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Usefulness of Cotton Research Station as Perceived by Cotton Growers

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ABSTRACT

In order to study the usefulness of the Cotton Research Station, Surat as perceived by cotton growers the study was carriedout in 16 villages within the radious 30 kms. from Cotton Research Station, Surat. The respondents (200) were selected with the help of random sampling technique. A field survey was conducted through structured interview schedule. The results of the study revealed that 86.5 per cent cotton growers has perceived the cotton research station useful as an information centre and 89.5 per cent perceived the cotton research station as a source of inspiration for adoption of improved farm practices. On the basis of the findings, it is suggested that the authority of the Cotton Research Station and extension agency will have to exert more in order to aware the farming community regarding the research activities being carried out at the Research Station and being technological change in cotton growing area.

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INTRODUCTION

Rapid advances in agricultural sciences and technology offer better prospects to farmers for achieving significant increases in productivity, production and consequently higher incomes. The need is for taking the fruits of research faster to farmers and enable them to adopt these technologies for their economic betterment. Agricultural research station plays a major role in solving the problems of agriculture and allied sciences for the purpose of aiding the development of agriculture and for the benefit of rural population of the state. Another main role of research station is to build relationship and increase confidence among the farmers so that they may develop favourable attitude and feeling towards the research station. This may result in motivating them to take advantage of the research station. Earlier studies by Dudhani and Rao (1969), Laxminarayan and Satyanarayan (1970) indicated that extension agency (including i.e. government agriculture college) was found to be a major sources of first information.

In order to study the usefulness of the Cotton Research Station, Surat as perceived by cotton growers the present study was undertaken with following objectives :

1. To determine the usefulness of the cotton research station as on the basis of the opinions expressed by cotton growers :

- as a information centre.

- as a source of inspiration for adoption of improved farm practices.

2. To know the cotton growers' awarness about the activities being carried out by the station.

3. To determine type of advantages availed by the cotton growers from the station.

MATERIALS AND METHODS

The method used for the study was a field survey undertaken through structured interview schedule. The sample consisted of 200 farmers from 3 villages of Olpad and 8 villages of Choryashi taluka of Surat district of Gujarat State.

The sampling method used for the study was a random sampling procedure. All 16 villages were selected from these two talukas with following criteria :

(i) A village falling within a radius of 30 kms from the cotton research station and

(ii) A village in which cotton cultivation is the regular feature of the cropping pattern.

RESULTS AND DISCUSSION

Utility of Cotton Research Stations

The respondents were asked to narrate usefulness of the cotton research station, Surat. These responses were tabulated in Table 1.

TABLE 1

Distribution of respondents according to their perception regarding usefulness of the Cotton Research Station, Surat as an information centre.

N = 200

Sr. No.	*Usefulness*	*No. of respondents (out of 200)*	*Percentages*
I	Number of cotton growers who perceived the Cotton Research Station as an information centre for :	173	86.5
	Cotton Seed		
	Information regarding improved variety	170	85.0
	Information regarding sources of procuring seeds of improved varieties	150	75.0
	Information regarding seed rate/hectare	143	71.5
	Information regarding seed treatment	47	23.5
	Chemical fertilizers		
	Information regarding proper time for applying fertilizers	173	86.5
	Information regarding doses of fertilizers	134	67.0
	Information regarding method of applying fertilizers.	75	37.5

1.	2.	3.	4.
	Plant protection measures		
	Information regarding insecticides and fungicides to be used against the insects of cotton crops	166	83.0
	Information regarding the proportion of insecticides and fungicides to be used	145	72.5
	Information as to when and how to apply insecticides and fungicides	65	32.5
	Irrigation		
	Information regarding the time to irrigate cotton crop	157	78.5
	Information regading the number of irrigation	74	37.0
	Crop rotation		
	Information regarding the type of crop rotation	159	79.5
	Information regarding the importance of crop rotation	108	54.0
	Hybrid seed production		
	Information regarding the scientific method of hybrid seed production	106	53.0

An examination of the data given in Table 1 revealed that out of 200 growers, 86.5 per cent had perceived the cotton research station useful as an information centre.

Cotton seed

Majority of the cotton growers (85.0 per cent) had considered the cotton research station as a source of information regarding improved varieties of cotton while 75.0 and 17.5 per cent cotton growers had expressed their views as a source of information regarding source of procuring seeds of improved varieties and seed rate/hectare, respectively.

Chemical fertilizers

Majority of the cotton growers (86.5 per cent) expressed their views that information regarding proper time for applying fertilizers could be obtained from the research station. Out of 200 farmers, 67 per cent mentioned that the research station as a source of information regarding dozes of fertilizers and 37.5 per cent considered it as a source of information regarding the methods of applying fertilizers.

Plant protection measures

Eighty three per cent cotton growers considered the research station as a source of information regarding insecticides and fungicides to be used against insects, pests and diseases of the crop. The data further revealed that 72.5 per cent respondents mentioned the cotton research station as a source of information regarding the proportion of insecticides and fungicides to be used. While 32.5 per cent expressed it as a source of information as to when and how to apply insecticides and fungicides.

Irrigation

The data revealed that majority of respondents (78.5 per cent) mentioned the research station as a source of information regarding the time to irrigate the crop and 37.0 per cent considered it as a source of information regarding the number of irrigation to be given to the crop.

Crop rotation

Majority of the cotton growers (79.5 per cent) perceived the usefulness of the research station as a source of information regarding the type of crop rotation to be followed in the cotton crop, while 54.0 per cent indicated it as a source of information regarding the importance of crop rotation.

