>PROJECTED BALANCE SHEET</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>SOURCES OF FUND</b>					
<b>Capital Account</b>					
Opening Balance	-	2.51	4.65	6.77	9.88
Add: Additions	1.60	-	-	-	-
Add: Net Profit	2.91	4.64	4.82	7.12	9.14
Less: Drawings	2.00	2.50	2.70	4.00	6.00
<b>Closing Balance</b>	<b>2.51</b>	<b>4.65</b>	<b>6.77</b>	<b>9.88</b>	<b>13.02</b>
CC Limit	4.50	4.50	4.50	4.50	4.50
Term Loan	8.76	6.57	4.38	2.19	0.00
Sundry Creditors	1.31	1.53	1.68	1.84	1.99
<b>TOTAL :</b>	<b>17.08</b>	<b>17.25</b>	<b>17.33</b>	<b>18.41</b>	<b>19.51</b>
<b>APPLICATION OF FUND</b>					
<b>Fixed Assets ( Gross)</b>	<b>10.95</b>	<b>10.95</b>	<b>10.95</b>	<b>10.95</b>	<b>10.95</b>
Gross Dep.	1.37	2.56	3.59	4.50	5.28
Net Fixed Assets	9.58	8.39	7.36	6.45	5.67
<b>Current Assets</b>					
Sundry Debtors	2.61	3.09	3.51	3.95	4.41
Stock in Hand	4.17	4.82	5.40	5.99	6.60
Cash and Bank	0.72	0.94	1.07	2.01	2.83
<b>TOTAL :</b>	<b>17.08</b>	<b>17.25</b>	<b>17.33</b>	<b>18.41</b>	<b>19.51</b>

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<b>PROJECTED PROFITABILITY STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>A) SALES</b>					
Gross Sale	78.30	92.69	105.28	118.47	132.26
<b>Total (A)</b>	<b>78.30</b>	<b>92.69</b>	<b>105.28</b>	<b>118.47</b>	<b>132.26</b>
<b>B) COST OF SALES</b>					
Raw Material Consumed	56.25	65.63	72.19	78.75	85.31
Electricity Expenses	2.05	2.28	2.51	2.74	2.97
Repair & Maintenance	1.72	1.85	2.63	2.37	2.65
Labour & Wages	7.81	8.20	9.84	12.30	14.76
Depreciation	1.37	1.19	1.04	0.90	0.79
<b>Cost of Production</b>	<b>69.21</b>	<b>79.15</b>	<b>88.21</b>	<b>97.07</b>	<b>106.48</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>2.30</b>	<b>2.64</b>	<b>2.99</b>	<b>3.37</b>
<b>Less: Closing Stock /WIP</b>	<b>2.30</b>	<b>2.64</b>	<b>2.99</b>	<b>3.37</b>	<b>3.76</b>
Cost of Sales (B)	66.91	78.81	87.85	96.69	106.09
<b>C) GROSS PROFIT (A-B)</b>	<b>11.39</b>	<b>13.88</b>	<b>17.43</b>	<b>21.78</b>	<b>26.17</b>
	<b>14.54%</b>	<b>14.97%</b>	<b>16.55%</b>	<b>18.38%</b>	<b>19.79%</b>
D) Bank Interest (Term Loan )	1.07	0.87	0.63	0.39	0.15
ii) Interest On Working Capital	0.50	0.50	0.50	0.50	0.50
E) Salary to Staff	3.78	4.16	4.99	5.99	7.19
F) Selling & Adm Expenses Exp.	3.13	3.71	4.42	4.74	5.29
<b>TOTAL (D+E)</b>	<b>8.48</b>	<b>9.23</b>	<b>10.54</b>	<b>11.61</b>	<b>13.12</b>
<b>H) NET PROFIT</b>	<b>2.91</b>	<b>4.64</b>	<b>6.89</b>	<b>10.16</b>	<b>13.05</b>
	<b>3.7%</b>	<b>5.0%</b>	<b>6.5%</b>	<b>8.6%</b>	<b>9.9%</b>
I) Taxation			2.07	3.05	3.92
<b>J) PROFIT (After Tax)</b>	<b>2.91</b>	<b>4.64</b>	<b>4.82</b>	<b>7.12</b>	<b>9.14</b>

