DETAILED PROJECT REPORT

NOODLES MAKING UNIT

UNDER PMFME SCHEME

National Institute of Food Technology Entrepreneurship and Management

Ministry of Food Processing Industries

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1. PROJECT SUMMARY

1. Name of the proposed project	:	Noodles Making Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	456000 Kg/annum(50,55,60,65&70% capacity utilization in 1st to 5th Year respectively)
4. Raw materials	:	Wheat Flour, Starch Powder, Salt, Vegetable Oil.
5. Major product outputs	:	Noodles
6. Total project cost	:	Rs. 25.80 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 16.40 Lakh
• Miscellaneous Fixed Assets	:	Rs. 2.40 Lakh
• Working capital	:	Rs. 7.00 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 6.58 Lakh
• Promoter's contribution (min10%)	:	Rs. 2.58 Lakh
• Term loan	:	Rs. 10.34 Lakh
• Working Capital Requirement	:	Rs. 6.30 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1^{st}year	:	Rs. 1.62 Lakh
• 2^{nd}year	:	Rs. 3.92 Lakh
• 3rd year	:	Rs. 5.96 Lakh
• 4th year	:	Rs. 7.98 Lakh
• 5th year	:	Rs. 10.38 Lakh
11. Average DSCR	:	Rs. 3.25
12. Term loan repayment	:	5 Years with 6 months grace period

2.   ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

Noodles are a type of food that is rolled flat and cut into long strips or strings, stretched or extruded, from unleavened dough. It is possible to refrigerate noodles for short-term storage or to dry and prepare them for future use. Usually, noodles are cooked in boiling water, often with added cooking oil or salt. For Asian noodles, there is no formal classification or nomenclature; large variations exist between countries. Using a universal classification scheme, there is a need to standardise noodle nomenclature. The classification below is based on the state of information at the moment.

- Based on raw material: Noodles can be made alone or in combination with buckwheat flour from wheat flour. Wheat flour noodles include noodles of the Chinese and Japanese kinds. There are several varieties reflecting different characteristics of formulation, processing and noodle consistency. Noodles containing buckwheat, meaning buckwheat noodles, are also called soba. Usually, these noodles are light brown or grey with a special taste and flavour.

- Depending on Salt Used: Based on the absence or presence of alkaline salt in the formula, noodles can be categorized as white (salt-containing) or yellow (salt-containing) noodles.

- Based on Size: Japanese noodles are divided into four groups according to the width of the noodle strands. Since noodles of smaller size typically soften faster than larger sizes in hot water, so-men and hiya-mughi noodles are usually served cold in the summer, and in the cool season's udon and hira-men are often eaten hot.

- Based on Manufacturing: Hand-made and machine-made noodles are the easiest way to distinguish noodles based on processing. Mixing raw materials, dough sheeting, compounding, sheeting/rolling and slitting are noodle manufacturing operations. For all

noodle styles, this sequence of processes remains constant between countries. To produce various types of noodles, noodle strands are further processed, and this can be a means of classification.

- ✓ Fresh- Noodle strands are cut into certain packaging lengths without any further processing from slitting rolls.
- ✓ Dry- Dried by sunlight or in a regulated chamber, fresh noodle stands are dried. The shelf life of noodles is significantly increased, however delicate noodles can have issues with handling.
- ✓ Boiled- Fresh noodle strands are either parboiled or completely cooked (90% complete cooking). Prior to serving, boiled noodles are re-cooked for another 1-2 minutes.
- ✓ Steamed- New alkaline noodle strands are steamed in a steamer and softened by rinsing or steeping with water.

2.2.   MARKET POTENTIAL:

In 2018, the global demand for instant noodles reached a size of US$ 42.2 billion, recording a CAGR of 6.2 percent between 2011 and 2018. Furthermore, by 2024, the market value is expected to hit around US$ 57.5 billion, increasing at a CAGR of 5.2 percent during 2019-2024. Along with a combination of alkaline salts, instant noodles are made up of fine wheat flour. In smaller amounts, various extra ingredients such as starch, edible oil, gluten, and stabilizers such as guar gum are also added to the dough. Instant noodles are pre-cooked dried noodles that, using one of the two methods, either flash or air frying, are dehydrated. In general, they are followed by a tiny sachet containing the tastemaker. As they are compact, simple to make and easy to store, instant noodles have gained popularity worldwide.

