



EXTENT OF ADOPTION OF THE RECOMMENDED CULTURAL PRACTICES OF KRISHI VIGYAN KENDRA BY THE FARMERS IN DISTRICT PILIBHIT, U.P., INDIA

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Abstract

In Indian economy, the agricultural sector still contributes about 34 per cent to our national income where nearly 70 per cent of the population depends. In this regard, the I.C.A.R. introduced several first line transfers of technology projects. The Krishi Vigyan Kendra (Farm Science Centre) is one of them. In pursuance of the recommendations of Education Commission (1964-66) and Dr. Mohan Singh Mehta Committee report to establish institutions for providing vocational education in agriculture at the pre and post matriculate level, the Indian Council of Agricultural Research has started a scheme to establish Krishi Vigyan Kendra's in the country. The national commission and Agriculture (1976) recommended the establishment of one K.V.K. The first K.V.K. was established in 1974 at Pondicherry under the administrative control of the Tamil Nadu Agricultural University, Coimbatore (T.N.) since then several K.V.Ks were established in different parts of the country. Up to October 31, 2016, 651 KVKs were established in the country. In Uttar Pradesh there were 68 KVKs established up to October, 2016 and the number is increasing every year. In U.P. district Pilibhit under the jurisdiction of Sardar Vallabhbhai Patel University of Agriculture & Technology, Modipuram, Meerut, was purposively selected as locale for present's investigation because the researcher was well acquainted with the locality and culture. There are 7 development blocks in district Pilibhit. All the blocks are covered under Krishi Vigyan Kendra Pilibhit. Therefore, due to limited time and resources only two blocks *i.e.*, Marauri and Lalorikhera were selected purposively for conducting present research projects. The reason for the selection of above blocks was that the Krishi Vigyan Kendra Pilibhit was also running training programmes. Majority of trained farmers was in the category of higher adoption is 86.66 per cent, followed by medium 13.33 per cent in respect of HYV. Seed rate, time and method of sowing, fertilizer application and improved agricultural implements of paddy crops, but for plant protection majority was under non-adopters category (76.66 per cent) followed by low high and medium. Majority of trained farmers had higher adoption in all the five selected practices of wheat except plant protection, where majority was under non-adoption *i.e.* 70 per cent. The majority of trained farmers 73.33 per cent were found under higher adoption of H.Y.V. followed by fertilizer application (66.66 per cent) and seed rate time and method of sowing of potato crops. In remaining practices like plant protection and use of improved agricultural implements 70 per cent and 31.66 per cent, respectively fell in the category of non adoption. The majority of trained farmers had higher adoption in the fertilizer application (66.66 per cent) seed rate time and method of sowing (65.00 per cent) and H.Y.V. (58.33 per cent) sugarcane.

Key words : K.V.K., agriculture, farming, plant protection.

Introduction

Development of agriculture is an integral part of economic development. The primary objective of agricultural production system is for the farmers to enable them to maximize their incomes, like other cases of economic enterprises. Very few countries that have attained significant growth in agriculture have also a rapid growth of their overall economy. In Indian economy, the

agricultural sector still contributes about 34 per cent to our national income where nearly 70 per cent of the population depends. Despite sustained efforts in agriculture and spectacular strides made in agriculture technology over the part several decades. India is still faced to a challenge that was to be viewed in light of rapidly growing population and the gradual depletion of natural resources in the farm of land and water, available for agriculture development in coming decades. The present rate of agricultural production could be doubled,

