

PROJECT REPORT

Of

VERMICELLI

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Vermicelli Making unit**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



Lucknow Office: Sidhivinayak Building ,
27/1/B, Gokhley Marg, Lucknow-226001

Delhi Office : Multi Disciplinary Training
Centre, Gandhi Darshan Rajghat,
New Delhi 110002

Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555

PROJECT REPORT ON VERMICELLI



INTRODUCTION

Vermicelli is a popular instant food product. It falls under the category of extruded product and is made from wheat flour. At times tapioca or soybean or groundnut flour is also added. Thus, it is rich in proteins and liked by people from all walks of life, irrespective of age. It is basically a snack food item and at times it is also used as a table enricher. With changing lifestyles, greater awareness about health and preference for instant food items have made vermicelli very popular and an item of mass consumption.

Objective

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of vermicelli. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

Raw Material Availability

Major raw material would be wheat flour which will be available locally. Other flours like soya bean, tapioca or groundnut will be required in small quantities. Some minerals and vitamins can also be added.

Market Opportunities

Urbanization has changed the lifestyles of not only urbanites but even of semi-urban and rural areas. This along with increase in the purchasing power of people has fuelled demand for many fast-food or instant food items and vermicelli is one such product. With the addition of groundnut or soybean or tapioca flour, it also becomes a nutritive product and thus even health conscious people prefer it. Vermicelli has, thus, become a very popular instant food variety since last few years and its demand is steadily growing. There are some established brands like Maggi and Fryums but the market is very large and growing. A small scale unit can compete with these brands in the local market on the price front because of low overheads, less transportation costs and reasonable advertisement budget. Proper and adequate placement of product and thrust on publicity basically at the point of sales would also be crucial.

PROJECT DESCRIPTION

Applications

Vermicelli is an extruded instant food product basically made from wheat flour. Other flours like groundnut, soybean or tapioca are also mixed with wheat flour to make it more nutritive. They are easily affordable, tasty and easy to make. This product can be made in many states of the country

Availability of knowhow and compliances

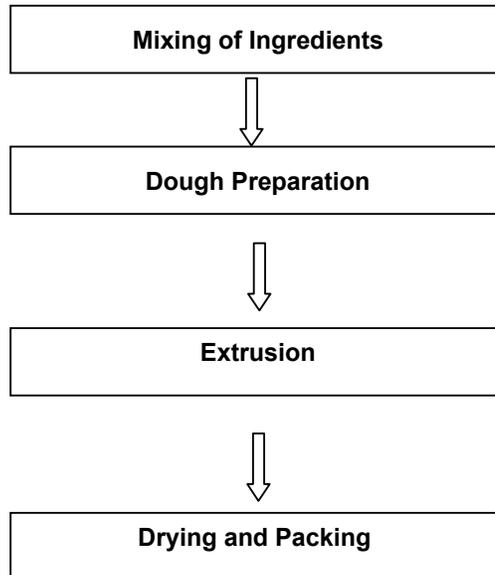
DFRL, Mysore,, has successfully developed the technical know-how. BIS has specified quality parameters in 1485:1976. Compliances under the PFA Act are mandatory.

Capacity of the Project

Rated production capacity of 80 tonnes per year with 300 working days and 8 hours working every day.

Manufacturing process

It is very well standardised and simple. Wheat and other flours in small quantity are mixed with around 25% to 30% of water in a mixer for about half an hour and dough is prepared. This dough is passed through extruder and long rods of vermicelli come out from the extruder which are cut into the desired length and then placed in the tray drier for drying. Drying temperature is around 55-65 degree C and time required is 4½ to 5 hours. Dried pieces are weighed and packed in attractively printed polythene bags. The weight and process loss is around 10%. The process flow chart is as under:



FSSAI LICENSE: FSSAI License is issued by the Food Safety and Standards Authority of India (FSSAI), Ministry of Family Health & Welfare, Government of India. Application to commence a food business must be made to the FSSAI in the prescribed format. Based on the application and supporting documents, FSSAI will accord approval. The Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations 2011 introduced to improve the hygiene and quality of food has brought about tremendous changes in the food industry. As per the Act, no person shall commence or carry on any food business except under a FSSAI license or FSSAI registration. Therefore, any food manufacturing or processing or packaging or distributing entity is now required to obtain a FSSAI License or Registration.

