

# Bumper Rice Crop: Road Ahead

## Onicra's Outlook on SMEs in Rice Milling Segment

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## Overview

Rice has been the oldest and the largest cultivated food crop and is a staple for over half of the world population. Though not highly traded, it assumes significance from the fact that it caters to one of the three primary needs of the human race – food.

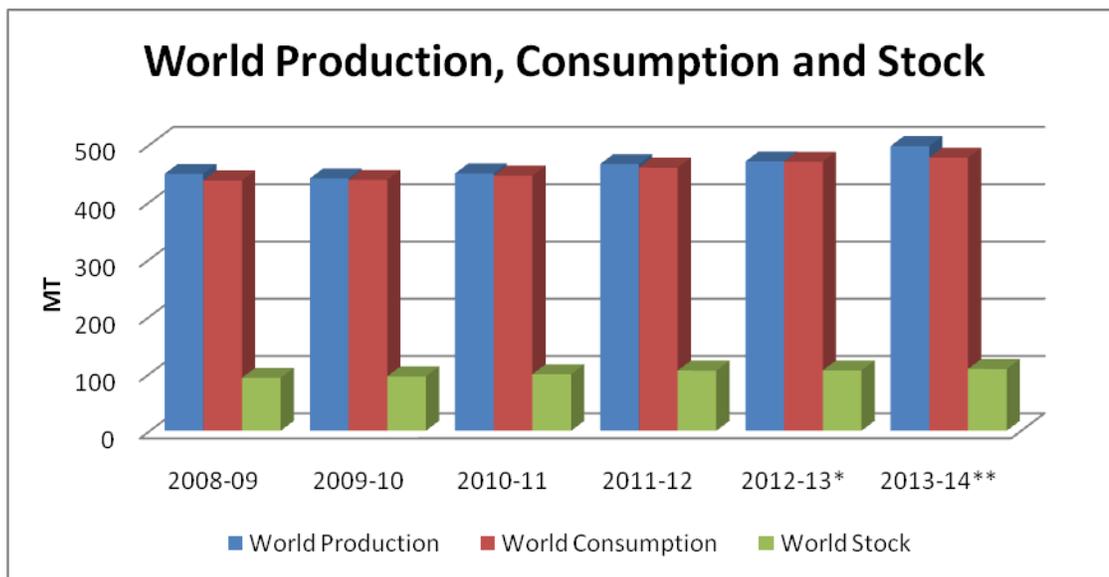
Rice production is labour intensive hence the developing countries have an upper hand in production and global trade. Asia has been leading the world in global rice production and export. The leading countries contributing to Asia's production are China, India and Indonesia. China dominates the production due to its advance technology, high quality seeds, abundance of workforce and developed infrastructure. China was the first country to develop hybrid seeds followed by India. Currently research is going on to develop super hybrid seeds which will further enhance the yield by 20-30%.

**For FY12, India has the distinction of being the second largest producer of rice and the largest exporter of rice world-wide.** India is poised to retain its leading position in export market in FY13 considering the harvest is expected to be good due to the good rainfall. She has the largest harvested area under rice crop in the world. The Indian government has taken several initiatives to promote rice production with special attention towards SME sector which contributes to more than half of the industry. Major portion of production of paddy and its milling lies in the hands of SMEs and local farmers and there are only few large corporates operating in the market. Government initiatives have played a pivotal role in the growth and development of the sector however, a lot has to be done in context of infrastructure, developed logistics, easy availability of funds for SMEs, research & development and imparting agricultural training to local farmers in order to achieve optimum yield possible.

It has been noticed that majority of Indian consumers prefer rice as their primary staple food. In the last few years the demand has shifted from non aromatic rice to aromatic rice primarily, due to increase in the disposable income of the common man and change in the lifestyle.

## Rice Production across the Globe

World production of rice has risen steadily from about 151.00 Million Tons (MT) of paddy in 1960 to over 465.80 MT in 2013. Traditionally, production had been chasing the consumption but overtook it in 2005. The major contributor to world production is Asia with 87.73% of total production and is trailed by America, which contributes 3.21%.



