

DPR ON COLD STORE HAVING CAPACITY OF 5000 MT

INTRODUCTION: Assistance for setting up of new cold storage infrastructure will be available only to multi-chamber cold storage units with technologies which are energy efficient with provision for thermal insulation, humidity control, advanced cooling systems, automation, etc., having specifications and standards approved by the Ministry. Cold storages (Long term storage and distribution hubs) upto 5000 MT capacity will be promoted under NHM/HMNEH sub-schemes.

Assistance will be available to individuals, Group of farmers/ growers/ consumers, Partnership/ Proprietary firms, Self Help Groups (SHGs), Farmers Producer Organization (FPOs), Pvt. Limited Companies, Corporations, Cooperatives, Cooperative Marketing Federations etc through either NHM/State Agriculture Policy' 2013.

Land

The promoter should have own land of 2 acre.

Source of Finance

The Project is proposed to be funded, through a mix of Owned Corpus funds and financial support from Banks. Subsidy as admissible from Government of India under "Mission for Integrated Development of Horticulture (MIDH) Scheme or APICOL for setting up of Cold Store or from any other sources may be ascertained.

Implementation Schedule

The land for project has all the necessary amenities & utilities. Approach road, water & power are readily available at the site of the project. The proposed facility is being planned using faster construction techniques for structure and PUF panels which will facilitate a shorter execution time. Equipments are readily available in the country and the contractors /vendors are willing to supply all the necessary equipment within the required schedule.

BASIS OF DESIGN FOR COLD STORAGE CHAMBER

Sr. No.	Description	Parameters
A	General Details	
1	Location	Within the State
2	Internal Room Size in METER (CS-1 & 2)	17.50m (W) x 42.0m (D) x 7.0m (Ht.)-Each Room
3	Internal Room Size in METER (CS-3)	17.50m (W) x 28.0m (D) x 7.0m (Ht.)-Each Room
4	Internal Room Size in METER (CS-4 & 5)	9.0m (W) x 28.0m (D) x 7.0m (Ht.)-Each Room
5	Room temperature	2 to 6 °C
6	Room Volume in CFT (CS-1 & 2)	181554 CFT (5145 CMT)
7	Room Volume in CFT (CS-3)	121036 CFT (3430 CMT)
8	Room Volume in CFT (CS-4 & 5)	62247 CFT (1764 CMT)

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9	Total Storage / Chamber as per NHB / NHM std. (CS- 1 to 5 no.)	1500 MT (CS-1 & 2) 1000 MT (CS-3) 500 MT (CS-4 & 5)
10	Max. Ambient Temperature	45 °C
11	Anteroom Size in Mtr.	4.5m (W) x 35.0m (D) x 7.0m (Ht.)
12	Sorting & Grading Size in Mtr.	4.5m (W) x 42.0m (D) x 7.0m (Ht.)
13	Mezanine Floor	GF + 2 no.
14	No of rooms	5 no. of different sizes with common anteroom
B	Product Details	
1	Product to be stored	POTATO(CS-1,2&3) / CARROT(CS-4) / F&V (CS-5)
2	Incoming Product / day / Chamber	75 MT (CS-1 & 2) ,50 MT (CS-3),25 MT (CS-4&5) per day at the time of Loading
3	Incoming Product Temperature	30 °C
4	Required room temp.	2 to 6 °C
5	Pull-down / Cooling Time	18 Hours (30 °C to 15 °C at the time of loading) after that per day 0.5 °C at the time of pull down -as per NHB std.
C	Product Storage Pattern	
1	JUTE BAG	

TECHNICAL DETAILS FOR PUF PANELS

SR.NO.	Discription / Parameter	Properties / Value
1	Types of Insulation	PUF (Poly Urethine Foam)
2	Density	40 ± 2 Kg / m ³
3	Panel Thickness	100mm
4	Panel Lamination for Wall & Ceiling	PCGI /PCGI
5	Panel Joining	Continuous tongue & groove type
6	PCGI Sheet Thickness	0.5 mm tct
7	Lamination / Types of Floor	100mm PUF Slab with tarfelt
8	Types of Door	Swing
9	Size of Door in mm	1200mm x 2100mm

**TECHNICAL DETAILS FOR REFRIGERATION SYSTEMS
(RACK TYPE REFRIGERATION SYSTEM WITH SCREW COMPRESSOR)**

SR.NO.	Discription / Parameter	Properties / Value
	No of identical rooms	5 no.
1	Types of System	RACK type
2	Types of Compressor	Semi-Hermetic Screw
3	Make of Compressor	BITZER- GERMANY
4	Model of Compressor	HSK-7451-70-40P
5	Rack Model No	HP-503-M-HSK7451-210-40P

