

# **PROJECT PROFILE**

ON

ROASTED ENERGY FOOD  
(WOMEN SHG ONLY)

Month & Year  
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**PREPARED BY  
TANSTIA-FNF SERVICE CENTRE  
B-22, INDUSTRIAL ESTATE  
CHENNAI-600032**

**Supported by**

Friedrich Naumann  
STIFTUNG **FÜR DIE FREIHEIT**



## **ROASTED ENERGY FOOD (WOMEN SHG ONLY)**

### **1. Introduction**

Energy food is a commonly consumed commodity. In households both in urban and rural areas, the food is prepared domestically, stored and served per se or as a beverage. It is also recommended by medical professional as a dietary to improve the nutrition in the body. The roasted energy food is used as a supplementary food in the nutrition programs implemented by various State governments and Voluntary Organizations. There exists a lot of potential for manufacture and sale of energy food as economical alternatives to existing brands in the market. The technology is simple and with the product reasonably priced, the middle income group households would be the target consumers.

### **2. Market**

The product finds placement in all “A”, “B” and “C” class outlets, self service, departmental stores and supermarkets.

### **3. Packaging**

Roasted energy food is best packed in polyethylene or polypropylene or BOPP pouches as a primary packing. The pouch is placed in a paperboard carton which is the secondary packing. The product is packed in weights of 500 gms and 1000 gms.

### **4. Production capacity**

- The plant operates to two shifts a day with each shift of eight hours duration.
- The plant will operate to a capacity of raw material input of 600 kilograms per shift or 1200 kilograms per day. The end product output will be 1000 kilograms per day. The estimated production per annum of 300 working days would be 300 M.T.
- The time period required for achieving full capacity utilization is one year.

### **5. Sales revenue**

- The ex-factory selling price of the product shall be Rs. 80 per kilogram thereby yielding a sales revenue of Rs. 240 lakhs on full capacity utilization. The MRP is Rs. 50 per 500 grams packet.

#### **6. Production process outline.**

Ragi and green gram are first cleaned to remove sand and other contaminated material. They are then germinated separately for 48 hours. On germination, they are roasted separately at temperatures ranging from 120 to 150 degrees centigrade till the moisture has evaporated and the product turns golden brown. Jowar, bajra, wheat, rice, sago are also cleaned and roasted separately at similar temperatures till they turn golden brown. The ingredients are mixed in the following proportions:

- Ragi                    15%
- Jowar                   15%
- Bajra                   15%
- Green gram          10%
- Roasted gram       5%
- Wheat                 15%
- Rice                    20%
- Sago                    5%

They are then ground in the micropulveriser and passed through the flour sifter to remove excess fibre. The material after sieving is packed.

#### **7. Quality specifications**

- Moisture - maximum 10 %.
- Protein - minimum 15%
- Fat - maximum 2%
- Crude fibre - maximum 5%
- Ash - maximum 1%
- Acid insoluble ash - maximum 0.1 %.
- Acidity of extracted fat as oleic acid - maximum 1.5 percent.

- The product should be free from coliforms, salmonella and streptococci bacteria. The total plate count should not exceed 50,000 per gram.
- The product should be free from rodent excreta, human hair, and insect infestation It should also not contain any added coal tar food colours, preservatives, emulsifiers, stabilizers, and artificial flavouring agents.

**8. Pollution control measures**

Not necessary as there are no pollutants or effluents.

**9. Energy conservation measures**

Common measures will do.

**10. Land and construction cost for the proposed unit**

The proposed processing area is to be taken up on lease. The processing area required is 3500 square feet as detailed below:

SI	Description	Sq. feet
1	Processing area	1000
2	Raw material store	1000
3	Other ingredients store room	200
4	Finished goods store room	200
5	Laboratory	200
6	Office space	500
7	Machinery spares room	100
8	Toilets	200
9	Miscellaneous space	100
<b>10</b>	<b>Total</b>	<b>3500</b>

Lease rent – Rs. 6.00 per square foot; Total rent per month – Rs. 21000

Lease advance – RS 100000.

