



DETAILED PROJECT REPORT

RAGI FLOUR MILL UNIT

UNDER PMFME SCHEME



National Institute of Food Technology Entrepreneurship and Management

Ministry of Food Processing Industries

Plot No.97, Sector-56, HSIIDC, Industrial Estate, Kundli, Sonapat, Haryana-131028

Website: <http://www.niftem.ac.in>

Email: pmfmeCELL@niftem.ac.in

Call: 0130-2281089

TABLE OF CONTENTS

S No.	Topic	Page Number
1.	Project Summary	3
2.	About the Product	4-6
3.	Process Flow Chart	6-10
4.	Economics of the Project	10-26
	4.1. Basis & Presumptions	10-11
	4.2. Capacity , Utilisation, Production & Output	11-12
	4.3. Premises/Infrastructure	12
	4.4. Machinery & Equipments	12-14
	4.5. Misc. Fixed Assets	15
	4.6. Total Cost of Project	15
	4.7. Means of Finance	15
	4.8. Term Loan	15
	4.9. Term Loan repayment & interest schedule	16-19
	4.10. Working Capital Calculations	19
	4.11. Salaries/Wages	20
	4.12. Power Requirement	21
	4.13. Depreciation Calculation	21
	4.14. Repairs & Maintenance	22
	4.15. Projections of Profitability Analysis	22
	4.16. Break Even Point Analysis	23
	4.17. Projected Balance Sheet	24
	4.18. Cash- Flow Statement	25
	4.19. Debt-Service Coverage Ratio	26

1. PROJECT SUMMARY

1. Name of the proposed project	:	Ragi Flour Mill Unit
2. Nature of proposed project	:	Proprietorship/Company/Partnership
3. Proposed project capacity	:	456000 Kg/annum(55,60,65,70,&75% capacity utilization in 1 st to 5 th Year respectively)
4. Raw materials	:	Whole Finger Millet, Packing material
5. Major product outputs	:	Ragi Flour
6. Total project cost	:	Rs. 35.06 Lakh
• Land development, building & Civil Construction	:	Nil
• Machinery and equipment's	:	Rs. 23.10 Lakh
• Miscellaneous Fixed Assets	:	Rs. 1.4 Lakh
• Working capital	:	Rs. 10.56 Lakh
8. Means of Finance		
• Subsidy (max 10lakhs)	:	Rs. 8.58 Lakh
• Promoter's contribution (min10%)	:	Rs. 3.50 Lakh
• Term loan	:	Rs. 13.48 Lakh
• Working Capital Requirement	:	Rs. 9.50 Lakh
9. Profit after Depreciation, Interest & Tax		
• 1 st year	:	Rs. 3.00 Lakh
• 2 nd year	:	Rs. 5.28 Lakh
• 3 rd year	:	Rs. 7.24 Lakh
• 4 th year	:	Rs. 9.02 Lakh
• 5 th year	:	Rs. 10.95 Lakh
11. Average DSCR	:	Rs. 3.07
12. Term loan repayment	:	5 Years with 6 months grace period

2. ABOUT THE PRODUCT

2.1. PRODUCT INTRODUCTION:

In the arid and semi-arid regions of Africa and Asia, *Eleusinecoracana*, or finger millet, is an annual herbaceous plant widely cultivated as a cereal crop. In Nepal, where 877 accessions were retained by the National Plant Genetic Resource Centre, Khumaltar, Nepal, it is commonly called kodo. It is a tetraploid species that originally evolved from its wild relative *Eleusine Africana* and is self-pollinating. Since time immemorial, finger millet has been in food use, and a large number of traditional food preparations have been in practice in rural areas (predominantly tribal areas), especially in catchments of production. In India, finger millet, also known as ragi, is one of the major cereals that occupies the highest area among the small millets under cultivation.

In terms of protein (6-8 per cent) and fat (1-2 per cent), finger millet is comparable to rice and is superior to rice and wheat in terms of mineral and micronutrient content. For a wide section of society, it is a significant source of dietary carbohydrates.

