

PROJECT REPORT

OF

BAJRA CLEANING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Bajra (Pearl Millet) Cleaning 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.]



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PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **BAJRA**
- 6 Name of the project / business activity proposed : **BAJRA CLEANING UNIT**
- 7 Cost of Project : Rs.24.83 Lakhs
- 8 Means of Finance
- Term Loan Rs.15.85 Lakhs
- Own Capital Rs.2.48 Lakhs
- Working Capital Rs.6.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.67
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 34%
- 13 Employment : 10 Persons
- 14 Power Requirement : 20.00 KW
- 15 Major Raw materials : Harvested Bajra Seeds
- 16 Estimated Annual Sales Turnover : 146.16 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	16.61
Miss Assets	0.50
Furniture & Fixtures	0.50
Working Capital	7.22
Total	24.83

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.48
Working Capital(Finance)	6.50
Term Loan	15.85
Total	24.83

BAJRA CLEANING UNIT

1. INTRODUCTION

Pearl millet (*Pennisetum glaucum* L.; Poaceae) is an annual crop grown extensively in India and Africa for its grain, which is used to make flour and other foods. Millets are a group of small-seeded grasses that are commonly grown for fodder and human food as cereal crops or grains all over the world. Pearl millet is the most common crop among the millets. Cumbu is another name for pearl



millet. It has the same amount of protein as wheat. A high proportion of globulin and albumin—followed prolamine can be found in the protein. The nutritional value of Bajra is unaffected by pearling since the majority of the germs are left intact to about 8% polish. Pearling improves the appearance and flavour of the food. It's usually ground into flour and used to make chapatti. It's even made into a thin porridge. There are many millet types, including the Bajra pearl millet. Other common millet varieties include fonio, finger millet (ragi), Job's tears, foxtail, and Kodo millet.

2. USES & MARKET POTENTIAL

The edible seeds of pearl millet plants are referred to as Bajra. They come in a range of colours, including white, yellow, grey, brown, and bluish-purple. Usually, the seeds are cooked as a cereal grain or finely ground and used as flour. Bajra is usually ground into a fine flour that is used to make roti and other flatbreads. It can also be used to make cakes and noodles, as well as a substitute for other flours in a variety of recipes. Bajra can also be eaten as a puffed millet snack, similar to popcorn.

The global production of millet has been estimated at 27.8 million tons. With a 41.0 percent global market share, India is the largest global producer. The importance of millet as a food staple, particularly in India, has declined over the last two decades due to various factors, including growing incomes, increasing urbanization, and government policies. More than 50 percent of millet production, as opposed to its use only as a staple, is currently finding its way into alternative uses. Demands for food and beverage products are further driven by the increasing population, which in turn contributes to growth in the millet market in India.

RAW MATERIAL REQUIREMENT

- For Bajra processing plant the required raw material is harvested Bajra seed which is obtained after harvesting and threshing.
- Woven sacs are required as packaging materials.

MANUFACTURING PROCESS

- 1. Grain delivery**
- 2. Magnetic separator**
- 3. Vibrating Separation**
- 4. Aspiration**
- 5. De-stoning**
- 6. Disc separation**
- 7. Colour Separator**
- 8. Weighing Packaging**

YIELD OF PRODUCT/PRODUCTION RATIO

The basis for calculation of production capacity is on single shift basis, with 80-90% efficiency. If 10 labours will be working for single shift basis then the total production capacity will be approx. 500 KG per hour.

3. PROJECT COMPONENTS

3.1 Land /Civil Work

The The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities, cutting & filling area. Also, some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete small-scale factory setup is 1500-2000 Sq. ft. approximately.