\* Estimated

\*\* Projected

Source: All India Rice Exporters Association

Rice production is labour intensive whether it be farming or milling. Due to this factor, approximately 95% of the world rice production comes from the developing countries. However, only 5-6% of rice is traded internationally, while the rest is consumed domestically. Since rice is a significant contributor to the food sufficiency of a country, its trade is highly controlled by agencies such as Bureau of Logistics (BULOG) in Indonesia, the National Food Authority (NFA) in the Philippines, VINAFOOD in Vietnam and the Food Corporation of India (FCI) in India within their country. As a result, the contribution of rice to world trade is only 1%.

According to a United States Department of Agriculture (USDA) report, the world's largest exporters in 2012 were India (10.41 MT), Vietnam (7.20 MT), Thailand (6.50 MT), Pakistan (3.75

MT) and the United States (3.22 MT). China was an exporter till early 2000s' but became a net importer in 2010. India exports the aromatic basmati variety whereas Thailand and Vietnam export Jasmine variety of rice. As per the All India Rice Exporters Association (AIREA), the total value of India's exports was ` 241.19 bn in FY12 and ` 332.31 bn in FY13.

	Basmati Export		Non Basmati Export		Total Export	
	Qty (MT)	Value (` in bn)	Qty (MT)	Value (` in bn)	Qty (MT)	Value (` in bn)
FY12	3.21	154.50	4.10	86.68	7.31	241.19
FY13	3.53	192.03	6.57	140.28	10.10	332.31

Major importers include Nigeria, Iran, Indonesia, Philippines, Iraq, Saudi Arabia, Malaysia, Brazil and some African and Gulf countries.

## Position of India in the global market: Bumper Rice Crop

Rice production in India has seen a remarkable growth in the last few decades which has led the country to be the second largest producer of the world. India's share in global rice production has been 22.88% during the FY12.

### INDIA'S RICE PRODUCTION IN GLOBAL CONTEXT

Year	World Production in MT	Indian Production in MT	India's Share (In %)
FY02	399	93	23.39
FY03	380	72	18.90
FY04	390	89	22.70
FY05	405	84	20.53
FY06	423	92	21.70

FY07	427	94	21.86
FY08	438	97	22.08
FY09	459	99	21.61
FY10	457	89	19.49
FY11	449	96	21.38
FY12	456	104	22.88
FY13* (Est.)	463	103	22.25

Source: Department of Agriculture and Cooperation

India has the largest harvested area in the world and yet her production of rice is trailing China. India's yield rate per hectare is lower than some other developing countries such as China and Indonesia. India is working hard to be the largest producer and the following factors are supporting her endeavour :

1. Largest harvested area
2. Abundant labour force
3. Hybridization
4. Government support

Government of India has made consistent efforts to infuse the latest technology, better quality seeds and provide adequate fertilizers which has led to a tremendous improvement in rice production and yields. This has resulted in the production of a sustainable export surplus.

However, the following factors are hampering its growth:

