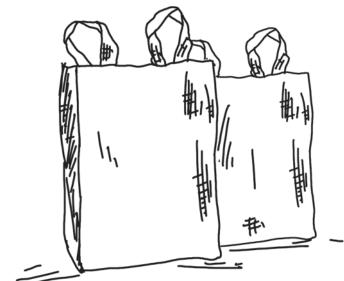
# **JUTE BAG**



#### 1.0 INTRODUCTION

Jute Diversified Product Sector is one of the relatively lesser known but significant sectors that support almost all industrial activity. Jute is the most widely used materials in the world for making sacks as packaging material.

Jute bags, are mainly used to pack cement, Tea, sugar and other bulky articles, which are packed in weight range from 50 to 100 kgs. These are tailored as per customer's specifications in terms of size and to meet the ever increasing demand of jute bags in the farm sector, agrobased industries and cement industries. The common carry bags can be manufactured with jute as the main material with lamination or without lamination.

This project profile is for setting up of a Jute Bag making unit, based on 300 working days per annum and 10 working hours per day. The installed production capacity of the unit per annum is as follows;

Shopping Bags - 30,000 Nos.

### 2.0 MARKET POTENTIAL

Of late, being environment friendly, bio degradable and ecologically harmless nature of jute bags, these bags are increasingly used in common life. The domestic usage and exports are going up and they are commonly used as shopping bags. Shoppers bags made of jute attractively printed are widely used for carrying articles. They are

durable and biologically disposable. They can carry heavy articles. Being one of the most reasonable and convenient medium for packing, the demand for jute bag is continuously increasing despite pressure of its substitutes like plastic bag set. Market for jute bag is available in mills, agriculture products, cattle feed etc.

#### 3.0 PROCESS DETAILS:

Both laminated and non-laminated jute fabrics are procured from the market and as per drawing, design and size cutting is done to make bags. After cutting, the clothes are placed on the table. Then cut pieces are stitched in the sewing machine. During the process of making the bags, various accessories of bamboo and canes are also fitted. After completion of total works the bags are packed and dispatched to market for sale.

The production process comprises of the following different process.

### PROCESS FLOW CHART

Jute Fabric

↓

Drawing, Design, Cutting, Stitching, Tailoring, Cutting
etc.

↓

Printing/Finishing
↓

Packing

### 4.0. COST OF THE PROJECT

The estimated project cost is given below:

(Rs. in lacs)

Particulars	Amount (Rs)
Land & Site Development	Rented
Building & Civil works	Rented
Plant & Machinery	0.75
Misc. Fixed assets	0.53
Preliminary & pre-operative expenses	0.34
Contingencies & escalation @ 3%	0.04
Working capital	0.50
TOTAL	2.15

4.1 Land & Site Development: Nil.

Total Land: 1,500 Sq. Ft.; Covered Area: 750 Sq. Ft.

- 4.2 Building & Civil Works: Nil.
- **4.3** Plant & Machinery: Details of Plant & Machinery are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Heavy Duty Sewing Machine	1	24000	24000
Industrial Sewing Machine	2	12000	24000
Miscellaneous Tools and Equipment	LS	LS	20000
		Sub total	68000
Add: Installation, transportation, etc @ 10%			6800
		TOTAL	74800
		Say (Rs. in lacs)	0.75

**4.4 Misc. Fixed assets:** Details of miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Wooden Working Table	2	2500	5000
Cutting Table	2	4000	8000
Misc. Furniture & fixtures	LS	LS	15000
Electrification including load security	LS	LS	20000
		Sub total	48000
Add: Installation, transportation, etc @ 10%			4800
		TOTAL	52800
		Say (Rs. in lacs)	0.53

**4.5 Contingencies & escalation:** Contingencies & escalation has been assumed at 3% of the cost of land & site development, building & civil works, plant & machinery and miscellaneous fixed assets.

**4.6 Preliminary & pre-operative expenses:** Details of preliminary & pre-operative expenses are given below.

(Rs. In lacs)

Particulars	Amount (Rs)
Travelling expenses	6000
Professional & other fees	10000
Interest during implementation	2552
Miscellaneous expenses	15000
TOTAL	33552
Say (Rs. in lacs)	0.34



# **4.7 Working capital:** Details of working capital are given below.

(Rs. in lacs)

	Period	Total Current Assets		
	(Days)	Year 1	Year 2	Year 3
Raw materials	15	0.21	0.24	0.27
Power & utility	30	0.02	0.02	0.02
Salary	30	0.30	0.30	0.30
Finished Goods	15	0.37	0.40	0.44
Receivables	15	0.37	0.43	0.49
Total		1.25	1.39	1.53
Working capital margin in Year 1 (40%)	0.50			

