Knowledge and Adoption Level of Farmers about Scientific Cultivation of Okra in Tapi District

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ABSTRACT

The study was conducted in Tapi district of South Gujarat. Vyara, Valod, Songadh and Uchchhal taluka were selected purposively as the majority of the farmers in these talukas are growing Okra as main cash crop in Rabi season. Ten villages were selected from these four talukas by simple random sampling techniques. A list of Okra growers was prepared from the selected villages. 20 respondents were selected from each village by proportionate random sampling technique. Thus, total number of respondents was 200. The structural interview schedule was used for the data collection. The data were tabulated, analyzed and interpreted in the light of the objectives. The statistical measures like frequency, percentage, Mean and S.D. were used. Majority of the respondents was in young age group, were illiterate, were participated in social activities, were participated in more than one extension activity, had annual income up to Rs. 50,000/-, were engaged in farming + Animal Husbandry as main occupation, possessed 0.01 – 1.00 ha of land, were found to have medium level of economic motivation, were found to have medium level of knowledge about okra production technology and were medium adopters of okra production technology.

Keywords: Knowledge, Adoption, Okra

INTRODUCTION

In Tapi district, Okra is the main cash crop in Rabi season. This district is famous for growing okra in Rabi season. From this region, okra is exported in foreign countries. In Tapi district approximately 2000 ha. area under okra cultivation in Rabi season. Majority of the farmers are growing okra by trial and error method.

Our research scientists, extension workers and farmers have great responsibility to maximize the production of okra in Tapi district particularly in Dolvan and Bandharpada region, as okra is exported which is possible if farmers were getting very low yield in Okra. Low productivity in okra was due to lack of knowledge about scientific cultivation, poor nutrient management and lack of knowledge regarding IPDM.

Keeping all these views in mind, the research study "Knowledge level of farmers about scientific cultivation of Okra in Tapi district" was taken with following objectives.

OBJECTIVES

1 To study the personal profile of the respondents *viz.* Age, Education, Social participation, Extension participation, Annual Income, occupation, Land Holding and economic motivation .

2 To study the knowledge and adoption level of farmers about scientific cultivation of okra. i.e Land preparation, Use of organic manure, Season of cultivation, Selection of varieties / Hybrid, Seed treatment, Spacing, Inorganic fertilizer application, Integrated water management, Weed management, IPDM, Harvesting, Value addition, Use of PGR

METHODOLOGY

Tapi district consists of five talukas *viz.* Vyara, Valod, Songadh, Uchchhal and Nizar. Vyara, Valod, Songadh and Uchchhal taluka were selected purposively as the majority of the farmers in these talukas are growing Okra as main cash crop in Rabi season. Ten villages were selected from these four talukas by simple random sampling techniques.

A list of Okra growers was prepared from the selected villages. 20 respondents were selected from each village by proportionate random sampling technique.

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RESULTS AND DISCUSSION

Personal profile of the respondents

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

Table 1: Distribution Of Respondents According To Their Personal Characteristics   n=200

Sr. No.	Personal Characteristics	Number of respondents	Per cent
1	**Age group**		
1	Young (up to 35 years)	125	62.5
2	Middle (36 to 50 years)	60	30.0
3	Old (50 years and above)	15	7.5
2	**Level of Education**		
1	Illiterate	68	34.0
2	Up to primary school level	39	19.5
3	Up to middle school level	56	28.0
4	Up to high school level	25	12.5
5	Up to college and above college	12	6.0
3	**Social Participation**		
1	Participated	153	76.5
2	Not participated	47	23.5
4	**Extension Participation**		
1	Not participated	55	27.5
2	Participated in one activity	38	19.0
3	Participated in more than one activity	107	53.5
5	**Annual Income**		
1	Above Rs. 2,00,000/-	0	0.0
2	Rs. 1,50,001 to 2,00,000	1	0.5
3	Rs. 1,00,001 to 1,50,000	4	2.0
4	Rs. 50,001 to 1,00,000	45	22.5
5	Up to Rs. 50,000	150	75.0
6	**Occupation**		
1	Farming	34	17.0
2	Animal Husbandary	0	0
3	Farming + Animal Husbandary	165	82.5
4	Service + Farming	00	00
5	Farming + Business	01	0.5
7	**Land Holding**		
1	> 10 ha	01	0.5
2	4.01 – 10.00 ha	01	0.5
3	2.01 – 4.00 ha	28	14.0
4	1.01 – 2.00 ha	56	28.0
5	0.01 – 1.00 ha	114	57.0
8	**Economic motivation**		
1	Low economic motivation (< 6 score)	30	15.0
2	Medium economic motivation (6-10 score)	133	66.5
3	High economic motivation (> 10 score)	37	18.5

Mean = 14.08   S.D. = 2.71

Age

From the data presented in Table 1(1) show that majority (62.50 per cent) of the respondents was in young age group followed by 30.00 per cent of the respondents belonging middle age group and only 7.50 per cent were under old age group.

