



## BEHAVIORAL CHANGE OF ADOPTED FARMERS IN KRISHI VIGYAN KENDRA IMPHAL EAST DISTRICT OF MANIPUR

**M. Universe Singh<sup>1</sup>, Daya Ram and M. Deepa Devi**

Department of Extension Education, College of Agriculture, Central Agricultural University, Imphal-795 004 (Manipur)

<sup>1</sup>Directorate of Agriculture, Imphal-795 004 (Manipur)

E-mail : d.dram@rediffmail.com

### ABSTRACT

The present investigation is designed to study of KVK on behavioural change of farmers. In the present era of technological development, agricultural technology is advancing at a high speed. The progress in agriculture to a large extent depends on the quick and effective dissemination of new agricultural practices among the farmers and feeding back the farmer's problem to search station for their solution. Imphal-East District of Manipur was selected purposively for present study. Ex-post facto research design was employed. There are three blocks under Imphal-East District. Total eight villages, 4 four adopted villages and 4 non-adopted were selected randomly in the block for present study. A Sample of 120 farmers, 60 adopted farmers & 60 non-adopted farmers was selected based on stratified random sampling with proportional allocation method. It was found that 60.00 per cent of the adopted respondents were possessed medium knowledge followed by 28.33 per cent with high level of knowledge and remaining 11.67 per cent respondents was possessed low knowledge regarding KVK activities. As far the non-adopted was concerned 50.00 per cent respondents were found to have medium level of knowledge, followed by 26.67 per cent in the low knowledge group and only 23.33 per cent respondents was possessed high knowledge regarding KVK activities. Majority of respondents of both the categories fell under medium level of knowledge about KVK activities. Further the number of adopted in higher knowledge group 28.33 per cent was more than non-adopted 23.33 per cent.

Key Words : **Knowledge, Adoption, Dependent and Independent variables**

In India, more than 70 per cent population lived in rural areas and 60 percent of its population is in agriculture directly or indirectly. Agriculture contribute around one fourth of our GDP (Gross Domestic Product). The demand for food grains in India is

expected to rise not only as a function of population growth but, also as more and more people across the poverty line with economic and social development.

During early 1970's at the instance of the planning commission government of India and with the initiative

of the then union agricultural minister Dr. C. Subramaniam, this noble project Krishi Vigyan Kendra (KVK) came into being after a special committee, headed by Mr. Mohan Singh Mehta, constituted for the purpose, recommended for its establishment. KVK is one of the major extension institutions of the Indian council of agriculture research (ICAR) aiming at technology transfer. KVK's are playing a vital role across the rural economy in areas as diverse as animal husbandry, horticulture, plant protection and food processing. The KVK is repository of scientific knowledge for and its allied disciplines and which can be transmitted through effective extension means to the farmers who in turn can use this knowledge to improve the production and productivity in their farm operations. KVK not only have latest scientific knowledge on agriculture and its allied discipline, but also this is being transferred by the scientists and other technical persons who are well versed with the science and technology of agriculture and its appropriate applications. The present investigation is designed to study of KVK on behavioural change of farmers. In the present era of technological development, agricultural technology is advancing at a high speed. The progress in agriculture to a large extent depends on the quick and effective dissemination of new agricultural practices among the farmers and feeding back the farmer's problem to search station for their solution. This is unanimously accepted that success of any extension activity depends on the ability and expertise of the extension staff to speedy delivery and direct flow of information to the clientele system at the right time in the most appropriate manner. KVKs are established in almost all the districts of Manipur. They are basically the institutions for developing the human resource of the district in agriculture and allied fields. To carry out its functions each KVK is attached with a large instructional farm and other necessary infrastructural facilities.

India is endowed with 183 million hectares of cultivable land conducive are agro climatic advantage for cultivation of number of crops. With the hard work of 115.6 million farming families and several million of

landless labourers, the production of food grains has scaled up to 216 million tons during 2005-06. The country which depended once upon a time imported food grains to feed her millions has now emerged strong with food security. The country has displayed its strength to export food grains. Over two thirds of Indian population continues to depend upon agriculture for sustenance. With their hard work they feed the whole of over 1060 million people. But it is a paradox that over 260 million dependent on agriculture continue to suffer under the clutches of poverty and hunger. Agriculture accounts for 26 per cent of India's economy and 64 per cent of labour force. In some states, it accounts for 40 per cent of the domestic product. Agriculture also accounts for 18 per cent of India's exports. Agriculture growth has an impact on poverty eradication. Its development also helps in containing inflation, raising agricultural wages and increasing employment generation. The present growth rate of population in India demands a production of additional 5-6 million tonnes of food grains every year for ensuring food security of the country. This is a major challenge for the policy makers, planners, administrators, agricultural scientists and extension workers of the country. These calls for the reassessment of the existing roles, mission and strategies related to technology generation, technology assessment and refinement and dissemination in the field of agriculture and allied sectors. Considering the major challenges in agriculture including the need for enhanced productivity and enhanced profitability there is a need for effective technology dissemination. Keeping these in view a study was conducted to existing level of knowledge of farmers' in terms of various activities of KVK.