Finger millet (ragi) has the highest calcium amount, antioxidant and phytochemical properties, making it simple and slowly digestible. Therefore, it helps to regulate blood glucose levels very well in diabetic patients. The millet malt is traditionally used for infant feeding purposes and also since pretty old times to prepare drinks with milk of luke warm water with the addition of sugar. Finger millet is a very good source of natural iron and its ingestion leads to anemia recovery. Because of their high calcium and iron content, the Ragi based foods are highly appropriate for expectant mothers and elderly people. Consumption of finger millet naturally assists in calming the body.

2.2. MARKET POTENTIAL:

In India, finger millet (ragi), kodo millet (kodo), foxtail millet (kangni), barnyard millet (sawan), proso millet (cheema) and small millet are the leading producers of small millet (kutki). Under them, the annual planting area is about 2.5 million hectares; and under finger millet, about 1.5 million hectares constitute around 40-50 percent of the world's crop area. The finger millet area has decreased over the last three decades, but with a major productivity increase (1,500 kg/ha), its annual production has remained at around 2.4 million tonnes. Tiny millets currently account for less than 1% of the food grains produced in the world (ICAR, 2010). Their cultivation dates back almost 5000 years, and they form an important component of traditional cropping systems in India and make a major contribution to the regional food and nutritional protection and diversity of the national food basket, and are important both for dryland crops and hill farming in their production areas. Tiny millet grains have a longer storage life and can be referred to as a backup for famine. The strength shown by them can prove beneficial for their adaptation to various eco-systems and make them possible crops for contingency plantings.

In India, finger millet is an essential small millet that is grown. In many hilly regions of the country, it is a staple food. It is cultivated for both grain and forage. Grains are abundant in minerals and are the richest source of calcium used in many preparations, such as desserts, puddings, cookies, etc. It is also a rich source of iron, protein, fiber and other minerals and is a food free of gluten (elastic texture). It is low in fat and mostly contains unsaturated fat. It is believed that finger millet is a strong laxative and prevents constipation due to its rich fiber content. For people suffering from diabetes, liver disease, high blood pressure, heart weakness and asthma, it is a healthy meal. His green straw is ideal for silage processing. Karnataka, Uttarakhand, Maharashtra, Tamil Nadu, Odisha, Andhra Pradesh and Gujarat are the most important finger millet growing states.

2.3. RAW MATERIAL DESCRIPTION:

One of the most nutritious cereals is known to be finger millet. Approximately 5-8% of protein, 1-2% of ether extractives, 65-75% of carbohydrates, 15-20% of dietary fiber and 2.5-3.5% of minerals are contained in finger millet. The finger millet has the largest amount of calcium (344 mg percent) and potassium of all cereals and millets (408mg percent). The cereal is low in fat (1.3%) and mostly contains unsaturated fat. On average, 100 grams of finger millet has an energy content of around 336 KCal.

The millet, however, also includes phytates (0.48 percent), polyphenols, tannins (0.61 percent), inhibitory factors of trypsin, and dietary fiber, which were once known as "anti-nutrients" due to their activities of metal chelating and enzyme inhibition (Thompson 1993), but are now called nutraceuticals. Finger millet, being non-glutinous, is healthy for individuals suffering from gluten allergy and celiac disease. It's non-acidic and, thus, easy to absorb. Rich in amino acids, finger millet is (Tryptophan, Threonine, Valine, Isoleucine and Methionine).

Finger millet (ragi) contains high amounts of protein, iron, calcium, phosphorus, fiber and vitamins. The amount of calcium is greater than that of all cereals, and the content of iodine is said to be highest among all food grains. Ragi, along with the inclusion of essential amino acids, vitamin A, vitamin B and phosphorus, has the highest quality protein. Green ragi is also recommended for lactating mothers in the absence of milk production conditions. Finger millet could help to keep hunger, degenerative diseases and premature aging at bay if eaten regularly.

