

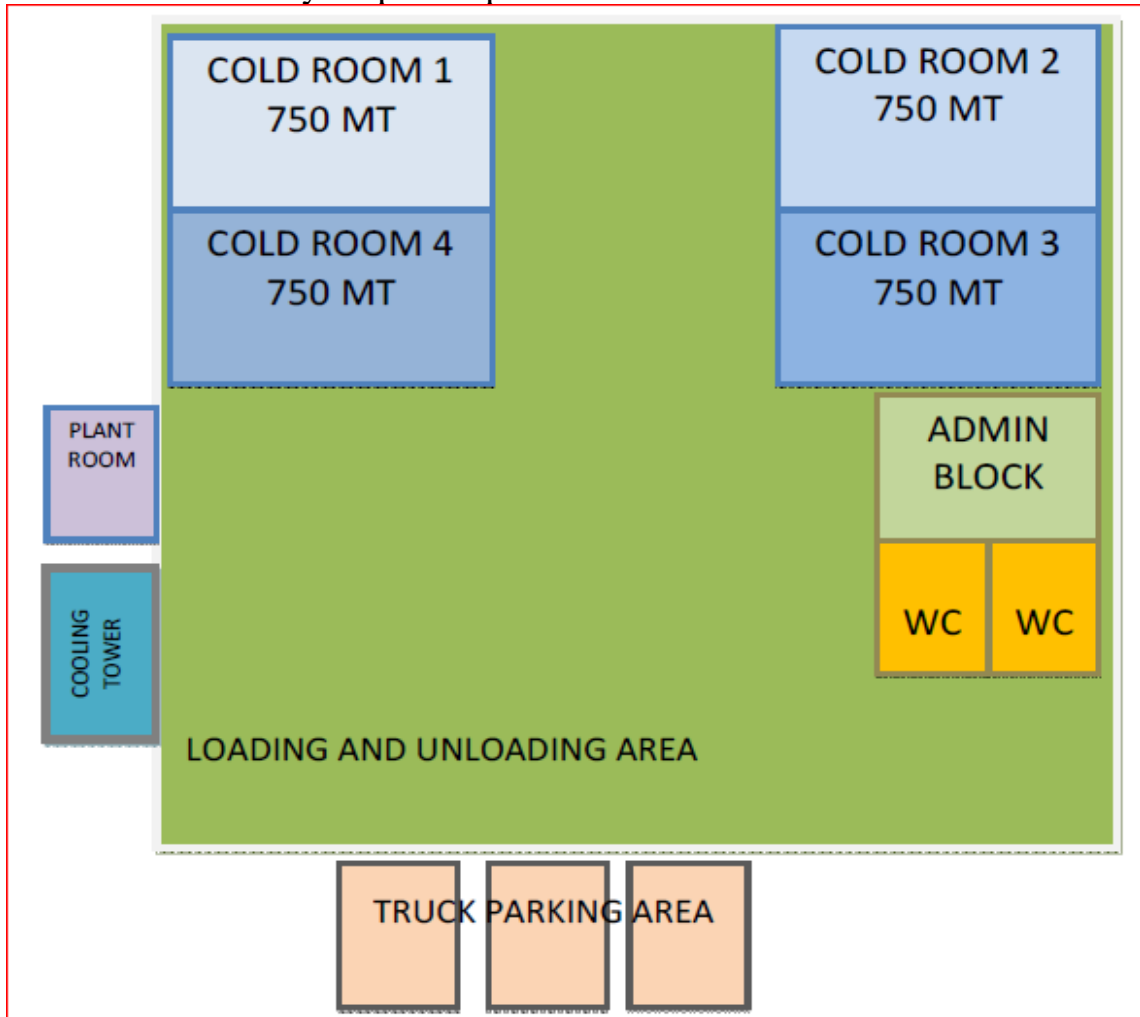
## DPR ON COLD STORAGE OF 3000MT CAPACITY

### Land

Two acres of land is required for construction of proposed cold storage.

### Layout

An indicative site layout plan is provided below.



### Multi-Chamber and Multi-Commodity Cold Storage of 3,000 MT Capacity

Four Cold Rooms are proposed to be built each with a capacity of 750 MT and a total capacity of 3,000 MT for storage of fresh horticulture produce. This will reduce losses in supply chain which is at present estimated anywhere between 30% to 40% of the total produce. Modern cold stores are multi-chamber, multi-commodity stores that use energy-efficient refrigeration equipment and energy-conserving thermal insulation. Most

## DPR ON COLD STORAGE OF 3000MT CAPACITY

horticultural produce (with a few exceptions like - onions) require high RH levels and, therefore, good humidification systems are essential.

- **Rooms & capacities** The number of cold rooms has been worked out based on the proposed stacking pattern for potato, fruits, vegetables and capacities desired. Four Cold Rooms are proposed to be built each with a capacity of 750 MT with a total capacity of 3,000 MT.
- **Rapid cooling in rooms** Room cooling is proposed to be carried out for the Fruits to allow for storage of the produce in the same rooms based on a 3 - 4 day cycle. The proposed stacking pattern, refrigeration system and air circulation system (complete with VFD) have been planned accordingly. Pressurized air flow within the room is proposed to ensure forced movement through the crates is planned with high CFM fans in evaporator units to meet the guidelines of NHB. Each of the rooms would require to maintain high humidity levels of 90 - 95% RH which is essential for sensitive produce & ripening activity which is proposed to be achieved by installation of adiabatic humidifiers complete with nozzles, RO and pressure pump. Display and control units for temperature, humidity, ethylene and CO2 levels in the ripening rooms, are proposed to be installed so as to ensure proper monitoring of these levels.
- **Temperature & humidity management** The refrigeration system has been planned for accurate management and display of temperature & high humidity (90-99% RH) in all the rooms. Humidification system based on adiabatic type, with nozzles capable of delivering droplets of 10 micron size suitable for maintaining high humidity Levels as Indicated In the following table.
- **Insulation & doors** It is proposed to install PUF sandwich panels of suitable thickness for ceiling and walls. The floor insulation is proposed with laying of PUF slab of suitable thickness complete with tar felt sheets and bitumen below the flooring. Each room shall be leak proof. The insulation system planned for the Cold rooms consists of insulated composite structural panels with core insulation of polyurethane of suitable thickness.
- **Accessories** The accessories required for managing operations in the Cold Store include mezzanine floor for holding of fruit, Pallets for stacking of crates or boxes, Electronic Weighing Platform for

