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Knowledge of improved wheat production practices by farmers in Prayagraj district of Uttar Pradesh

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Abstract

The present investigation was conducted in Jasra block of Prayagraj district, Uttar Pradesh. One hundred twenty respondents were selected through multistage sampling from 20 villages jasra block of prayagraj district. The primary data were gathered by the researcher itself through pre-structured interview schedule. Appropriate statistical tools were used to interpret the collected data to draw logical conclusion. The finding that majority of respondents were having medium level of knowledge of improved wheat Production Practices. Age, Education, Land Holding, Mass Media Exposure, Extension Contacts and Economic Motivation were observed positive and significant correlation with their knowledge level.

Keywords: Knowledge, wheat, production practices

Introduction

India is one of the important wheat producing and consuming countries in the world. The important wheat growing states are Punjab, Haryana, Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Gujarat in India. Wheat is the most extensively grown cereal crop in the world, covering about 237 million hectares annually, and accounting for a total of 420 million tones.

Wheat (*Triticum aestivum*) the world's largest cereal crop belongs to Graminae (Poaceae) family of the genus Triticum. It has been described as the "King of cereals" **I.** because of the acreage it occupies, high productivity andthe prominent position in the international food grain trade. Wheat is consumed in a variety of ways such as bread, chapatti, porridge, flour, suji etc. For Wheat production target has been fixed in India for 2020 is 105.19 million tones against 100 million tones last year. Uttar Pradesh is the largest state with maximum contribution towards national production, but with productivity on a lower side of 2.7 tonnes/ha. The present study was conducted to access the socio-economic status of the respondents and to find out the knowledge of farmers improved wheat production practices by farmers in Prayagraj district of Uttar Pradesh.

Materials and Methods

The present study was purposively undertaken in jasra block of prayagraj district in Uttar Pradesh. Twenty villages were purposively selected on the basis of majority of farmers practicing wheat cultivation.

From each selected village, 10 farmers were selected randomly making a sample of 120 respondents.

Pretested interview schedule was used for collection of data. The collected data were classified, Tabulated and analyzed in the light of the objectives. Descriptive research design was followed and the variables were measured by using suitable scale and procedure adopted by various researchers in past with few modifications. Appropriate statistical tools were used to draw the inferences.

Results and Discussion

Socio - economic characteristics of the respondents

The socio-economic characteristics of the respondents were studied and the data are given below.

Table-1. Shows that majority (65.00%) of respondents belongs to middle level of age group. It was observed that (55.00%) of the respondents belongs to medium level (literate up to intermediate) category. It was found that (45.00%) of the respondents belongs to high level land holding (>2 ha), similarly it was observed that (55.83%) of the respondents belongs to high level of income i.e. above 80,000). It was found that (41.67%) of the respondents belongs to medium level of mass media exposure category, (41.67%) of the respondents belongs to medium level extension contacts category, (45.00%) of the respondents belongs to medium level economic motivation category. Similar result is also reported by Kumar and Bose (2013) [3].

Table 1: Socio - economic characteristics wise distribution of the respondents (N=120)

Age		
Category	**Frequency**	**Percentage**
(25 - 35 years)	12	10.00
(35 -55 years)	78	65.00
(Above 55 years)	30	25.00
Education		
Category	Frequency	Percentage
Illiterate	70	58.33
Primary School	12	10.00
Junior High School	20	16.67
High School	5	4.16
Intermediate	6	5.00
Graduate	3	2.50
Postgraduate	4	3.34
Size of Land Holding		
Category	Frequency	Percentage
Marginal Farmers	50	41.47
Small Farmers	35	29.17
Semi – Medium Farmers	25	20.83
Medium Farmers	10	8.33
Annual Income		
Category	Frequency	Percentage
Low (Upto Rs. 50,000)	16	13.34
Medium (Rs. 50,000 – 1,00,000)	37	30.83
High (above 1,00,000)	67	55.83
Mass Media Exposure		
Category	Frequency	Percentage
Low	38	31.67
Medium	50	41.67
High	32	26.66
Extension Contacts		
Category	Frequency	Percentage
Low	41	34.17
Medium	50	41.67
High	29	24.16
Economic Motivation		
Category	Frequency	Percentage
Low	32	26.67
Medium	34	28. 33
High	54	45.00

Table 2: Knowledge level of farmers Improved wheat production practices

Sl. No.	**Statements**	**Evaluation**		
		Fully correct F (%)	**Partially correct F (%)**	**Not correct F (%)**
1.	Field preparation Traditional method- 2-3 times ploughing se of zero tillage machine, Surface seeding method	60 (50.00%)	42 (35.00%)	18 (15.00%)
2.	Improved variety • DDW 47 • HDR 329 • DBW 187 • HD 3385	42 (35.00%)	47 (39.17%)	1 (25.83%)
3.	Seed and its treatment ▪ Vitavax ▪ Carbendazim ▪ Pseudomonas fluorescens	20 (16.16%)	64 (53.34%)	36 (30%)
4.	Sowing time ▪ October - December	41 (34.17%))	51 (42.50%)	28 (23.33%)
5.	Spacing ▪ 22.5 to 23 cm ▪ 15 to 18 cm ▪ 20 to 22.5 cm	40 (33.33%)	51 (42.50%)	29 (24.17%)

