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A STUDY ON ADOPTION BEHAVIOUR OF WHEAT GROWERS IN IMPROVED PRODUCTION PRACTICES IN WADRAFNAGAR BLOCK OF BALRAMPUR DISTRICT OF CHHATTISGARH

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ABSTRACT

The present study was conducted in the Balrampur district of Chhattisgarh. 120 respondents were selected from 10 villages of Wadrafnagar block. The data was elicited through personal interview method. From the study it was found that majority 58.33% of the respondents fell in the medium adoption level group, whereas 30.00 per cent respondents were observed in the high adoption level group and remaining 11.66 per cent respondents were low adoption level group. Independent variables, namely education, annual income, land holding, extension contact and social participation had positive and significant relationship with adoption while age, family size and family type shows non significant relationship with adoption of improved cultivation practices of wheat growers

Keywords: Wheat, Balrampur, Chhattisgarh.

INTRODUCTION

Agriculture research and Extension are two important factors of agricultural development. During the past independence period, considerable efforts have been made in the country resulting in appreciable increase in agriculture production. There is a need for change in our approach in identifying research priorities. Indian farmers are in general resource poor and there is a greater need for research on resource assessment and management. The name wheat is given to a number of species within the genus *Triticum* (family *Poaceae* Syn. *Gramineae*). *Triticum aestivum* is presently grown in India in almost all the wheat growing zones. This wheat is introduced in India by Borlaug of Mexico and wheat is frequently said to be the Mexican dwarf wheat. (Wadge, 2017)

Wheat takes second place to maize on a worldwide basis as feed grain for livestock. However, wheat grain can equal maize in energy value and often better than maize with respect to protein concentration. Wheat compares well with other important cereals in its nutritive value. It contains more protein than other cereals. Besides, its significance in characteristics substance “gluten” which is very essential for bakers. Wheat is commonly called as “king of cereals”. Wheat crop has wide adoptability. It can be grown not only in the tropical and subtropical zones but also in the cold tracts of the far north, beyond even the 60° north latitude. Wheat can tolerate severe cold and snow and resume growth with the setting in of warm weather in spring. It can be cultivated from sea level to as high as 3300 metres.

The present investigation is therefore, planned to study existing adoption level of farmers about improved wheat cultivation technology.

MATERIALS AND METHODS

The present study was conducted in the Balrampur district of Chhattisgarh. Balrampur District is a part of Ambikapur (Surguja) division. There are six blocks in Balrampur district. Out of which Wadrafnagar block was selected purposively for the study because of the largest cultivated area under wheat crop as compared to other blocks of the district. A complete list of all the major wheat growing villages was prepared in consultation with the personnel of revenue and agriculture department from the identified tehsils. The list so prepared, 10 villages from Wadrafnagar block were selected on the basis of maximum area under wheat cultivation. Thus, total 120 respondents were selected for the present investigation. For selection of respondents, a comprehensive list of small, marginal and large farmers of wheat growers was prepared with the help of village Patwari and agricultural supervisor of respective village. Total 120 wheat growers were included in the sample of study.

RESULTS AND DISCUSSION

Table 1: Distribution of wheat growers according to personal, socio-economic, and communicational characteristics

Characteristics	Frequency(N=120)	Percentage
Age group		
Below 35 years	28	23.33
36 to 55 years	68	56.67
Above 55 years	24	20.00
Total	120	100.00
Educational group		
Illiterate	34	28.33
Primary school	42	35.00
High School	18	15.00
Intermediate	16	13.33
Graduate and Above	10	08.34
Total	120	100.00
Size of land holding		
Less than 1 hectares	40	33.33
1 to 2 hectares	48	40.00
More than 2 hectares	32	26.67
Total	120	100.00
Annual income of respondent		
Below Rs. 50, 000	40	33.33
Rs. 50,001 to 1,00,000	48	40.00
Above Rs. 1,00,000	32	26.67
Total	120	100.00

