PROJECT PROFILE

ON

RICE MILL
(Capacity – 4 TPH)

PREPARED BY

APITCO LIMITED
Engineering Growth

Formerly Andhra Pradesh Industrial & Technical Consultancy Organisation Limited

8th Floor, Parishrama Bhavan,
Basheerbagh, Hyderabad

1. Introduction:

The Rice milling is the process that helps in removal of hulls and bran's from paddy grains to produce polished rice. Rice is rich in genetic diversity with thousands of varieties grown throughout the world. Rice has been one of man's most important foods. Today, this unique grain helps sustain two-thirds of the world's population. It is life for thousands of millions of people. It is deeply embedded in the cultural heritage of their societies. About four-fifths of the world's rice are produced by small-scale farmers and are consumed locally.

2. Market:

Global rice production in 2008-09 is 460 million tons while consumption stood around 446 million tons. Andhra Pradesh is one of the major paddy cultivated state in India with 39.78 lakh hectares with an output of 118 lakh tonnes. In Andhra Pradesh rice is grown in 22 districts of which 18 districts are under high productivity group, with an yield of more than 2500 kg/ha.

Production of Rice in India:

India produced 95.68 mn tonnes in the year 2007-08 of which most of the production is available during Kharif season by almost 86.5%. The year wise rice production is given in the table below:

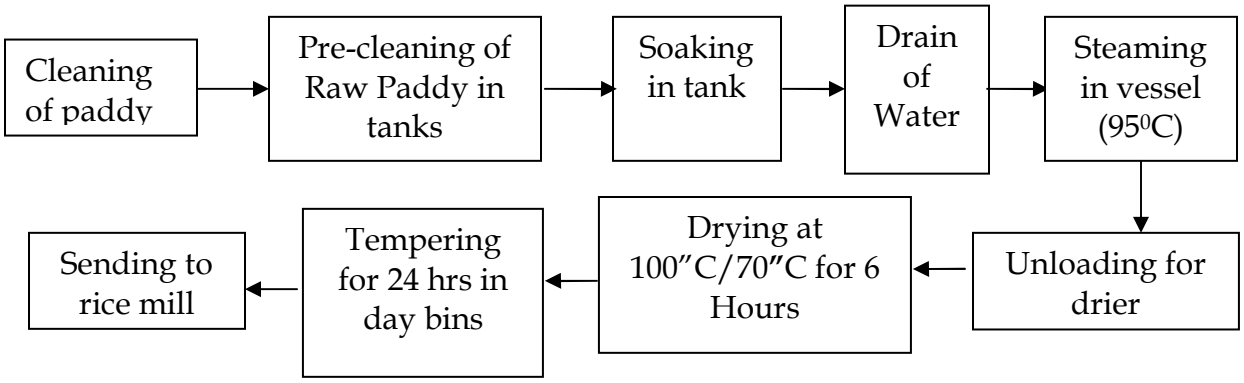
Product/Rice	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Khariff	78.62	72.23	78.27	80.17	82.78
Rabi	9.91	10.90	13.52	13.18	12.90
Total	**88.53**	**85.3**	**91.79**	**93.35**	**95.68**

Indian sales are primarily categorized as FCI sales and local market sales. FCI (Food Corporation of India) is a major purchaser of rice and Government suggests minimum support price for paddy and FCI purchases 20-25% of total rice production in the country as levy.

3. Manufacturing Process:

Rice forms are the basic primary processed product obtained from paddy and this is further processed for obtaining various secondary and tertiary products. Step wise procedure of processing of paddy to various finished products is illustrated in the table given below.

Cleaning & Boiling Process:



4. Technology:

The technology required for the ginning & pressing operations are De-stoner, Paddy Husker and Paddy Separator, Vertical Whitener, Humidifier Air Polisher, Grain color sorter, Pre-cleaner, GEC alstom motors, Airlocks, gear motors, couplings, elevators, sifters, graders, blowers, electronic weighing and bagging system, slat conveyor, Rotary screw air compressor, DG set, weigh bridge, electrical infrastructure and other accessories etc.