3. PROCESS FLOW CHART

- **Grain delivery:** The grain is supplied by covered trucks and hopper railcars to factories. The distance travelled by the grain varies tremendously. In several times, the 110-car unit train has covered hundreds of miles. In other situations, it is shipped in the same county from a

nearby plant. After arriving at the mill, grain stocks will often have gone through a variety of accumulation processes (farmer, country elevator, terminal elevator, etc.).The number of conveyances carrying grain can vary based on the time of harvesting and delivery.

- **Grain standard:** Before barley grains are unloaded in a factory, the assessment is required with samples. The grain is tested for moisture, test weight, unsound seeds, and foreign material. The grains are categorized according to Indian Grain Standards and are also subject to the ISO trade standards. Product management chemists start experiments to identify grain and assess end-user values during unloading.

- **Cleaning:** After inspection, the grain is unloaded directly from the truck into the unloading container and transferred into large bins or silos through conveyors and bucket lifts. Grain storing is a science. It is necessary to maintain the correct moisture, heat, and air or mildew, sprout, or ferment Barley. The grain can also be fumigated to eradicate insect pests during transportation. During the process In terms of nutrient level and consistency, barely is stored.

- **Cleaning the barley grains:** It can take as many as six steps. The machines that clean the grain are collectively called the cleaning house.
 - ✓ **Magnetic separator** – The grain first passes by a magnet that removes ferrous metal particles. It will pass through other metal detectors after milling to ensure that no metal pieces are in the finished product. Magnets are also positioned throughout the milling process and at the last step prior to load-out.

 - ✓ **Separator** – Vibrating or rotating drum separators remove bits of wood, straw, and almost anything else too big or too small to be the desired grain.

 - ✓ **Aspirator** – Air currents act as a vacuum to remove dust and lighter impurities.

- ✓ **De-stoner** – Using gravity, the machine separates the heavy material from the light to remove stones that may be the same size as the desired grain.
 - ✓ **Disc separator** – The grain passes through a separator that identifies the size of the kernels even more closely. It rejects anything longer, shorter, more round, more angular or in any way a different shape.
 - ✓ **Scourer**– The scourer eliminates the outer husks, the soil in the kernel crease, and other minor impurities with vigorous scouring action. Currents of air are dragging up all the loose stuff.
 - ✓ **Impact Entoleter**– The centrifugal force cuts down some unsound kernels or insect eggs and the aspiration rejects them from the flow of the mill. From the meet, the sound of the Barley flows into the grinding bins, large hoppers that regulate the feeding of the Barley to the actual milling process.
 - ✓ **Colour Separator** – Newer mills may also utilize electronic color separators to simplify the cleaning process.
- **Grinding:** The grains of barley are now ready to be milled into flour. The modern milling process is a gradual reduction of the barley grains through the grinding and sifting process. This science of analysis, blending, grinding, sifting, and blending results in consistent end product. Barley kernels are weighed or fed from bins to roller mills, corrugated cylinders made of chilled steel. The rolls are paired and rotated inward to each other at varying speeds. Passing through the corrugated "first break" rolls, the separation of the bran, endosperm, and germ begins.
- There are about five roller mills or breaks in the system. Again, the aim is to remove the endosperm from the bran and the germ. To get as much pure endosperm as possible, each break roll must be set. The "break" rolls, each has successively finer corrugations, through the break rolls. The grist is sent back upstairs to drop through sifters after each trip. The

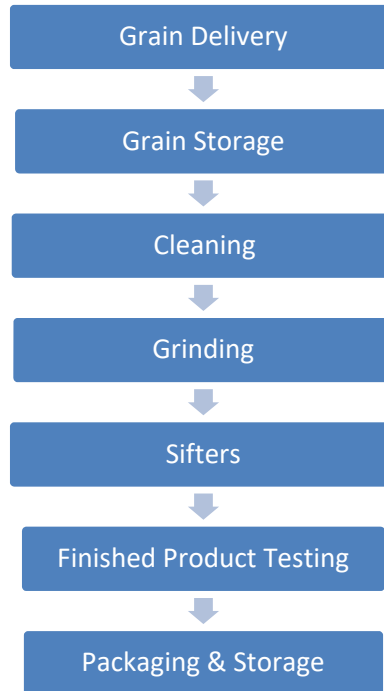
system reworks the coarse stocks from the sifters and reduces the Barley particles to granular “middling” that are as free from bran as possible.