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if the available technologies are brought to bear with the production processes and programmes, focusing more and more on transferring our new technologies away from the confines of laboratories and research institutions to the farmers and make them more result and work oriented. There is a continuous advancement in agricultural research in the country. The transfer of technology, however, could not keep pace with the advancement of agricultural research. Therefore, the gap between the technology available at the agricultural research stations and technologies being practiced in the farmer's field has widened. To reduce this gap and to maintain a continuous flow of technology from research station to the farmer's fields, it is essential to train the farmers in agricultural and allied technologies. There are a large number of school drop-outs in the rural areas who need training, in selected vocations, especially in agriculture so that they may be suitably employed in farming. In this regard the I.C.A.R. introduced several first line transfers of technology projects. The Krishi Vigyan Kendra's (Farm Science Centre) is one of them. In pursuance of the recommendations of Education Commission (1964-66) and Dr. Mohan Singh Mehta Committee report to establish institutions for providing vocational education in agriculture at the pre and post matriculate level, the Indian Council of Agricultural Research has started a scheme to establish Krishi Vigyan Kendra's in the country. The national commission on Agriculture (1976) recommended the establishment of one K.V.K. in each district by the end of sixth five year plan and three KVKs per district by the end of the present century. Keeping the above facts in view, Government of India decided to establish at least one K.V.K. in each district in a phased manner, during the seventh five year plan. The first K.V.K. was established in 1974 at Pondicherry under the administrative control of the Tamil Nadu Agricultural University, Coimbatore (T.N.), since then several K.V.Ks were established in different parts of the country. Upto October 31, 2016, 651 KVKs were established in the country. In Uttar Pradesh there were 68 KVKs established up to June, 2016 and the number is increasing every year. The Mohan Singh Mehta Committee (1974) laid down the following basic concepts of K.V.K. The Kendra will impart learning through work experience and hence, will be concerned with technical literacy, the acquisition of which does not necessarily require as a pre-condition the ability to read and write. The Kendra will impart training only to those extension workers who are already employed or to practicing farmers and fisherman. In other words, the Kendra does will cater to the needs of those who are already employed or those who wish to be selling employed. There will be no uniform

syllabus for a Kendra. The syllabus and programme of each Kendra will be tailored according to the felt needs, natural resources and the potentials for agricultural growths in that particular area. The three fundamental principles *viz.* (i) agricultural production as the prime goal (ii) work-experience as the main method of imparting training and (iii) priority to the weaker sections of the society are the backbone of the K.V.K. programme. The main idea is to influence productivity to achieve social justice for the most needy and deserving weaker sections of the society like tribal farmers, small and marginal farmers, agricultural labourers drought and flood affected farmers, etc. The K.V.K. project is sponsored by the I.C.A.R. and is implemented by the ICAR research institutes, State Agricultural Universities, State Departments of Agriculture and reputed Voluntary Organizations. The K.V.K. is headed by a senior scientist of the rank of Professor/Associate Professor in the field of Agricultural Extension or Agronomy. He is supported by a team of disciplinary scientist representing Agronomy, Horticulture, Plant Pathology, Entomology, Animal Science and Agricultural Engineering, Home Science and Fisheries, depending upon the needs of respective district. A group of technical and other supporting staff is also provided to each K.V.K. The local management committee in each K.V.K. is an important instrument of management. This committee is devoted to constantly review the progress of the K.V.Ks provide guidance for organizing training programmes and follow up extension activities and redress the problems wherever possible. The kind and quality of training being envisaged in the K.V.Ks demands practical and experienced trainees. They in fact should be in a position to demonstrate the skills effectively to the trainees by the actual doing the operations themselves on the principles of 'teaching by doing'. To cater the needs of K.V.K. trainees, the 10 T.T.Cs have also been established to train K.V.K. staff and higher secondary schools. The transfer of technology through organized system is also getting momentum. The innovations are being communicated through variety of extension methods and organizations. But their effect is not seems as positive as we require.

Research Methodology

The present study entitled "An Appraisal of K.V.K. District Pilibhit in Transforming Socio-economic Status of the trained Persons" was under taken during the Agricultural year 2012. There are 7 development blocks in district Pilibhit. All the blocks are covered under Krishi Vigyan Kendra Pilibhit. Therefore, due to limited time and resources only two blocks *i.e.*, Marauri and Lalorikhera were selected purposively for conducting

present research projects. The reason for the selection of above blocks was that the Krishi Vigyan Kendra pilibhit was also running training programmes, which must have affected the farmers favorably. Other reason for the selection of said blocks was near to the Krishi Vigyan Kendra and possessed easy means of transportation and communication. A through acquaintance with the languages, customs, traditions, values and comparative nature of the people were other beneficial points to the researcher for obtaining accurate and unbiased information. With the help of the training centres, a list of villages involved in training was prepared separately for both the development blocks. From each of these two lists, a set of two villages gram Marori and Jonapuri from Marauri community development block Lalorikhera, Zatipur for Lalorikhera, community development block were randomly chosen. Thus, a total of four villages (two from each development block) were randomly selected for drawing the sample of respondents. Required numbers of respondents were selected at random from all the four villages after preparing a list of trained farm in Krishi Vigyan Kendra. The total number of respondents were sixty (30 from each development block or 2 villages from each development block).

