KNOWLEDGE AND EXTENT OF ADOPTION OF TRIBAL FARMERS ABOUT RECOMMENDED AGRICULTURAL TECHNOLOGIES TRANSMITTED BY KVK

G. J. Chaudhary[1], R.S.Prajapati[2] and R.N.Patel[3]

1 PG Student, Department of Extension Education, CPCA, Sardarkrushinagar - 385 506
2 Planning Officer, SDAU, Sardarkrushinagar - 385 506
3 Agriculture Officer, Deptt. of Ext.Edu, CPCA, SDAU, Sardarkrushinagar - 385 506
Email: gopalchaudhry90@gmail.com

ABSTRACT

The present investigation was an attempt to know knowledge and extent of adoption of farmers about recommended agricultural technologies transmitted by KVK. Sabarkantha district was selected purposively total three talukas viz., Khedbrahma, Vijaynagar and Poshina were selected on the basis of activities carried out by KVK during the decade. Six villages were selected from the above selected talukas on the basis of activities carried out by KVK. These selected villages were considered as experimental villages in the present study. To select a control group of respondents, six villages were taken from same talukas where KVK has not undertaken any activities; such villages were termed as control villages in the present investigation. Thus, in all 12 villages were included in the study sample. For selection of respondents, a comprehensive list of the beneficiary farmers from each experimental village has prepared with the help of KVK personnel and 10 respondents were selected randomly from each selected village and considered as beneficiary respondents. Thus, the total sample was comprised of 120 (60 beneficiaries and 60 non-beneficiaries) respondents. It can be concluded that a majority *55.00 per cent beneficiary and 48.34 per cent of the non-beneficiary respondents had medium level of knowledge about recommended agricultural technologies transmitted by KVK. It was observed that 53.33 per cent and 46.67 per cent beneficiary and non-beneficiary respondents were found having medium extent of adoption of recommended agricultural technologies transmitted by KVK respectively.*

Keywords: *knowledge, extent of adoption, KVK*

INTRODUCTION

Krishi Vigyan Kendra (KVK) continues to play a vital role in carrying out the latest agricultural technology from laboratories to the field and also carrying back the field problems to the laboratories for their solution. The training camps organized by KVK at the district, block and village levels for imparting latest technology to the farmers are very effective. Such training camps are organized during kharif and rabi seasons every year. In addition, specific training camps are organized for production aspects. In these camps, the subject matter specialist of various disciplines imparts skill-oriented training to the farmers through learning by doing methods.The study was undertaken with the following specific objectives.

OBJECTIVES

(a) To measure the knowledge of tribal farmers about recommended agricultural technologies transmitted by KVK

(b) To ascertain the extent of adoption of recommended agricultural technologies transmitted by KVK among the tribal farmers

(c) Association between independent variables of tribal beneficiaries and their knowledge and adoption

METHODOLOGY

The present study was confined to ex-post facto research design as the independent variables have already operated in the study area. Kerlinger (1976) stated that ex-post facto research design is worthy to apply when the independent variables have already acted upon. Hence, it was applied in the present study. Multistage random sampling technique was used for present study. Sabarkantha district was selected purposively because KVK is functioning in Sabarkantha district and is dominating with respect to tribal

population. The district consists of 08 talukas, out of which three talukas viz., Khedbrahma, Vijaynagar and Poshina were selected on the basis of activities carried out by KVK during the decade. Six villages were selected from the above selected talukas on the basis of activities carried out by KVK. These selected villages were considered as experimental villages in the present study. To select a control group of respondents, six villages were taken from same talukas where KVK has not undertaken any activities; such villages were termed as control villages in the present investigation. Thus, in all 12 villages were included in the study sample. For selection of respondents, a comprehensive list of the beneficiary farmers from each experimental village has prepared with the help of KVK personnel and 10 respondents were selected randomly from each selected village and considered as beneficiary respondents. Thus, the total sample was comprised of 120 (60 beneficiaries and 60 non-beneficiaries) respondents.

