IMPACT OF TRAINING ON PRODUCTION LEVEL OF MUSTARD

Vivek Sharma[1], S.K. Sharma[2] & M.S. Kakran[3]

The present growth rate of population in India demands increase in production to ensure food requirement for every human being. In this view, Krishi Vigyan Kendra (S) were started throughout the country to provide four important functions viz. demonstrations, vocational training to farmers and farm woman, in service training to extension workers and on farm trials (Prased, 1990). Out of these function, vocational training plays vital role to set the stage for innovation dissemination systems in action.

The results of the training conducted by various KVK's and other training programme show that the participating (trained) farmers produce higher yield of the mustard than the non-participating (untrained) farmers. Therefore, the present study was under taken with following specific objectives.

(1) To assess the level of production of mustard crop among participating and non-participating farmers.

(2) To analyse the relationship between dependent variable (Production level) and independent variables of participating farmers.

METHODOLOGY

The Krishi Vigyan Kendra is in operation since 1994 at Tikamgarh. Hence, Tikamgarh block of Tikamgarh district of M.P. was selected purposively. The four villages were selected randomly out of seven villages where Krishi Vigyan Kendra has imparted training programme on improved mustard production technology to the farmers from each selected village. Two lists of farmers, participating and non-participating were prepared and from each list fifteen farmers were selected randomly. Thus, the information pertaining to the objective was collected from 60 participating and 60 non-participating farmers with the help of interview schedule. Statistical test i.e. frequency, percentage, mean deviation, z-test and correlation coefficient were used for analyzing and interpreting the data.

RESULTS AND DISCUSSION

Trainings Received–Table1 reveals a majority of participating farmers i.e. 46.67 percent had attended more than five trainings 33.33 percent 3to 5 training whereas 20 percent had attended only 2 or less than 2 training organized by KVK on improved technology of mustard.

Table 1. Distribution of participating farmers according to number of training received

S. No.	No. of trainings received	Participating farmers	
		No. of respondents	Percentage
1.	Up to 2 trainings	12	20.00
2.	3 to 5 trainings	20	33.33
3.	5 and above	28	46.67
	Total	60	100.00

Assessment of Production Level–The data in table 2 indicates that majority of 43.33 percent of participating farmers was observed under medium production level, 40 percent had high production level and 16.67 percent low production level. Whereas, in case of non-participating farmers, 58.33 percent had low production, 28.33 percent medium production and only 13.33 percent had high production level of mustard crop.

1. Ex.-PG. Student, 2. Reader Ag. Ext. 3, Reader, Ag. Statistics, College of Agril. Gwalior.

Table 2. Distribution of respondents according to their production level of mustard crop

S.No.	Adoption level (per quintal)	Participating farmers		Non-participating farmers	
		No. of respondents	Percentage	No. of respondents	Percentage
1.	Low production (up to 2)	10	16.66	35	58.33
2.	Medium production (2 to 4)	26	43.33	17	28.33
3.	High production (above 4)	24	40.00	8	13.33
	Total	**60**	**100.00**	**60**	**100.00**

Therefore, it is concluded that production level of the participating farmers was higher than the production level of the non-participating farmers.

Table 3. Mean production level of participating and non-participating farmers

S. No.	Respondents	Production level			
		No.	Mean	S.D.	'Z' Value
1.	Participating farmers	60	3.67	0.535	12.26**
2.	Non-participating farmers	60	2.58	0.697	12.26**

Table 3 reveals that the production level of participating farmers who had received training on mustard production technology organized by Krishi Vigyan Kendra had higher production level than nonparticipating farmers as shown by 'Z' test.

Relationship Among Independent Variables (characteristics) of the Participating Farmers :

To asses the relationship among different independent variable correlation coefficient. ('r' values) were computed. The data presented in table 4 indicate the inter correlation among the independent variable of age (X_1), caste (X_2), education (X_3) farm size (X_4), number of training received (X_5), scientific orientation (X_6), knowledge of improved mustard production technology (X_7) adoption of improved mustard production technology (X_8), utilization source of information (X_9) and contact with development agency (X_{10}).

Table 4. Zero order inter-correlation among independent variables of participating farmers.