**11. Costing of machinery and equipment**

SI	Description	Rs. lakhs
1	Flour sifter – closed type – SS	0.650
2	Wooden germination racks	0.250
3	Roaster	0.350
4	Micro pulveriser – hammer mill with accessories	1.250
5	Pedal sealing machine – 2 nos	0.200
6	Weighing scales – 2 nos	0.200

<b>7</b>	<b>Total machinery</b>	<b>2.900</b>
8	Laboratory equipment	0.500
<b>9</b>	<b>Grand total machinery and equipment</b>	<b>3.400</b>

**12. Project cost**

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	2.900
4	Laboratory equipment	0.500
5	Transport vehicle (Tata Ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.350
9	Cost of electrification	0.650
10	Erection and commissioning	0.330
11	Cost of machinery spares	0.100
12	Cost of office equipment	1.000
13	Deposits if any	0.700
14	Company formation expenses	0.100
15	Gestation period expenses	1.000
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	10.000
18	Contingencies	0.250
19	Working capital margin money	7.002
<b>20</b>	<b>Total</b>	<b>28.742</b>

**13. Working capital requirements per month**

**a. Salaries and wages**

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Manager	1	0.150
2	Production supervisor cum chemist	2	0.200
3	Skilled workers	3	0.180
4	Unskilled workers	10	0.400
5	Administrative staff	2	0.200
6	Security	3	0.150
7	Van driver	1	0.070

<b>8</b>	<b>Total</b>	<b>22</b>	<b>1.350</b>
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**b. Raw material requirement per month**

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Ragi	4950	15.00	0.743
2	Jowar	4950	15.00	0.743
3	Bajra	4950	15.00	0.743
4	Green gram whole	3300	70.00	2.310
5	Roasted gram	1575	60.00	0.945
6	Wheat	4950	20.00	0.990
7	Rice	6600	30.00	1.980
8	Sago	1575	40.00	0.630
9	<b>Total raw material</b>	<b>32850</b>		<b>9.084</b>

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	Primary packaging material – metallized polyester – poly film	50 kgs	250	0.125
2	Primary cartons	50000	3.00	1.500
3	Cartons and straps	2500 nos	40	1.000
4	<b>Total</b>			<b>2.625</b>

**Total raw + packaging material = Rs. 11.709 lakhs**

**d. Utilities per month**

SI	Description	Rs. lakhs
1	Power 5000 kwh @ Rs. 5.50 per unit	0.275
2	Water	0.020
3	Boiler fuel	0.000
4	<b>Total utilities</b>	<b>0.295</b>

**e. Contingent expenses per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Rent for processing shed	0.210
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.050
6	Local transports, loading and unloading	0.200
7	Advertisement and publicity @ 10% of sales	2.000
8	Insurance	0.010
9	Sales expenses @ 1% of sales	0.200
10	Miscellaneous expenses @ 1% of sales	0.200
11	Trade incentives @ 2% of sales	0.400
12	Taxes @ 4%	0.800
<b>13</b>	<b>Total contingent expenses</b>	<b>4.150</b>

**f. Total working capital requirement per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Salaries and wages	1.350
2	Raw material and packaging material	11.709
3	Utilities	0.295
4	Contingent expenses	4.150
<b>5</b>	<b>Total</b>	<b>17.504</b>

**14. Means of finance**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total Project Cost	28.742
2	Equity	9.485
3	Debt	19.257
4	Working capital margin money	7.002

**15. Financial analysis**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total recurring cost per year	210.048
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicle	0.832
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	2.600
8	Interest on short term borrowings@ 13.5%	1.418
<b>9</b>	<b>Total cost of production</b>	<b>215.018</b>

**16. Turnover per year**

<b>SI</b>	<b>Item</b>	<b>Qty</b>	<b>Rate/unit (Rs)</b>	<b>Total Rs. lakhs</b>
1	<b>Energy Food</b>	<b>300 MT</b>	<b>80</b>	<b>240</b>

**17. Viability analysis**

<b>SI</b>	<b>Description</b>	<b>Value</b>
1	Net profit before income tax (Rs. lakhs)	24.982
2	Net profit ratio	10.4%
3	Internal rate of return	21.3%
4	Break even percentage	56%
5	Debt service coverage ratio	1.936

*List of machinery suppliers for roasted energy food*

Machinery has to be fabricated locally as per requirements.