<b>PROJECTED CASH FLOW STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>SOURCES OF FUND</b>					
Own Contribution	1.60	-			
Reserve & Surplus	2.91	4.64	6.89	10.16	13.05
Depriciation & Exp. W/off	1.37	1.19	1.04	0.90	0.79
Increase In Cash Credit	4.50				
Increase In Term Loan	9.86	-	-	-	-
Increase in Creditors	1.31	0.22	0.15	0.15	0.15
<b>TOTAL :</b>	<b>21.54</b>	<b>6.05</b>	<b>8.08</b>	<b>11.22</b>	<b>13.99</b>
<b>APPLICATION OF FUND</b>					
Increase in Fixed Assets	10.95	-	-	-	-
Increase in Stock	4.17	0.65	0.58	0.59	0.61
Increase in Debtors	2.61	0.48	0.42	0.44	0.46
Repayment of Term Loan	1.10	2.19	2.19	2.19	2.19
Taxation	-	-	2.07	3.05	3.92
Drawings	2.00	2.50	2.70	4.00	6.00
<b>TOTAL :</b>	<b>20.83</b>	<b>5.82</b>	<b>7.95</b>	<b>10.27</b>	<b>13.18</b>
Opening Cash & Bank Balance	-	0.72	0.94	1.07	2.01
Add : Surplus	0.72	0.23	0.12	0.95	0.82
Closing Cash & Bank Balance	<b>0.72</b>	<b>0.94</b>	<b>1.07</b>	<b>2.01</b>	<b>2.83</b>

<b>COMPUTATION OF MAKING OF PLASTIC RAINCOATS</b>			
<b>Item to be Manufactured Plastic Raincoats</b>			
Manufacturing Capacity per day		200	Pcs
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		60,000	Pcs
Total Production per Annum		60,000	Pcs
Year		Capacity	PLASTIC RAINCOATS
		Utilisation	
I		45%	27,000.00
II		50%	30,000.00
III		55%	33,000.00
IV		60%	36,000.00
V		65%	39,000.00

<b>COMPUTATION OF RAW MATERIAL</b>				
Item Name	Quantity of Raw Material	Unit	Unit Rate	Total CostPer Annum (100%)
Fabric Sheets	2,40,000.00	Mtr.	45.00	1,08,00,000.00
Button and chains	60,000.00	Set	25.00	15,00,000.00
Packing material				2,00,000.00
				-
<b>Total</b>				<b>1,25,00,000.00</b>
Total Raw material in Rs lacs				125.00

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)	
I	45%	56.25	
II	50%	65.63	5% Increase in Cost
III	55%	72.19	5% Increase in Cost
IV	60%	78.75	5% Increase in Cost
V	65%	85.31	5% Increase in Cost

<b>COMPUTATION OF SALE</b>					
Particulars	I	II	III	IV	V
Op Stock	-	900.00	1,000.00	1,100.00	1,200.00
Production	27,000.00	30,000.00	33,000.00	36,000.00	39,000.00
	27,000.00	30,900.00	34,000.00	37,100.00	40,200.00
Less : Closing Stock(10 Days)	900.00	1,000.00	1,100.00	1,200.00	1,300.00
Net Sale	26,100.00	29,900.00	32,900.00	35,900.00	38,900.00
Sale Price per Packet	300.00	310.00	320.00	330.00	340.00
<b>Sale (in Lacs)</b>	<b>78.30</b>	<b>92.69</b>	<b>105.28</b>	<b>118.47</b>	<b>132.26</b>

<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>Finished Goods</b>					
(10 Days requirement)	2.30	2.64	2.99	3.37	3.76
<b>Raw Material</b>					
(10 Days requirement)	1.88	2.19	2.41	2.63	2.84
<b>Closing Stock</b>	<b>4.17</b>	<b>4.82</b>	<b>5.40</b>	<b>5.99</b>	<b>6.60</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>			
<b>Particulars</b>	<b>Amount</b>	<b>Margin(10%)</b>	<b>Net Amount</b>
Stock in Hand	4.17		
Less:			
Sundry Creditors	1.31		
<b>Paid Stock</b>	<b>2.86</b>	<b>0.29</b>	<b>2.57</b>
Sundry Debtors	2.61	0.26	2.35
<b>Working Capital Requirement</b>			<b>4.92</b>
<b>Margin</b>			0.55
<b>MPBF</b>			<b>4.92</b>
<b>Working Capital Demand</b>			<b>4.50</b>

<b>BREAK UP OF LABOUR</b>				
Particulars	Wages	No of	Total	
	Per Month	Employees	Salary	
Supervisor	16,000.00	1	16,000.00	
Plant Operator	12,000.00	1	12,000.00	
Unskilled Worker	10,000.00	2	20,000.00	
Helper	8,000.00	1	8,000.00	
Security Guard	6,000.00	1	6,000.00	
			62,000.00	
Add: 5% Fringe Benefit			3,100.00	
Total Labour Cost Per Month			65,100.00	
Total Labour Cost for the year ( In Rs. Lakhs)		6	7.81	

<b>BREAK UP OF SALARY</b>				
Particulars	Salary	No of	Total	
	Per Month	Employees	Salary	
Manager	12,000.00	1	12,000.00	
Accountant cum store keeper	10,000.00	1	10,000.00	
Sales	8,000.00	1	8,000.00	
Total Salary Per Month			30,000.00	
Add: 5% Fringe Benefit			1,500.00	
Total Salary for the month			31,500.00	
Total Salary for the year ( In Rs. Lakhs)		3	3.78	

