

KNOWLEDGE LEVEL OF RECOMMENDED PACKAGE OF PRACTICES BY PADDY GROWERS

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ABSTRACT

The present study was conducted in agricultural zone Bandipora of district Bandipora of Jammu and Kashmir state. Four villages were selected purposively on the basis of area under rice cultivation. From each selected village, 25 paddy grower were selected randomly but only those paddy growers were included who cultivated paddy over an area of ½ acre or more. Thus, total 100 growers were selected for the study. The “Ex-Post-Facto” design of social research was used for investigation. The findings indicated that (47.00%) of growers were in medium age group, (54.00%) educated up to middle school level, (67.00%) belonged to medium size of family comprising 6-10 members, (41.00 %) were possessed land holding ranging between 11-20 kanals, (83.00%) had agriculture as their main occupation, (69.00%) were having annual income upto Rs. 2 lakh, (52.00%) were having 11-20 years of experience in paddy cultivation, (51.00%) were observed having medium level of mass media exposure, (45.00%) had medium scientific orientation, (61.00%) had low extension contacts and (62.00%) had low social participation.

Keywords: knowledge, paddy, agriculture, food, growers.

INTRODUCTION

Paddy (*Oryza sativa* L.) is one of the important cereal crops of the world and forms the staple food for more than half of the world’s population and is known as “king of cereals”. In Asia, India has the largest area under the rice accounting for 28.5 per cent of the global rice area.

Rice is one of the most important food crop of India and stands first in area and second in total food production. Among the rice growing countries, India has the largest area under rice in the world (43.97 million ha) with a total production of 104.32 million tonnes during 2011-12 and it stood next only to China in the world with respect to production. In India, the highest area under paddy is in Uttar Pradesh (5.95 million ha), followed by West Bengal (5.46 million ha), Andhra Pradesh (4.10 million ha), Odisha (4.02 million ha), and Karnataka (1.39 million ha). Production-wise, West Bengal stands first (14.80 million tonnes), followed by Uttar Pradesh (14.03 million tonnes), Andhra Pradesh (12.89 million tonnes), and Karnataka (4.04 million tonnes). The highest yield is observed in the state of Punjab (3741 kg/ha) followed by Tamil Nadu (3423 kg/ha), Andhra Pradesh (3146 kg/ha) and Karnataka (2897 kg/ha) (Anonymous *et al.*, 2012).

The area under rice in Jammu and Kashmir is 0.3 million hectares with a productivity of 2123.4 kg/ha and

in Kashmir valley rice is grown over an area of 1.44 lakh hectares with a production of 3.8 lakh tons and a productivity of 2688.3 kg/ha (Anonymous *et al.*, 2016a)

Rice is the primary source of carbohydrates and proteins besides, rice also contains small quantities of fat, ash, fiber and moisture. It has a very high calorific value (363kcal) than any other cereal crop with easily digestible carbohydrates (80.40 per cent) and high quality protein (6.76 per cent) with biological value as high as egg protein, due to high content of amino acids.

In Bandipora District of J&K, the area under rice during 2016-17 was 11746 hectares (Anonymous *et al.*, 2016b). It has been found that the production levels over the decade have remained stagnant mainly due to poor and deteriorating soils. One of the probable reason could be that the farmers are not adopting the recommendations of SKUAST-Kashmir with respect to rice crop. In view of this fact the present study was conducted with the following objectives.

OBJECTIVES

- (1) To study the socio-economic profile of paddy growers
- (2) To know the knowledge of paddy growers regarding recommended package of practices

METHODOLOGY

The present research study was conducted in Bandipora district of Jammu and Kashmir state. In Bandipora district, Agricultural Zone Bandipora were purposively selected for the research. Four villages in agricultural zone Bandipora were randomly selected for research. From each selected villages, 25 growers were selected and a total sample of 100 paddy growers were selected for the research work.

These growers were considered on the basis of minimum ½ acre of land possessed under paddy cultivation. An interview schedule was developed with the help of scientists of SKUAST-Kashmir. Personal interview method was used for data collection. Data was collected by administering the structured interview schedule to the respondents. The questions were asked in local language i.e. Kashmiri. For the analysis of collected data suitable statistical procedures were used.