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6	No. of compressor in Rack System	3 nos. (2 Working + 1 standby)
7	Total Cooling Capacity - Rack System in TR (at 2 °C SST and 38 °C - SDT temp)	125.56 TR (442 Kw) (2 no. compressors)
8	Required Cooling Capacity - Rack System in TR (at -3 °C SST and 38 °C - SDT temp)	108 TR (380 Kw)
9	Refrigerant	R 404A - CFC Free
10	Expansion Device	Expansion Valve
11	Types of Condenser	Water - Cooled Shell & tube type
12	Shell & tube condenser capacity	820 KW
13	Control Panel	Inbuilt in System
14	Types of Evaporator	Celing Suspended - Dx type
15	Evaporator lamination	Powder Coated GS
16	Each Evaporator fan CFM	41310 CMH
17	Connected Power for Rack Compressor	100 Kw
18	C.O.P. FOR COMPRESSOR	4.44
19	Total Connected power (Rack +Indoor+Cooling Tower pump etc.)	140 Kw
20	C.O.P. -OVERALL SYSTEM	3.68

PRICE SHEDULE

SR.NO.	Discription of Items	Basic Total In INR
1	Wall,Celing ,Partition, PUF panels ,Floor with tarfelt& other required accessories with 10 no.Imported Doors for cold storage &ante-room	15545512
2	Rack Type Refrigeration Systems with Power Saving Screw Compressor	7150000
3	Imported Evaporator Unit with - Total12 no. (6 no. -CS-1 & 2) / (3 no. - CS-3) / (2 no. - CS-4&5)	7200000
4	Cooling Tower (250 TR) With Pump &Plumbing	600000
5	BASIC TOTAL FOR SUPPLY in INR	27495512
6	Taxes & Duties	Extra at actual
7	Transportation	Extra at actual
8		
9	Installation PUF Panels with suspension accessories	3442470
10	Installation & commissioning for Refrigeration Systems	5298785
11	BASIC TOTAL FOR SUPPLY AND INSTALLATION in INR	39236767

MS Internal Structure cost approx. 150 Lacs

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ECONOMIC ANALYSIS

Possible Alternatives

There are various options available for the proposed project.

Option-1: A 5000 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 unutilized 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.

Option-2: A 5000 MT cold storage is established and run on a combined model of rental and trading. This means certain percent of storage space will be used as rental where as remaining 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

To take appropriate investment decision the economic analysis of all the options have been worked out and given here under. For this purpose, a break even analysis of the proposed cold store with installed capacity of 5000 MT for Cold Storage with and without provision of trading are given in tables below.

Assumptions for Analysis

1. Power consumption :

- a. Consumption 120Unit per hour.
- b. The unit will run 100% time in a day.
- c. Cost of power @ Rs5.25 per unit.

2. Rent Margin:

- a. The Entrepreneur will have a margin of Rs 1.60 per KG. as Rent

- As per the calculation above, it may be seen that the proposed unit will attain break even after 16.93 years of installation if the unit will be operated on fully rental model i.e. the space will be utilized by producers/traders on payment of rents @ Rs150 per quintal.
- The project will attain breakeven in 5.19 years if 50% of the storage space will be used for own trading and remaining 50% used for rental.
- The unit will reach break-even point in 6.03 years if it will be operated on 40% own trading and 60% rental model.
- Similarly, the unit will attain breakeven in 7.18 years if it will be operated on 30-70 model of own trading vs rental.

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Break Even Analysis for 5000 MT Cold Store

Capacity Utilization	80%	90%	95%	95% 3.
Capital Cost	585.00	585.00	585.00	585.00
Cost of storage per MT for 1 year	3903	3619	3368	3368
Revenue from Rent	9760000	21960000	23180000	23180000
Total Revenue	9760000	21960000	23180000	23180000
Profit during one year	592000	2422000	3399000	3871000
Break even	66.04%	61.45%	54.93%	49.36%

Project Cost

The Tentative Capital outlay for the Project is estimated at Rs 585.00 lacs as per details given below.

Particulars	Rs. In Lakhs
Land	Nil
Factory Shed & Building	124.00
Plant & Machinery	392.00
Furniture & Fixtures	5.00
Preliminary & pre-operative exp.	7.00
Security deposit for electricity & Govt. Dep.	2.00
Working Capital	52.00
Total	585.00

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

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9	Break Even Analysis
10	Ratio Analysis
11	Calculation of Pay Back Period & IRR
12	Sensitivity Analysis
13	Assumptions

PROJECT IMPLEMENTATION SCHEDULE

SL. NO.	ACTIVITY	START	FINISH
1	Land Acquisition	EXISTING 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	Feb-16	May-16
7	Machine Arrival	Feb-16	Jun-16
9	Electrical Line Connection	Mar-16	Aug-16
10	Trial Storing	Sep-16	Sep-16
11	Commercial Storing	Oct-16	



