

## HYDROPONIC VEGETABLE SHOP

## Introduction

The hydroponic vegetable is one that is grown without the use of soil nutrients. Vegetables cultivated in a hydroponic system are grown in a controlled atmosphere with no exposure to the elements. The entire hydroponic agriculture process is managed by a centralised computer system that regulates the nutrition balance in the feed water, greenhouse humidity, and fertiliser concentration. As a result, disease-free and pollutant-free hydroponic veggies are grown. Plant yields are extremely predictable, so grantees return to the manufacturers. Hydroponic veggies are of great quality and may be cultivated close to the vegetable market's selling point. As a result, the product's worth rises.

## Market Potential

Growing demand for sustainable and protected farming practices and higher yield of crops grown under hydroponic facilities over traditional farming are the driving factors for its growth. The average yield of lettuce per acre yearly was recorded between 910 tons in soil-based agriculture and 300-400 tons in hydroponics agriculture. Increased hydroponics' investment rate over the traditional soil-based agricultural process through increased yield and minimal water cultivation might further boost the agricultural communities towards adopting the hydroponics technologies during the forecast period.

| Hydroponic Vegetable in India |  |
| :--- | ---: |
| Particulars | Rs/kg |
| Tomatoes | 125 |
| Lettuce | 460 |
| Spinach | 85 |
| strawberries | 8500 |
| White radish | 150 |
| Chives | 1500 |
| Basil | 625 |

## Assumptions

1. For SME unit having yearly turnover of 500 lakhs, the Nayak Committee recommendation has been implemented by all the banks. Hence, we have worked out the funding requirement accordingly.
2. Sales of such trading units is majorly impacted by the selection of business location. The entrepreneur should examine all business aspects while selecting this location. Normally, Hydroponic vegetable shop is established in a prevalent market area. Thus, we have assumed that the unit has been set up in a market area.
3. The shop premises of this unit is taken on lease. 200 sq. ft . is the proposed area which shall be spacious for stock display and stock-keeping.
4. Computation of Closing Stock is done on the basis of Working Capital cycle which is assumed to be of 3 days.
5. DSCR is high because of the term loan component is lesser than working capital requirement. We have not considered repayment for working capital and it is running on a continuous basis.

## Cost of Project

| Particulars | Amount <br> (Rs.in Lakhs) |  |  |
| :--- | :---: | :---: | :---: |
| Premises (Lease) | - |  |  |
| Interior Civil Work including False Ceiling, Wall Rack, Partition Rack, etc <br> @200 per sq. ft. (Shop Premises) | 0.40 |  |  |
| Equipments | - |  |  |
| Furniture and Fixtures as per Annexure | 2.27 |  |  |
| Electrical Equipment (AC, as per Annexure) | 0.74 |  |  |
| Desktop and Printer | 0.50 |  |  |
| Software Cost (Tally/SAP) | 0.30 |  |  |
| DG SET (FOR DPTT) | 1.50 |  |  |
| Preliminary \& Preoperative Expenses (A) | 0.89 |  |  |
| Sub-total | 6.60 |  |  |
| Working Capital Margin @25\% of Total WC Requirement | 0.11 |  |  |
| Total Project Cost | $\mathbf{6 . 7 1}$ |  |  |
| Total Working Capital Required 3 days cosumption(B) | 0.45 |  |  |
| MEANS OF FINANCE |  |  | 7.05 |
| Total Funds Required (A+B) | - |  |  |
| Loan Component | 4.95 |  |  |
| TERM LOAN (75\% of A) | 0.34 |  |  |
| WORKING CAPITAL (75\% of B) | 5.28 |  |  |
| Total | 1.76 |  |  |
| Equity | $\mathbf{7 . 0 5}$ |  |  |
| Total |  |  |  |

## Detailed Cost Element

| SI. <br> No. Particulars | Quantity | Rate | Amount <br> (Rs. in Lakhs) |  |
| :---: | :--- | :---: | :---: | :---: |
|  | Electrical Equipment |  |  |  |
| 1 | AC | 1 | 50000 | 0.50 |
| 2 | CCTV | 4 | 3000 | 0.12 |
| 3 | Fan | 1 | 2000 | 0.02 |
| 4 | Light | LS | LS | 0.10 |
|  |  |  |  |  |
|  | Furniture and Fixtures | 0.74 |  |  |
| 1 | Chairs | LS | LS | 0.02 |
| 2 | Counter | 1 | 25000 | 0.25 |
| 3 | Vegetable Refrigerator cum display rack | 2 | 100000 | 2.00 |
|  | Total |  |  |  |

