PROJECT PROFILE FOR COIR PITH GROW BAG MAKING UNIT

PRODUCT	**:**	**COIR PITH GROW BAG**
PRODUCTION CAPACITY (P.A)		
(100% CAPACITY)	**:**	**448 TONS**
VALUE	**:**	**RS.156.80LAKHS**
MONTH & YEAR OF PREPARATION	**:**	**JUNE 2018**
PREPARED BY	**:**	**COIR BOARD, MINISTRY OF MSME, GOVT OF INDIA**

- ## INTRODUCTION

Coir pith is a very light and compressible material. It is highly hygroscopic and has good water holding properties. It is widely used in soft-fruit production and other horticultural crops as a soil conditioner, surface mulch/rooting medium and desiccant. Application of coir pith in soil helps in improving the structure and other physical and chemical properties of the soil. Coir pith improves the physical properties such as bulk density, pore space, infiltration rate and hydraulic conductivity of even the heaviest clay soils and allows free drainage when coir pith is incorporated as an ameliorant. Because of its sponge like structure, coir pith helps to retain water and improve aeration in root zone.

- ## PROCESS OF MANUFACTURE

Coir pith grow bags are manufactured by blending coir pith with adequate quantity of short coir fibre. This is then compressed and packed loosely in a UV stabilized black and white polythene bag. At the user end suitable holes are to be cut for planting as well as for drainage. Coir pith grow bags enable to enjoy delicious crop such as tomatoes, strawberries and cucumbers. The bags are ready to use as planting containers. Simply transplant plants into the coir pith grow bags during the planting season.

Specifications

- Weight 350 g +/- 30g
- Size 100 x 18 x 13 cm
- Compression ratio 5:1
- Moisture content less than 20%
- Electrical Conductivity less than 0.65 millimhos/cm

BASIS AND PRESUMTIONS

- The Project Profile is based on 8 working hours for1shift in a day and 200 days in a year 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 day	:	1120 grow bag (2kg)
Number of Shift per day	:	1
Working days p.a	:	200 days
Capacity Utilization		
-First year	:	70%
-Second year	:	75%
-Third year	:	80%
-Fourth year	:	90%
-Fifth year	:	100%
Rate of Average Sales Realization	:	Rs. 70 per bag
Rate of Average cost of raw material	:	Rs.8000 per ton of raw pith

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

Manpower requirement

Supervisor : 1

Unskilled worker : 20

- **FINANCIAL ASPECTS**

i) Cost of Project

		Amount
• Land	:	Lease/owned
• Building	:	Lease/owned
• Machinery &Equipments	:	Rs.2013000/-
• Working Capital	:	Rs. 487000/-

Total	**:**	**Rs. 2500000/-**

Sl. No	Description of machines &equipments	Qty
1	Hydraulic grow bag machine 30 HP	1
2	Screener 2 HP	1
3	De -Stoner 8 HP	1
4	Sewing machine	1
5	Weighing scale	1
6	Pallet corner	4
7	Cooling tower	1
8	Miscellaneous equipments such as Table, pump set etc	

Total	Rs.2013000/-

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ii) Means of Finance

- Promoters Capital 5% : Rs. 125000/-
- Bank Term loan 95% : Rs.1912000/-
- WC Loan from Bank 95% : Rs. 463000/-

Total : Rs.854000/-

DETAILS OF THE PROFITABILITY OF THE PROJECT

Rs.in Lakhs

Years		**1**	**2**	**3**	**4**	**5**
Installed Production capacity per day		1120	1120	1120	1120	1120
Number of shift/day		1	1	1	1	1
Working days per annum		200	200	200	200	200

Installed production capacity per annum		224000	224000	224000	224000	224000
Capacity utilization		70%	75%	80%	90%	100%
Annual production quantity		156800	168000	179200	201600	224000
Annual Sales Realization	*Rs. 35,000*	109.76	117.60	125.44	141.12	156.80
Cost of Production						
Raw material requirement		439.04	470.40	501.76	564.48	627.20
Cost of raw material	Rs.8,000	35.12	37.63	40.14	45.16	50.18
Repairs and Maintenance	2.00%	0.40	0.48	0.58	0.70	0.83
Power cost		3.73	3.99	4.26	4.79	5.32
Cost of Bag	Rs.7500	33.60	36.00	38.40	43.20	48.00
Wages & salary		17.81	19.08	20.35	22.90	25.44
Cost of Production		**90.66**	**97.19**	**103.73**	**116.74**	**129.77**
Gross Profit		**19.1**	**20.41**	**21.71**	**24.38**	**27.03**
Administrative & selling expenses	2.00%	2.20	2.35	2.51	2.82	3.14
Rent		2.40	2.40	2.40	2.40	2.40
Interest on Term Loan		2.00	2.12	1.76	0.63	0.27
Interest on Working capital		0.58	0.58	0.58	0.58	0.58
Depreciation of machinery		2.01	2.01	2.01	2.01	2.01
Total		**9.19**	**9.46**	**9.26**	**8.44**	**8.4**
Net Profit		**9.91**	**10.95**	**12.44**	**15.94**	**18.63**

ESTIMATION OF BREAK EVEN POINT

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
Capacity utilization	70%	75%	80%	90%	100%
Break-even point	48%	46%	43%	35%	31%

Break even Production	151	156	153	140	139

- **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
Capacity utilization	70%	75%	80%	90%	100%
DSCR	4.06	3.03	3.51	5.33	6.68
Average DSCR	4.52				
DSCR weighted average	4.31				

- **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
Capacity utilization	70%	75%	80%	90%	100%
Variable Cost	90.66	97.19	103.73	116.74	129.77
Fixed Cost	9.19	9.46	9.26	8.44	8.4
Working capital Gap	4.87	5.24	5.61	6.33	7.05