China holds the leading position in the global instant noodles market on a geographical front. Since there has been a high demand for instant noodles in the region, noodles have been an integral part of Chinese cuisine. Indonesia, Japan, India, Vietnam, the United States, the Republic of Korea, Thailand and Saudi Arabia will be accompanied by China.

India's noodle market is one of the world's fastest growing markets, powered by steady economic growth and consumer disposable income growth. Rapid urbanization and a huge young population are also helping to further expand the noodle industry. Dried and Instant Noodles is the leading segment in the market for noodles, with the leading distribution channel being Convenience Stores. Urbanization, rising income levels, working couples, interstate migration and young India's changing lifestyle are main drivers for the demand for noodles. The product has been positioned as a filling meal that can be prepared in just a few minutes, providing both convenience and time saving.

2.3.   RAW MATERIAL DESCRIPTION:

The main raw materials are wheat flour or Maida and starch. Additionally, you will need sugar, common salt, spices, garlic, ginger, Sodium Bicarbonate, etc. Actually, the requirement of the ancillary ingredients depends on the specific taste and flavor you want to provide in noodles. Instant noodles are essentially made up of salt, wheat flour and water. The micro nutrients vary according to different instant noodle brands. Instant noodles are low in calories, protein, fiber, vitamins and minerals. In many Asian countries, noodles are a staple meal. Instant noodles are foods that are globally well-known and consumption is at the top worldwide. It is popular for instant noodles with characteristics such as nutrition, taste, protection, convenience, reasonable price and longer shelf life. Noodles are unleavened dough that is stretched, rolled or extruded with fat and cut into one of several types. It is made of wheat flour, water, starch, salt or kansui and other ingredients that partially cooked by steaming and cooked further or dehydrated by deep frying process improve the flavor and texture of noodles. Precooked or dried noodles fused with oil are instant noodles and sold with a flavoring packet.

Wheat Flour/Maida

Semolina and all types of flour are used to make Noodles or pasta, but soft white wheat flour is also preferred. The noodles are too elastic and chewy when cooked if solid, high-protein flour is used. Maida is a white flour made of wheat from the Indian subcontinent. Finely milled, polished and bleached without any bran, it closely resembles cake flour. Maida is commonly used to make fast foods- noodles, pasta, baked goods such as pastries, bread, sweets of different varieties, and traditional flatbreads.

Starch

Several commercial starch noodles made from legume, tuber, geshu (kudzu and sweet potato) and fernery starch are used.

Salt

In noodles, sodium chloride is a significant component. In Asian noodles, the addition of sodium chloride at 2-3% level could improve noodle texture by strengthening and tightening the gluten network to increase viscoelasticity

Oil

Edible oils such as palm oil, partly hydrogenated palm oil, pure lard, altered lard, and mixtures thereof are commonly used. At temperatures of about 130-150° C, the noodle strings are fried for about 1 to 3 minutes.

S.N.	Particulars	Rate
1	Wheat Flour	Rs 20-22/Kg
2	Starch Powder	Rs 40-50/Kg
3	Salt	Rs 10-12/Kg
4	Vegetable Oil	Rs 70-80/Ltr

Average raw material cost per 1 kg packet of Noodles: Rs. 30-40

3.   PROCESS FLOW CHART

Kneading and Mixing:

The first step is the process of wheat flour and water being mixed into the mixing machine. Here, the dough is kneaded with water and is then filled with tissue producing elastic properties of the noodles at a temperature of 20 to 30 Celsius.

Creating noodle belt

The Flour dough is left to mature after certain duration. Then the dough send two rotating rollers, with two noodles bring as a single belt to spread the noodles equally.

Rolling

The 10mm thick noodles are repeatedly flattened with four rollers by pressing rollers and gradually thin by 1mm thickness.

Slitting

In order to add to the noodles manufacturing process, these noodles are then placed in the slitter, which makes the instant noodles much thinner and wavey with the help of the rollerblades.

Steaming:

The pre-gelatinization process is then carried out in a steamer, which steams the instant noodles for one to five minutes.

Stacking

It is then cut to 40-70 cm and molded using a round or square-shaped metal mold serving.

De-watering and Frying

Most noodles are either dewatered by frying oils or by air drying, thus giving rise to fried or non-fried noodles. There are also damp noodles known as instant noodles of the raw form.

