# PROJECT PROFILE COIR GEO-TEXTILESON 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 slayare 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 PRESUMTIONS**

  - The Project Profile is based on 8 working hours for2 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 |