DETAILS OF PROJECT

1 COST OF PROJECT	<u>Rs in Lacs</u>	<u>TOTAL</u>	OWN SOURCE	Margin
A. Land	EXISTING LAND	-	-	-
With Land Development Cost		-		
B. Factory Shed & Building		124.00		
As per Building Estimated Rport		124.00	124.00	-
C. Plant & Machinery				
Insulation & Refrigeration for Cold Storage		392.00		
		-		
		392.00	392.00	-
D. Furniture & Fixtures and others		5.00	5.00	
SUB TOTAL (A+B+C+D)		521.00		
E. Preliminary & Pre-op. Exps (Including IDC)		7.00	7.00	
		7.00		
F. Security Deposit for Electricity and Govt Department		2.00	2.00	
F. Working Capital Funds		55.00	55.00	-
Total		585.00	585.00	
2 MEANS OF FINANCE				
A. OWN Funds		585.00		
Total		585.00		

PROJECT AT A GLANCE

1	Name of the Unit	:	-
	Name of the Promoter		
2	Nature of Project	:	Storage of Potato & Vegetables
3	Type of Unit	:	Small Enterprises
4	Project Cost	:	585.00 Lakhs
5	Means of Finance		
	Own Source (Term)	:	530.00 Lakhs
	(Block Capital , Pre op Exps and Security Deposit etc)	:	
			530.00
	Working Capital (Own Fund)	:	55.00 Lakhs
			585.00
6	Promoters Contribution (%)	:	-
7	Installed Capacity	:	5000 MT per Annum
8	Power Requirement	:	120kw Connected Load
9	Refunds Period	:	9 yrs (INCLUDING MORATORIUM PERIOD OF 1 years)
10	Average D.S.C.R	:	1.30
11	Break Even Point (3rd Year)	:	61% (As a % of Installed Capacity)
12	Internal Rate of Return	:	25.24%
13	Pay Back Period	:	8.34 years
14	Subsidy		50.00 Lacs

PROJECTED PROFITABILITY STATEMENT

Rs. in Lacs.

	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
Capacity Utilisation (%)		80%	90%	95%	95%	95%	95%	95%	95%	95%
Months of Operations		6	12	12	12	12	12	12	12	12
A. INCOME										
SALES	-	97.60	219.60	231.80	231.80	231.80	231.80	231.80	231.80	231.80
OTHER INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	-	97.60	219.60	231.80	231.80	231.80	231.80	231.80	231.80	231.80
B. EXPENDITURES										
RAW MATERIALS	-	6.80	15.30	16.15	16.15	16.15	16.15	16.15	16.15	16.15
CONSUMABLES & CHEMICALS	-	4.80	10.80	11.40	11.40	11.40	11.40	11.40	11.40	11.40
POWER & FUEL EXPENSES	-	23.87	53.70	56.68	56.68	56.68	56.68	56.68	56.68	56.68
DIRECT WAGES	-	9.84	22.14	23.37	23.37	23.37	23.37	23.37	23.37	23.37
DEPRECIATION	-	32.75	60.91	52.40	45.14	38.93	33.63	29.09	25.21	21.88
ADD:OP. STOCK OF W.I.P	-	78.06	162.85	160.00	152.74	146.53	141.23	136.69	132.81	129.49
LESS:CL. STOCK OF W.I.P	-	-	-	-	-	-	-	-	-	-
C. COST OF PRODUCTION	-	78.06	162.85	160.00	152.74	146.53	141.23	136.69	132.81	129.49
ADD:OP. STOCK OF F.G	-	-	-	-	-	-	-	-	-	-
LESS:CL.STOCK OF F.G	-	-	-	-	-	-	-	-	-	-
E. COST OF SALES	-	78.06	162.85	160.00	152.74	146.53	141.23	136.69	132.81	129.49
F. GROSS PROFIT	-	19.54	56.75	71.80	79.06	85.27	90.57	95.11	98.99	102.31
G.OVERHEADS										
ADMINISTRATIVE SALARY	-	7.02	14.04	14.04	14.04	14.04	14.04	14.04	14.04	14.04
OFFICE & ADMN. EXPENSES	-	1.92	3.84	3.84	3.84	3.84	3.84	3.84	3.84	3.84
SELLING EXPENSES	-	0.10	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23
PRELIMINARY & PRE-OP. W/O	-	1.40	1.40	1.40	1.40	1.40	0.00	0.00	0.00	0.00
H.INTEREST	-	10.44	19.50	19.51	19.51	19.51	18.11	18.11	18.11	18.11
TERM FUND	-	-	-	-	-	-	-	-	-	-
WORKING CAPITAL FUND	-	-	-	-	-	-	-	-	-	-
I.INTEREST + OVERHEADS	-	10.44	19.50	19.51	19.51	19.51	18.11	18.11	18.11	18.11
J.NET PROFIT	-	9.11	37.26	52.29	59.55	65.76	72.46	77.00	80.88	84.21
K.INCOME TAX	-	3.19	13.04	18.30	20.84	23.02	25.36	26.95	28.31	29.47
L.NET PROFIT AFTER TAX	-	5.92	24.22	33.99	38.71	42.74	47.10	50.05	52.57	54.73
O.GROSS PROFIT RATIO (%)	0.00%	20.02%	25.84%	30.97%	34.11%	36.78%	39.07%	41.03%	42.70%	44.14%
P.NET PROFIT RATIO (%)	0.00%	6.07%	11.03%	14.66%	16.70%	18.44%	20.32%	21.59%	22.68%	23.61%
CASH PROFIT	-	40.07	86.53	87.79	85.25	83.08	80.73	79.14	77.78	76.62