- **Sifters-** Through pneumatic tubes, the broken particles of Barley are elevated and then dropped into huge, vibrating, box-like sifters where they are shaken to separate the larger from the smaller particles by either a series of bolting cloths or screens.
There may be as many as 27 frames inside the sifter, each covered with either a screen or nylon or stainless steel, with square holes that get narrower and smaller and the farther down they go. It is probable that up to six different particle sizes come from a single sifter.

- **Blending:** From the fibre, the flour is separated and the process is repeated again.

- **Testing of the final product:** Lab checks are carried out after milling to ensure that the flour follows the specification and standards. Millers also conduct routine monitoring of indicator natural organisms. While dry flour does not provide an atmosphere that is conducive to microbial development, it is important to note that flour is not a ready-to-eat food and is a minimally processed agricultural ingredient. Flour is not meant for raw use. Baking, baking, boiling, and cooking heat processes are sufficient to kill any pathogens that may be found in flour and lower the possible risk of food borne disease.

- **Packaging of Product:** The packaging is carried out in a much simple process then milling, the Barley flour is fed to holding tank of the packaging machine, which simply seals one end of continuous packaging first, then it simply fills the packet as per required weight & seals the other end, generating the required packet.



4. ECONOMICS OF THE PROJECT

4.1. BASIS & PRESUMPTIONS

1. Production Capacity of Ragi flour is 200 kg per hr. First year, Capacity has been taken @ 55%.
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 15 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 15KW.
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 RAGI FLOUR		
Items to be Manufactured		
Ragi Flour		
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 Ragi Flour		
Production	Capacity	KG
1st year	55%	2,50,800
2nd year	60%	2,73,600
3rd year	65%	2,96,400
4th year	70%	3,19,200
5th year	75%	3,42,000


Raw Material Cost			
Year	Capacity Utilisation	Rate (per Kg)	Amount (Rs. in lacs)
1st year	55%	36.00	95.04
2nd year	60%	38.00	109.44
3rd year	65%	40.00	124.80
4th year	70%	42.00	141.12
5th year	75%	44.00	158.40






COMPUTATION OF SALE					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	12,540	13,680	14,820	15,960
Production	2,50,800	2,73,600	2,96,400	3,19,200	3,42,000
Less : Closing Stock	12,540	13,680	14,820	15,960	17,100
Net Sale	2,38,260	2,72,460	2,95,260	3,18,060	3,40,860
sale price per packet	60.00	63.00	66.00	69.00	72.00
Sales (in Lacs)	142.96	171.65	194.87	219.46	245.42

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.
Unloading Bins	These are large bins designed for unloading of grains & similar product; they are equipped with large rod mess to prevent big impurities from entering system.	

<p>Silos</p>	<p>These Equipments are class of storage Equipments which are specifically designed for dry grain raw material of small granule composition. Usually used to store grains but can also be used to store cement & aggregate.</p>	
<p>Vibrating Pre-Cleaner</p>	<p>It's composed of a vibrating sieve, powered by an exciter which is in turn is powered by an appropriate motor; which is used to remove most of the dirt & large impurities from given grain.</p>	
<p>Heavy duty Pulveriser Mill</p>	<p>It basically a grinder class machine, which may employ any possible grinding arrangement to achieve, required grinding as per product to be grinded.</p>	
<p>Flour Sifter Machine</p>	<p>It's basically an industrial version of the sieve used to sieve out, large fibers, particles etc, to achieve required particle size in flour.</p>	
<p>Flour testing kit</p>	<p>This is the type of kit that measure moisture of flour before packaging of final product.</p>	
<p>Packet Filling & Packaging</p>	<p>It's a simple packaging machine, designed to fill the given food grade</p>	

