Indian Journal of Extension Education
Vol.47, No. 1 & 2, 2011 (113-116)

Awareness of Farmers Related Crop Production Technology in Sagar, Madhya Pradesh

D.K. Singh[1], U.S. Gautam[2], S.R.K. Singh [3]and N.K. Patle[4]

ABSTRACT

A large number of illiterate farmer in the country are in the habit of sticking with old farm practice. They are poorly educated having low credit flow from institutions which adversely effect the adoption of farm practices. Through up gradation in skill the farmer can able to under stand the new practice of agriculture technology and get benefit. Knowledge has been found to be an important factor contributing to the adaptation of innovation by farmers. The present investigation conducted in Sager district of M.P. The data were collected on 14 agronomical practice of 4 major crop Soybean, Arhar, Wheat and chick pea that whether they have aware or not. It has been again evidence from the study that awareness of the farmer about improve farm practice was very low in case of fertilizer requirement, improved verities, plant protection practices, optimum time of sowing and weed management as reported by majority of respondent data also revealed that their was correlation between awareness and education, caste, land holding, income, material possession, social participation and attitude. It is interesting to note that there still a big gap between the available crop production technology and technologies received and adopted by the farmer. Which altimetry affect the livelihood of the farmers.

Today our population is one billion the fast growing population is putting tremendous pressure on the agriculture sector of the country. A large number of illiterate farmer in the country are in the habit of sticking with old farm practice. They are poorly educated having low credit flow from institutions which adversely effect the adoption of farm practices. Majority of the farmers in the country are illiterate, they possess a very limited knowledge about the improved farm practices. The communication media like news papers, magazines, bulletin and posters are very little use to them.

Farmers training is an effective approach to teach them modern technology and also to improve their knowledge in farming, which ultimate help them in raising their standard of living.Training provides an investment in human beings and therefore the time, money an energy expanded over these are found to pay rich dividend, while imparting training the attitude of the trainers not only get sharpened but also would to suit the ever changing needs of environment, the society and the technology. Thus majority of the illiterate farmers need to have proper field training for increasing there farm production and also for improving their economic condition with the help of adopting the modern farm practice. Through up gradation in skill the farmers can able to under stand the new practices of agricultural technology and get benifits. Knowledge has been found to be an important factor contributing to the adoption of innovations by farmers. Several studies have reiterated this point (Shivrain and Dalal et.al., 1999) The following specific objective of the study was.

1. To asses the awareness of farmers related crop production practice.

[1] Subject Matter Specialist (Agril. Extension) KVK, Jabalpur, [2] Zonal Project Director Zone VII, ICAR, Jabalpur, [3]Sr. Scientist, ZPD, Zone-VII, Jabalpur, [4] Programme Assistant, (Agro forestry), KVK, Jabalpur

2. To study the relationship between awareness and characteristics of farmers

METHODOLOGY

The present investigation was conducted in Sager district have 11 blocks out of which 4 development block were selected by random sampling technique 2 villages from each selected block were selected by applying random sampling procedure from each village 30 respondent were selected randomly. Respondent were those who were cultivating soybean, arhar, wheat and chickpea. Thus, data was collected from 240 respondents through interview method with the help of well structured and pretested interview schedule.They were asked about 14 agronomical practices of 4 major crop soybean, arhar, wheat and chickpea that whether they have listen them or not. The awareness of farmers on four selected crop was measured on the basis of frequency. There were 14 multiple choice statements in the schedule one score were assigned for each correct answer. The minimum score was 1 and maximum score was 3 for each statement of one crop. The level of awareness was measured by calculating frequency and percentage for each crop and response was category in low, medium and high.

RESULT AND DISCUSSION

The responding farmers' were classified in to low, medium and high categories on the basis of their obtained awareness score. The frequency and percentage of the same are presented in table 1.

Table 1 Scoring methods for recording awareness about crop production technology

S.N	Agronomical Practices	Maximum	Total Score	Percentage obtained Score
1	Crop variety	12	3.68	30.67
2	Seed rate	12	9.47	78.92
3	Time of sowing	12	9.82	81.83
4	Seed treatment	12	10.46	87.17
5	Sowing method	3	2.9	96.67
6	Soil-testing	3	0.91	30.33
7	Fertilizer requirement	12	0.97	8.08
8	Advantage of fertilizer use	3	0.44	14.66
9	Irrigation management	12	2.19	18.25
10	Weed management	12	8.4	70
11	Soil & water conservation	3	0.6	20
12	Disease management	12	5.6	46.67
13	Use of farm implement	12	8.35	69.58
14	Produce sale	3	0.47	15.66

Table 2 Awareness of the farmer about crop production practice

S.N	Agronomical Practices	Level of Knowledge					
		Low		Medium		High	
		Freq-uency	Perce-ntage	Freq-uency	Perce-ntage	Freq-uency	Perce-ntage
1	Improved crop variety	180	75.00	44	18.33	16	6.67
2	Seed rate	90	37.50	77	32.08	73	30.42
3	Optimum time of sowing	204	85.00	30	12.50	6	2.50

