

PERCEPTIONS OF TRAINEES ABOUT INTEGRATED PEST MANAGEMENT TRAINING

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ABSTRACT

This study was conducted to evaluate the impact of training on the knowledge level of extension officers of state agriculture department. The knowledge level of trainees after training programme was higher than their pre-training knowledge. The correlation coefficient between knowledge and type of family, educational qualification, service experience, head quarter and training exposure were positive and significant. Though, the correlation with age was negative and non-significant. The overall quality of training was perceived to be very good by sixty percent trainees. Respondents suggested that each training programme must start with field visit.

INTRODUCTION

Globalization and increased international competitiveness have led to the restructuring of economies of numerous countries, in the recent past. In the process technology has come to be widely regarded as a major factor contributing to the growth and development of the organization as well as countries. The economic development is very much dependant upon appropriate policies and continuous Up-gradation of technology, both at macro and organization levels. In this process the most crucial factor in the successful transfer and absorption of technology is the capacity and skill of the human resources to assimilate and develop new technologies.

In this world of knowledge explosion and scientific advancement, extension workers should be familiar with the latest knowledge. In-service training helps them to keep touching with the growing knowledge. Training is one of the effective methods of transfer of technology and plays an important role in updating the knowledge of extension personnel in the area of latest farm

technologies.

The Krushi Vigyan Kendra (KVK), Rajgarh is engaged in imparting training to the extension functionaries in different aspects of agriculture. Evaluation of such training programme will enables the organization to further strengthen these programs based on the feedback. Hence this study has been taken up with a view to evaluate the effectiveness of integrated pest management trainings conducted for the extension workers of development departments by the KVK. The present study was carried out with following objectives.

1. To find out the level of knowledge gained by the participants as a result of the training.
2. To know the perception of participants about quality of training.
3. To seek the suggestions of the trainees to improve the training programme.
4. To study the relationship between knowledge and personal characteristics of the trainees.

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METHODOLOGY

During the last week of July 2001, a three day training programme on integrated pest management in soybean crop was organized at KVK Rajgarh. A total of 33 extension officers, who have participated in this training programme were treated as respondents.

In the present study, knowledge denotes the understanding of participants about integrated pest management practices. The data were collected with the help of semi structured schedule. The schedule was administered to the respondents before and after conducting the training programme in order to quantify the knowledge gain. Based on the mean and standard deviation, the respondents were classified into three groups as low, medium and high. Quality of training programme was measured by taking into account the impression of participants about various aspects of training like subject, topic, level of skill training, participation in discussion, use of audio-visual aids and overall quality of training. The response was recorded on three point continuum. Correlation coefficient was used to find out the relationship between knowledge and independent variables.

RESULTS AND DISCUSSION

Level of knowledge

The data presented in Table 1 revealed that the majority of extension officers had low to medium knowledge about integrated pest management practices in soybean crop. Only 12.80 per cent participants had high knowledge before acquiring the training, while 53.12 per cent trainees had high knowledge after training programme. It is also evident from the table that only 6.25

Table 1: Knowledge level of Extension Officer

S. No.	Categories of knowledge	Before Training		After Training	
		Freq.	&	Freq.	&
1	Low	17	53.12	2	6.25
2	Medium	11	34.37	13	40.62
3	High	4	12.80	17	53.12
N =		32		32	

per cent participants possessed least knowledge after training.

Impact of training

It could be observed from Table 2 that there was significant increase in knowledge on IPM by the extension personnel at the end of the training

Table 2: Knowledge gain of participants in Training Programme

S. No.	Particular	Before Training	After Training
1	Total knowledge score	484	779
2	Mean knowledge score	15.125	24.343
3	Knowledge index	37.81	60.85
4	Sd	5.045	6.25
5	CV	1.042	0.802
"t" Value		9.543 *	

* - Significant at 0.01 level

programme. The knowledge index of participants before and after the training was 37.81 and 60.85 respectively. The calculated "t" value was significant at 0.01 level of probability.

On the basis of above findings it could be inferred that knowledge level of extension officers before and after training differs significantly as per their mean knowledge score. The knowledge level of the extension officers after training programme was higher than their pre training knowledge. It could be referred to as an impact of training

Table 3: Quality of training as perceived by the Trainees

S. No.	Particular	Freq.	%	N = 32
1.	Subject of training			
	A. Very important	25	78.12	
	B. Important	07	21.87	
	C. Somewhat important	00	0.00	
2.	Topics set for discussion			
	A. Entirely new	02	6.25	
	B. Partly new	08	25.0	
	C. Few topic new	03	68.75	
3.	Appropriateness of subject matter			
	A. Highly suitable	11	34.37	
	B. Moderately suitable	18	56.25	
	C. suitable to some extent	03	9.37	
4.	Level of skill training			
	A. Very good	23	71.87	
	B. Good	09	28.12	
	C. Poor	00	0.00	
5.	Participation in discussion			
	A. Very good	09	28.12	
	B. Good	03	40.62	
	C. Poor	10	31.25	
6.	Relevancy of reading material			
	A. Very relevant	08	25	
	B. Relevant	10	31.25	
	C. Not relevant	14	43.75	
7.	Appropriate use of A.V. aids			
	A. Very good	13	40.62	
	B. Good	15	46.87	
	C. Poor	04	12.50	
8.	Overall quality of training			
	A. Very good	19	59.37	
	B. Good	13	40.62	
	C. Poor	00	0.00	

programme. These findings are in the line with the findings of Mahipal and Prasad (1995).