Family size		
Small size (up to 5 members)	43	35.83
Large size (above 5 members)	77	64.16
Total	120	100.00
Family Type		
Nuclear families	76	63.33
Joint families	44	36.67
Total	120	100.00
Extension Contact		
Low	22	18.33
Medium	62	51.67
High	36	30.00
Total	120	100.00
Social Participation		
Low	25	20.83
Medium	68	56.66
High	27	22.50
Total	120	100.00

Distribution of wheat growers according to personal, socio-economic, and communicational characteristics

Majority of respondents belonged to the age group of 36 to 55 years. This group alone constitutes 56.67 per cent of the total sample. Majority of respondents belonged to the primary school education (35.00 %) and about 40.00 percent respondents have 1 to 2 ha. land. Maximum percentage of the respondents (40.00%) were found in annual income range of Rs. 50001 to 100000. majority of respondents *i.e.* 64.16 per cent were from large families and 63.33 per cent families were nuclear in their composition. Majority of respondents (51.67%) have medium extension contact and 56.66 % respondents have medium social participation.

Adoption level of wheat growers about their improved cultivation practices.

The adoption level of the wheat growers about their improved cultivation practices was measured with the help of adoption test development for the study. The respondents were categorized into three groups based on equal interval method as presented in Table 2.

Table 2: Adoption of wheat production practices by the respondents

S. No.	Aspects/ Practices	Adoption Level		
		Fully Adopted F (%)	Partially Adopted F (%)	Not Adopted F (%)
1.	Use of high yielding varieties	30 (25.00)	70 (58.33)	20 (16.66)
2.	Soil and soil treatments	40 (33.33)	65 (54.16)	15 (12.50)
3.	Field preparation	35 (29.16)	70 (58.33)	15 (12.50)
4.	Seed rate	38 (31.67)	62 (51.66)	20 (16.67)
5.	Recommended spacing &	55 (45.83)	50 (41.66)	15 (12.50)
6	depth	30 (25.00)	60 (50.00)	30 (25.00)
7.	Seed treatments	30 (25.00)	65 (54.16)	25 (20.84)
8.	Time & method of sowing	40 (33.33)	60 (50.00)	20 (16.67)
9.	Fertilizers application	27 (22.50)	63 (52.50)	30 (25.00)
10.	Use of micronutrients	32 (26.66)	68 (56.66)	20 (16.67)
11.	Weed managements	45 (37.50)	60 (50.00)	15 (12.50)
12.	Irrigation managements	51 (42.50)	45 (37.50)	24 (20.00)
13.	Plant protection measures	47 (39.16)	44 (36.66)	29 (24.16)

Table 3: Distribution of respondents according to their overall adoption level about improved cultivation practices of wheat

Adoption level	Knowledge	Frequency	Percentage
Low	(12 to 15)	14	11.66
Medium	(16 to 19)	70	58.33
High	(Above 19)	36	30.00
Total		120	100.00

Table 3 revealed that majority of the respondents 70 (58.33%) fell in the medium adoption level group, whereas 30.00 per cent respondents were observed in the high adoption level group and remaining 11.66 per cent respondents formed low adoption level group. It is hereby concluded that majority of farmers were having medium level of adoption followed by high and low adoption level, respectively.

Table 4: Relationship between selected variables of wheat growers and their level of adoption of recommended package of practices

S. No.	Independent variables	Correlation coefficient (r)
1.	Age	-0.086 NS
2.	Education	0.042**
3.	Annual income	0.248**
4.	Land holding	0.514**
5.	Family size	0.125 NS
6.	Family type	0.012 NS
7.	Extension contact	0.235**
8.	Social participation	0.175**

**** Correlation is significant at the 0.05 level of probability NS= Non-significant**

From Table 4 correlation analysis revealed that independent variables, namely education, annual income, land holding, extension contact and social participation had positive and

significant relationship with adoption while age, family size and family type shows non significant relationship with adoption of improved cultivation practices of wheat growers.

CONCLUSION

It was concluded that the socio-economic status of the respondents were medium level , practices wise adoption level of the respondents reveal that respondents had medium to high level adoption in the practices like irrigation management and field preparation, followed by harvesting and storage, fertilizer application and seed rate. Least adoption was observed in the practices plant protection measures.

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