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
<u>CAPITAL :</u>										
Op.Bal	0.00	0.00	5.92	28.64	60.82	97.43	137.78	182.48	230.13	280.30
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	5.92	24.22	33.99	38.71	42.74	47.10	50.05	52.57	54.73
Less: Dividends	0.00	0.00	1.50	1.80	2.10	2.40	2.40	2.40	2.40	2.40
Cl.Bal.	0.00	5.92	28.64	60.82	97.43	137.78	182.48	230.13	280.30	332.64
Subsidy		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
<u>SECURED LOAN</u>										
Own source(term)	314.00	496.88	430.63	364.38	298.13	231.88	165.63	99.38	33.13	0.00
Working Capital Funds	0.00	55.00	58.00	58.00	55.00	53.00	51.00	50.00	48.00	47.00
<u>CURRENT LIABILITIES & PROVISIONS</u>										
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	3.19	13.04	18.30	20.84	23.02	25.36	26.95	28.31	29.47
Liability For Expenses	0.00	2.84	2.84	2.22	2.22	2.22	2.22	2.22	2.22	2.22
TOTAL	314.00	613.82	583.14	553.72	523.62	497.89	476.69	458.67	441.96	461.33
<u>ASSETS</u>										
<u>FIXED ASSETS</u>										
Gross Block	129.00	521.00	521.00	521.00	521.00	521.00	521.00	521.00	521.00	521.00
Less:Depreciation	0.00	32.75	93.66	146.06	191.20	230.13	263.76	292.85	318.06	339.94
Net Block	129.00	488.25	427.34	374.94	329.80	290.87	257.24	228.15	202.94	181.06
FD On Lien		50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
<u>CURRENT ASSETS,LOANS & ADVANCES</u>										
Inventories	0.00	5.80	6.53	6.89	6.89	6.89	6.89	6.89	6.89	6.89
Sundry Debtors	0.00	52.04	54.28	53.33	50.91	48.84	47.08	45.56	44.27	43.16
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	176.00	10.14	38.79	63.76	82.62	99.29	113.48	126.07	135.86	178.22
<u>MISC. EXPENDITURE</u>										
Security Deposit	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Preliminary & Pre-op Exps. (to the extent not w/o or adjusted)	7.00	5.60	4.20	2.80	1.40	0.00	0.00	0.00	0.00	0.00
TOTAL	314.00	613.82	583.14	553.72	523.62	497.89	476.69	458.67	441.96	461.33

REPUND SCHEDULE

FUNDS AMOUNT	:	530.00 LAKHS			
RATE OF INTEREST	:	0.00%			
REFUND PERIOD	:	9 yrs (INCLUDING MORATORIUM PERIOD OF 1 years)			
IN 96 INSTALMENTS			Repayment From- October Month 2016		Rs. In Lakhs
Month	Opening Balance	Dishbursement	Repayment	Interest	Closing Balance
2015-16					
Apr-15					
May-15					
Jun-15	-	-	-	-	-
Jul-15	-	-	-	-	-
Aug-15	-	-	-	-	-
Sep-15	-	-	-	-	-
Oct-15	-	-	-	-	-
Nov-15	-	50.00	-	-	50.00
Dec-15	50.00	100.00	-	-	150.00
Jan-16	150.00	100.00	-	-	250.00
Feb-16	250.00	30.00	-	-	280.00
Mar-16	280.00	34.00	-	-	314.00
	TOTAL	314.00	-	-	
2016-17					
Apr-16	314.00	50.00	-	-	364.00
May-16	364.00	166.00	-	-	530.00
Jun-16	530.00	-	-	-	530.00
Jul-16	530.00	-	-	-	530.00
Aug-16	530.00	-	-	-	530.00
Sep-16	530.00	-	-	-	530.00
Oct-16	530.00	-	5.52	-	524.48
Nov-16	524.48	-	5.52	-	518.96
Dec-16	518.96	-	5.52	-	513.44
Jan-17	513.44	-	5.52	-	507.92
Feb-17	507.92	-	5.52	-	502.40
Mar-17	502.40	-	5.52	-	496.88
	TOTAL	216.00	33.13	-	
2017-18					
Apr-17	496.88	-	5.52	-	491.35
May-17	491.35	-	5.52	-	485.83
Jun-17	485.83	-	5.52	-	480.31
Jul-17	480.31	-	5.52	-	474.79
Aug-17	474.79	-	5.52	-	469.27
Sep-17	469.27	-	5.52	-	463.75
Oct-17	463.75	-	5.52	-	458.23
Nov-17	458.23	-	5.52	-	452.71
Dec-17	452.71	-	5.52	-	447.19
Jan-18	447.19	-	5.52	-	441.67
Feb-18	441.67	-	5.52	-	436.15
Mar-18	436.15	-	5.52	-	430.63
	TOTAL	-	66.25	-	
Cont.....					
2018-19					
Apr-18	430.63	-	5.52	-	425.10
May-18	425.10	-	5.52	-	419.58
Jun-18	419.58	-	5.52	-	414.06
Jul-18	414.06	-	5.52	-	408.54
Aug-18	408.54	-	5.52	-	403.02
Sep-18	403.02	-	5.52	-	397.50
Oct-18	397.50	-	5.52	-	391.98
Nov-18	391.98	-	5.52	-	386.46

