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A Comparative Study of Impact of KVKs Managed by Different Agencies in Uttar Pradesh

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ABSTRACT

The Krishi Vigyan Kendra (KVK) provides a strong training support for bringing about production breakthrough in agriculture. Krishi Vigyan Kendras are functional in carrying out extension activities in accordance with government programme schedule and providing support to raise the skill of the farmers which will help them to increase their farm productivity. On the basis of findings and observations of the study, it may be concluded that most of the farmers were having either marginal or small holdings. Majority of the respondents were having farming as their main occupation. The KVK beneficiaries differed significantly in case of knowledge, attitude and skill. New agricultural technologies dissemination through KVK were adopted by the farmers to a considerable extent. Highest adoption was found by the KVK of NGO which may be due to better and adequate infrastructure and other facilities. Among the three selected KVKs, the performance of KVK of the NGO, Sultanpur was found to be superior. Nearly 60 per cent beneficiaries reported that after receiving training from KVK, their farm productivity increased. Forty per cent of the beneficiaries fully adopted recommendations of the KVK, while 40 per cent adopted it partially.

Keywords: Krishi Vigyan Kendra, non-government organization, impact, respondents

INTRODUCTION

Training of farmers and in-service extension functionaries is a critical input for the rapid transfer of agricultural technology. *Krishi Vigyan Kendras* (KVKs) were evolved as an innovative institution for vocational training in agriculture and allied subjects. The KVKs are the grass-root level technology transfer and vocational training institutions designed for bridging the gap between the available technologies on one hand and their application for increased productions on the other. Hence, to evaluate the effectiveness and performance of selected three *Krishi Vigyan Kendras* on the farmers of the area, the present study was undertaken with the objectives: To study the personal, socio-economic and communication characteristics of the respondents of three KVKs, to study the level of knowledge of the respondents towards the programme of three KVKs, and to study the adoption behavior of the respondents towards the programme of three KVKs.

METHODOLOGY

The present study was conducted in three KVKs of Uttar Pradesh namely, KVK, Sultanpur, KVK, Bareilly and KVK, Shahjahanpur. Twenty villages were selected from the each KVK for the selection of the respondents; eight adjacent to KVK; eight in the radius of 20-25 kilometres; and two beyond 25 kilometres from the KVK. Only such villages were selected where farmers attended the training programmes of the KVK. About 25 respondents were selected from each selected village. The lists of beneficiaries of three selected KVKs were prepared. Fifty beneficiaries from each selected KVK were selected randomly as respondents for the study. In this way, 300 beneficiaries of KVK comprised the sample size. Scoring techniques of socio-economic status suggested by Trivedi and Pareek (1964) with slight modification was followed to assess the socio-economic status of the respondents. To study the communication behaviour and information sources utilization pattern (ISUP), the availability, contact and competency for understanding was included. Each information source was measured on a 3 point continuum of frequently, occasionally and rarely and score value of 3, 2 and 1 was assigned to each level for positive questions while for negative questions, score values were assigned in reverse order *i.e.* 1, 2 and 3. Information sources utilization pattern of the respondents was categorized into three categories *i.e.* low, medium and high depending on the mean score values. A knowledge test was developed for measurement of knowledge of the respondents reading scientific rice production technology. Based on the pre-test, suitable modification and deletions of questions were done. For quantifying the level of knowledge of respondents a score of one (1) was assigned to each

Krishi Vigyan Kendra, Shahjahanpur, U.P. * Krishi Vigyan Kendra, Bageshwar, Uttarakhand.

correct reply and zero (0) to incorrect or no reply. The total number of items in the knowledge test were '20'. Thus, a respondent could get a maximum of 20 and a minimum of zero score. Knowledge score obtained by the respondents were then divided into three classes as low, medium and high. Adoption of recommended agriculture technology selected to cultivation of rice was measured by means of "Adoption Intensity Index". The following formula was used to work out the individual adoption extent

$$\text{Adoption extent} = \frac{x_1 + x_2 + x_3 - - - - - - - x_n}{N} \times 100$$