## DPR ON COLD STORAGE OF 3000MT CAPACITY

weighing of fruits, Carton Strapping Machine for Packed Fruit Cartons ready for dispatch to markets, Hand Pallet Trucks for movement of crates within Cold rooms, Trolleys for movement of Packed Fruit Cartons, Power Back up system with Genset.

### ECONOMIC ANALYSIS

#### 4.1 Possible Alternatives

There are various options available for the proposed project.

##### **Option-1:**

A 3000 MT cold storage is established and run on a rental model. Which means farmers/ traders can store their produce mainly potato. In such situation, 100% capacity utilization is not possible though the potato producers would be benefited. Because, the local produce if stored on rental basis may be taken out any time within 7 – 8 months. But remaining period of the year, the space will be utilized whereas the electricity charges and manpower cost etc., is to be met for the whole year. Which means the rental earning of 7-8 months will be utilized for maintaining the cold store for the whole year. Hence, this may not be an attractive proposition in terms of revenue generation and sustainability.

##### **Option-2:**

A 3000 MT cold storage is established and run on a combined model of rental and trading. This means some portion of storage space will be used as rental whereas remaining portion of storage space can be utilized by promoter to store potato by way of procuring at reasonable price during harvest period and selling out beyond the season at a higher price. This option is therefore more attractive proposition than the previous one.

#### **Economic Analysis**

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Assumptions for Analysis

##### **1. Power consumption :**

- a. Consumption 200 Unit per hour.**
  - b. The unit will run 80% time in a day.**
  - c. Cost of power @ Rs 4.40 per unit.**
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## DPR ON COLD STORAGE OF 3000MT CAPACITY

### PROJECT OUTLAY AND IMPLEMENTATION SCHEDULE

On the basis of the suggested option the project cost has been estimated. About 70% of the commodities in the cold store will be stored on rental basis and 30% space will be utilized by way of own procurement. Existing rental charges of the cold storages varies between Rs.150/- to Rs 175/- per quintal of potato for a storage period of 7-8 months.

#### Project Cost

The Tentative Capital outlay for the Project is estimated at Rs 328.00 lacs as per details given below.

Particulars	Rs. In Lakhs
Land	Nil
Building	180.00
Special insulation, Plant and Machinery utilities	130.00
Contingency including deposits	03.00
Preliminary and pre-operative exp	03.00
Margin Money for Working Capital	12.00
<b>Total</b>	<b>328.00</b>

- I. Project at a Glance**
- II. A Small write up about the Project & Promoters Back Ground**
- III. Project Implementation Schedule**
- IV. Financial Statements**

### **FINANCIAL ANALYSIS**

- 1 Details of Project**
- 2 Projected Profitability Statements**
- 3 Projected Cash Flow Statement**
- 4 Projected Balance Sheet**
- 5 Depreciation Schedule**
- 6 Working Capital Assessment**
- 7 Term Funds Refunds Schedule**
- 0 # 8 D.S.C.R Calculation**
- 9 Break Even Analysis**
- 10 Ratio Analysis**
- 11 Calculation of Pay Back Period & IRR**
- 12 Sensitivity Analysis**
- 13 Assumptions**

**PROJECT AT A GLANCE**

1 Name of the Unit	:	-	
Name of the Promoter			
2 Nature of Project	:	Storage of Patato, Vegetables	
3 Type of Unit	:	Small Enterprises	
4 Project Cost	:	328.00 Lakhs	
5 Means of Finance			
Term Funds from Own Source	:	316.00 Lakhs	
	0	0.00	
Promoter's Contribution	:	<u>0.00</u> Lakhs	
		316.00	
Cash Credit Funds	:	<u>12.00</u> Lakhs	
		328.00	
6 Promoters Contribution (%)	:	-	
7 Installed Capacity	:	3000 MT per Annum	
8 Power Requirement	:	120kw Connected Load	
9 Refund Period	:	9 yrs (INCLUDING MORATORIUM PERIOD OF1years)	
10 Average D.S.C.R	:	1.30	
11 Break Even Point (3rd Year)	:	40% (As a % of Installed Capacity)	
12 Internal Rate of Return	:	30.96%	
13 Pay Back Period	:	8.63 years	
14 Subsidy		170.50	
15	0		-
16 FUND Refund Period		9 yrs (INCLUDING MORATORIUM PERIOD OF5years)	

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**PROJECT IMPLEMENTATION SCHEDULE**

<b>SL. NO.</b>	<b>ACTIVITY</b>	<b>START</b>	<b>FINISH</b>
1	Land Acquisition	Own Land	
2	Land Development	EXISTING	
3	Boundary Wall	EXISTING	
4	Working Sheds CHAMBER CIVIL WORKS	Jan-16	Mar-16
5	Office Building & Store	Jan-16	Apr-16
6	Machine Ordering	Jan-16	May-16
7	Machine Arrival	Feb-16	Jun-16
9	Electrical Line Connection	Mar-16	Aug-16
10	Truel Storing	Sep-16	Sep-16
11	Commercial Storing	Oct-16	

