



Research Article

A STUDY OF FARMER'S FIELD SCHOOL ON CHICKPEA MANAGEMENT PRACTICES IN SEHORE BLOCK OF SEHORE DISTRICT OF MADHYA PRADESH

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Abstract- The present study was conducted in the Sehore block of Sehore district in the year 2016-17 to access the knowledge and practices of Farmers Field School members regarding chickpea management practices. The study revealed that majority of farmers have the higher percentage (36.90%) participant have partial knowledge followed by (34.53%) chickpea growers have perfect knowledge about overall improved chickpea management practices and (28.57%) chickpea growers have least knowledge about overall improved chickpea management practices.

Keywords- Farmers field school, chickpea management practices, Knowledge level

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Introduction

Agriculture is one of the most important activities of human being for their livelihood. It is also important source of income which provides basic raw material to man and various agro based industries. The agricultural situation in India has undergone a rapid change with advancement of technological improvement through research and extension activities.

Indian agriculture, long been viewed as a subsistence occupation and a way of life on the part of the peasant is now rapidly getting commercialized. Indian farmer has come to produce for the market rather than for domestic consumption. With the breakthrough in farm technology, now a day, agriculture has become increasingly capital-intensive interims of augmentation of productivity both land and human labour. Self-sufficiency in the production of food grains, including pulses and edible oils is not a small achievement if we consider the steady uptrend in growth of population. The areas under irrigation and cropping intensity have steadily increased. Exports of agricultural products enabled us to import machinery and food grains. India is largest producer of pulses in the world with 27-28 per cent share in global production. Chickpea, pigeonpea, mungbean, uradbean, lentil, and fieldpea are important pulses crop contributing 39 per cent, 21 per cent, 11 per cent, 10 per cent, 7 per cent and 5 per cent to the total production of pulses in the country.

Madhya Pradesh is one of the major chickpea producing state in India ranks first with respect to chickpea's area and production. It is said that agricultural extension has traditionally transferred farm management practices and technologies developed in research stations to farmers. But existing agricultural extension and advisory services were ineffective in meeting the challenges of farmers as local specific base.

The approach has largely been top-down, as characterized, for example, by the World Bank's Training and Visit System. Following the perceived failure of such top-down approaches, different – more participatory – approaches have emerged, notably Farmers' Field School (FFS). Madhya Pradesh is one of the State in India where farmers' field school is running for development of management practices of crop production. Keeping the importance of Farmers' Field School in chickpea management practices, the present study was under taken.

Material and Methods

The investigation has been carried out in Sehore district of Madhya Pradesh due to well-known area by researcher which would become easy for data collection. The study also conducted in Sehore district due to chickpea is the major rabi crop in rainfed area which requires managerial skill and management practices to get higher yield. The Sehore district is comprises of 5 blocks (Sehore, Astha, Ichhawar, Nasrullaganj and Budhani). Out of 5 blocks, the Sehore block was selected purposively because it served a great deal of convenience for the researcher. On the other hand, in Sehore block the farmer's field school is performing very well in concern with KVK nearby place. The Sehore block comprises of 157 villages. A list of villages was prepared from Department of Agriculture, Sehore. Out of which 12 villages were selected randomly. A list of chickpea growers (members of Farmer's Field School) was prepared in selected villages. From each selected village, 7 respondents (chickpea growers [members of farmer's field school]) was selected on the basis of random sampling method. Thus, the total sample drawn was 84 chickpea growers. Keeping in view the objectives of the study and to draw logical conclusion, statistical test i.e. frequency, percentage, mean, standard deviation and correlation test analysis were used for analyzing and interpreting the data.

Result and Discussion

Knowledge of Farmers' Field School members regarding chickpea management practices

The knowledge for the purpose of present study was operationalized as the amount of understanding information possessed by the farmers regarding improved chickpea management practices. The data regarding knowledge of participant chickpea growers under Farmers' Field School (FFS) programme has been analyzed and presented in [Table-1]. 12 components of improved chickpea management practices were considered to examine the level of knowledge of participant under Farmers' Field School. The distribution of participant chickpea growers according to frequency values in respect of knowledge showed that in overall knowledge of chickpea management practices, the higher percentage (36.90%) participant have partial knowledge followed by (34.53%) chickpea A

Table 1 Distribution of participant chickpea growers under Farmers' Field School (FFS) according to their level of knowledge. (n=84)

S.No.	Chickpea Management Practices	Level of knowledge			Mean Score	Rank
		Least	Partial	Perfect		
1.	Field preparation	26 (30.95)	28 (33.34)	30 (35.71)	2.05	V
2.	Improved varieties of chickpea	20 (23.81)	30 (35.71)	34 (40.48)	2.17*	I
3.	Different methods of sowing	22 (26.19)	28 (33.33)	34 (40.48)	2.14*	III
4.	Depth of seed sowing and spacing	24 (28.57)	32 (38.10)	28 (33.33)	2.05	V
5.	Modern method of seed treatment	26 (30.95)	37 (44.05)	21 (25.00)	1.94	IX
6.	Application of rhizobium and PSB culture	29 (34.53)	30 (35.71)	25 (29.76)	1.95	VIII
7.	Application of FYM and chemical fertilizer	25 (29.76)	31 (36.90)	28 (33.34)	2.04	VI
8.	Application of weedicide	22 (26.19)	34 (40.48)	28 (33.33)	2.07*	IV
9.	Disease control measures	19 (22.61)	32 (38.10)	33 (39.29)	2.17*	I
10.	Insect control measures	20 (23.81)	31 (36.90)	33 (39.29)	2.15*	II
11.	Number of recommended irrigation and their method	25 (29.76)	31 (36.90)	28 (33.34)	2.04	VI
12.	Proper harvesting and threshing method.	26 (30.95)	30 (35.71)	28 (33.34)	2.02	VII
13.	Overall average	24 (28.57)	31 (36.90)	29 (34.53)	2.06	

(Figure in parentheses show the percentage of total)

Table-2 Distribution of participant chickpea growers under Farmer s' Field School (FFS) according to their level of practices.

