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Training: An Effective Tool for Transfer of Agricultural Technologies

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ABSTRACT

Training of farmers and farm women has always been regarded as critical input for the rapid transfer of technologies. The present study was carried in five adopted villages of Krishi Vigyan Kendra, Burhanpur during 2014-15 to 2018-19. Out of over 100 different training programmes organized on various topics like pre sowing techniques, crop management practices, post-harvest management, goatery production and livestock management practices by KVK, Burhanpur during last five years a sample of 500 adult members actively participated in the training programmes was selected. The study revealed that the on campus training was most preferred by majority of the farmers, followed by off campus training programme. The farmers rated one to three days duration training organized during lean period as most preferred training programme for farmers.

Keywords: Training, Preferences, Farmers and Farm women

INTRODUCTION

Various efforts for agriculture and rural development have been made by the government organizations, non government organization and other institutes from pre-independence to the present era. The efforts are mainly concerned to encourage farmers to adopt new agricultural technologies and efficient practices to change their situations for economic prosperity and livelihood security. To impart Vocational training to practicing farmers, farm women and rural youth; in-services training to field level extension workers is taken care by a farm science centre (Krishi Vigyan Kendra) at districts level in India with the aim. These Krishi Vigyan Kendras in addition to dissemination of new technology help inculcate entrepreneurship among the farmers and farm women so that they can establish their own enterprises depending upon the availability of the resources. As such the training has always been the central to the Krishi Vigyan Kendra. Training for farmers has been proven to yield variety of results. Murshed-E-Jahan and Pemsl (2011); Tripp and Hiroshimil (2005); Oreszczyn and Carr (2010); Yang *et al.* (2008) on their study on Bangladeshi small farmers concluded that building the capacity of farmers through training is more valuable than the provision of financial support in terms of raising production and income. Present paper aims to document the training preferences of Burhanpur farmers and farm women under KVK training programmes. These training programmes were aimed at building the competencies, skills and capabilities of farmers in order to improve their farm practices and productivity in addition to prepairing farmers for various entrepreneurial opportunities for improving their economic status.

METHODOLOGY

The study was carried out in adopted villages (Harda, Nimandar, Manjrod, Umarda, Sandas) of Krishi Vigyan Kendra, Burhanpur during 2014-15 to 2018-19. In total 100 different training programmes organized on various topics like Pre sowing techniques, Crop management practices, Post-harvest management, Goatery production and Livestock management practices. Five skill

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development training programmes, 10 rural youth training programmes, 20 Capacity Building training Programme and 65 one day farm and farm women training programmes covering approximately 2500 KVK, Burhanpur trained farmers made the population for the study. A sample of 500 adult members who were actively involved in the training programmes was selected. In order to identify perceived preferences of farmers, the responses of an individual beneficiary were recorded on three point continuum as most preferred, preferred and not preferred with respective scores 3, 2 and 1 by pre tested structured interview schedule. Mean was calculated for each aspect by adding up frequencies and multiplied with respective continuum scores and ranked accordingly.

RESULT AND DISCUSSION

Table 1 revealed that one day farmer and farm women training programme was most preferred by 40.00% farmers followed by rural youth training programme (18.6%) followed by capacity building training (17.00%) and Skill development training (4.6%). This might be because of the involvement of KVK's farmers in more than one enterprise or activity at a time. Hence, farmers might have preferred one day training programme mostly. This finding was in line with that of Bhagat (1989) who reported the training need for all sectors . similiarly Nain *et al* (2013) concluded that future stress should be on disseminating information regarding income and employment opportunities.

