

A Study On Rice Mill Workers In Madurai: Problems And Prospects

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Key Words: Rice Mill Workers, Problems, Suggestions and policies, etc.	Abstract The Present study made an attempt to explore the present problems faced by the rice mill workers in Madurai District. In Tamil Nadu, we have different set of problems such as, low wages, long working hours, poor working conditions, job security and etc. hence, migration and separation from families, some workers migrate from rural areas to work in rice mills, leading to separation from their families and social networks. Regarding health problems due to dust inhalation, repetitive strain injuries, or other work related factors. Majority workers don't have enough protective measures such as masks, hand closes and other safety measures. These challenges vary depending on the specific context and location with Tamil Nadu. Further, these issues would require a multi-faceted approach involving government policies, industry initiatives, and social support system.
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Introduction and background of the study

India is the second biggest rice producing country in the world after China. It contributes about 20 percent of the world output of rice. Paddy being the major cereal crop of India covers an area of more than 42.8 million hectares, the largest under any single crop (FAO, 1995). It has been stated by the Department of Agriculture, Government of India that in 1985-86 production of paddy was of the order of 96 million tonnes which was increased to 115 million tonnes in 1995-96 and is expected to increase to 130 million tonnes by year 2000. It is grown in almost all the provinces of the country but more than 86 percent of the total production accounts for the States of Andhra Pradesh, West Bengal, Tamil Nadu, Uttar Pradesh, Bihar, Orissa, Madhya Pradesh, Punjab and Assam. Rice production, processing and marketing constitute the biggest industry in the country. Indian rice milling industry is the oldest and largest agro-based industry. The annual production of paddy was estimated at over 521 million tonnes, mostly in developing countries and the amount is rising at an average rate of 3 percent per annum (FAO, 1995). It was, however, the serious food crisis in the early sixties which highlighted the need for a proper policy towards the industry. This led to joint study of the industry by the Government of India and the Ford Foundation of India. The study pointed out that the overall supply of rice could be augmented substantially with additional yield obtained through modernization of the existing rice processing techniques. A number of studies were also undertaken and came out with the same findings. As a result, the policy of modernization of rice mills in India has since then been pursued by the Government of India and various States within it. Thus, the industry has become fairly modernized and more important in the economy of the country. However, it is still believed that this has not been successfully implemented in most parts of the country.

Review of Literature

Sannamelam Murali Mohan et al (2018) Identified the marketing problems of the agro based industries in Chittoor district. Agro based industry is regarded as the sunrise sector of Indian economy. Approximately 14% of total work force is engaged in agro processing sector directly and indirectly.

Especially in rural based industries it has been served that rice mill industry in Patiala district is in the crisis and facing the various marketing problems regarding lack of financial assistance, improper marketing channel, high degree of breakdown of finished products and non-availability of research lab for quality control. In this study using primary data covers 218 small and medium agro based units. In the study it is identified the problems like competition, high cost production, credit sale, lack of brand good will, inadequate irregular supply of power, low demand, heavy taxes etc. The objective of the study was to analyze the impact of marketing practices followed by agro based units by the industrial units.

P.V. Gopinatan et .al (2017) stated that many studies in the past have reported the overall supply of rice could be augmented substantially with additional conversion of paddy to rice through modernization of the existing paddy processing techniques. The Thrissur district is one of the major rice zones in Kerala and is in third in the rank in respect of area of cultivation and production of paddy in the state. processing co-operative society limited established in 1993. The main aim of the society was to save the farmers from the exploitation of the middle men, millers and their agents in paddy marketing by ensuring remunerative price to the growers for their produce during the harvesting seasons. From the study it is found that the hulling to milling ratio analysis is the reasons for poor performance of existing plant were analyzed. Modernization of current plant was suggested to improve the organizational performance of rice mills.

