



Model Detailed Project Report

FROZEN PEAS PROCESSING UNIT

Under the Formalization of Micro Food Processing Enterprises Scheme



(Ministry of Food Processing Industries, Government of India)

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1. The Project at a Glance

1. Name of the proposed project	:	Frozen Peas Processing Unit
2. Name of the entrepreneur/FPO/SHG/Cooperative	:	
3. Nature of proposed project	:	Proprietorship/Company/Partnership
4. Registered office	:	
5. Project site/location	:	
6. Names of Partner (if partnership)	:	
7. No of share holders (if company/FPC)	:	
8. Technical advisor	:	
9. Marketing advisor/partners	:	
10. Proposed project capacity	:	Frozen Peas: 120000 Kg/annum (50,55,60,65,&70% capacity utilization in 1 st to 5 th Year respectively)
11. Raw materials	:	Fresh pea beans & Packaging material
12. Major product outputs	:	Fresh Peas
13. Total project cost	:	<i>Rs. 39.58 Lakh</i>
• <i>Land development, building & civil construction</i>	:	<i>Nil</i>
• <i>Machinery and equipments</i>	:	<i>Rs. 33.91 Lakh</i>
• <i>Other Fixed Assets</i>	:	<i>Rs. 2 Lakh</i>
• <i>Working capital margin</i>	:	<i>Rs. 2.95 Lakh</i>
• <i>Contingencies</i>	:	<i>Rs. 0.72 Lakh</i>
14. Working capital requirement		<i>Rs. 8.84 Lakh</i>
15. Means of Finance		
• <i>Subsidy grant by MoFPI (max 10 lakh)</i>	:	<i>Rs. 10.0 Lakh</i>
• <i>Promoter's contribution (min 20%)</i>	:	<i>Rs. 13.42 Lakh</i>
• <i>Term loan (45%)</i>	:	<i>Rs. 16.16 Lakh</i>
16. Debt-equity ratio	:	0.94
17. Profit after Depreciation, Interest & Tax		
• <i>1st year</i>	:	<i>2.29 Lakh</i>
• <i>2nd year</i>	:	<i>6.35 Lakh</i>
• <i>3rd year</i>	:	<i>10.34 Lakh</i>
• <i>4th year</i>	:	<i>13.55 Lakh</i>
• <i>5th year</i>	:	<i>18.08 Lakh</i>
18. Average DSCR	:	2.85
19. Term loan repayment	:	5 Years with 6 months grace period

2. About the Project

2.1. Frozen Peas Processing Unit

Green peas are a tasty and very nutritious vegetable that should be a part of almost everyone's diet. They're a great source of protein, vitamins, minerals, and soluble fiber. They are also very versatile. Peas can be cooked and prepared in many different ways and can add flavor and interest to many dishes. Another advantage of peas is that they are often inexpensive to buy. In addition to being a component of a meal, green peas can be used to make other foods, including soups, puddings, and porridges. They also make a great addition to items such as salads, stews, pies, pasta, and omelets.

Field pea (*Pisum sativum*) is one of the world's main pulse crops, grown over an area of 5.9 million hectares and Production approximately 11.7 million tons. The pea, after dry bean and chickpea, is the third most important pulse crop worldwide. In India field pea is grown over an area of 11.50 lakh ha with a production of about 10.36 lakh tons during period (2012-2015). Uttar Pradesh is the largest pea producing state and It alone produces about 49 % of pea produced in India.

Other states such as Madhya Pradesh and Jharkhand, Himachal Pradesh, Punjab, West Bengal, Haryana, Bihar, Uttarakhand, Jammu and Kashmir, Odisha, portions of Rajasthan, and Maharashtra grow peas on a large scale. It is grown in Karnataka and in the hilly regions like Ooty and Kodaikanal also. The green pea growing area is 0.543 million ha in Madhya Pradesh, and production was 5430 tonnes. The mature seeds are used as whole or separated into dal and are used in different ways. Only about 5 percent of the peas sold worldwide are fresh. The rest are sold either frozen or canned or dry. Frozen peas are convenient and easy-to-use, without the hassle of shelling, and can be stored as fresh, and also they're not that much more expensive than fresh peas.

2.2. Raw Material Requirements

Major raw materials that are used are as follows:

- For the processing of Frozen peas, the main raw material is fresh tender pea beans are required.
- Good packaging materials are required for the packaging of processed products.

