

KNOWLEDGE LEVEL OF FARMERS ACCORDING TO THEIR PERSONAL ATTRIBUTES UNDER FLDS REGARDING SOYBEAN PRODUCTION TECHNOLOGIES.

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ABSTRACT

The Present study was conducted in Sangod, Ladpura and Sultanpur panchayat samities of kota district Rajasthan. Personal interview technique was used to collect data from 140 farmers (70 beneficiaries of FLD and 70 non-beneficiaries). The majority of the respondents belonged to middle age group and general caste. Further, more than 50% respondents were illiterate, had big land holding and higher income level, Highly significant association was found between education, size of land holding, income and social participation with the knowledge level of respondents about soybean production technology and no significant association was found between caste and knowledge level of the respondents.

INTRODUCTION

Soybean is the kharif oilseed crop. It is the most popular oilseed in the country after groundnut and soy meal is the largest produced oil meal in the country. Soybean protein is rich in the valuable amino acid lysines (5%) in which most of the cereals are deficient. A large number of Indian and western dishes such as bread, chapatti, milk, sweets, pastries etc. can be prepared with soybean.

The Front Line Demonstration is an important method of transfer of latest package of practices in totality to farmers. Through it, farmers learn latest technologies of oilseeds and pulses production under real farming situation at their own field, which may lead to higher adoption. Further, these demonstration are designed carefully where provision are made for speedy dissemination of demonstrated technology among farming community through organization of other supportive extension activities, such as field days and farmers convention. The main objective of the front line demonstration is to demonstrate newly released crop production technologies and management practices at the farmers' field under different agro-climate regions and farming situations. While demonstrating the technologies at the farmer's field, the scientists are required to study, the factors, constraints of production and there by generating production factor and feed-back information. Front

Line Demonstration are conducted in a block of two to four hectares of land in order to have better impact of the demonstrated technology on the farmers.

RESEARCH METHODOLOGY

The present study was conducted in purposely selected Kota district of Rajasthan since this district had the highest area (654299 ha) under soybean crop in comparison to other districts of Rajasthan. Out of 5 panchayat samities, three, namely, Sangod, Ladpura and Sultanpur were selected because FLDS were conducted in these three panchayat samities only by the Krishi Vigyan Kendra, Kota.

Total 70 FLDS were conducted by KVK Kota during 3 years (2005 to 2008). These demonstrations were conducted in six villages from selected panchayat samities. All the 70 respondents of 6 villages were selected for the study purpose as beneficiary farmers. In order to make a comparative study, a sample of 70 non-beneficiary farmers, on whose farms FLDS were not conducted, were chosen randomly from the villages of 5-15 km radius of the same panchayat samities with similar number as control group. Thus, the total size of sample comprised 140 (70 beneficiary and 70 non-beneficiary farmers).

Tailor-made interview schedule was used for collecting the data with the help of personnel inter-

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view technique. Statistical measures viz; frequency, per cent and chi-square were used for arriving at conclusions. The impact of FLDs on beneficiaries in the present investigation has been determined by comparing beneficiaries of FLDs and non-beneficiaries with regards to their personal attributes with existing knowledge level about scientific soybean production techniques.

RESULTS AND DISCUSSION

Personal characteristics of the respondents

In this section the data regarding the personal characteristics of respondent's viz., age, caste, education, land holding, income and social participation are presented.

Age of respondents

Table 1 shows that majority of respondents belonged to middle age group i.e. between 28-52 years of age. This age group constituted 57.86 per cent of the total sample. Further, 23.57 and 18.57 per cent respondents were from old and young age group, respectively.

The data in the table further reveal that 38 (54.28%) beneficiary and 43 (61.43%) non-beneficiary respondents belonged to middle age group. On the other hand, 19 (27.15%) beneficiary and 14 (20.00%) non-beneficiary respondents were in the old age group. Further, only 13 (18.57%) beneficiary as well as equal number of non-beneficiary respondents belonged to young age group.

Caste of respondents

Table 1 shows that majority of the respondents belong to general caste. This caste group constituted 37.15 per cent of the total sample. Further, 32.85 per cent were from Other Backward Class. Out of the total sample, the percentage of Scheduled Caste and Scheduled Tribe respondents were 17.85 and 12.15 per cent, respectively.