PM FME- Detailed Project Report of Ragi Flour Mill Unit

Machine	plastic material's continuous pouch with required product after sealing one end & after filling sealing the other end also to generate packet of product.	
---------	---	---

Machine	Unit	Rate	Price
Silos (Capacity- 2.5 Tonne)	2	100000	200000
Vibrating Pre-Cleaner (Capacity- 400 Kg/hr)	1	150000	150000
Heavy duty Pulveriser Mill (Capacity-450 Kg/hr)	1	500000	500000
Flour Sifter Machine (Capacity- 300Kg/hr)	2	160000	320000
Flour testing kit	-	-	200000
Packet Filling & Packaging Machine	1	220000	220000
Bins and other material handling equipments. (Unloading Bins, escalator, elevator, conveyor, storage bins, etc.)	-	-	720000

Note: Approx. Total Machinery cost shall be Rs 23.10 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	23.10
Miscellaneous Assets	1.40
Working capital	10.56
Total	35.06

4.7. MEANS OF FINANCE

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	3.50
Subsidy @35%(Max. Rs 10 Lac)	8.58
Term Loan @ 55%	13.48
Working Capital (Bank Finance)	9.50
Total	35.06

4.8. TERM LOAN: Term loan of Rs. 13.48 Lakh is required for project cost of Rs. 35.06 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	-	13.48	13.48	-	-	13.48
	2nd month	13.48	-	13.48	0.12	-	13.48
	3rd month	13.48	-	13.48	0.12	-	13.48
	4th month	13.48	-	13.48	0.12	-	13.48
	5th month	13.48	-	13.48	0.12	-	13.48
	6th month	13.48	-	13.48	0.12	-	13.48
	7th month	13.48	-	13.48	0.12	0.25	13.23
	8th month	13.23	-	13.23	0.12	0.25	12.98
	9th month	12.98	-	12.98	0.12	0.25	12.73
	10th month	12.73	-	12.73	0.12	0.25	12.48
	11th month	12.48	-	12.48	0.11	0.25	12.23
	12th month	12.23	-	12.23	0.11	0.25	11.98
					1.32	1.50	
2nd	Opening Balance						
	1st month	11.98	-	11.98	0.11	0.25	11.73
	2nd month	11.73	-	11.73	0.11	0.25	11.48
	3rd month	11.48	-	11.48	0.11	0.25	11.23

PM FME- Detailed Project Report of Ragi Flour Mill Unit

4th month	11.23	-	11.23	0.10	0.25	10.98
5th month	10.98	-	10.98	0.10	0.25	10.73
6th month	10.73	-	10.73	0.10	0.25	10.48
7th month	10.48	-	10.48	0.10	0.25	10.23
8th month	10.23	-	10.23	0.09	0.25	9.98
9th month	9.98	-	9.98	0.09	0.25	9.73
10th month	9.73	-	9.73	0.09	0.25	9.48
11th month	9.48	-	9.48	0.09	0.25	9.23
12th month	9.23	-	9.23	0.08	0.25	8.98
				1.17	2.99	
3rd	Opening Balance					
1st month	8.98	-	8.98	0.08	0.25	8.73
2nd month	8.73	-	8.73	0.08	0.25	8.48
3rd month	8.48	-	8.48	0.08	0.25	8.23
4th month	8.23	-	8.23	0.08	0.25	7.99
5th month	7.99	-	7.99	0.07	0.25	7.74
6th month	7.74	-	7.74	0.07	0.25	7.49
7th month	7.49	-	7.49	0.07	0.25	7.24
8th month	7.24	-	7.24	0.07	0.25	6.99
9th month	6.99	-	6.99	0.06	0.25	6.74
10th month	6.74	-	6.74	0.06	0.25	6.49
11th month	6.49	-	6.49	0.06	0.25	6.24
12th month	6.24	-	6.24	0.06	0.25	5.99
				0.84	2.99	