Where x_1, x_2, x_3 - - - - - - x_n are correct answer for first, second, third - - - - - n^{th} question and 'N' is the maximum possible score to secure. Finally, the adoption index was measured by the formula :

$$\text{Adoption index} = \frac{\text{Total score obtained}}{\text{Maximum possible score}} \text{ x } 100$$

The respondents were divided into three categories as low, medium and high on the basis of scores obtained by them. The following criteria was used for categorizing the adoption behaviour of the respondents:

Score		Category
Up to 8	-	low
9 - 16	-	Medium
Above 17	-	high

The data were collected from the selected respondents with the help of pre-tested structured interview schedule through personal interview method. The data so collected were arranged, classified, quantified and tabulated systematically.

RESULTS AND DISCUSSION

From the Table 1, it is evident that majority of the respondents (35.67 %) were in monthly income group of ₹ 2501/- to 5000 /- followed by the group of upto ₹ 2500/- with 34.33 per cent and monthly income group of ₹ 5001/- and above with 30.00 per cent.

Table 1: Distribution of beneficiaries according to their monthly income

n=300

Monthly Income (₹)	Number of Beneficiaries			
	KVK Shahjahanpur *f* (%)	KVK Sultanpur *f* (%)	KVK Bareilly *f* (%)	Total
Up to 2500	40 (40.00)	29 (29.00)	34 (34.00)	103(34.33)
2501 -5000	28 (28.00)	44 (44.00)	35(35.00)	107(35.67)
5001 and above	32 (32.00)	26 (26.00)	31(31.00)	90(30.00)
Total	**100**	**100**	**100**	**300**

Table 2: Distribution of beneficiaries according to their education

n=30

Educational level of the respondents	Number of Beneficiaries			
	KVK Shahjahanpur *f* (%)	KVK Sultanpur *f* (%)	KVK Bareilly *f* (%)	Total
Illiterate	20 (20.00)	12 (12.00)	11 (11.00)	43(14.33)
Can Read only	19 (19.00)	9 (9.00)	13(13.00)	41(13.67)
Primary School	28 (28.00)	24 (24.00)	15 (15.00)	67(22.33)
J.H.S	12(12.00)	18(18.00)	25(25.00)	55(18.33)
High School	9(9.00)	17(17.00)	12(12.00)	38(12.66)
Intermediate	7(2.00)	10(10.00)	14(14.00)	31(10.33)
Graduate	5(5.00)	10(10.00)	10(10.00)	25(8.33)
Total	**100**	**100**	**100**	**300**

The data presented in Table 2 showed that 35 per cent of the beneficiaries were having education upto primary school or were even illiterate. Beneficiaries having education upto Junior high school and high school were 18.33 and 12.66 per cent, respectively. Only 10.33 per cent and 8.33 per cent beneficiaries were having education upto education upto intermediate level and graduation level respectively.

Table 3: Distribution of beneficiaries according to their land holding

n=300

Type of farmer	Number of Beneficiaries			
	KVK Shahjahanpur *f* (%)	KVK Sultanpur *f* (%)	KVK Bareilly *f* (%)	Total
Marginal (Up to 1 ha.)	22(22.00)	30(30.00)	30(30.00)	82(27.34)
Small (1 – 2 ha.)	58 (58.00)	46 (46.00)	51 (51.00)	155(51.66)
Semi-Large (2 – 3 ha.)	12(12.00)	14(34.00)	15(15.00)	41(13.67)
Large (Above 3 ha.)	8(8.00)	10(10.00)	4(4.00)	22(7.33)
Total	**100**	**100**	**100**	**300**

The Table 3 indicated that 51.66 per cent beneficiaries were small farmers whereas, 27.34 per cent beneficiaries were marginal farmers. Only 13.67 per cent and 7.33 per cent beneficiaries were semi-large farmers and large farmers respectively. Thus, it can be concluded that majority of beneficiaries were having small and marginal land holdings.