The data in the table further reveal that 30 (42.80%) beneficiary and 22 (31.43%) non-beneficiary respondents belong to General Caste. On the other hand, 25 (35.70%) beneficiary respondents and 21 (30.00%) non-beneficiary were of Other Backward Class. Further, 9 (12.80%), 6 (8.70%) beneficiary and 16 (22.85%), 11 (15.72%) non-beneficiary respondents belong to Scheduled Caste and Scheduled Tribe

category, respectively.

Education level of respondents

The data in Table 1. shows that 71 (50.72%) of the total respondents were illiterate (no schooling). Further, 49 (35.00%) respondents were educated up to secondary and only 20 (14.28%) were educated above secondary level.

The data incorporated in the table further reveal that 29 (41.43%) beneficiary and 20 (28.57%) non-beneficiary respondents were educated up to secondary, while Only 13 (18.57%) beneficiary and 7 (10.00%) non-beneficiary respondents were educated above secondary class and 28 (40.00%) beneficiary respondents and 43 (61.43%) non-beneficiary respondents were found illiterate.

Size of land holding

Observation of Table 1 reveal that majority of the respondents belong to big land holding group i.e., above 2 hectares of land. This land holding category alone constitutes 47.86 per cent of the total sample. Further, 29.28 per cent were in small farmers category whereas, remaining i.e., 22.86 per cent respondents were in the marginal farmer's category.

The data in the table further indicate that 41 (58.57%) beneficiary and 26 (37.14%) non-beneficiary respondents were in the big land holding category having more than two hectares of land. Further, 16 (22.86%) beneficiary and 25 (35.72%) non-beneficiary respondents were small farmers with 1-2 hectares of land while, Only 13 (18.57%) beneficiary and 19 (27.14%) non-beneficiary respondents were marginal farmers having less than one hectares of land holding.

Income level of respondents

The data incorporated in Table 1 clearly shows that majority of the respondents i.e., 75 (53.57%) were from above poverty line, while only 65 (46.43%) respondents were found to be from below poverty line.

Data further shows that 42 (60.00%) beneficiary and 33 (47.15%) non-beneficiary respondents were above poverty line. Further, 28 (40.00%) beneficiary and 37 (52.85%) non-beneficiary respondents were found in below poverty line.

Table 1: Distribution of respondents according to their personal attributes **n=140**

S.No	Personal attributes	Beneficiary (n=70)		Non-Beneficiary (n=70)		Overall (n=140)	
		f	%	f	%	f	%
1	Age						
(i)	Young (below 28 years)	13	18.57	13	18.57	26	18.57
(ii)	Middle (28-52 years)	38	54.28	43	61.43	81	57.86
(iii)	Old (above 52 years)	19	27.15	14	20.00	33	23.57
2	Caste						
(i)	Scheduled Caste	9	12.80	16	22.85	25	17.85
(ii)	Scheduled Tribe	6	8.70	11	15.72	17	12.15
(iii)	Other Backward Class	25	35.70	21	30.00	46	32.85
(iv)	General Caste	30	42.80	22	31.43	52	37.15
3.	Education						
(i)	Illiterate	28	40.00	43	61.43	71	50.72
(ii)	Up to Secondary	29	41.43	20	28.57	49	35.00
(iii)	Above Secondary	13	18.57	07	10.00	20	14.28
4.	Size of land holding						
(i)	Marginal (< 1 ha.)	13	18.57	19	27.14	32	22.86
(ii)	Small (1-2 ha.)	16	22.86	25	35.72	41	29.28
(iii)	Big (> 2 ha.)	41	58.57	26	37.14	67	47.86
5.	Income						
(i)	Above Poverty Line (< Rs. 27,500/-)	42	60.00	33	47.15	75	53.57
(ii)	Below Poverty Line (> Rs. 27,500/-)	28	40.00	37	52.85	65	46.43
6.	Social participation						
(i)	No member of any organization	29	41.42	37	52.85	66	47.14
(ii)	Members of organization	33	47.15	22	31.42	55	39.28
(iii)	Office bearer	08	11.43	11	15.72	19	13.58

Social participation

Observation of Table 1 shows that majority of the respondents in the study sample i.e. 66 (47.14%) were not the member of any organization, 55 (39.28%) were the member of one organization, and Only 19 (13.57%) respondents possessed the position of office bearer.

Critical analysis of Table 1 shows that 41.42 per cent beneficiary and 52.85 per cent non-beneficiary respondents were not the member of any organization. It was also found that 33 (47.15%) benefi-

ciary and 22 (31.42%) non-beneficiary respondents were member of an organization. While only 8 (11.43%) beneficiary and 11 (15.72%) non beneficiary respondents were office bearers of the organization.