5. Investment:

The investment cost for setting up a Rice mill with a capacity of 4 TPH will be around **Rs. 8.69 Crores** and the break up of the cost is tabulated below.

The land requirement will be around 5 acres. The pre-operative expense includes interest during construction of Rs 0.63 Crores. Plant & Machinery including installation, erecting & commissioning charges are of Rs. 2.80 Crores and the cost of electrical infrastructure & furniture & fixtures works out to Rs. 0.20 Crores. Buildings and civil works are estimated to be Rs. 2.02 Crores. Contingencies, electricity deposits are also considered in the project cost. Margin money for working capital is estimated to be Rs. 1.32 Crores.

Table 1: Project Cost

S.No.	Description	Cost (Rs in Crores)
1	Land & Site Development	1.42
2	Buildings & Civil works	2.02
3	Plant & Machinery – Indigenous	1.19
4	Plant & Machinery – Imported	1.60
5	Electrical Infrastructure	0.15
6	Electricity Deposits	0.06
7	Furniture & Fixtures	0.05
8	Preliminary Expenses	0.08
9	Pre-operative Expenses	0.55
10	Contingency @5%	0.24
11	Margin Money for Working capital	1.32
Total Project Cost		**8.69**

Means of Finance

The project is proposed to finance with a debt equity ratio of 0.85:1 and the means of finance is as follows:

Table 2: Means of Finance

S.No.	Sources of Funds	Cost (Rs in Crores)
1	Share Capital - Equity	4.69
2	Term Loan from Bank	4.00
	Total	**8.69**

6. Profitability Assumptions:

Mill Capacity: The mill capacity is considered to be 19200 Metric Tonnes per annum.

Particulars	Paddy Requirement
Plant Capacity (TPH)	4
Number of Working Hours	16
Number of Days	300
Annual requirement (in MT) At Installed capacity	19200

Yield and Production: The raw material used in rice mill is raw paddy. The yield of rice is given in the table below:

Particulars	Yield (%)
Raw Rice	65
Husk	21
Broken Rice	4
Rice Bran	8
Rejected Rice	1
Impurities	1

The Rice mill can work at 70% of installed capacity for the first year, 80% for the second year and 85% from the third onwards. The total manpower requirement is considered at 60 personnel for various levels of casual labour, Technical & Supervisory staff and administrative staff.

7. Key Financial indicators:

The returns are adequate enough to repay the term loan in 7 years. The key financial indicators are tabulated below.

(Rs. in Crores)

S No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1	Sales	14.98	18.38	19.25	19.29	19.29	19.29	19.29
2	Total Expenditure	13.06	15.71	16.69	17.02	17.05	17.06	17.09
3	PBIDT	1.93	2.66	2.56	2.27	2.24	2.23	2.20
4	PBT	1.30	1.39	1.32	1.11	1.16	1.25	1.32
5	PAT	1.05	1.04	0.96	0.80	0.82	0.86	0.89
6	Cash Accruals	1.16	1.27	1.20	1.03	1.05	1.09	1.13
7	BEP @ Installed capacity	24.11%	30.57%	35.83%	37.07%	34.67%	31.32%	28.14%
8	BEP @ Operating capacity	34.44%	38.21%	42.15%	43.61%	40.79%	36.85%	33.11%
9	Debt Equity Ratio	0.68	0.57	0.44	0.30	0.14	0.00	0.00
10	DSCR (Gross)	2.33	1.93	1.75	1.48	1.42	1.36	1.71
11	Average DSCR	1.68						
12	DSCR (Net)	3.28	2.92	2.33	1.75	1.57	1.43	1.76
13	Average DSCR	2.28						
14	IRR (%)	15.48%						

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