Extension Contact and Constraints Faced by Farmers in Pigeonpea Cultivation

A. B. Chahande and R. M. Ghadge

Abstract: The study was conducted to know the extent of knowledge and adoption of recommended pigeonpea package of practices by the growers of Parbhani district in Maharashtra. The study was conducted in Parbhani district comprising 120 respondents from twelve villages. The result showed that the majority of respondents had medium extension contact for obtaining the information about improved package of practices. It was found that the majority of respondents had medium level of utilization of information sources for getting agricultural information. It also revealed that pigeonpea growers mostly faced constraints like uncertainty of rain, non-availability of labours, and unavailability of quality compost and lack of scientific knowledge about plant protection measures. The present study clearly indicates the need to strengthened the work of extension agency to impart information about pigeonpea production technology and to minimize the the constraints faced by farmers to increase the productivity of pigeonpea.

Keywords: Extension contact, Information source, Pigeonpea grower

INTRODUCTION

Agriculture in India is major economic sector and its creates plenty of employment opportunity as well. Indian agriculture is currently the biggest industry in India. On the whole it has key role in the socio-economic growth of the country. Pigeonpea is an important pulse crop in India. It is also known as Red gram, Arhar and Tur. Red gram is mainly cultivated and consumed in developing countries of the world. This crop is widely grown in India. It contributes to the sustainability of agriculture besides being used as food, fuel wood and fodder .But the yield and productivity of pigeonpea is not satisfactory as compared to area under cultivation.

The higher productivity in pigeonpea can be achieved not only by the coming up with improved technology but also with extension contact of farmers which help to adopt new agricultural practices prior to other in his social system. Extension activities conducted in the area helps farmers for gaining the knowledge about recommended package of practices .Extension contact is the tendency of an individual to be in contact with extension personnel to obtain information about improved agricultural practices. By contacting extension agencies, individual may gain knowledge and motivation for adoption of new ideas. Utilization of information sources enhances the ability of farmers for seeking technical information and guidance about chickpea cultivation practices. Also the low yield and productivity may be due to some constraints facing the pigeonpea growers in adoption of recommended technology of pigeonpea.

Hence the field extension research is necessary to know the extension contact and the constraints faced by the farmers in adoption of recommended cultivation practices. The present study was proposed to be undertaken with the following specific objectives.

*   E-mail: rmghadge2011@rediffmail.com

OBJECTIVES

1. To study the extension contact and source of information of the pigeonpea growers.

2. To find out the constraints faced by the growers in adoption of recommended pigeonpea package of practices.

METHODOLOGY

The present study was undertaken in Parbhani district of Maharastra. Three talukas namely Manwat, Selu and Pathri from Parbhani district were randomly selected. and from each talukas four villages were selected randomly. Ten farmers from each village who were cultivating this crop were selected randomly. Thus, the total numbers of respondents were one hundred and twenty. The data pertaining to the objectives of the study were collected with the help of structured interview schedule by personal interview method. The data thus collected were subjected to the statistical analysis by using, frequency, percentage.

Extension contact of each respondent was measured on three point continuum scale. Zero score was assigned for no contact, one score was assigned for contact once in a season, two scores were assigned once in a month and three score was assigned once in fortnight. The respondents were categorized into three categories on the basis of mean ± SD as high, medium and low extension contact.

About 17 sources of information including print media, electronic media, personal contact, extension contact etc. the responses of individual respondents were collected in three point's continuum i.e. always, sometimes and never. A score of 2, 1, and 0 was assigned for always, sometimes and never respectively. Finally the score obtained for all items was summed and on the basis of mean ± SD. The respondents were categorized into three categories on the basis of mean ± SD as high, medium and low level of information source utilization. The constraints faced by farmers in pigeonpea cultivation were ranked based on frequency and percentage.

RESULTS AND DISCUSSION

The results of the present research work presented below.

Extension contact

The observations regarding the extension contact of the respondents is given in Table 1

Table 1
Distribution of respondents according to their extension contact

(n= 120)

Sr. No.	Extension contact	Frequency	Per cent
1.	Low (Upto 3)	41	34.16
2.	Medium (4 to 8)	58	48.33
3.	High (9 and above)	21	17.50
	Total	**120**	**100.00**

It was depicted from the above table that majority (48.333 per cent) of the respondents belonged to medium extension contact category. While 34.16 per cent and 17.50 per cent of the respondents belonged to low and high extension contact category, respectively. It clearly indicates the need to put more efforts for enhancing extension contact of respondent.

Sources of information

It is observed from Table 2 that majority (43.33%) of respondents had medium, whereas 37.50 per cent of respondents had low sources of information followed by 19.16 per cent of the respondents were having high level sources of information.

Table 2
Distribution of respondents according to their sources of information

(n= 120)

Sr. No	Category	Frequency	Percent
1.	Low (Up to 11.11)	45	37.50
2.	Medium (11.12 to 20.49)	52	43.33
3.	High (20.50 and above)	23	19.16
	Total	**120**	**100.00**

Results are in conformity with findings of Mutukule (1999), Suhasini (2009) respectively

Constraints faced by pigeonpea growers in adoption of recommended package of practices of pigeonpea

Constraints faced in the adoption of recommended practices for pigeonpea by the respondents have been presented in Table 3.