### 5.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

(Rs. in lacs)

Particulars		Percent	Amount
EQUITY			
A. Equity from Promoters		40%	0.86
B. Subsidy from Central/State Govt.		-	
DEBT			
Term Loan from Banks/Financial Institutions		60%	1.29
	TOTAL	100%	2.15

### 6.0 PROFITABILITY STATEMENT

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
A. INCOME					
Production Capacity (Nos./annum)	30000	30000	30000	30000	30000
Capacity utilisation	60%	70%	80%	80%	80%
Production/annum at capacity utilisation	18000	21000	24000	24000	24000
Total income/annum	9.00	10.50	12.00	12.00	12.00
B. OPERATING EXPENSES					
Raw Materials	4.99	5.82	6.65	6.65	6.65
Power & Utility	0.20	0.24	0.27	0.27	0.27
Salary	3.60	3.62	3.64	3.65	3.67
Repair & Maintenance	0.02	0.02	0.02	0.02	0.02
Other Expenses	0.09	0.11	0.12	0.12	0.12
Total Operating Expenses	8.91	9.80	10.70	10.72	10.74
Operating profit	0.09	0.70	1.30	1.28	1.26
C. FINANCIAL EXPENSES					
Depreciation	0.07	0.07	0.07	0.07	0.07
Interest on Term Loan	0.10	0.08	0.06	0.04	0.01
Interest on Working Capital Loan	0.06	0.07	0.07	0.07	0.07
Net Profit	-0.14	0.47	1.09	1.10	1.10
Net cash accruals	-0.07	0.55	1.16	1.17	1.17
Principal Repayment	0.14	0.29	0.29	0.29	0.29

**6.1 Production capacity and Sales Realisation:** Total production of **Jute Bags** at 100% capacity utilization is estimated as below.

Jute Shopping Bags	30000 Nos.
Total production per annum at 100% capacity (in Nos.)	30000 Nos.

Products	Qnty	Average Rate Per Unit (Rs.)	Amount (Rs)
Jute Shopping Bags	30000 Nos.	50	1500000
Total Sale Turnover per annum at 100% capacity			1500000

**6.2 Raw materials:** Total expenses on raw materials at 100% capacity utilization are estimated as below.

Jute Fabrics 36,200 Meter @ Rs. 18/Per Meter	651600
Consumables like Thread, Needle, Label, Buckles, Hook, Runner, Chain, Lining, Handle, Eye Let etc @ Rs. 15,000 Per Month	180000
Expenses on raw material at 100% capacity (Rs)	831600

**6.3** Power & Utility: Total expenses on power & utility at 100% capacity utilization is estimated as below.

		Power	
Particulars Particulars	Quantity	(Kw)	Total (Kw)
Plant & Machinery		2.50	2.50
General Lighting	5	0.10	0.50
Total p	ower requireme	ent/ day (Kw)	3.00
No. of hrs/day	10		
No. of days/annum	300		
Annual power requirement (kwh)	9000		

3.50

31500

Expenses on Oil/Lubricants (Rs) 2400

Expenses on Power & Utility at 100% capacity (Rs) 33900

**6.4 Salary:** Total expenses on salary in the 1<sup>st</sup> year are estimated as given below. It is assumed that salary expenses will increase @ 0.5% every subsequent year.

Particulars of Employees	Numbers	Salary/ Month (Rs)	Cost/ annum (Rs)
Manager	1	6000	72000
Master Cutter	1	4000	48000
Tailors	5	3000	180000
Unskilled workers	2	2500	60000
Expenses on salary in the 1st year (Rs)			360000

Rate per unit (Rs)

Expenses on Power (Rs)

**6.5** Repair & Maintenance: Total expenses on repair & maintenance in the 1 st year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 2% every subsequent year.

(Rs. in lacs)

			Amount
Particulars Particulars	Cost (Rs)	Rate	(Rs)
Building & Civil works	0.00	1.00%	0.00
Plant & Machinery	0.75	2.00%	0.02
Misc. Fixed assets	0.53	1.50%	0.01
Expenses on repair & maintenance in year 1			0.02

- **6.6** Other Expenses: Other expenses have been assumed at 1% of sales realisation.
- **6.7 Depreciation:** Depreciation has been calculated by straight line method. The details of calculation are given below.

