

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 9-10 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 (Rs.in Lakhs)
Premises (Lease)	-
Interior Civil Work including False Ceiling, Wall Rack, Partition Rack, etc @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	0.89
Sub-total (A)	6.60
Working Capital Margin @25% of Total WC Requirement	0.11
Total Project Cost	6.71
Total Working Capital Required 3 days cosumption(B)	0.45
MEANS OF FINANCE	
Total Funds Required (A+B)	7.05
Loan Component	-
TERM LOAN (75% of A)	4.95
WORKING CAPITAL (75% of B)	0.34
Total	5.28
Equity	1.76
Total	7.05

Detailed Cost Element

SI. No.	Particulars	Quantity	Rate	Amount (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
	Total	0.74		
	Furniture and Fixtures			
1	Chairs	LS	LS	0.02
2	Counter	1	25000	0.25
3	Vegetable Refrigerator cum display rack	2	100000	2.00
	Total			2.27

Preliminary Expenses

Particulars	Amount (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 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 1 month)	0.04
Total	0.89

Salary

Designation	Manpower	Amount (Rs. In Lakhs)		
Front Desk Staff	1	1.80		
Sales helper	1	1.20		

Profitability Statement

Amount (Rs. In lakhs									
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	73.00	80.30	88.33	97.16	106.88				
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	1.40	1.01	1.77	1.94	2.14				
Total Operating Expenses	64.62	70.51	76.98	83.90	91.68				
Operating Profit (A-B)	8.38	9.79	11.35	13.27	15.20				
C. FINANCIAL EXPENSES									
Interest on Term loan	0.38	0.30	0.21	0.13	0.05				
Interest on Working Capital Loan	0.03	0.03	0.03	0.03	0.03				
Total Expenses	0.41	0.33	0.24	0.16	0.07				
Net Profit Before Tax	7.97	9.46	11.11	13.11	15.12				
Provision for Tax	1.99	2.37	2.78	3.28	3.78				
Net Profit after Tax (PAT)	5.98	7.10	8.33	9.83	11.34				

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

	Amount (Rs. In Lak								
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			
Α	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			
В	Total (i + ii)	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 Camer	Dum Dum Park, Kolkata, West Bengal 700055 Contact: 090515 06727
Lakhi Cooling Centre	GS Rd, Near Ulubari Flyover, Ulubari, Guwahati, Assam 781007 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
I													_
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
II													
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
111													
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