Results and Discussion

It is clear from the table 1 that out of 60 trained farmers 52 (86.66 per cent) were under high adoption category and 8 or (13.33 per cent) to medium adoption

category. None was under lower category of adoption in case of high yielding varieties. For seed rate, time and method of sowing 50 (83.33 per cent) medium adopters. None was under low adoption category. With regard to fertilizer application, 52 or (86.66 per cent) were under high adopters category. For plant protection, maximum 46 (76.66 per cent) farmers were non adopters, 2 (3.33 per cent) low, 7 (11.66 per cent) medium and 5 (8.33 per cent) were found under higher adopters category. with regards to improved agricultural implements maximum 26 (43.33 per cent) farmers were in higher adoption category, 8 (13.33 per cent) medium and 2 (3.33 per cent) farmers were low adoption category and a number of 24 (40 per cent) farmers were non adopters.

It is apparent from the table 2 that out of 60 trained farmers 48 or 80.00 per cent were in higher adoption, 8 or 13.33 per cent medium, 2 or 3.33 per cent in lower adoption category. Only 2 or 3.33 per cent farmer were non- adopters of high yielding varieties. In seed rate time and method of sowing 42 or 70.00 per cent farmers were under higher adoption category. followed by 14 or 23.33 per cent, medium, 3 or 5.00 per cent low and only one 1.66 per cent did not adopt agricultural the practices. for fertilizer application 47 or 78.33 per cent were under high adoption followed by 12 or 20.00 per cent medium, 1 or 1.66 per cent, low adoption category. None was under non adoption category. For plant protection 42 or 70 per cent farmers were not adopting the plant protection

Table 1 : Level of adoption by trained farmers in relation to selected package of practices of paddy.

Class range	Level of adoption	Selected farm practices				
		H.Y.V.	Seed rate time & method of sowing	Fertilizer application	Plant protection	Improved agril. implements
0.0	No adoption	-	-	-	46 (76.66)	24 (40.00)
00-33.33	Low adoption	-	-	1 (1.66)	2 (3.33)	2 (3.33)
33.34-66.66	Medium adoption	8 (13.33)	10 (16.66)	7 (11.66)	7 (11.66)	8 (13.33)
Above 66.67	High adoption	52 (86.66)	50 (83.33)	52 (86.66)	5 (8.33)	26 (43.33)

Figures in parentheses indicate percentage of respondents.

Table 2 : Level of adoption by trained farmers in relation to selected package of practices of wheat.

Class range	Level of adoption	Selected farm practices				
		H.Y.V.	Seed rate time & method of sowing	Fertilizer application	Plant protection	Improved agril. implements
0.0	No adoption	2 (3.33)	1 (1.66)	-	42 (70.00)	-
00-33.33	Low adoption	2 (3.33)	3 (5.00)	1 (1.66)	9 (15.00)	-
33.34-66.66	Medium adoption	8 (13.33)	14 (23.33)	12 (20.00)	5 (8.33)	7 (11.66)
Above 66.67	High adoption	48 (80.00)	42 (70.00)	47 (78.33)	4 (6.66)	53 (88.33)

Figures in parentheses depicts percentage of trained respondents.

Table 3 : Level of adoption by trained farmers in relation to selected package of practices of potato.

Class range	Level of adoption	Selected farm practices				
		H.Y.V.	Seed rate time & method of sowing	Fertilizer application	Plant protection	Improved agril. implements
0.0	No adoption	2(3.33)	3(5.00)	-	42(70.00)	19(31.66)
00-33.33	Low adoption	2(3.33)	5(8.33)	1(1.66)	9(15.00)	11(18.33)
33.34-66.66	Medium adoption	12(20.00)	14(23.33)	19(31.66)	5(8.33)	16(26.66)
Above 66.67	High adoption	44(73.33)	38(63.33)	40(66.66)	4(6.66)	14(23.33)

Figures in parentheses indicate per centage trained respondents.

Table 4 : Level of adoption of trained farmers relation to selected package of practices of sugarcane.

