



Impact of Krishi Vigyan Kendra in Changing the Annual Income of the Farmers in Barwani District of Madhya Pradesh, India

Lakhan Lal Bamne^{a++}, S. K. Badodiya^{b#}
and Govinda Bihare^{c†*}

^a Mansarovar Global University Bhopal, Madhya Pradesh, India.

^b Krishi Vigyan Kendra, Badwani, Madhya Pradesh, India.

^c RKDF University Bhopal, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2023/v41i61918

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/99157>

Original Research Article

Received: 21/02/2023

Accepted: 23/04/2023

Published: 01/05/2023

ABSTRACT

The farming community needs training to develop their skills and knowledge. The economic condition of the farming community can be improved through various trainings. This study was carried out in Barwani districts of Madhya Pradesh. The total sample consisted of 240 farmers as respondents of the study. This study showed that the upper part of the farmers were found in the low category and the change in annual income (<one Lakh rupees) about the agricultural

⁺⁺ Ph.D. Scholar;

[#] Principal Scientist and Head;

[†] Assistant Professor;

*Corresponding author: E-mail: govindabihare599@gmail.com;

technology was noted due to Krishi Vigyan Kendra conducting various skill development programs and activities. Of the fourteen variables, age, caste and family size were found to have no significant relationship with the annual increase in income due to the program. Majority 75.00 percent of the respondents said that KVK was established in the district headquarters and it was far away from the villages because Barwani district has the headquarters of KVK in the district headquarters. Farmers need continuous education to stay abreast of the rapidly changing developments in agriculture so that they can use technology and new tools to modernize their operations and increase their income.

Keywords: Impact; KVK; annual income; training; respondents; co-ordination; literature etc.

1. INTRODUCTION

Agriculture generally has five stages. Production, processing, consumption, storage and marketing. Farmers are actively involved in most of the steps. They are involved in most of the agricultural operations such as field preparation, seed planting, intercropping operations, weeding and plant conservation practices, harvesting, composting, fertilizer and manure application. They are also involved in cleaning crops, storing seeds and grains, and processing agricultural by-products.

Krishi Vigyan Kendra (KVK) is an innovative science-based institute providing vocational training to farmers, farm women and rural youth and extension workers in farm research for technical improvement and frontline demonstration. Effective education means education in different ways and methods. The appropriate methods of implementing technical knowledge are mainly interactive lectures, drama groups, and discussion role-plays. In such a situation, trainees have a good opportunity to discuss and clarify. Apart from this, the ideal location, suitable materials according to the requirements, suitable design and suitable timing are other considerations for the effective implementation of an educational program. Through Krishi Vigyan Kendra's education, an attempt was made to investigate the effectiveness of education. On farmers, most programs are associated with demonstrations and trails that are conducted to develop solutions to site-specific problems and improve production. Similarly, some aimed to increase net income and better manage natural resources by reducing production costs. Some of these programs aim to diversify agriculture based on market demand for available local resources.

“Education is an important and continuous need for the overall development of the agricultural sector. Professional training is one of the most

important activities of Krishi Vigyan Kendra. The needs and problems of selected target villages are addressed through PRA. For this reason, appropriate training programs are organized for extension workers and farmers, which provide systematic opportunities for rural youth and participants to gain the necessary understanding and skills during training. KVK provides training not only in agriculture and allied occupations but also in other income generating activities which can double the income of farming communities. The methods used in education are formal and informal or a combination of both. Training programs should be implemented systematically” Bihare et al. [1].

The current research was carried out with the following objectives:

- To know the impact of KVK in terms of annual income of farmers.
- To explore the relationship between socio-personal traits of the farmers with their annual income increased due to the programme.
- To know the problems faced by the farmers in getting the training programme and participation in other activities.

2. MATERIALS AND METHODS

The study was conducted in West Nimar of Madhya Pradesh i.e. Barwani districts. Barwani district consists of seven blocks. Among the seven blocks of Barwani district, Barwani, Sendhwa, Pati and Rajpur blocks have the maximum number of farmers followed by other blocks which were purposively selected for the study. A list of villages where various activities/programmes were conducted by Krishi Vigyan Kendra was prepared and from which 3 villages were randomly selected from each selected block for the study. In consultation with Krishak Mitra, AFO and RAEO, a village-wise list of farmers was prepared. Twenty farmers from

each village were randomly selected from this list to create a sample size of 240 farmers. Primary data were collected from respondents using a pre-tested interview schedule. Respondents were interviewed individually by the investigator.