Cooling

The noodles that are 100 degrees Celsius are cooled with air after dehydration in the process of processing noodles.

Check weight and detect metal
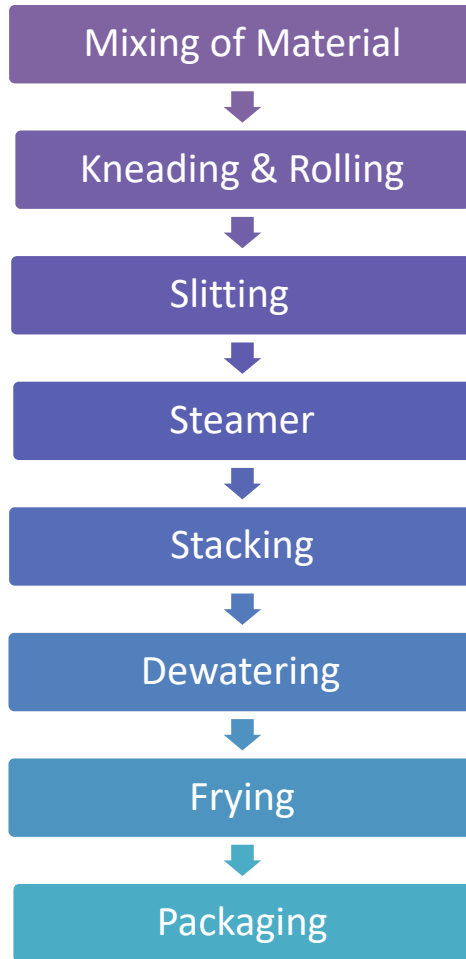
In the event that some metal in the noodles is found or if the weight goes outside the present range, the commodity is discarded.

Adding the Taste-Maker

The process consists of the addition of a tastemaker to improve noodles taste.

Packing

The instantly ready noodles are then put together and seasonings and then sealed with aluminium foils in bags or containers as needed.

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│    Mixing of Material    │
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┌─────────────────────────┐
│    Kneading & Rolling    │
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┌─────────────────────────┐
│         Slitting         │
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│         Steamer          │
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│         Stacking         │
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│        Dewatering        │
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│          Frying          │
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┌─────────────────────────┐
│        Packaging         │
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4.   ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Noodles is 200 kg per hr. First year, Capacity has been taken @ 50%.

2. Working shift of 8 hours per day has been considered.

3. Raw Material stock is for 10 days and Finished goods Closing Stock has been taken for 10 days.

4. Credit period to Sundry Debtors has been given for 7 days.

5. Credit period by the Sundry Creditors has been provided for 7 days.

6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.

7. Interest on working Capital Loan and Term loan has been taken at 11%.

8. Salary and wages rates are taken as per the Current Market Scenario.

9. Power Consumption has been taken at 12 KW.

10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

COMPUTATION OF PRODUCTION OF NOODLES		
Items to be Manufactured Noodles		
Machine capacity Per hour	200	Kg
Total working Hours	8	
Machine capacity Per Day	1,600	Kg
Working days in a month	25	Days
Working days per annum	300	
Wastage Considered	5%	
Raw material requirement	480000	Kg
Final Output per annum after wastage	456000	Kg
Final Product to be packed in 1 kg packet		
Number of packets per annum	456000	1 Kg Packet

Production of Noodles		
Production	**Capacity**	**KG**
1st year	50%	2,28,000
2nd year	55%	2,50,800
3rd year	60%	2,73,600
4th year	65%	2,96,400
5th year	70%	3,19,200

Raw Material Cost			
Year	**Capacity Utilisation**	**Rate (per Kg)**	**Amount (Rs. in lacs)**
1st year	50%	30.00	72.00
2nd year	55%	32.00	84.48
3rd year	60%	34.00	97.92
4th year	65%	36.00	112.32
5th year	70%	38.00	127.68

COMPUTATION OF SALE					
Particulars	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
Op Stock	-	7,600	8,360	9,120	9,880
Production	2,28,000	2,50,800	2,73,600	2,96,400	3,19,200
Less : Closing Stock	7,600	8,360	9,120	9,880	10,640
Net Sale	**2,20,400**	**2,50,040**	**2,72,840**	**2,95,640**	**3,18,440**
Sale price per packet	55.00	58.00	61.00	64.00	67.00
Sales (in Lacs)	121.22	145.02	166.43	189.21	213.35

4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 2000-2500 Sq. ft. for smooth production including storage area. It is expected that the premises will be on rental.

