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Effectiveness of Trainings imparted by a *Krishi Vigyan Kendra* (KVK) in Tamil Nadu

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ABSTRACT

In an agricultural country like India, training of farmers is a laborious task and requires a heavy investment in training infrastructure to reach most of the farmers on a regular basis. Trainings are conducted in Krishi Vigyan Kendras(KVKs) at various levels for which the programmes are designed based on the farmers problems their needs and interests. Altogether, 300 respondents were selected for the study through random sampling method to assess the effectiveness of trainings imparted by a Krishi Vigyan Kendra (KVK). Majority of the trainees were having medium level of adoption of recommended technologies followed by low level and high levels of adoption of recommended crop cultivation practices in major crops.

Keywords: *KVK; Training; Effectiveness; Crop Production; Cultivation practices; Impact; Adoption; Tamil Nadu.*

INTRODUCTION

The Indian Council of Agricultural Research (ICAR) had launched a major programme of *Krishi Vigyan Kendra* (KVK) or farm science centre, which is a science/ technology led, farmer centric institution, established with the purpose of providing knowledge and skill training to the farmers, rural youth and field-level extension workers. It should be recognized that agriculture varies from one area to another, even from one field to another. Training programmes therefore, should be fitted to the local conditions. The specific objective of this study is to study the adoption level of farmers trained on crop cultivation practices in major crops at ICAR-KVK in Karur district of Tamil Nadu.

METHODOLOGY

The study area, viz., Karur district of Tamil Nadu consists of five taluks and eight blocks viz., Kulithalai, Thogaimalai, Krishnarayapuram, Tharagampatti, Arava kurichi, K.Paramathy, Thanthoni and Karur. Out of eight blocks of Karur district, two blocks were purposively selected for this study, as maximum numbers of trainings have been conducted by ICAR-KVK, Karur in these blocks. In Thogaimalai block, 88 training programmes and in Kulithalai block

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66 training programmes were conducted. For the selection of respondents, a list of trainees from Kulithalai and Thogaimalai blocks were prepared with the help of KVK. Altogether, 300 respondents were selected for the study through random sampling method. In the present study, adoption has been operationalized as the extent to which the farmers have adopted the recommended cultivation techniques in the study area, which would indicate the effectiveness of the trainings. By having discussionswith the extension officials , major techniques in major crops were selected on which the adoption level of the respondents was studied.

The respondents were narrated about these practices one by one, each time enquiring whether they have adopted the practice in the previous year. The response "Adopted" was given two score and "Not adopted" was given one score. The scores for all these items were added up for each respondent and adoption score was arrived at. Based on the score obtained by the respondents, they were classified as low, medium and high categories on overall adoption levels using cumulative frequency method.

FINDINGS AND DISCUSSION

Rogers and Shoemaker (1983) had defined adoption as a decision to make full use of an innovation as the best course of action available. The adoption level of farmers are presented here.

Adoption level of Recommended Practices through Trainings Imparted by KVK

Table 1 shows the overall adoption of recommended crop production technologies by the KVK trained farmers in the two blocks.

It is revealed from Table 1, that medium level of adoption was observed in both the blocks. In Thogaimalai block, the major crops cultivated are paddy, sorghum, black gram and ground nut. The farmers are cultivating less number of crops, due to frequent monsoon failure and inadequate availability of water. This might be the reason for medium (40.67 %), followed by low (32 %) and high (27.33 %) levels of adoption in recommended crop cultivation techniques in Thogaimalai block. This finding is similar to that of Govind (1992). In Kulithalai block, the major crops are banana, paddy, sugarcane and black gram. Timely availability of water is the main reason for cultivating annual crops like banana and

Table 1.
Overall adoption Level of KVK trained Farmers in relation to Recommended Crop Production Technologies

Sl.No	Category	Kulithalai block (n=150)		Thogaimalai block (n=150)		Total (n=300)	
		Number	Per cent	Number	Per cent	Number	Per cent
1	Low	49	32.67	48	32.00	97	32.33
2	Medium	58	38.66	61	40.67	119	39.67
3	High	43	28.67	41	27.33	84	28.00

sugarcane in major areas and other crops like pulses, oilseeds and vegetables are cultivated in small areas only. This might be the reason for medium (38.66 %), followed by low (32.67 %) and high (28.67 %) level of adoption in recommended crop cultivation practices. This finding derives support from the finding of Patel (2004). From Table 1, the overall adoption level showed that, the majority of the respondents were having medium level (39.67 %) of adoption followed by low level (32.33 %) and high levels (28 %) of adoption of recommended crop cultivation practices.

Practice-wise Adoption level of Recommended Crop Cultivation Techniques

The findings on practice-wise adoption of recommended crop cultivation techniques in crop production, horticulture, plant protection and animal science are given in Table 2. It could be inferred that all the training programmes would have created positive impact on the respondents and therefore they continue to adopt the practices given in KVK trainings. Further, to have a better understanding practices adopted by the farmers, the practice-wise adoption of the selected four types of trainings are presented in this section.

Majority of the respondents (87.33%) adopted SRI method of paddy cultivation, followed by seed treatment technique in paddy (82.33 %), gypsum application in groundnut (80.33%), cono weeder operation in SRI paddy cultivation (73.67 %), *Pseudomonas fluorescens* treatment in paddy seeds (64 %), bio fertilizer application in black gram (48.33 %), pulse wonder application in pulses (37 %), seed treatment in groundnut (32 %), groundnut rich application for groundnut (27.67 %), usage of leaf colour chart (13.67 %) and fixing bee hives (6.67 %) in sun flower field.