3.2 Plant and Machinery

SR. NO	ITEMS	AMOUNT
1	Gravity separator 5 Fan .(Without Motor)	2,60,000.00
2	Vibro Type Sieves with Two Jali, with 2 Nos. Vibro motor and it's Stand.	1,85,000.00
3	Vibro Type Sieves with Three Jali, with 2 Nos. Vibro motor and it's Stand.	2,10,000.00
4	Aspiration system.	45,000.00
5	Cyclone 900 Kice Type	32,000.00
6	Blower 5 hp High Pressar with motor	45,000.00
7	Rotary Air Lock with Gear Motor Set.	30,000.00
8	Vibro Type Destoner with 5 HP Blower and Cyclone With Vibro Motor 0.50 hp x 2 Nos. .	3,10,000.00
9	Elevator with gear & motor, Hight - 20' foot, 5"Bucket	1,40,000.00
10	Elevator with gear & motor, Hight - 14' foot, 5"Bucket	68,000.00
11	Elevator with gear & motor, Hight - 12' foot, 5"Bucket	58,000.00
12	Demphar with slider Gate.	25,000.00
	Total Rs.	14,08,000.00
	GST @ 18%	2,53,440.00
	Total Rs.	16,61,440.00

3.3 Power Requirement

For whole manufacturing plant requires three phase AC power supply. The machineries and other electrical utilities may require up to 20 KW power, for above mentioned capacity.

3.4 Manpower Requirement

Manpower required for this manufacturing unit is depending on the land, type of manufacturing unit etc. For this unit around 10-12 people will be required.

3.5 Other Utilities

General electrical apparatus, Water, telephone etc.

4. FINANCIALS

PROJECTED BALANCE SHEET						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>Liabilities</u>						
Capital						
Opening Balance		4.82	6.99	9.48	12.38	
Add:- Own Capital	2.48					
Add:- Retained Profit	5.34	7.17	7.99	8.90	10.28	
Less:- Drawings	3.00	5.00	5.50	6.00	7.00	
Closing Balance	4.82	6.99	9.48	12.38	15.66	
Term Loan	14.09	10.57	7.04	3.52	-	
Working Capital Limit	6.50	6.50	6.50	6.50	6.50	
Sundry Creditors	5.40	6.18	7.00	7.87	8.78	
Provisions & Other Liabilities	0.40	0.60	0.72	0.86	1.08	
TOTAL :	31.21	30.84	30.75	31.14	32.02	
<u>Assets</u>						
Fixed Assets (Gross)	17.61	17.61	17.61	17.61	17.61	
Gross Depreciation	2.62	4.84	6.74	8.35	9.72	
Net Fixed Assets	14.99	12.77	10.87	9.26	7.89	
Current Assets						
Sundry Debtors	5.36	5.75	6.52	7.32	8.17	
Stock in Hand	8.47	9.87	11.18	12.57	14.03	
Cash and Bank	1.14	1.70	1.17	0.49	0.93	
Loans and advances/other current assets	1.25	0.75	1.00	1.50	1.00	
TOTAL :	31.21	30.84	30.75	31.14	32.02	

PROJECTED CASH FLOW STATEMENT						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>SOURCES OF FUND</u>						
Own Margin	2.48					
Net Profit	5.38	7.40	8.43	9.57	11.47	
Depriciation & Exp. W/off	2.62	2.23	1.89	1.61	1.37	
Increase in Cash Credit	6.50	-	-	-	-	
Increase In Term Loan	15.85	-	-	-	-	
Increase in Creditors	5.40	0.78	0.82	0.87	0.91	
Increase in Provisions & Other liabilities	0.40	0.20	0.12	0.14	0.22	
TOTAL :	38.63	10.60	11.26	12.19	13.97	
<u>APPLICATION OF FUND</u>						
Increase in Fixed Assets	17.61					
Increase in Stock	8.47	1.40	1.32	1.39	1.46	
Increase in Debtors	5.36	0.39	0.77	0.81	0.85	
Increase in loans and advances	1.25	- 0.50	0.25	0.50	- 0.50	
Repayment of Term Loan	1.76	3.52	3.52	3.52	3.52	
Drawings	3.00	5.00	5.50	6.00	7.00	
Taxation	0.04	0.23	0.44	0.66	1.19	
TOTAL :	37.49	10.04	11.79	12.88	13.52	
Opening Cash & Bank Balance	-	1.14	1.70	1.17	0.49	
Add : Surplus	1.14	0.56	-0.53	-0.69	0.45	
Closing Cash & Bank Balance	1.14	1.70	1.17	0.49	0.93	