Education

A perusal of data presented in Table 1(2) reveal that majority (34.00 per cent) of the respondents were illiterate followed by 28.00, 19.50, 12.50 and 6.00 had an education up to middle school level, primary school level, high school level and college and above college level education. This information gives indication that the literacy rate in tribal area is still very low.

Social participation

The data in Table 1(3) revealed that majority (76.50 per cent) of the respondents were participated in social activities whereas, 23.50 per cent of the respondents were not participated in social activities.

Extension participation

From the data presented in Table 1(4) it was observed that majority (53.50 per cent) of the respondents were participated in more than one activity followed by 27.50 per cent and 19.00 per cent of the respondents were not participated in any activity and participated in one activity respectively.

Annual Income

It is apparent from Table 1(5) that majority (75.00 per cent) of the respondents had annual income up to Rs. 50,000/- followed by 22.50 per cent, 2.00 per cent and 0.50

per cent of the respondents had annual income between Rs. 50,001 to 1,00,000, Rs. 1,00,001 to 1,50,000 and Rs. 1,50,001 to 2,00,000 respectively. While none of them had annual income above Rs. 2,00,000/- .

Occupation

The data presented in Table 1(6) reveal that majority (82.50 per cent) of the respondents were engaged in farming + Animal Husbandry as main occupation followed by 17.00 per cent and 0.5 per cent of the respondents were engaged in farming and Farming + Business. While none of the respondents had Animal Husbandry and Farming + Business as main occupation.

Land holding

It is evident from the data in Table 1(7) that more than one-half (57.00 per cent) of the respondents possessed 0.01 – 1.00 ha of land followed by 28.00 per cent and 14.00 per cent of the respondents possessed 1.01 – 2.00 ha and 2.01 – 4.00 ha land respectively. An equal proportion (0.50 per cent) of the respondents had 4.01 – 10.00 ha and > 10 ha of land.

Economic motivation

The date presented in Table 1(8) portray that majority (66.50 per cent) of the respondents were found to have medium level of economic motivation whereas, 18.50 per cent and 15.00 per cent of the respondents had high and low level of economic motivation.

Knowledge and adoption level of farmers about scientific cultivation of okra:

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

Knowledge about okra production technology

A perusal of data presented in Table 2(1) indicate that majority (71.00 per cent) of the respondents were found to have medium level of knowledge about okra production technology. An equal (14.50 per cent) number of respondents had low and high level of knowledge about okra production technology.

Adoption about okra production technology

The data in Table 2(1) revealed that majority (74.50 per cent) of the respondents were medium adopters of okra production technology whereas, 14.00 per cent and 11.50 per cent of the respondents were under low and high adoption level of okra production technology.

Table 2: Distribution of Respondents According to Their Knowledge and Adoption Level of Farmers About Scientific Cultivation of Okra   n=200

I	Level of knowledge	No.	Per cent
1	Low level of knowledge (< 28 score)	29	14.5
2	Medium level of knowledge (28-37 score)	142	71.0
3	High level of knowledge (> 37 score)	29	14.5
Mean = 47.38			S.D. = 4.66
II	Level of adoption		
1	Low level of adoption (< 24 score)	28	14.0
2	Medium level of adoption (24-29 score)	149	74.5
3	High level of adoption (> 29 score)	23	11.5

Mean = 45.25   S.D. = 4.07

CONCLUSION

From the above discussion it could be concluded that majority of the respondents was in young age group, were illiterate, were participated in social activities, were participated in more than one extension activity, had annual income up to Rs. 50,000/-, were engaged in farming + Animal Husbandry as main occupation, possessed 0.01 – 1.00 ha of land, were found to have medium level of economic motivation, were found to have medium level of knowledge about okra production technology and were medium adopters of okra production technology.

REFERENCES

Butani Ketankumar and Dhillon, D.S.(2011).Knowledge and use of Information communication technology by the scientists. *Agriculture Update*, 6(3&4): 195-200.

Dubey, Swapnil. (2011). Impact of Front Line Deminstration of Pigeon pea in transfer of improved technology. *Agriculture Update*, 6(3&4): 61-163.

Gaikwad, A.B.,Shinde, S.B. and Kolgane, B.T.(2011). Knowledge of extension personnel about horticultural recommendations on selected fruit crops. *Agriculture Update*, 6(3&4): 155-160.

Pandya, C.D. and Pandya, R.D. (2010). A critical analysis of Socio-Economic Status of organic farming followers of South Gujarat. Ph.D. (Agri.) Thesis (Unpublished), Navsari Agricultural University, Navsari.