1. Uneven rainfall
2. Lack of proper storage and warehousing

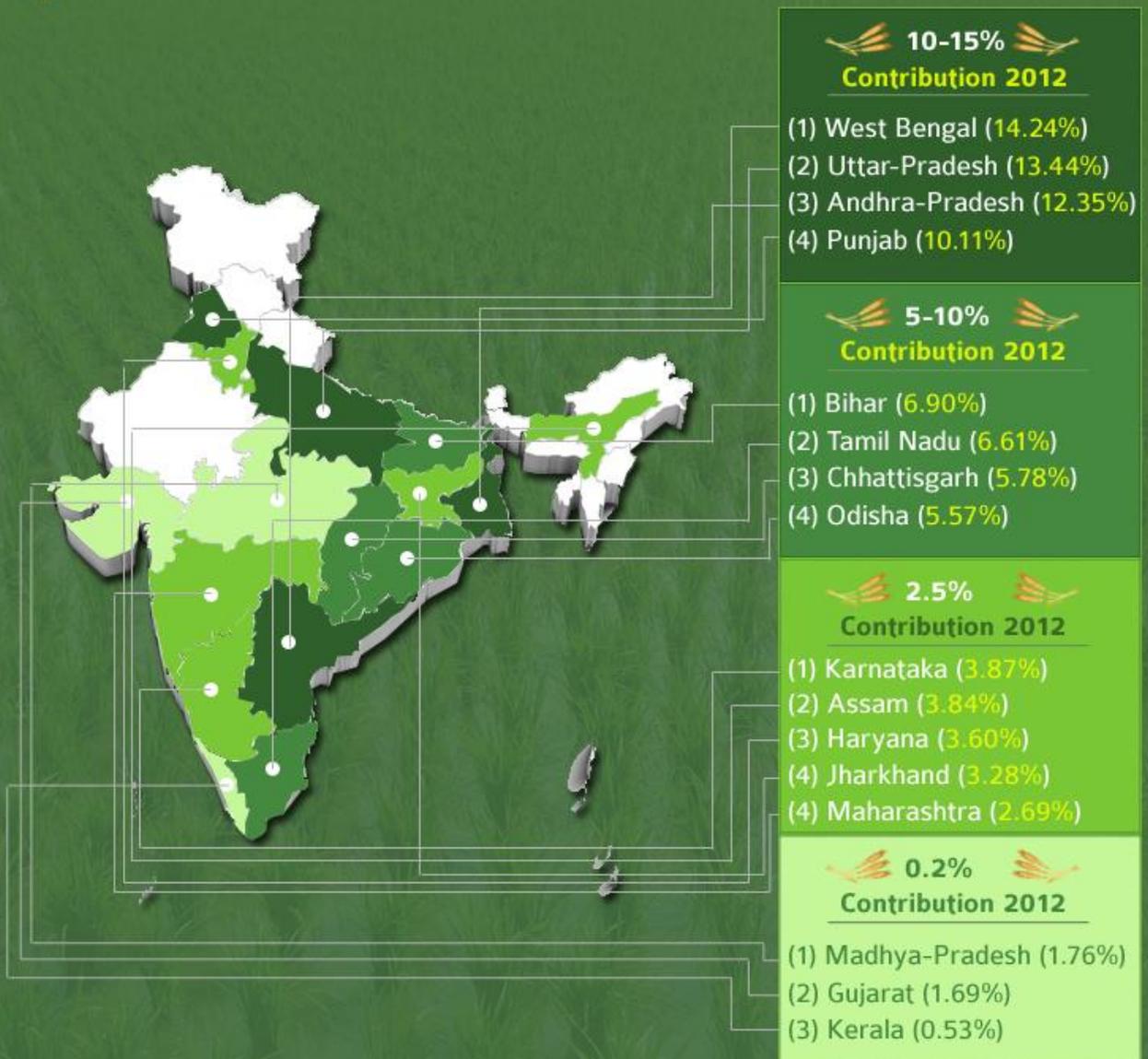
3. Lack of adequate agricultural training
4. Inadequate infrastructural facilities(Roads, Transport, etc.)

### MAJOR RICE PRODUCING STATES IN INDIA

During FY12, West Bengal is the largest producer in the Indian subcontinent contributing to 14.24% of total production in India followed by Uttar Pradesh and Andhra Pradesh contributing 13.44% and 12.35% of total production respectively. Bihar, Jharkhand and Uttar Pradesh have picked up the momentum in rice production while Andhra Pradesh and Punjab have shown a decline in rice production over FY11. It may be noted that the states of Haryana, Punjab and Uttar Pradesh are famous for basmati production.



# Statewise Contribution In Rice Production



Source: Directorate of Economics & Statistics, Department of Agriculture and Cooperation.

## ROLE OF GOVERNMENT OF INDIA IN RICE INDUSTRY

The paddy purchase, sale & its processing is greatly affected and regulated by Government of India to protect the interests of farmers on one hand & maintain adequate food / rice stock level in the central pool on the other hand. The government announces minimum support price (MSP) every year for paddy procurement to protect the interest of the farmers. In case the price of paddy is falling down in the open market, the government designated agencies take up bulk purchases and help maintain MSP. Simultaneously, the rice milling units are bound to deliver 75% of the rice produced out of leviable paddy (whether bought from the open market or from any of the purchasing agencies) to the central pool at the price & specifications determined in the policy. In case the paddy is procured by the government purchasing agencies, the agencies get that paddy milled from the rice milling units at the price & terms fixed in the yearly policy. This rice is called Custom Milled Rice (CMR). CMR is then sent to central pool by agencies. The basmati variety of rice is not covered under the MSP scheme.