## Preliminary Expenses

| Particulars | Amount <br> (Rs in Lakhs) |
| :--- | :---: |
| Incorporation Expenses | 0.10 |
| Project Report Preparation | 0.10 |
| Interior Designer's Fee | 0.25 |
| Legal Charges - Drafting for agreements, contracts, stamp paper, notary and <br> affidavit cost | 0.05 |
| Salary (1 month) | 0.27 |
| Rent Expenses (1 month; Rs. 40/sq. ft.) | 0.08 |
| Interest Cost for both term loan and cc(period before commercial production <br> 1 month) | 0.04 |
| Total | $\mathbf{0 . 8 9}$ |

## Salary

| Designation | Manpower | Amount <br> (Rs. In Lakhs) |
| :--- | :---: | :---: |
| Front Desk Staff | 1 | 1.80 |
| Sales helper | 1 | 1.20 |

## Profitability Statement

| Particulars |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Year- 1 | Year- 2 | Year- 3 | Year- 4 | Year- 5 |  |
| A. INCOME |  |  |  |  |  |
| Total Working Days in a Year | 300 | 300 | 300 | 300 | 300 |
| Estimated Sales per Day (in Rs.) | 0.20 | 0.27 | 0.29 | 0.32 | 0.36 |
| Annual turnover(Rs.) | 73.00 | 80.30 | 88.33 | 97.16 | 106.88 |
| Total income during the year | $\mathbf{7 3 . 0 0}$ | $\mathbf{8 0 . 3 0}$ | $\mathbf{8 8 . 3 3}$ | $\mathbf{9 7 . 1 6}$ | $\mathbf{1 0 6 . 8 8}$ |
| B. OPERATING EXPENSES |  |  |  |  |  |
| Stock Consumed (75\% of Sales) | 54.75 | 60.23 | 66.25 | 72.87 | 80.16 |
| Salary | 3.00 | 3.15 | 3.31 | 3.47 | 3.65 |
| Rent | 0.96 | 1.01 | 1.06 | 1.11 | 1.17 |
| Power \& utilities | 3.60 | 3.67 | 3.75 | 3.82 | 3.90 |
| Depreciation and Amortization | 0.85 | 0.85 | 0.85 | 0.68 | 0.68 |
| Administrative and General | 1.46 | 1.61 | 1.77 | 1.94 | 2.14 |
| Expenses | $\mathbf{6 4 . 6 2}$ | $\mathbf{7 0 . 5 1}$ | $\mathbf{7 6 . 9 8}$ | $\mathbf{8 3 . 9 0}$ | $\mathbf{9 1 . 6 8}$ |
| Total Operating Expenses | $\mathbf{8 . 3 8}$ | $\mathbf{9 . 7 9}$ | $\mathbf{1 1 . 3 5}$ | $\mathbf{1 3 . 2 7}$ | $\mathbf{1 5 . 2 0}$ |
| Operating Profit (A-B) |  |  |  |  |  |
| C. FINANCIAL EXPENSES | 0.38 | 0.30 | 0.21 | 0.13 | 0.05 |
| Interest on Term Ioan | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Interest on Working Capital Loan | $\mathbf{0 . 4 1}$ | $\mathbf{0 . 3 3}$ | $\mathbf{0 . 2 4}$ | $\mathbf{0 . 1 6}$ | $\mathbf{0 . 0 7}$ |
| Total Expenses | $\mathbf{7 . 9 7}$ | $\mathbf{9 . 4 6}$ | $\mathbf{1 1 . 1 1}$ | $\mathbf{1 3 . 1 1}$ | $\mathbf{1 5 . 1 2}$ |
| Net Profit Before Tax | 1.99 | 2.37 | 2.78 | 3.28 | 3.78 |
| Provision for Tax | $\mathbf{5 . 9 8}$ | $\mathbf{7 . 1 0}$ | $\mathbf{8 . 3 3}$ | $\mathbf{9 . 8 3}$ | $\mathbf{1 1 . 3 4}$ |
| Net Profit after Tax (PAT) |  |  |  |  |  |

## Breakeven Point

| Amount (Rs. in lakhs) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL | Particulars | Year - 1 | Year - 2 | Year - 3 | Year - 4 | Year - 5 |
| A. | Net Sales | 73.00 | 80.30 | 88.33 | 97.16 | 106.88 |
| B. | Variable Cost |  |  |  |  |  |
|  | Stock consumed | 54.75 | 60.23 | 66.25 | 72.87 | 80.16 |
|  | Power and Utility | 3.60 | 3.67 | 3.75 | 3.82 | 3.90 |
|  | Total Variable Cost | 58.35 | 63.90 | 69.99 | 76.69 | 84.06 |
| C. | Contribution (A-B) | 14.65 | 16.40 | 18.34 | 20.47 | 22.82 |
| D. | Fixed and Semi-Fixed Cost |  |  |  |  |  |
|  | Salary | 3.00 | 3.15 | 3.31 | 3.47 | 3.65 |
|  | Rent Expenses | 0.96 | 1.01 | 1.06 | 1.11 | 1.17 |
|  | Interest on term loan | 0.38 | 0.30 | 0.21 | 0.13 | 0.05 |
|  | interest on working capital | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
|  | Depreciation and Amortisation | 0.85 | 0.85 | 0.85 | 0.68 | 0.68 |
|  | Total Fixed Cost | 5.22 | 5.33 | 5.46 | 5.42 | 5.56 |
| E. | Breakeven Point | 36\% | 33\% | 30\% | 26\% | 24\% |
| F. | Cash BEP | 30\% | 27\% | 25\% | 23\% | 21\% |