**DETAILS OF PROJECT**

<b>1 COST OF PROJECT</b>	<b><u>Rs in Lacs</u></b>	<b><u>TOTAL</u></b>	Own Source	
<b>A. Land</b>				
With	Owned Land			Margin
Land Development Cost	-	-	-	-
	<u>                    </u>			
	<u>                    </u>	-		
		<u>                    </u>		
<b>B. Factory Shed &amp; Building</b>				
As per Building Estimated Rport		180.00		
		<u>                    </u>		
		<u>                    </u>	180.00	-
<b>Revl Plant &amp; Machinery</b>				
Insulation & Refrigeration for Cold Storage (As per Qutation )		130.00		
		<u>                    </u>		
		<u>                    </u>	130.00	-
		<u>                    </u>		
Furniture & Fixtures and others		1.50	1.50	
		<u>                    </u>		
SUB TOTAL (A+B+C+D)		311.50		
Preliminary & Pre-op. Exps (Including IDC)		3.00	3.00	
		<u>                    </u>		
		<u>                    </u>		3.00
		<u>                    </u>		
<b>D. Security Deposit for Electricity and Govt Department</b>		1.50	1.50	
		<u>                    </u>		
<b>Working Capital Funds</b>		12.00	12.00	-
		<u>                    </u>		
<b>E.</b>				
<b>Total</b>		<u>                    </u>	<b>328.00</b>	
		<u>                    </u>	<b>328.00</b>	

**MEANS OF FINANCE**

**F. Funds From Own Source** 328.00

**F.**

**2**

**Total**                       
                      
**328.00**

**Debt /Equity Ratio**

**:1**

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**PROJECTED CASH FLOW STATEMENT**

PARTICULARS	Rs in Lacs									
	2015-16 Projected	2016-17 Projected	2017-18 Projected	2018-19 Projected	2019-20 Projected	2020-21 Projected	2021-22 Projected	2022-23 Projected	2023-24 Projected	2024-25 Projected
<b>A) SOURCES OF FUNDS</b>										
Net Profit after tax	-	14.93	30.84	31.60	32.32	33.01	34.26	34.88	35.46	36.03
Preliminary & Pre-op Exp. W/o.	-	0.60	0.60	0.60	0.60	0.60	-	-	-	-
Depreciation	-	7.79	15.19	14.43	13.71	13.02	12.37	11.75	11.16	10.59
	-	23.31	46.63	46.63	46.63	46.63	46.63	46.63	46.63	46.62
Subsidy		170.50								
Increase in Share Capital	-	-	-	-	-	-	-	-	-	-
Increase in Term Funds	184.50	131.50								
Increase in Cash Credit Funds	-	12.00								
Increase in Current Liabilities & Provision	-	0.73	-	-	-	-	-	-	-	-
Increase VCA	-	-								
	184.50	338.04	46.63	46.63	46.63	46.63	46.63	46.63	46.63	46.62
<b>B) APPLICATION OF FUNDS</b>										
Increase in Fixed Assets	180.00	131.50	-	-	-	-	-	-	-	-
Increase in Preliminary & Pre-op Expenses	3.00									
Refunds Term Funds	-	19.75	39.50	39.50	39.50	39.50	39.50	39.50	39.50	19.75
Increase in Inventories	-	0.30	-	-	-	-	-	-	-	-
Increase in Sundry Debtors	-	12.43	-	-	-	-	-	-	-	-
Increase in Other C.Assets	-	-	-	-	-	-	-	-	-	-
Refunds VCA										
Security Deposit	1.50	-								
FD in Lien		170.50								
Drawings	-	-	-	-	-	-	-	-	-	-
	184.50	334.48	39.50	39.50	39.50	39.50	39.50	39.50	39.50	19.75
<b>Surplus/(Deficit)</b>	-	3.57	7.13	7.13	7.13	7.13	7.13	7.13	7.13	26.87
<b>Opening Balance</b>	-	-	3.57	10.69	17.82	24.95	32.07	39.20	46.32	53.45
<b>Closing Balance</b>	-	3.57	10.69	17.82	24.95	32.07	39.20	46.32	53.45	80.32

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**PROJECTED BALANCE SHEET**

Rs in Lakhs

LIABILITIES	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
	Pre OP	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
<b>CAPITAL :</b>										
Op.Bal	0.00	0.00	14.93	45.77	77.37	109.69	142.69	176.95	211.83	247.29
Add:During the year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add:Profit During the Year	0.00	14.93	30.84	31.60	32.32	33.01	34.26	34.88	35.46	36.03
Less: Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cl.Bal.	0.00	14.93	45.77	77.37	109.69	142.69	176.95	211.83	247.29	283.32
<b>Subsidy</b>		170.50	170.50	170.50	170.50	170.50	170.50	170.50	170.50	170.50
<b>SECURED LOAN</b>										
Term Funds	184.50	296.25	256.75	217.25	177.75	138.25	98.75	59.25	19.75	0.00
Cash Credit Funds	0.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
VCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>CURRENT LIABILITIES &amp; PROVISIONS</b>										
Sundry Creditors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provision For Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liability For Expenses	0.00	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
<b>TOTAL</b>	<b>184.50</b>	<b>494.41</b>	<b>485.75</b>	<b>477.85</b>	<b>470.67</b>	<b>464.17</b>	<b>458.93</b>	<b>454.31</b>	<b>450.27</b>	<b>466.55</b>
<b>ASSETS</b>										
<b>FIXED ASSETS</b>										
Gross Block	180.00	311.50	311.50	311.50	311.50	311.50	311.50	311.50	311.50	311.50
Less:Depreciation	0.00	7.79	22.97	37.40	51.10	64.12	76.49	88.24	99.41	110.00
Net Block	180.00	303.71	288.53	274.10	260.40	247.38	235.01	223.26	212.09	201.50
FD On Lien		170.50	170.50	170.50	170.50	170.50	170.50	170.50	170.50	170.50
<b>CURRENT ASSETS, LOANS &amp; ADVANCES</b>										
Inventories	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Sundry Debtors	0.00	12.43	12.43	12.43	12.43	12.43	12.43	12.43	12.43	12.43
Other Current Assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash & Bank Balance	0.00	3.57	10.69	17.82	24.95	32.07	39.20	46.32	53.45	80.32
<b>MISC. EXPENDITURE</b>										
Security Deposit	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Preliminary & Pre-op Exps.	3.00	2.40	1.80	1.20	0.60	0.00	0.00	0.00	0.00	0.00
(to the extent not w/o or adjusted)										
<b>TOTAL</b>	<b>184.50</b>	<b>494.41</b>	<b>485.75</b>	<b>477.85</b>	<b>470.67</b>	<b>464.17</b>	<b>458.93</b>	<b>454.31</b>	<b>450.27</b>	<b>466.55</b>