PM FME- Detailed Project Report of Ragi Flour Mill Unit

4th	Opening Balance						
	1st month	5.99	-	5.99	0.05	0.25	5.74
	2nd month	5.74	-	5.74	0.05	0.25	5.49
	3rd month	5.49	-	5.49	0.05	0.25	5.24
	4th month	5.24	-	5.24	0.05	0.25	4.99
	5th month	4.99	-	4.99	0.05	0.25	4.74
	6th month	4.74	-	4.74	0.04	0.25	4.49
	7th month	4.49	-	4.49	0.04	0.25	4.24
	8th month	4.24	-	4.24	0.04	0.25	3.99
	9th month	3.99	-	3.99	0.04	0.25	3.74
	10th month	3.74	-	3.74	0.03	0.25	3.49
	11th month	3.49	-	3.49	0.03	0.25	3.24
	12th month	3.24	-	3.24	0.03	0.25	2.99
					0.51	2.99	
5th	Opening Balance						
	1st month	2.99	-	2.99	0.03	0.25	2.74
	2nd month	2.74	-	2.74	0.03	0.25	2.50
	3rd month	2.50	-	2.50	0.02	0.25	2.25
	4th month	2.25	-	2.25	0.02	0.25	2.00
	5th month	2.00	-	2.00	0.02	0.25	1.75
	6th month	1.75	-	1.75	0.02	0.25	1.50
	7th month	1.50	-	1.50	0.01	0.25	1.25
	8th month	1.25	-	1.25	0.01	0.25	1.00
	9th month	1.00	-	1.00	0.01	0.25	0.75
	10th month	0.75	-		0.01	0.25	0.50

			0.75			
11th month	0.50	-	0.50	0.00	0.25	0.25
12th month	0.25	-	0.25	0.00	0.25	-
			0.18	2.99		
DOOR TO DOOR MORATORIUM PERIOD	60	MONTHS				
REPAYMENT PERIOD	6	MONTHS				
	54	MONTHS				

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						
	6.53	7.46	8.38	9.40	10.47	
Raw Material						
	3.17	3.65	4.16	4.70	5.28	
Closing Stock	9.70	11.11	12.54	14.11	15.75	

COMPUTATION OF WORKING CAPITAL REQUIREMENT						
TRADITIONAL METHOD						(in Lacs)
Particulars	Amount	Own Margin		Bank Finance		
Finished Goods & Raw Material	9.70					
Less : Creditors	2.22					
Paid stock	7.48	10%	0.75	90%	6.73	
Sundry Debtors	3.34	10%	0.33	90%	3.00	
	10.82		1.08		9.73	
MPBF					9.73	
WORKING CAPITAL LIMIT DEMAND (from Bank)					9.50	
Working Capital Margin					1.06	

4.11. SALARY & WAGES

<u>BREAK UP OF LABOUR CHARGES</u>			
Particulars	Wages Rs. per Month	No of Employees	Total Salary
Plant Operator	15,000	1	15,000
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			1,17,000
Total annual labour charges	(in lacs)		14.04

<u>BREAK UP OF STAFF SALARY CHARGES</u>			
Particulars	Salary Rs. per Month	No of Employees	Total Salary
Administrative Staff	6,000	4	24,000
Manager	20,000	1	20,000
Accountant	15,000	1	15,000
Total salary per month			59,000
Total annual Staff charges	(in lacs)		7.08