Knowledge of the respondents about improved soyabean cultivation technology

The knowledge of the respondents about improved practices of soybean cultivation was assessed. For this, the respondents were divided into three knowledge level groups on the basis of mean score obtained by them and standard deviation.

Table 2: Distribution of respondents according to their level of knowledge. **n=140**

S.No	Level of knowledge	Beneficiary (n=70)		Non-Beneficiary (n=70)		Pooled (n=140)	
		f	%	f	%	f	%
1.	Low (below 30 score)	8	11.43	25	35.71	33	23.58
2.	Medium (30-42)	41	58.57	39	55.71	80	57.14
3.	High (above 42 score)	21	30.00	6	8.58	27	19.28
	Overall	70	100	70	100	140	100

The data presented in Table 2 reveal that majority of the respondents i.e. 57.14 per cent had medium level of knowledge, this was followed by low and high knowledge group with 23.58 and 19.28 per cent respondents, respectively.

In case of beneficiary respondents, majority of them (58.57%) possessed the medium level of knowledge, followed by high level knowledge group. Further, only 8 (11.43) beneficiary respondents fall under the low level of knowledge group regarding improved agricultural practices of soybean production. Data of Table 2 further indicate that majority of the non-beneficiary respondents (55.71%) possessed medium level of knowledge, followed by low level of knowledge. Only 6 (8.58%) non-beneficiary respondents possessed high level of knowledge regarding soybean production technology.

Association between age and knowledge

The data incorporated in Table 3 show that the calculated chi-square value was 43.73 for overall respondents, 21.26 for beneficiary respondents and 19.15 for non-beneficiary respondents respectively, which is highly significantly associated with the knowledge of farmers about soybean production technology at one per cent level of significance. It means, age of respondents exerted a highly significant effect on the knowledge level of respondents.

Association between caste and knowledge

The data incorporated in Table 3 indicate that the calculated chi-square value was 1.97 for overall respondents, 3.69 for beneficiary respondents and 0.34 for non-beneficiary respondents which were less than their respective tabulated value at 5 per cent level of significance, which asserts that there is no significant association between caste and knowledge level of respondents about soybean produc-

tion technology.

Association between education and knowledge

The data incorporated in table 3. shows that the calculated chi-square value was 43.48 for overall respondents, 21.26 for beneficiary respondents and 18.05 for non-beneficiary respondents which is highly significantly associated with the knowledge of farmers about soybean production technology at 1 per cent level of significance, It means educational level of respondent's affect significantly on the knowledge level of respondents.

Association between size of land holding and knowledge

The study of Table 3 reveals that calculated chi-square value was 30.94 for overall respondents, 15.17 for beneficiary and 11.56 for non-beneficiary respondents which were less than their tabulated value at 1 per cent level of significance. It means land holding of respondent effect significantly on the knowledge level of respondents.

Association between income and knowledge

It can be seen from the Table 3 that calculated chi-square value was 24.71 for overall respondents, 13.02 for beneficiary, 9.85 non-beneficiary respondents respectively were significant at 1 and 5 per cent level of significance. It means income variable exerted highly significant effect on the knowledge level of farmers.

Association between social participation and knowledge

The data incorporated in table 3 indicated that the calculated chi-square value was 3.75 for overall respondents, 15.17 for beneficiary respondents and 6.91 for non-beneficiary respondents respectively were significant at 1 and 5 per cent level of signifi-

cance. Thus the null hypothesis was rejected and alternative hypothesis was accepted it means social participation variable exerted significant effect on the knowledge level of farmers.

CONCLUSIONS

In line with the findings it is concluded that the majority of the respondents belonged to middle age group, 37.15 per cent of them were of general caste. Further more than 50% respondents were illiterate, had big land holding and higher income level. Around half of them were not the member of any organization. In case of beneficiary respondents they were also middle age group, 42.80 per cent of them were of General Caste, 40 per cent of them did not attend formal schooling. Further around 50 per cent of them had big land holding, higher income level and were member of organization.

It was also opened that 61.43 percent of non-beneficiary respondents belonged to middle age group, equal number of them were for Other Back-

ward Class & General Caste, Small & Big land holding and Above & Below Poverty Line. More than half of them were not member of any organization.

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