2.3. Technology

IIFPT has all the advanced technical know on frozen pea processing & packaging with respect to specific parameters' for getting good quality standards. These technologies are available through consultancy.

2.4. Market Demand and Supply

Increasing customer desire for convenience foods implicitly favors increasing demand for frozen items, as they require less time and effort than cooking from scratch. The processed food market is driven by the greater need for convenience due to the busy lifestyles of consumers. That, in particular, raises the market for frozen goods. Rising disposable income is also one of those reasons that have a major effect on the development of the frozen food industry as it increases the purchasing power of customers.

The size of the frozen food industry in 2019 was priced at \$291.8 billion and is expected to hit \$404.8 billion by 2027, with a CAGR of 4.2 percent between 2020 and 2027. Frozen food is described as food products that are frozen at low temperatures and are used for a long period of time. Different food products, including ready meals, vegetables & fruits, rice, meat & fish, fish, and soup, are part of the product market.

Fresh peas are available only during the winter season but are generally required in all seasons. Also, their harvest is limited to certain states. This gap between demand and supply is being managed by frozen peas available in the Indian market.

2.5. Marketing Strategy

The increasing urbanization and income offers huge scope for marketing of frozen peas. Urban organized platforms such as departmental stores, malls, super markets can be attractive platforms to sell well packaged frozen peas. Processors can also have tie-up with hotels, caterers and restaurants for supply.

2.6. Manufacturing Process

➤ Sowing of pea

The peas are sown during the winter season. Depending on the variety and time, the seed is sown at a distance of 10 cm between the rows. When it is sown early the highest seed quantity is used because of the low germination percentage. Peas grow best in mild climates with enough humidity, ensuring that during flowering and ripening sufficient moisture is present. Preference is given to humus-rich and well drain soil. The pea crops do not require frequent irrigation and cannot stand with water lodging so drainage facilities are necessary for the cultivation of pea. The plant has the ability to absorb nitrogen from the air through Rhizobium bacteria, which live in symbiosis in the root nodules on the roots of the plant.(The contract farming practices is important if the processing plant is on a large scale)

- ### ➤ **Harvesting:**
- Since peas are only harvested from November to February in India, it is in the processing plants' interest that the pea supply is spread to a maximum over this period. To achieve this coverage, sowing is done according to a specific timetable, also called a seed scheme. Moreover, advantage can be taken off early and late varieties of peas. During ripening sugar is converted into starch, allowing the peas to become harder. In addition, the grain skin hardens. The ideal time for harvesting can therefore be determined using a tender meter. The round peas are at the time of harvest light green of color. Wrinkled peas both come in light green and dark green varieties. When the tender meter value is too high, too much sugar is converted to starch. After harvesting the peas must be processed as quickly as possible

to prevent them from warming up. Warming up might cause the peas to be affected by bacteria, which convert proteins into the toxic brown matter. Therefore, the temperature of the peas is well monitored.

- **Cleaning:** To determine the detergent effect of the washer, the percentage of unwanted parts is determined. This percentage is also included in the price of the raw material. Often, coarse dirt is first removed with shake and drum sieves and a blower. Because peas are quite vulnerable, a flotation washer is used. The peas are fed into the machine through a funnel. In the first part of the flotation washer, the remaining coarse and heavy dirt particles are removed. The stream that is formed at the bottom of the washer is so strong that only the heavier parts sink. In the second part of the washer, bark, leaves, and pea peels are sorted because they are lighter than the soaked peas and therefore float to the surface of the water. Using a strong flow of water, the now soggy and sunken peas are pressed to a vibrating sieve screen. Here, any remaining pea peels are loosened and the remaining sand is washed away.

- **Sorting:** With a conveyor belt or water, the peas are transported to the sorting machine. Here, the peas are sorted. Sorting is important because a pea's size determines its further processing, the difference in filling weight, starch content, and price. The peas sorter consists of 3 to 5 rotating clover leaf-shaped, perforated drums with a diameter of about 2 meters that are placed on top of each. With water, the peas are led to the upper drum which has perforations of 8 mm. The sieved peas are collected in a gutter and transported with water to a drum with perforations of 7 mm.