-14.55





**REPAYMENT SCHEDULE**

**FUNDS AMOUNT** : **316.00 LAKHS**  
**RATE OF INTEREST** : **0.00%**  
**REPAYMENT PERIOD** : **9 yrs (INCLUDING MORATORIUM PERIOD OF 1 years)**

<b>IN66 INSTALMENTS</b>		Repayment From- Sept Month 2015			<b>Rs. In Lakhs</b>	
<b>Month</b>	<b>Opening Balance</b>	<b>Dishbursement</b>	<b>Repayment</b>	<b>Interest</b>	<b>Closing Balance</b>	
<b>2015-16</b>						
Apr-15						
May-15						
Jun-15	-	-	-	-		-
Jul-15	-	-	-	-		-
Aug-15	-	-	-	-		-
Sep-15	-	-	-	-		-
Oct-15	-	-	-	-		-
Nov-15	-	-	-	-		-
Dec-15	-	-	-	-		-
Jan-16	-	100.00	-	-		100.00
Feb-16	100.00	80.00	-	-		180.00
Mar-16	180.00	4.50	-	-		184.50
	<b>TOTAL</b>	<b>184.50</b>	<b>-</b>	<b>-</b>		
<b>2016-17</b>						
Apr-16	# 184.50	30.00	-	-		214.50
May-16	214.50	101.50	-	-		316.00
Jun-16	316.00	-	-	-		316.00
Jul-16	316.00	-	-	-		316.00
Aug-16	316.00	-	-	-		316.00
Sep-16	316.00	-	-	-		316.00
Oct-16	316.00	-	3.29	-		312.71
Nov-16	312.71	-	3.29	-		309.42
Dec-16	309.42	-	3.29	-		306.13
Jan-17	306.13	-	3.29	-		302.83
Feb-17	302.83	-	3.29	-		299.54
Mar-17	299.54	-	3.29	-		296.25
	<b>TOTAL</b>	<b>131.50</b>	<b>19.75</b>	<b>-</b>		
<b>2017-18</b>						
Apr-17	296.25	-	3.29	-		292.96
May-17	292.96	-	3.29	-		289.67
Jun-17	289.67	-	3.29	-		286.38
Jul-17	286.38	-	3.29	-		283.08
Aug-17	283.08	-	3.29	-		279.79
Sep-17	279.79	-	3.29	-		276.50
Oct-17	276.50	-	3.29	-		273.21
Nov-17	273.21	-	3.29	-		269.92
Dec-17	269.92	-	3.29	-		266.63
Jan-18	266.63	-	3.29	-		263.33
Feb-18	263.33	-	3.29	-		260.04
Mar-18	260.04	-	3.29	-		256.75
	<b>TOTAL</b>	<b>-</b>	<b>39.50</b>	<b>-</b>		
<b>Cont.....</b>						
<b>2018-19</b>						
Apr-18	256.75	-	3.29	-		253.46
May-18	253.46	-	3.29	-		250.17
Jun-18	250.17	-	3.29	-		246.88