## Debt-Service Coverage Ratio

|  |  |  |  |  | unt (Rs | n Lakhs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL | Particulars | Year - 1 | Year - 2 | Year - 3 | Year - 4 | Year - 5 |
| i | Profit | 5.98 | 7.10 | 8.33 | 9.83 | 11.34 |
| ii | Depreciation | 0.85 | 0.85 | 0.85 | 0.68 | 0.68 |
| iii | Interest | 0.38 | 0.30 | 0.21 | 0.13 | 0.05 |
| A | Total (i + ii + iii) | 7.21 | 8.24 | 9.40 | 10.64 | 12.06 |
| i | Interest | 0.38 | 0.30 | 0.21 | 0.13 | 0.05 |
| ii | Principal repayment | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| B | Total ( $\mathrm{+}$ + i ) | 1.37 | 1.29 | 1.20 | 1.12 | 1.03 |
|  | DSCR (A / B ) | 5.26 | 6.40 | 7.81 | 9.51 | 11.66 |

## Interest on Term Loan and Principal Repayment

Refer Annexure I for Loan Repayment Schedule.
We have assumed the repayment tenure of term loan for a period of 5 years, Rate of interest being $8.5 \%$ p.a.

## Address of Vendors

| Name of Vendor | Address and Contact Number |
| :--- | :--- |
| Hikvision CCTV <br> Camer | Dum Dum Park, <br> Kolkata, West Bengal 700055 <br> Contact: 090515 06727 |
| Lakhi Cooling <br> Centre | GS Rd, Near Ulubari Flyover, Ulubari, <br> Guwahati, Assam 781007 <br> Contact: 098640 10272 |

ANNEXURE- I

| Year | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10 | Month 11 | Month 12 | Annually |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Principal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening | 4.95 | 4.86 | 4.78 | 4.70 | 4.62 | 4.53 | 4.45 | 4.37 | 4.29 | 4.20 | 4.12 | 4.04 |  |
| Repaid | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.99 |
| Closing | 4.86 | 4.78 | 4.70 | 4.62 | 4.53 | 4.45 | 4.37 | 4.29 | 4.20 | 4.12 | 4.04 | 3.96 |  |
| Interest | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.38 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Principal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening | 3.96 | 3.88 | 3.79 | 3.71 | 3.63 | 3.55 | 3.46 | 3.38 | 3.30 | 3.22 | 3.13 | 3.05 |  |
| Repaid | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.99 |
| Closing | 3.88 | 3.79 | 3.71 | 3.63 | 3.55 | 3.46 | 3.38 | 3.30 | 3.22 | 3.13 | 3.05 | 2.97 |  |
| Interest | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.30 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| III |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Principal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening | 2.97 | 2.89 | 2.80 | 2.72 | 2.64 | 2.56 | 2.47 | 2.39 | 2.31 | 2.23 | 2.14 | 2.06 |  |
| Repaid | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.99 |
| Closing | 2.89 | 2.80 | 2.72 | 2.64 | 2.56 | 2.47 | 2.39 | 2.31 | 2.23 | 2.14 | 2.06 | 1.98 |  |
| Interest | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.21 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IV |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Principal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening | 1.98 | 1.90 | 1.81 | 1.73 | 1.65 | 1.57 | 1.48 | 1.40 | 1.32 | 1.24 | 1.15 | 1.07 |  |
| Repaid | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.99 |
| Closing | 1.90 | 1.81 | 1.73 | 1.65 | 1.57 | 1.48 | 1.40 | 1.32 | 1.24 | 1.15 | 1.07 | 0.99 |  |
| Interest | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.13 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| V |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Principal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opening | 0.99 | 0.91 | 0.82 | 0.74 | 0.66 | 0.58 | 0.49 | 0.41 | 0.33 | 0.25 | 0.16 | 0.08 |  |
| Repaid | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.99 |
| Closing | 0.91 | 0.82 | 0.74 | 0.66 | 0.58 | 0.49 | 0.41 | 0.33 | 0.25 | 0.16 | 0.08 | 0.00 |  |
| Interest | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |

