

AWARENESS AND ATTITUDE OF FARMERS TOWARDS CERTIFIED SEEDS

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ABSTRACT

The study was conducted in Banaskantha district of Gujarat state. Using multistage random sampling technique, a sample consisting of 150 farmers of 30 villages was selected for the study. The study revealed that three-fourths of the respondents had medium level of awareness and moderately favourable attitude towards certified seeds. The important constraints perceived by farmers in adopting certified seed were; in-adequate availability, poor quality of certified seed, non-timely availability, high cost, lack of knowledge about attributes of specific variety and non-availability at local level. Major suggestions given by the farmers were; certified seed should be made available locally in adequate quantity and at right time, information on morphological characteristics of variety should be given along with certified seed packet, priority in crop insurance should be given to certified seed growers, premium price to produce of certified seed and strong penalty provisions against sale of spurious seed.

KEY WORDS: *Attitude, awareness, certified seed, constraints, suggestions.*

INTRODUCTION

Farmers in India, always give prime importance to seed, an important input for improving productivity and profitability in crop production. They are receptive to adoption of a new technology package, in which improved seed of new varieties is the central input. More often they are ready to pay high price for quality seed of new varieties if they are assured of higher returns. In spite of the best efforts of Government and Seed Agencies, the production and availability of quality seed is far below the requirement. Therefore, farmers use their own farm saved seed which give approximately 15-25 per cent

lower yield due to poor seed quality in respect of varietal purity, germination, vigour and health of repetition seed.

The certified quality seed enables the farmers to improve the profitability since certified quality seed is more rewarding than uncertified seed. Though selection of seed is very crucial to farmers, many farmers don't fully understand what is meant by certified seed or what benefits certified seed offers to those who want to establish a crop or pasture from seed. Hence, the present investigation is an attempt to identify important characteristics of the farmers, their awareness and attitude towards certified seeds.

METHODOLOGY

The study was conducted in Banaskantha district of Gujarat state. Three talukas viz., Amirgadh, Deesa and Vadgam of the district were selected randomly for the study. From each selected taluka ten villages were selected randomly and from each selected village five farmers were selected randomly. Thus using the multistage random sampling technique, a sample consisting of 150 farmers of 30 villages was drawn for the study. A three-point continuum scale was used to determine the attitude of the respondents towards certified seeds. Attitude scale contained 17 items. These items were identified after thorough review of literature and in consultation with scientists and experts in the field. Attitude was assessed in terms of highly favourable, moderately favourable and less favourable attitude by assigning the scores 3, 2 and 1, respectively. For measuring the extent of awareness of respondents regarding certified seeds, the test developed for the purpose was used. After consulting with experts in the field, awareness aspects viz., characteristics and standards of certified seeds, importance of certified seeds, points to be considered while purchasing the certified seeds, awareness about producers, suppliers and seed certifying agency, procedure to be followed against sale of spurious seed were included in the awareness test. The awareness score was calculated as sum of the scores of correct responses. A respondent could get maximum score of 54 and minimum of 0. The respondents were classified into three groups viz., low level of awareness ($\text{mean} - \text{S.D.}$), medium level of awareness ($\text{mean} \pm \text{S.D.}$) and high level of awareness ($\text{mean} + \text{S.D.}$). In order to know the actual problems in adopting certified seeds, a list of

probable constraints was prepared and responses were obtained from each of the respondent on three point continuum viz., high, moderate and no constraint and 3, 2 and 1 score was assigned, respectively. Mean score was calculated for each constraints and based on mean score ranks were given to the constraints. For obtaining suggestions, an open ended question was asked to respondents. Then suggestions offered were tabulated according to frequency and percentage of respondents and ranks were assigned. Interview schedule was constituted for collection of the data. Appropriate statistical tools were used to interpret the data and to draw the conclusions.

RESULTS AND DISCUSSION

A perusal from the data presented in Table 1 indicated that nearly half (52.00 %) of the farmers were found in middle age group and two-thirds (66.00 %) had primary to secondary education. Nearly two-thirds (69.33 %) were found cultivating small and medium size of land holding, more than half (52.00 %) of them followed the potato based cropping pattern. Nearly three-fifths (58.67 %) had more than 200 percent cropping intensity, annual income below Rs. 1,50,000 and membership in more than one organization. Majority of the farmers had medium utilization of information sources (68.67 %).

The results presented in Table 2 indicated that nearly three-fourths (75.33 %) of the respondents had moderately favourable attitude towards certified seed, followed by 16.00 per cent having less favourable and 8.67 per cent having highly favourable attitude towards certified seed. The probable reason for above finding might be due to the fact that farmers might have considered certified seeds as more remunerative as compared to

non- certified seed due to undesired experiences of spurious seeds.

Data presented in Table 3 portray that majority (79.33 %) of the respondents had medium level of awareness regarding certified seeds. The respondents with low and high level of awareness were to the extent of 8.67 per cent and 12.00 per cent, respectively. The average awareness score was 28.28.

It is evident from Table 4 that, almost all 8 enlisted constraints had been perceived by the respondents in adopting certified seed. However, those constraints having mean score values more than the average mean score 2.33 were considered most important. These problems in descending order of ranks were: inadequate availability (2.70MS), poor quality of certified seed (2.55MS), non-timely availability (2.49MS), high cost (2.45MS), lack of knowledge about attributes of specific variety (2.44MS) and non-availability at local level (2.39 MS). Other constraints reported less important were: lack of information about production potential of certified seed (2.23 MS) and water stress (1.44 MS). From the foregoing discussion of the constraint analysis, it can be concluded that inadequate availability, poor quality of certified seed, non-availability at right time, high cost, lack of knowledge about attributes of specific variety and non-availability at local level were perceived most important constraints by farmers in adopting certified seed.

The information collected regarding suggestions given by the farmers is presented in Table 5. The results depicted that about three-fourths (74.67%) of the farmers suggested that certified seed should be made available locally in adequate quantity and at right time followed by information on morphological

characteristics of variety should be given along with certified seed packet. (70.00 %) were ranked first and second. Other suggestion given by farmers were; priority in crop insurance should be given to certified seed growers (68.00%), premium price to produce of certified seed (66.00%), strong penalty provisions against sale of spurious seed (62.67%) and information on production potential of variety of certified seed should be given along with certified seed packet (50.00%) were ranked third, fourth fifth and sixth, respectively. Extension agencies should provide training on quality aspects of seed along with cultivation practices. (48.67 %) and farmers should be trained on legal procedure against sale of spurious seed (41.33%) were found less important suggestions.

The calculated coefficients (Table 6) of correlation show that, out of eight variables selected, three variables were exerted positive and significant relationship with awareness. They were social participation, source of information and attitude, while remaining five variables viz., age, education, land holding, cropping intensity and cropping pattern have failed to establish significant correlation with farmers' awareness regarding certified seed.

CONCLUSION

From the foregoing discussion it can be concluded that major suggestions given by the farmers were; certified seed should be made available locally in adequate quantity and at right time, information on morphological characteristics of variety should be given along with certified seed packet, priority in crop insurance should be given to certified seed growers, premium price to produce of certified seed and strong

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Table 1: Characteristics of the respondents

(n=150)

Characteristics	Category	Freq.	Per cent
1. Age	Young (Up to 35 years)	24	16.00
	Middle (36 to 50 years)	78	52.00
	Old (Above 50 years)	48	32.00
2. Education	Illiterate	10	6.67
	Primary (up to VII)	36	24.00
	Secondary (VIII to X)	63	42.00
	Higher Secondary (XI to XII)	27	18.00
	College	14	9.33
3. Social participation	No membership	5	3.33
	Membership in one organization	44	29.33
	Membership in more than one organization	88	58.67
	Office bearer	13	8.67
4. Land holding	Marginal (Below 1.0 ha)	29	19.33
	Small (1.01 to 2.0 ha)	52	34.67
	Medium 2.01 to 4.0 ha)	52	34.67
	Big (Above 4.0 ha)	17	11.33
5. Annual income	Up to Rs.50,000/-	25	16.67
	Rs.50,001 to 1.00,000/-	15	10.00
	Rs.1,00,001 to 1,50,000/-	48	32.00
	Rs.1,50,001 to 2,00,000/-	26	17.33
	Above Rs.2,00,000/-	36	24.00
6. Cropping intensity	100 to 150	20	13.33
	151 to 200	42	28.00
	201 to 250	48	32.00
	251 to 300	40	26.67
7. Cropping pattern	Groundnut-Potato-Bajara, Greengram-Potato-Bajara/ Vegetables	78	52.00
	Castor-Castor-fellow/ Bajara	37	24.67
	Cotton-Cotton-Fellow, Cotton-Wheat-Fellow,	30	20.00
	Vegetables-Potato-Groundnut, Vegetables-Wheat/ Mustard - Fellow	5	3.33
8. Utilization of information sources	Low (Below 30.84 scores)	29	19.33
	Medium (30.84 to 50.08 scores)	103	68.67
	High (Above 50.08 scores)	18	12.00