6.	Fertilizers ▪ 120:60:40 KgNPK/ha ▪ 90:60:40 kgNPK/ha	24 (20.00%)	74 (61.66%)	22 (18.34%)
7.	Irrigation ▪ 2 times ▪ 3 times ▪ 6 times	33 (27.50%)	60 (50.00%)	27 (22.50%)
8.	Weeding and hoeing operations ▪ 2 times ▪ 3 times ▪ 4 times	11 (9.17%)	47 (39.16%)	62(51.67%)
9.	Weed control ▪ Sulfosulfuron ▪ Metribuzin ▪ Clodinafop ▪ Fenoxaprop-p-ethyl	21 (17.5%)	71(59.16%)	28(23.34%)
10.	Diseases ▪ Yellow rust ▪ Black rust ▪ Common bunt ▪ Common rootrot ▪ Leaf blight	32(26.67%)	45(37.5%)	43(35.83%)
11.	Harvesting ▪ 80 - 90 days ▪ 90 - 100 days ▪ 100 - 110 days ▪ 110 - 120 days	33(27.50%)	37(30.83%)	50(41.67%)
12.	Yield ▪ 35-40 quintal/ha ▪ 20-25 quintal/ha ▪ 15-20 quintal/ha ▪ 25-35 quintal/ha	23(19.17%)	77(64.17%)	20(16.66%)

Table 3: Overall Knowledge level of farmers Improved wheat production practices of the respondents. (N=120)

Knowledge Level			
Category	**Knowledge Score**	**Frequency**	**Percentage**
Low level	(13-20)	25	20.83
Medium level	(21-27)	65	54.17
High level	(28-34)	30	25.00
Total		120	100.00

Table 4: Relationship between the selected independent variables with knowledge of farmers Improved wheat production practices. (N=120).

Si. No.	Variables	Correlation coefficient ('r'value)
1.	Age	0.9884713*
2.	Education	0.91766294*
3.	Size of Landholding	0.32231732*
4.	Annual income	0.0134255NS
5.	Mass media exposure	0.9011271*
6.	Extension contacts	0.75124363*
7.	Economic motivation	0.9994664*
*	=	Significant at 0.05 level of probability.
**	=	Significant at 0.01 level of probability.
NS	=	Non-Significant

Table-3 reveals that majority of the respondents (54.17%) fell in the medium knowledge level group, whereas (25.00%) per cent respondents were observed in the high knowledge level group and remaining (20.83%) percent respondents formed low knowledge level group. It is concluded that majority of farmers were having medium knowledge level followed by high and low knowledge level respectively. Table 4 Indicated that out of seven independent variables, six variables are i.e. age, education, size of landholding, mass media exposure, extension contacts, economic motivation positively and significantly correlated with knowledge of farmers improved wheat production practices whereas the independent variable annual income of the respondents was availed negatively and non- significantly correlated with knowledge of farmers improved wheat production practices.

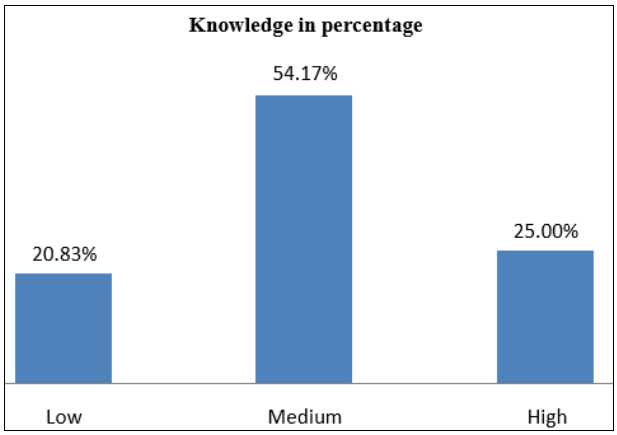

Fig 1: Table3 Knowledge in percentage of respondents

Conclusion

It was concluded that the socio-economic profile of the sample group were medium level. It was evident that the knowledge of farmers improved wheat production practices were found medium level. The factors influencing in knowledge of farmers improved wheat production practices are age, education, size of land holdings, mass media exposure, extension contacts, and economic motivation. Farmers should be trained by the Agriculture Scientists for seed treatment and timely availability of chemical specially culture should be ensured either by the Agriculture University or State Department of Agriculture. A regular mass media support at the appropriate technical articles in the newspaper, magazines etc. should be ensured for equipping the farmers with latest wheat production practices.

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