Further, 1-3 days duration training was most preferred by majority (32.60%) whereas 3-5, 5-7 and 7-10 days training were preferred by 31.40, 11.80 and 7.20 per cent, respectively. 10-15 (5.40%) and 15-21 (4.60%) days training programme was least preferred. This could be due to the farmers' involvement in more activities. This finding was in concurance with that of Khan *et al.* (2011), Nain and Trikha (2009) and Kumar *et al.* (2013) whereas the preferred duration of training vaied considerably. As far as season of training programme was concerned, rainy

Table 1: Distribution of the farmers' preferences on various facets of training programmes

Facets of training programmes	Not Preferred (%)	Preferred (%)	Most Preferred (%)
a) Training Type			
One day F & FW training programme	0 (0.0)	63 (12.6)	200 (40)
Capacity building training programme	2 (0.4)	17 (3.4)	85 (17)
Rural youth training programme	1 (0.2)	9 (1.8)	93 (18.6)
Skill development training programme	1 (0.2)	6 (1.2)	23 (4.6)
b) Venue of training			
On-campus training programme	3 (0.6)	48(9.6)	303 (60.6)
Off-campus training programme	0 (0.0)	39 (7.8)	107 (21.4)
c) Subject matter for training			
Agronomy	1 (0.2)	5 (1.0)	63 (12.6)
Soil science	2(0.4)	2(0.4)	29(5.8)
Plant protection	0(0.0)	7 (1.4)	161 (32.2)
Horticulture	2 (0.4)	2(0.4)	97(19.4)
Animal husbandry	0 (0.0)	6 (1.2)	123(24.3)
d) Topics for training			
Pre sowing technique	3 (0.6)	23 (4.6)	13 (2.6)
Crop management practices	0(0.0)	41 (8.2)	127 (25.4)
Post harvest technology	4(0.8)	21 (4.2)	32 (6.4)
Goatery production	1(0.2)	32(6.4)	61 (12.2)
Livestock management practices	0(0.0)	43(8.6)	99 (19.8)

Table 1 contd...

Facets of training programmes		Not Preferred (%)	Preferred (%)	Most Preferred (%)
e) Preferred training method				
Lecture		1 (0.2)	5 (1.0)	23 (4.6)
Lecture with discussion		2 (0.4)	2 (0.4)	59 (11.8)
Lecture with film show		0 (0.0)	7 (1.4)	157 (31.4)
Exposure visit		2 (0.4)	2 (0.4)	27 (5.4)
Exposure visit with film show		0 (0.0)	3 (0.6)	36 (7.2)
Practicals		0 (0.0)	11 (2.2)	163 (32.6)
f) Use of AV-Aids				
Audio aids	Radio	0 (0.0)	5 (1.0)	24 (4.8)
	Audio CD	3(0.6)	2 (0.4)	22(4.4)
Video aids	Charts	1(0.2)	17 (3.4)	12(2.4)
	Picture	3(0.6)	12 (2.4)	20(4.0)
	Models	0(0.0)	31 (6.2)	22(4.8)
	Boards	0(0.0)	11 (2.2)	17(3.4)
	Literatures	0(0.0)	41 (8.2)	25(5.0)
Audio visual aids	Projector	0(0.0)	17 (3.4)	22(4..4)
	VCD player	2 (0.4)	21 (4.2)	22(4.4)
	LED/TV	0(0.0)	34 (6.8)	31(6.2)
	Multimedia	0(0.0)	53 (10.6)	30(6.0)
g) Preferred frequency				
Weekly		3 (0.6)	23 (4.6)	13 (2.6)
Monthly		0 (0.0)	41(8.2)	127 (25.4)
Quarterly		4(0.8)	21(4.2)	32 (6.4)
Half yearly		1(0.2)	32(6.4)	61 (12.2)
Yearly		0(0.0)	43(8.6)	99 (19.8)
h) Duration of training programme				
1-3 days		0 (0.0)	11 (2.2)	163 (32.6)
3-5 days		0 (0.0)	7 (1.4)	157(31.4)
5-7 days		2 (0.4)	2 (0.4)	59(11.8)
7-10 days		0 (0.0)	3 (0.6)	36(7.2)
10-15 days		2 (0.4)	2 (0.4)	27(5.4)
15-21 days		1 (0.2)	5 (1.0)	23(4.6)
i) Season of training programme				
Summer		1 (0.2)	9(1.8)	100 (20.0)
Winter		0 (0.0)	30 (6.0)	107 (21.4)
Rainy		2 (0.4)	48(9.6)	203 (40.6)
j) Preferred period for training programme				
Crop		0 (0.0)	39 (7.8)	107 (21.4)
Lean		3(0.6)	48 (9.6)	303 (60.6)

