Original Research Article

Assessment of Training Programme of Krishi Vigyan Kendra in Changing the Knowledge of the Farmers in Barwani District of Madhya Pradesh

ABSTRACT

The farming society needs training for their skill and knowledge development. Training seeks to improve the job performance and work behavior of those trained. The economic condition of the farming community can be improved through various training. The present study was conducted in the Barwani districts of Madhya Pradesh. The total sample was consisted of 240 farmers as respondents to the study. This study shows that greater part of the 50.00 percent respondents had increasing their knowledge in medium level about agricultural technology due to the programme and activities of Krishi Vigyan Kendra The coefficient of correlation of age, caste and family size were showed no significant relationship with knowledge increased due to activities/programme organized by KVK. The responses from the farmers show that majority 73.33 percent of the respondents suggested that outreach of KVK should be increased for remote as well as villages level and got ranked first.

Key Words: *Assessment, Krishi Vigyan Kendra, Knowledge, Training, Farmers, Graphical and Pictographic, etc.*

INTRODUCTION-

Agriculture development is intimately related with the application of science and technology in the sector. Therefore, increase in agriculture production and the economic and social benefits are directly dependent on the extent to which farmers use the improved technology. The technology transfer through training, demonstration and extension activities has been viewed as most important critical factors for increasing agriculture production. Krishi Vigyan Kendra (KVK) is an innovative science- based institution which undertaking vocational training to the farmers, farm

Comment [R1]: Authors are advised to reframe the sentences and rectify the grammatical errors.

Being a reviewer am not questioning the capability of the researchers but its mandatory to avoid such basic errors in the very beginning of the article

Comment [R2]: Please cite the rivews in Introduction part also, if some phrases are used from secondary sources, those must be find a place in Introduction part

Women and rural youths, in service training for extension workers conducts on farm research for technology refinement and frontline demonstrations. One of their important activities is to train the farmers through (Farm Science Center) or Krishi Vigyan Kendra. Krishi Vigyan Kendra organizes long-term vocational-based and skill-oriented training for farm women, the farming community, rural youth, and school dropout adults, to encourage them to adopt new technologies to increase farm income.

The concept of training is an essential part of human resource development. It compacts with teaching and practicing a skill to a specific level through education and practice. Effective training is one in which training is imparted involving various methods and methods. Appropriate ways to conduct technical know-how are mostly interactive lectures and demonstration groups, discussion role-plays, etc. In such a situation, trainees get a good opportunity to discuss adequately for clarification. Apart from this the ideal location, appropriate material as per the requirement, proper design, and right timing are other considerations to carry out the training programs effectively. Therefore, in this study, an attempt has been made to study the impact of training on farmers through Krishi Vigyan Kendra training. Most of the programmes are interlinked with the demonstration and trail that are conducted to extend the solution to location-specific problems and to improve production. Similarly, some aimed at increasing the net income and proper management of natural resources by reducing the cost of production. The some programmes are aimed at diversifying agriculture based on market demand for available local resources.

Training is an important and constant need for the all-round development of the agriculture sector. Vocational training is one of the most important activities of Krishi Vigyan Kendra. The needs and problems of the selected focal village are addressed through PRA. It is for this reason that need-based training programme are organized for extension workers and practicing farmers, and there are systematic opportunities for rural youth and participants to acquire the necessary understanding and skills during the training. The KVK not only provides training in agriculture and allied business but also provides training in other income-generating activities which can double the

income of farming communities. The methods employed in training can be formal and informal, or a combination of both. The training program should be conducted as a plan. The present investigation was carried out with following objectives-

- To study the impact of KVK in terms of gain in knowledge of agriculture technology and allied activities of farmers.
- To explore the relationship between socio-personal traits of the farmers with their level of knowledge about agricultural technology and allied activities of farmers.
- To record the opinion of the farmers as feedback for effective conducting of different activities.

Materials and Methods-

The study was conducted in West Nimar region of Madhya Pradesh i.e. Barwani districts. The Barwani district comprises seven blocks. Among seven blocks of the Barwani district Barwani, Sendhwa, Pati, and Rajpur that were selected purposively for the study due to these blocks have the maximum number of farmers who were participated in different activities of KVK followed by other blocks. A list of villages where different activities/ programme were conducted by Krishi Vigyan Kendra was prepared and out of which 3 villages from each selected block were selected randomly for the study. A village-wise list of farmers was prepared by consulting with Krishak Mitra, AFO and RAEO. From this list, twenty farmers were selected randomly from each village to make a sample size of 240 farmers. The primary data was collected from the respondents by using a pretested interview schedule. The respondents were interviewed individually by the investigator.

