

PROJECT PROFILE COIR GEO-TEXTILES ON AUTOMATIC LOOM UNIT

PRODUCT	:	COIR GEO-TEXTILES
PRODUCTION CAPACITY (P.A)		
(100% CAPACITY)	:	180000 SQ.METER (H2M6)
VALUE	:	RS. 100.80 LAKHS
MONTH & YEAR OF PREPARATION	:	JUNE 2018
PREPARED BY	:	COIR BOARD, MINISTRY OF MSME, GOVT OF INDIA

INTRODUCTION

Coir geo textiles are permeable fabric capable to control soil erosion. It protects the earth and promotes vegetation retaining precious topsoil. Coir geo textiles are made from coir fibre/yarn extracted from coconut husk either by natural retting or by mechanical process. It is a woven fabric of two treadle in construction with a width 1-2meter and 50-meter length and made from 2-ply coir yarn in which the warp and weft strands are positioned at a distance to get a mesh (net) effect of ¼", ½" and 1". The netting (mesh) gives the grass plenty of room to grow, at the same time it provides large number of "Check Dams" per square meter of soil surface.

The coir geo textiles initially holds the ground for seeds and seedling and provides a mechanical support against water erosion helps the germination of seeds for better and growth of the plants conserving moisture and adds organic matter to the soil after degradation.

• PROCESS OF MANUFACTURE

In power loom, the operation for lifting of the shed and the force to beat the slay are done by motor. The loom has a speed of 90 picks per/hour. 240 sq meter of coir matting can be woven per day with the help of one operator and one helper. Bobbin winding machine and creel stand is required for the loom.

- **BASIS AND PRESUMPTIONS**

- The Project Profile is based on 8 working hours for 2 shifts in a day and 25 days in a month and the Break Even efficiency has been calculated on 70%, 80%, 90%, 90% and 100% capacity utilization.
- The rate of interest both for fixed asset and working capital have been taken as 12.5% p.a.

- **TECHNICAL ASPECTS**

Installed Production capacity per loom/shift	:	300 Sq. meter per shift
Number of Loom	:	1
Number of Shift per day	:	2
Working days p.a	:	300 days
Yield wastage	:	5%
Capacity Utilization		
-First year	:	70%
-Second year	:	80%
-Third year	:	90%
-Fourth year	:	90%
-Fifth year	:	100%
Rate of Average Sales Realization	:	Rs. 56000/1000Sq.meter
Rate of Average cost of raw material	:	Rs.47000
Interest on term Loan	:	12.50%
Interest on working capital	:	12.50%

Manpower requirement

Supervisor	:	1
Skilled worker	:	4

• FINANCIAL ASPECTS

i) Cost of Project

		Amount
• Land	:	Lease/owned
• Building	:	Rs. 650000/-
• Machinery & Equipments	:	Rs.1000000/-
• Working Capital		Rs. 584000/-

Total	:	Rs. 2234000/-

Sl. No	Description of machines & equipments	Qty	Amount (Rs)
1	Automatic Loom (including double head bobbing winding machine, Cops winding, flyer etc.), Electrification	1 no	1000000.00-
Total			1000000.00-

ii) Means of Finance

• Promoters Capital	5%	:	Rs. 112000/-
• Bank Term loan	95%	:	Rs.1568000/-
• WC Loan from Bank	95%	:	Rs .554000/-

Total		:	Rs.2234000/-

• **DETAILS OF THE PROFITABILITY OF THE PROJECT**

Rs.in Lakhs

Years		1	2	3	4	5
Installed Production capacity/loom/shift	Sq.meter	300	300	300	300	300
Number of machines		1	1	1	1	1
Number of shift/day		2	2	2	2	2
Working days per annum		300	300	300	300	300
Installed production capacity per annum	Sq.meter	180000	180000	180000	180000	180000
Capacity utilization		70%	80%	90%	90%	100%
Annual production quantity		101	115	130	130	144
Annual Sales Realization	Rs. 56000 Sq.meter	70.56	80.64	90.72	90.72	100.80
Cost of Production						
Raw material requirement	Tons	105.84	120.96	136.08	136.08	151.20
Cost of raw material	Rs. 47000	49.74	56.85	63.96	63.96	71.06
Spares, Repairs & maintenance	2%	0.20	0.22	0.24	0.27	0.29
Wages & salary		7.73	8.83	9.94	9.94	11.04
Insurance		0.10	0.10	0.10	0.10	0.10
Power cost		0.56	0.64	0.72	0.72	0.80
Cost of Production		58.33	66.64	74.95	74.98	83.30
Gross Profit		12.23	14.00	15.77	15.74	17.5
Administrative & selling expenses	2%	1.41	1.61	1.81	1.81	2.02
Interest on Term Loan		1.61	1.75	1.47	0.49	0.21
Interest on Working capital		0.69	0.69	0.69	0.69	0.69
Depreciation of machinery		1.00	1.00	1.00	1.00	1.00

Depreciation of building		0.33	0.33	0.33	0.33	0.33
Total		5.04	5.38	5.3	4.32	4.25
Net Profit		7.19	8.62	10.47	11.42	13.25

- ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	70%	80%	90%	90%	100%
Break-even point	76%	36%	32%	25%	22%
Break even Production	76	42	41	33	32

- DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	70%	80%	90%	90%	100%
DSCR	3.59	2.85	3.48	4.72	5.90
Average DSCR	4.11				
DSCR weighted average	3.94				

- WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	70%	80%	90%	90%	100%
Variable Cost	58.33	66.64	74.95	74.98	83.30
Fixed Cost	5.04	5.38	5.3	4.32	4.25
Working capital Gap	5.84	6.68	7.52	7.56	8.42