KNOWLEDGE OF RECOMMENDED PEA PRODUCTION TECHNOLOGY AND TRAINING NEEDS AMONG SMALL FARMERS OF SPITI-AN ARID COLD DESERT REGION OF H.P., INDIA

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Abstract

The present study was carried out in three randomly selected *panchayats* of Spiti, a sub division of district Lahaul & Spiti H.P. (India) during year 2016-17. The study aimed to assess the knowledge level of pea growers in pea production and training needs of small farmers towards recommended pea production technology. The findings of study revealed that the overall knowledge of pea production technology was medium. The major areas of training needs were identified in sowing method, seed rate, fertilizer application and disease management. It was also observed that maximum number of respondents from Tabo *panchayat* has shown high overall knowledge of pea production technology. It may be due to the easy access of farmers of tabo panchayat to research sub station of two universities, Dr. Y. S. Parmar UHF and CSK H.P. Krishivishvavidyalya, existing in their *panchayat*.

Key words : Pea production, training need, cold desert region.

Introduction

Pea is an important off-season commercial leguminous vegetable crop of cold desert region of Himachal Pradesh, India. Productivity of pea is comparatively lesser in Spiti region in comparison to Lahaul region of district Lahaul and Spiti. To increase the production, it is necessary to clean doubts from the mind of farmers and convince them about the performance of new recommended varieties of pea and the need to adopt recommended practices. Training is a critical input for quick transfer of technology and way to modernise agriculture. Thus, the importance of training is an indispensable instrument for human resource development at any level, which can not be ignored. In order to make any training meaningful and effective the training needs of the farmers are determied (Farooqui *et al.*, 1992; Sinha, 1967; Singh *et al.*, 2002 and Gupta *et al.*, 2008). Hence, present study was designed to know the knowledge of recommended production technology and training needs among the small farmers of Spiti region.

Materials and Methods

The present investigation was carried out during year 2016-17 in three panchayats Tabo, Kibber and Lossar of Spiti sub division of district Lahaul & Spiti. Twenty two farmers were selected from each panchayat randomly for the present study. The data was collected after setting questionnaire on different aspects of production technology in pea. A scale was used to measure the knowledge level of farmers regarding recommended technology for pea crop as per scale used by Shriwas *et al.* (2015) in brinjal crop. The responses of respondents regarding knowledge were categorized into three point as under.

Categories	Score
Incomplete knowledge	1
Partial knowledge	2
Complete knowledge	3

The knowledge index was worked as follows:

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$$\text{Knowledge index} = \frac{\text{Sum of knowledge score actually obtained by respondents}}{\text{Maximum possible knowledge score obtainable by respondents}} \times 100$$

Further, the respondents were classified into three categories by using following formula:

K.I. = Mean (X) ± S.D. (Standard Deviation)

Categories

Low Level   < X-S.D.

Medium Level   X±S. D.

High Level   > X±S. D.

The training need of each major subject area assessed using a three point scale such as much needed, needed and not needed was 3, 2 and 1 respectively as per Bajpai *et al.* (2014).

Results and Discussion

The data presented in table 1 revealed that there were no farmers, who had low level of knowledge regarding preparatory cultivation, weed management and harvesting and marketing. However, maximum percentage (60.60) of respondents showed low level of knowledge for seed rate and sowing method followed by insect-pest & disease management, manure and fertilizer application, irrigation and selection of varieties. In case of medium level of knowledge, maximum percentage (93.93) of respondent were observed for preparatory cultivation followed by manure and fertilizer application, weed management and insect pest and disease management. The minimum percentage (6.06) value was observed for selection of varieties. While in case of high level of knowledge regarding selected practices of recommended pea production technology, the practices were selection of varieties (92.42%) followed by harvesting and marketing (78.79%), irrigation (65.15%). Nil respondents showed high level of knowledge for manure and fertilizer application. It was followed by preparatory cultivation, seed rate and sowing, weed management and insect-pest management.

Mean score for training need was lowest in case of selection of varieties followed by harvesting and marketing, irrigation, weed management and preparatory cultivation. However, maximum mean score for training need was observed in seed rate and sowing followed by manure and fertilizer application and insect-pest management.