Time and again, the Government of India has curbed the exports of non-basmati rice for a particular period, especially in times of rain deficit or low yield of rice in the said period.

The government has also played an important role in setting up of councils, development agencies and research institutes for the development & improvement of rice seeds and rice. Research institutions (such as Indian Institute of Crop Processing Technology and Central Rice Research Institute etc.) have been set up by the government under the aegis of Indian Council of Agricultural Research (ICAR) for the same purpose. Some of the evolutions by the research institutions are:

- Alternate Wetting and Drying (AWD) in irrigated areas with good water management practices;

- System of Rice Intensification (SRI) under leveled & well drained soil with assured source of irrigation;
- Integrated crop management ;
- Development and promotion of new, higher yielding, better quality varieties.

The use of higher yielding seeds/ better quality seeds for cultivation has increased from 632.50 MT in 2007-08 to 946.90 MT in FY12. Several programmes such as National Food Security Mission (NFSM) launched during FY08, Bringing Green Revolution in Eastern India (BGREI) during FY11 are being implemented to increase the production and productivity of rice in the country.

While the research institutes are engaged in development of new technologies for improving the production and productivity of rice, innovating cultivation and irrigation techniques, there are agencies such as Agricultural & Processed Food Products Export Development Authority (APEDA), which offer to promote the marketing of rice. APEDA is involved in:

- Formation of agriculture export processing zones;
- Providing financial assistance by way of grant of aids and reduction in interest rate on credit availed from banks and Financial Institutions;
- Supporting to resolve administrative, legal and fiscal issues;
- Fixing of standards and specifications for the purpose of export; and
- Carrying out inspection to maintain quality.

## Onicra's Outlook on SMEs in Rice Milling

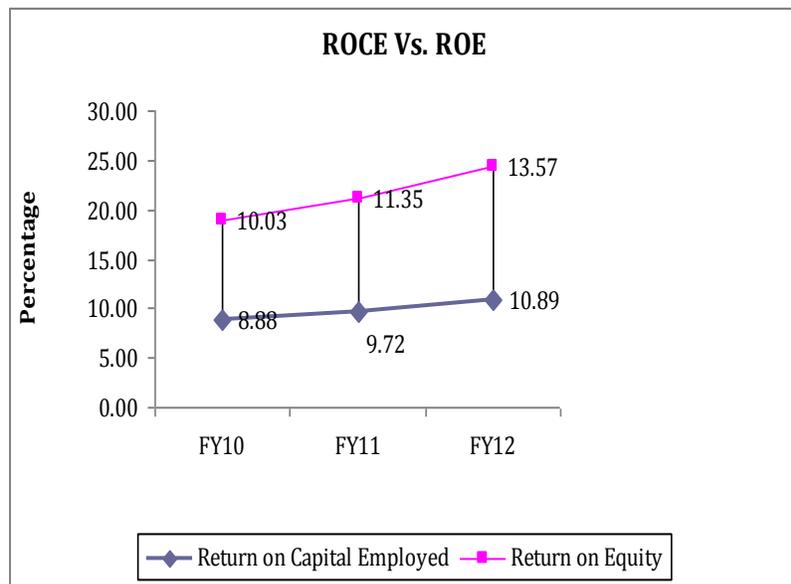
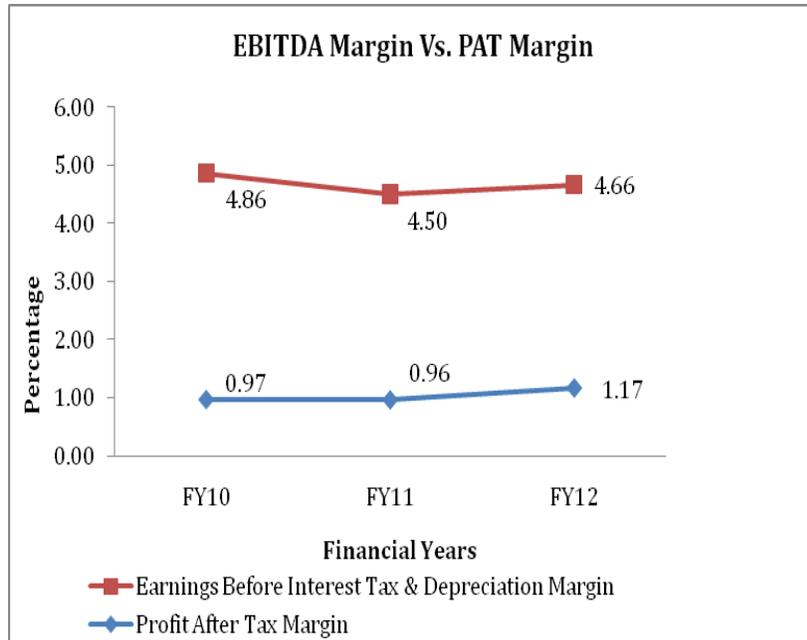
There are 27 SME clusters for rice milling in India.