Jagbir Rehal et.al (2017) has reviewed the various studies conducted affected the rice yield, it gives a detailed outline of various post-harvest processes, milling treatments, factors and latest technologies used in improving quality and production of rice. Shri S.K Chawla Explained solar energy significant savings in rice mills. Energy is fundamental requirement for life and prosperity. Rice milling is an energy intensive industry that is located over India and is a major contribution national export earnings. Huge amount of power is required at every stage. If it goes well rice husk and solar power two very unlike entities will together to provide solution to energy was for rice mills more over the evolving system promises zero emission of pollutants as well. Therefore it is the need of the hour to make rice mills energy self-sufficient.

Mohan et.al (2016) Explains prevalence of musculoskeletal disorder among the rice mill workers in Karimnagar. Rice mill industry is the oldest and largest agro based industry. Load handling, lifting, and carrying are the major job component. One of the most common work related injuries is the development of musculoskeletal disorders caused by heavy lifting and performing the task that required respective motions. This made use to study the prevalence of musculoskeletal disorder among the rice mill workers. Among the total study was conducted on 273 rice mills workers in 20 rice mills it was found that 201 workers were males(73.3%) and 72 (26.7%) were female workers. Majority of the study subjects 183 (67%) were in age group of 28 to 47 years. Religion wise 194(34%) are Hindus. Total 179 (66%) rice mill workers live in the rural area and 94 (34%) were living in urban area. The study observed that the workers drinking alcohol, smokers related to their working experience.

Bhavna Mistry (2016) discussed a preliminary analysis of the numerous repeated properties and uses of rice husk and its ash. Attempt has been made to collect data and information from various research work related to RH and RHA. Recent studies in literature have been covered in the past on rice husk. Rice husk has been used directly or in the form of ash either as a value added material or as allows cost substitute material for modifying the properties of existing products. The use of rice husk as electricity generation in efficient manner is likely to transformation this agricultural waste material into a valuable fuel for industrial sectors. Systematic approaches to this material can give birth to a new industrial sector of rice husk processing and thermal energy generation. Removal, lime, ferric, Sulfates, alum, ferric chloride and poly aluminum chloride were used independently. The result shows that precipitation with simple coagulations and aeration system are quite promising treatment to the small scale parboiled rice mill unit.

Objective of the study

1. To study the problems of the rice mill workers in Madurai.

Problems faced by the rice mill workers from their Residence Distance

S.No.	Distance in kms.	Number of Workers		Total
		Modern Rice Mill	Traditional Rice Mill	
1.	Below 5	17 (11.33)	12 (8.00)	29 (9.67)
2.	6 - 15	120 (80.00)	80 (53.33)	200 (66.67)
3.	16 – 25	6 (4.00)	16 (10.67)	22 (7.33)
4.	26 – 35	5 (3.33)	6 (4.00)	11 (3.67)
5.	Above 35	2 (1.34)	36 (24.00)	38 (12.66)
	Total	150 (100.00)	150 (100.00)	300 (100.00)

Computed

An investigation determined the distance between the research location's rice mill and the residential area. The respondents provided their views based on the information shown in the data. The data shows that 9.62 percentage of respondents lived within a 5 km radius of the rice mill, while 65 percentages lived between 6 and 15 km away. Additionally, 12.45 percentages of respondents lived more than 35 km away, 7.23 percentages lived between 16 and 25 km away, and only 3.67 percentages lived between 26 and 35 km away from the rice mill. **Around 200** respondents were identifies, form their home to working place they have to travel more than 28 kilometers per day for their livelihood. Further, with their stipulated income they have to spend some significance portion of revenue for daily travel, this circumstances considered a major problems of the rice mill workers.