4.4. MACHINERY & EQUIPMENTS

Machine Name	Description	Machine Image.
Vertical type powder mixer	This machine is used for mixing the ingredients required to make noodles.	
Dough mixer blade type	With a rotating bowl in a Spiral mixer the spinning motion imitates hand kneading and rolling motions and gently mixes Noodles dough	
Noodles making machine	This machine consists of cutting knife, folding part, conveying net, machine frame and driving part. The main function is to cut the noodles in a certain length, different length means different weight.	
Noodles Steamer Machine	This machine are used for steams the instant noodles after slitting for one to five minutes	
Dryer machine	The Dryer machine is used for remove the execs water from the steamed noodles.	

Frying Machine	The frying machine is used for Fried instant noodles and are dried by oil frying for 1–2 minutes at a temperature of 140–160 °C	
Noodles packaging machine	Used for packaging the noodles for marketing in various packages. It is also a type of Flow Wrap Machine that packs the raw noodles inside the pouch.	
Material handling Equipments	These Equipments are used for material handling.	

Machine	Unit	Rate	Price
Vertical Type Powder Mixer	1	25000	25000
Dough Mixer Blade Type (200 kg/hr)	1	45000	45000
Noodles Making Machine (200 kg/hr)	1	400000	400000
Noodles Steamer Machine	1	20000	20000
Dryer Machine	1	250000	250000
Frying Machine	1	250000	250000
Noodles Packaging Machine (45-60 Pouches Per Minute)	1	350000	350000
Material handling equipments	1	300000	300000

Note: Approx. Total Machinery cost shall be Rs 16.40 lakh including equipment's but excluding GST and Transportation Cost.

4.5. MISCELLANEOUS FIXED ASSETS

- Water Supply Arrangements
- Furniture & Fixtures
- Computers & Printers

4.6. TOTAL COST OF PROJECT

COST OF PROJECT	
	(in Lacs)
PARTICULARS	**Amount**
Land & Building	Owned/Rented
Plant & Machinery	16.40
Miscellaneous Assets	2.40
Working capital	7.00
Total	**25.80**

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	**AMOUNT**
Own Contribution (min 10%)	2.58
Subsidy @35%(Max. Rs 10 Lac)	6.58
Term Loan @ 55%	10.34
Working Capital (Bank Finance)	6.30
Total	**25.80**

4.8. TERM LOAN: Term loan of Rs. 10.34 Lakh is required for project cost of Rs. 25.80 Lakh

4.9. TERM LOAN REPAYMENT & INTEREST SCHEDULE

REPAYMENT SCHEDULE OF TERM LOAN						
					Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	10.34	10.34	-	-	10.34
	2nd month	10.34	-	10.34	0.09	-	10.34
	3rd month	10.34	-	10.34	0.09	-	10.34
	4th month	10.34	-	10.34	0.09		10.34
	5th month	10.34	-	10.34	0.09		10.34
	6th month	10.34	-	10.34	0.09		10.34
	7th month	10.34	-	10.34	0.09	0.19	10.15
	8th month	10.15	-	10.15	0.09	0.19	9.96
	9th month	9.96	-	9.96	0.09	0.19	9.77
	10th month	9.77	-	9.77	0.09	0.19	9.57
	11th month	9.57	-	9.57	0.09	0.19	9.38
	12th month	9.38	-	9.38	0.09	0.19	9.19
					1.02	1.15	

2nd	Opening Balance					
	1st month	9.19	-	9.19	0.08	0.19	9.00
	2nd month	9.00	-	9.00	0.08	0.19	8.81
	3rd month	8.81	-	8.81	0.08	0.19	8.62
	4th month	8.62	-	8.62	0.08	0.19	8.43
	5th month	8.43	-	8.43	0.08	0.19	8.23
	6th month	8.23	-	8.23	0.08	0.19	8.04
	7th month	8.04	-	8.04	0.07	0.19	7.85
	8th month	7.85	-	7.85	0.07	0.19	7.66
	9th month	7.66	-	7.66	0.07	0.19	7.47
	10th month	7.47	-	7.47	0.07	0.19	7.28
	11th month	7.28	-	7.28	0.07	0.19	7.08
	12th month	7.08	-	7.08	0.06	0.19	6.89
					0.90	**2.30**	
3rd	Opening Balance					
	1st month	6.89	-	6.89	0.06	0.19	6.70
	2nd month	6.70	-	6.70	0.06	0.19	6.51
	3rd month	6.51	-	6.51	0.06	0.19	6.32
	4th month	6.32	-	6.32	0.06	0.19	6.13
	5th month	6.13	-	6.13	0.06	0.19	5.94
	6th month	5.94	-	5.94	0.05	0.19	5.74
	7th month	5.74	-	5.74	0.05	0.19	5.55
	8th month	5.55	-	5.55	0.05	0.19	5.36
	9th month	5.36	-		0.05	0.19	5.17

