

## RELATIVE EFFECTIVENESS OF COMMUNICATION MEDIA FOR PROMOTING PLANT PROTECTION MEASURES IN PADDY

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### ABSTRACT

*The communication media bring desirable changes in behaviour pertaining to knowledge, attitude and symbolic adoption. However the effectiveness of such media differs significantly from medium to medium. A research study in this regard was conducted in Kalol taluka of Panchmahal district with 210 respondents. The results of this study indicated that accumulated influence of several communication media is more than any single media. Further, the media mix was found better than any single medium for gain in knowledge, change in attitudes and change in symbolic adoption behaviour and thereby overall behaviour.*

### INTRODUCTION

The effective communication is the key to increase the use of plant protection technology. The proper education on the plant protection measure and its regular action will save food grain and help in solving food grain deficiency problem. To transfer the latest technological knowledge to the ultimate users, an array of communication media is available, but these channels are not sufficient without careful direction or use in the right way, at the right time, to do right job, for the right purpose, with the right audience, all in relation to the message. For the use of communication media, there is a need of knowing the relative effectiveness of communication media individually as well as in various combinations in terms of behavioural change pertaining to knowledge, attitude and symbolic adoption behaviour with special reference to plant protection measures in Paddy.

### METHODOLOGY

The present study was conducted in three villages of Kalol taluka of Panchmahal district with 70 respondents from each selected village. Single as well as all possible combination of audio-visual and written communication media viz. tape-recorder, slide-show and folder were selected to determine the relative effectiveness in educating farmers about the plant protection measures in Paddy. An information folder entitled "Danger Man Paksanrakshan" was specially prepared in local language. The same message was recorded in an audio cassette and also a set of 28 coloured slides were arranged in a logical order for exposure to the farmers.

All the 210 randomly selected respondents were divided into seven groups, each consisting of 30 respondents for media exposure. In each selected village, the seven treatments were randomly allocated to 70 respondents at the rate of ten respondents to one each treatment. The 'Before and After' type of research design

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(Venugopal, 1975 and Nagraj, 1979) was followed. Thus, the data were collected in two phases with the help of well structured and pre-tested Gujarati version interview schedule which included all the items on which information was required for the study.

The pre-test (Before the exposure of Media) responses were recorded three days in advance of conducting the experiment in villages and post-test (after the exposure) responses were obtained on the next day. The difference provided the gain score. The variables were measured by utilizing appropriate scale and procedure adopted by other research workers. The statistical tool used to analyze the data was one way analysis of variance by applying square root transformation (Nigam and Gupta, 1979).

## RESULTS AND DISCUSSION

One way analysis of variance applied to the data relating to mean knowledge gain, attitudinal change, change in symbolic adoption and change in overall behaviour

of the respondents in different media treatments has been presented in Table-1.

### Gain in knowledge

The data presented in Table reveal that three communication media and their all possible combinations showed significant difference in the extent of their effectiveness in improving knowledge of the paddy growers regarding plant protection measures. Further, the Table gives following information.

1. Comparing the communication media individually, all the three single media showed similarity in their effectiveness.
2. Folder, slide show and tape recorder + folder were found to be similar in their effect but tape recorder + folder was superior to tape recorder only.
3. Looking at two media mix, slideshow + folder was found to be superior to slide show + tape recorder and tape recorder + folder.

**Table 1: Relative effectiveness of communication media in terms of behavioural change**

Sr. No.	Communication Media	Knowledge Gain		Attitudinal Change		Change in symbolic adoption		Change in over all behaviour	
		Original	Trans- formed	Original	Trans- formed	Original	Trans- formed	Original	Trans- formed
1	Tape Recorder	7.27	2.65	6.17	2.44	10.00	2.93	23.43	4.64
2	Folder	8.40	2.78	8.17	2.76	13.18	3.16	29.75	5.08
3	Slide show	8.80	2.87	8.27	2.76	13.33	3.37	30.40	5.25
4	Tape Recorder + Folder	10.13	3.10	9.60	2.96	13.92	3.39	33.68	5.50
5	Slideshow + Tape Recorder	13.30	3.55	10.47	3.18	17.54	3.98	41.31	6.24
6	Slideshow + Tape Recorder	18.57	4.25	13.67	3.62	25.00	4.69	57.23	7.33
7	Slideshow + Tape Recorder + Folder	22.07	4.60	16.93	4.06	31.37	5.41	70.34	8.19
	F Calculated	28.10		17.368		7.357		15.966	
	F Table	2.12		2.12		2.12		2.12	
	SEM	1.44		0.135		0.335		0.325	
	CD	0.399		0.374		0.927		0.901	

n=210

4. There was no difference in three media mix and two media mix viz. slide show + folder but three media mix was found to be superior to all single media and two media mix except slideshow + folder.
  5. Another notable feature is that three media mix and two media mix (slide show + Folder) were similar in their effect in terms of knowledge gain. This helps the budget man to reduce the cost in exposure by eliminating tape recorder from the three media mix.
- media to media as the difference was considerably higher than critical difference set up. Further the table shows that:
1. All the single media were similar in their effect along with two media mix viz. tape recorder + folder.
  2. Folder, slide show, tape recorder + folder and slide show + tape recorder were found similar in their effect.
  3. Slide show + folder was superior to tape recorder + folder and all single media but at par with slide show + tape recorder.
  4. Three media mix was superior to all single media and two media mix except slide show + folder.

#### **Change in attitude**

The Table shows that attitudinal change differed very much from media to media as the difference was considerably higher than the critical difference set up. Further the table generates following information.

1. All the single media were found similar in their effect in terms of attitudinal change.
2. Folder, slideshow and tape recorder + folder were found to be similar in their effect.
3. Slide show + tape recorder was found superior to any single media but at par with tape recorder + folder.
4. Slideshow + folder was found effective than rest of the two media mix and any of single media.
5. Three media mix was found more effective than any of single and two media mix.

#### **Change in symbolic adoption**

The perusal of data presented in Table reveals that the change in symbolic adoption behaviour of farmers differed very much from

#### **Change in overall behaviour**

The data presented in Table reveal that change in overall behaviour of the farmers differed very much from media to media. The difference was considerably higher than critical difference set up. The table gives following information.

1. All the single media along with two media mix viz. tape recorder + folder were alike in their effects in terms of overall change in behaviour.
2. Among the two media mix, slideshow + folder was found to be superior to slide show + tape recorder and tape recorder + folder. However slideshow + tape recorder and tape recorder + folder were found similar in their effect to bring about change in overall behaviour.
3. Three media mix was found to be superior to all single media and two media mix except slide show + folder which is at par in their effect to bring about change in overall behaviour.

**CONCLUSION**

To epitomize the result of the study, it can be stated that communication media are the devices used to create the situation in which communication can take place and bring about desired behavioural change. However the effectiveness of these media differs from one another. Further, it is observed that accumulated influence of several communication media is more than any single media.

Communication media has influenced the knowledge, attitude, symbolic adoption and overall behaviour; therefore, extension worker should try to manipulate these media while working with farming community. Further, extension worker should use media mix rather than single media for effective communication.

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