Comment [R3]: What are the statistical methods used to analyze the data should find a place in this section. Please incorporate that.

Results & Discussion-

Impact of KVK in terms of gain in knowledge of agriculture technology and allied activities of farmers-

Knowledge is a familiarity with someone or something, which can include facts, information, descriptions or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject due to KVK activities. It refers to information about different vocational programme which were conducted by Krishi Vigyan Kendra and change knowledge of farmers about agricultural technology. The farmers were categorized on the root of their obtained score of knowledge.

Change in knowledge about agricultural technology and allied activities among the farmers due to activities of KVK -

Increasing the knowledge about agricultural technology and allied activities among the farmers were assessed and summarized in Table-1. In case of improved variety, majority of respondents 54.17 were found medium level of knowledge followed by 33.33 and 12.50 per cent of the respondents were high and low level of knowledge about agricultural technology. With regards to the preparation of land, most of them, 51.67 per cent of the respondents possessed medium level of knowledge, followed by 35.83 per cent high level of knowledge andonly12.50 per cent of the respondent's low level of knowledge about agricultural technology.

While, in case of sowing time and method, majority of the respondents (52.50%) possessed high level of knowledge, 37.50 per cent medium level of knowledge and 10.00 per cent of the respondents possessed low level of knowledge about agricultural technology. In case of manure and fertilizer of the respondents, most of respondents 46.25 per cent had high level knowledge, followed by 39.17 per cent respondents had medium level knowledge and solitary 14.58 per cent respondents had low level of knowledge regarding to agricultural production technology about agricultural technology.

With regards to the irrigation and drainage of the respondents, a superior percentage of them 55.33 per cent had medium level knowledge, 28.33 per cent respondents had high level of knowledge and just 15.83 per cent respondents had low level knowledge about agricultural technology.

Table-1: Distribution of respondents according to their knowledge increased about agricultural technology due to activities of KVK-

Comment [R4]: Please mention N=?

S. N.	Name of technology	Extent of Knowledge					
		Low		Medium		High	
		No.	%	No.	%	No.	%
1.	Improved variety	30	12.50	130	54.17	80	33.33
2.	Seed Treatment	41	17.08	120	50.00	79	32.92
3.	Sowing time and method	24	10.00	90	37.50	126	52.50
4.	Manure and fertilizer	35	14.58	94	39.17	111	46.25
5.	Irrigation and drainage	38	15.83	134	55.83	68	28.33
6.	Weed control	44	18.33	144	60.00	52	21.67
7.	Plant protection measures	68	28.33	128	53.34	44	18.33

With regards to the weed control, mainstream of respondents 60.00 per cent, possessed medium level of knowledge, followed by 21.67 per cent respondents had high level of knowledge and 18.33 per cent of the respondents had low level of knowledge about agricultural technology. While, in case of plant protection measures, a preponderance percentage of them (53.34%) possessed medium level of knowledge, 28.33 per cent respondents had low level of knowledge and merely 18.33 per cent of the respondents possessed high level of knowledge about agricultural technology. The findings are conformity with the findings of Deshmukh et al.(2021) and Christopher et al. (2020).

Table-2 Allocation of the respondents according to increasing their overall knowledge about agricultural technology-

SN	Category	Respondents	
		Frequency	Percentage
1	Low (< 33%)	40	16.67
2	Medium (33%-66%)	120	50.00
3	High (> 66%)	80	33.33
Total		240	100
Mean (μ)		2.17	
Standard Deviation (σ)		0.70	

The facts in table 2 shows that out of the total 240 farmers, greater part of the 50.00 percent respondents had increasing their overall knowledge in medium level about agricultural technology, followed by 33.33 percent of farmers had increasing high level of their overall knowledge about agricultural technology and solitary 16.67 percent of the respondents had increasing their overall knowledge in low level about agricultural technology. These similar findings are also reported by Badodiya et al. (2021), Khare et al. (1996) and Medhi et al. (2017).

