

Adoption Of Different Post Harvest Management Practices of Rice by The Tribal Farm Families

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Abstract

In Jashpur district, there is renewed concern about post-harvest losses which account for 20–30% loss of farm produce. The lack of adequate storage facilities also affects produce quality, reducing produce market value with negative implications for various parts of the value chain (consumers, processors, etc.) requiring high quality raw materials. Adoption of post-harvest practices was studied at Jashpur district of Chhattisgarh. Majority of the respondents (61.67%) have medium level of adoption of post-harvest management practices for rice, followed by 25 per cent of them had high extent of adoption while, 13.33 per cent of them had low level of adoption regarding post-harvest management practices for rice. Most of the post-harvest activities was adopted by men and women viz. drying, threshing, winnowing, de-husking, storage/packaging, processing and marketing. As the tribal farm families are largely poor, they can't adopt the new technology of post-harvest management practices. Facilitating efficient post-harvest management technology in tribal/farming communities benefits not only families in terms of increased income, but also hunger-stricken populations across tribal areas in terms of food security

Key words: *Rice farming, tribal farm families, adoption and post-harvest management activities.*

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I. INTRODUCTION

Rice is an important crop and consumed widely across the globe as a staple food. In India, Chhattisgarh ranks 7th in terms of rice producing state, which contribute more than 5% in total rice production in the country. Rice is the most important crop in Chhattisgarh and grown in an area of more than 37 Lakh Hectares (AIREA 2015). Several studies have indicated that the adoption of post-harvest technology gives high yields and income to the farmers. The yield level of rice is comparatively low at present need to be increased substantially. Higher rice production can be achieved by adoption of all the recommended post-harvest technologies by large number of farmers. In general, recommended post-harvest technologies are not accepted by all the farmers at a time and also to full extent. In this context the study was conducted with the objective to study the extent of adoption of selected post-harvest management practices by the tribal farm families.

II. METHODOLOGY

The present study was undertaken in Jashpur district of Chhattisgarh. Out of 8 blocks, 4 blocks were selected purposively because of high tribal population and also having large area of rice crop. For this study 12 tribal villages were selected, 10 tribal farm families from each selected village were selected randomly. Thus the total 120 farm families were selected for the study. In this way (12 X 10 = 120) a total of 120 rice growing farm families were selected for present study. The data were collected by personal interview with the help of well prepared, structured and pretested interview schedule. Data were analyzed using frequency distribution, percentages, and correlation coefficient.

III. RESULT AND DISCUSSION

Adoption of Recommended post-harvest practices :

The majority of the respondents (61.67%) have medium level of adoption of post-harvest management practices for rice, followed by 25 per cent of them had high extent of adoption while, 13.33 per cent of them had low level of adoption regarding post-harvest management practices for rice (Table 1).

The data regarding the adoption of different post-harvest technologies of rice by respondents are presented in the table 4.24. The reveals that in case of drying, all the respondents practiced the rice drying in fields as well as in stack yard, followed by bund (7.50 %), concrete floor (2.50%) and polythene (1.67 %).

Threshing process is done by various ways like by bull, by tractor etc. In the study area maximum 75.00 per cent of the respondents were using tractor for threshing, 65 per cent use bulls and 3.33 per cent use both activities for threshing of rice. Winnowing process is performed by hand, by fan and by thresher in the study area. Maximum (96.67 %) respondents prefer fan for winnowing, followed by 31.67 per cent prefer hand and 3.33 per cent prefer thresher amongst the respondents. De-husking process is mostly done (92.50% respondents) by machines, followed by 15.00 per cent use Dheki for de-husking and 7.50 per cent prefer rice mill. Grading process is done by hand in the study area.

Table 1: Distribution of respondents according to their overall adoption Regarding post-harvest management practice of rice

S.No.	Level of adoption	Frequency	Percentage
1	Low (up to 33.33%)	16	13.33
2	Medium (33.34 to 66.66%)	74	61.67
3	High (above 66.66%)	30	25.00

Table 2: Distribution of respondents according to their adoption of different post-harvest technologies

S.No.	Different post-harvest activities	Frequency*	Percentage
A Drying (n=120)			
1	In field	120	100
2	In bund	9	7.50
3	In concrete floor	3	2.50
4	In polythene	2	1.67
5	In stackyard	120	100
B Threshing (n=120)			
1	By bull	78	65.00
2	By tractor	90	75.00
3	By combine harvester	4	3.33
C Winnowing (n=120)			
1	By hand	38	31.67
2	By fan	116	96.67
3	By thresher	4	3.33
D Dehusking (n=120)			
1	Machine	111	92.50
2	Dheki	18	15.00
3	Rice mill	9	7.50
E Grading (n=120)			
1	By hand	49	40.83
F Storage/Packaging (n=120)			
1	Kothi (Made primarily with mud)	38	31.66
2	Puri (Made primarily with straw)	65	54.16
3	Gunny bag	89	74.16
4	Improved kothi	3	2.50
G Processing (n= 120)			
1	Paraboiling	73	60.83
2	Chiwda / poha	18	15.00
3	Other	40	33.33
H Marketing (n=85)			
1	Local market	12	18.82
2	Nearby shop	18	40.00
3	To people in town	9	15.29
4	Co-operative society	46	25.88

*Data are based on multiple responses

Storage and packaging were mostly (74.16%) done in gunny bags, followed by 54.16 per cent of the respondents prefer Puri (made by straw), 31.66 per cent prefer Kothi (made of bamboo) and 2.5 per cent

preferred improved Kothi. Processing of paddy is done mostly by paraboiling of the paddy grains as reported by 60.83 per cent of respondents followed by 33.33 per cent do various other processing of paddy grains and 15 per cent prefer to make chiwda/poha from paddy grains. Marketing of the agri products is done by maximum 40 per cent in the nearby shop, followed by 25.88 per cent sell their agri products through cooperative societies, 18.82 per cent prefer local market to sell the agri products and 15.29 per cent prefer to sell the agri products to the people in town.

IV. CONCLUSION

Majority of the respondents (61.67%) have medium level of adoption of post-harvest management practices for rice, followed by 25 per cent of them had high extent of adoption while, 13.33 per cent of them had low level of adoption regarding post-harvest management practices for rice.

REFERENCE :

- [1]. Agarwal, B. 1983. Rural Women and the High Yielding Rice Technology in India, Paper Presented at the Conference on Women in Rice Farming, 26-30 September, IRRI, Los Banas, Laguna, Philippines. 70
- [2]. Ahmed, A. 1995. Malaysian Women and Agriculture-Issues and Challenges Towards the 21 st Century, 21 (5), p. 50
- [3]. Chaney, E. 1981, Women In Development, World Agricultural Economics and Rural Sociology Abstracts, 23(3): 257.
- [4]. Chaudhry, T.P.S. and Sharma, B.M. 1961. Female Labour of Farm Family in Agriculture, Agricultural Situation in India, 16(5): 643-50.42
- [5]. Devadas, P.R., Muthu, S. and Thangameni, K. 1972 Role of Selected Farm Women in Agricultural Operation The Indian Journal of Home Science, 6(1), p. 50.44
- [7]. Dhillon G. 1980. The Changing Role of Rural Women, Social Change, 11(2): 21.62
- [8]. Kabir and Simmers, E.P. 1976. Economic Research in Women in Rural Development in North Nigeria", AID Research and Development Abstract, 5 (3): 5,56