4.12 POWER REQUIREMENT

Utility Charges (per month)		
Particulars	value	Description
Power connection required	15 KWH	
consumption per day	120 units	
Consumption per month	3,000 units	
Rate per Unit	10 Rs.	
power Bill per month	30,000 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	23.10	1.40	24.50
Total	23.10	1.40	24.50
Less : Depreciation	3.47	0.14	3.61
WDV at end of Year	19.64	1.26	20.90
Additions During The Year	-	-	-
Total	19.64	1.26	20.90
Less : Depreciation	2.95	0.13	3.07
WDV at end of Year	16.69	1.13	17.82
Additions During The Year	-	-	-
Total	16.69	1.13	17.82
Less : Depreciation	2.50	0.11	2.62
WDV at end of Year	14.19	1.02	15.21
Additions During The Year	-	-	-
Total	14.19	1.02	15.21
Less : Depreciation	2.13	0.10	2.23
WDV at end of Year	12.06	0.92	12.98
Additions During The Year	-	-	-
Total	12.06	0.92	12.98
Less : Depreciation	1.81	0.09	1.90
WDV at end of Year	10.25	0.83	11.08

4.14. REPAIR & MAINTENANCE: Repair & Maintenance is 2.5% 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 %	55%	60%	65%	70%	75%	
<u>SALES</u>						
Gross Sale						
Ragi Flour	142.96	171.65	194.87	219.46	245.42	
Total	142.96	171.65	194.87	219.46	245.42	
COST OF SALES						
Raw Material Consumed	95.04	109.44	124.80	141.12	158.40	
Electricity Expenses	3.60	4.14	4.76	5.48	6.02	
Depreciation	3.61	3.07	2.62	2.23	1.90	
Wages & labour	14.04	15.44	16.99	18.35	19.82	
Repair & maintenance	3.57	4.29	4.87	5.49	6.14	
Packaging	10.72	12.87	13.64	15.36	17.18	
Cost of Production	130.58	149.26	167.68	188.02	209.45	
Add: Opening Stock /WIP	-	6.53	7.46	8.38	9.40	
Less: Closing Stock /WIP	6.53	7.46	8.38	9.40	10.47	
Cost of Sales	124.05	148.33	166.76	187.00	208.38	
GROSS PROFIT	18.90	23.32	28.11	32.46	37.04	
	13.22%	13.59%	14.43%	14.79%	15.09%	
Salary to Staff	7.08	8.21	10.02	11.52	12.67	
Interest on Term Loan	1.32	1.17	0.84	0.51	0.18	
Interest on working Capital	1.05	1.05	1.05	1.05	1.05	
Rent	3.60	3.96	4.36	4.79	5.27	
selling & adm exp	2.86	3.43	3.90	4.39	4.91	
TOTAL	15.91	17.82	20.16	22.26	24.08	
NET PROFIT	3.00	5.51	7.96	10.20	12.96	
	2.10%	3.21%	4.08%	4.65%	5.28%	
Taxation	-	0.23	0.72	1.19	2.01	
PROFIT (After Tax)	3.00	5.28	7.24	9.02	10.95	

4.16. BREAK EVEN POINT ANALYSIS

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	142.96	171.65	194.87	219.46	245.42
Less : Op. WIP Goods	-	6.53	7.46	8.38	9.40
Add : Cl. WIP Goods	6.53	7.46	8.38	9.40	10.47
Total Sales	149.49	172.58	195.79	220.48	246.49
Variable & Semi Variable Exp.					
Raw Material Consumed	95.04	109.44	124.80	141.12	158.40
Electricity Exp/Coal Consumption at 85%	3.06	3.52	4.05	4.65	5.12
Wages & Salary at 60%	12.67	14.19	16.20	17.92	19.49
Selling & administrative Expenses 80%	2.29	2.75	3.12	3.51	3.93
Interest on working Capital	1.045	1.045	1.045	1.045	1.045
Repair & maintenance	3.57	4.29	4.87	5.49	6.14
Packaging	10.72	12.87	13.64	15.36	17.18
Total Variable & Semi Variable Exp	128.40	148.11	167.73	189.10	211.30
Contribution	21.09	24.47	28.07	31.38	35.19
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.54	0.62	0.71	0.82	0.90
Wages & Salary at 40%	8.45	9.46	10.80	11.95	13.00
Interest on Term Loan	1.32	1.17	0.84	0.51	0.18
Depreciation	3.61	3.07	2.62	2.23	1.90
Selling & administrative Expenses 20%	0.57	0.69	0.78	0.88	0.98
Rent	3.60	3.96	4.36	4.79	5.27
Total Fixed Expenses	18.09	18.97	20.11	21.18	22.23
Capacity Utilization	55%	60%	65%	70%	75%
OPERATING PROFIT	3.00	5.51	7.96	10.20	12.96
BREAK EVEN POINT	47%	47%	47%	47%	47%
BREAK EVEN SALES	128.25	133.76	140.27	148.80	155.71

