

11

## PROJECT PROFILE UNDER .NMCC

TITLE :Rice Milling Industry

PRODUCT CODE :  
(i) ASICC :17106  
(ii) NIC :15312  
(iii) ITC(HS):

QUALITY STANDARD : BIS

PRODUCTION CAPACITY QTY : 130 MT Nos. Per Annum

YEAR OF PREPARATION : 2006 - 07

PREPARED BY

: TH BAITE,A.D(Elect)  
SMALL INDUSTRIES SERVICE INSTITUTE  
INDUSTRIAL ESTATE, TAKYELPAT  
IMPHAL - 795001,MANIPUR

## 1. INTRODUCTION

India is one of the largest producers of Rice in the world next only to China. The mechanized sector of Rice milling industry accounts for more than 40 million tones of paddy annuasly. And the major portion of the paddy Is being processed by Hullers, which are low capacity mills and the yields of Rice obtained is less than that obtained in modern Rice mills and higher breakage of rice is also occurs. To over these problems

## 2. MARKET POTENTIAL

Rice milling is an old activity which has gone through many phase of Development from hand pound, foot pounding to modern mechanized milling. The economy of Manipur is an agrarian and rice is the staple food of the People. The valley district is known as the rice bowl of Manipur, since majority Of Paddy production is from the valley. In fact, the state is not self sufficient in Rice and has to depend from neighboring state and tp some extent Myanmar

Since the product is a demand base, and daily essential item no problem Is envisaged in marketing.

Besides, the rice mill can be used as a service unit for custom milling. And The rice bran and husk also has a good market for other purposes. Rice milling is an agro-based industry.

## 3. BASIS AND PRESUMPTION

- i) The basis for calculation of production capacity has been taken on a single Shift basis on 75 % efficiency.
- ii) The maximum capacity utilization on a single shift basis for 300 days a year. During the first year and second year of operations the capacity utilization is 60 % and 80 % respectively. The unit is expected to achieve full capacity utilization from the third year onwards.
- iii) The salary and wages, cost of materials,utilities,rents,etc. are base on the Prevailing rates in and around Imphal. These cost factors are likely to vary with time and location.
- iv) Interest on term loan and working capital loan must be preferably current rate. Otherwise, the rate of 16 % on an average may be taken.
- iv) The cost of machineries and equipments refer to a particular make/model And prices are approxim ate.
- v) The breakeven point percentage indicated is of full capacity utilization.
- vi) The project preparation cost etc. whenever required could be consider as pre-operative expenses.
- vii) The essential production machinery and test equipment required for the project have been indicated.

#### 4. IMPLEMENTATION SCHEDULED

The major activities in the implementation of the project listed below and the average time for Implementation of the project is estimated at 10 months:

Sl.no.	Events	Period( in months)
1.	Preparation of project report	1
2.	Registration and other formalities	1
3.	Sanction of loans by financial institutions	
4.	Plant and Machinery	
	a) Placement of order	1
	b) Procurement	2
	c) Power connection/electrification	1
	d) Installation/Erection of machineries/Test equipment	1
5.	Procurement of Raw material	1
6.	Recruitment of technical Personnel etc.	1
7.	Trial Production	1/2
8.	Commercial production	1/2
	<b>Total</b>	<b>: 10 mths</b>

#### 5. TECHNICAL ASPECTS

##### 5.1 PROCESS OF MANUFACTURE

The modern rice consists of paddy cleaner, sheller, separator and a polisher. The polisher can be either a vertical cone polisher or a horizontal rotor polisher. The shelling and polishing units are kept separate.

The paddy is cleaned in a paddy cleaner to get off the foreign matter like Mud, stone chips, chaff etc. The clean paddy is fed into the dehusker, where it is dehusked with the help of rubber roller and separated from the husk. The brown rice with a small quantity of paddy is next fed into the huller where polishing of rice is done by mild friction created with the polishing chambers of the huller. The resulting polished rice and bran are collected separately.

During the paddy milling, rice constitutes about 60% to 70 %, husk is about 20 to 25 % and 8 % bran approximately.