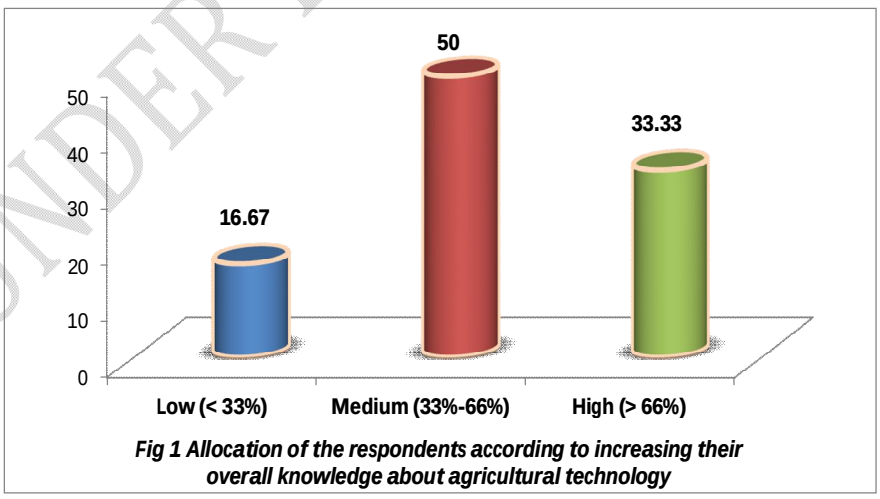

Fig 1 Allocation of the respondents according to increasing their overall knowledge about agricultural technology

Relationship between socio-personal traits of the farmers with their level of knowledge about agricultural technology **and allied activities of farmers -**

The zero order correlation coefficient of selected socio-personnel traits was determined with knowledge of farmers and presented in table 3. The zero order correlation coefficient of each of the variables with their dependent variable annual income increased due to training programme organized by KVK has been furnished.

Table- 3 Relationship between* Socio-personal traits *of farmers and their knowledge due to the programme-

SN	Cursor	Socio-personal traits	**Correlation Coefficient "r"**
1	X_1	Age	0.102
2	X_2	Education	0.524
3	X_3	Caste	-0.042
4	X_4	Size of family	0.121
5	X_5	Social participation	0.418
6	X_6	Occupation	0.448
7	X_7	Size of land holding	0.526
8	X_8	Irrigation facility	0.401
9	X_9	Source of information	0.437
10	X_{10}	Migration behavior	0.423
11	X_{11}	Risk orientation	0.427
12	X_{12}	Extension contact	0.469
13	X_{13}	Innovativeness	0.681
14	X_{14}	Cosmopoliteness	0.551

It could be revealed that among eleven variables, i.e. education, social participation, occupation, size of land holding, irrigation facility, source of information, migration behavior, risk orientation, extension contact, innovativeness,

and cosmopoliteness showed positive relationship with knowledge of agricultural technology due to activities/programme organized by KVK at 0.01 percent level of probability.

The coefficient of correlation of age, caste and family size were showed no significant relationship with knowledge increase due to activities/programme organized by KVK. This findings are in line with the findings of Badodiya et al. (2021), Bihare et al.(2022), Dixit & Singh(2005), Yadav et al (2012) and Medhi et al. (2017).

Opinion of the farmers as feedback for effective conducting of different activities-

During the research work, the farmers conveyed many opinions and submission to formulate training programme more effectives. These observations were termed as workable strategies for effective training programme were expressed.

The responses from the farmers show that majority 73.33 percent of the respondents suggested that outreach of KVK should be increased for remote as well as villages level and got ranked first followed by Local language and simple terminology should be used during theory and practical classes said by 62.50 percent of the respondents and it's got second ranked.

Analysis of data exposed in table 4. that Literature should be prepared in local language experienced by 59.17 percent of the respondents and this is based on the principle of extension education of "seeing by believing" the and majority, 50.83 of the respondents reported that Result and Method demonstration should be conducted during training because "learning by doing" is the best principle of extension education & got fourth ranked. Graphical and pictographic model should be used for making training more effective articulated the constraints by 42.50 percent of the respondents. Training should be organized on need and time based was advocated by 31.67 percent of the respondents and it's got eighth ranked. It has been experimented in the table 4 that most of the 33.33 percent of the respondents advocated that Infrastructural facilities should be developed because inputs are the foundation of any enterprise and it's got seventh ranked.