Jul-18	246.88	-	3.29	-	243.58
Aug-18	243.58	-	3.29	-	240.29
Sep-18	240.29	-	3.29	-	237.00
Oct-18	237.00	-	3.29	-	233.71
Nov-18	233.71	-	3.29	-	230.42
Dec-18	230.42	-	3.29	-	227.13
Jan-19	227.13	-	3.29	-	223.83
Feb-19	223.83	-	3.29	-	220.54
Mar-19	220.54	-	3.29	-	217.25
<b>TOTAL</b>	<b>-</b>	<b>39.50</b>	<b>-</b>		
<b>2019-20</b>					
Apr-19	217.25	-	3.29	-	213.96
May-19	213.96	-	3.29	-	210.67
Jun-19	210.67	-	3.29	-	207.38
Jul-19	207.38	-	3.29	-	204.08
Aug-19	204.08	-	3.29	-	200.79
Sep-19	200.79	-	3.29	-	197.50
Oct-19	197.50	-	3.29	-	194.21
Nov-19	194.21	-	3.29	-	190.92
Dec-19	190.92	-	3.29	-	187.63
Jan-20	187.63	-	3.29	-	184.33
Feb-20	184.33	-	3.29	-	181.04
Mar-20	181.04	-	3.29	-	177.75
<b>TOTAL</b>	<b>-</b>	<b>39.50</b>	<b>-</b>		
<b>2020-21</b>					
Apr-20	177.75	-	3.29	-	174.46
May-20	174.46	-	3.29	-	171.17
Jun-20	171.17	-	3.29	-	167.88
Jul-20	167.88	-	3.29	-	164.58
Aug-20	164.58	-	3.29	-	161.29
Sep-20	161.29	-	3.29	-	158.00
Oct-20	158.00	-	3.29	-	154.71
Nov-20	154.71	-	3.29	-	151.42
Dec-20	151.42	-	3.29	-	148.13
Jan-21	148.13	-	3.29	-	144.83
Feb-21	144.83	-	3.29	-	141.54
Mar-21	141.54	-	3.29	-	138.25
<b>TOTAL</b>	<b>-</b>	<b>39.50</b>	<b>-</b>		
<b>2021-22</b>					
Apr-21	138.25	-	3.29	-	134.96
May-21	134.96	-	3.29	-	131.67
Jun-21	131.67	-	3.29	-	128.38
Jul-21	128.38	-	3.29	-	125.08
Aug-21	125.08	-	3.29	-	121.79
Sep-21	121.79	-	3.29	-	118.50
Oct-21	118.50	-	3.29	-	115.21
Nov-21	115.21	-	3.29	-	111.92
Dec-21	111.92	-	3.29	-	108.63
Jan-22	108.63	-	3.29	-	105.33
Feb-22	105.33	-	3.29	-	102.04
Mar-22	102.04	-	3.29	-	98.75
<b>TOTAL</b>	<b>-</b>	<b>39.50</b>	<b>-</b>		
<b>2022-23</b>					
Apr-22	98.75	-	3.29	-	95.46
May-22	95.46	-	3.29	-	92.17

Jun-22	92.17	3.29	-	88.88
Jul-22	88.88	3.29	-	85.58
Aug-22	85.58	3.29	-	82.29
Sep-22	82.29	3.29	-	79.00
Oct-21	79.00	3.29	-	75.71
Nov-22	75.71	3.29	-	72.42
Dec-22	72.42	3.29	-	69.12
Jan-23	69.12	3.29	-	65.83
Feb-23	65.83	3.29	-	62.54
Mar-23	62.54	3.29	-	59.25
	<b>TOTAL</b>	<b>39.50</b>	<b>-</b>	
<b>2023-24</b>				
Apr-22	59.25	3.29	-	55.96
May-22	55.96	3.29	-	52.67
Jun-23	52.67	3.29	-	49.38
Jul-23	49.38	3.29	-	46.08
Aug-23	46.08	3.29	-	42.79
Sep-23	42.79	3.29	-	39.50
Oct-23	39.50	3.29	-	36.21
11/1/203	36.21	3.29	-	32.92
Dec-23	32.92	3.29	-	29.63
Jan-24	29.63	3.29	-	26.33
Feb-24	26.33	3.29	-	23.04
Mar-24	23.04	3.29	-	19.75
	<b>TOTAL</b>	<b>39.50</b>	<b>-</b>	
<b>2024-25</b>				
Apr-24	19.75	3.29	-	16.46
May-24	16.46	3.29	-	13.17
Jun-24	13.17	3.29	-	9.87
Jul-24	9.87	3.29	-	6.58
Aug-24	6.58	3.29	-	3.29
Sep-24	3.29	3.29	-	(0.00)
	<b>TOTAL</b>	<b>19.75</b>	<b>-</b>	
	<b>TOTAL REP</b>	<b>-</b>	<b>316.00</b>	<b>LAKHS</b>



**SFAC VCA CONTRIBUTION REFUND SCHEDULE**

**FUNDS AMOUNT** : - LAKHS  
**RATE OF INTEREST** : 0.00%  
**REFUND PERIOD** : 9 yrs (INCLUDING MORATORIUM PERIOD OF 5 years)

**IN 48 INSTALMENTS**                      Repayment From- October Month 2020                      **Rs. In Lakhs**

<b>Month</b>	<b>Opening Balance</b>	<b>Dishbursement</b>	<b>Repayment</b>	<b>Interest</b>	<b>Closing Balance</b>
--------------	------------------------	----------------------	------------------	-----------------	------------------------

**2011-12**

May-15					
Jun-15	-	-	-	-	-
Jul-15	-	-	-	-	-
Aug-15	-	-	-	-	-
Sep-15	-	-	-	-	-
Oct-15	-	-	-	-	-
Nov-15	-	-	-	-	-
Dec-15	-	-	-	-	-
Jan-16	-	-	-	-	-
Feb-16	-	-	-	-	-
Mar-16	-	-	-	-	-
<b>TOTAL</b>		-	-	-	

**2016-17**

Apr-16	-	-	-	-	-
May-16	-	-	-	-	-
Jun-16	-	-	-	-	-
Jul-16	-	-	-	-	-
Aug-16	-	-	-	-	-
Sep-16	-	-	-	-	-
Oct-16	-	-	-	-	-
Nov-16	-	-	-	-	-
Dec-16	-	-	-	-	-
Jan-17	-	-	-	-	-
Feb-17	-	-	-	-	-
Mar-17	-	-	-	-	-
<b>TOTAL</b>		-	-	-	

**2017-18**

Apr-17	-	-	-	-	-
May-17	-	-	-	-	-
Jun-17	-	-	-	-	-
Jul-17	-	-	-	-	-
Aug-17	-	-	-	-	-
Sep-17	-	-	-	-	-
Oct-17	-	-	-	-	-
Nov-17	-	-	-	-	-
Dec-17	-	-	-	-	-
Jan-18	-	-	-	-	-
Feb-18	-	-	-	-	-
Mar-18	-	-	-	-	-
<b>TOTAL</b>		-	-	-	

Cont.....