Independent variable	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}
X1	0.045	-0.239	-0.032	-0.243	-0.139	-0.221	-0.184	-0.309*	-0.153
X2		0.265*	0.193	0.401**	0.228	0.228	0.168	0.203	0.276*
X3			0.359*	0.799**	0.691**	0.714**	0.641**	0.697**	0.606**
X4				0.274*	0.234	0.108	0.146	0.122	0.134
X5					0.645**	0.738**	0.655**	0.704**	0.581**
X6						0.605**	0.664**	0.643**	0.608**
X7							0.901**	0.674**	0.552**
X8								0.653**	0.549**
X9									0.706**

* Significant at p=0.05** significant at p= 0.01

Table 4 reveals that education (X_3) had significant and positive relationship with knowledge (X_7) and adoption (X_8) of improved mustard technology, utilization source of information (X_9) and contact with development agency (X_{10}) number of training received (X_5) had significant and positive relationship with scientific orientation (X6), knowledge of improved mustard production technology (X_7), adoption of improved mustard production technology (X_8), utilization source of information (X_9) and contact with development agency (X_{10}).

Knowledge of improved mustard technology (X_7) had highly significant and positive relationship with adoption of improved mustard production technology (X8), utilization source of information (X9), contact with development agency (X10), education (X3), number of training received (X5) and scientific orientation (X6). Adoption of improved mustard production technology (X8) had highly significant and positive relationship with education (X3), number of training received (X5), scientific orientation (X6), knowledge of improved mustard production technology (X7), utilization source of information (X9) and contact with development agency (X10).

Relationship of Independent Variables of Participating Farmers with Dependent Variable(production level of mustard crop)

The table 5 of zero order correlation coefficients between dependent variable (production level) and other independent variables indicates that caste, education, farm size number of training received, scientific orientation, knowledge of improved mustard production technology, adoption of improved mustard production technology, utilization of information source and contact with develop-ment agency were positively correlated and significant highly with production level. These finding are supported with the work of Jondhale et. al. (2000), Singh and Verma (1998), Swarankar & Chauhan (1993) and Sharma & Singh (2001). It is also observed that variable age, is found significantly and negatively related with production level of mustard crop. This finding is supported with the finding of Dikle et. al. (1994).

During the survey, the suggestions given by the participating farmers for improvements of training programmes were noted and ranked as per their merits e.g. the farmers advocated that their participation should be necessary during the determining of training programme, need based training should be organized, training should be orgnised when farmers are free from farming operations, training should be practically oriented and size of the training group should not be lengthy.

Table 5. Zero order correlation between independent variable and dependent variable

S. No.	Independent Variables	Y Dependent variable (Production level)
1.	Age	-0.189*
2.	Caste	0.351**
3.	Education	0.793**
4.	Farm size	0.305*
5.	Number of trainings received	0.853**
6.	Scientific orientation	0.639**
7.	Knowledge of improved mustard production technology.	0.809**
8.	Adoption of improved mustard production technology	0.745**
9.	Utilization of information source	0.737**
10.	Contact with development agency	0.642**

* Significant at p=0.05 ** significant at p= 0.01

CONCLUSION

It is concluded from the findings that the proportion of participating farmers was higher than the proportion of untrained farmers appearing in high level of production of mustard crop. Thus, there was a significant impact of KVK's training on production level of mustard crop.

REFERENCES

1. Dekle, R.N., Mahajan, B.S. and Deshmukh, N.D. (1994). Correlates of yield of Jowar crop by farmers in progressive and non-progressive district, *Maharashtra J. Extn. Edu.* **13**:125-129.
2. Jondhale, S.G. Ingale, L.A. and Patak, U.N. (2000). Impact of krishi vigyan kendra training on adoption of improved practices of summer groundnut *Maharashtra J. Extn. Edu.* **19** :109 - 111.
3. Sharma, B.K. and Singh, V.B. (2001). Correlates of adoption of mustard technology by small farmers in Manipur state. *India Res. J. Extn. Educ.* **1**: 46 - 51.
4. Singh, Meera and Verma, N.C. (1998). Effectiveness of training in changing attitude of tribal women towards nutrition practices. *Maharastra J. Extn. Edu.* **15**:140 - 143.

• • •