Dec-18	386.46	-	5.52	-	380.94
Jan-19	380.94	-	5.52	-	375.42
Feb-19	375.42	-	5.52	-	369.90
Mar-19	369.90	-	5.52	-	364.38
TOTAL		-	66.25	-	
2019-20					
Apr-19	364.38	-	5.52	-	358.85
May-19	358.85	-	5.52	-	353.33
Jun-19	353.33	-	5.52	-	347.81
Jul-19	347.81	-	5.52	-	342.29
Aug-19	342.29	-	5.52	-	336.77
Sep-19	336.77	-	5.52	-	331.25
Oct-19	331.25	-	5.52	-	325.73
Nov-19	325.73	-	5.52	-	320.21
Dec-19	320.21	-	5.52	-	314.69
Jan-20	314.69	-	5.52	-	309.17
Feb-20	309.17	-	5.52	-	303.65
Mar-20	303.65	-	5.52	-	298.13
TOTAL		-	66.25	-	
2020-21					
Apr-20	298.13	-	5.52	-	292.60
May-20	292.60		5.52	-	287.08
Jun-20	287.08		5.52	-	281.56
Jul-20	281.56		5.52	-	276.04
Aug-20	276.04		5.52	-	270.52
Sep-20	270.52		5.52	-	265.00
Oct-20	265.00		5.52	-	259.48
Nov-20	259.48		5.52	-	253.96
Dec-20	253.96		5.52	-	248.44
Jan-21	248.44		5.52	-	242.92
Feb-21	242.92		5.52	-	237.40
Mar-21	237.40		5.52	-	231.88
TOTAL		-	66.25	-	
2021-22					
Apr-21	231.88	-	5.52	-	226.35
May-21	226.35		5.52	-	220.83
Jun-21	220.83		5.52	-	215.31
Jul-21	215.31		5.52	-	209.79
Aug-21	209.79		5.52	-	204.27
Sep-21	204.27		5.52	-	198.75
Oct-21	198.75		5.52	-	193.23
Nov-21	193.23		5.52	-	187.71
Dec-21	187.71		5.52	-	182.19
Jan-22	182.19		5.52	-	176.67
Feb-22	176.67		5.52	-	171.15
Mar-22	171.15		5.52	-	165.63
TOTAL		-	66.25	-	
2022-23					
Apr-22	165.63		5.52	-	160.10
May-22	160.10		5.52	-	154.58
Jun-22	154.58		5.52	-	149.06
Jul-22	149.06		5.52	-	143.54
Aug-22	143.54		5.52	-	138.02
Sep-22	138.02		5.52	-	132.50
Oct-21	132.50		5.52	-	126.98
Nov-22	126.98		5.52	-	121.46

Dec-22	121.46	5.52	-	115.94
Jan-23	115.94	5.52	-	110.42
Feb-23	110.42	5.52	-	104.90
Mar-23	104.90	5.52	-	99.38
	TOTAL	66.25	-	
2023-24				
Apr-22	99.38	5.52	-	93.85
May-22	93.85	5.52	-	88.33
Jun-23	88.33	5.52	-	82.81
Jul-23	82.81	5.52	-	77.29
Aug-23	77.29	5.52	-	71.77
Sep-23	71.77	5.52	-	66.25
Oct-23	66.25	5.52	-	60.73
11/1/203	60.73	5.52	-	55.21
Dec-23	55.21	5.52	-	49.69
Jan-24	49.69	5.52	-	44.17
Feb-24	44.17	5.52	-	38.65
Mar-24	38.65	5.52	-	33.13
	TOTAL	66.25	-	
2024-25				
Apr-24	33.13	5.52	-	27.60
May-24	27.60	5.52	-	22.08
Jun-24	22.08	5.52	-	16.56
Jul-24	16.56	5.52	-	11.04
Aug-24	11.04	5.52	-	5.52
Sep-24	5.52	5.52	-	0.00
	TOTAL	33.13	-	
	TOTAL REP	-	530.00	LAKHS