- **Blanching:** After sorting, the peas are blanched. Depending on their size/ sorting classification, the peas are heated up to 75 to 80°C for 2 to 4 minutes. After that, the peas are immediately washed with cold water, preventing the growth of thermophilic microorganisms. In addition, this step removes any starch from the peas, making sure that there will not be any turbid water. Blanching removes any cell moisture from lightly crushed peas, which may otherwise cause flavor inconsistencies when coming in contact with oxygen.

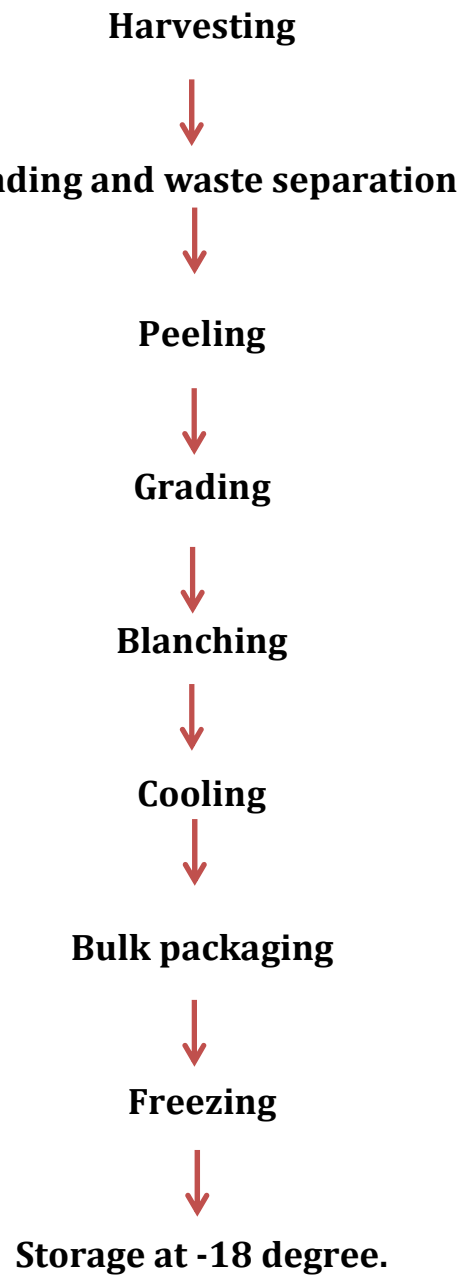
- **Detection of Metal:** This process is also carried out with the grading or sorting simultaneously. It is necessary to identify any other particles of metal or items that may have been collected during harvesting or processing. peas are passed through a metal detector, it is highly recommended as metals could be highly injurious during consumption.

- **Packaging:** The packaging is the most essential operation after processing it is also convenient for handling and marketing. The peas can be packed in different packaging materials are packed in several types and sizes of packaging on the basis of the nature of the market. 0.25 -1 kg or 2 kg volume packaging is commonly used for the local market. On the packaging labels, data such as weight, country of origin, cost, and date of expiry should be mention properly.

- **Frozen Peas:** After packing, the sealed packets are fed to blast freezer for rapid freezing, followed by which they are kept in cold chamber to maintain them in frozen state. The chamber must be able to achieve -18 degree Celsius temperature. The peas can be stored in bulk and later packaged using a flow packer.

- **Storage:** After packaging the storage temperature of frozen peas needs to maintain till consumption the standard temperature of frozen peas is -18⁰c. When peas are stored in cans and bottle the peas should be stored dry at a temperature of about 10 to 15°C. Usually the cans and jars are labelled only after leaving the temporary storage.

Flow Chart of Frozen Pea Processing



2.7. Basic Project Assumptions

Capacity of Frozen peas processing Unit: Frozen Peas 120000 Kg/annum

Working hours per day : 8-10 hrs.

Working days per year : 300 days.

Interest on capital investment: 11% on term loan and working capital loan.

Repayment period : Five years with six months grace period is considered.

Utilization of capacity : 50% 1st year, 55% in 2nd year, 60% in 3rd year, 65% in 4th year & 70% 5th year onwards

Average prices of raw material : Rs. 42/ Kg

Average sale price : Rs 120/Kg

2.8. Fixed Capital Investment

2.8.A. Land & Building

The DPR is for FME scheme to upgrade/formalize existing micro enterprises which already has land & built-up area. However, they can invest to expand the built-up area as required.