**5.2 QUALITY STANDARDS** : As per Customers Requirement

##### 5.3. PRODUCTION CAPACITY PER ANNUM

QUANTITY : 130 MT ( 70 %)

VALUE : Rs. 18,20,000

**5.4 MOTIVE POWER** : 15 HP

##### 6. POLLUTION CONTROL

The Govt. accords utmost importance to control environments pollution. The small scale entrepreneurs should have an environmental friendly attitude and adopt pollution control measures by process modification and technology substitutions. India

## 8. MANUFACTURING PROCESS :

The Rice Mill unit consist of paddy cleaner,sheller,separator and polisher. The polisher can be either the vertical cone or horizontal rotor polisher. It is Used to avoid breakage of rice during the milling process. The most important feature of the mill is that the shelling and polisher unit are kept separated. The paddy is cleaned in a paddy cleaner to get rid of foreign material such as mud,stone,chafts etc.The cleaned paddy is fed to the dehusker with the help of rubber roller. The brown rice is again fed into huller where polishing of rice is done. The resulting polished rice and bran are collected separately.

### 9.1 FINANCIAL ASPECTS

<b>Land</b>	2,000 Sq.Ft.	1,20,000
<b>Building</b>	Area in Sq. ft	Sq. ft
i) Rice Milling Room	25 * 30	750
ii) Maize & Spices Room	20 * 15	300
iii)Store Room	20 * 20	400
iv)Office Room	10 * 15	150
	Total	1,600
		<b>Rs. 3,72,000</b>
	Total of Land & Building	<b>Rs.4,92,000</b>

### 9.2 MACHINERY AND EQUIPMENT

Sl.no	Description	Qty.	Value (Rs.)
1.	M.G. Sheller DL-6 with rubber rolls,Press Pulley etc.	1 no.	35,000
2.	14/15 h.p Kirloskar make 1450 rpm DE set with pulley system complete	1 no	28,500
3.	Rice Polisher Jet,NP-50	1 no	34,000
4.	OSTAD Huller no,8 with Hopper	1 no.	7,800
5.	Kirloskar/Crompton make 15 HP,1450,3-ph,electric motor	1 no	28,000
6.	Star-delta Motor starter	1 no	3,700
7.	100 A SF Unit	1 no	1,200
8.	M.S shaft 2.6 * 12	Set	10,000
9.	Water circulating pump with V-Pulley,belt,G.I pipe	Set	7,50
10.	Belt Size 66 * 4	SET	4,000
11.	Belt Size 22 * 3	Set	900
12.	Belt Lacing & Paste	Set	300
		Total	1,54,000
	Add electrification @ 10 %		15,400
	Add Transportation & Installation	L. S	6,000
	Furnitures & Working Tables	L. S	25,000
	Weighing balances,& Tools etc.	L.S	5,000
	Preliminary &preoperative Expenses	L.S	14,000
	<b>Total</b>		<b>2,19,400</b>

### 9.3 TOTAL FIXED CAPITAL:

Sl.no	Particular	Value (Rs.)
1.	Land	1,20,000
2.	Building	3,72,000
3.	Plant & machinery	1,54,000
4.	Furniture's & Fixtures	25,000
5.	Pre-operative Expenses	14,000

Total :Rs.6,85,000

### 10.1 WORKING CAPITAL REQUIREMENT ( per month)

#### A. Raw Material

Sl.no	Description	Qty	Rate (Rs.)	Amount (Rs.)
1.	Paddy	12 MT	8,000	96,000
2.	Packaging	L. S	1,000	1,000
<b>Total</b>				<b>:Rs.97,000</b>

#### B. Staff & Labor

Sl.no.	Particular	Qty	Rate (Rs.)	Amount (Rs.)
1.	Manager cum Supervisor	1no.	4,500	4,500
2.	Skill Worker	2nos	3,500	3,500
3.	Helper	5nos	1,500	7,500
4.	Clerk cum Accountant	1no	3,500	3,500
5.	Watchman/Chowkidar	2nos	1,500	3,000
<b>Total</b>				<b>Rs.20,500</b>