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**

Month	Opening Balance	Dishbursement	Repayment	Interest	Closing Balance
2015-16					
Apr-15					
May-15					
Jun-15	-	-	-	-	-
Jul-15	-	-	-	-	-
Aug-15	-	-	-	-	-
Sep-15	-	-	-	-	-
Oct-15	-	-	-	-	-
Nov-15	-	-	-	-	-
Dec-15	-	-	-	-	-
Jan-16	-	-	-	-	-
Feb-16	-	-	-	-	-
Mar-16	-	-	-	-	-
TOTAL		-	-	-	
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	-	-	-	-	-
TOTAL		-	-	-	
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	-	-	-	-	-
TOTAL		-	-	-	
Cont.....					
2018-19					
Apr-18	-	-	-	-	-
May-18	-	-	-	-	-
Jun-18	-	-	-	-	-
Jul-18	-	-	-	-	-
Aug-18	-	-	-	-	-
Sep-18	-	-	-	-	-
Oct-18	-	-	-	-	-
Nov-18	-	-	-	-	-

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

Dec-22	-	-	-	-
Jan-23	-	-	-	-
Feb-23	-	-	-	-
Mar-23	-	-	-	-
	TOTAL	-	-	
2023-24				
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	-	-	-	-
	TOTAL	-	-	
2024-25				
Apr-24	-	-	-	-
May-24	-	-	-	-
Jun-24	-	-	-	-
Jul-24	-	-	-	-
Aug-24	-	-	-	-
Sep-24	-	-	-	-
	TOTAL	-	-	
	TOTAL REP	-	-	LAKHS



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
A) SOURCES OF FUNDS										
Net Profit after tax	-	5.92	24.22	33.99	38.71	42.74	47.10	50.05	52.57	54.73
Preliminary & Pre-op Exp. W/o.	-	1.40	1.40	1.40	1.40	1.40	-	-	-	-
Depreciation	-	32.75	60.91	52.40	45.14	38.93	33.63	29.09	25.21	21.88
	-	40.07	86.53	87.79	85.25	83.08	80.73	79.14	77.78	76.62
Subsidy		50.00								
Increase in Share Capital	-	-	-	-	-	-	-	-	-	-
Increase in Term Fund	314.00	216.00								
Increase in Cash Credit	-	55.00								
Increase in Current Liabilities & Provision	-	6.03	9.85	4.64	2.54	2.17	2.35	1.59	1.36	1.16
Increase VCA	-	-								
	314.00	367.10	96.38	92.43	87.79	85.25	83.08	80.73	79.14	77.78
B) APPLICATION OF FUNDS										
Increase in Fixed Assets	129.00	392.00	-	-	-	-	-	-	-	-
Increase in Preliminary & Pre-op Expenses	7.00									
Refunds of Term Funds	-	33.13	66.25	66.25	66.25	66.25	66.25	66.25	66.25	33.13
Increase in Inventories	-	5.80	0.73	0.36	-	-	-	-	-	-
Increase in Sundry Debtors	-	52.04	2.25	(0.95)	(2.42)	(2.07)	(1.77)	(1.51)	(1.29)	(1.11)
Increase in Other C.Assets	-	-	-	-	-	-	-	-	-	-
Security Deposit	2.00	-								
FD in Lien		50.00								
repayment of VCA						-	-	-	-	-
Drawings	-	-	1.50	1.80	2.10	2.40	2.40	2.40	2.40	2.40
	138.00	532.96	70.72	67.46	65.93	66.58	66.88	67.14	67.36	34.42
Surplus/(Deficit)	176.00	(165.86)	25.66	24.97	21.86	18.67	16.19	13.59	11.78	43.37
Opening Balance	-	176.00	10.14	35.79	60.76	82.62	101.29	117.48	131.07	142.86
Closing Balance	176.00	10.14	35.79	60.76	82.62	101.29	117.48	131.07	142.86	186.22