2.8.B. Machinery & Equipment: Rs. 33.91 Lakh

Description	Rate	Unit	Amount
Product Feeding Conveyor	120000	1	120000
Continues online washer	450000	1	450000
Pea Podder	355000	1	355000
Continues Online blancher	500000	1	500000
Sorting/ manual inspection conveyor	140000	1	140000
Product Elevator Conveyor	90000	1	90000
Vibratory screen Conveyor	150000	1	150000
Blast Freezer	850000	1	850000
Metal Detector	35000	1	35000
Control Panel	34000	1	34000
Packaging machine	150000	1	150000
Total Amount			2874000
GST @ 18%			517320
Net Amount			3391320

2.8.C. Other Fixed Assets:

i.	Furniture and Fixtures	Rs. 2 Lakh
ii.	Plastic trays capacity	
iii.	Electrical fittings	

2.8.D. Total Fixed Capital Investment (A+B+C): Rs. 35.91 Lakh

2.9. Working Capital Requirement

Working capital is critical input in frozen pea processing & packaging unit.

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(30 Days requirement)	7.20	8.71	10.01	11.39	12.85
Raw Material					
(30 Days requirement)	2.52	2.90	3.31	3.74	4.20
Closing Stock	9.72	11.62	13.32	15.13	17.05

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(25%)	Net Amount
Stock in Hand	9.72		
Less:			
Sundry Creditors	1.18		
Paid Stock	8.54	2.14	6.41
Sundry Debtors	3.24	0.81	2.43
Working Capital Requirement			8.84
Margin			2.95
MPBF			8.84
Working Capital Demand			8.84

2.10. Total Project Cost and Means of Finance

Particulars	Amount (Rs. in Lakh)
i. Land and building	Nil
ii. Plant and machinery	33.91
iii. Other Fixed assets	2.00
iv. Working capital margin	2.95
v. Contingencies	0.72
Total project cost (i to v)	39.58
Means of finance	
i. Subsidy	10.00
ii. Promoter's contribution	13.42
iii. Term loan	16.16
Total Means of Finance(i to iii)	39.58

2.11. Manpower:

BREAK UP OF LABOUR				
Particulars	Wages	No of	Total	
	Per Month	Employees	Salary	
Supervisor	20,000.00	1	20,000.00	
Machine Operator	13,000.00	3	39,000.00	
Skilled/Unskilled Worker	11,000.00	4	44,000.00	
Helper	8,000.00	3	24,000.00	
			1,27,000.00	
Add: 10% Fringe Benefit			12,700.00	
Total Labour Cost Per Month			1,39,700.00	
Total Labour Cost for the year (In Rs. Lakhs)		11	16.76	

BREAK UP OF SALARY				
Particulars	Salary	No of	Total	
	Per Month	Employees	Salary	
Accountant cum store keeper	25,000.00	1	25,000.00	
Sales	22,000.00	2	44,000.00	
Total Salary Per Month			69,000.00	
Add: 5% Fringe Benefit			3,450.00	
Total Salary for the month			72,450.00	
Total Salary for the year (In Rs. Lakhs)		3	8.69	

2.12. Financial Analysis:

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	25.20	30.75	36.60	42.15
Add: Additions	13.42	-	-	-	-
Add: Net Profit	2.29	6.35	10.34	13.55	18.08
Less: Drawings	0.50	0.80	4.50	8.00	13.00
Subsidy/Grant	10.00	-	-	-	-
Closing Balance	25.20	30.75	36.60	42.15	47.22
CC Limit	8.84	8.84	8.84	8.84	8.84
Term Loan	14.37	10.77	7.18	3.59	-
Sundry Creditors	1.18	1.36	1.55	1.75	1.96
TOTAL :	49.58	51.72	54.16	56.32	58.02
APPLICATION OF FUND					
Fixed Assets (Gross)					
Fixed Assets (Gross)	35.91	35.91	35.91	35.91	35.91
Gross Dep.	0.65	1.51	2.50	3.63	4.91
Net Fixed Assets	35.27	34.40	33.41	32.28	31.00
Current Assets					
Sundry Debtors	3.24	4.32	4.96	5.65	6.38
Stock in Hand	9.72	11.62	13.32	15.13	17.05
Cash and Bank	1.36	1.39	2.47	3.26	3.59
TOTAL :	49.58	51.72	54.16	56.32	58.02

PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	64.80	86.33	99.25	113.00	127.60
Total (A)	64.80	86.33	99.25	113.00	127.60
B) COST OF SALES					
Raw Material Consumed	25.20	29.04	33.12	37.44	42.00
Electricity Expenses	3.92	4.31	4.70	5.09	5.48
Repair & Maintenance	5.18	6.91	7.94	9.04	10.21
Labour & Wages	16.76	18.44	20.28	22.31	24.54
Packing & other overheads	0.65	0.86	0.99	1.13	1.28
Cost of Production	51.71	59.56	67.04	75.01	83.51
Add: Opening Stock /WIP	-	7.20	8.71	10.01	11.39
Less: Closing Stock /WIP	7.20	8.71	10.01	11.39	12.85
Cost of Sales (B)	44.51	58.05	65.74	73.63	82.05
C) GROSS PROFIT (A-B)	20.29	28.28	33.51	39.37	45.55
	31.31%	32.76%	33.76%	34.84%	35.70%
D) Bank Interest (Term Loan)	1.75	1.43	1.04	0.64	0.25
ii) Interest On Working Capital	0.97	0.97	0.97	0.97	0.97
E) Salary to Staff	8.69	10.43	12.00	13.80	15.18
F) Selling & Adm Expenses Exp.	1.30	3.88	4.17	4.75	5.10
G) Depreciation as per Schedule	5.29	4.50	3.84	3.27	2.79
TOTAL (D+E+F+G)	18.00	21.23	22.01	23.43	24.29
H) NET PROFIT	2.29	7.06	11.49	15.94	21.27
	3.5%	8.2%	11.6%	14.1%	16.7%
I) Taxation	-	0.71	1.15	2.39	3.19
J) PROFIT (After Tax)	2.29	6.35	10.34	13.55	18.08

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	13.42	-			
Reserve & Surplus	2.29	7.06	11.49	15.94	21.27
Depriciation & Exp. W/off	0.65	0.86	0.99	1.13	1.28
Increase In Cash Credit	8.84	-	-	-	-
Increase In Term Loan	16.16	-	-	-	-
Increase in Creditors	1.18	0.18	0.19	0.20	0.21
Subsidy/Grant	10.00	-	-	-	-
TOTAL :	52.52	8.10	12.68	17.27	22.76
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	35.91	-	-	-	-
Increase in Stock	9.72	1.90	1.70	1.81	1.92
Increase in Debtors	3.24	1.08	0.65	0.69	0.73
Repayment of Term Loan	1.80	3.59	3.59	3.59	3.59
Taxation	-	0.71	1.15	2.39	3.19
Drawings	0.50	0.80	4.50	8.00	13.00
TOTAL :	51.17	8.07	11.59	16.48	22.43
Opening Cash & Bank Balance	-	1.36	1.39	2.47	3.26
Add : Surplus	1.36	0.03	1.09	0.79	0.33
Closing Cash & Bank Balance	1.36	1.39	2.47	3.26	3.59

2.13. Depreciation Schedule:

COMPUTATION OF DEPRECIATION				
Description	Land	Plant & Machinery	Other Assets	TOTAL
Rate of Depreciation		15.00%	10.00%	
Opening Balance	Leased	-	-	-
Addition	-	33.91	2.00	35.91
	-	33.91	2.00	35.91
		-	-	-
TOTAL		33.91	2.00	35.91
Less : Depreciation	-	5.09	0.20	5.29
WDV at end of Ist year	-	28.83	1.80	30.63
Additions During The Year	-	-	-	-
	-	28.83	1.80	30.63
Less : Depreciation	-	4.32	0.18	4.50
WDV at end of IInd Year	-	24.50	1.62	26.12
Additions During The Year	-	-	-	-
	-	24.50	1.62	26.12
Less : Depreciation	-	3.68	0.16	3.84
WDV at end of IIIrd year	-	20.83	1.46	22.28
Additions During The Year	-	-	-	-
	-	20.83	1.46	22.28
Less : Depreciation	-	3.12	0.15	3.27
WDV at end of IV year	-	17.70	1.31	19.02
Additions During The Year	-	-	-	-
	-	17.70	1.31	19.02
Less : Depreciation	-	2.66	0.13	2.79
WDV at end of Vth year	-	15.05	1.18	16.23