3. RESULTS AND DISCUSSION

3.1 Annual Income Increased due to the Programme

Annual income is the amount of income a person earns in a financial year. Agricultural income refers to income or income from resources including agricultural land. The data based on the scores obtained by the farmers are presented in Table 1.

On the basis of score obtained to the farmer, the data presented in Table 1 majority of the respondents 50.42 percent had reported to increase their annual income in the low level (< one Lakh rupee) due to the after participation

in the programme organized by Krishi Vigyan Kendra and adoption of agricultural technology followed by 36.25 percent of the respondents had reported to increase their annual income in medium category (one to two Lakhs rupee) due to the programme and activities conducted by the KVK and just 13.33 percent respondents reported to increased their income high level (> two Lakhs) due to to the after participation in the programme organized by Krishi Vigyan Kendra and adoption of agricultural technology. Similar findings were reported by Badodiya et al. [2], Bihare et al. [1] and Gupta et al. [3].

Sample mean of the respondents' change their annual income due to the after participation in the programme organized by Krishi Vigyan Kendra and adoption of agricultural technology was examined and found the value 1.63. Standard deviation was calculated 0.72 which was explored the quantity of variation or diffusion of a set of values of agricultural technology farmers.

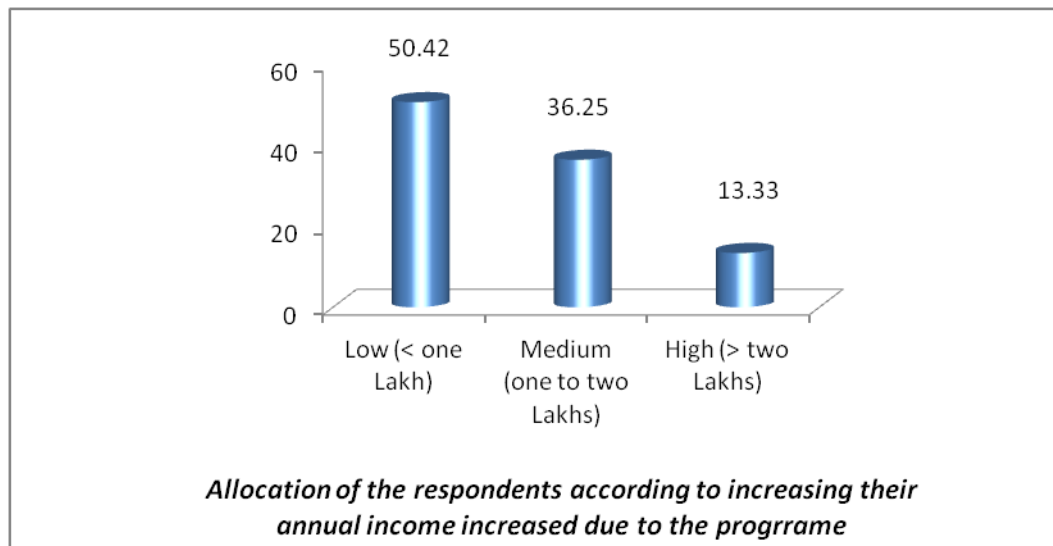


Fig. 1. Allocation of the respondents according to increasing their annual income increased due to the programme

Table 1. Allocation of the respondents according to increasing their the annual income

SN	Category	Respondents	
		Frequency	Percentage
1	Low (< one Lakh)	121	50.42
2	Medium (one to two Lakhs)	87	36.25
3	High (> two Lakhs)	32	13.33
Total		240	100
Mean (μ)		1.63	
Standard Deviation (σ)		0.72	

3.2 Relationship between the Socio-personnel Traits of Farmers and their Income Increased due to the Programme

The zero order correlation coefficient of selected socio- personnel traits was determined with annual income increased of farmers and presented in Table 2. 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.

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 annual income increase due to training

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 training programme organized by KVK. This findings are in line with the findings of Badodiya et al. [4], Bihare et al. [1] and Medhi et al. [5].

3.3 Problems Faced by the Farmers in Getting the Training Programme and Participation in other Activities

The data in Table 3 depicts constraints which were experienced during attaining the training programme. 75.00 percent respondents reported that KVK is far away from villages and remote areas because Barwani both district had one KVK in district head quarter.