				5.36			
	10th month	5.17	-	5.17	0.05	0.19	4.98
	11th month	4.98	-	4.98	0.05	0.19	4.79
	12th month	4.79	-	4.79	0.04	0.19	4.60
					0.64	**2.30**	
4th	Opening Balance						
	1st month	4.60	-	4.60	0.04	0.19	4.40
	2nd month	4.40	-	4.40	0.04	0.19	4.21
	3rd month	4.21	-	4.21	0.04	0.19	4.02
	4th month	4.02	-	4.02	0.04	0.19	3.83
	5th month	3.83	-	3.83	0.04	0.19	3.64
	6th month	3.64	-	3.64	0.03	0.19	3.45
	7th month	3.45	-	3.45	0.03	0.19	3.26
	8th month	3.26	-	3.26	0.03	0.19	3.06
	9th month	3.06	-	3.06	0.03	0.19	2.87
	10th month	2.87	-	2.87	0.03	0.19	2.68
	11th month	2.68	-	2.68	0.02	0.19	2.49
	12th month	2.49	-	2.49	0.02	0.19	2.30
					0.39	**2.30**	
5th	Opening Balance						
	1st month	2.30	-	2.30	0.02	0.19	2.11
	2nd month	2.11	-	2.11	0.02	0.19	1.91
	3rd month	1.91	-	1.91	0.02	0.19	1.72
	4th month	1.72	-	1.72	0.02	0.19	1.53

5th month	1.53	-	1.53	0.01	0.19	1.34
6th month	1.34	-	1.34	0.01	0.19	1.15
7th month	1.15	-	1.15	0.01	0.19	0.96
8th month	0.96	-	0.96	0.01	0.19	0.77
9th month	0.77	-	0.77	0.01	0.19	0.57
10th month	0.57	-	0.57	0.01	0.19	0.38
11th month	0.38	-	0.38	0.00	0.19	0.19
12th month	0.19	-	0.19	0.00	0.19	-
				0.14	**2.30**	

4.10. WORKING CAPITAL CALCULATIONS

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					(in Lacs)
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
Finished Goods					
	3.54	4.09	4.65	5.27	5.89
Raw Material					
	2.40	2.82	3.26	3.74	4.26
Closing Stock	**5.94**	**6.91**	**7.91**	**9.01**	**10.14**

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	**Amount**	**Own Margin**		**Bank Finance**	
Finished Goods & Raw Material	5.94				
Less : Creditors	1.68				
Paid stock	**4.26**	**10%**	**0.43**	**90%**	**3.83**
Sundry Debtors	**2.83**	**10%**	**0.28**	**90%**	**2.55**
	7.09		**0.71**		**6.38**
MPBF					**6.38**
WORKING CAPITAL LIMIT DEMAND (from Bank)					**6.30**
Working Capital Margin					**0.70**

4.11. SALARY & WAGES

BREAK UP OF LABOUR CHARGES			
Particulars	**Wages Rs. per Month**	**No of Employees**	**Total Salary**
Machine Operator	15,000	2	30,000
Supervisor	20,000	1	20,000
Skilled (in thousand rupees)	12,000	4	48,000
Unskilled (in thousand rupees)	8,500	4	34,000
Total salary per month			**1,32,000**
Total annual labour charges	**(in lacs)**		**15.84**

BREAK UP OF STAFF SALARY CHARGES			
Particulars	**Salary Rs. per Month**	**No of Employees**	**Total Salary**
Administrative Staff	8,000	4	32,000
Manager	20,000	1	20,000
Accountant	15,000	1	15,000
Total salary per month			**67,000**
Total annual Staff charges	**(in lacs)**		**8.04**

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	**value**	**Description**
Power connection required consumption per day	12	KWH
	96	units
Consumption per month	2,400	units
Rate per Unit	10	Rs.
power Bill per month	24,000	Rs.