RESULTS AND DISCUSSION**Table-1: Selected characteristics of paddy growers**

(n= 100)

Sr. No.	Variable	Category	Respondents	
			F	P
1	Age	Young -18 to 35 years	30	30.00
		Middle-36 to 60 years	47	47.00
		Old- above 60 years	23	23.00
2	Education	Illiterate	16	16.00
		Primary school	07	07.00
		Middle school	54	54.00
		High school	08	08.00
		10 + 2	12	12.00
		Graduate and above	03	03.00
3	Family size	Small (upto 5 members)	18	18.00
		Medium (6-10 members)	67	67.00
		Big (above 10 members)	15	15.00
4	Total Land holding (20 Kanals=1 ha)	4-10 kanals	13	13.00
		11-20 kanals	41	41.00
		21-30 kanals	31	31.00
		Above 30 kanals	33	33.00
5	Occupation	Only Agriculture	83	83.00
		Agriculture + Business	09	09.00
		Agriculture + Service	08	08.00
6	Annual income	Low (up to 2 lakh)	69	69.00
		Medium (2-4 lakh)	21	21.00
		High (above 4 lakh)	10	10.00
7	Experience in paddy cultivation	Up to 10 years	15	15.00
		11-20 years	52	52.00
		Above 20 years	33	33.00
8	Extension contacts	Low	61	61.00
		Medium	29	29.00
		High	10	10.00
9	Mass media exposure	Low	34	34.00
		Medium	51	51.00
		High	15	15.00
10	Scientific orientation	Low	42	42.00
		Medium	45	45.00
		High	14	14.00
11	Social participation	Low	62	62.00
		Medium	23	23.00
		High	15	15.00

Note: N= Number of Respondents, F= Frequency, P=Per cent.

The data in Table-1 reveals that, majority (47.00%) of the respondents belonged to middle age group, followed by 30.00 per cent belonged to young age group and 23.00 per cent belonged old age group. These findings are in line with the findings of Dhayal and Mehta (2022).

It is clear from the Table-1 that, majority (54.00%) of the respondents were education up to middle school, 16.00 per cent were found illiterates, 12.00 per cent educated upto intermediate, 8.00 per cent were educated up to high school, 7.00 per cent had education up to primary school level and only 3.00 per cent of the respondents were graduates and above. The results are in line with the results of Raghuvanshi (2014).

It is clear from the Table-1 that, majority (67.00%) of respondents were having family size of 6-10 members followed 18.00 per cent and 15.00 per cent of the respondents were having family size of up to 5 members and above 10 members respectively. The findings are in line with the findings of Karangami *et al.* (2017).

The data in Table-1 shows that, majority (41.00%) of the respondents were having land holding of 11 to 20 kanals, followed by 33.00 per cent and 31.00 per cent of the respondents had above 30 kanals and 21-30 kanals of land holding respectively. Whereas 13.00 per cent of the respondents were having land holding of 4-10 kanals. The results are matched with the results of Dharmendra (2016).

The data presented in Table-1 reveals that, majority (83.00%) of the respondents were engaged only in agriculture, while 9.00 per cent of the respondents were engaged both in agriculture and business and 8.00 per cent of the respondents were engaged both in agriculture and service. The findings are in line with the findings of Meena *et al.* (2012).

It is clear from the Table-1 that, majority (69.00%) of the respondents were having low annual income, 21.00 per cent of the respondents were having medium level of annual income and 10.00 per cent of the respondents with high level of annual income. The results are in accordance with the results of Nazreen Hassan (2016).

It is clear from the Table-1 that, majority (52.00%) of the respondents were having 11-20 years of experience in paddy cultivation, followed by 33.00 per cent and 15.00 per cent of the respondents having above 20 years and upto 10 years of experience in paddy cultivation respectively. The

results are similar to the results of Ashok (2012).

The data presented in Table-1 reveals that, majority (61.00%) of the respondents were having low level of extension contacts, followed by 29.00 per cent of the respondents had medium level of extension contacts and only 10.00 per cent were having high level of extension contacts. The findings matched with the findings of Upadhyaya (2010).