S. No.	State	District	Location of Cluster
1	Andhra Pradesh	East Godavari	East Godavari
2	Andhra Pradesh	Krishna	Vijayawada
3	Andhra Pradesh	West Godavari	West Godavari
4	Haryana	Kaithal	Kaithal
5	Haryana	Karnal, Kurukshetra, Panipat	Karnal, Kurukshetra, Panipat
6	Jammu & Kashmir	Jammu/ Kathua	Jammu/ Kathua
7	Karnataka	Shimoga	Shimoga
8	Maharashtra	Bhandara	Bhandara
9	Maharashtra	Chandrapur	Chandrapur
10	Maharashtra	Gadchiroli	Gadchiroli
11	Maharashtra	Gondia	Gondia
12	Odisha	Balangir	Balangir
13	Odisha	Balasore	Balasore
14	Odisha	Cuttack	Cuttack
15	Odisha	Ganjam	Ganjam
16	Odisha	Koraput	Koraput
17	Odisha	Puri	Puri
18	Odisha	Sambhalpur	Sambhalpur
19	Punjab	Amritsar	Amritsar
20	Punjab	Gurdaspur	Batala, Gurdaspur
21	Punjab	Kapurthala	Kapurthala

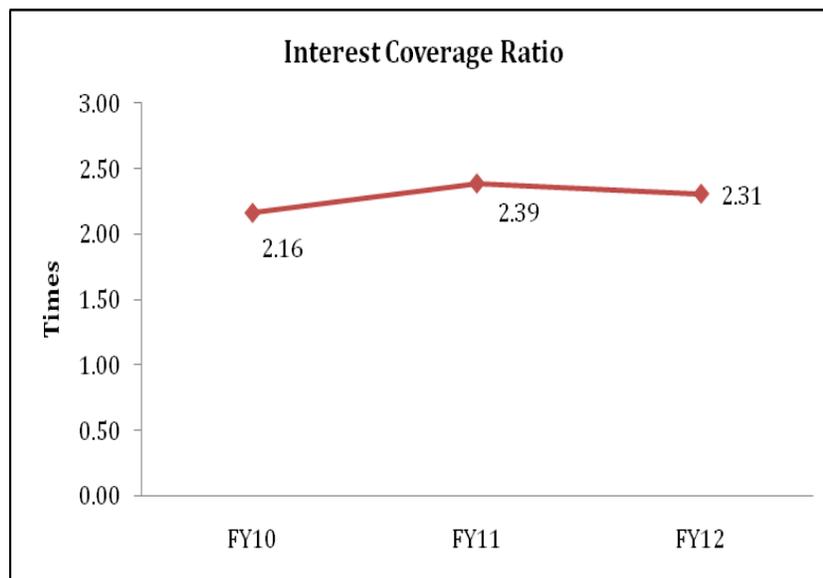
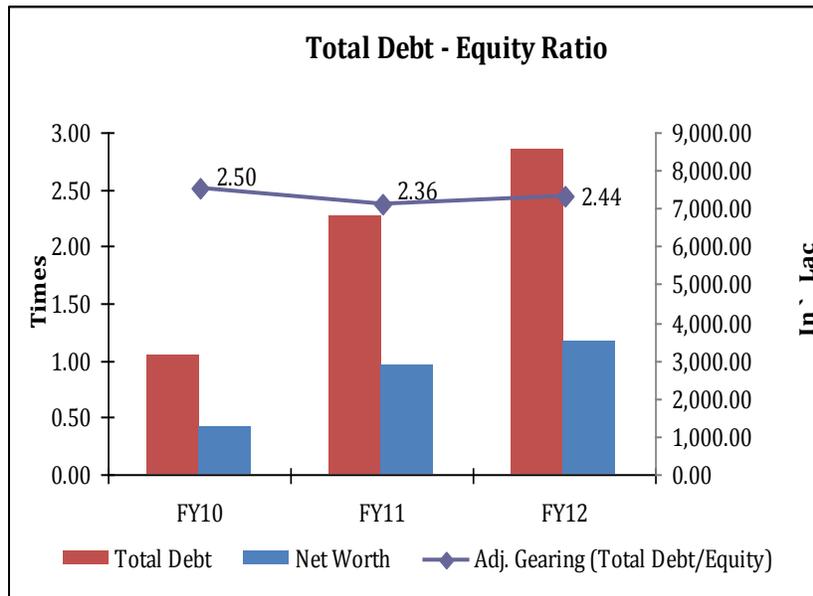
<b>22</b>	Punjab	Sangrur	Sangrur
<b>23</b>	Tamil Nadu	Madurai	Madurai
<b>24</b>	Tamil Nadu	Thanjavur	Thanjavur
<b>25</b>	Uttar Pradesh	Muzaffarnagar	Muzaffarnagar
<b>26</b>	Uttar Pradesh	Saharanpur	Saharanpur
<b>27</b>	Uttaranchal	Udham Singh Nagar	Rudrapur