4	Seed treatment	166	69.17	68	28.33	6	2.50
5	Sowing method	83	34.58	137	57.08	20	8.03
6	Soil-testing practices	34	14.17	164	68.33	42	17.50
7	Fertilizer requirement	185	77.08	47	19.58	8	3.33
8	Advantage of fertilizer use	162	67.50	94	32.08	1	0.42
9	Irrigation management	142	59.17	67	39.17	4	1.67
10	Weed management	168	70.00	67	27.92	5	2.08
11	Soil & wter conservation practice	136	56.67	100	41.67	4	1.67
12	Plant protection practices	215	89.58	24	10.00	1	0.42
13	Use of farm implement1	59	66.25	76	31.67	5	2.08
14	Produce sale and input purchased	116	48.33	102	42.50	22	9.17
	Overall	146	60.83	79	32.92	15	6.25

The data in table 2 reveals that the awareness of the farmers regarding agronomical practice shows that the 89.58% farmers are not much aware about plant protection practices while, 30.42 respondents level of awareness is high in case of seed rate .The over all picture shows that farmers are still unaware about most of the improved practices. It shows the poor level of awareness similar finding were reported by (Singh et.al., 2002).While in some other practices i.e. soil testing, sowing method, produce sale & input purches, soil water conservation, irrigation management, seed rate and use of important farm implements in terms of percentage 68.33%, 57.08%, 42.50% 41.67% 39.17%, 32.08% and 31.67% respondents have given average response respectively. This table clearly indicates that there is still a wide gap exist between the technology available and technology goes to the farmers for its adoption. Therefore, it can be said that there is great need of training to the farmers on crop production technology in all the crops in general and wheat, soybean, chickpea, and arhar in particular, all the four major crops taken under study. It is clear from the study that soybean and chickpea are quite popular crops in study area but there is still need of training to farmers about scientific method of crop cultivation.

Table 3 Awareness of the farmer about important component of crop production.

S.	Agronomical	Soybean			Arhar			Wheat			Chickpea		
No.	Practices	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
1	Improved varieties	76.67	16.25	7.08	99.17	0.83	0.00	40.42	43.33	16.25	84.58	12.50	2.92
2	Seed rate	25.83	44.17	32.92	75.42	20.00	4.58	36.67	25.42	37.92	13.75	38.75	47.50
3	Sowing Time	79.58	15.83	4.58	85.83	12.92	1.25	90.42	8.75	0.83	85.00	12.50	2.50
4	Seed treatment	54.58	40.42	2.92	84.17	14.58	1.25	69.17	29.17	1.67	67.50	29.17	3.33
5	Irrigation	91.25	8.75	0.00	98.33	1.67	0.00	8.33	85.58	7.08	37.92	62.08	0.00
6	Weed management	5.42	86.25	8.33	86.25	13.75	0.00	93.75	5.83	0.42	95.00	5.00	0.00
7	Management of disease & insect pest	79.17	20.83	0.00	99.17	0.83	0.00	93.75	5.83	0.42	86.25	12.92	0.83
8	Farm machinery	58.33	37.08	4.58	65.42	34.17	0.42	70.83	27.50	1.67	71.25	27.08	1.67

The table 3 reveled that about awareness of the farmers in the agronomical practices under crop production in soybean, Arhar and Chickpea came under low categories expect wheat come under medium categum. In using seed rate of Soybean and Arhar medium to Low category but in wheat and chickpea were using high seed rate. Sowing time and seed rate come under low category of awareness, but in soybean weed management come under medium category. Farm machinery and plant protection were very important component but there were found low awareness among the farmers.

Table-4: Correlation coefficient between awareness and independent variables

S. No.	Independent variables	Correlation with awareness
X_1	Age	0.0775
X_2	Education	0.2552**
X_3	Caste	0.4031**
X_4	Family type	0.1428
X_5	Family size	0.1157
X_6	House	0.1893
X_7	Land holding	0.7135**
X_8	Occupation	0.1773
X_9	Income	0.6479**
X_{10}	Material possession	0.6394**
X_{11}	Social participation	0.4250**
X_{12}	Extension contact	0.2215*
X_{13}	Mass media exposure	0.1381*
X_{14}	Economic Motivation	0.0142
X_{15}	Attitude	0.2550**
X_{16}	Aspiration	0.2138*

The result indicate that (Table 4) the variables like education, caste, landholding, income, material possession, social participation, and attitudes of the respondents are positive and significantly correlated with their awareness at P= 0.01 level (This finding gets support from, Nagabhushanam,1998). Further, the association of extension contact, mass media exposure and aspiration have positive and significant correlation with awareness at P= 0.05, others like age, family type and size, type of house and economic motivation of the farmers did not show any significant relationship with their awareness.

CONCLUSION

It has been again evidenced from the study that awareness of the farmers about improved farm practices was very low in case of fertilizer requirement, improved verities, plant protection practices, optimum time of sowing and weed management as reported by majority of respondents. It is interesting to note that there still a big gap between the available crop production technology and the technology received and adopted by the farmers. The awareness is affected mainly by the variables like education, caste, land holding, income, material possession , social participation and attitude.

REFERENCE

Shivrain,D.K. and Dala,R.S. et.al. (1999) Farmer Knowledge of gram production technology in Hariyana. Annals of biology-Ludhiana.15 (1): 103-105.

Singh,A.K.; Singh,G.P. and Singh Baldeo (2002) Correlates of farmers Knowledge of Improved Chickpea production technology. Indian. Journal of Extn.Edu. 38 (3 & 4): 162-167.

Nagabhushanam, K. (1998) Assessment of Knowledge and skill gained by farm women through institutional training. Madras Agril.Journal . 85 (1) : 26-28.