RATIO ANALYSIS

Rs in Lakhs

YEAR	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Net Sales	-	97.60	219.60	231.80	231.80	231.80	231.80	231.80	231.80
Operating profit	-	10.51	38.66	53.69	60.95	67.16	72.46	77.00	80.88
Operating Profit to Net Sale (%)		11%	18%	23%	26%	29%	31%	33%	35%
Net Other Income	-	-	-	-	-	-	-	-	-
Profit before tax	-	9.11	37.26	52.29	59.55	65.76	72.46	77.00	80.88
PBT to Net Sale (%)		9%	17%	23%	26%	28%	31%	33%	35%
Profit after tax	-	5.92	24.22	33.99	38.71	42.74	47.10	50.05	52.57
PAT to Net Sale (%)		6%	11%	15%	17%	18%	20%	22%	23%
Net cash accruals	-	40.07	86.53	87.79	85.25	83.08	80.73	79.14	77.78
Paid up Capital	-	5.92	28.64	60.82	97.43	137.78	182.48	230.13	280.30
Tangible Net worth	-	5.92	28.64	60.82	97.43	137.78	182.48	230.13	280.30
TOL/TNW	-	94.23	17.62	7.28	3.86	2.25	1.34	0.78	0.40
Term FUND Liab/TNW	-	83.93	15.04	5.99	3.06	1.68	0.91	0.43	0.12
Current Ratio	-	1.11	1.35	1.58	1.80	1.98	2.13	2.25	2.38
Total Tangible Assets(TTA)	307.00	608.22	578.94	550.92	522.22	497.89	476.69	458.67	441.96
Efficiency Ratios									
Net Sales/TTA (Times)	-	0.16	0.38	0.42	0.44	0.47	0.49	0.51	0.52
PBT/TTA(%)	0%	1%	6%	9%	11%	13%	15%	17%	18%
Operating Cost/NS(%)		89%	82%	77%	74%	71%	69%	67%	65%
(Inv.+Rec.)/NS(days)		213.33	99.68	93.53	89.77	86.55	83.81	81.46	79.45
Liquidity Ratios									
Current Ratio	-	1.11	1.35	1.58	1.80	1.98	2.13	2.25	2.38
Acid Test ratio	-	0.26	0.61	0.90	1.15	1.36	1.53	1.68	1.82
BOARD Finance to WCG (%)		100%	100%	100%	99%	99%	99%	100%	98%
Leverage Ratios									
Debt:Equity ratio	-	83.93	15.04	5.99	3.06	1.68	0.91	0.43	0.12
TOL/TNW	-	94.23	17.62	7.28	3.86	2.25	1.34	0.78	0.40
FA CR	0.41	0.98	0.99	1.03	1.11	1.25	1.55	2.30	6.13

Turnover Ratios								
Inventory Ratios (Days)		21.39	10.70	10.70	10.70	10.70	10.70	10.70
Total Assets Turnover(TIMES)	-	0.16	0.38	0.42	0.44	0.47	0.49	0.51
Average Credit Period(days)								
Profitability Ratios								
Net Profit Margin(%)		6%	11%	15%	17%	18%	20%	22%
Net Income:Assets Ratio(%)	0%	1%	4%	6%	7%	9%	10%	11%
Return on Investment(%)	0%	7%	17%	19%	20%	21%	22%	23%
Return on Equity(%)	0%	100%	85%	56%	40%	31%	26%	22%
Operating Profitability(%)	0%	11%	18%	23%	26%	29%	31%	33%
Pre-tax profitability(%)	0%	9%	17%	23%	26%	28%	31%	33%
PBT/TTA(%)	0%	1%	6%	9%	11%	13%	15%	17%
Structural Ratios								
Raw Material Content(%)		9%	9%	10%	11%	11%	11%	12%
Operating Cost/Sales(%)		89%	82%	77%	74%	71%	69%	67%

CALCULATION OF PAYBACK PERIOD

INITIAL INVESTMENT

Rs in Lakhs

585.00

YEAR	PAT	DEP.	INTEREST	TOTAL	CUM. TOTAL
1	-	-	-	-	-
2	5.92	32.75	-	38.67	38.67
3	24.22	60.91	-	85.13	123.80
4	33.99	52.40	-	86.39	210.19
5	38.71	45.14	-	83.85	294.03
6	42.74	38.93	-	81.68	375.71
7	47.10	33.63	33.63	114.36	490.06

PAY BACK PERIOD

8.34 YEARS

CALCULATION OF INTERNAL RATE OF RETURN

INITIAL INVESTMENT

Rs in Lakhs

585.00

YEAR	PAT	DEP.	TOTAL	Discount. factor 15%	<u>Net present value@15%</u>	Discount. factor 16%	<u>Net present Value@16%</u>
2016-17	5.92	32.75	38.67	0.87	33.64	0.86	33.26
2017-18	24.22	60.91	85.13	0.87	74.06	0.86	73.21
2018-19	33.99	52.40	86.39	0.87	75.16	0.86	74.30
2019-20	38.71	45.14	83.85	0.87	72.95	0.86	72.11
2020-21	42.74	38.93	81.68	0.87	71.06	0.86	70.24
2021-22	47.10	33.63	80.73	0.87	70.23	0.86	69.43
2022-23	50.05	29.09	79.14	0.87	68.85	0.86	68.06
2023-24	52.57	25.21	77.78	0.87	67.67	0.86	66.89
2024-25	54.73	21.88	76.62	0.87	66.66	0.86	65.89
	Residual Value		257.24	0.87	223.80	0.86	221.23
			Total cash Inflow		824.08		814.61
			Total Initial Investment		585.00		585.00
			Net Present Value		239.08		229.61