RESULTS AND DISCUSSION

Table 1: Distribution of respondents according to knowledge level **n = 120**

Sr. No.	Level of knowledge	Beneficiaries (n=60)		Non –beneficiaries (n=60)		'Z' Value
		Frequency	Per cent	Frequency	Per cent	
1	Low (below 41.00 score)	12	20.00	20	33.33	3.648**
2	Medium(between 41.00 to 58.00 score)	33	55.00	29	48.34	
3	High(above 58.00 score)	15	25.00	11	18.33	

Mean: 50.35 S.D: 8.41 ** Significant at 0.01 percent level

The results in Table 1 indicates that majority of the beneficiary respondents (55.00 per cent) were having medium level of knowledge followed by 25.00 and 20.00 per cent had high and low level of knowledge about recommended agricultural technologies transmitted by KVK, respectively. Whereas, 48.34 per cent non-beneficiary respondents were having medium level of knowledge followed by 33.33 and 18.33 per cent had low and high level of knowledge about recommended agricultural technologies transmitted by KVK, respectively. Thus, it can be concluded that majority (80.00 per cent) of beneficiary and 66.67per cent non-beneficiary respondents have medium to high level of knowledge about recommended agricultural technologies transmitted by KVK.

The calculated 'Z' value (3.648**)was found highly significant indicating there was significant difference between beneficiary and non-beneficiary respondents with respect to their level of knowledge about recommended agricultural technologies transmitted by KVK.

The probable reason for having significant difference may be that beneficiary farmers were having better participation in the training programme organized by KVK. In depth training was also provided to participating farmers covering full package of practice. The beneficiary farmers were found having close contact with KVK scientists and also medium level of extension contact.

Table 2: Distribution of respondents with respect to extent of adoption of recommended agricultural technologies

n = 120

Sr. No.	Extent of adoption	Beneficiaries		Non –beneficiaries		'Z' Value
		Frequency	Per cent	Frequency	Per cent	
1	Low(below 36.00 score)	16	26.67	23	38.33	4.076**
2	Medium (between 36.00 to 57.00 score)	32	53.33	28	46.67	
3	High(above 57.00score)	12	20.00	09	15.00	

Mean: 46.73 S.D:10.37 ** Significant at 0.01 percent level

The results in Table 2 reveals that slightly more than half (53.33 per cent) of the beneficiary respondents were having medium extent of adoption followed by 26.67 and 20.00 per cent were having high and low level of extent of adoption of recommended agricultural technologies transmitted by KVK among the tribal farmers, respectively. Whereas, in case of non-beneficiary respondent's majority 46.67 per cent were having medium extent of adoption followed by 38.33 and 15.00 per cent were having low and high level of adoptionof recommended agricultural technologies transmitted by KVK among the tribal farmers, respectively. Thus, it can be stated that majority (73.33 per cent) of the beneficiary and 61.67 per cent non-beneficiary respondents have medium to high level of extent of adoptionof recommended agricultural technologies transmitted by KVK among the tribal farmers.

The calculated 'Z' value (4.076**) was found significant indicating there was highly significant difference between beneficiary and non-beneficiary respondents with respect to their extent of adoption of recommended agricultural technologies transmitted by KVK among the tribal farmers.

The probable reason for this might be that they had medium level of knowledge, moderately favourable attitude possessed by most of the beneficiary respondents. Also medium extension contact, scientific orientation, innovativeness as well as several constraints they faced and limited resources with them. Another reason might be due to sincere efforts put forth by implementing agencies *i.e*. Krushi Vigyan Kendras, Khedbramha to communicate the beneficiary farmers of Sabarkantha district.

It was observed from table 3 that the variables *viz.*, education, size of land holding, annual income, social participation, achievement motivation, scientific orientation, innovativeness and extension contact had positive and significant associations with knowledge level of the beneficiary farmers about recommended agricultural technologies transmitted by KVK. Age and size of family and occupation were found non-significant association with knowledge level of the beneficiary farmers about recommended agricultural technologies transmitted by KVK.