Perceived quality of training

This aspect though looks minor but can lead to adverse results, if not managed properly. Frequency distribution of the respondents based on their opinions about the training

methodology, contents and its coverage etc. are presented in the Table 3. Usefulness of training subject is a very important aspect since it has a direct link with the enhancement/ updating of knowledge, learning new skills etc. Data presented in the table revealed that 78 per cent of officers rated that subject of training was very important for them.

Regarding topic set for discussion in training programme, the majority (68 per cent) of the participants perceived that the few topics were new while 25 per cent reported that some of them were new for them.

As regard the appropriateness of subject matter, 56 per cent respondents were perceived that the subject matter were moderately suitable, while 34 per cent reported that it was highly suitable for them. The reason may be due to the fact that the major kharif crop of the area is soybean and it used to be affected by various leaf feeders and stem insects. As regard the level of skill imparted in training, 72 per cent of respondents perceived that the level of skill training was very good. The skill was transferred by various methods such as how to prepare spray solution, spray method, identification of beneficial and harmful insects in field. Though, 28 per cent respondents perceived that the level of skill training was good.

The data in Table 3 also revealed that, majority (68 per cent) of participants reported that the interaction between trainers and trainees was of high level. This may be due to the fact that all the trainers were very well aware about interaction/discussion with participants and they were encouraging trainees to participate in discussions.

About relevancy of reading material majority (54 per cent) of respondents feel that the reading material given in training programme were very relevant to relevant. This might be due to the literature distributed in this training programme covered all the major insects of soybean, their nature of damage, marks of identification, life cycle and various control

measures. The literature on IPM was also provided to the participant trainees.

An attempt was made in the study to see the perception of the trainees on the use of different audio visual aids/ training tools utilized by the resource persons. It was found that more than 87 per cent resource persons used various kinds of audio visual aids to explain to their topic.

As regard the overall quality of training 60 per cent trainees were reported that the training was very good, while 40 per cent trainees reported that training was good. This shows that topic included in training, methods used were not very new but were delivered with relevance and technological advances.

Table 4: Correlation between knowledge and selected independent variable of the participants

S. No.	Independent Variable	Correlation Coefficient "r" values
1	Age	- 0.045 ^{NS}
2	Type of family	0.892 **
3	Educational qualification	0.989 **
4	Service experience	0.713 **
5	Head quarter	0.683 **
6	Training exposure	0.650 **

NS = Non - significant

** = Significant at 0.01 level of probability

Relationship between knowledge and independent variables

The correlation coefficient values were computed on the basis of the scores obtained by the participants on each of the six independent variables. The results obtained have been given in the Table 4.

The coefficient of correlation between the age and knowledge about integrated pest management practices showed a negative

association. This indicates that with advancement of age, the knowledge about IPM declines; though not significantly. This finding gets support from the study conducted by Ramesh Babu and Sinha (1988).

The correlation coefficient between type of family and knowledge was positively correlated. It can thus be concluded that type of family had significant impact over the knowledge. These results are in conformity with the result of Kumari and Sinha (1995).

The relationship between the education and knowledge level was found to be significant at 0.01 level of probability. This indicates that as the education increases, the knowledge horizon of the extension officers is broadened. It is concluded that the better the formal education of the respondents, more the knowledge he possessed about the innovation. It is supported by Rai, et. al. (1987) and Shakharkar, et. al. (1992).

It was observed that service experience was significantly and positively correlated with knowledge of integrated pest management practices. This indicate that as the tenure of service increases the extension workers able to know the dangerous hazards of

chemicals, hence they are acquiring more information about bio-logical and agronomical methods of pest control in the crop.

The distance of head quarter from district/ block has significant impact on knowledge level of extension officers. This might we due to the fact that those posted at district/ block are having more exposure to training, literature and contact with senior officer, etc; which leads to increase in knowledge.

The correlation coefficient between training/ exposure and knowledge of integrated pest management practices was positively significant at 0.01 percent level of significance. It could be interpreted as the training is important assets of extension officers; because training may help extension officers to acquire more and more knowledge about improve methods of pest management.

Suggestions of trainees

The trained extension personnel's were also asked to suggest the measures for improving farmers training programme. The compiled responses from them were presented in Table 5. The respondents opined that 'each

Table 5. Suggestions given by trainees for improving training programs

Sr. No.	Opinion / statements	Per cent	Frequency	Rank
1	Each training programme must start with field visit	87.5	28	I
2	KVK must organize long duration training	12.5	4	VII
3	Trainers must use audio-visual and other teaching aids during the training programme to make the training session interesting	28.12	9	V
4	During training programme KVK must distribute printed information / material about the subject matter	68.75	22	II
5	Training programme in KVK should be conducted by external experts on the subject together with regular KVK trainers for better exposure and experiences	37.5	12	III
6	Each training programme must start with skill training	34.37	11	IV
7	Every training programme of KVK should have monitoring and evaluation	18.75	6	VII

training programme must start with field visit' as the most important measure for improving the training programme and ranked as first. The other measures suggested by the extension officers are 'during training programme, printed information/ material about the subject matter shall be distributed' (ranked II). Training programme in KVK should be conducted by external experts on the subject together with regular KVK trainers for better exposure and experiences, each training programme must start with skill training and trainers must use audio-visual and other technical aids during the training programme to make the training session interesting as ranked 3rd, 4th and 5th suggestions respectively.

CONCLUSION

This study was conducted to evaluate the impact of IPM training on the knowledge level of extension officers. The knowledge level of trainees after training programme was higher than their pre-training knowledge. The correlation

coefficient between knowledge and type of family, educational qualification, service experience, head quarter and training exposure were positive and significant. The overall quality of training was perceived to be very good by sixty percent trainees. The main suggestion made by the respondents was that each training programme must start with field visit.

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