

## Prospectus, Present status and Future of Rice Milling Industry in Western Orissa

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Rice is known as Oryzal in Botanical terminology. The earliest reference to rice in writing mentioned that the crop was grown in China about 2800 B.C. However, several references in ancient Hindu Scriptures and Literatures provide evidence that rice had been cultivated also in India since ancient times.



Sasrutha Samihita and Ayurvedic medical literature of 1000 B.C., there had been mention of various group of rice separated on the basis of their duration, water

requirement and nutritional value. Further more the oldest Archaeological evidence yet known in the world- carbonized paddy grain dated between 1000-750 B.C. was obtained in excavation in Hastinapur in Uttar Pradesh in India.

India is the largest manufacture of rice in the World outside the mainland China Rice is one of the most important food crop in the world and the staple diet for nearly half the world's population of the total consumption of cereals, roughly one-half is represented by rice. Obviously, it is the most important staple food in India. It supplies not only the majority of calories but also nutrients including protein in Indian diet. Approximately 24

percent of the total cropped area are planted with Paddy, Production and marketing of paddy and rice is, therefore India's foremost industry within the agriculture sector the rice processing industry represents about 25 percent of the value of the total income of the nation.

### Prospectus

In Western Orissa which is correctly termed as bowl of rice of Orissa the prospectus of rice milling industry is not so bright. Though new rice mills are coming up daily having scant regard for coming problems. The main point to consider is raw material which is Paddy. Paddy is produced in some limited area. The area under Paddy cultivation is not proportionality growing as the growth of rice milling capacity. The most pertinent question therefore is where from Paddy will come. If sufficient paddy is not available or made available, the industry will die as it happened in Balasore. If this happened then the Government and new entrepreneurs will be solely responsible. Therefore the prospectus of rice milling industry in Western Orissa is dim unless corrective measures are taken on urgent basis.

The present status of the industry is far from satisfactory. The reasons are not far to find

Rice is intimately involved in the culture as well as the food ways and economy of many Societies. Rice is considered as the gift of god, and it is treated with reverence, and its cultivation is tied to elaborate rituals. Chinese myth, by contrast, tells of rice being a gift of animals rather than of gods. Tradition holds that "the precious things are not pearls and jade but the five grains", of which rice is the first. Though sufficient food is produced on global basis

to feed everyone, the pains of hunger continue to be a common experience of many people in the world today especially in the developing countries and under developed countries because of the rapid population growth. Among the major cereals, rice is the primary staple food for more than 2 billion people in Asia and hundreds of millions of people in Africa and in Latin America. Rice contains a large amount of starch, some proteins, minerals and vitamins like E and B.



out. Due to heavy demand of paddy due to uncontrolled numbers of rice mills there is strain in procuring paddy and hence stiff competition to

No of Rice mill Operations in Western Orissa during the Year 2006-07	
Name of the District	No of rice mill
Bargarh	107
Sambalpur	73
Jharsuguda	9
Nuapada	43
Balangir	53
Kalahandi	150
Subarnapur	25
Boudh	7
Sundargarh	3
<b>TOTAL</b>	<b>470</b>

Source : Rice Trade 2006-2007

receive the above raw material. And paddy is procured at uneconomical cost which in turn

Rice production of India	
Figure in million Tonnes	
Year	Qty
5th plan (1973-74)	44.05
8th Plan (1996-97)	81.74
2000-01	85.00
2001-02	93.30
2002-03	71.80
2003-04	88.30
2004-05	85.30

Source : Ministry of agriculture Govt of India

increase cost of production. An industry goes to dogs due to two primary reasons:-

- (i) Increased cost of production
- (ii) Diminished production

(i) **Increased cost of production**(a) The cost increases due to high cost of raw material.(b) in efficient use to steam and electric power.(c) Heavy interest burden for loan.(d) labour cost

(ii) **Diminishing production** is mainly responsible for the failure of industry. The diminishing production is due to (a) shortage of raw material(b)unavailability of cheap finance(c)power cuts(d)Improper maintenance of machineries(e) Lack of strict management. Future of rice milling in Western Orissa is bright and there is no cause for unnecessary alarm. The reasons are that a standard rice mill requires about 5 crore of rupees including working capital. The land requirement is approximately 5 acres. It gives good profit, only there is a danger of overcrowding and if density of industry increases in a particular area or district the industry may fail has happened in case of Balasore. There is apprehension that same fate may be met the industry in Kalahandi District where a cluster of rice mills are coming up. This is a very big industry and the situation has to be corrected.