**2018-19**

May-18	-	-	-	-	-
Jun-18	-	-	-	-	-
Jul-18	-	-	-	-	-
Aug-18	-	-	-	-	-

Sep-18	-	-	-	-	-
Oct-18	-	-	-	-	-
Nov-18	-	-	-	-	-
Dec-18	-	-	-	-	-
Jan-19	-	-	-	-	-
Feb-19	-	-	-	-	-
Mar-19	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-
<b>2019-20</b>					
Apr-19	-	-	-	-	-
May-19	-	-	-	-	-
Jun-19	-	-	-	-	-
Jul-19	-	-	-	-	-
Aug-19	-	-	-	-	-
Sep-19	-	-	-	-	-
Oct-19	-	-	-	-	-
Nov-19	-	-	-	-	-
Dec-19	-	-	-	-	-
Jan-20	-	-	-	-	-
Feb-20	-	-	-	-	-
Mar-20	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-
<b>2020-21</b>					
Apr-20	-	-	-	-	-
May-20	-	-	-	-	-
Jun-20	-	-	-	-	-
Jul-20	-	-	-	-	-
Aug-20	-	-	-	-	-
Sep-20	-	-	-	-	-
Oct-20	-	-	-	-	-
Nov-20	-	-	-	-	-
Dec-20	-	-	-	-	-
Jan-21	-	-	-	-	-
Feb-21	-	-	-	-	-
Mar-21	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-
<b>2021-22</b>					
Apr-21	-	-	-	-	-
May-21	-	-	-	-	-
Jun-21	-	-	-	-	-
Jul-21	-	-	-	-	-
Aug-21	-	-	-	-	-
Sep-21	-	-	-	-	-
Oct-21	-	-	-	-	-
Nov-21	-	-	-	-	-
Dec-21	-	-	-	-	-
Jan-22	-	-	-	-	-
Feb-22	-	-	-	-	-
Mar-22	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-
<b>2022-23</b>					
Apr-22	-	-	-	-	-
May-22	-	-	-	-	-
Jun-22	-	-	-	-	-
Jul-22	-	-	-	-	-

Aug-22	-	-	-	-
Sep-22	-	-	-	-
Oct-21	-	-	-	-
Nov-22	-	-	-	-
Dec-22	-	-	-	-
Jan-23	-	-	-	-
Feb-23	-	-	-	-
Mar-23	-	-	-	-
	<b>TOTAL</b>	-	-	
<b>2023-24</b>				
Apr-22	-	-	-	-
May-22	-	-	-	-
Jun-23	-	-	-	-
Jul-23	-	-	-	-
Aug-23	-	-	-	-
Sep-23	-	-	-	-
Oct-23	-	-	-	-
11/1/203	-	-	-	-
Dec-23	-	-	-	-
Jan-24	-	-	-	-
Feb-24	-	-	-	-
Mar-24	-	-	-	-
	<b>TOTAL</b>	-	-	
<b>2024-25</b>				
Apr-24	-	-	-	-
May-24	-	-	-	-
Jun-24	-	-	-	-
Jul-24	-	-	-	-
Aug-24	-	-	-	-
Sep-24	-	-	-	-
	<b>TOTAL</b>	-	-	
	<b>TOTAL RE</b>	-	-	<b>LAKHS</b>





## RATIO ANALYSIS

**Rs in Lakhs**

<i>YEAR</i>	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Net Sales	-	37.28	74.55	74.55	74.55	74.55	74.55	74.55	74.55
Operating profit	-	15.53	31.44	32.20	32.92	33.61	34.26	34.88	35.46
Operating Profit to Net Sale (%)		42%	42%	43%	44%	45%	46%	47%	48%
Net Other Income	-	-	-	-	-	-	-	-	-
Profit before tax	-	14.93	30.84	31.60	32.32	33.01	34.26	34.88	35.46
PBT to Net Sale (%)		40%	41%	42%	43%	44%	46%	47%	48%
Profit after tax	-	14.93	30.84	31.60	32.32	33.01	34.26	34.88	35.46
PAT to Net Sale (%)		40%	41%	42%	43%	44%	46%	47%	48%
Net cash accruals	-	23.31	46.63	46.63	46.63	46.63	46.63	46.63	46.63
Paid up Capital	-	14.93	45.77	77.37	109.69	142.69	176.95	211.83	247.29
Tangible Net worth	-	14.93	45.77	77.37	109.69	142.69	176.95	211.83	247.29
TOL/TNW	-	20.70	5.89	2.97	1.74	1.06	0.63	0.34	0.13
Term Loan Liab/TNW	-	19.85	5.61	2.81	1.62	0.97	0.56	0.28	0.08
Current Ratio	-	1.28	1.84	2.40	2.96	3.52	4.08	4.64	5.20
Total Tangible Assets(TTA)	181.50	492.01	483.95	476.65	470.07	464.17	458.93	454.31	450.27
<b>Efficiency Ratios</b>									
Net Sales/TTA (Times)	-	0.08	0.15	0.16	0.16	0.16	0.16	0.16	0.17
PBT/TTA(%)	0%	3%	6%	7%	7%	7%	7%	8%	8%
Operating Cost/NS(%)		58%	58%	57%	56%	55%	54%	53%	52%
(Inv.-Rec.)/NS(days)		122.90	61.45	61.45	61.45	61.45	61.45	61.45	61.45
<b>Liquidity Ratios</b>									
Current Ratio	-	1.28	1.84	2.40	2.96	3.52	4.08	4.64	5.20
Acid Test ratio	-	0.30	0.86	1.42	1.98	2.54	3.10	3.66	4.22
Bank Finance to WCG (%)		100%	100%	100%	100%	100%	100%	100%	100%
<b>Leverage Ratios</b>									
Debt:Equity ratio	-	-	3.00	2.81	1.62	0.97	0.56	0.28	0.08
TOL/TNW	-	20.70	5.89	2.97	1.74	1.06	0.63	0.34	0.13
FA CR	0.98	1.03	1.12	1.26	-	-	1.00	1.00	1.00
INTEREST COVERAGE RATIO		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
<b>Turnover Ratios</b>									
Inventory Ratios ( Days)		2.90	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Total Assets Turnover( TIMES)	-	0.08	0.15	0.16	0.16	0.16	0.16	0.16	0.17
Average Credit Period(days)									
<b>Profitability Ratios</b>									
Net Profit Margin(%)		40%	41%	42%	43%	44%	46%	47%	48%
Net Income:Assets Ratio(%)	0%	3%	6%	7%	7%	7%	7%	8%	8%
Return on Investment(%)	0%	5%	10%	10%	10%	10%	10%	10%	10%
Return on Equity(%)	0%	100%	67%	41%	29%	23%	19%	16%	14%
Operating Profitability(%)	0%	42%	42%	43%	44%	45%	46%	47%	48%
Pre-tax profitability(%)	0%	40%	41%	42%	43%	44%	46%	47%	48%
PBT/TTA(%)	0%	3%	6%	7%	7%	7%	7%	8%	8%
<b>Structural Ratios</b>									
Raw Material Content(%)		2%	2%	2%	2%	2%	3%	3%	3%
Operating Cost/Sales(%)		58%	58%	57%	56%	55%	54%	53%	52%