The data presented in fig. 1 for overall level of knowledge regarding pea production technology, revealed that maximum percentage (54.54) of respondents showed medium level of knowledge and minimum percentage (19.70) of population showed high level of knowledge. Similar findings for overall level of knowledge regarding brinjal production technology in Durg district of

Table 1 : Distribution of farmers according to their practice wise level of knowledge regarding recommended pea production technology and training need.

S. no.	Recommended practices of pea production technology	Level of knowledge			Mean score for training need	Extent of training need
		Low f (%)	Medium f (%)	High f (%)		
1.	Preparatory cultivation	0(0)	61(92.42)	5(7.58)	1.92	Low
2.	Manure and fertilizer application	11(16.67)	55(83.33)	0(0)	2.17	High
3.	Selection of varieties	1(1.52)	4(6.06)	61(92.42)	1.09	Low
4.	Seed rate and sowing	40(60.61)	17(25.76)	9(13.63)	2.47	High
5.	Irrigation	2(3.03)	22(33.33)	42(63.64)	1.38	Low
6.	Weed management	0(0)	54(81.81)	12(18.18)	1.81	Low
7.	Insect pest and disease management	17(25.76)	33(50.00)	16(24.24)	2.04	High
8.	Harvesting and marketing	0(0)	14(21.21)	52(78.79)	1.21	Low

Table 2 : Distribution of respondents according to overall level of knowledge regarding pea production technology in three panchayat of Spiti.

S. no.	Level of knowledge	Tabo	Lossar	Kibber
1.	Low	4.78	13.07	29.69
2.	Medium	48.70	50.00	48.44
3.	High	46.52	36.93	21.87

Chhattisgarh were also reported by Shriwas *et al.* (2015).

It was also observed that maximum number of respondents from tabo panchayat has shown high overall knowledge of pea production technology (table 2). It may be due to the easy access of farmers of tabo *panchayat* to research sub station of two universities viz. Dr YS Parmar UHF and CSK HP Krishivishvavidyalya existing
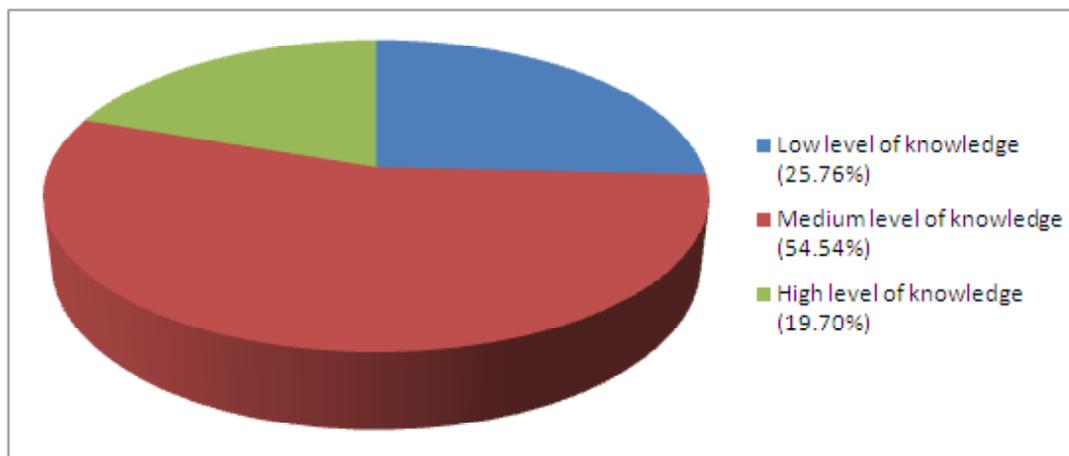
Fig. 1 : Pie Chart presenting distribution of respondents according to overall level of knowledge regarding pea production technology.

in their panchayat.

On the basis of present study, it can be concluded that farmers need to be trained mainly on seed rate and sowing method, application of manure and fertilizers and insect-pest and disease management.

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