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur XXXXXXX
- 2 Constitution (legal Status) XXXXXXX
- 3 Father's/Spouse's Name XXXXXXX
- 4 Unit Address : XXXXXXX
- Taluk/Block: XXXXX
 District : XXXXX
 Pin: XXXXX
 E-Mail : XXXXX
 Mobile XXXXX
- State:
- 5 Product and By Product : **Vermicelli**
- 6 Name of the project / business activity propose **Vermicelli**
- 7 Cost of Project : Rs16lac
- 8 Means of Finance
 Term Loan Rs.9.94 Lacs
 KVIC Margin Money - As per Project Eligibility
 Own Capital Rs.1.6 Lacs
 Working Capital Rs.4.47 Lacs
- 9 Debt Service Coverage Ratio : 4.92
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 6 Months
- 12 Break Even Point : 23%
- 13 Employment : 6 Persons
- 14 Power Requirement : 25.00 HP
- 15 Major Raw materials : **wheat, topioca,groundnut flour, soyabean**
- 16 Estimated Annual Sales Turnover : 53.87 Lacs
- 16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000 Sq Ft)	1.50
Plant & Machinery	8.30
Furniture & Fixtures	0.74
Pre-operative Expenses	0.50
Working Capital Requirement	4.96
Total	16.00

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	1.60
Term Loan	9.94
Workign Capital Finance	4.47
Total	16.00

Beneficiary's Margin Money **General** **Special**
 (% of Project Cost) 10% 5%

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
Vermicelli extruder and cutting Machine25 HP	2.00	275000.00	550000.00
Dough Kneader	1.00	15000.00	15000.00
Rotary Roaster	-	175000.00	175000.00
Weighing scales	1.00	20,000.00	20,000.00
Packaging Machine	1.00		50,000.00
Misc other	LS		20,000.00
Total			830,000.00

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Share Capital	1.60	-			
Reserve & Surplus	10.17	12.41	15.32	18.14	20.87
Depriciation & Exp. W/off	1.43	1.26	1.08	0.93	0.80
Increase in Cash Credit	4.47	-	-	-	-
Increase In Term Loan	9.94	-	-	-	-
Increase in Creditors	1.58	0.26	0.26	0.26	0.26
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	29.54	13.97	16.71	19.38	21.98
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	10.54	-	-	-	-
Increase in Stock	3.84	0.34	0.50	0.50	0.50
Increase in Debtors	2.69	0.59	0.47	0.47	0.47
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	2.48	2.48	2.48	2.34
Taxation	-	1.24	3.06	3.63	4.17
TOTAL :	19.58	4.23	6.80	7.39	7.82
Opening Cash & Bank Balance	-	9.96	19.71	29.62	41.61
Add : Surplus	9.96	9.75	9.91	11.99	14.16
Closing Cash & Bank Balance	9.96	19.71	29.62	41.61	55.77

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Capital Account	1.60	1.60	1.60	1.60	1.60
Retained Profit	10.17	21.34	33.60	48.11	64.81
Term Loan	9.94	7.45	4.97	2.48	0.14
Cash Credit	4.47	4.47	4.47	4.47	4.47
Sundry Creditors	1.58	1.84	2.10	2.36	2.63
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	28.11	37.09	47.17	59.50	74.17
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	10.54	10.54	10.54	10.54	10.54
Gross Dep.	1.43	2.70	3.78	4.71	5.51
Net Fixed Assets	9.11	7.84	6.76	5.83	5.03
Current Assets					
Sundry Debtors	2.69	3.28	3.76	4.23	4.70
Stock in Hand	3.84	3.50	4.00	4.50	5.01
Cash and Bank	9.96	19.71	29.62	41.61	55.77
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	28.11	37.09	47.17	59.50	74.17
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>A) SALES</u>					
Gross Sale	53.87	65.68	75.13	84.58	94.03
Total (A)	53.87	65.68	75.13	84.58	94.03
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	31.50	36.75	42.00	47.25	52.50
Elecricity Expenses	2.15	2.51	2.86	3.22	3.58
Repair & Maintenance	-	0.66	0.75	0.85	0.94
Labour & Wages	3.43	3.78	4.15	4.57	5.02
Depriciation	1.43	1.26	1.08	0.93	0.80
Consumables and Other Expense	2.69	3.28	3.76	4.23	4.70
Cost of Production	41.21	48.24	54.61	61.05	67.55
Add: Opening Stock /WIP	-	2.27	2.65	3.02	3.40
Less: Closing Stock /WIP	2.27	2.65	3.02	3.40	3.78
Cost of Sales (B)	38.94	47.86	54.23	60.67	67.17
C) GROSS PROFIT (A-B)	14.93	17.82	20.90	23.91	26.86
	28%	27%	28%	28%	29%
D) Bank Interest (Term Loan)	0.86	1.04	0.75	0.46	0.18
Bank Interest (C.C. Limit)	0.45	0.45	0.45	0.45	0.45
E) Salary to Staff	2.38	2.61	2.87	3.16	3.48
F) Selling & Adm Expenses Exp.	1.08	1.31	1.50	1.69	1.88
TOTAL (D+E)	4.76	5.41	5.57	5.76	5.99
H) NET PROFIT	10.17	12.41	15.32	18.14	20.87
I) Taxation	-	1.24	3.06	3.63	4.17
J) PROFIT (After Tax)	10.17	11.17	12.26	14.52	16.70