(Rs in lacs)

Description	Cost (Rs)	Rate	Amount/ annum (Rs)
Building & Civil works	0.00	3.34%	0.00
Plant & Machinery	0.75	5.28%	0.04
Misc. Fixed assets	0.53	6.33%	0.03
TOTAL			0.07

**6.8 Interest on term loan & principal repayment:** Interest rate has been assumed at 8.00%. Duration of Loan repayment has been considered for a period of 5 years including moratorium period of 6 Months with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)

Month	Year	1	2	3	4	5
Month 1	Opening balance	1.29	1.15	0.86	0.57	0.29
	Repayment	0.00	0.02	0.02	0.02	0.02
	Interest (8%)	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.29	1.12	0.84	0.55	0.26
Month 2	Opening balance	1.29	1.12	0.84	0.55	0.26
	Repayment	0.00	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.29	1.10	0.81	0.53	0.24
Month 3	Opening balance	1.29	1.10	0.81	0.53	0.24
	Repayment	0.00	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.29	1.08	0.79	0.50	0.22
Month 4	Opening balance	1.29	1.08	0.79	0.50	0.22
	Repayment	0.00	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.29	1.05	0.77	0.48	0.19
Month 5	Opening balance	1.29	1.05	0.77	0.48	0.19
	Repayment	0.00	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.29	1.03	0.74	0.45	0.17
Month 6	Opening balance	1.29	1.03	0.74	0.45	0.17
	Repayment	0.00	0.02	0.02	0.02	0.02

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	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.29	1.00	0.72	0.43	0.14
Month 7	Opening balance	1.29	1.00	0.72	0.43	0.14
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.27	0.98	0.69	0.41	0.12
Month 8	Opening balance	1.27	0.98	0.69	0.41	0.12
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.24	0.96	0.67	0.38	0.10
Month 9	Opening balance	1.24	0.96	0.67	0.38	0.10
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.22	0.93	0.65	0.36	0.07
Month 10	Opening balance	1.22	0.93	0.65	0.36	0.07
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.20	0.91	0.62	0.33	0.05
Month 11	Opening balance	1.20	0.91	0.62	0.33	0.05
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.17	0.89	0.60	0.31	0.02
Month 12	Opening balance	1.17	0.89	0.60	0.31	0.02
	Repayment	0.02	0.02	0.02	0.02	0.02
	Interest	0.01	0.01	0.00	0.00	0.00
	Closing balance	1.15	0.86	0.57	0.29	0.00
Principal Re	payment	0.14	0.29	0.29	0.29	0.29
Interest		0.10	80.0	0.06	0.04	0.01

# 7.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5
Profit After Tax (Net Profit)	-0.14	0.47	1.09	1.10	1.10
Depreciation	0.07	0.07	0.07	0.07	0.07
Interest	0.10	0.08	0.06	0.04	0.01
Total	0.03	0.63	1.22	1.20	1.19
Interest	0.10	0.08	0.06	0.04	0.01
Loan repayment	0.14	0.29	0.29	0.29	0.29
Total	0.24	0.37	0.35	0.32	0.30
DSCR	0.14	1.71	3.54	3.73	3.96

Average DSCR = 2.70

# 8.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

Year	1	2	3
A. Net sales	9.00	10.50	12.00
B. Variable cost			



Raw Materials	4.99	5.82	6.65
Power & Utility	0.20	0.24	0.27
Other expenses	0.09	0.11	0.12
Interest on Working Capital Loan	0.06	0.07	0.07
Total variable cost	5.34	6.23	7.12
C. Contribution (A-B)	3.66	4.27	4.88
D. Fixed & Semi-fixed Costs			
Salary	3.60	3.62	3.64
Repair & maintenance	0.02	0.02	0.02
Interest on Term Loan	0.10	0.08	0.06
Depreciation	0.07	0.07	0.07
Total fixed cost	3.80	3.80	3.79
E. BREAK EVEN POINT	103.83%	88.90%	77.65%
F. BEP at operating capacity	62.30%	62.23%	62.12%
G. Cash BEP	61.10%	61.03%	60.92%

### 9.0 INTERNAL RATE OF RETURN (IRR)

(Rs. in lacs)

Year	0	1	2	3	4	5
CASH OUTFLOW						
Capital Expenditure	1.32	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	1.25	0.14	0.14	0.00	0.00
Total (A)	1.32	1.25	0.14	0.14	0.00	0.00
CASH INFLOW						
Profit After Tax		-0.14	0.47	1.09	1.10	1.10
Add: Depreciation		0.07	0.07	0.07	0.07	0.07
Add: Interest		0.10	0.08	0.06	0.04	0.01
Add: Salvage Value						
Total (B)	0.00	0.03	0.63	1.22	1.20	1.19
NET FLOW (B-A)	-1.32	-1.22	0.49	1.09	1.20	1.19

IRR = 30%