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**CALCULATION OF PAYBACK PERIOD**

						<u>Rs in Lakhs</u>
INITIAL INVESTMENT						328.00
YEAR	PAT	DEP.	INTEREST	TOTAL	CUM. TOTAL	
1	-	-	-	-	-	
2	14.93	7.79	-	22.71	22.71	
3	30.84	15.19	-	46.03	68.74	
4	31.60	14.43	-	46.03	114.77	
5	32.32	13.71	-	46.03	160.79	
6	33.01	13.02	-	46.03	206.82	
7	34.26	12.37	12.37	58.99	265.81	

**PAY BACK PERIOD** **8.63 YEARS**

**CALCULATION OF INTERNAL RATE OF RETURN**

				<u>Rs in Lakhs</u>			
INITIAL INVESTMENT				328.00			
YEAR	PAT	DEP.	TOTAL	Discount. factor 15%	<a href="#">Net present value@15%</a>	Discount. factor 16%	<a href="#">Net present Value@16%</a>
2016-17	14.93	7.79	22.71	0.87	19.76	0.86	19.53
2017-18	30.84	15.19	46.03	0.87	40.04	0.86	39.58
2018-19	31.60	-	3.00	0.87	2.61	0.86	2.58
2019-20	32.32	13.71	46.03	0.87	40.04	0.86	39.58
2020-21	33.01	13.02	46.03	0.87	40.04	0.86	39.58
2021-22	34.26	12.37	46.63	0.87	40.56	0.86	40.10
2022-23	34.88	11.75	46.63	0.87	40.56	0.86	40.10
2023-24	35.46	11.16	46.63	0.87	40.56	0.86	40.10
2024-25	36.03	10.59	46.62	0.87	40.56	0.86	40.09
	Residual Value		235.01	0.87	204.46	0.86	202.11
			Total cash Inflow		509.21		503.35
			Total Initial Investment		328.00		328.00
			Net Present Value		181.21		175.35
<b>INTERNAL RATE OF RETURN</b>					<b>30.96</b>		

**SENSITIVITY ANALYSIS**

**A. WITH A 2% DECREASE IN SALES**

<b>PARTICULARS</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>
	<b>Pre OP</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
<b>INCOME</b>										
Sales	-	36.53	73.06	73.06	73.06	73.06	73.06	73.06	73.06	73.06
<b>Total</b>	<b>-</b>	<b>36.53</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>	<b>73.06</b>
<b>EXPENDITURE</b>										
Cost of Sales	-	19.29	38.19	37.43	36.71	36.02	35.37	34.75	34.17	33.60
Overheads	-	3.06	5.52	5.52	5.52	5.52	4.92	4.92	4.92	4.92
Interest on Term Loan	-	-	-	-	-	-	-	-	-	-
Interest on Working Capital	-	-	-	-	-	-	-	-	-	-
	-	22.35	43.71	42.95	42.23	41.54	40.29	39.67	39.09	38.52
<b>PROFIT BEFORE TAX</b>	<b>-</b>	<b>14.18</b>	<b>29.35</b>	<b>30.11</b>	<b>30.83</b>	<b>31.52</b>	<b>32.77</b>	<b>33.38</b>	<b>33.97</b>	<b>34.54</b>
<b>TAX</b>	<b>-</b>	<b>1.25</b>	<b>5.33</b>	<b>5.48</b>	<b>7.65</b>	<b>7.85</b>	<b>8.23</b>	<b>8.42</b>	<b>8.59</b>	<b>8.76</b>
<b>PROFIT AFTER TAX</b>	<b>-</b>	<b>12.93</b>	<b>24.02</b>	<b>24.63</b>	<b>23.18</b>	<b>23.66</b>	<b>24.54</b>	<b>24.97</b>	<b>25.38</b>	<b>25.78</b>
<b>STRESSED DSCR ANALYSIS</b>										
Net Profit After Tax	-	12.93	24.02	24.63	23.18	23.66	24.54	24.97	25.38	25.78
Depreciation&Write offs	-	8.39	15.79	15.03	14.31	13.62	12.37	11.75	11.16	10.59
Interest on Term Loan	-	-	-	-	-	-	-	-	-	-
<b>Funds Available For Debt Service</b>	<b>-</b>	<b>21.31</b>	<b>39.81</b>	<b>39.65</b>	<b>37.49</b>	<b>37.28</b>	<b>36.91</b>	<b>36.72</b>	<b>36.54</b>	<b>36.37</b>
Interest on Term Loan	-	3.00	-	-	-	-	-	-	-	-
Installment of Term Loan	-	19.75	39.50	39.50	39.50	39.50	39.50	39.50	39.50	19.75
<b>Debt Obligation</b>	<b>-</b>	<b>22.75</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>39.50</b>	<b>19.75</b>
<b>D.S.C.R</b>	<b>-</b>	<b>0.94</b>	<b>1.01</b>	<b>1.00</b>	<b>0.95</b>	<b>0.94</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>1.84</b>
<b>Average DSCR</b>	<b>1.05</b>									