4.13. DEPRECIATION CALCULATION

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	**Plant & Machinery**	**Miss. Assets**	**TOTAL**
Rate of Depreciation	**15.00%**	**10.00%**	
Opening Balance	-	-	-
Addition	16.40	2.40	18.80
Total	16.40	2.40	18.80
Less : Depreciation	2.46	0.24	2.70
WDV at end of Year	**13.94**	**2.16**	**16.10**
Additions During The Year	-	-	-
Total	13.94	2.16	16.10
Less : Depreciation	2.09	0.22	2.31
WDV at end of Year	**11.85**	**1.94**	**13.79**
Additions During The Year	-	-	-
Total	11.85	1.94	13.79
Less : Depreciation	1.78	0.19	1.97
WDV at end of Year	**10.07**	**1.75**	**11.82**
Additions During The Year	-	-	-
Total	10.07	1.75	11.82
Less : Depreciation	1.51	0.17	1.69
WDV at end of Year	**8.56**	**1.57**	**10.14**
Additions During The Year	-	-	-
Total	8.56	1.57	10.14
Less : Depreciation	1.28	0.16	1.44
WDV at end of Year	**7.28**	**1.42**	**8.69**

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 3.0% of Gross Sale.

4.15. PROJECTIONS OF PROFITABILITY ANALYSIS

PROJECTED PROFITABILITY STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
SALES					
Gross Sale					
Noodles	121.22	145.02	166.43	189.21	213.35
Total	**121.22**	**145.02**	**166.43**	**189.21**	**213.35**
COST OF SALES					
Raw Material Consumed	72.00	84.48	97.92	112.32	127.68
Electricity Expenses	2.88	3.31	3.81	4.38	4.82
Depreciation	2.70	2.31	1.97	1.69	1.44
Wages & labour	15.84	17.42	19.17	20.70	22.36
Repair & maintenance	3.64	4.35	4.99	5.68	6.40
Packaging	9.09	10.88	11.65	13.24	13.87
Cost of Production	106.15	122.75	139.51	158.01	176.56
Add: Opening Stock /WIP	-	3.54	4.09	4.65	5.27
Less: Closing Stock /WIP	3.54	4.09	4.65	5.27	5.89
Cost of Sales	102.61	122.20	138.95	157.39	175.95
GROSS PROFIT	**18.61**	**22.83**	**27.48**	**31.82**	**37.41**
	15.35%	**15.74%**	**16.51%**	**16.82%**	**17.53%**
Salary to Staff	8.04	9.00	10.45	11.39	12.75
Interest on Term Loan	1.02	0.90	0.64	0.39	0.14
Interest on working Capital	0.69	0.69	0.69	0.69	0.69
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	3.64	4.35	4.99	5.68	6.40
TOTAL	**16.99**	**18.90**	**21.13**	**22.94**	**25.25**
NET PROFIT	1.62	3.92	6.35	8.88	12.16
	1.34%	**2.70%**	**3.82%**	**4.70%**	**5.70%**
Taxation	-	-	0.40	0.90	1.77
PROFIT (After Tax)	1.62	3.92	5.96	7.98	10.38

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	121.22	145.02	166.43	189.21	213.35
Less : Op. WIP Goods	-	3.54	4.09	4.65	5.27
Add : Cl. WIP Goods	3.54	4.09	4.65	5.27	5.89
Total Sales	124.76	145.58	166.99	189.83	213.97
Variable & Semi Variable Exp.					
Raw Material Consumed	72.00	84.48	97.92	112.32	127.68
Electricity Exp/Coal Consumption at 85%	2.45	2.82	3.24	3.72	4.10
Wages & Salary at 60%	14.33	15.86	17.77	19.25	21.06
Selling & adminstrative Expenses 80%	2.91	3.48	3.99	4.54	5.12
Interest on working Capital	0.693	0.693	0.693	0.693	0.693
Repair & maintenance	3.64	4.35	4.99	5.68	6.40
Packaging	9.09	10.88	11.65	13.24	13.87
Total Variable & Semi Variable Exp	105.11	122.55	140.26	159.45	178.92
Contribution	19.65	23.02	26.74	30.38	35.05
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.43	0.50	0.57	0.66	0.72
Wages & Salary at 40%	9.55	10.57	11.84	12.83	14.04
Interest on Term Loan	1.02	0.90	0.64	0.39	0.14
Depreciation	2.70	2.31	1.97	1.69	1.44
Selling & adminstrative Expenses 20%	0.73	0.87	1.00	1.14	1.28
Rent	3.60	3.96	4.36	4.79	5.27
Total Fixed Expenses	18.03	19.10	20.38	21.49	22.90
Capacity Utilization	50%	55%	60%	65%	70%
OPERATING PROFIT	1.62	3.92	6.35	8.88	12.16
BREAK EVEN POINT	46%	46%	46%	46%	46%
BREAK EVEN SALES	114.45	120.77	127.32	134.31	139.77