PROJECTED PROFITABILITY STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	45%	50%	55%	60%	65%
SALES					
BAJRA (PEARL MILLET)	146.16	172.46	195.49	219.71	245.23
Total	146.16	172.46	195.49	219.71	245.23
COST OF SALES					
Raw material cost	108.00	123.60	140.05	157.39	175.66
Electricity Expenses	3.36	3.86	4.44	5.11	5.88
Depreciation	2.62	2.23	1.89	1.61	1.37
Wages & labour	10.44	11.48	12.63	13.90	15.29
Repair & maintenance	0.73	1.72	1.95	2.20	2.45
Consumables	1.46	1.72	1.95	2.20	2.45
Packaging cost	2.56	2.59	2.93	3.30	3.68
Cost of Processing	129.17	147.21	165.87	185.70	206.77
Add: Opening Stock	-	4.87	5.75	6.52	7.32
Less: Closing Stock	4.87	5.75	6.52	7.32	8.17
Cost of Sales	124.29	146.33	165.10	184.89	205.92
GROSS PROFIT	21.87	26.13	30.39	34.82	39.30
Salary to Staff	5.76	6.62	7.62	8.76	10.07
Interest on Term Loan	1.56	1.37	0.98	0.60	0.21
Interest on working Capital	0.72	0.72	0.72	0.72	0.72
Rent	4.80	5.28	5.81	6.39	7.03
Selling & Administration Expenses	3.65	4.74	6.84	8.79	9.81
TOTAL	16.49	18.73	21.97	25.25	27.84
NET PROFIT	5.38	7.40	8.43	9.57	11.47
Taxation	0.04	0.23	0.44	0.66	1.19
PROFIT (After Tax)	5.34	7.17	7.99	8.90	10.28

CALCULATION OF D.S.C.R

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	7.96	9.39	9.89	10.51	11.65
Interest on Term Loan	1.56	1.37	0.98	0.60	0.21
Total	9.51	10.76	10.87	11.11	11.86
REPAYMENT					
Instalment of Term Loan	1.76	3.52	3.52	3.52	3.52
Interest on Term Loan	1.56	1.37	0.98	0.60	0.21
Total	3.32	4.89	4.51	4.12	3.73
DEBT SERVICE COVERAGE RATIO	2.87	2.20	2.41	2.70	3.18
AVERAGE D.S.C.R.					2.67

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					(in Lacs)	
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
Finished Goods						
(10 Days)	4.87	5.75	6.52	7.32	8.17	
Raw Material						
(10 Days)	3.60	4.12	4.67	5.25	5.86	
Closing Stock	8.47	9.87	11.18	12.57	14.03	

COMPUTATION OF WORKING CAPITAL REQUIREMENT						
TRADITIONAL METHOD					(in Lacs)	
Particulars	Amount	Own Margin		Bank Finance		
Finished Goods & Raw Material	8.47					
Less : Creditors	5.40					
Paid stock	3.07	10%	0.31	90%	2.76	
Sundry Debtors	5.36	10%	0.54	90%	4.82	
	8.43		0.84		7.59	
MPBF					7.59	
WORKING CAPITAL LIMIT DEMAND (from Bank)					6.50	