Workers working in Rice Mills

The rice mills process the rice from paddy. About 50 of such rice mills are functioning in Madurai city. It is interesting to note that the workers working in rice mills are grouped under the agricultural workers. Majority of these workers are illiterates or under-educated. The work to a greater extent is seasonal. Only few of the rice mills store the rice, which they process even during the off-season. In such cases, workers get employment during off-seasons. A few rice mills are seasonal, as they do not store and process the rice during the off-seasons. Under such circumstances, the workers of such rice mills are unemployed. Hence, the status of the workers working in rice mills shows the 'underemployment'. As observed, the wages paid by the owners of the rice mills, they are lower and discriminatory. When conducting the present study, a few of the workers working in rice mills of Madurai city are interviewed. They have discussed their Rice Mill Workers in Madurai City: Problems and Prospects problems at work and in their families. It is noted that the work of these workers is purely temporary in nature. As such, the working hours are long that is between 8 to 10 hours in a day. Further, it is noted that wages paid are discriminatory. In other words, wages are not fixed on a regular basis or based on extent of work or even working hours, but the wages are fixed as per the wishes of their employers. As expressed by many of the workers in rice mills, the work is not available for these workers in the mills for all the 365 days in a year, but is underemployed. That is, majority of these workers work for only 200 days and during the remaining days, many of them are unemployed or are engaged in some other occupations such as animal husbandry, tailoring, handicrafts, etc. Due to their work in unorganized sector, their socio-economic status is also low in the society. As per the information collected, none of the workers are aware about the labour welfare laws such as the Factories Act, the

Minimum Wages Act, etc. Further, only few of the workers have availed benefits from welfare policies of the Government. The reason is that majority of these workers are not aware about such welfare schemes. The information was also gathered from the employers regarding the work. Many of the rice mill owners stated that many of the workers are absent during the work and as such; there is considerable loss to their mills. Consequently, they are forced to pay lower wages. Frequent power cut problems faced by these mill owners had made them to incur the loss and as such, they can't able to give incentives to the workers and are also extended the working hours of the workers.

Milling section

The dried paddy is shifted to milling section and stored in silos before converting the paddy into rice. The milling section comprises the following areas:

Destoning: In this pre-cleaning area, the carry-over along with paddy, such as stones, are removed in a vibrating platform having sieves.

De-husking: Husk is removed from paddy producing brown rice. Husk is used as fuel in boiler for steam generation.

Whitening and polishing: De-husking produces brown rice, which comprises a brown layer called bran. The bran is removed from the brown rice in polishing area to produce white rice. Bran is a by-product rich in protein content and can be used for producing rice bran oil and poultry products. Some of the utilities used in rice mills include pumps for water pumping, material conveying system, and compressors for meeting compressed air requirement.

Production Capacities

The major raw material used in rice mills cluster is paddy mainly procured from local market. The cluster processes about 429,000 tonnes of paddy producing about 279,000 tonnes of rice comprising both par-boiled rice and raw rice. The production of parboiled rice is about 69% from the cluster and rest 31% of raw rice is produced from hulling units. These hulling units' process paddy to supply the state government. The average yield ratio of the local paddy is about 65% which however varies based on the quality of grains and contaminants present in raw paddy. There are about 100 rice mills operating in Red Hills cluster. Majority of these mills falls under Micro, Small, and Medium Enterprises (MSME) as defined by the Ministry of MSME. About 70 rice mills are engaged in production of par boiled rice. About 30 hulling units (i.e., units engaged only in removal of husk and polishing activities) produce only raw rice that provides supply to government programmes.

Employment in Rice Mills

In the early stages when rice mills started sprouting in the madurai there was some kind of an agreement that when a rice mill was built in the environs of a particular village, the rice mill has to engage laborers for loading and unloading or any other work either from that village or other surrounding villages. Later this norm broke down. One of the factors contributing to this unwritten agreement was that, in certain seasons, rice mills had to be operated continuously for 24 hours necessitating the continuous availability of labor. As most of the laborers have their own agricultural activity, and as their family farming operations also require their labour, there was no way that those workers would devote all their labor power to the local rice mill. The laborers from farming households could not ensure their continuous availability for mill operations. Millers therefore went for an alternative: using cheap migrant labour from madurai through labor contractors. Loading and unloading activity in commercial rice mills in this area 16 are increasingly manned by non-local, migrant labour from Madurai. These rice mills engage only male migrant laborers for loading and unloading activity. There is not a single female migrant worker for any kind of rice mill activity. Only technical and supervisory roles remained with local workers. Contracts for technical and supervisory staff are on yearly basis but payments, are made monthly. A few local female casual laborers

are engaged for sweeping and cleaning mill floors, and a few female laborers are hired for grading tasks. Wages for the daily casual female labour are paid weekly or monthly.

