

Short Communication

Knowledge Gain of Extension Personnel on Exposure to Training Program

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Training of extension personnel aims at bringing about a desirable change in knowledge, skills, attitudes, values, beliefs and understanding so that an individual becomes qualified and proficient in communicating/transferring the knowledge to the clients. Training of extension personnel is, therefore, of immense importance to transfer the latest knowledge in the field of agriculture to the adopters, i.e., the farmers. This study was undertaken with an objective of analyzing the effectiveness of training program in improving the knowledge and skills of extension personnel.

The Division of Extension Education and Training at the Central Arid Zone Research Institute is entrusted with organizing need-based training programs for the extension personnel. The following data pertains to the training program on horticulture organized for 21 participants, comprising of Assistant Agricultural Officers, Assistant Directors of Horticulture and Agricultural Research Officers. Initial knowledge of trainees on horticultural aspects was measured by a knowledge test developed for the study, based on the subject matter covered in the training program. A score of 1 was assigned to each correct response. The gain in knowledge after exposure to training program was measured with the same knowledge test. Based on the range

of scores the trainees were grouped under low (0-15), medium (15-30) and high (above 30) knowledge categories. Trainee's opinion on the usefulness of coverage, duration and nature of training program was also elicited to serve as a feedback to the trainer to improve the quality of their training programs.

Extension personnel have a difficult task of transferring new and improved technologies to the farmers. For this special task they have to keep themselves informed and upgrade their knowledge. Training is one of the means to do so, as is evident from the findings in Table 1. It can be seen that majority (80.95%) of the trainees were in the high knowledge category after exposure to the training program, in comparison to 76.2% in medium knowledge category before exposure to the training program. Similar findings of gain in knowledge after exposure to training program have been reported by Chauhan (1990), Verma *et al.* (1993) and Wasnik *et al.* (1998).

Table 2 explains the knowledge gained by extension personnel on different aspects of dryland horticulture. The highest gain in knowledge was observed for plant protection measures, followed by methods of propagation, fertilizer application, improved varieties, benefits of shelterbelts, pruning, and fertilizer application.

Table 1. Knowledge level of extension personnel

S.No.	Category	Knowledge score	Before training		After training	
			Number	Percentage	Number	Percentage
1.	Low	0-15	2	9.52	—	—
2.	Medium	15-30	16	76.20	4	19.05
3.	High	above 30	3	14.28	17	80.95

Horticultural crops in arid region, as anywhere else, are taken up for earning more. It was observed that due to disease and pest attack the yields from these crops were drastically reduced in the study area. Farmers were always anxious to learn from extension personnel the curative and preventive measures for the pest and disease attacks. This may be the probable reason that extension personnel too, were eager to acquire more knowledge on these aspects.

The hostile agro-climatic conditions and lack of suitable cultivars are the limiting factors for horticultural growth in arid region. Extension personnel desired to acquire knowledge and skills in propagation techniques so that the farmers could be taught nursery management and transplanting. The success of orchard development depends primarily on these aspects. Extension personnel, therefore, were keen to learn about soil improvement and nutrient management practices according to soil type so that their clients would benefit from their knowledge. Extension personnel were interested to learn about the suitable tree species for shelterbelt, their layout and management, as reflected in the gain in knowledge on these aspects after exposure to the training program. Shelterbelts, apart from providing food, fodder crops and horticultural crops grown in their sheltered zones, play an important role in wind speed reduction. Gain in knowledge after exposure to training was

observed to be significant for all aspects of fruit production. Thus, the objective of training in bringing about desirable changes in knowledge and understanding of extension personnel gets fulfilled when they can communicate the latest knowledge to the client system.

The trainee's opinion on usefulness and coverage of subject matter was also elicited. All the topics of the training schedule were rated between useful to fairly useful. But the coverage of certain topics was not found to be satisfactory. This would serve as a feedback to the trainers to improve the quality and coverage of the subject matter. Majority of the trainees were satisfied with the duration, location and timing of the training program and they found the training schedule comfortable.

Training aims at improving the quantity and quality of work produced by individuals. Extension personnel have the major responsibility of communicating the developments in horticultural technology to the farmers. Therefore, they themselves should be well informed and trained in all these aspects. The findings of the study prove the fact that training brings about desirable changes in knowledge, skills and understanding of individuals. Majority (80.95%) of the extension personnel were found to be in the high knowledge category after exposure to the training program.

Table 2. Knowledge gained by the extension personnel on various aspects of dryland horticulture

Aspects	Maximum possible score	Before training		After training		Mean knowledge gain score	Mean gain score in terms of %	Calculated "t" value
		Mean knowledge score	Mean score expressed in terms of %	Mean knowledge score	Mean score expressed in terms of %			
Benefits of shelterbelts for horticultural crops	2	1.09	54.50	1.71	85.50	0.62	31.00	4.18**
Methods of propagation	5	2.85	57.00	4.19	53.80	1.34	26.80	6.48**
Improved varieties	11	7.00	63.63	9.66	87.82	2.66	24.18	4.46**
Pruning	3	2.00	66.67	2.52	84.00	0.52	17.33	2.85**
Fertiliser application	4	1.19	29.75	2.19	54.75	1.00	25.00	5.22**
Plant protection measures	18	8.33	46.27	13.57	75.38	5.34	29.11	8.08**
Total	33	22.46	52.23	33.84	78.69	11.38	26.46	10.34**

** P = 0.01.

References

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