Class range	Level of adoption	Selected farm practices				
		H.Y.V.	Seed rate time & method of sowing	Fertilizer application	Plant protection	Improved agril. implements
0.0	No adoption	2(3.33)	1(1.66)	-	42(70.00)	15(25.00)
00-33.33	Low adoption	8(13.33)	4(6.66)	5(8.33)	8(13.33)	11(18.33)
33.34-66.66	Medium adoption	15(25.00)	16(26.68)	15(25.00)	6(10.00)	16(26.66)
Above 66.67	High adoption	35(58.33)	39(65.00)	40(66.66)	4(6.66)	18(30.00)

Figures in parentheses depicts percentage of trained respondents.

measures. Only 9 or 15.00 per cent low, 5 or 8.33 per cent medium and rest 4 or 6.66 per cent were under the higher adopters category. In case of improved agricultural implements 53 or 88.33 per cent were of higher adopters and remaining 7 or 11.66 per cent medium adopters.

The table 3 showed that out of 60 trained farmers 44 or 73.33 per cent were under higher adoption category, followed 12 or 20 per cent medium 2 or 3.33 per cent low and only two 3.33 per cent farmers were non-adopters for seed rate, time and method of sowing 38 or 63.33 per cent found under higher adoption category 145 or 23.33 per cent medium, 5 or 8.33 per cent lower level of adoption while only 3 or 5.00 per cent farmers found under non adoption category. In fertilizer application 40 or 66.66 per cent were under higher adoption, 19 or 31.33 per cent medium and only one or 1.66 per cent was found under low adoption. None was under non adoption category for improved agricultural implements as 19 or 31.66 per cent was not adopting the practice followed in order 16 or 26.66 per cent medium, 14 or 23.33 per cent and high and 11 or 18.33 per cent low adoption category. In case of plant protection 42 or 70.00 per cent were under non adoption category, while 9 or 15.00 per cent low, 5 or 8.33 per cent medium and rest 4 or 6.66 per cent farmers under high level of adoption.

It is obvious from the table 4 that out of 60 trained farmers 35 or 58.33 per cent found in the category of higher adoption, 15 or 25.00 per cent medium, 8 or 13.33

per cent low adoption and 2 or 3.33 per cent farmers in non adoption category in H.Y.V. in case of seed rate, time and method of sowing 39 or 65.00 per cent farmers had higher, 16 or 26.66 per cent medium 4 or 6.66 per cent low level of adoption while one or 1.66 per cent farmers found under non adoption category. In fertilizer application 40 or 66.66 per cent were higher adopters. 15 or 25.00 per cent medium and remaining 5 or 8.33 per cent were low adoption category. None was under non adoption category. For plant protection 42 or 70.00 per cent farmers were not adopting the plant protection measures. Only 8 or 13.33 per cent low, 6 or 10.00 per cent medium and rest 4 or 6.66 per cent were under the higher adopter's category. In case of improved agricultural implements 18 or 30.00 per cent, 16 or 26.66 per cent, 11 or 18.33 per cent and 15 or 25.00 per cent were found under higher medium low and non adoption category, respectively.

Conclusion

Majority of trained farmers was in the category of higher adoption is 86.66 per cent, followed by medium 13.33 per cent in respect of HYV. Seed rate, time and method of sowing, fertilizer application and improved agricultural implements of paddy crops, but for plant protection majority was under non-adopters category (76.66 per cent) followed by low high and medium. Majority of trained farmers had higher adoption in all the

five selected practices of wheat except plant protection, where majority was under non-adoption *i.e.* 70 per cent. The majority of trained farmers 73.33 per cent were found under higher adoption of H.Y.V. followed by fertilizer application (66.66 per cent) and seed rate time and method of sowing of potato crops. In remaining practices like plant protection and use of improved agricultural implements 70 per cent and 31.66 per cent, respectively fell in the category of non adoption. The majority of trained farmers had higher adoption in the fertilizer application (66.66 per cent) seed rate time and method of sowing (65.00 per cent) and H.Y.V. (58.33 per cent) sugarcane. A narrow gap was assured in higher and medium adoption in higher and medium adoption in case of improved agricultural implements of sugarcane. As for as plant protection is concerned the majority was under non-adopters (70 per cent) followed by low (13.33 per cent) medium (10 per cent) and high adopter (66.66 per cent).

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