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Adoption of pigeon pea production technology among the adopted and non-adopted Villages respondents of front line demonstrations

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Abstract

Organising “Front Line Demonstrations (FLDs)” on various crops to generate production data and feedback information is one of the mandates of KVKs. The present study was conducted in four randomly selected villages of Narmada district from the list of KVK adopted villages. While four neighboring villages of the adopted one were selected purposively as the Non-adopted village. From each village's ten respondents, thus 80 respondents were randomly selected. It was observed that majority of the respondents were in middle age group, educated up to primary school level, participated in social activities, participated in more than one extension activity, annual income up to Rs.50,000/-, engaged in farming as main occupation, possessed 0.01 – 2.00 ha of land, found to have medium level of economic motivation and found to have medium level of knowledge and adoption of pigeon pea production technology in adopted villages whereas, majority of the respondents were in middle age group, educated up to primary school level, not participated in social activities, participated in more than one extension activity, annual income up to Rs. 50,000/-, engaged in farming as main occupation, possessed 0.01 – 1.00 ha of land and found to have medium level of economic motivation in non-adopted villages. Majority 95.00 per cent of the respondents were found to have medium to high level of adoption about pigeon pea production technology in adopted villages.

Keywords: FLD, KVK, profile of respondent, farm science centre, adoption

Introduction

The lack of transfer of technology from research system to the client system is the main problem in increasing agricultural production in the developing world. Still there is a wide gap exists between attained technical know-how and its utilization in the field of common farmers. The present rate of agricultural production can be doubled if the available Pigeon Pea production technologies are brought to bear with production process and programme. This requires the steady flow of information from the scientist to the farmers. Moreover, inputs are needed to be used scientifically. This is possible through the demonstration as it is an important and appropriate extension method which makes it possible to disseminate technology to the user farmers. Keeping this fact in view, the Government of India launched frontline demonstration programmes for increasing crops production. It has played significant role in increasing the adoption of recommended Pigeon Pea production technologies by the Pigeon Pea growers. Keeping in mind, the present study was taken with the following objectives:

1. To study the personal profile of the respondents
2. Extent of adoption of pigeon pea production technology among the farmers.

Research Methodology

Present study was conducted in the Narmada district. Four villages were selected randomly from the list of adopted villages of KVK, while four neighboring villages of the adopted villages were selected purposively as the Non-adopted villages. Ten respondents were selected from the list of demonstration farmers on those fields where FLDs on pigeon pea was conducted in each adopted villages; and non-adopted villages by random sampling technique. Thus, total numbers of respondents were 80. The interview schedule was developed after due consultation with the faculty members of the discipline and the data were collected by the personal interview method. The data so collected were tabulated, analyzed with appropriate

statistical tools and interpreted in the light of the objectives. To measure the attitude, a structured schedule was developed with twenty items along with their quantity and time of availability for raising crops. The responses of the respondents were categorized into three categories i.e. fully adopted, partially adopted and not adopted with a score of 2, 1 and 0 respectively. For this variable, the maximum score was 40 and minimum possible score was zero. Based on the score obtained by the individuals they were categorized into three groups into low, medium and high by using mean and standard deviation.

Findings and discussion

1. Personal profile of the respondents

The findings of these selected characteristics have been presented in the following section:

1.1 Age

The data presented in Table 1(1) shows that more than half (57.50 and 52.50 per cent) of the respondents were in middle age group in adopted and non-adopted villages, respectively, followed by 22.50 and 25.00 per cent of the respondents belongs to old age group in adopted and non-adopted villages, respectively. The findings were similar to the findings reported by Borole (2010)^[1].

Table 1: Distribution of respondents according to their personal characteristics (n=80)

S. No.	Personal Characteristics	Adopted Villages (40)		Non-Adopted Villages (40)	
		Frequency	Percentage	Frequency	Percentage
1	Age group				
1	Young (up to 35 years)	8	20.00	9	22.50
2	Middle (36 to 50 years)	23	57.50	21	52.50
3	Old (50 years and above)	9	22.50	10	25.00
2	Level of Education				
1	Illiterate	5	12.50	8	20.00
2	Up to primary school level	29	72.50	26	65.00
3	Up to middle school level	5	12.50	5	12.50
4	Up to high school level	1	2.50	1	2.50
5	College and above	0	0.00	0	0.00
3	Social Participation				
1	Participated	25	62.50	11	27.50
2	Not participated	15	37.50	29	73.50
4	Extension Participation				
1	Not participated	0	0.00	8	20.00
2	Participated in one activity	0	0.00	13	32.50
3	Participated in more than one activity	40	100	19	47.50
5	Annual Income				
1	Above Rs. 2,00,000/-	0	0.00	0	0.00
2	Rs. 1,50,001 to 2,00,000	0	0.00	1	2.50
3	Rs. 1,00,001 to 1,50,000	0	0.00	3	0.00
4	Rs. 50,001 to 1,00,000	4	10.00	7	17.50
5	Up to Rs. 50,000	36	90.00	29	72.50
6	Occupation				
1	Farming	23	57.50	27	67.50
2	Animal Husbandry	0	0.00	0	0.00
3	Farming + Animal Husbandry	17	42.50	10	25.00
4	Service + Farming	0	0.00	2	5.00
5	Farming + Business	0	0.00	1	2.50
7	Land Holding				
1	> 10 ha	0	0.00	0	0.00
2	4.01 – 10.00 ha	0	0.00	2	5.00
3	2.01 – 4.00 ha	3	7.50	10	25.50
4	1.01 – 2.00 ha	10	25.00	9	22.50
5	0.01 – 1.00 ha	27	67.50	19	47.50
8	Economic motivation				
1	Low economic motivation (< 15 score)	4	10.00	10	25.00
2	Medium economic motivation (15-17 score)	28	70.00	22	55.00
3	High economic motivation (> 17 score)	8	20.00	8	20.00