2.14. Repayment Schedule:

REPAYMENT SCHEDULE OF TERM LOAN					11.0%		
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	16.16	16.16	0.44	-	16.16
	Iind Quarter	16.16	-	16.16	0.44	-	16.16
	IIIrd Quarter	16.16	-	16.16	0.44	0.90	15.26
	Ivth Quarter	15.26	-	15.26	0.42	0.90	14.37
					1.75	1.80	
II	Opening Balance						
	Ist Quarter	14.37	-	14.37	0.40	0.90	13.47
	Iind Quarter	13.47	-	13.47	0.37	0.90	12.57
	IIIrd Quarter	12.57	-	12.57	0.35	0.90	11.67
	Ivth Quarter	11.67		11.67	0.32	0.90	10.77
					1.43	3.59	
III	Opening Balance						
	Ist Quarter	10.77	-	10.77	0.30	0.90	9.88
	Iind Quarter	9.88	-	9.88	0.27	0.90	8.98
	IIIrd Quarter	8.98	-	8.98	0.25	0.90	8.08
	Ivth Quarter	8.08		8.08	0.22	0.90	7.18
					1.04	3.59	
IV	Opening Balance						
	Ist Quarter	7.18	-	7.18	0.20	0.90	6.28
	Iind Quarter	6.28	-	6.28	0.17	0.90	5.39
	IIIrd Quarter	5.39	-	5.39	0.15	0.90	4.49
	Ivth Quarter	4.49		4.49	0.12	0.90	3.59
					0.64	3.59	
V	Opening Balance						
	Ist Quarter	3.59	-	3.59	0.10	0.90	2.69
	Iind Quarter	2.69	-	2.69	0.07	0.90	1.80
	IIIrd Quarter	1.80	-	1.80	0.05	0.90	0.90
	Ivth Quarter	0.90		0.90	0.02	0.90	- 0.00
					0.25	3.59	

2.15. Financial Ratios:

FINANCIAL RATIOS					
	I	II	III	IV	V
TURNOVER	64.80	86.33	99.25	113.00	127.60
GROSS PROFIT	20.29	28.28	33.51	39.37	45.55
G.P. RATIO	31.31%	32.76%	33.76%	34.84%	35.70%
NET PROFIT	2.29	7.06	11.49	15.94	21.27
N.P. RATIO	3.5%	8.2%	11.6%	14.1%	16.7%
CURRENT ASSETS	14.32	17.32	20.75	24.04	27.02
CURRENT LIABILITIES	10.01	10.19	10.38	10.59	10.80
CURRENT RATIO	1.43	1.70	2.00	2.27	2.50
TERM LOAN	14.37	10.77	7.18	3.59	-
TOTAL NET WORTH	15.20	20.75	26.60	32.15	37.22
DEBT/EQUITY	0.94	0.52	0.27	0.11	-
TOTAL NET WORTH	15.20	20.75	26.60	32.15	37.22
TOTAL OUTSIDE LIABILITIES	24.38	20.97	17.57	14.18	10.80
TOL/TNW	1.60	1.01	0.66	0.44	0.29
PBDIT	10.30	13.96	17.34	20.83	25.27
INTEREST	2.73	2.40	2.01	1.61	1.22
INTEREST COVERAGE RATIO	3.78	5.81	8.63	12.90	20.73
WDV	35.27	34.40	33.41	32.28	31.00
TERM LOAN	14.37	10.77	7.18	3.59	-
FACR	2.45	3.19	4.65	8.99	-