INTERNAL RATE OF RETURN

25.24



SENSITIVITY ANALYSIS

A. WITH A 2% DECREASE IN SALES

PARTICULARS	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
INCOME										
Sales	-	95.65	215.21	227.16	227.16	227.16	227.16	227.16	227.16	227.16
Total	-	95.65	215.21	227.16	227.16	227.16	227.16	227.16	227.16	227.16
EXPENDITURE										
Cost of Sales	-	78.06	162.85	160.00	152.74	146.53	141.23	136.69	132.81	129.49
Overheads	-	10.44	19.50	19.51	19.51	19.51	18.11	18.11	18.11	18.11
Interest on Term Loan	-	-	-	-	-	-	-	-	-	-
Interest on Working Capital	-	-	-	-	-	-	-	-	-	-
	-	88.49	182.34	179.51	172.25	166.04	159.34	154.80	150.92	147.59
PROFIT BEFORE TAX	-	7.16	32.86	47.65	54.92	61.12	67.83	72.36	76.25	79.57
TAX	-	0.53	6.05	9.10	14.88	16.74	18.75	20.11	21.27	22.27
PROFIT AFTER TAX	-	6.63	26.81	38.56	40.04	44.39	49.08	52.25	54.97	57.30
STRESSED DSCR ANALYSIS										
Net Profit After Tax	-	6.63	26.81	38.56	40.04	44.39	49.08	52.25	54.97	57.30
Depreciation & Write offs	-	34.15	62.31	53.80	46.54	40.33	33.63	29.09	25.21	21.88
Interest on Term Loan	-	-	-	-	-	-	-	-	-	-
Funds Available For Debt Service	-	40.78	89.12	92.36	86.58	84.72	82.71	81.35	80.18	79.18
Interest on Term Loan	-	-	-	-	-	-	-	-	-	-
Instalment of Term Loan	-	33.13	66.25	66.25	66.25	66.25	66.25	66.25	66.25	33.13
Debt Obligation	-	33.13	66.25	66.25	66.25	66.25	66.25	66.25	66.25	33.13
D.S.C.R	-	1.23	1.35	1.39	1.31	1.28	1.25	1.23	1.21	2.39
Average DSCR	1.40									

B. WITH A 2% INCREASE IN DIRECT COST

PARTICULARS	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
INCOME										



ASSUMPTIONS

ON BASIS-100% Rent

INSTALLED CAPACITY (AT 100%)	<u>3.00</u>	Total Stock Rotation	
Stocks	MT	5000	<u>Per Annum</u>
potato	MT	3000	
Potato Seeds	MT	1000	
Vegetables	MT	1000	
Stock Roating time per Annum (Potato)	Time	1	3,000
Stock Roating time per Annum (Potato Seeds)	Time	1	1000
Stock Roating time per Annum (Vegetables)	Time	12	12,000
Stock per Annam (Cumulated)	MT	5000	16,000

INCOME

AT INSTALLED CAPACITY

		Per Annum Mt	Average Rate/PerMT Rs.	Value Rs. Lakhs
Revenue from Rent on Potato & potato seeds	80%	4,000	0.0160	64.00
Revenue from rent on Vegetable	20%	12,000	0.015	180.00
		<u>16000.000</u>		<u>244.00</u>

INPUTS :

(At installed Capacity)

MATERIALS

		Require- ments per Annam MT	Rate Per	Value
				Rs. Lakhs
Raw material		-	0.000	0.00
Packing Materials Bags	Nos	320000	0.050	(perthousan) 16.00
Gas	0.00	per 10000		<u>1.00</u>
				<u>17.00</u>

Consumption per month (in Unit)	Cost per Unit (in Rs.)	Cost per Month (Rs. in Lakhs)	Cost per Annum (Rs. in Lakhs)
77990	5.25	4.09	49.13
120	250.00	0.30	3.93
500	50.00	0.25	3.00
ltrs		4.64	59.66
		Cost per Month (In Rs.)	Cost per Annum (Rs. in Lakhs)
		1.00	12.00

POWER & FUEL

120 K.W Connected Load

Electricity Duity @ 8% on Electricity Charges

Fix Charges Rs 250.00 Per K.W Per Month

Fuel

CONSUMABLES & STORES

A. ADMINISTRATIVE SALARY PER MONTH

General Manger
Manager Sales
Manager Administration
Manager Accounts
Accountant
Store Keeper
Watch Man
Peon
SALARY PER ANNUM

NO. OF EMPLOYEES	RATE PER MONTH (Rs.)	TOTAL PER PM (Rs.)
1	20000	20000
1	15000	15000
3	12000	36000
1	10000	10000
1	8000	8000
1	8000	8000
3	5000	15000
1	5000	5000
Total p.m.	83000	117000

B. WAGES (AT 100% CAPACITY IN 3 SHIFTS)

Skilled Workers
Semi-skilled Workers
Un Skilled Worker

NO. OF WORKERS	RATE PER MONTH (Rs.)	TOTAL PERPM (Rs.)
5	9000	45000
10	6000	60000
20	5000	100000
Total p.m.		205000
	(Rs. Lakhs)	24.60

WAGES PER ANNUM

ADMINSTRATIVE EXP.

Insurance
Office Expenses
Repairs & Maint.
Other Expenses
Selling Expenses
PER ANNUM

MONTH	Per Anm
5000	60000
5000	60000
15000	180000
7000	84000
32000	384000
2000	24000
(Rs. Lakhs)	4.08