A study on the impact assessment of training on mushroom cultivation on the farmers

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ABSTRACT

This study evaluated the impact of a 7 days mushroom cultivation training conducted by Krishi Vigyan Kendra, Samba, Jammu and Kashmir, on 20 economically disadvantaged farmers and landless labourers in 2020-21. Data were collected via pre-tests, post-tests, feedback questionnaires and semi-structured interviews. Results indicated a significant positive impact. Out of the total, 39.4 per cent of respondents strongly agreed their networking increased and 36.2 per cent reported increased job motivation. Seventy per cent agreed that they gained new knowledge/skills and 64.0 per cent reported improved job performance. Ninety five found the training content relevant to their work with 62.0 per cent stating almost everything learned was applicable. In total, 26.5 per cent reported a 70.0 per cent gain in new skills/knowledge and 25.0 per cent reported an 80.0 per cent gain. These findings demonstrate the effectiveness of practical, need-based training in enhancing farmers' capabilities and livelihoods.

Keywords: Mushroom cultivation; training; impact; knowledge; skills; abilities

INTRODUCTION

Training for farmers has been proven to yield variety of results. The training programmes are aimed at building the competencies, skills and capabilities of farmers in order to improve their farm practices and productivity. Murshed-E-Jahan and Pemsl (2011), in their study on Bangladeshi small farmers, concluded that building the capacity of farmers through training was more valuable than the provision of financial support in terms of raising production and income. Training is a critical input for the farmers for quick transfer of technology and a way to improve their agriculture and, thereby, their socio-economic condition (Reddy and Kumar 2020). Study on the effectiveness of trainings for farmers showed that not all programmes meet success as most failures of programmes in the developing countries were attributed to the tendency of excessively concentrating on a particular technology transfer rather than a broader spectrum of farmer empowerment including knowledge dissemination (Oreszczyn et al 2010, Yang et al 2008). However, these gaps can be overcome by carefully revising and designing the training to address the needs. It was also reported that some success stories were related to using non-formal education and focusing on learning-discovery approach and filling in the gaps in farmers' knowledge misconceptions.

METHODOLOGY

A 7 days training on mushroom cultivation was conducted by the Krishi Vigyan Kendra, Samba, Jammu and Kashmir in 2020-21. The youth for the trainings were selected from different blocks of Samba, Jammu and Kashmir. Majority of them were small farmers and landless labourers who belonged to the lower strata of the society in terms of economic conditions. Few of

them had the previous experience of mushroom farming but due to the lack of scientific training on the mushroom cultivation, they were not able to make headway.

The present study was aimed at investigating the benefits gained and level of knowledge, skills and ability (KSA) gained by the farmers through training. A multi-stage approach was adopted and data were collected through pre-tested questionnaires. Respondents comprised 20 males and females. Pre-test of the trainees was done prior to attending the course. The feedback test of the trainees was done immediately after completion of the course and the post-test was done 6 months after completion of the course. Semi-structured interviews were also conducted using WhatsApp and home visits.

RESULTS and DISCUSSION

Data in Table 1 indicate that among the respondents, 50 per cent were under the age of 25 years, 30 per cent were between 26 and 30 years and 20 per cent were above 30 years of age.

Table 1. Distribution of respondents according to age

Age (years)	Respondents (n = 20)	
	Number	Percentage
<25	10	50
26-30	6	30
>30	4	20

Data given in Table 2 depict that majority (39.4%) of the respondents strongly agreed that their networking increased due to training on mushroom cultivation followed by 36.2 per cent who found themselves more motivated toward their job. Seventy per cent agreed that they acquired knowledge and skills as a consequence of training followed by 64.0 per cent agreeing that their job performance level increased after the training. Ten per cent of them were not able to judge that they could do their work faster after training, whereas, 8.00 per cent could not judge that they were more motivated towards their job. Five and 1.6 per cent respondents disagreed that they completed their work faster and were more motivated towards their job after the training respectively. Only 2.2 per cent of the respondents strongly disagreed that they were more motivated towards their job after the training.

Data on the ability level of respondents to transfer skills, knowledge and ability from the training to workplace are given in Table 3. Most of the farmers (30.0% each) strongly agreed that the course content covered in the training was relevant to their job and almost everything they learnt was applicable at work. Most of the respondents (65.0%) agreed that the course content covered in the training was relevant to their job followed by 62.0 per cent who told that almost everything they learnt was applicable at work. Thirty one per cent of the farmers were unable to judge whether they were able to coach the fellow farmers followed by 18.0 per cent who could not judge that what they learnt was not difficult to practically apply. Twenty and 19.0 per cent respondents disagreed that what they learnt was not difficult to practically apply and they were able to coach the fellow farmers respectively. Only 1.0 per cent farmers strongly disagreed that what they learnt was not difficult to practically apply or they learnt highly applicable skills and knowledge.