Add perquisites @ 15 %

3075

Rs.23,000

**Per annum**

**Rs.2,76,000**

#### C. Utilities ( per month)

Sl.no	Particular	Amount(Rs.)
1.	Power	3,000
2.	Diesel Oil	3,00

**Total**      **Rs. 3,300**

**Per annum**      **Rs. 39,600**

#### D. Other Contingent Expenses (per month)

Sl.no	Particulars	Amount(Rs.)
1.	Postage & Stationery	1,000
2.	Telephone/Fax/Mobile	1,200
3.	Repair & Maintenance	800
4.	Transport & Conveyance	4,000
5.	Advertisement & Publicity	1,500
6.	Insurance & tax	600
7.	Consumables	500
8.	Misc. Expenses	500

	<b>Total</b>	<b>:Rs.10,100</b>
	<b>Per annum</b>	<b>:Rs. 1,20,000</b>
<b>Total Working Capital per month(A+B+C+D)</b>		<b>:Rs.1,30,000</b>
“ “ “ <b>for 3 months</b>		<b>:Rs.3,90,000</b>
“ “ “ <b>per Annum</b>		<b>:Rs,15,60,000</b>

Thus, **TOTAL WORKING CAPITAL**

Sl.no	Particular	Per Month (Rs.)	Per Annum (Rs.)
1.	Raw material	97,000	11,64,000
2.	Stall & Labour	23,000	2,76,000
3.	Utilities	3,300	39,600
4.	Other Contingent Expenses	10,000	1,20,000
		<b>Total :</b>	<b>Rs. 15,60,000</b>

#### 10.2 Total Capital Investment

Sl.no	Particular	Amount (Rs.)
1.	Fixed Capital	6,85,000
2.	Working capital for three months	3,90,000
	<b>Total</b>	<b>11,00,000</b>

#### 10.3 Means of Finance

a).	Promoters Contribution	: Rs.2,75,000
b).	Term Loan	: Rs.8,25,000

## 10.4 Financial Analysis :

### (A) Cost of Production (per annum)

Sl.no	Particular	Amount (Rs.)
1.	Recurring Expenses	15,60,000
2.	Depreciation on building	18,600
1.	Depreciation on machinery and equipment @10%	15,000
2.	Depreciation on Tools, Jigs, & Fixtures @ 25%	1,250
3.	Depreciation on office Equipments, furniture @20%	5,000
4.	Interest on capital investment @ 14 %	1,15,000
5.	Total	17,14,850
6.	Say	17,14,000

### (B) Turnover per annum

a) By Sale of Rice	130MT	Rs.13,500	:Rs.18,20,000
b) By sale of Bran	15 MT	Rs. 5,500	:Rs. 82,500
c) By sale of Husk	10 MT	Rs. 2,000	:Rs. 20,000
		Total	:Rs. 19,23,000

(11) Annual Profit (Cost of production -- Turnover) :Rs.2,09,000

(12) Profit Ratio : 11 %

(13) Return on Investment : 19 %

### (14) Break even point

#### Fixed Cost

a) Depreciation on Building	:Rs.18,600
b) Depreciation on Plant & Machinery	:Rs. 15,000
c) Depreciation on Office furniture's	:Rs. 5,000
d) Depreciation on Tools & Jigs	:Rs. 1,250
e) 40 % of salary & wages	:Rs. 40,000
f) 40 % of Other Expenses(Excl. Insurance, utilities)	
:Rs.1,10,000	
g) Interest on capital investment	:Rs.1,15,000
<b>Total</b>	<b>:Rs.3,04,000</b>

Fixed Cost + Profit before tax :Rs.5,13,000  
 Profit before tax :Rs.2,09,000

$$\text{B.E.P} = \frac{\text{Fixed Cost}}{\text{F.C} + \text{Profit}} * 100 \quad : 59 \%$$

(15) Addresses of Plant & machinery Supplier

1. Mysore Industries  
2336,9<sup>th</sup> Cross  
Bashaveshwara Road  
Mysore – 560004
2. General Engineering Company  
P.B No 20  
Udupi, Karnataka
3. Sathana Industries  
A -3, Industrial Estate  
Krishnaagar – 635001  
Tamilnadu