Table 3: Association between independent variables of tribal beneficiaries and their knowledge

n=60

Sr. No.	Independent variables	Correlation coefficient ('r' value)
A	**Personal attributes**	
X_1	Age	0.0398^{NS}
X_2	Education	0.3763**
X_3	Size of family	-0.0773^{NS}
B	**Socio-Economic Attributes**	
X_4	Size of land holding	0.2627*
X_5	Annual income	0.2565*
X_6	Occupation	0.1135^{NS}
X_7	Social participation	0.2982*
C	**Psychological Attributes**	
X_8	Achievement motivation	0.3426**
X_9	Scientific orientation	0.3663**
X_{10}	Innovativeness	0.2512*
D	**Communication Attribute**	
X_{11}	Extension contact	0.3408**

* = Significant at 0.05 per cent level ** = Significant at 0.01 per cent level NS= Not Significant

Table 4: Association between independent variables of tribal beneficiaries and their adoption

n=60

Sr. No.	Independent variables	Correlation coefficient ('r' value)
A	**Personal Attributes**	
X_1	Age	0.0185^{NS}
X_2	Education	0.3737**
X_3	Size of family	0.0307^{NS}
B	**Socio-Economic Attributes**	
X_4	Size of land holding	0.3149*
X_5	Annual income	0.3378**
X_6	Occupation	0.1417^{NS}
X_7	Social participation	0.3413**
C	**Psychological Attributes**	
X_8	Achievement motivation	0.2523*
X_9	Scientific orientation	0.2766*
X_{10}	Innovativeness	0.3164*
D	**Communication Attribute**	
X_{11}	Extension contact	0.2689*

* = Significant at 0.05 per cent level
** = Significant at 0.01 per cent level NS = Not Significant

In Table 4 seen that variables *viz.*, education, size of land holding, annual income, social participation, achievement motivation, scientific orientation, innovativeness and

extension contact were found having positive and significant association with adoption of recommended agricultural technologies transmitted by KVK. Age, size of family and occupation were found non-significant association with extent of adoption of recommended agricultural technologies transmitted by KVK among beneficiary farmers.

CONCLUSION

It can be concluded that majority 55.00 per cent beneficiary and 48.34 per cent of the non-beneficiary respondents had medium level of knowledge about recommended agricultural technologies transmitted by KVK. It was observed that 53.33 per cent and 46.67 per cent beneficiary and non-beneficiary respondents were found having medium extent of adoption of recommended agricultural technologies transmitted by KVK respectively. It was observed that the variables *viz.*, education, size of land holding, annual income, social participation, achievement motivation, scientific orientation, innovativeness and extension contact had positive and significant associations with knowledge level of the beneficiary farmers about recommended agricultural technologies transmitted through KVK. In case of adoption the variables *viz.*, education, size of land holding, annual income, social participation, achievement motivation, scientific orientation, innovativeness and extension contact were found having positive and significant association with adoption of recommended agricultural technologies transmitted by KVK.

REFERENCES

Dhaneshwar, S.; Patel, B.B.,Verma,L.R.(2013) Knowledge and extent of adoption of farmers regarding recommended agricultural technologies transmitted by KVK. *Agriculture update.* 8(1&2):156-159

Kerlinger, F.N. (1976). Foundations of behavioural research., Surjeet Publications, New Delhi, :198-204.

Patel K.S. (2004). Impact of KrishiVigyan Kendra, deesa on behavioural change of farmers of Banaskantha district. M.Sc (Agri.) Thesis (Unpublished). Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar,

Patel, Mahesh R., Patel, D. D. and Desai, Jaydip D. (2016). Relationship between Migration Habit and Contribution of Tribal Farm Women in Agriculture and Animal Husbandry. *Guj. J. Ext. Edu.*, 27(2): 180-181

Pokar, M.V (2008). An evaluation of front line demonstration of kharif groundnut production technology organized by Krishi Vignan Kendra, Deesa during 2001-2005, M.Sc. (Agri.) Thesis (Unpublished). Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar.

Prajapati, R.S. (2006). Impact of frontline demonstrations on knowledge and adoption of improved pulse production technology by the farmers of North Gujarat. Ph.D. Thesis (Unpublised). Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar.

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