Suggestions:

1. It is suggested to look into the problems of the rice mill owners such as power cut, storage of paddy and rice, etc.
2. There is needed to fix minimum wages as per the law prevailed and enforce the related laws strictly in the rice mills.
3. It is suggested to provide awareness about the rights and privileges of the rice mill workers.
4. It is essentially needed to increase awareness of the workers regarding legal safeguards such as the Minimum Wages Act, the Factories Act, etc.

Major Problems of Rice Mill Workers

The major problems faced by the industry are heterogeneity in the composition of rice milling industry. Large variations are found in type, capacity, location, services rendered as well as in ownership of different processing units. Consequently, investment requirement, cost and return also vary over a wide range. Heterogeneity in rice milling industry arise mainly from the widely varying economic activities made available to private rice millers in different areas and sectors of the country. Another common feature of rice milling industry is considered that its technical potential capacity is not fully utilized and this is because of the seasonal concentration and spatial spread of paddy production coupled with the existence of a number of diverse processing units competing with one another in supplying facilities. As these small mills generally do not purchase and store paddy on their own, their operations tend to be restricted to the paddy marketing season, and their installed capacity remained unutilized/underutilized during the rest of the period of the year.

Present Status of Rice Milling Industry in Madurai District

In order to know the present status of rice milling industry in Madurai district a case study was undertaken in the year 2022-2023 by the RESC, PHTC, IIT Chennai on the basis of questionnaire supplied by the Department of Food, Ministry of Food and Civil Supplies, Govt. of India. It was found that there were 35 licensed mills which were functioning. Out of these 21 mills 28 were surveyed by personal interview method by the author and the data were analyzed. The result showed that all the rice mills were running their mills for trading purposes only. Modernization of rice mills started in the district in 2000; so far only four those were fully modernized and the rest were in the process of modernization. Seventy-eight percent of the rice mills surveyed were found to be having Rubber-Roll-Sheller, 6 percent discs Sheller, 10 percent battery of hullers and the rest 6 percent double hullers. About 89 percent of the rice mills had adopted local/traditional method of parboiling paddy and the rest by CFTRI parboiling method and pressure parboiling. Only three rice mills were having mechanical dryers for drying their parboiled paddy whereas all others were using the conventional method of drying paddy, i.e., sun drying. The bran produced from different mills having Rubber-Roll-Sheller was sold to the solvent extraction plants in the district which were four in numbers. Almost all the rice millers were aware of the modern equipment's used in rice mills. Even though they believed that modernization was economical, they had not been able to procure and use all the modern equipment's due to financial constraint. Only in case of few rice mills non-availability of power supply was found to be the stumbling block for modernization. The millers were quite confident of modernizing their mills if they were provided with financial assistance, technical advice, electricity, concessions in the present levy system and marketing facilities for products and by-products.

Conclusion

This study made an attempt to bring all the problems of the rice mill workers specially day to day work. Working Conditions: Long working hours: Rice mill workers often face extended working hours, leading to fatigue and health issues. Lack of safety measures: Inadequate safety measures can expose workers to various occupational hazards, such as accidents and respiratory problems. Wages and Job Insecurity: Low wages: Many workers in the rice milling industry may receive low wages, making it challenging for them to meet their basic needs. Job insecurity: Seasonal nature of the work can result in job insecurity, leaving workers without a stable source of income during off-seasons. Health Concerns: Exposure to dust: Workers may face respiratory issues due to prolonged exposure to dust generated during the milling process. Lack of healthcare benefits: Limited access to healthcare benefits or insurance can exacerbate health concerns among workers. Lack of Social Security: Absence of social security schemes: Some workers may lack access to social security benefits, making it difficult for them to cope with emergencies or unexpected events. Child Labor: Despite legal prohibitions, child labor might still be a prevalent issue in some areas, affecting the education and well-being of young individuals. Besides, rice mill workers need to survive their lives with the help of the government assistances. These are all the major problems as well as challenges faced by the rice mill workers in Madurai District.

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