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## WOMEN'S PARTICIPATION IN RICE MILLS IN SHERPUR SADAR UPAZILA OF BANGLADESH

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### Abstract

The main purpose of this study was to determine women's participation in rice mills of Sherpur sadar upazila of Bangladesh. Ninety respondents were selected using cluster random sampling method. The researchers personally collected data from August to September 2012. Aimed at explaining the assessment of the present status of women worker of rice mills and explored the relationship between their selected characteristics and extent of participation. Majority of the respondents had long experience in working in the rice mill and almost everybody had participation around the year. Women were mostly involved in drying and on an average spent time for helping in husking machine operating (3.02 hours) followed by final drying of paddy (2.05 hours), drying the paddy before boiling (1.25 hours), piling the paddy (1.12 hours), cleaning the threshing floor (1.05 hours), packing the rice (1.02 hours) per day. They worked about 8-10 hours per day. Results show that the women worker's performance decreased with the increase of their age.

**Keywords:** Rice Mills, Women's Participation

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### Introduction

Rice is the most important staple food in Bangladesh. More than 70 per cent of the total calorie intake comes from this food item. The per capita consumption (about 400g/day) of rice in Bangladesh is one of the highest in the world (IFRI, 2013). Rice cultivation in Bangladesh covers more than 70 per cent of the total cropped area (Begum, 1997). Three types of rice, namely *aus* (summer), *aman* (winter) and *boro* (spring) are grown in Bangladesh. When the paddy is harvested from fields, it needs to be processed for consumption. Parboiling, drying and milling are the different stages of getting rice from paddy. These are done both at home (small scale) and at the rice mills (large scale). Processing at home, the non-commercial sector of milling is perhaps the oldest and almost obsolete form of rice processing method in Bangladesh. In this method, paddy is processed in *dheki* after it is parboiled and dried. Paddy processing and milling in Bangladesh is mostly performed at the rice mills. These mills are called commercial milling center. There are three kinds of commercial mills available in Bangladesh. They are husky, major and automatic. Increasing trend in mechanical process unit in the market has gradually replaced the traditional method of rice processing. These commercial- processing units have been playing a significant role in the rice marketing system (Zaman *et al.*, 2003).

In Bangladesh, there are approximately 40,000 rice mills. Rice mills are very much dependent on human labor, and almost 5 millions of unorganized workers are working in different rice mills and more than 60 per cent of them are female worker (Anonymous, 2003). Women workers are responsible for drying and husking paddy and packing the husked rice into sacks. Male workers are responsible for doing the less laborious works (Siddika, 2012).

The above-mentioned discussion implies the importance of women's participation in Bangladeshi rice milling sector. Therefore, keeping the importance in mind the present study was undertaken to explore the extent of participation by the respondents in the rice mills in the selected area. The relationship between the selected characteristics of the respondents and their participation in the rice mills will be also identified.

### Methodology

Sherpur sadar upazila was purposively selected for the study. Accordingly, a list of rice mills was collected from the rice mill owner association of Sherpur. List shows that there are 391 rice mills in the study area. From the list, four rice mills namely, M/S Bangla Rice Mill, M/S Ruman Suman Rice Mill, M/S Jisan Rice Mill and M/S

Aditi Rice Mill were selected following cluster sampling technique. Then the researcher collected list of women workers from the managers or the owners of the selected rice mills. In each mill, 20 to 30 women have been working daily or permanent basis. Thus, all women workers of these four rice mills were the sample of this study, which was 90 in number (from M/S Bangla Rice Mill 27, from M/S Ruman Suman Rice Mill 22, from M/S Jisan Rice Mill 21 and from M/S Aditi Rice Mill 20 respondents). Data were collected through face-to-face interview method using pre-design and pre-tested interview schedules.

Selected characteristics of the respondents such as age, education, family size, properties, earning member in the family, marital status, family type, physical fitness, working experience, relation with superiors or mill-owner, relation with colleague/fellow worker, contribution to the family were considered as the independent variables of the

study and computing appropriate scores. The characteristics were measured either raw scores or through rated scores. Amount of time spent by women rice mill worker was the dependent variable of the study. It was measured by calculating the actual time spent (in hour) in the rice mill by the respondent women. Total time spent by the respondents in different activities of rice mill was identified in hours per day.

## Results and Discussion

### *Personal characteristics of the respondents*

The results indicate that most of the respondents are middle aged (65%), illiterate (54%), married (66%), medium family size (59%) and respondent and their husbands are the main earning member in their family (49%).

Table 1. Distribution of the respondents according to their personal characteristics

Characteristics	Categories	Number	Per cent	Mean	SD
Age	Young (up to 35 year)	1	1	48.31	6.14
	Middle (36 to 50year)	58	65		
	Old (>50 year)	31	34		
Education	Illiterate	49	54	1.51	0.06
	Signature ability	36	40		
	Primary education	5	6		
Family size	Small (up to 4members)	35	39	4.96	1.11
	Medium (5-7 members)	53	59		
	Large (above 7 members)	2	2		
Properties	Landless	26	29	1.77	0.55
	Only house	58	65		
	House with a piece of land	6	6		
Earning member	Only respondents	28	31	1.88	0.71
	Respondents and her husband	44	49		
	Respondents and other members of family	18	20		
Marital status	Married	59	65	3.47	0.82
	Divorced	17	19		
	Widow	14	16		
Family type	Nuclear family	81	90	1.1	0.30
	Joint family	9	10		
Physical fitness	Physically well	83	92	1.07	0.26
	Physically sick	7	8		
Experience	Less than12years experience	34	38	13.47	6.43
	12-18 years experience	36	40		
	More than 18 years experience	20	22		
Relation with superiors or mill owner	Amiable	4	5	2.08	0.46
	Cooperative	76	84		
	Respectable	8	9		
	Not good	2	2		
Relation with colleague or fellow worker	Amiable	8	9	2.08	0.62
	Cooperative	72	80		
	Respectable	4	4		
	Not good	6	7		
Financial contribution to the family	Low (up to 16)	14	15	18.45	2.05
	Medium (17-18)	42	47		
	High(Above 18)	34	38		