Table 2. Relationship between socio-personal traits of farmers and their annual income increased due to the programme

SN	Pointer	Socio-personal traits	Correlation Coefficient “r”
1	Y ₁	Age	-0.039
2	Y ₂	Education	0.662
3	Y ₃	Caste	0.070
4	Y ₄	Size of family	0.139
5	Y ₅	Social participation	0.424
6	Y ₆	Occupation	0.440
7	Y ₇	Size of land holding	0.525
8	Y ₈	Irrigation facility	0.665
9	Y ₉	Source of information	0.393
10	Y ₁₀	Migration behavior	0.404
11	Y ₁₁	Risk orientation	0.582
12	Y ₁₂	Extension contact	0.665
13	Y ₁₃	Innovativeness	0.453
14	Y ₁₄	Cosmopoliteness	0.617

Table 3. Problems faced by the farmers in getting the training programme and participation in other activities

SN	Problems faced by the farmers	Freq.	%	Rank
1	Scientific and English words are not explicable	152	63.33	II
2	KVK is established in district headquarter and it is far away from villages	180	75.00	I
3	Literature is in English and Hindi language	148	61.67	III
4	Demonstrations are not conducted effectively	132	55.00	IV
5	Lack of graphical and pictographic appearance	106	44.17	V
6	Trainings are not planned according to need and time of local people	86	35.83	VII
7	Lack of extensive promotion of training	97	40.42	VI
8	Maintain meager co-ordination with other organizations	82	34.17	VIII
9	Lacking of superior infrastructural facilities	81	33.75	IX
10	Information communication tools are not used in properly	74	30.83	X

This constraint ranked first followed by 63.33% of respondents who experienced "scientific and English words cannot be explained". Technical publications are published in English and Hindi and are ranked third with 61.67% of respondents. The demo was ineffective.

Rank 4, experienced by 55.00% of respondents. The majority of farmers, 44.17%, expressed "lack of graphic or pictorial appearance" and ranked fifth. Training was not planned according to the needs and time of the local people, which was reported by 35.83% of the respondents and ranked seventh.

A majority of 40.42% of respondents said there was a lack of extensive facilitation of training, followed by poor coordination with other agencies, with 34.17% of respondents reporting in eighth place. 33.75% of farmers said that they lack good infrastructure facilities. 30.83% of the respondents said that the communication tool was not used properly. Findings consistent with Deshmukh et al. [6] and Chakaravarthy and Balakrishnan [7,8].

4. CONCLUSION

This study shows that due to various programs and activities undertaken by Krishi Vigyan Kendra, a high proportion of farmers were found in the lower range and recorded annual income change (<one lakh rupees) about agricultural technology. Of the fourteen variables, age, gender, and family size did not show any significant relationship with the increase in annual income due to the program. Majority, 75.00 percent of the respondents noted that the KVK is established at the district headquarters and is far from the villages as there is one KVK at the district headquarters in Barwani district. Farmers need continuous education to be aware of the rapid development in agriculture to use technology and new tools to upgrade operations and increase their income. The planning and execution of such training have to be carefully carried out to achieve the good success.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Bihare, Govinda, Swarnkar VK, Badodiya SK. Efficacy of trainings programme among the tribal farmers provided by Krishi Vigyan Kendra's of West Nimar Region Madhya Pradesh. *J. Krishi Vigyan.* 2022;11(1): 158-161.
2. Badodiya SK, Rakesh Jain SRK, Singh, Kulmi GS. 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.* 2021;10(2):114–119.
3. Gupta Nishith, Patel Neerja, Bhargav KS, Singh Moni, Dixit AK. Impact of Vocational Training Programme on Income and Employment Generation for Rural Youth in Dewas District of Madhya Pradesh. *Indian Journal of Extension Education.* 2018;54 (4):180-188.
4. Badodiya SK, Jain DK, Maratha P, Gour CL, Sikarwar RS. 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.* 2021; 23(1):83-86.
5. Medhi S, Singha AK, Sing R, Singh RJ. Effectiveness of training programmes of Krishi Vigyan Kendra (KVK) towards socio-economic development of farmers in Meghalaya. *Economic Affairs.* 2017; 62(4):677-682.
6. Deshmukh SK, Tamilselvi G, Deshmukh TS. Impact of KVK Training on Knowledge and Adoption Levels of Soybean Growers in Maharashtra state. *International Journal of Agriculture Sciences.* 2021;13(2):10644-10646.
7. Chakaravarthy Niruban, Balakrishnan T. An evaluative study on training programmes organized by Krishi Vigyan Kendra in adoption of integrated crop management practices. *Plant Archives.* 2020;20(1):3329-3334.

8. Dubey AK, Srivastva JP, Singh RP, Sharma VK. Impact of KVK Training Programme on Socio-economic Status and Knowledge of Trainees in Allahabad District. Indian Res. J. Ext. Edu. 2008; 8(2&3):60-61.

© 2023 Bamne et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/99157>