season (40.60) was perceived as most preferred season for training, followed by winter season (21.40%) and summer season (20.00%) in the order of preference. Preferring rainy season for undergoing training could be due to the reason that farmers were usually free during this period. This finding was in similar with those of Yang *et al.* (2008) and Tripp *et al.* (2005). Likewise, the lean period (60.60%) was perceived as most preferred period for training followed by crop period (21.40%). Preferring rainy season for undergoing training could be due to the reason that farmers relatively feel free during this period. This finding was in accordance with those of Vimal *et al.* (2013). As far as venue of training programme was concerned, it was revealed that on-campus training was preferred most by 60.60 per cent farmers followed by off-campus training (21.40%). This might be due to non-availability of infrastructural and training material at villages, the farmers prefer training at KVK where physical facilities for imparting training were available. This finding was in accordance with those of Khan *et al.* (2011).

Table further shows that plant protection training was most preferred by 32.20 per cent farmers followed by animal husbandry (24.60%), horticulture (19.40%), agronomy (12.6%) and least preferred on soil science (5.80%). This might be due to disease, insect and pest attack are more a complex issue to handle now a days especially in the era of changing pests and their nature of damage in changing climate arena. Also farmers doesn't want to depend only on crop production but they prefer to diversify through animal production also. This finding was in accordance with those of Kirkpatrick *et al.* (2006). Further, crop management practices training was most preferred by 25.4 per cent farmers followed by livestock management practices (19.80%), goatery production (12.20%), post harvest technology (6.40%) and least preferred on pre sowing techniques (2.60%). This may be because still farmers level of awareness on importance of presowing techniques i.e. land preparation, seed treatment, variety selection, basal dose of fertilizer and soil testing is deficient. The results revealed that practical and lectures with film shows was most preferred method of training by 32.60 and 31.40 per cent of farmers, whereas lecture with discussion and exposure visit with film show were preferred by 11.80 and 7.20 per cent, respectively. Exposure visit and lectures, was preferred by 5.40 and 4.60 per cent of the farmers, respectively. This could be due to their experience in various farming situations. This finding was in accordance with those of Oreszczyn *et al.* (2010). Also using multiple senses via seeing, hearing and doing was most effective method of training, whereas learn by hearing and doing and learn by doing were preferred by 9.80 and 8.00 %, respectively. Learn by seeing and doing, learn by seeing and hearing and learn by seeing was preferred by 7.20, 5.40 and 4.60 per cent of the farmers, respectively. This could be due to they mostly believe in practical. This findings are well supported by Pharate *et al.* (2010).

AV aids were not preferred by 0.82 farmers whereas preferred and mostly preferred by 22.18 and 22.45. The majority (25.40%) of farmers most preferred to undergo training monthly, followed by yearly (19.8%), half yearly (12.20%), quarterly (6.40) and weekly (2.60%). This might be due to the busy schedule of farmers. This finding was in similar with those of Sudeepkumar *et al.* (1993).

CONCLUSION

The on campus training was most preferred by farmers, followed by off campus training programme. The farmers had chosen Krishi Vigyan Kendra as most preferred venue for training. The farmers rated one to three days duration training as "most preferred", lean period and rainy season was perceived as most preferred time for arranging training programme for farmers. Results also revealed that training has been effective in enabling the farmers to develop their skill, knowledge, attitudes and transfer them to their farm fields. Not only that, the impact of training has also enabled the farmers to do their jobs much faster and easier and that they were highly motivated as well as satisfied with the possession of new skill, knowledge and attitudes.

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