REPAYMENT SCHEDULE OF TERM LOAN								
							Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance	
1st	Opening Balance	-						
	1st month		15.85	15.85	-	-	15.85	
	2nd month	15.85	-	15.85	0.15	-	15.85	
	3rd month	15.85	-	15.85	0.15	-	15.85	
	4th month	15.85	-	15.85	0.15	-	15.85	
	5th month	15.85	-	15.85	0.15	-	15.85	
	6th month	15.85	-	15.85	0.15	-	15.85	
	7th month	15.85	-	15.85	0.15	0.29	15.56	
	8th month	15.56	-	15.56	0.14	0.29	15.26	
	9th month	15.26	-	15.26	0.14	0.29	14.97	
	10th month	14.97	-	14.97	0.14	0.29	14.68	
	11th month	14.68	-	14.68	0.13	0.29	14.38	
	12th month	14.38	-	14.38	0.13	0.29	14.09	
					1.56	1.76		
2nd	Opening Balance							
	1st month	14.09	-	14.09	0.13	0.29	13.79	
	2nd month	13.79	-	13.79	0.13	0.29	13.50	
	3rd month	13.50	-	13.50	0.12	0.29	13.21	
	4th month	13.21	-	13.21	0.12	0.29	12.91	
	5th month	12.91	-	12.91	0.12	0.29	12.62	
	6th month	12.62	-	12.62	0.12	0.29	12.33	
	7th month	12.33	-	12.33	0.11	0.29	12.03	
	8th month	12.03	-	12.03	0.11	0.29	11.74	
	9th month	11.74	-	11.74	0.11	0.29	11.45	
	10th month	11.45	-	11.45	0.10	0.29	11.15	
	11th month	11.15	-	11.15	0.10	0.29	10.86	
	12th month	10.86	-	10.86	0.10	0.29	10.57	
					1.37	3.52		
3rd	Opening Balance							
	1st month	10.57	-	10.57	0.10	0.29	10.27	
	2nd month	10.27	-	10.27	0.09	0.29	9.98	
	3rd month	9.98	-	9.98	0.09	0.29	9.69	
	4th month	9.69	-	9.69	0.09	0.29	9.39	
	5th month	9.39	-	9.39	0.09	0.29	9.10	
	6th month	9.10	-	9.10	0.08	0.29	8.81	
	7th month	8.81	-	8.81	0.08	0.29	8.51	
	8th month	8.51	-	8.51	0.08	0.29	8.22	
	9th month	8.22	-	8.22	0.08	0.29	7.92	
	10th month	7.92	-	7.92	0.07	0.29	7.63	
	11th month	7.63	-	7.63	0.07	0.29	7.34	

12th month	7.34	-	7.34	0.07	0.29	7.04
				0.98	3.52	
4th Opening Balance						
1st month	7.04	-	7.04	0.06	0.29	6.75
2nd month	6.75	-	6.75	0.06	0.29	6.46
3rd month	6.46	-	6.46	0.06	0.29	6.16
4th month	6.16	-	6.16	0.06	0.29	5.87
5th month	5.87	-	5.87	0.05	0.29	5.58
6th month	5.58	-	5.58	0.05	0.29	5.28
7th month	5.28	-	5.28	0.05	0.29	4.99
8th month	4.99	-	4.99	0.05	0.29	4.70
9th month	4.70	-	4.70	0.04	0.29	4.40
10th month	4.40	-	4.40	0.04	0.29	4.11
11th month	4.11	-	4.11	0.04	0.29	3.82
12th month	3.82	-	3.82	0.03	0.29	3.52
				0.60	3.52	
5th Opening Balance						
1st month	3.52	-	3.52	0.03	0.29	3.23
2nd month	3.23	-	3.23	0.03	0.29	2.94
3rd month	2.94	-	2.94	0.03	0.29	2.64
4th month	2.64	-	2.64	0.02	0.29	2.35
5th month	2.35	-	2.35	0.02	0.29	2.05
6th month	2.05	-	2.05	0.02	0.29	1.76
7th month	1.76	-	1.76	0.02	0.29	1.47
8th month	1.47	-	1.47	0.01	0.29	1.17
9th month	1.17	-	1.17	0.01	0.29	0.88
10th month	0.88	-	0.88	0.01	0.29	0.59
11th month	0.59	-	0.59	0.01	0.29	0.29
12th month	0.29	-	0.29	0.00	0.29	-
				0.21	3.52	
DOOR TO DOOR	60	MONTHS				
MORATORIUM PERIOD	6	MONTHS				
REPAYMENT PERIOD	54	MONTHS				

Assumptions:

1. Production Capacity of Bajra Plant is taken at 500 Kg per Hour. First year, Capacity has been taken @ 45%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 10 days and 10 days respectively.
4. Credit period to Sundry Debtors has been given for 10-15 days.
5. Credit period by the Sundry Creditors has been provided for 10-15 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 20 KW.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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