

Utilization, Credibility and Effectiveness of Communication Media among Bt Cotton Growers

U.R. Chinchmalatpure¹, H.D.Rajput² and C.P.Girase³

Introduction

Cotton is a major cash crop of India. It is grown in varied agro-climatic situations across nine major states viz. Maharashtra, Gujarat, Madhya Pradesh, Punjab, Haryana, Rajasthan, Andra Pradesh, Karnataka and Tamil Nadu.

The area under Bt cotton across the states of India is growing consistently and inspite of this, there are debates over the advantages and disadvantages of Bt cotton. Recently, ICAR has reconfirmed that there is a net increase of 33.7 per cent yield in Bt over non-Bt cotton hybrids in frontline demonstrations (Chaudhary 2007). However, there are questions raised occasionally on the benefits and safety of Bt cotton. Much of this is based on unscientific facts and ignorance of the farmers not following recommended cultivation practices. Farmers are either ignorant or have partial knowledge of the science behind Bt cotton cultivation practices. Hence it was felt necessary to investigate the communication pattern utilized by cotton growers.

Methodology

The research design adopted for the study was ex-post facto research technique and was purposively conducted in Jalgaon and Dhule districts of north Maharashtra region, as it covers the highest area under Bt cotton. Moreover there was highest adoption rate of Bt cotton technology since its inception. The list of Bt cotton growers from the selected villages was prepared and from the list, 175 Bt cotton growers were selected by adopting the procedure of lottery method of random sampling. An interview schedule was prepared keeping in view the objectives of the study and data were collected by personal interview of the selected Bt cotton growers.

¹Assistant professor, College of Agriculture, Dr. PDKV, Akola.

²Ph. D Scholar, Yashwantrao Chavhan Maharashtra Open University, Nasik

³M. Sc. Student, Department of Extension Education, Dr. PDKV, Akola

Results and Discussion

Communication media help to obtain knowledge and guidance about any particular subject or technology. Communication media not only provide information but also some guidance along with the information. Communication media utilization shows the degree of utilization of different media of communication by the respondents, i.e. Bt cotton growers to obtain information about Bt cotton production technology.

1. Extent of Use of Communication Media

The distribution of respondents on the basis of their communication media utilization is depicted in Table 1. Data revealed that communication media were categorised under interpersonal media (non-institutional, institutional), mass media (print and electronic) and group media sources. It is revealed that the Bt cotton growers used one or more than one media. It is indicated that the non-institutional media viz., friends, relatives, neighbours and progressive farmers was used to a great extent (80.29 per cent). The most predominant communication media for getting information under non-institutional media category was friends (97.71 per cent), followed by progressive farmers (82.29 per cent), relatives (74.86 per cent) where as neighbours was least used (66.29 per cent).

Institutional media like agricultural scientists, extension agencies, input dealers and company representative were used by a majority of Bt cotton growers i.e. 64 per cent. Further, data revealed that under this category, input dealers and company representative media were used by a majority of the respondents (84 per cent and 72.57 per cent respectively), while extension agencies and agricultural scientists were least used as communication media by 53.14 and 46.29 per cent of the respondents respectively.

As regards mass media including print media (agricultural magazines and newspaper) and electronic media (radio and television), it is observed that, it was the least preferred i.e. 57.14 per cent and 55.71 per cent respectively. Further, data indicated that, newspaper and television media under print and electronic category were used by a majority of the respondents i.e. 70.86 and 62.29 per cent respectively. However, radio and agricultural magazines under electronic and print media category were least used by the respondents (49.14 per cent and 43.43 per cent, respectively).

As regards group media (field demonstration, field visits, farmer meetings, training workshop and exhibition) category, extent of use was 70.40 per cent. Further, it was observed that farmer meetings (91.43 per cent) followed by field visits (90.86 per cent) and field demonstration (72.00 per cent) were utilized as communication media to a large extent. However, exhibition (52.57 per cent) and training workshop (45.12 per cent) were least used.

Table 1. Extent of Use of Communication Media by Bt Cotton Growers

Sl. No.	Sources	Extent of use (%) (n=175)					Credibility			Effective communication media for Bt cotton technology		
		Regular(2)	Frequent(1)	Rare(0)	Percentage	Mean	Frequency	Percentage	Mean	Frequency	Percentage	Mean
A	Interpersonal media											
* 1	Non-institutional Friends	109	62	4	97.71		154	88.00		134	76.57	
2	Relatives	71	70	34	74.86	80.29	108	61.71	66.86	114	65.14	57.3
3	Neighbour	65	51	59	66.29	I	88	50.29	I	29	16.57	I
4	Progressive farmer	34	110	31	82.29		118	67.43		124	70.86	
*	Institutional											
1	Agriculture scientists	13	129	33	46.29		62	35.43		20	11.43	
2	Extension agencies	6	139	30	53.14	64.00	102	58.29	42.29	117	66.86	49.00
3	Dealers	15	132	28	84.00	III	71	40.57	III	124	70.86	II
4	Company representative	71	91	13	72.57		61	34.86		82	46.86	
B	Group media											
1	Field demonstration	74	87	14	72.00		127	72.57		74	42.29	
2	Field visits	79	80	16	90.86	70.40	141	80.57	55.54	128	73.14	44.57
3	Farmer meetings	40	120	15	91.43	II	119	68.00	II	119	68.00	III
5	Training workshop	21	89	65	45.14		31	17.71		10	5.71	
6	Exhibition	64	63	48	52.57		68	38.86		59	33.71	
C	Mass media											
* 1	Print media											
	Agricultural magazines	15	96	64	43.43	57.14	61	34.86	41.14	5	2.86	20.00
2	News paper	9	150	16	70.86	IV	83	47.43	IV	65	37.14	IV
*	Electronic media											
1	Radio	8	96	71	49.14	55.71	26	14.86	28.00	8	4.57	3.14
2	Television	5	104	66	62.29	V	72	41.14	V	3	1.71	V