## **MATERIALS AND METHODS**

Imphal-East District of Manipur was selected purposively for present study. Ex-post facto research design was employed. There are three blocks under Imphal-East District. Total eight villages, 4 four adopted villages and 4 non-adopted were selected randomly in the block for present study. A Sample of 120 farmers, 60 adopted farmers & 60 non-adopted farmers was

selected based on stratified random sampling with proportional allocation method. The primary data was collected using pre-tested structured interview schedule. Analysis of primary data was carried out using multidimensional scaling technique of SPSS-16 besides conventional correlation analysis as part of exploratory approach of data analysis.

## RESULTS AND DISCUSSION

Table 1 reveals that adopted farmers was posses (I) rank in training, what is KVK and their establishment and field day followed by demonstration in (II) rank, distribution of seeds posses (III) rank, on farm research posses (IV) rank, operational area of KVK posses (V) ranks, sponsoring agency of KVK and farmers scientist interaction posses (VI) ranks, educational tour posses (VII) rank, who runs these institutions posses (VIII) rank, and finally campaign and soil testing posses (IX) rank. They ranked these I & II respectively. In case of non-adopted farmer Training was posses (I) rank, What is KVK and their establishment was posses (II) second, Field day was posses (III) third, operational area of KVK and distribution of seeds was posses (IV) rank, Demonstration was posses (V) rank, Educational tour

was posses (VI) rank, Campaign and sponsoring agency of KVK was posses (VII) rank, on farm research and soil testing was posses (VIII) rank and finally farmers scientist interaction was posses (IX) rank. This finding is partially supported by the findings of Singh (3) and Sharma *et al.* (2).

To get an overall view of the respondents, they were categorised into three knowledge categories on the basis of knowledge score obtained viz., low, medium and high. These categories were formulated on the basis of calculated mean score and standard deviation. The results have been presented in Table 2.

A perusal of data presented in Table 2 visualised that exactly half of the respondents 55.00 per cent were from medium knowledge category followed by 19.17 per cent respondents who possessed low knowledge regarding KVK activities. Further, it was also observed that 25.83 per cent respondents had high knowledge about KVK activities.

It was found that 60.00 per cent of the adopted respondents were possessed medium knowledge followed by 28.33 per cent with high level of knowledge and remaining 11.67 per cent respondents was possessed low knowledge regarding KVK activities.

Table 1 : Existing level of knowledge of Adopted and non-Adopted farmers in terms of various activities of KVK

Sr. No.	Aspects	Adopted Farmers		Non-Adopted Farmers	
		Frequency & Percentage	Rank	Frequency & Percentage	Rank
A.	General aspects				
1.	Knowledge about general aspects				
1.	What is KVK? Why they are established?	60 (100.00)	I	48 (80.00)	II
2.	What is operational area for each KVK?	52 (86.67)	V	43 (71.67)	IV
3.	Who is the sponsoring agency of these KVK?	50 (83.33)	VI	39 (65.00)	VII
4.	Who runs these institutions?	47 (78.33)	VIII	38 (63.33)	VIII
B.	Knowledge about various activities				
5.	Training	60 (100.00)	I	52 (86.67)	I
6.	Demonstration	58 (96.67)	II	42 (70.00)	V
7.	On farm research	54 (90.00)	IV	38 (63.33)	VIII
8.	Field day	60 (100.00)	I	45 (75.00)	III
9.	Educational tour	48 (80.00)	VII	40 (66.67)	VI
10.	Campaign	43 (71.67)	IX	39 (65.00)	VII
11.	Distribution of seeds/other inputs	56 (93.33)	III	43 (71.67)	IV
12.	Soil testing	43 (71.67)	IX	38 (63.33)	VIII
13.	Farmer's Scientists interaction	50 (83.33)	VI	36 (60.00)	IX

As far the non-adopted was concerned 50.00 per cent respondents were found to have medium level of knowledge, followed by 26.67 per cent in the low knowledge group and only 23.33 per cent respondents was possessed high knowledge regarding KVK activities. Majority of respondents of both the categories fell under medium level of knowledge about KVK activities. Further the number of adopted in higher knowledge group 28.33 per cent was more than non-adopted 23.33 per cent. This finding is partially supported by the finding of Singh (3).