Table 4: Distribution of the beneficiaries according to their socio-economic status

n=300

Categories	Number of Beneficiaries			
	KVK Shahjahanpur *f* (%)	KVK Sultanpur *f* (%)	KVK Bareilly *f* (%)	Total
High (Score above 35)	22 (22.00)	26 (26.00)	30 (30.00)	78(26.00)
Medium (Score 18 - 34)	52 (52.00)	44 (44.00)	59(59.00)	155(51.66)
Low (Score up to 17)	26(26.00)	30(30.00)	11(11.00)	67(22.34)
Total	**100**	**100**	**100**	**300**

It is apparent from Table 4 that 51.66 per cent beneficiaries were from medium socio-economic status group followed by 26 per cent beneficiaries from high socio-economic status group and 22.34 per cent beneficiaries from lower socio-economic status group.

Table 5: Distribution of beneficiaries of KVK Shahjahanpur, Sultanpur and Bareilly according to their communication behaviour

n=300

Sources /channel	Shahjahanpur		Sultanpur		Bareilly	
	Score value	Rank order	Score value	Rank order	Score value	Rank order
News paper	1.77	VIII	1.72	VIII	1.68	VIII
Block officials	1.11	IX	1.01	IX	1.21	IX
Farm magazine	2.83	IV	2.75	IV	2.80	IV
Demonstration	3.66	III	3.36	III	3.60	III
Television / radio	2.13	VII	2.13	VII	2.15	VII
Group meeting/ discussion	5.42	I	5.55	I	5.29	I
Folder/leaflet/ pamphlets	4.45	II	4.45	II	4.61	II
Agricultural Scientists	2.53	V	2.53	V	2.63	V
Input Dealer	2.19	VI	2.19	VI	2.13	VI
Farmer's fair/Exhibition	0.19	X	0.19	X	0.09	X
Mean score	1.93			1.87		1.57
Overall mean score	2.39			2.33		2.23

It is evident from the Table 5 that KVK, in case of Shahjahanpur, group meeting/ discussion got highest score value (5.42) followed by folder/leaflet/pamphlets (4.45), demonstration (3.66), farm magazine (2.83) and agricultural scientists (2.53) and occupied rank order I, II, III, IV and V respectively. Further, input dealer (2.19), television / radio (2.13), newspaper (1.77), block officials (1.11) and farmer's fair (0.19) got the rank order VI, VII, VIII, IX and X, respectively. The same trend found in KVK Sultanpur and KVK Bareilly. So, it may be concluded that among all the informal sources, group meeting / discussion, was the most important sources of information used by the farmers. The television/radio was the most frequently used important information source among all mass media sources.

Table 6: Level of knowledge of beneficiaries

n=300

Categories	Number of Beneficiaries	Percentage
Low (upto-10)	106	35.33
Medium (11-15)	112	37.34
High (above-16)	82	27.34
Total	**300**	**100.00**

A critical look of the Table 6 focuses that the majority of respondents (37.34%) were found to be possessing medium level of knowledge, followed by 35.33 per cent and 27.34 per cent low level and high level of knowledge respectively. On the basis of above findings it can be concluded that majority of respondents had average knowledge level regarding the programmes of the KVK. Similar findings were also reported by Anuradha, (1992).

Table 7: Adoption behaviour score of beneficiaries

n=300

Categories	Number of Beneficiaries	Percentage
Low (upto - 10)	99	33.00
Medium (10 - 20)	128	42.66
High (above - 21)	73	24.34
Total	**300**	**100.00**

From the Table 7 it is clear that the majority of beneficiaries (42.66 %) were having medium adoption behaviour followed by 33.00 per cent and 24.34 per cent beneficiaries exhibiting low and high level of adoption behaviour respectively. On the basis of these findings, it can be concluded that majority of respondents have adopted new agricultural technologies provided by the KVK either fully or partially. Similar findings were also given by Anuradha (1992) and Rahman, and Hossain, (1995), Singh, Gautam and Singh 2012.

CONCLUSION

The study revealed that majority of the farmers were having either marginal or small holdings with farming as their main occupation. The knowledge level and adoption behaviour of beneficiary farmers varied significantly as a result of exposure to the KVKs. The scientific innovative agricultural technologies transferred by KVKs were adopted either partially or fully by the beneficiary farmers.

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