COMPUTATION OF MANUFACTURING OF VEMICELLI

Items to be Manufactured

Vemicelli

Manufacturing Capacity per day	-	0.50	MT
	-		
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		150.00	MT
Year		Capacity	MT
		Utilisation	
			Less wastage 10%
IST YEAR	90	60%	81
IIND YEAR	105	70%	95
IIIRD YEAR	120	80%	108
IVTH YEAR	135	90%	122
VTH YEAR	150	100%	135

COMPUTATION OF RAW MATERIAL

Item Name		Quantity of Raw Material MT	Recovery	Unit Rate of /MT	Total Cost Per Annum (100%)
wheat flour	100%	150.00	100%	30,000.00	4,500,000.00
Other flours like soya bean, tapioca or groundnut		15.00		50000	750,000.00
Total (Rounded off in lacs)					5,250,000.00
Annual Consumption cost	(In Lacs)				52.50

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	60%	31.50
IIND YEAR	70%	36.75
IIIRD YEAR	80%	42.00
IVTH YEAR	90%	47.25
VTH YEAR	100%	52.50

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>Finished Goods</u>					
(15 Days requirement)	2.27	2.65	3.02	3.40	3.78
<u>Raw Material</u>					
(15 Days requirement)	1.58	0.86	0.98	1.10	1.23
Closing Stock	3.84	3.50	4.00	4.50	5.01

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total Amount
Stock in Hand			3.84
Sundry Debtors			2.69
		Total	6.54
Sundry Creditors			1.58
Working Capital Requirement			4.96
Margin			0.50
Working Capital Finance			4.47

BREAK UP OF LABOUR

Particulars		Wages Per Month	No of Employees	Total Salary
Skilled Worker		8,000.00	2	16,000.00
Semi skilled Worker		5,000.00	2	10,000.00
				26,000.00
Add: 10% Fringe Benefit				2,600.00
Total Labour Cost Per Month				28,600.00
Total Labour Cost for the year (In Rs. Lakhs)			4	3.43

BREAK UP OF SALARY

Particulars		Salary Per Month	No of Employees	Total Salary
Accountant		8,000.00	1	8,000.00
Sales Representative		10,000.00	1	10,000.00
Total Salary Per Month				18,000.00
Add: 10% Fringe Benefit				1,800.00
Total Salary for the month				19,800.00
Total Salary for the year (In Rs. Lakhs)			2	2.38

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased	-	-	-	-
Addition	-	1.50	8.30	0.74	10.54
	-	1.50	8.30	0.74	10.54
Less : Depreciation	-	0.15	1.25	0.04	1.43
WDV at end of Ist year	-	1.35	7.06	0.70	9.11
Additions During The Year	-	-	-	-	-
	-	1.35	7.06	0.70	9.11
Less : Depreciation	-	0.14	1.06	0.07	1.26
WDV at end of IIInd Year	-	1.22	6.00	0.63	7.84
Additions During The Year	-	-	-	-	-
	-	1.22	6.00	0.63	7.84
Less : Depreciation	-	0.12	0.90	0.06	1.08
WDV at end of IIIrd year	-	1.09	5.10	0.57	6.76
Additions During The Year	-	-	-	-	-
	-	1.09	5.10	0.57	6.76
Less : Depreciation	-	0.11	0.76	0.06	0.93
WDV at end of IV year	-	0.98	4.33	0.51	5.83
Additions During The Year	-	-	-	-	-
	-	0.98	4.33	0.51	5.83
Less : Depreciation	-	0.10	0.65	0.05	0.80
WDV at end of Vth year	-	0.89	3.68	0.46	5.03