S.No.	Chickpea Management Practices	Level of practices			Mean Score	Rank
		Not practices	Coordinating to other	Self practices		
1.	Field preparation	19 (22.62)	37 (44.05)	28 (33.33)	2.11*	II
2.	Improved practices of seed treatment	20 (23.81)	35 (41.67)	29 (34.52)	2.11*	II
3.	Sowing of seed	21 (25.00)	34 (40.48)	29 (34.52)	2.10*	III
4.	Application and management of FYM and chemical fertilizer	26 (30.95)	35 (41.67)	23 (27.38)	1.96	VI
5.	Irrigation management	19 (22.62)	35 (41.67)	30 (35.71)	2.13*	I
6.	Application and weedicide management	23 (27.38)	27 (32.14)	34 (40.48)	2.13*	I
7.	Insect control measures	27 (32.14)	32 (38.10)	25 (29.76)	1.98	V
8.	Disease control measures	30 (35.71)	28 (33.33)	26 (30.95)	1.95	VII
9.	Harvesting and threshing	24 (28.57)	35 (41.67)	25 (29.76)	2.01	IV
10.	Storage	24 (28.57)	38 (45.24)	22 (26.19)	1.98	V
11.	Overall average	23 (27.38)	34 (40.48)	27 (32.14)	2.05	

(Figure in parentheses show the percentage of total)

growers have perfect knowledge about overall improved chickpea management practices and (28.57%) chickpea growers have least knowledge about overall improved chickpea management practices. This finding is in conformity with the findings as reported [1-5].

Management practices of Farmers' Field School members in chickpea cultivation:

The data regarding management practices by participant chickpea growers under Farmers' Field School (FFS) programme has been analyzed and presented in [Table-2].

10 items of improved chickpea management practices were considered to examine the level of practices performed by participant under Farmers' Field School. The distribution of participant chickpea growers according to frequency values in respect of overall chickpea management practices showed that the higher percentage (40.48%) participant have coordinating to other followed by (32.14%) chickpea growers have self-practices and (27.38%) chickpea growers have not practices of overall improved chickpea management practices. The distribution of participant chickpea growers according to frequency values in respect of overall chickpea management practices showed that the higher percentage (40.48%) participant have coordinating to other followed by (32.14%) chickpea growers have self-practices and (27.38%) chickpea growers have not practices of overall improved chickpea management practices. The recommended chickpea production technology is complex in nature for traditional farmers. The

higher number of chickpea growers coordinating to other in production process with improved management practices. This was mainly due to that few of the improved management practices are complex in nature and requires expertise and dissemination of success achieved to others. This finding is in conformity with the findings as reported by Khadge, *et al.*, (1998) and Kakkar Shreya, (2014-15) [1,2].

Summary

It is concluded that the higher percentage of chickpea growers participant members of Farmers' Field School perceived knowledge about "improved varieties of chickpea" and "disease control measures" mean score 2.17 (rank Ist each) followed by "insect control measures" mean score 2.15 (rank IInd), "different methods of sowing" mean score 2.14 (rank IIIrd), "application of weedicide" mean score 2.07 (rank IVth), "field preparation" and "depth of seed sowing and spacing" mean score 2.05 (rank Vth), "application of FYM and chemical fertilizer" and "number of recommended irrigation and their method" mean score 2.04 (rank IVth each), "proper harvesting and threshing method" mean score 2.02 (rank VIIth), "application of rhizobium and PSB culture" mean score 1.95 (rank VIIIth) and "modern method of seed treatment" mean score 1.94 (rank IXth) respectively.

Application of research: This study is useful for assess the present condition of chickpea management practices of chickpea with farmers' field school in the research area and suggestion for improvement of management practices of-

chickpea with farmers' field school in the research area

Research Category: Chickpea Management Practices

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References

- [1] Khadge M.I., Jondhale S.G. and Wakle P.K. (1998) *Maha. Jour. of Extn. Edu.*, 17,33-35.
- [2] Kakkar Shreya (2014-15) *Inclusiveness of Chickpea Value Chain in Andhra Pradesh. Report Submitted to International Crop Research Institute for the Semi-Arid Tropics Patancheru, Telangana.*
- [3] Kangali Sarita (2012) *M.Sc. (Ag.) Thesis Submitted to the R.V.S.K.V.V. Gwalior.*
- [4] Maida Mahesh Kumar (2015) *M.Sc. (Ag.) Thesis Submitted to the Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior.*
- [5] Parmar Lokendra (2014) *M.Sc. (Ag.) Thesis Submitted to the R.V.S.K.V.V. Gwalior.*