Majority of the respondents (65%) have only house and of them 92 per cent are physically well. It is also found that 40 per cent of the respondents have long experience (12 to 18 years) in working in the rice mill and almost everybody (93%) had participation around the year. The mill owners or superiors are cooperative to respondents (84%) and they have good relationship with their colleagues (80%). About half of the respondents (47%) have medium contribution to their family (Table 1).

### **Gender wise involvement in different activities in rice mill**

Most of the activities performed within the rice mill jointly by men and women and, therefore, it is very difficult to find out the exact works performed only by the women. Results presented in the Table 2 indicate that women are mostly involved in drying (94.44% in drying before boiling and 96.66% in final drying).

Table 2. Gender wise involvement in different activities in rice mill

Sl. No.	Activities	Female only	Male only	Jointly
1	Carrying the sack of rice	0 (0)	86 (95.55)	4 (4.44)
2	Drying the rice before boiling	87(96.66)	0(0)	3(3.33)
3	Helping in boiling	0(0)	88(97.77)	2(2.22)
4	Firing the boiler machine	0(0)	90(100)	0(0)
5	Boiler operating	0(0)	90(100)	0(0)
6	Piling the rice	74(82.22)	7(7.77)	9(10)
7	Helping in husking machine operating	64(71.11)	19(21.11)	7(7.77)
8	Cleaning the threshing floor	83(92.22)	3(3.33)	4(4.44)
9	Final drying /drying after boiling	85(94.44)	0(0)	5(5.56)
10	Packing	14(15.55)	65(72.23)	11(12.22)
11	Others (covering incomplete dried paddy, winnowing etc.)	33(36.60)	15(16.66)	42(46.64)

(Figures in parenthesis indicate per cent)

There are less involvement of the women respondent workers in helping in boiling and operating the boiler machine. Rice packing and piling are done jointly (10 and 12.22%, respectively). Carrying the sack (95.55%), helping in boiling (97.77%) and boiler operation is almost done by their male counter parts (Table 2).

### **Extent of participation in the rice mills by women worker**

Results shown in Table 3 reveal that respondent women worker on an average spend most of their time in rice mills for helping in husking machine operating (3.02 hours) followed by final drying of paddy (2.05 hours), drying the paddy before boiling (1.25 hours), piling the paddy (1.12 hours), cleaning the threshing floor (1.05 hours) and packing the rice (1.02 hours) per day. Muhibbullah (2010) reported similar results.

Table 3. Extent of respondent women's participation in the rice mills (hour/day)

Sl. No.	Activities	Time spent (in hour/day)	
		Mean	SD
1	Carrying the sacks of rice	0.30	0.06
2	Drying the paddy before boiling	1.25	0.38
3	Helping in boiling	0.38	0.27
4	Piling the rice	1.12	0.46
5	Helping in husking machine operating	3.02	0.65
6	Final drying/drying after boiling	2.05	0.34
7	Packing	1.02	0.35
8	Cleaning the threshing floor	1.05	0.34
9	Others (covering incomplete dried paddy, winnowing)	0.25	0.05
Total		10.44	

### **Relationship between the extent of participation and the selected characteristics of the respondents**

Based on the correlation analysis it is observed that out of seven selected characteristics of the respondents only age have significant negative

relation with their extent of participation in rice mill (Table 4). That is if the age of respondents increased then their extent of participation in different activities of rice mill would also be increased.

Table 4. Relationship between extent of participation of the respondents in rice mill and their selected characteristics

Independent variables	Dependent variable (value of 'r')
1. Age	-0.224*
2. Education	0.035 <sup>NS</sup>
3. Family size	0.151 <sup>NS</sup>
4. Earning member in the family	0.073 <sup>NS</sup>
5. Marital status	-0.087 <sup>NS</sup>
6. Experience	0.120 <sup>NS</sup>
7. Contribution to the family	0.137 <sup>NS</sup>

(\* Significant at 0.05 level of probability, \*\* Significant at 0.01 level of probability, NS= Not significant)

This might be because with the increase of age, an individual's capacity tends to decrease. Begum (2001) observed similar findings but Tuli (2011) observed different findings in her study.

### Conclusion

From the findings and their logical interpretation, it can be concluded that most of the respondents of the study were middle aged, illiterate, physically sound, married, had a medium family size, respondent and her husband are earning member in their family, possessed only house. Most of the respondents have long experience of working in the rice mill and almost everybody has round the year participation. The mill owner or superiors are cooperative to respondents and good relation with colleagues and medium contribution to the family. Women are mostly involved in drying the paddy and on an average spent time for helping in husking machine operating (3.02 hours) followed by final drying of paddy (2.05 hours), drying the paddy before boiling (1.25 hours), piling the paddy (1.12 hours), cleaning the threshing floor (1.05 hours), packing the rice (1.02 hours) per day. Therefore, women in rice mill work about 8-10 hours per day.

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