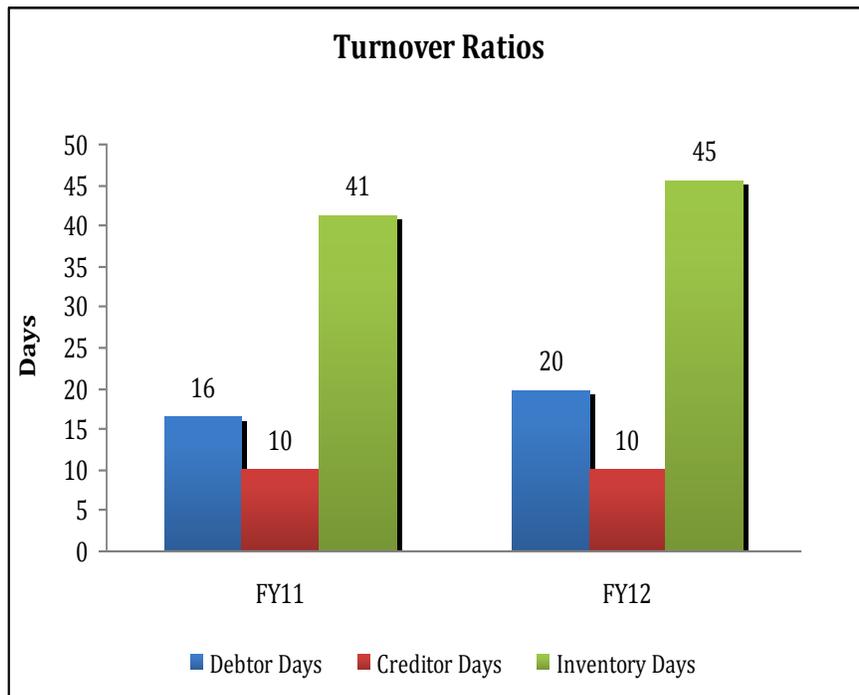
Source: Ministry of Small, Medium and Micro Enterprises

FINANCIAL OUTLOOK<sup>1</sup>



<sup>1</sup> A sample data of 30 companies across India was chosen from the entities that have been rated by Onicra during the period January'2013 to August'2013 as a representative of the SME units. These entities are involved in processing of paddy.