**Suggestion :**

- 1.The industry has to concentrate in cost reduction.
2. Maintenance of quality
- 3.Bye product utilization Here comes rice bran which should be fully and economically utilized. This particular bye product make the future promising. The other bye product is husk which is mostly utilized for steam generation. Further study is needed on its further utilization. Broken rice is also considered a bye product. Sometimes these bye products meet the entire cost of production.
4. Efficient use of electric power.



**Navratna Info**

**Origin of Rice** From our ancient scripts it is learnt that Indians new rice before the present era. According to ome earlier workers like Decandolle 1886) and Watt (1862) the rice cultivation was originated in the South India. Some other workers like Vavilov suggested that India and Burma are centers of origin of ultivated rice. · The origins of rice have been debated for some time, but the plant

is of such antiquity that the precise time and place of its first development will perhaps never be known. It is certain, however, that the sub-species Indica is mostly grown in India while in few pockets of Sikkim and in Himalayan regions where cold climate exists and the Japonica varieties are grown. The classification of rice cultivated in India is as follows



**Further suggestion :**Cost of procurement has to be reduced as far as possible. The procurement price of paddy will be increased possibly every year due to political compulsion and other reasons. The price of rice is also increased but it is not reasonable. The increase in procurement of paddy price put strain of the financial position of the mills. Most mills are run by borrowed finance and with huge interest liability. The industry has to take upon itself to increase production of paddy by enlightening the farmers regarding efficient water management, sprinkle water system. The cultivation of paddy has to be made remunerative. The millers and farmers have to supplement each other.

**Rice Board :**

A Rice Board should be immediately constituted by the Government to look into and device the ways to restructure the rice milling industry in such a manner that production is maximized, cost minimized and valuable bye product is efficiently utilized.

**Statistical quality control :**

Since Rice Milling is a process industry, all the parameters effecting the process should be controlled. The statistical quality control method should be adopted which has not be used so far.

**Regarding the author ;**

Er. Ghanashyam Agrawal is a mechanical engineer. He passed engineering from UCE Burla in 1966. He did his PGDJM in 1990 from the same institution. He has worked with Government and private firms. He has considerable experience in Boilers. The extracts in the above article are drawn

mainly from the Author's. These 1990 titled studies of quality assurance of rice mills coupled with technology based renovation.

(Ganesh Rice Mills, Bargarh)

**Statewise Area, Production and Productivity of rice in India**

State	Area in M Ha	Prodn.in Mt	Productivity in Kg/ha.
West Bengal	6.07	15.26	2514
Uttar Pradesh	5.88	12.46	2120
Andhra Pradesh	3.83	11.39	2978
Punjab	2.49	8.82	3545
<b>Orissa</b>	<b>4.50</b>	<b>7.15</b>	<b>1589</b>
Tamilnadu	2.11	6.87	3263
Bihar	3.57	5.28	1480
Chhattisgarh	3.73	5.13	1374
Assam	2.53	3.85	1524
Karnataka	1.42	3.17	2236
Haryana	1.03	2.72	2652
Mahrashtra	1.51	2.65	1751
Madhya Pradesh	1.76	1.66	948
Jarkhand	1.48	1.64	1111
Gujarat	0.66	1.03	1549
Kerala	0.32	0.72	2218
Others	1.75	3.28	@
All India	44.62	93.08	2086

Statistic based on year 2002

@- since area / production is low, yield rate is not worked out.

**Navratna Info**

From an early beginning somewhere in the Asian arc, the process of diffusion has carried rice in all directions until today it is cultivated on every continent save Antarctica. In China, the history of rice valleys and low-lying areas is longer than its history as a dryland crop. In southeast Asia, by contrast, rice was originally produced under dryland conditions in the uplands, and only recently did it come to occupy the vast river deltas. Migrant peoples from South China or perhaps northern Vietnam carried the traditions of wetland rice cultivation to the Philippines during the second millennium B.C.

and deuterio-Malays carried the practice to Indonesia about 1500 B.C. From China or Korea, the crop was introduced to Japan no later than 100 B.C. Movement to western India and to Sri Lanka was also accomplished very early. The crop may well have been introduced to Greece and neighboring areas of the Mediterranean by the returning members of Alexander the Great's expedition to India ca. 344-324 B.C. From a centre in Greece and Sicily, rice spread gradually throughout the southern portions of Europe and to a few locations in North Africa. Interestingly enough, medical geographers in the 16th century played an important role in limiting the adoption of rice as a major crop in the Mediterranean area