Hybrid seed production

The data revealed the research station as a source of information regarding the scientific method of hybrid seed production was perceived by 53.0 per cent of the respondents.

The respondents were further asked to report regarding the usefulness of the cotton research station, Surat as a source of inspiration for adoption of improved practices. These responses were tabulated as reported in Table 2.

TABLE 2

Distribution of respondents according to their perception regarding the usefulness of the Cotton Research Station, Surat as a source of inspiration for adoption of improved farm practices.

N = 200

Sr. No.	*Usefulness*	*No. of respondents (out of 200)*	*Percentage*
I.	Number of cotton growers considering Cotton Research Station, Surat as a source of inspiration for adoption of improved agricultural practices	179	89.5
	Inspiration regarding sowing improved seeds	179	89.5
	Inspiration regarding the use of improved implements	53	26.5
	Inspiration regarding the adoption of plant protection measures	125	62.5
	Inspiration regarding the use of chemical fertilizers	92	46.0
	Inspiration regarding weed control	119	59.5
	Inspiration regarding maintenance of varietal purity	83	41.5
	Inspiration regarding adoption of improved cultivation practices	90	45.0
	Inspiration for doing all agricultual operations regularly and in time	51	25.5

The data presented in Table 2 indicates that 89.5 per cent cotton growers perceived the usefulness of the Cotton Research Station, Surat as a source of inspiration for adoption of improved farm practices.

Eightynine per cent respondents were inspired for sowing improved seeds, while 26.5 per cent respondents were inspired for the use of improved implements. Out of 200 farmers, 62.5 per cent were inspired for adoption of plant protection measures and 46.0 per cent inspired for the use of chemical fertilizers. The data further indicates that 41.5 per cent respondents and 45.0 per cent respondents were inspired for maintaining varietal purity and adoption of improved cultivation practices, respectively.

Awareness of activities

The respondents were further asked to report regarding awareness about the activities being carried out on the Cotton Research Station, Surat. These responses were tabulated as reported in Table 3.

TABLE 3

Distribution of cotton growers according to their awareness about the activities being carried out at the Cotton Research Station, Surat.

N = 200

Sr. No.	*Activities*	*No. of respondents (out of 200)*	*Percentage*
1.	Conducting Rsesarch	70	35.0
2.	Finding suitable plant protection measures	36	18.0
3.	Improvement of quality of cotton	26	13.0
4.	Evolving improved varieties	18	9.0
5.	Organising farmers' day	122	61.0
6.	Laying out demonstrations	45	22.5
7.	Cultivation for hybrid seed cultivation	23	11.5

The data presented in Table 3 revealed that the majority of respondents (61.0 per cent) indicated that they knew about the organization of farmers' day on the research station. The respondents were not found to be aware of the type of research that was being carried out at the Cotton Research Station, Surat. It was found that only 18.0 per cent respondents were aware of the research on plant protection measures in cotton crop being carried out and only 13.0 per cent and 9.00 per cent respondents indicated their awareness about the research related to the improvement of cotton quality and evolving of improved varieties. The awareness of activity of laying out demonstration was mentioned by 22.5 per cent respondents and the awarness of the activity of hybrid seed production was indicated by only 11.5 per cent.

Benefits availed

Respondents were further asked to narrate the types of advantages of the Cotton Research Station, Surat taken by them. Their responses were tabulated and depicted in Table 4.

TABLE 4

Distribution of cotton growers according to advantages of Cotton Research Station, Surat availed by them.

N = 200

Sr. No.	*Type of benefit availed*	*No. of respondents (out of 200)*	*Percentage*
1.	Information about the methods of application and dozes of fertilizers	169	84.5
2.	Information regarding insecticides and fungicides and their proportion and methods of use	161	80.5
3.	Information regarding improved implements useful for cotton cultivation and their use	29	14.5
4.	In formation regarding cultuvation method for hybrid seed production	112	56.0
5.	Information regarding irrigation in cotton crop	141	70.5
6.	Information regarding crop rotation	111	55.5
7.	Information regarding picking of cotton	31	15.5

The data presented in Table 4 indicated that the majority of the respondents (84.5 per cent) obtained information about the methods of application and doses of fertilizers. While 80.5 per cent got information regarding selection, concentration and methods of application of insecticides/fungicides. Out of 200 farmers, 14.5 per cent got information regarding purchase of new improved implements for cultivation and their use. While 56.0 per cent respondents had taken advantages by learning scientific cultivation methods for hybrid seed production. About 70.0 per cent and 55.5 per cent respondents took advantages of knowing irrigation practices for the crop and information regarding crop rotation, respectively.

The conclusions emerging from this study indicated that out of 200 cotton growers 86.5 per cent has perceived the Cotton Research Station useful as an information centre. Similarly 89.5 per cent perceived that the cotton research station, Surat as a source of inspiration for adoption of improved farm practices. With regard to awareness of cotton growers, about the activities being carried out at the station was expressed by 61.0 per cent

farmers know about organization of farmers' day at the station.

But only 9.0 per cent, 13 per cent and 18 per cent respondents knew regarding the research activities of evolving improved varieties, improvement of quality of cotton and finding suitable plant protection measures respectively. This indicated that the main aim of the Cotton Research Station is to breed better cotton varieties and to develop appropriate technology of its cultivation was not known by the majority of the respondents, therefore, it is suggested that the authority of the Cotton Research Station and extension agency will have to exert more in order to aware the farming community regarding the research activities being carried out at the Research Station and being technological change in cotton growing area.

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