**Revenue growth remained strong driven by increased demand in domestic and export market and increased prices of rice however margins remained constrained:** The EBITDA margin has declined to 4.66% for FY12 as against 4.86% for FY10 due to rise in cost of production faced by the SMEs, mainly due to old technology, increase in minimum support prices of paddy, increase in minimum wages, production of custom milled rice, soaring fuel prices and the high percentage of wastage due to broken or unshelled paddy. The net profit margin (NPM) of the units has improved slightly due to decrease in proportion of financial charges as compared to revenue generated.

**The returns generated by the rated sample has shown an increasing trend** in the financial years under study. This implies that the return on capital employed of the units has improved, which makes the industry more lucrative for the investors. This is also indicative of the fact that though the cost of production has increased, the returns have improved, due to the

decrease in the administrative and financial expenses. The Government of India has granted rice industry the status of a priority sector for the lenders, which would help in reducing the financial expenses. This is corroborated by increasing interest coverage ratio.

**The SME units rated by Onicra has exposure to debt which is more than double of equity invested in the business.** The major portion of debt (62.64% of total borrowings outstanding as on 31 March 2012) comprised of working capital loans. It has been observed that in the rice industry, the working capital loan is primarily required for funding the inventory requirements. Intense efforts are needed from the government's side on easy financing to SMEs, so that they can expand further.

**The working capital cycle of the SME units has been satisfactory.** The cash cycle (Inventory Days + Debtor Days – Creditor Days) was around 57 Days in FY12, indicating a good cash turnaround. Given the seasonal nature of rice crop, the units have been observed to stock inventory for 45 days in FY12.

### CHALLENGES THAT ONICRA FORESEES FOR SMEs IN RICE MILLING INDUSTRY

Government of India's several cluster development initiatives involving technical assistance, subsidies for technology upgradation and marketing support has strengthened the competitiveness of the SMEs and provided them with economies of scale, bargaining power, networking opportunities and competitiveness. They are also challenged by various limitations. Some of them are stated below:

- SMEs can concentrate only in few cities and towns as they lack the infrastructure & funds for registering themselves at national level.
- Lower scale of operations, inadequate logistics and improper supply chain

management has created huge problems for the smaller players.

- Since, many of the rice millers are operating on a small scale, the grain loss ranges from 30-40%. Studies have shown that while a modern mill can operate at a 72% recovery rate of rice from the grain, traditional mills struggle to operate at a recovery rate as low as 60%. A low recovery rate may be a result of a low productivity or high percentage of broken and unshelled paddy.
- It is difficult for the SME sector to raise funds from outside as they are greatly hit by any non-conducive change in their macro environment. Rice being highly dependent on rains makes it a more risky investment than some other manufacturing units. Though Government of India has declared rice production and milling a priority sector for lending, access to funds is still not easy for SME units.
- The access to infrastructure is limited for small scale operators. A study by World Bank – Food and Agriculture Organization has come out with the results indicating that approximately 26% of the grain is lost post harvest due to poor infrastructure including cold storage, warehouse and transportation.
- The cost of production is high in most of the SMEs engaged in rice milling as they have installed indigenous and non-standard local fabricated plants which are not fully energy efficient and productive.
- Though India has the largest harvested area under rice production, her productivity is about 45% of the rice farm productivity in China, and about 60% of the rice farm productivity in Indonesia. This is due to the fact that the farming knowledge and technology levels are still low despite all the government efforts.

Apart from the above mentioned factors affecting SMEs in rice industry in India, the Indian economy is being marred by some macro level problems of her own i.e. high domestic food inflation, slowing GDP growth rate, delay in policy decision making and increasing fuel prices affecting the transportation cost. The aforesaid problems will further hamper the growth of the industry. However, it is satisfactory to note that the initiatives of the government are in the right direction. The establishment of research institutions and authorities has delivered some

results. A lot of innovation is taking place considering the development of new and better varieties of rice, patenting of rice and its development techniques. The upcoming areas in rice processing include high capacity dehuskers and more efficient polishers, improved infrastructural facilities for storage of paddy and rice such as cold storage of rice and downstream products, products diversification in the form of flakes, puffed rice, snacks, bakery items, quick cooking and ready-to-eat rice etc. The need is therefore, to promote modern rice mills and develop milling technology for fine rice. As per a study, if all paddy is milled in modern rice mills, approx. 3.00 MT of additional rice worth ` 15,000 million could be obtained.

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