Table 2.
Practice Wise Adoption Level of Recommended Crop Cultivation Techniques

(n=300*)

Sl. No	Practices	Kulithalai block (n=150)		Thogaimalai block (n=150)		Total (n=300)	
		Number of respondents adopted	Per centage	Number of respondents adopted	Per centage	Number of respondents adopted	Per centage
I.	**Recommended Cultivation Practices in Major Agricultural Crops**						
1	Seed treatment in Paddy	131	87.33	116	77.33	247	82.33
2	*Pseudomonas fluorescens* treatment in Paddy seeds	110	73.33	82	54.67	192	64.00
3	SRI Paddy cultivation	139	92.67	123	82	262	87.33

Sl. No	Practices	Kulithalai block (n=150)		Thogaimalai block (n=150)		Total (n=300)	
		Number of respondents adopted	Per centage	Number of respondents adopted	Per centage	Number of respondents adopted	Per centage
4	Usage of Leaf Colour Chart (LCC)	18	12.00	23	15.33	41	13.67
5	Cono weeder operation in SRI paddy cultivation	127	84.67	94	62.67	221	73.67
6	Bio fertilizer application in black gram	89	59.33	56	37.33	145	48.33
7	Pulse wonder application in pulses	61	40.67	50	33.33	111	37.00
8	Seed treatment in groundnut	39	26.00	57	38	96	32.00
9	Gypsum application in Groundnut	101	67.33	140	93.33	241	80.33
10	Ground nut rich application for groundnut	24	16.00	59	39.33	83	27.67
	Fixing Bee hives in sun flower field	4	2.67	16	10.67	20	6.67
II.	**Recommended Cultivation Practices in Horticultural crops**						
1	Quality sucker selection in banana	132	88.00	55	36.67	187	62.33
2	Micro nutrient application in banana	96	64.00	78	52	174	58.00

Sl. No	Practices	Kulithalai block (n=150)		Thogaimalai block (n=150)		Total (n=300)	
		Number of respondents adopted	Per centage	Number of respondents adopted	Per centage	Number of respondents adopted	Per centage
3	Vegetable seedlings raised by protray method	91	60.67	130	86.67	221	73.67
4	Vegetable special application for vegetable crops	49	32.67	42	28	91	30.33
5	Coconut tonic application in coconut	21	14.00	37	24.67	58	19.33
III.	**Recommended Plant Protection practices in Major crops**						
1	Control measures for rice leaf folder	67	44.67	37	24.67	104	34.67
2	Control measures for bacterial leaf blight disease in paddy	17	11.33	22	14.67	39	13.00
3	Control measures for red hairy caterpillar	49	32.67	112	74.67	161	53.67
4	Control measures for shoot and fruit borer in bhendi	17	11.33	38	25.33	55	18.33
5	Fixing light traps against sucking pests	43	28.67	69	46	112	37.33
IV.	**Recommended Animal Husbandry Practices**						
1	Assessing the good breed character in dairy cows	47	31.33	85	56.67	132	44.00

Sl. No	Practices	Kulithalai block (n=150)		Thogaimalai block (n=150)		Total (n=300)	
		Number of respondents adopted	Per centage	Number of respondents adopted	Per centage	Number of respondents adopted	Per centage
2	Preventive measures for occurrence of bloat in dairy cows	26	17.33	48	32	74	24.67
3	Correct milking method	78	52.00	118	78.67	196	65.33
4	Cultivation of Multi cut fodder grass Variety	107	71.33	130	86.67	237	79.00
5	Azolla for dairy cows	19	12.67	28	18.67	47	15.67

*(*Multiple responses obtained)*

The reasons for adoption of this method of cultivation (SRI Paddy cultivation) may be due to time saving, less labour requirement for weeding, cost of inputs reduced and the main contributing factor was the increased production which made it possible to adopt this practice. In horticulture related trainings, nearly three fourths of the respondents (73.67 %) adopted vegetable seedlings raised by protray method, followed by quality sucker selection in banana (62.33 %), micro nutrient application in banana (58 %), vegetable special application for vegetable crops (30.33 %) and coconut tonic application in coconut (19.33 %). The reason for adoption of protray method of nursery raising practice could be reduction in cost of cultivation through saving in labour, inputs and to get healthy and vigorous vegetable seedlings.

In plant protection related practices, more than half of the respondents (53.67 %) farmers adopted control measures for red hairy caterpillar followed by fixing light traps against sucking pests (37.33 %), control measures for rice leaf folder (34.67 %) and control measures for bacterial leaf blight disease in paddy (13 %). In Animal husband related trainings, majority of respondents (79 %) adopted cultivation of Multicut fodder grass practice, followed by correct milking method (65.33 %), assessing the good breed character in dairy cows (44 %), preventive measures for occurrence of bloat in dairy cows (24.67 %) and azolla for dairy cows (15.67 %). Overall, in the two blocks, majority of the respondents possessed dairy component. Fodder scarcity is the main problem in summer season. Keeping this in view, KVK had provided more number

of training on fodder management techniques. This might be the reason for more adoption of multicut fodder cultivation technique in both the blocks.

CONCLUSION

In both the blocks, the farmers were aware about recommended crop cultivation practices in paddy, blackgram, groundnut, banana and vegetable crops through KVK trainings. But they could not adopt them due to non-availability of critical inputs like quality seeds, bio fertilizers, crop boosters etc. Hence, the KVK should arrange the availability of critical inputs in timely, it would help to increase the adoption level of farmers. In Thogaimalai block, the farmers are cultivating less number of crops, due to frequent monsoon failure and inadequate availability of water. In order to be effective, KVK must advise the farmers to make changes in the cropping pattern and to prepare for contingent plans according to water availability, and should offer training programmes on water management techniques. This will help the farmer to cultivate more number of crops by using less quantity of water.

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