

Factors Affecting the Knowledge Extent about Rice Production Technology

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ABSTRACT

The majority of respondents 47 percent were found having medium level of knowledge, 20 percent respondents who had high level and 33 percent low level of knowledge respectively, the majority of all rice production technological knowledge Only Storage 100 percent. Out of 18 variables with knowledge, 2 variables like family size and mass media use were found highly significant and 2 variables like adoption extent and land holding. The study showed that majority of rice farmers had dominated in medium category of knowledge

Key word: Rice production technology, Farmers, Knowledge.

INTRODUCTION

Rice (*Oryza sativa*) is a staple food of the majority people of Asian countries. It is one of the constituent diets of almost 80% population in India. It provides about 22 % of the world supply of calories and 17 % of protein requirement. In developing countries, the paddy occupies about one of third of total area under cereals which is almost double to the area of wheat. In India, per capita availability of rice has been estimated 243.97 gram per day while its per capita requirement is 325 gram per day. On the basis of per capita requirement as suggested by the Indian Council of Medical Research. (ICMR), 164million tones of cereals were required for an estimated population of 915 millions in 1995.and by the year 2000, this estimated requirement would be 180 million tons for an anticipated population of 1004 million. The average production of rice in India is 14.25

quintals per hectare, while in national demonstration, it has been found 32.24 quintals per hectare Swami Nathan stated that the average yield of rice as produced by Tamilnadu farmers was over 50 quintal per hectare. The average yield of rice in Uttar Pradesh is 18.67 quintals and in eastern Uttar Pradesh 18.83 quintals per hectare, which is too less in comparison to its average gap hectare yields of Tamilnadu state. Now the basic issue arises that why this gap occurred and how it can be bridged.

MATERIAL AND METHODS

The study was conducted during 2011-2012 in order to study extent of knowledge of rice production technology regarding improved rice farming practices, at first selecting the block out of (23) community development block in Sultanpur district.

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The Baldirai block was selected purposively for this study because of the convenience and nearer to Narendra Dev University of Agriculture and Technology, Kumarganj. Besides, there was having sufficient grown area under rice crop, and the selection of villages, a list of all the villages in the block was prepared and ten villages were selected, 1.Haidhanakhurd, 2.Dewara, 3.Mohali, 4.Mejhuti and 5.Baghauna, through random sampling techniques. At the last stage of sampling, the list of respondents were prepared separately for each sample village and thus, a total number of 100 agro forestry famers from 5 sample villages were selected through proportionate random sampling

technique on the basis of size of land holding. An interview schedule was prepared in the light of decided objectives and variables undertaken, the knowledge extent about the cultivation of rice production technology was measured by using the knowledge test developed by Ernest. The knowledge extent was operationalized as the extent between recommended technology and actual known to the respondents at the time of investigation, farmers were individually interviewed. The questionnaire consisted close questions, all of which were translated into the local language. Appropriate statistics are used to draw inferences accordingly.

**Table-1 Distribution of respondents according to extent of knowledge about rice production technology
N=100**

S. No.	Categories (score)	Respondents	
		No.	Percentage
1	Low (up to 47)	33	33.00
2	Medium (48-68)	47	47.00
3	High (69 and above)	20	20.00
Total		100	100.00

Mean = 57.56, S.D. = 10.64, Min. = 31.00, Max = 78.00

The above Table-1 is summarized from 32 questions asked to respondents. It reveals the fact that the majority of the respondent (47%) was found possessing medium level of knowledge followed by 20 per cent high and 33 per cent respondent who had low level of knowledge respectively. The mean of scores

was found to be 57.56 with a range of minimum 31.00 and maximum 78.00 On the basis of above discussion it can be said that 47% respondents had medium level of knowledge regarding rice production technology.

Table-2 rice production technology practice wise knowledge extent of farmers

S.No.	Practices	Extent of Knowledge (%)	Rank Order
1.	Improved variety	59.00	XII
2.	Land preparation	86.5	II
3.	Seed rate	78.5	V
4.	Seed treatment	53.00	XIII
5.	Time of sowing	62.00	XI
6.	Spacing	62.6	X
7.	Method of sowing	69.00	VII
8.	Manure & fertilizer	81.6	IV
9.	Irrigation	77.5	VI
10.	Weeding	82.00	III
11.	Insect/pest control	67.00	IX
12.	Disease control	68.3	VIII
13.	Harvesting	53.00	XIII(A)
14.	Storage	100.00	I
	Overall average	71.71	

It is obvious from the table -2 that all the main practices viz, improved variety , nursery land preparation , method of sowing, fertilizer application ,irrigation ,weeding, insect pest control, disease control harvesting, storage. The practice like and storage was ranked Ist (100%) as for as knowledge possessed by respondents was concerned followed by land preparation ranked IInd (86.50), weeding IIIrd

(82.00), manure &fertilizer application IVth (78.50), seed rate Vth (77.50), irrigation VIth (69.00) , method of sowing VIIth (68.30), disease control VIIIth (67.00), insect control IXth (66.00), spacing Xth (62.60), time of sowing XIth (62.00), improved variety and seed treatment XIIth (59.00), harvesting XIIIth(A) (53.00) and XIIth(B) (53.00) with percentage, respectively.

Table-3 Correlation coefficient (r) between different variables and extent of knowledge about rice production technology. N=100

S. No	Variables	Correlation coefficient(r)
1	Age	-0.1679
2	Education	0.1166
3	Caste	0.1311
4	Family type	-0.1701
5	Family size	-0.2543**
6	Housing pattern	-0.1004
7	Land holding	0.2090*
8	Annual income	0.1267
9	Social participation	-0.0685
10	Agriculture experience	0.1011
11	Farm power	-0.0888
12	Communication media possession	0.1278
13	Mass media use	0.4532**
14	Economic motivation	-0.0897
15	Achievement motivation	-0.0151
16	Value orientation	0.0551
17	Scientific orientation	-0.0561
18	Adoption extent	0.2020*

*Significant at 0.05 probability level = 0.195

** Significant at 0.01 probability level = 0.254

It reveals from Table-3 that the variables like education, caste, family size, mass media use and adoption were found to have significant and positive relationship with the extent of knowledge of the respondents. It can be noted that the variables, namely age, education, caste, family type, housing pattern , land holding , annual income, social participation, farm power, communication media possession, economic motivation , achievement motivation and value orientation had no influence on knowledge of the respondents while those, showed the positive and significant relationship had direct influence over knowledge extent means that the value of

these variables is increased the extent of knowledge will also be increased .

CONCLUSION

The majority of the respondents (47%) were observed in the medium category of knowledge extent about rice production technology. The mean of scores of knowledge was found to be 57.56, all of 18 variables studied, the two variables namely family size and mass media use had highly significant ('land holding and adoption contact' moderately significant) and negative correlation with the extent of knowledge.

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