4.17. PROJECTED BALANCE SHEET

PROJECTED BALANCE SHEET					(in Lacs)
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
Liabilities					
Capital					
opening balance		8.78	10.21	11.66	13.64
Add:- Own Capital	2.58				
Add:- Retained Profit	1.62	3.92	5.96	7.98	10.38
Less:- Drawings	2.00	2.50	4.50	6.00	8.00
Subsidy/grant	6.58				
Closing Balance	8.78	10.21	11.66	13.64	16.03
Term Loan	9.19	6.89	4.60	2.30	-
Working Capital Limit	6.30	6.30	6.30	6.30	6.30
Sundry Creditors	1.68	1.97	2.28	2.62	2.98
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	**26.36**	**25.87**	**25.44**	**25.58**	**26.17**
Assets					
Fixed Assets (Gross)	18.80	18.80	18.80	18.80	18.80
Gross Dep.	2.70	5.01	6.98	8.66	10.11
Net Fixed Assets	**16.10**	**13.79**	**11.82**	**10.14**	**8.69**
Current Assets					
Sundry Debtors	2.83	3.38	3.88	4.41	4.98
Stock in Hand	5.94	6.91	7.91	9.01	10.14
Cash and Bank	1.49	1.79	1.82	2.02	2.36
TOTAL :	**26.36**	**25.87**	**25.44**	**25.58**	**26.17**

4.18. CASH FLOW STATEMENT

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	**1st year**	**2nd year**	**3rd year**	**4th year**	**5th year**
SOURCES OF FUND					
Own Margin	2.58				
Net Profit	1.62	3.92	6.35	8.88	12.16
Depriciation & Exp. W/off	2.70	2.31	1.97	1.69	1.44
Increase in Cash Credit	6.30	-	-	-	-
Increase In Term Loan	10.34	-	-	-	-
Increase in Creditors	1.68	0.29	0.31	0.34	0.36
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	6.58				
TOTAL :	**32.20**	**6.62**	**8.74**	**11.03**	**14.10**
APPLICATION OF FUND					
Increase in Fixed Assets	18.80				
Increase in Stock	5.94	0.97	1.01	1.10	1.13
Increase in Debtors	2.83	0.56	0.50	0.53	0.56
Repayment of Term Loan	1.15	2.30	2.30	2.30	2.30
Drawings	2.00	2.50	4.50	6.00	8.00
Taxation	-	-	0.40	0.90	1.77
TOTAL :	**30.72**	**6.32**	**8.70**	**10.83**	**13.76**
Opening Cash & Bank Balance	-	1.49	1.79	1.82	2.02
Add : Surplus	1.49	0.30	0.04	0.20	0.34
Closing Cash & Bank Balance	**1.49**	**1.79**	**1.82**	**2.02**	**2.36**

4.19. DEBT SERVICE COVERAGE RATIO

CALCULATION OF D.S.C.R

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	4.32	6.23	7.93	9.67	11.83
Interest on Term Loan	1.02	0.90	0.64	0.39	0.14
Total	5.34	7.12	8.57	10.06	11.96
REPAYMENT					
Instalment of Term Loan	1.15	2.30	2.30	2.30	2.30
Interest on Term Loan	1.02	0.90	0.64	0.39	0.14
Total	2.17	3.19	2.94	2.69	2.43
DEBT SERVICE COVERAGE RATIO	**2.47**	**2.23**	**2.91**	**3.74**	**4.91**
AVERAGE D.S.C.R.					**3.25**