2.16. Breakeven Point Analysis:

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	64.80	86.33	99.25	113.00	127.60
Less : Op. WIP Goods	-	7.20	8.71	10.01	11.39
Add : Cl. WIP Goods	7.20	8.71	10.01	11.39	12.85
Total Sales	72.00	87.84	100.54	114.38	129.07
Variable & Semi Variable Exp.					
Raw Material & Tax	25.20	29.04	33.12	37.44	42.00
Electricity Exp/Coal Consumption at 85%	3.33	3.66	3.99	4.33	4.66
Wages & Salary at 60%	15.27	17.32	19.37	21.67	23.83
Selling & administrative Expenses 80%	1.04	3.11	3.33	3.80	4.08
ii) Interest On Working Capital	0.97	0.97	0.97	0.97	0.97
Repair & Maintenance	5.18	6.91	7.94	9.04	10.21
Packing & other overheads	0.65	0.86	0.99	1.13	1.28
Total Variable & Semi Variable Exp	51.64	61.88	69.72	78.37	87.03
Contribution	20.36	25.96	30.82	36.01	42.03
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.59	0.65	0.70	0.76	0.82
Wages & Salary at 40%	10.18	11.55	12.91	14.44	15.89
Interest on Term Loan	1.75	1.43	1.04	0.64	0.25
Depreciation	5.29	4.50	3.84	3.27	2.79
Selling & administrative Expenses 20%	0.26	0.78	0.83	0.95	1.02
Total Fixed Expenses	18.07	18.91	19.33	20.07	20.77
Capacity Utilization	50%	55%	60%	65%	70%
OPERATING PROFIT	2.29	7.06	11.49	15.94	21.27
BREAK EVEN POINT	44%	40%	38%	36%	35%
BREAK EVEN SALES	63.92	63.97	63.05	63.75	63.76

3. Limitations of the Model DPR and Guidelines for Entrepreneurs

3.1. Limitations of the Model DPR

- i. This model DPR has provided only the basic standard components and methodology to be adopted by an entrepreneur while submitting a proposal under the Formalization of Micro Food Processing Enterprises Scheme of MoFPI.
- ii. This is a model DPR made to provide general methodological structure not for specific entrepreneur/crops/location. Therefore, information on the entrepreneur, forms and structure (proprietorship/partnership/cooperative/ FPC/joint stock company) of his business, details of proposed DPR, project location, raw material base/contract sourcing, entrepreneurs own SWOT analysis, detailed market research, rationale of the project for specific location, community advantage/benefit from the project, employment generation and many more detailed aspects not included.
- iii. The present DPR is based on certain assumptions on cost, prices, interest, capacity utilization, output recovery rate and so on. However, these assumptions in reality may vary across places, markets and situations; thus the resultant calculations will also change accordingly.
- iv. This particular DPR is made on three components of means of finance i.e. grant, owner's contribution and loan/debt as followed in many central sector schemes. However, if the DPR is for credit linked subsidy then the calculation may slightly change without changes in the general structure and methodology adopted in the DPR.

3.2. Guidelines for the Entrepreneurs

- i. The success of any prospective food processing project depends on how closer the assumptions made in the initial stage are with the reality of the targeted market/place/situation. Therefore, the entrepreneurs must do its homework as realistic as possible on the assumed parameters.
- ii. This model DPR must be made more comprehensive by the entrepreneur by including information on the entrepreneur, forms and structure (proprietorship/partnership/cooperative/ FPC/joint stock company) of entrepreneur's business, project location, raw material base/contract sourcing, entrepreneurs own SWOT analysis, detailed market research, comprehensive dehydrated product mix based on demand, rationale of the project for specific location, community advantage/benefit from the project, employment generation, production/availability of the raw materials/crops in the targeted area/clusters and many more relevant aspects for acceptance and approval of the competent authority.

- iii. The entrepreneur must be efficient in managing the strategic, financial, operational, material and marketing aspects of a business. In spite of the assumed parameter being closely realistic, a project may become unsustainable if the entrepreneur does not possess the required efficiency in managing different aspects of the business and respond effectively in changing situations.
- iv. The machineries should be purchased after thorough market research and satisfactory demonstration.
- v. The entrepreneur must ensure uninterrupted quality raw materials' supply and maintain optimum inventory levels for uninterrupted operations management.
- vi. The entrepreneur must possess a strategic look to steer the business in upward trajectory.
- vii. The entrepreneur must maintain optimum (not more or less) inventory, current assets. Selecting optimum source of finance, not too high debt-equity ratio, proper capital budgeting and judicious utilization of surplus profit for expansion is must.
- viii. The entrepreneur must explore prospective markets through extensive research, find innovative marketing strategy, and maintain quality, adjust product mix to demand.
- ix. The entrepreneur must provide required documents on land, financial transaction, balance sheet, further project analysis as required by the competent authority for approval.
- x. The entrepreneur must be hopeful and remain positive in attitude.

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