From Table-1 it is evident that, majority (51.00%) of the respondents were having medium level of mass media exposure followed by 34.00 per cent and 15.00 per cent of respondents having low and high level of mass media exposure respectively. The results matched with the results of Kumari (2014).

From Table-1 it is clear that, majority (45.00%) of the respondents were having medium level of scientific orientation followed by 42.00 per cent and 14.00 per cent of the respondents having low and high level of scientific orientation respectively. The results are in line with the results of Devi (2012).

From Table-1 it could be seen that, majority (62.00%) of the respondents had low level of social participation followed by 23.00 per cent and 15.00 per cent of respondents having medium and high level of social participation respectively.

Knowledge of paddy growers regarding recommended package of practices

Table 2 : Overall knowledge level of paddy growers

(n=100)

Sr. No.	Categories	F	P
1	Low (18-22 score)	24	24.00
2	Medium (23-27 score)	71	71.00
3	High (28-32 score)	05	05.00

F= Frequency, P=Per cent.

The data in Table-2 revealed that, majority (71.00%) of the respondents were having medium level of knowledge, followed by 24.00 per cent and 05.00 per cent of the respondents were having high and low level of knowledge, respectively. The results are in line with the results of Biradar *et al.* (2013) and Karangami *et al.* (2017).

Relationship between socio-economic profile and Knowledge of paddy growers

Table 3: Relationship of independent variables of respondents with their knowledge level

(n=100)

Sr. No.	Variable	Correlation coefficients ('r' value)	'p' value
X ₁	Age	-0.233*	0.014
X ₂	Education	0.337*	0.003
X ₃	Family size	0.192*	0.037
X ₄	Total Land holding	0.183*	0.045
X ₅	Occupation	0.234*	0.017
X ₆	Annual income	0.332*	0.000
X ₇	Experience in paddy cultivation	0.367*	0.000
X ₈	Extension contacts	0.158 ^{NS}	0.083
X ₉	Mass media exposure	0.189*	0.027
X ₁₀	Scientific orientation	0.360*	0.000
X ₁₁	Social participation	0.173 ^{NS}	0.064

* 'p' value less than 0.05 implies that correlation is significant
NS- Non-significant

It can be inferred from Table-3, that education, family size, total land holding, occupation, annual income, experience in paddy cultivation, mass media exposure and scientific orientation of growers were significantly and positively related with the level of knowledge. The age of the respondents was negatively significant with the knowledge level of respondents as most of the farmers belonged to middle age category having medium level of knowledge regarding recommended package of practices. These findings are in line with Rathwa *et al.*, (2022) and Maheswaran *et al.*, (2022). The other variables, extension contacts and social participation were not associated with the knowledge level of respondents as farmers were not aware of various extension agencies which they could have contacted for getting information regarding package of practices and other services. This finding was in line with Bhandare *et al.*, (2014).

CONCLUSION

The data in the study revealed that majority (47.00%) of growers were middle aged, (54.00%) educated up to middle school level, (67.00%) belonged to medium size of family, (41.00 %) possessed land holding of 11-20 kanals, (83.00%) had agriculture as their main occupation, (69.00%) having annual income upto Rs. 2 lakh, (52.00%) had 11-20 years of experience in paddy cultivation, (51.00%) were observed having medium level of mass media exposure, (45.00%) had

medium scientific orientation, (61.00%) had low extension contacts and (62.00%) had low social participation. Majority (71.00%) of the paddy growers had medium level of overall knowledge followed by 24.00 per cent of the respondents had low and 5.00 per cent of the respondents had high level of overall knowledge regarding recommended package of practices of paddy.

POLICY IMPLICATIONS

The findings of the study and the inferences drawn can be generalized for the whole valley. Moreover the constraints faced by the respondents will help in reshaping the research, extension and the needed infrastructure for the adoption.

The findings of this study would be helpful to the extension worker and researcher working in the area for monitoring their programs to meet the present day need and enhance the knowledge and adoption level of the farmers thereby improving the health status of soil and enhancing the production level of paddy.

CONFLICT OF INTEREST

No conflict of interest among researchers.

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Received : October 2022 : Accepted : December 2022