**PROJECT PROFILE FOR COIR VERTICAL GARDEN UNIT**

**PRODUCT : SETTING UP OF VERTICLE GARDEN**

**PRODUCTION CAPACITY (P.A)**

**(100% CAPACITY) : 75 ASSIGNMENTS**

**VALUE : RS.187.50LAKHS**

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

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

**GOVT OF INDIA**

* **INTRODUCTION**

Vertical Garden is the term used to refer to all form of vegetated wall surfaces. Green walls are not only spectacularly beautiful, but also helpful in enlivening the ambiance. It can absorb heated gas in the air, lower both indoor and outdoor temperature, providing a healthier indoor air quality as well as a more beautiful space. They hold or slow rainwater, providing food and shelter for wildlife.

Agriculture intensification and diversification is achieved and would lead to increased cropping intensity, productivity through better health and nutritional management and sustainable use of land and water resources.

* **PROCESS OF MANUFACTURE**

The use of Vertical garden with C-POM will advantageous to the beneficiaries especially nursery industry to increase yield, uniform & better quality crops, reduction in labour cost, reduction in fertilizer cost, low water requirement, less chances of disease attack, thus reduction in disease control cost and less area to get maximum yield and benefits.

Some plants are able to grow on walls by taking root in the substance of the wall itself. Typical of these are the small herbaceous species such as ivy-leaved toadflax, wallflower and plants such as mosses, lichens and grasses. But other species are naturally adapted for climbing up and over obstacles such as rock faces, trees and shrubs. For these to grow successfully on walls and buildings some kind of support structure is usually essential. Also Green walls can be constructed with many systems.

**BASIS AND PRESUMTIONS**

* The Project Profile is based on 8 working hours for1shift in a day and 300 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 year : 75 assignments

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 : 100%

Rate of Average Sales Realization : Rs. 250000 /- per

assignment

Rate of Average cost of raw material : Rs.210000/- per

assignment

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

**Manpower requirement**

Supervisor : 1

Unskilled worker : 10

* **FINANCIAL ASPECTS**

**i) Cost of Project**

Amount

* Land : Lease/owned
* Building : Rs. 250000/-
* Machinery &Equipments : Rs.250000/-
* Working Capital : Rs.133000/-

**------------------- Total : Rs. 633000/-**

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

|  |  |  |
| --- | --- | --- |
| **Sl.**  **No** | **Description of machines &equipments** | **Amount (Rs)** |
| 1 | Sprinkler |  |
| 2 | Drilling machine |  |
| 3 | Welding set, Polishing Machine |  |
| 4 | Weighing balance |  |
| 5 | Cutting machine |  |
| 6 | Table, Desk etc. |  |
| **Total** | | 250000.00 |

**ii) Means of Finance**

* Promoters Capital 5% : Rs.32000/-
* Bank Term loan 95% : Rs.475000/-
* WC Loan from Bank 95% : Rs.126000/- -------------------

**Total : Rs.633000/-**

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**DETAILS OF THE PROFITABILITY OF THE PROJECT**

Rs.in Lakhs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Years** |  | **1** | **2** | **3** | **4** | **5** |
| Installed Production capacity per year | Assignment | 75 | 75 | 75 | 75 | 75 |
| Number of shift/day |  | 1 | 1 | 1 | 1 | 1 |
| Working days per annum |  | 300 | 300 | 300 | 300 | 300 |
| Capacity utilization |  | 70% | 80% | 90% | 90% | 100% |
| Annual production quantity |  | 53 | 60 | 68 | 68 | 75 |
| **Annual Sales Realization** | Rs. 250,000 | 131.25 | 150.00 | 168.75 | 168.75 | 187.50 |
| Cost of Production | | | | | | |
| Cost of raw material | Rs. 210,000 | 110.25 | 126.00 | 141.75 | 141.75 | 157.50 |
| Wages & salary |  | 11.34 | 12.96 | 14.58 | 14.58 | 16.20 |
| **Cost of Production** |  | **121.59** | **138.96** | **156.33** | **156.33** | **173.70** |
| **Gross Profit** |  | **9.66** | **11.04** | **12.42** | **12.42** | **13.8** |
| Administrative & selling expenses | 2.00% | 2.63 | 3.00 | 3.38 | 3.38 | 3.75 |
| Interest on Term Loan |  | 0.49 | 0.53 | 0.44 | 0.15 | 0.07 |
| Interest on Working capital |  | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Depreciation of machinery |  | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Depreciation of Building |  | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| **Total** |  | **3.66** | **4.07** | **4.36** | **4.07** | **4.36** |
| **Net Profit** |  | **6.01** | **6.98** | **8.07** | **8.36** | **9.45** |

**ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
|  | 70% | 80% | 90% | 90% | 100% |
| Break-even point | 46% | 44% | 41% | 36% | 34% |
| Break even Production | 24 | 26 | 28 | 24 | 25 |

* **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity Utilization | 70% | 80% | 90% | 90% | 100% |
| DSCR | 7.97 | 6.30 | 7.66 | 10.21 | 12.69 |
| Average DSCR | 8.97 |  |  |  |  |
| DSCR weighted average | 8.62 |  |  |  |  |

* **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
|  | 70% | 80% | 90% | 90% | 100% |
| Variable Cost | 121.59 | 138.96 | 156.33 | 156.33 | 173.70 |
| Fixed Cost | 3.66 | 4.07 | 4.36 | 4.07 | 4.36 |
| Working capital gap | 1.33 | 1.53 | 1.73 | 1.76 | 1.98 |