Table-4 Opinion of the farmers as feedback for effective conducting of different activities –

SN	*Feedback*	*Freq.*	*%*	*Rank*
1	Local language and simple terminology should be used during training	150	62.50	II
2	Outreach of KVK should be increased for remote as well as villages level	176	73.33	I
3	Literature should be prepared in local language	142	59.17	III
4	Result and Method demonstration should be conducted during training	122	50.83	V
5	Graphical and pictographic model should be used for making training more effective	102	42.50	VI
6	Training should be organized on need and time based	76	31.67	VIII
7	Infrastructural facilities should be developed	80	33.33	VII
8	Information communication tools should be used in proper way	70	29.17	X
9	Practical and exposure visit should be conducted during training programme	130	54.17	IV
10	Coordination should be made with other department and extensive promotion should be made for training	78	32.50	IX

Out of 240 respondents, Coordination should be made with other department and extensive promotion should be made for training suggested by 32.50 percent of the respondents. Information tools or Audio visual aids should be working in proper way advised by 29.17 percent of the respondents. The findings are in conformity with the results of Badodiya et al. (2021)

Conclusion-

Comment [R5]: If authors could add some suggestions for policy implication that could be better

This study explains that greater part of the 50.00 percent respondents had increasing their knowledge in medium level about agricultural technology due to the programme and activities of Krishi Vigyan Kendra The coefficient of correlation of age, caste and family

size were showed no significant relationship with knowledge increase due to activities/programme organized by KVK. The responses from the farmers show that majority 73.33 percent of the respondents suggested that outreach of KVK should be increased for remote as well as villages level and got ranked first followed by Local language and simple terminology should be used during theory and practical classes said by 62.50 percent of the respondents and it's got second ranked.

References-

Badodiya; S.K. Rakesh Jain; S.R.K. Singh and G.S. Kulmi (2021) Impact Assessment of Krishi Vigyan Kendra's Interventions on Adoption of Drip Irrigation among the Farmers of Barwani District, Madhya Pradesh. *Technofame- A Journal of Multidisciplinary Advance Research.* 10(2): 114–119

Badodiya S.K., Jain D.K., Maratha P., Gour C.L., Sikarwar R.S (2021). Efficacy of training programs as perceived by the tribal farmers with regards to organic farming practices in West Nimar Region Barwani of Madhya Pradesh. *SKUAST Journal of Research 23(1): 83-86*

Bihare, Govinda; VK Swarnkar and SK Badodiya (2022) Efficacy of trainings programme among the tribal farmers provided by Krishi Vigyan Kendra's of West Nimar Region Madhya Pradesh. *J Krishi Vigyan* 11(1):158-161

Dixit, H. and Singh S. (2005), Impact assessment of farm women training programmes with reference to Sidhi district (M.P.), *Madhya J. Extn.Edu.,* VIII : 87-90.

Khare, Y.R.; M.K. Dubey and N.K. Khare (1996). Utility and effectiveness of training on Mushroom (Osyter) production technology - SA study. *Bhartiya Krishi Anusandhan Patrika*, 11 (2) : 121-128.

Medhi, S.; A.K. Singha, R. Sing and R.J. Singh (2017) Effectiveness of training programmes of Krishi Vigyan Kendra (KVK) towards socio-economic development of farmers in Meghalaya. *Economic Affairs.* 62 :(4)677-682

Deshmukh S.K., Tamilselvi G. and Deshmukh T.S. (2021) Impact of KVK training on knowledge and adoption levels of soybean growers in Maharashtra State. International Journal Of Agriculture Sciences. 13(2): 10644-10646

Christopher, Kevin; Mukesh Kumar, Anand Pathak and Nemha Khusboo(2020)Impact of Krishi Vigyan Kendra (KVK) Training Program on Knowledge Behaviour of Maize Growers in Bettiah Block of West Champaran District of Bihar, India. Int. J. Curr. Microbiol. App. Sci. 9(2): 2431-2434

Yadav, S.K.; M.L. Sharma, D.P. Singh. (2012) Impact of Krishi Vigyan Kendra on Knowledge and Adoption of Rice Production Technology by the Farmers. Research J. Science and Tech. 2012; 4(4): 158-161.