Data in Table 4 show that majority of the farmers (26.5%) responded that there was 70.0 per cent gain in their new skills/knowledge followed by 25.0 per cent whose gain was 80.0 per cent. Twenty six per cent of them practiced new skills/knowledge (80.0%) followed by 19.0 per cent whose gain was 50.0 per cent. Twenty five per cent of the respondents' gain in time saving and faster and easier work completion was 50.0 per cent followed by 18.5 per cent whose gain was 70.0 per cent.

In a study conducted by Singh et al (2024), it was found that the gain in knowledge of the trainees from pre-training to post-training ranged from 28.33 to 60.00 per cent. Most of the beneficiaries were found to be satisfied with almost all parameters of training after post-evaluation test of training. Meena and Simgh (2014) investigated the effectiveness of training programme on mushroom cultivation in Rajasthan. About 69 per cent of the topics of the programme were perceived to be either relevant or highly relevant. Also, about 75 per cent of the respondents rated the topics of the programme either as most useful or useful. About 80 per cent of the respondents perceived the programme either effective or highly effective.

Manimekalai et al (2018) assessed the impact of vocational training programme on knowledge about mushroom production in Tiruvallur district, Tamil Nadu and revealed that knowledge gained on mushroom

Table 2. Farmers' response to impact of training on mushroom cultivation

Component	Respondents (%) response				
	Strongly disagree	Disagree	Unable to judge	Agree	Strongly agree
Networking increased	0.0	0.0	6.6	54.0	39.4
Acquired knowledge and skills	0.0	0.0	5.8	70.0	24.2
Enabled to perform job better					
Job performance level increased after training	0.0	0.0	7.4	64.0	28.6
More motivated towards job after training	2.2	1.6	8.0	52.0	36.2
Work completed faster	0.0	5.0	10.0	61.0	24.0

Multiple responses

Table 3. Ability of farmers to transfer skills, knowledge and ability from training to workplace

Component	Respondents' (%) ability level				
	Strongly disagree	Disagree	Unable to judge	Agree	Strongly agree
Course content relevant to job	0.0	0.0	5.0	65.0	30.0
Almost everything learnt applicable at work	0.0	2.0	6.0	62.0	30.0
Not difficult to practically apply what was learnt	1.0	10.5	18.0	55.0	15.5
Learnt highly applicable skills and knowledge	1.0	20.0	15.0	55.0	9.0
Able to coach fellow farmers	0.0	19.0	31.0	33.0	17.0

Multiple responses

Table 4. Farmers' response to the extent of benefits, knowledge and skills gained from training

Component	Respondents' (%) level of benefit gained (%)									
	10	20	30	40	50	60	70	80	90	100
New skills/knowledge gained	1.0	1.0	3.0	2.0	17.5	7	26.5	25.0	12	5.0
New skills/knowledge practiced	1.5	3.0	6.0	7.5	19.0	6.5	15.0	26.0	11.0	4.5
Time saving, work completed faster and easier	2.0	6.0	7.5	9.0	25.0	8.5	18.5	18.0	5.5	0.0

Multiple responses

production technologies ranged from 64.00 to 98.00 per cent. The farmers after undergoing training programmes registered an increase of 64.72 per cent in mean knowledge score. The trained farmers took up mushroom cultivation by extent of 50 per cent. Vishwakarma et al (2023) observed significant improvements in knowledge acquisition after going through training on mushroom cultivation. The training effectively increased participants' knowledge in all aspects of mushroom production. Shirur et al (2016) reported that the participants of training on mushroom cultivation evaluated the training topics highly useful with respect to relevance, content, supportiveness of teaching aids and overall learning achieved. Most of the variables to assess the overall training programme were rated high by the trainees.

Mazumdar et al (2020) studied the impact of training programme conducted on mushroom cultivation and observed that the knowledge gained after exposure

to training was satisfactory in all aspects in comparison with pre-training knowledge score. The study revealed that exposure to training had increased the knowledge of farmers regarding mushroom production technique by 73.7 per cent. The training developed favourable attitude toward mushroom cultivation among the trainees. The overall perception level of the respondents was found to be changed after training.

CONCLUSION

This study demonstrates the positive impact of mushroom cultivation training programmes conducted by Krishi Vigyan Kendra, Samba, Jammu and Kashmir, on local farmers and landless labourers. The training significantly enhanced the participants' knowledge, skills and abilities (KSA), leading to improved job performance, motivation and networking. Specifically, the majority of respondents reported that there was increase in their networking and motivation; they acquired new knowledge and skills; there was an improvement in their job performance; could complete their work faster; there was high relevance of training courses content to their work and there was significant gain in new skills/knowledge and practical application. The training effectively addressed the needs of participants, who were primarily from economically disadvantaged backgrounds. The learning-discovery approach and focus on practical application contributed to the high success rate. The study highlighted the importance of well-designed, need-based training programmes in empowering farmers and improving their livelihoods. The positive outcomes suggested that such training initiatives should be continued and expanded to benefit a wider population.

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