<b>COMPUTATION OF DEPRECIATION</b>					
Description	Land	Building/shed	Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
<b>Opening Balance</b>	Leased		-	-	-
Addition	-	4.00	5.45	1.50	10.95
	-	4.00	5.45	1.50	10.95
		-	-	-	
TOTAL		4.00	5.45	1.50	10.95
Less : Depreciation	-	0.40	0.82	0.15	1.37
WDV at end of Ist year	-	3.60	4.63	1.35	9.58
Additions During The Year	-	-	-	-	-
	-	3.60	4.63	1.35	9.58
Less : Depreciation	-	0.36	0.69	0.14	1.19
WDV at end of IIInd Year	-	3.24	3.94	1.22	8.39
Additions During The Year	-	-	-	-	-
	-	3.24	3.94	1.22	8.39
Less : Depreciation	-	0.32	0.59	0.12	1.04
WDV at end of IIIrd year	-	2.92	3.35	1.09	7.36
Additions During The Year	-	-	-	-	-
	-	2.92	3.35	1.09	7.36
Less : Depreciation	-	0.29	0.50	0.11	0.90
WDV at end of IV year	-	2.62	2.84	0.98	6.45
Additions During The Year	-	-	-	-	-
	-	2.62	2.84	0.98	6.45
Less : Depreciation	-	0.26	0.43	0.10	0.79
WDV at end of Vth year	-	2.36	2.42	0.89	5.67

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
<b>I</b>	Opening Balance						
	Ist Quarter	-	9.86	9.86	0.27	-	9.86
	IInd Quarter	9.86	-	9.86	0.27	-	9.86
	IIIrd Quarter	9.86	-	9.86	0.27	0.55	9.31
	Ivth Quarter	9.31	-	9.31	0.26	0.55	8.76
					1.07	1.10	
<b>II</b>	Opening Balance						
	Ist Quarter	8.76	-	8.76	0.24	0.55	8.22
	IInd Quarter	8.22	-	8.22	0.23	0.55	7.67
	IIIrd Quarter	7.67	-	7.67	0.21	0.55	7.12
	Ivth Quarter	7.12		7.12	0.20	0.55	6.57
					0.87	2.19	
<b>III</b>	Opening Balance						
	Ist Quarter	6.57	-	6.57	0.18	0.55	6.03
	IInd Quarter	6.03	-	6.03	0.17	0.55	5.48
	IIIrd Quarter	5.48	-	5.48	0.15	0.55	4.93
	Ivth Quarter	4.93		4.93	0.14	0.55	4.38
					0.63	2.19	
<b>IV</b>	Opening Balance						
	Ist Quarter	4.38	-	4.38	0.12	0.55	3.83
	IInd Quarter	3.83	-	3.83	0.11	0.55	3.29
	IIIrd Quarter	3.29	-	3.29	0.09	0.55	2.74
	Ivth Quarter	2.74		2.74	0.08	0.55	2.19
					0.39	2.19	
<b>V</b>	Opening Balance						
	Ist Quarter	2.19	-	2.19	0.06	0.55	1.64
	IInd Quarter	1.64	-	1.64	0.05	0.55	1.10
	IIIrd Quarter	1.10	-	1.10	0.03	0.55	0.55
	Ivth Quarter	0.55		0.55	0.02	0.55	-
					0.15	2.19	

Door to Door Period            60 Months  
Moratorium Period                6 Months  
Repayment Period                 54 Months

<b><u>CALCULATION OF D.S.C.R</u></b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>CASH ACCRUALS</u></b>	4.28	5.83	5.86	8.02	9.92
Interest on Term Loan	1.07	0.87	0.63	0.39	0.15
Total	5.35	6.70	6.49	8.41	10.07
<b><u>REPAYMENT</u></b>					
Repayment of Term Loan	1.10	2.19	2.19	2.19	2.19
Interest on Term Loan	1.07	0.87	0.63	0.39	0.15
Total	2.17	3.06	2.82	2.58	2.34
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.47</b>	<b>2.19</b>	<b>2.30</b>	<b>3.26</b>	<b>4.30</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.85</b>		

<b>COMPUTATION OF ELECTRICITY</b>				
<b>(A) POWER CONNECTION</b>				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	30	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
<b>Electricity Charges</b>				4,02,840.00
Add : Minimim Charges (@ 10%)				
<b>(B) DG set</b>				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			<b>0.54</b>	
Total cost of Power & Fuel at 100%				4.57
Year		Capacity		Amount (in Lacs)
I		45%		2.05
II		50%		2.28
III		55%		2.51
IV		60%		2.74
V		65%		2.97

## **DISCLAIMER**

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