

PROJECT PROFILE FOR COIR GARDEN ARTICLES PRODUCTION

UNIT

PRODUCT	:	GARDEN ARTICLES
QUALITY & STANDARD FIBRELINERS	:	a) MOULDED RUBBERISED COIR b) MOULDED RUBBERISED COIR FIBER POTS FOR TISSUE CULTURE c) DECORATIVE ARTICLES
PRODUCTION CAPACITY (P.A) (100% CAPACITY)	:	1000 PIECES
VALUE	:	RS.63 LAKHS
MONTH & YEAR OF PREPARATION	:	JUNE 2018
PREPARED BY	:	COIR BOARD, MINISTRY OF MSME, GOVT OF INDIA

• INTRODUCTION

The raw materials used for the manufacture of garden articles are coir needle felt coir fibres and compounded natural rubber latex. The fibre liners can be used for cultivating bitter gourd/snake gourd. The shaped fibre pots are supported by welded iron wire mesh, which can be kept in air by hanging it from GI wires with the help of hooks for cultivation of seasonal vegetables.

Advantages:

1. Useful for cultivation of seasonal vegetable plants.
2. No loss of manure applied in pots.
3. No chance of growth of weed/ grass in pots.
4. Retains moisture for long period.
5. Replaces non-biodegradable PVC support.

6. 100 % natural and eco-friendly.
7. Suits growth of climbers and hanging plants.
8. Available in various size and shape.

- **PROCESS OF MANUFACTURE**

The process of manufacture involves cleaning of coir fibre in willowing machine for the removal of husk particles, nose fibres and coir pith. The fibres are then fed to the sheeting machine to make it in a sheet form of required thickness. A light coating of compounded natural rubber latex is applied to the coir fibre sheet by hand or automatic spraying to get coated fiber liners or sheets.

It is then shaped to pot size of required shape manually with the help of mould and sprayed with latex compound and cured by hot pressing in a electrically or steam heated hydraulic press. The semi cured fibre pots may be kept in a vulcanization chamber for a specified period so as to get a product of desired degree of vulcanization and to acquire non sticky property. The heating in vulcanization chamber could be effected by circulating hot air through the semi cured fibre pots.

Moulded rubberized coir fiber baskets

These are made from latex coated sheets of coir fiberliners moulded in hemi spheres (baskets) of varying diameter of 10", 12", 14", 16", 18" and 20" keeping the height at 5". 16" quarter spheres are also made. They are also available in "U" shape and conical shape. They are used in roof gardens.

The shaped fiber baskets are supported by welded iron wire mesh, which can be kept in air by hanging it from GI wires with the help of hooks for the cultivation of seasonal vegetables and climbers.

Moulded coir fibre pots

The moulded coir fiber pots are usually used as nursery bag for the seedlings and the wall thickness varies from 2mm to 6mm and the 2mm thick pots are porous, the seedlings grown in these pots can be directly planted without removing the 'nursery bag'.

Coir Fiber tissue culture pots

Coir fiber tissue culture pots are available in size of 3" diameter x 2 5/8" heights and 4" diameter x 3 1/2" height.

BASIS AND PRESUMPTIONS

- The Project Profile is based on 8 working hours for 1 shift in a day and 25 days in a month and the Break Even efficiency has been calculated on 70%, 80%, 90%, 90% and 90% 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 day : 1000 pieces of different Varieties in tune with the market demand

Number of Shift per day : 1

Working days p.a : 300 days

Capacity Utilization

-First year : 70%

-Second year : 80%

-Third year : 90%

-Fourth year : 90%

-Fifth year : 90%

Rate of Average Sales Realization : Rs. 21 per piece

Rate of Average cost of raw material : Rs.155000

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

Manpower requirement

Supervisor : 1

Skilled worker : 8

Unskilled worker : 6

- **FINANCIAL ASPECTS**

- i) Cost of Project**

	Amount
• Land	: Lease/owned
• Work shed	: Rs. 500000/-
• Machinery & Equipment	: Rs.1754000/-
• Working Capital	Rs. 246000/-

Total	: Rs. 2500000/-

Sl. No	Description of machines & equipment	Qty	Amount (Rs)
1	Willowing machine	1	40000.00
2	Sheeting machine	1	500000.00
3	Latex compounding unit	1	400000.00
4	Air compressor with spray gun	1	20000.00
5	Ball mill	1	60000.00
6	Moulds (depending upon the requirement)	3	300000.00
7	Hydraulic press of 40"x40"	1	400000.00
8	Weighing balance	1	34000.00
Total			1754000.00

ii) Means of Finance

• Promoters Capital	5%	:	Rs. 125000/-
• Bank Term loan	95%	:	Rs.2141000/-
• WC Loan from Bank	95%	:	Rs. 234000/-

Total		:	Rs.2500000/-

DETAILS OF THE PROFITABILITY OF THE PROJECT

Rs.in Lakhs

Years		1	2	3	4	5
Installed Production capacity per day	piece	1000	1000	1000	1000	1000
Number of shift/day		1	1	1	1	1
Working days per annum		300	300	300	300	300
Installed production capacity per annum		300000	300000	300000	300000	300000
Capacity utilization		70%	80%	90%	90%	100%
Annual production quantity	Tons	210000	240000	270000	270000	300000
Annual Sales Realization	<i>Rs. 21</i>	44.10	50.40	56.70	56.70	63.00
Cost of Production						
Cost of raw material	Rs. 155,000	13.02	14.88	16.74	16.74	18.60
Power cost		1.02	1.14	1.14	1.27	0.89
Wages & salary		16.72	19.10	21.49	21.49	23.88

Cost of Production		30.62	35.00	39.37	39.37	43.75
Gross Profit		13.48	15.4	17.33	17.33	19.25
Administrative & selling expenses	2%	0.88	1.01	1.13	1.13	1.26
Interest on Term Loan		2.29	2.36	1.94	0.74	0.32
Interest on Working capital		0.29	0.29	0.29	0.29	0.29
Depreciation of machinery		1.75	1.75	1.75	1.75	1.75
Depreciation of building		0.25	0.25	0.25	0.25	0.25
Total		5.46	5.66	5.36	4.16	3.87
Net Profit		8.01	9.74	11.96	13.16	15.38

- ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

Particulars	1	2	3	4	5
	70%	80%	90%	90%	100%
Break-even point	70%	62%	50%	34%	26%
Break even Production	146466	148574	133928	93094	78644

- DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

Particulars	1	2	3	4	5
	70%	80%	90%	90%	100%
DSCR	3.04	2.42	2.95	3.81	4.73
Average DSCR	3.39				
DSCR weighted average	3.27				

- WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

Particulars	1	2	3	4	5
	70%	80%	90%	90%	100%
Variable Cost	30.62	35.00	39.37	39.37	43.75
Fixed Cost	5.46	5.66	5.36	4.16	3.87
Working capital Gap	2.46	2.81	3.18	3.21	3.59