Table 3
Distribution of the respondents according to the constraints faced in adoption of recommended package of practices of pigeonpea

N = 120

Sr. No.	Constraints	Frequency	Percentage
1	**Preparatory tillage**		
I.	Non availability of bullocks and plough for ploughing operation	47	39.16
II	Ploughing operation is costly	25	20.83
III	Non availability of adequate time.	33	27.50
2	**Use of FYM /Compost**		
I.	Lack of knowledge about preparation of compost by scientific methods	66	55.00
II	Non availability of quality compost	81	67.50
III	Cost of FYM is costly	51	42.50
3.	**Sowing**		
1.	Timely sowing cannot be done due to uncertainty in rain	49	40.84
11	Due to non availability of labours timely sowing is not followed	84	70.00
4	**Seeds**		
1	Inadequate availability of seed material at appropriate time	29	24.16
II	Seed material is costly	65	54.16
5	Seed treatment		
I.	Lack of knowledge about seed treatment	57	47.50
II	Advantages of seed treatment are not always certain	55	45.84
III	Non availability of rhizobium seed treatment material for seed treatment	41	34.16
IV	High cost of seed treatment martial.	31	25.84

contd. table 3

Sr. No.	Constraints	Frequency	Percentage
6	**Use of chemical fertilizers**		
I.	Lack of knowledge about recommended fertilizer dose	38	37.66
II	Non-availability of fertilizer at appropriate time	38	31.66
III	Use of fertilizer seems to be risky as it depends upon the availability of irrigation facility and rain	57	47.50
7	**Plant protection measures**		
I.	Lack of scientific knowledge about plant protection measure	75	62.50
II	Necessary insecticides are not available within the approach	34	28.34
III	Plant protection measures are not advantageous as they are costly	28	23.34
IV	The use of plant protection measures seems to be difficult and risky	27	22.50
8	**Harvesting and threshing**		
I	Due to uncertainty of rain harvesting and threshing can not be followed at appropriate time.	87	72.50
II	Non availability of labours at appropriate time	60	50.00
III	High rate of wages	39	32.50

Preparatory tillage: It is elucidated from Table 3 that significant number of respondents (30.16 %) reported non availability of bullocks and plough for ploughing operations followed by 27.50 per cent reported non availability of adequate time and 20.83 per cent opined that ploughing operation is costly in preparatory tillage.

Use of FYM/compost: 67.50 per cent of the respondents faced the constraint of non availability of quality compost followed by 55.00 per cent reported lack of knowledge about preparation of compost by scientific method and 42.50 per cent respondents indicate the high cost of FYM.

Sowing: In case of sowing, 70.00 per cent respondents expressed the non--availability of labours for timely sowing and 40.84 per cent viewed

that timely sowing could not be done due to uncertainty of rain.

Seeds: It has been observed that 54.16 per cent, 24.16 per cent and 21.66 per cent respondents faced costly seeds, inadequate availability of seed material at appropriate time and lack of detailed knowledge about recommended variety as the major constraints.

Seed treatment: Regarding seed treatment, substantial (47.50%) respondent had lack of knowledge about seed treatment, 45.84 per cent perceived uncertain advantage of seed treatment, 34.14 per cent faced non availability of rhizobuim seed treatment material and 25.84 per cent observed high cost of seed treatment were the major constraints.

Use of chemical fertilizers: Use of fertilizer seems to be risky as it depends upon the availability of irrigation facility and rain was the major constraints perceived by (47.50%) followed by lack of knowledge about recommended fertilizer dose 37.50 per cent and non availability of fertilizer at appropriate time 31.66 per cent were the constraints faced by respondents in the use of chemical fertilizer.

Plant protection: In plant protection measures lack of scientific knowledge about plant protection measures was reported by majority (62.50%) respondents. For 28.34 per cent respondent necessary insecticides were not available within the approach, 23.34 viewed that plant protection measures were not advantageous as they are costly and 22.50 per cent respondents perceived use of plant protection equipments seems to be difficult and risky.

Harvesting and threshing: Due to uncertainty of rain, harvesting and threshing could not be followed at appropriate time was the major constraints by felt by (72.50%) respondents 50.00 per cent reported non availability of labours at appropriate time and 32.50 per cent of respondents faces high rate of labour wages in harvesting and threshing. These were the major constraints observed by the respondents.

The similar findings were noticed by Dalvi (1995), Tripathi (2010).

CONCLUSION

It may be concluded that the majority of respondents (48.33%) had medium extension contact for obtaining the information about improved package of practices. It was found that the majority of respondents had medium level of utilization of information sources for getting agricultural information. The Present study revealed that pigeonpea growers mostly faced constraints like uncertainty of rain, non-availability of labours, and unavailability of quality compost and lack of scientific knowledge about plant protection measures. This clearly indicates the need to minimize the constraints faced by farmers in pigeonpea cultivation to increase the yield and productivity of pigeonpea.

Referances

Dalvi, S. T. (1995), A study of technological gap in soybean cultivation in Pathri block of Parbhani district. (M.Sc. Agri.) Thesis, MAU, Parbhani.

Mutkule, S.R. (1999), A study on adoption of recommended package of practices of chilli in Nanded district. (M.Sc. Agri.) Thesis, MAU, Parbhani.

Suhasini, P. (2009), Adoption of chickpea cultivars in AP: pattern, trend and constraints. Baseline Research Report for Tropical Legumes II.

Tripathi, S.K. (2010), Knowledge extent of farmers about chickpea production technology. Indian Research Jr. of Extn. Edn. Vol 9 (3).