Mean-16 S.D. -1

1.2 Education

It is evident from table 1(2) that more than two-third majority (72.50 and 65.00 per cent) of the respondents were educated up to primary school level in adopted and non-adopted villages, respectively. The findings were in agreement with those reported by Dhaneshwar (2008)^[2], Borole (2010)^[1], Rathod *et al.* (2013)^[7] and Dholariya (2014)^[3].

1.3 Social participation

The data in Table 1(3) revealed that about two-third majority (62.50 per cent) of the respondents were participated in social organizations and 37.50 per cent of the respondents were not participated in social activities in adopted villages while, majority (73.50 per cent) of the respondents were not participated in social organizations and 27.50 per cent of the

respondents were participated in social organizations in non-adopted villages. These results were conformity with those reported by Dholariya (2014)^[3].

1.4 Extension participation

It was observed from the data presented in Table 1(4) that all (100.00 per cent) the respondents were participated in more than one activities in adopted villages while, about (47.50 per cent) of the respondents were participated in more than one activity followed by 20.00 per cent were not participated in any activity in non-adopted villages. These data were supported by the findings of Koli (2012)^[4] and Dholariya (2014)^[3].

1.5 Annual Income

It is apparent from Table 1(5) that majority (90.00 and 72.50 per cent) of the respondents had annual income up to Rs. 50,000/- in adopted and non-adopted villages, respectively followed by 10.00 per cent and 17.50 per cent of the respondents had annual income between Rs. 50,001 to 1,00,000 in adopted and non-adopted villages, respectively. Similar findings were reported by Borole (2010)^[1] and Dholariya (2014)^[3].

1.6 Occupation

The data presented in Table 1(6) revealed that majority (57.50 and 67.50 per cent) of the respondents were engaged in farming as their main occupation in adopted and non-adopted villages, respectively followed by farming + Animal Husbandry 42.50 and 25.00 per cent of the respondents were

engaged in adopted and non-adopted villages, respectively. The findings were in agreement with those reported by Rathod *et al.* (2012)^[6].

1.7 Land holding

The data presented in Table 1(7) shows that more than two-third (67.50 per cent) of the respondents possessed land up to 1.00 ha followed by 25.00 per cent of the respondents possessed 1.01 – 2.00 ha of land in adopted villages while, half (47.50 percent) of the respondents possessed land up to 1.00 ha followed by (25.50 per cent) respondents possessed 2.01 – 4.00 ha in non-adopted villages. The findings were in agreement with those reported by Rathod *et al.* (2012)^[6], Mohanty *et al.* (2013)^[5] and Dholariya (2014)^[3].

1.8 Economic motivation

The data presented in Table 1(8) revealed that majority (70.00 and 55.00 per cent) of the respondents were found to have medium level of economic motivation in adopted and non-adopted villages, respectively while, 22.00 per cent and 25.00 per cent of the respondents had found high and low economic motivation in adopted and non-adopted villages, respectively. Similar findings were reported by Borole (2010)^[1] and Koli (2012)^[4].

2. Extent of adoption of pigeon pea production technology among the farmers

The findings of this characteristic have been presented in the following section:

Table 2: Distribution of respondents according to their adoption n=80

S.N.	Level of adoption	Adopted Villages (40)	
		Frequency	Percentage
1	Low level of adoption (< 25 score)	2	5.00
2	Medium level of adoption (25-35 score)	31	77.50
3	High level of adoption (> 35 score)	7	17.50
Mean-30 S.D. -5			
S.N.	Level of adoption	Non-Adopted Villages(40)	
		Frequency	Percentage
1	Low level of adoption (< 19 score)	6	15.00
2	Medium level of adoption (19-21 score)	30	75.00
3	High level of adoption (>21 score)	4	10.00

Mean-20 S.D. -1

The data presented in Table 2 indicated that majority (77.50 per cent) of the respondents were found to have medium level of adoption about pigeon pea production technology followed by 17.50 per cent of the respondents had high level of adoption in adopted villages. While, majority (75.00 per cent) of respondents had medium level of adoption followed by 15.00 per cent had low level of adoption in non-adopted villages. Similar findings were reported by Dholariya (2014)^[3].

Conclusion

From the results it can be concluded that majority of the respondents were in middle age group, educated up to primary school level, participated in social activities, participated in more than one extension activity, annual income up to Rs.50,000/-, engaged in farming as main occupation, possessed 0.01 – 2.00 ha of land, found to have medium level of economic motivation and found to have medium level of knowledge and adoption of pigeon pea production technology in adopted villages whereas, majority of the respondents were

in middle age group, educated up to primary school level, not participated in social activities, participated in more than one extension activity, annual income up to Rs. 50,000/-, engaged in farming as main occupation, possessed 0.01 – 1.00 ha of land and found to have medium level of economic motivation in non-adopted villages and found to have medium level of knowledge and adoption of pigeon pea production technology in non- adopted villages. Majority 95.00 per cent of the respondents were found to have medium to high level of adoption about pigeon pea production technology in adopted villages.

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