Table 3 indicated that the mean scores pertaining to the knowledge level of adopted and non-adopted farmers were 11.28 and 9.47 respectively. The difference between mean scores was 1.82. Thus, it can be concluded that the beneficiary respondents of the

study area possessed more knowledge about KVK activities as compared to non-beneficiaries of KVK. It may be due to more exposure of beneficiaries about various transfers of technology activities. They had frequent contact with the KVK personnel, participated in various KVK activities and were enlightened; obviously the non-beneficiaries were deprived of such exposure resulting into their poor knowledge. This finding is partially supported by the findings of Sharma *et al.* (3) & Thamban *et al.* (6).

The table 4 reveals that the variables viz. Education, Size of land holding, Social participation, Size of family, Innovation proneness, Attitude towards modern agricultural technology were found to be positively and significantly related to the extent of knowledge level of KVK for adopted farmers. Similar findings were also

Table 2 : Over all distribution of respondents according to knowledge about KVK activities (n=120)

Sr. No.	Knowledge group	Adopted Farmers		Non-Adopted Farmers		Total	
		F	%	F	%	F	%
1.	Low (Mean-S.D.)	7	11.67	16	26.67	23	19.17
2.	Medium (Mean± S.D.)	36	60.00	30	50.00	66	55.00
3.	High (Mean+ S.D.)	17	28.33	14	23.33	31	25.83
Total		60	100	60	100	120	100

Adopted respondents: Mean= 11.28, S.D= 1.53,  
 Non-Adopted respondents: Mean= 9.47, S.D= 3.36, F = Frequency  
 % = Percentage

Table 3 : Difference in knowledge level between adopted and non-adopted farmers

Sr. No.	Categories	Mean Score	Difference in mean score
1.	Adopted farmers	11.28	1.81
2.	Non-Adopted farmers	09.47	

Table 4: Relationship between independent variables and Knowledge level of (Correlation Coefficient 'r') KVK adopted and non-adopted respondents

Sr. No.	Independent variables	Adopted farmers ('r')	Non-adopted farmers ('r')
X <sub>1</sub>	Age	-0.043 <sup>NS</sup>	0.152 <sup>NS</sup>
X <sub>2</sub>	Caste	0.120 <sup>NS</sup>	0.326*
X <sub>3</sub>	Education	0.343**	0.287*
X <sub>4</sub>	Size of land holding	0.360**	0.023 <sup>NS</sup>
X <sub>5</sub>	Social participation	0.419**	0.236 <sup>NS</sup>
X <sub>6</sub>	Size of family	0.295*	-0.017 <sup>NS</sup>
X <sub>7</sub>	Innovation proneness	0.460**	0.124 <sup>NS</sup>
X <sub>8</sub>	Occupation	-0.055 <sup>NS</sup>	0.390**
X <sub>9</sub>	Attitude towards modern – agricultural technology	0.381**	0.095 <sup>NS</sup>

\*\* = Significant at 0.01 level of probability; \* = Significant at 0.05 level

reported by Sharma *et al.* (3), Singh (4), Supe *et al.* (5) Kumar (1). The remaining variables viz. Age, Caste, Occupation was not found to be correlating significantly with Knowledge level of KVK adopted farmers. In case of non-adopted farmers it is evident from table 17 that the variables viz. Caste, education and occupation were found to be positively and significantly related to the knowledge level of respondents. The remaining variables were not found to be correlating significantly with knowledge level of non-adopted farmers.

### Conclusion :

The KVK is an innovative institution for disseminating new agricultural technologies and imparting many short days and long days vocational training programmes to the farmers, farm women, rural youths and extension personnel. The farmers trained at KVK become more alert and fully aware citizens of the community. The KVK provides a strong training support for bringing significant breakthrough in agricultural production.

### REFERENCES

**Kumar R (2002).** A study of selected factors associated with adoption of boro rice production technology. M.Sc.

(Ag.) thesis. Extension Education RAU, Pusa, Bihar.

**Sharma TN, SharmaVB, and Saxena KK (1996).** Factors associated with knowledge index and adoption of dairy farming technology by beneficiaries of the KVK, Chindwara district (M.P.) *Crop Research*, Hisar, **11(3):375-380.**

**Singh JP (1986).** A comparative study of trained and untrained farmers at farmers training centers, Kanpur. M.Sc. (Agri.) Thesis, Department of Agricultural Extension, CSAUA & T, Kanpur, 44-45.

**Singh A (1991).** A study on impact of farmers training on knowledge and behavior changes of farmers of Rajasthan state. (Unpublished) *M.Sc. (Agri.) Thesis*, Rajasthan Agricultural University, Bikaner, Campus-Udaipur.

**Supe SV, Parde PB and Kude NR (1990).** Factor related with adoption of improved jowar practices among farmers in dry farming area. *Maharashtra Journal of Extension Education*. **9:275-277**

**Thamban C, Kunju OAR and Bhaskaran C (1996).** Knowledge level of farmers about improved cultivation practices of coconut, *J. Tropical Agric.*, **34(2): 129-132.**

\*\*\*\*\*