**PROJECT PROFILE FOR COIR PAPER/PAPER PRODUCTS MAKING UNIT**

**PRODUCT : COIR PAPER BOARD**

**PRODUCTION CAPACITY (P.A)**

**(100% CAPACITY) : 300 TON**

**VALUE : RS.67.80 LAKHS**

**MONTH & YEAR OF PREPARATION : JUNE 2018**

**PREPARED BY : COIR BOARD, MINISTRY OF MSME,**

 **GOVT OF INDIA**

* **INTRODUCTION**

Coir paper is manufactured from waste of coir fiber collected from coir processing unit and waste paper (corrugated board waste) from local market. The product finds its application in calendar, binding covers and note book covers.

* **PROCESS OF MANUFACTURE**

 The fiber and paper strips are put into a treatment vessel and then fed into a beater along with water and sized additives to form a pulp type mixture from coir fibre/coir pith. The pulp mixture is spread on a net which enables the water to settle down and form paper sheet. These paper sheets are blotted on a woolen / gada cloth. Water is drawn out from these sheets with the help of a hydraulic press and these sheets are detached from cloth and to let dry in sunlight. After drying these sheets are passed through two heavy rollers and calendaring in between two metal sheets for polishing the papers or boards. Lastly the sheet is cut into the required size and shape as required for marketing.

**BASIS AND PRESUMTIONS**

* The Project Profile is based on 8 working hours for1shift in a day and 25 days in a month and the Break Even efficiency has been calculated on 80%, 85%, 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 : 1 ton

Number of Shift per day : 1

Working days p.a : 300 days

Capacity Utilization

-First year : 80%

-Second year : 85%

-Third year : 90%

-Fourth year : 90%

-Fifth year : 100%

Rate of Average Sales Realization : Rs. 22600 per ton

Rate of Average cost of raw material : Rs.17500 per ton

Raw material requirement

i) Coir waste fiber : 0.5 ton per ton of output

ii) Waste paper : 0.5 ton per ton of output

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

**Manpower requirement**

Supervisor : 1

 Skilled worker : 4

 Unskilled worker : 8

 Total HP required : 60 HP

* **FINANCIAL ASPECTS**

**i) Cost of Project**

 **Amount**

* Land : Lease/owned
* Building : Lease/owned
* Machinery &Equipments : Rs.1997000/-
* Working Capital : Rs. 503000/-

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

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|  |  |  |
| --- | --- | --- |
| **Sl.****No** | **Description of machines &equipments** | **Qty** |
| 1 | Coir fiber Sheredder 10 HP | 1 |
| 2 | Hollender beater 10 HP | 1 |
| 3 | Hydro pulper 15 HP | 1 |
| 4 | TDR refiner 5 HP | 1 |
| 5 | Cylinder mould board machine 3 HP Drive 30:\*36: size one ton per 8 hrs capacity | 1 |
| 6 | Hydraulic power presser 5 HP | 1 |
| 7 | Pulp agitator 2 HP drive | 2  |
| 8 | Pulp pumps  | 3  |
| 9 | Calendaring machine 5 HP drive  | 1 |
| 10 | Cutting machine 3 HP drive | 1 |
| 11 | Trolley, Balance and tools |  |
| **Total** | Rs.1997000/- |

**ii) Means of Finance**

* Promoters Capital 5% : Rs. 125000/-
* Bank Term loan 95% : Rs.1897000/-
* WC Loan from Bank 95% : Rs .478000/- ---------------------

**Total : Rs.2500000/-**

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**DETAILS OF THE PROFITABILITY OF THE PROJECT**

Rs.in Lakhs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Years** |  | **1** | **2** | **3** | **4** | **5** |
| Installed Production capacity per day | *Ton* | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Number of shift/day |  | 1 | 1 | 1 | 1 | 1 |
| Working days per annum |  | 300  | 300  | 300  | 300  | 300  |
| Installed production capacity per annum | *Tons* | 300  | 300  | 300  | 300  | 300  |
| Capacity utilization |  | 80% | 85% | 90% | 90% | 100% |
| Annual production quantity | *Tons* | 240  | 255  | 270  | 270  | 300  |
| **Annual Sales Realization** | *Rs. 22,600*  | **54.24**  | **57.63**  | **61.02**  | **61.02**  | **67.80**  |
| Cost of Production  |
| Cost of raw material | Rs. 17,500  | 21.00  | 22.31  | 23.63  | 23.63  | 26.25  |
| Power cost |  | 2.13  | 2.26  | 2.39  | 2.39  | 2.66  |
| Wages & salary |  | 16.03  | 17.03  | 18.04  | 18.04  | 20.04  |
| **Cost of Production** |  | **39.16**  | **41.61**  | **44.05**  | **44.05**  | **48.95**  |
| **Gross Profit** |  | **15.08** | **16.02** | **16.97** | **16.97** | **18.85** |
| Administrative & selling expenses | 2.00% | 1.08  | 1.15  | 1.22  | 1.22  | 1.36  |
| Rent |  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  |
| Insurance |  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  |
| Interest on Term Loan |  | 1.98  | 2.11  | 1.75  | 0.62  | 0.27  |
| Interest on Working capital |  | 0.60  | 0.60  | 0.60  | 0.60  | 0.60  |
| Depreciation of machinery |  | 2.00  | 2.00  | 2.00  | 2.00  | 2.00  |
| **Total** |  | **5.96** | **6.16** | **5.87** | **4.74** | **4.53** |
| **Net Profit** |  | **9.12** | **9.87** | **11.10** | **12.23** | **14.34** |

**ESTIMATION OF BREAK EVEN POINT**

 Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 80% | 85% | 90% | 90% | 100% |
| Break-even point | 64% | 63% | 55% | 41% | 34% |
| Break even Production  | 155  | 160  | 149  | 111  | 102  |

* **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 80% | 85% | 90% | 90% | 100% |
| DSCR | 3.86 | 2.83 | 3.24 | 4.31 | 5.37 |
| Average DSCR | 3.92 |  |  |  |  |
| DSCR weighted average | 3.77 |  |  |  |  |

* **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 80% | 85% | 90% | 90% | 100% |
| Variable Cost | 39.16 | 41.61 | 44.05 | 44.05 | 48.95 |
| Fixed Cost | 5.96 | 6.16 | 5.87 | 4.74 | 4.53 |
| Working capital Gap | 5.03 | 5.37 | 5.70 | 5.74 | 6.39 |