**B. WITH A 2% INCREASE IN DIRECT COST**

<b>PARTICULARS</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>
	<b>Pre OP</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
<b>INCOME</b>										
Sales	-	37.28	74.55	74.55	74.55	74.55	74.55	74.55	74.55	74.55
<b>Total</b>	<b>-</b>	<b>37.28</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>	<b>74.55</b>
<b>EXPENDITURE</b>										
Raw Materials	-	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Consumables	-	0.18	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Fuel Expenses	-	10.17	20.34	20.34	20.34	20.34	20.34	20.34	20.34	20.34
Power Charges	-	-	-	-	-	-	-	-	-	-
Direct Wages	-	0.92	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Other Manufacturing Exps.	-	-	-	-	-	-	-	-	-	-
Depreciation	-	7.79	15.19	14.43	13.71	13.02	12.37	11.75	11.16	10.59
	-	19.52	38.65	37.89	37.17	36.48	35.83	35.21	34.63	34.05
Add:Opening Stock of WIP & FG	-	-	-	-	-	-	-	-	-	-
Less:Closing Stock of WIP & FG	-	-	-	-	-	-	-	-	-	-
<b>COST OF SALES</b>	<b>-</b>	<b>19.52</b>	<b>38.65</b>	<b>37.89</b>	<b>37.17</b>	<b>36.48</b>	<b>35.83</b>	<b>35.21</b>	<b>34.63</b>	<b>34.05</b>
<b>GROSS PROFIT</b>	<b>-</b>	<b>17.76</b>	<b>35.90</b>	<b>36.66</b>	<b>37.38</b>	<b>38.07</b>	<b>38.72</b>	<b>39.34</b>	<b>39.92</b>	<b>40.50</b>
<b>LESS:</b>										
Overheads	-	3.06	5.52	5.52	5.52	5.52	4.92	4.92	4.92	4.92





**ASSUMPTIONS**

ON BASIS-PROCUREMENT-30% AND RENT 70 % BASIS

**PRODUCTION**

**INSTALLED CAPACITY ( AT 100% )**

Stocks	<b>MT</b>	<b>3000</b>
Stock Roating time per Annam	<b>Time</b>	<b>1</b>
Stock per Annam ( Cumulated)	<b>MT</b>	<b>3000</b>

**INCOME**

**AT INSTALLED CAPACITY**

		<b>Per Annum Mt</b>	<b>Average Rate/PerMT Rs.</b>	<b>Value Rs. Lakhs</b>
Revenue from Rent- Potato's	75%	2,250	0.0250	56.25
Revenue from Rent- Potato seeds	15%	450	0.0240	10.80
Revenue from Rent- Vegetable	10%	300	0.0250	7.50
		<u>3000.000</u>		<u>74.55</u>

**INPUTS :**

**(At installed Capacity)**

**MATERIALS**

		<b>Require- ments per Annam MT</b>	<b>Rate Per</b>		<b>Value Rs. Lakhs</b>
<b>Packing</b>	<b>Bags</b>	<b>6000</b>	<b>0.050</b>	<b>(perthousan)</b>	<b>0.30</b>
Gas	Ls				0.60
		0.00	per 10000		<u><u>0.90</u></u>

	Consumption per month (in Unit)	Cost per Unit (in Rs.)	Cost per Month (Rs. in Lakhs)	Cost per Annum (Rs. in Lakhs)
<b>POWER &amp; FUEL</b>	<b>36000</b>	<b>4.20</b>	<b>1.51</b>	<b>18.14</b>
80KW Electric Load				
Fuel	300	50.00	<b>0.15</b>	<b>1.80</b>
	ltrs		1.66	19.94

#### CONSUMABLES & STORES

##### A. ADMINISTRATIVE SALARY

###### PER MONTH

	NO. OF EMPLOYEE	RATE PER MONTH (Rs. )	TOTAL PER PM (Rs. )
Manger	1	8000	8000
Accountant	1	6000	6000
Store Keeper	1	5000	5000
Watch Man	1	5000	5000
Peon	1	5000	5000
		<b>Total p.m.</b>	<b>29000</b>
		<b>(Rs. Lakhs)</b>	<b>3.48</b>

###### SALARY PER ANNUM

##### B. WAGES (AT 100% CAPACITY IN 2 SHIFTS)

	NO. OF WORKERS	RATE PER MONTH (Rs. )	TOTAL PERPM (Rs. )
Skilled Workers	1	9000	9000
Semi-skilled Workers	1	6000	6000
		<b>Total p.m.</b>	<b>15000</b>
		<b>(Rs. Lakhs)</b>	<b>1.80</b>

###### WAGES PER ANNUM

##### ADMINSTRATIVE EXP.

	MONTH	Per Ann
Insurance	750	9000
Office Expenses	1500	18000
Repairs & Maint.	8000	96000
Other Expenses	500	6000
Per Annum	10750	129000
<b>SELLING EXPENSES</b>		
Selling Expenses	1250	15000