2. Credibility of Communication Media Utilization

The credibility was measured by asking growers which was the most influential media on a three point continuum i.e. most credible, credible and not credible, and scored 2, 1 and 0 respectively. There were 18 sources of communication media covered and broadly classified into three categories viz., interpersonal, mass media and group media. Mean score of each category was considered as credibility score of each category.

The distribution of respondents on the basis of credibility of communication media utilization is depicted in Table 1.

The data indicates that non-institutional communication media was considered the most credible media by 66.86 per cent of the respondents and it was ranked 1st in the entire communication media utilization category. Among the various non-institutional communication media, 'friends' was the most credible media reported by a great majority of the respondents i.e. 80 per cent. Similarly, progressive farmers and relatives were mentioned the most credible source by 67.43 and 61.71 per cent of the growers respectively. It is further found that 'neighbour' was the least credible source of communication utilized by 50.29 per cent of the respondents.

The table also gives information regarding the credibility of group media of communication sources. It is observed that it was the second most credible media according to 55.54 per cent of the respondents. In the group media category, field visit, field demonstration and farmer meetings were the most credible media according to 80.57 per cent, 72.57 per cent and 68 per cent of the Bt cotton growers, respectively, while exhibition and training workshop media were shown as the least credible by 38.86 and 17.71 per cent of the respondents, respectively.

As regards institutional communication media, the mean score of credibility of communication media utilization was 42.29 per cent which was ranked third. Further, data under this category revealed that extension agencies were the most credible media according to a majority (58.29 per cent) of the respondents, followed by input dealers (40.57 per cent). However, communication media like, agricultural scientist and company representative were more or less at an equal level of credibility i.e. 35.43 and 34.86 per cent respectively how

With regards to mass communication media utilization, it is revealed that print media like news paper was a more credible communication media according to 47.43 per cent of the respondents, while agricultural magazine was less credible (34.86 per cent) according to the respondents. The mean credible score was 41.14 per cent and it ranked fourth.

Similarly, in case of electronic media, it was observed that television was the most credible media according to 41.14 per cent of the respondents; however, radio was the least credible media of communication (14.86 per cent). The mean credible score was 28 per cent and it ranked fifth among category of communication media utilization.

Among the inter personal (non-institutional, institutional), mass media (print and radio) and group media of communication media utilization, it was observed that majority of the respondents gave top priority to friends, field visits, field demonstration, farmer meetings, progressive farmers, relatives and extension agencies which were ranked from first to seventh as the most credible media of communication. The media like, neighbour, news paper, television, dealers, exhibition, agriculture scientists, company representative and agricultural magazines were placed at eight to fifteenth rank respectively. The other media like training workshop and radio were ranked as credible by a few number of Bt cotton growers.

3. Effective Communication Media for Bt Cotton Technology

The data presented in Table 1 revealed that among the inter personal (non-institutional, institutional), group media and mass media (print and radio) of communication media utilization, it was observed that non-institutional interpersonal media viz., friends, relatives, neighbour and progressive farmers, was the most effective communication media according to a majority of respondents i.e. 57.30 per cent. This was followed by institutional interpersonal media viz. agriculture scientist, extension agencies, dealers and company representative (49.0 per cent) and group media namely, field demonstration, field visits, farmer meetings, training workshop and exhibition recorded by 44.57 per cent of the Bt cotton growers. However, mass media including print media (agricultural magazines and news paper) and electronic media (radio and television) were less effective communication media regarding Bt cotton technology as reported by 20.0 and 3.14 percent respectively.

Conclusion

From the above findings of the study, it can be concluded that the non-institutional media viz., friends, relatives, neighbour and progressive farmers were used to a great extent (80.29 per cent). Group media category viz., field demonstration, field visits, farmer meetings, training workshop and exhibition was utilized by a majority of the respondents (70.40 per cent). About 64 per cent of them used institutional media viz. agriculture scientists, extension agencies, dealers and company representative, whereas, mass media including print media (agricultural magazine and news paper) and electronic media (radio and television), was least preferred i.e. 57.14 and 55.71 per cent for utilization, respectively.

It is also concluded that the growers ranked non-institutional communication media, group media, institutional communication media, mass communication media and electronic mass media of communication from 1st to 5th respectively as credible communication media.

Further it can be concluded that the non-institutional interpersonal media was the most effective communication media according to a majority of respondents, followed by institutional interpersonal media and group media by the Bt cotton growers.

Reference

Chaudhary, B. (2007). Front Line Demonstrations on Cotton 2005-06, ICAR. (<http://www.seedquest.com/News/releases/2007/march/18772.htm>).