Table 2: Distribution of the respondents according to their level of attitude towards certified seed

Sr. No.	Category	Frequency	Percentage
1.	Less favourable (Below 24.33 scores)	24	16.00
2.	Moderately favourable (24.33 to 36.99 scores)	113	75.33
3.	Highly favourable (Above 36.99 scores)	13	8.67
	Total	150	100.00
Mean=30.16		S.D=6.83	

Table 3: Distribution of the respondents according to their level of awareness regarding certified seeds

Sr. No.	Category	Frequency	Percentage
1.	Low (Below 23.08 scores)	13	8.67
2.	Medium (23.08 to 33.48 scores)	119	79.33
3.	High (Above 33.48 scores)	18	12.00
	Total	150	100.00
Mean=28.28		S.D=5.20	

Table 4: Constraints perceived by farmers in adoption of certified seed (n=150)

Sr. No.	Constraints	Level of Constraint			Mean Score	Rank
		High	low	Not at all		
1.	In-adequate availability	112 (74.67)	31 (20.67)	7 (4.67)	2.70	I
2.	Poor quality of certified seed	90 (60.00)	52 (34.67)	8 (5.33)	2.55	II
3.	Non-availability at right time	81 (54.00)	62 (41.33)	7 (4.67)	2.49	III
4.	High cost	82 (54.67)	53 (35.33)	15 (10.00)	2.45	IV
5.	Lack of knowledge about attributes of specific variety	74 (49.33)	68 (45.33)	8 (5.33)	2.44	V
6.	Non-availability at local level	66 (44.00)	77 (51.33)	7 (4.67)	2.39	VI
7.	Lack of information about production potential of certified seed	45 (30.00)	95 (63.33)	10 (6.67)	2.23	VII
8	Water stress restrict use of certified seed	10 (6.67)	47 (31.33)	93 (62.00)	1.44	VIII
Average Mean Score					2.33	

Note: The figure in brackets indicated percentage.

Table 5: Suggestions to overcome constraints perceived by the respondents in adoption of certified seed

(n=150)

No.	Suggestions	Frequency	Per cent	Rank
1.	Certified seed should be made available locally in adequate quantity and at right time.	112	74.67	I
2.	Information on morphological characteristics of variety should be given along with certified seed packet.	105	70.00	II
3.	Priority in crop insurance should be given to certified seed growers	102	68.00	III
4.	Premium price to the produce of certified seed	99	66.00	IV
5.	Strong penalty provisions against sale of spurious seed	94	62.67	V
6.	Information on production potential of variety of certified seed should be given along with certified seed packet.	75	50.00	VI
7.	Extension agencies should provide training on quality aspects of seed along with cultivation practices.	73	48.67	VII
8.	Farmers should be trained on legal procedure against sale of spurious seed	62	41.33	VIII
Average			60.16	

Table 6: Relationship between characteristics of farmers and their level of awareness towards certified seeds

(n=150)

Sr. No.	Independent Variables	Correlation coefficient 'r'
1	Age	0.068406
2	Education	0.038169
3	Social participation	0.21104**
4	Land holding	-0.11258
5	Cropping intensity	-0.13029
6	Cropping pattern	0.000603
7	Source of information	0.226115**
8	Attitude	0.187161*

* = Significant at 0.05 per cent level of probability

** = Significant at 0.01 per cent level of probability

[MS received: February 21, 2016]

[MS accepted: March 17, 2016]