4.17. PROJECTED BALANCE SHEET

<u>PROJECTED BALANCE SHEET</u>		(in Lacs)				
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>Liabilities</u>						
Capital						
opening balance		12.07	13.85	16.09	18.60	
Add:- Own Capital	3.50					
Add:- Retained Profit	3.00	5.28	7.24	9.02	10.95	
Less:- Drawings	3.00	3.50	5.00	6.50	8.00	
Subsidy/grant	8.58					
Closing Balance	12.07	13.85	16.09	18.60	21.55	
Term Loan	11.98	8.98	5.99	2.99	-	
Working Capital Limit	9.50	9.50	9.50	9.50	9.50	
Sundry Creditors	2.22	2.55	2.91	3.29	3.70	
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86	
TOTAL :	36.16	35.38	35.09	35.11	35.61	
<u>Assets</u>						
Fixed Assets (Gross)	24.50	24.50	24.50	24.50	24.50	
Gross Dep.	3.61	6.68	9.29	11.52	13.42	
Net Fixed Assets	20.90	17.82	15.21	12.98	11.08	
Current Assets						
Sundry Debtors	3.34	4.01	4.55	5.12	5.73	
Stock in Hand	9.70	11.11	12.54	14.11	15.75	
Cash and Bank	2.23	2.44	2.79	2.91	3.06	
TOTAL :	36.16	35.38	35.09	35.11	35.61	

4.18. CASH FLOW STATEMENT

PROJECTED CASH FLOW STATEMENT						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>SOURCES OF FUND</u>						
Own Margin	3.50					
Net Profit	3.00	5.51	7.96	10.20	12.96	
Depriciation & Exp. W/off	3.61	3.07	2.62	2.23	1.90	
Increase in Cash Credit	9.50	-	-	-	-	
Increase In Term Loan	13.48	-	-	-	-	
Increase in Creditors	2.22	0.34	0.36	0.38	0.40	
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14	
Sunsidy/grant	8.58					
TOTAL :	44.26	9.01	11.03	12.93	15.41	
<u>APPLICATION OF FUND</u>						
Increase in Fixed Assets	24.50					
Increase in Stock	9.70	1.41	1.43	1.56	1.65	
Increase in Debtors	3.34	0.67	0.54	0.57	0.61	
Repayment of Term Loan	1.50	2.99	2.99	2.99	2.99	
Drawings	3.00	3.50	5.00	6.50	8.00	
Taxation	-	0.23	0.72	1.19	2.01	
TOTAL :	42.03	8.80	10.69	12.81	15.26	
Opening Cash & Bank Balance	-	2.23	2.44	2.79	2.91	
Add : Surplus	2.23	0.21	0.35	0.12	0.15	
Closing Cash & Bank Balance	2.23	2.44	2.79	2.91	3.06	

4.19. DEBT SERVICE COVERAGE RATIO

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	6.60	8.35	9.86	11.25	12.85
Interest on Term Loan	1.32	1.17	0.84	0.51	0.18
Total	7.93	9.52	10.70	11.75	13.03
<u>REPAYMENT</u>					
Instalment of Term Loan	1.50	2.99	2.99	2.99	2.99
Interest on Term Loan	1.32	1.17	0.84	0.51	0.18
Total	2.82	4.16	3.83	3.50	3.17
DEBT SERVICE COVERAGE RATIO	2.81	2.29	2.79	3.36	4.11
AVERAGE D.S.C.R.	3.07				