REPAYMENT SCHEDULE OF TERM LOAN

11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
IST YEAR	Opening Balance						
	Ist Quarter	-	9.94	9.94	-	-	9.94
	Iind Quarter	9.94	-	9.94	0.29	-	9.94
	IIIrd Quarter	9.94	-	9.94	0.29	-	9.94
	Ivth Quarter	9.94	-	9.94	0.29	-	9.94
					0.86	-	
IIND YEAR	Opening Balance						
	Ist Quarter	9.94	-	9.94	0.29	0.62	9.32
	Iind Quarter	9.32	-	9.32	0.27	0.62	8.69
	IIIrd Quarter	8.69	-	8.69	0.25	0.62	8.07
	Ivth Quarter	8.07	-	8.07	0.23	0.62	7.45
					1.04	2.48	
IIIRD YEAR	Opening Balance						
	Ist Quarter	7.45	-	7.45	0.21	0.62	6.83
	Iind Quarter	6.83	-	6.83	0.20	0.62	6.21
	IIIrd Quarter	6.21	-	6.21	0.18	0.62	5.59
	Ivth Quarter	5.59	-	5.59	0.16	0.62	4.97
					0.75	2.48	
IIVTH YEAR	Opening Balance						
	Ist Quarter	4.97	-	4.97	0.14	0.62	4.35
	Iind Quarter	4.35	-	4.35	0.12	0.62	3.73
	IIIrd Quarter	3.73	-	3.73	0.11	0.62	3.11
	Ivth Quarter	3.11	-	3.11	0.09	0.62	2.48
					0.46	2.48	
VVTH YEAR	Opening Balance						
	Ist Quarter	2.48	-	2.48	0.07	0.62	1.86
	Iind Quarter	1.86	-	1.86	0.05	0.62	1.24
	IIIrd Quarter	1.24	-	1.24	0.04	0.55	0.69
	Ivth Quarter	0.69	-	0.69	0.02	0.55	0.14
					0.18	2.34	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>CASH ACCRUALS</u>	11.60	12.43	13.34	15.45	17.50
Interest on Term Loan	0.86	1.04	0.75	0.46	0.18
Total	12.46	13.47	14.09	15.91	17.68
<u>REPAYMENT</u>					
Instalment of Term Loan	2.48	2.48	2.48	2.34	2.34
Interest on Term Loan	0.86	1.04	0.75	0.46	0.18
Total	3.34	3.52	3.23	2.81	2.52
DEBT SERVICE COVERAGE R	3.73	3.83	4.36	5.67	7.01
AVERAGE D.S.C.R.			4.92		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	4	5	5	6
Production	81	95	108	122	135
	81	99	113	127	141
Less : Closing Stock	4	5	5	6	7
Net Sale	77	94	107	121	134
Sale Price per MT	70,000.00	70,000.00	70,000.00	70,000.00	70,000.00
Sale (in Lacs)	53.87	65.68	75.13	84.58	94.03

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	25	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				358,080.00
Add : Minimim Charges (@ 10%)				
(B) D.G. SET				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				3.58
Year		Capacity		Amount (in Lacs)
IST YEAR		60%		2.15
IIND YEAR		70%		2.51
IIIRD YEAR		80%		2.86
IVTH YEAR		90%		3.22
VTH YEAR		100%		3.58

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	53.87	65.68	75.13	84.58	94.03
Less : Op. WIP Goods	-	2.27	2.65	3.02	3.40
Add : Cl. WIP Goods	2.27	2.65	3.02	3.40	3.78
Total Sales	56.13	66.06	75.51	84.96	94.41
Variable & Semi Variable Exp.					
Raw Material & Tax	31.50	36.75	42.00	47.25	52.50
Electricity Exp/Coal Consumption at 85%	1.83	2.13	2.43	2.74	3.04
Manufacturing Expenses 80%	2.15	3.15	3.61	4.06	4.51
Wages & Salary at 60%	3.48	3.83	4.22	4.64	5.10
Selling & administrative Expenses 80%	0.86	1.05	1.20	1.35	1.50
Intt. On Working Capital Loan	0.45	0.45	0.45	0.45	0.45
Total Variable & Semi Variable Exp	40.27	47.36	53.91	60.49	67.11
Contribution	15.86	18.69	21.60	24.47	27.30
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.54	0.79	0.90	1.01	1.13
Electricity Exp/Coal Consumption at 15%	0.32	0.38	0.43	0.48	0.54
Wages & Salary at 40%	2.32	2.56	2.81	3.09	3.40
Interest on Term Loan	0.86	1.04	0.75	0.46	0.18
Depreciation	1.43	1.26	1.08	0.93	0.80
Selling & administrative Expenses 20%	0.22	0.26	0.30	0.34	0.38
Total Fixed Expenses	5.69	6.28	6.28	6.32	6.42
Capacity Utilization	60%	70%	80%	90%	100%
OPERATING PROFIT	10.17	12.41	15.32	18.14	20.87
BREAK EVEN POINT	22%	24%	23%	23%	24%
BREAK EVEN SALES	20.13	22.20	21.94	21.96	22.22

DISCLAIMER

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.