**PROJECT PROFILE COIR GEO-TEXTILES UNIT(ANUGRAHALOOM)**

**PRODUCT : COIR GEO-TEXTILES**

**PRODUCTION CAPACITY (P.A)**

**(100% CAPACITY) : 216000 SQ.METER**

**VALUE : RS. 120.96 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**

The metallic handloom named **“ANUGRAHA”** can weave all varieties of coir geo textiles. As there is no power required to operate Anugraha loom, it can be installed in the remote village where women can easily operate it as it has a simple pedal for treadling. The treadling and beating is very easy in Anugraha loom. The treadling is operated by a 3 mm wire rope (motor cycle cable) and beating simplified providing a bush bearing. Anugraha is light weight, easy to shift from one place to another as it needs no foundation. It needs less maintenance and occupies less space. The metallic Anugraha handloom could save trees, which are very essential for maintenance of ecology.

* **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 : 0.042 per shift

Number of Loom : 12

Number of Shift per day : 1

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 /- per1000Sq.m

Rate of Average cost of raw material : Rs.46000/- per1000Sq.m.

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

**Manpower requirement**

 Supervisor : 1

 Skilled worker : 20

* **FINANCIAL ASPECTS**

**i) Cost of Project**

 **Amount**

* Land : Lease/owned
* Building : Rs. 470000/-
* Machinery &Equipments : Rs.1420000/-
* Working Capital Rs. 610000/-

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

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**ii) Means of Finance**

* Promoters Capital 5% : Rs. 125000/-
* Bank Term loan 95% : Rs.1795000/-
* WC Loan from Bank 95% : Rs. 580000/- -------------------
* **Total : Rs.2500000/-**

 **---------------------**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Description of Machines & equipments** | **Qty** | **Amount (Rs)** |
| **1** | Anugraha Loom | 12 | 1000000.00 |
| **2** | Wrapping Device, Spooling Device and Quilling equipments etc. |  | 420000.00 |
| **Total** |  | 1420000.00 |

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

Rs.in Lakhs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Years** |  | **1** | **2** | **3** | **4** | **5** |
| Installed Production capacity/loom/shift | Sq.meter | 60 | 60 | 60 | 60 | 60 |
| Number of machines |  | 12 | 12 | 12 | 12 | 12 |
| Number of shift/day |  | 1 | 1 | 1 | 1 | 1 |
| Working days per annum |  | 300 | 300 | 300 | 300 | 300 |
| Installed production capacity per annum | Sq.meter | 216000 | 216000 | 216000 | 216000 | 216000 |
| Capacity utilization |  | 70% | 80% | 90% | 90% | 100% |
| Annual production quantity |  | 151200 | 172800 | 194400 | 194400 | 216000 |
| **Annual Sales Realization** | Rs. 56000 Sq.meter | **84.67**  | **96.77**  | **108.86**  | **108.86**  | **120.96** |
| Cost of Production  |
| Raw material requirement | Tons | 111.13  | 127.01  | 142.88  | 142.88  | 158.76  |
| Cost of raw material | Rs. 46000 | 51.68  | 59.06  | 66.44  | 66.44  | 73.82  |
| Spares, Repairs & maintenance | 1% | 0.14  | 0.16  | 0.17  | 0.19  | 0.21  |
| Wages & salary |  | 21.17  | 24.19  | 27.22  | 27.22  | 30.24  |
| **Cost of Production** |  | **72.99**  | **83.41**  | **93.83**  | **93.85**  | **104.27**  |
| **Gross Profit** |  | **11.68** | **13.36** | **15.03** | **15.01** | **16.69** |
| Administrative & selling expenses | 0.5% | 0.42  | 0.48  | 0.54  | 0.54  | 0.60  |
| Interest on Term Loan |  | 1.85  | 2.00  | 1.68  | 0.57  | 0.24  |
| Interest on Working capital |  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  |
| Depreciation of machinery |  | 1.42  | 1.42  | 1.42  | 1.42  | 1.42  |
| Depreciation of building |  | 0.24  | 0.24  | 0.24  | 0.24  | 0.24  |
| **Total** |  | **4.65** | **4.86** | **4.6** | **3.49** | **3.22** |
| **Net Profit** |  | **7.03** | **8.5** | **10.43** | **11.52** | **13.47** |

* **ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| Break-even point | 36% | 33% | 27% | 19% | 16% |
| Break even Production | 38 | 40 | 37 | 26 | 24 |

* **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| DSCR | 3.27 | 2.59 | 3.16 | 4.26 | 5.32 |
| Average DSCR | 3.72 |  |  |  |  |
| DSCR weighted average | 3.57 |  |  |  |  |

* **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| Variable Cost | 72.99  | 83.41  | 93.83  | 93.85  | 104.27  |
| Fixed Cost | 4.65 | 4.86 | 4.6 | 3.49 | 3.22 |
| Working capital Gap | 6.10 | 6.98 | 7.86 | 7.90 | 8.79 |