

Role of Mass Media in the Dissemination of Agricultural Technologies Among Farmers

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ABSTRACT

Pakistan is basically an agricultural country its development is mainly dependent on this sector. However, agricultural production of the country is much lower than that of many other countries of the world. Even within the country there is a big gap between average and potential yields of various agricultural crops. It clearly indicates that the available technologies, if adopted by farmers according to the recommendations, can enhance agricultural production considerably. Therefore, there is a dire need to apply science and technology in the field of agriculture. In order to achieve this objective, the extension agencies are disseminating new technologies through different means including mass media (radio, TV & print media). The present study was planned to determine the role of mass media in the dissemination of agricultural technologies among the ultimate users farmers. Lahore district was selected for this study. A random sampling technique was used for selecting sample. The total sample size was 120 respondents. Data were collected through a pretested interview schedule. The results revealed that a simple majority (54.1%) of the respondents gave 1st preference to television, 25.0% gave 2nd preference to radio, and 16.7% gave 3rd preference to print media as source of agricultural information. A vast majority of the respondents did not listen/watch agricultural radio/TV broadcasts regularly or occasionally. With regard to effectiveness, the respondents ranked TV, radio and print media as 1st, 2nd and 3rd, respectively.

Key Words: Agricultural technologies; Dissemination; Mass media

INTRODUCTION

Pakistan is predominantly an agricultural country. Although its economy has undergone considerable diversification over the years, yet agriculture is still the largest sector of the economy. With its present contribution to GDP at 23.3%, it accounts for 42.1% of the total employed labour force and is the largest source of foreign exchange earnings (Government of Pakistan, 2004). In spite of such a great importance, agriculture in Pakistan is developing at a low speed. Khan (2002) revealed that our agricultural production is much lower than many other countries of the world. Moreover, there is a big gap between actual yield and attainable potential yield of our crops. It clearly indicates that the available technologies, if adopted by farmers according to the recommendations, can enhance agricultural production considerably. Therefore, there is a dire need to apply science and technology in the field of agriculture. In this context, farmers need adequate information exposure to the latest technologies. Research has shown that by and large farmers' information exposure is most likely to be an important factor influencing their adoption behaviour. Of course, greater exposure is likely to enhance awareness about the latest recommendations and to lead to farmers putting these recommendations into practice in a precise manner (Muhammad & Garforth, 1995). In order to achieve this objective, the extension agencies are disseminating new technologies through different means including mass media (radio, TV & print media).

Personal, face-to-face extension methods, which come under individual and group categories have their own

strengths and weaknesses. One of their limitations is that they cannot cover all farmers of the community. So mass media such as radio, TV and printed materials are used to reach large number of people quickly. These methods are particularly useful in making large number of people aware of new ideas and practices, or alerting them to sudden emergencies. While the amount of detailed information that can be transmitted by mass media is limited, they can serve an important and valuable function in stimulating farmers' interest in new ideas. Once stimulated or made aware through mass media, farmers may seek additional information from neighbours, friends, extension workers or progressive farmers in the area (Behrens & Evans, 1984). A study conducted in Faisalabad district has established that by and large mass media proved relatively popular among the farming community (Muhammad & Garforth, 1999). The cost of extension advice through mass media comes to be considerably low as compared to individual and group methods (Oakley & Garforth, 1985). However, the mass media involve one-way communication from information source to the receivers. They permit limited and delayed feedback, which ofcourse is essential for effective communication (Muhammad, 2005). Mahmood and Sheikh (2005) stated that creation of awareness is the first step towards the adoption process. Mass media (electronic & print media) are playing very important role in creating awareness about new agricultural technologies among farmers. Mass media are spreading agricultural technologies to the farmers at a faster rate than personal contacts. Khushk and Memon (2004) stated that production and distribution of printed material helps farmers in the transfer of new

information and technologies. Printing helps in preserving the technologies in the shape of books/booklets, magazines, newspapers and brochures. According to a study conducted in the central Punjab, majority of the farmers consulted pamphlets, magazines, and newspapers for getting the information regarding sugarcane production technologies. These were regarded as the most suitable forms of print media for adoption of sugarcane production technologies (Abbas *et al.*, 2003a). Farm publications have proved to be effective means for dissemination of information, especially to introduce new technologies. Farm publications are also useful for disseminating information among literate farmers (Singh, 2001). Radio is a tool for the delivery of quick information. Television is a powerful medium of information exchange in these days. The common electronic media viz; radio and TV are regarded as very effective in communicating the latest knowledge to the farmers. Radio and television are the most effective tools in communication for the support of development (Hussain, 1997). A study conducted in the central Punjab showed that more than 56% farmers listened/watched agricultural programmes on radio and television (Abbas *et al.*, 2003b). Farooque (2004) stated that all the respondents regarded print media and fellow farmers as their major sources of agricultural information followed by TV (80.83%) and radio (75%). As far as the correctness of the information was concerned, books/booklets were at the top with 100% positive responses followed by magazines (95%), pamphlets (95%) and posters (90%). The present study was designed to see the role of mass media (radio, TV & print media) in the dissemination of agricultural technologies among farmers.

MATERIALS AND METHODS

The present study was conducted in Nishtar Town, Lahore. From 10 rural union councils of this town, six having five or more villages were taken randomly for the study. From each selected union council, one village was selected at random and from each village, 20 farmers were selected randomly. The data were collected with the help of an interview schedule and analyzed by using Statistical Package for Social Sciences (SPSS) software.

RESULTS AND DISCUSSION

The data given in Table I reveal that the important sources of agricultural information for the respondents were fellow farmers (97.5%), pesticide agencies (91.7%), TV (64.2%), extension field staff (51.7%), print media (44.2%) and radio (40.8%). The results regarding radio are contradictory to those of Hanif (1992) and Ali (1994), who found that radio was the major source of information in educating farmers regarding recommended agricultural practices. The possible reason for the difference may be time factor, the gap between these studies is more than ten years. Thus with the passage of time situation might have changed. The results regarding fellow farmers are in line

Table I. Distribution of the respondents based on their agricultural information sources

Agricultural information sources	No.	%
Radio	49	40.8
Television	77	64.2
Print media	53	44.2
Extension field staff	62	51.7
Fellow farmers	117	97.5
Pesticide agencies	110	91.7
Parents	13	10.8

Table II. Distribution of the respondents according to their preference given to mass media

Mass media	1 st		2 nd		3 rd		Total	
	No.	%	No.	%	No.	%	No.	%
Radio	17	14.2	30	25.0	02	1.7	49	40.8
Television	65	54.1	10	8.3	02	1.7	77	64.2
Print media	11	9.1	22	18.3	20	16.7	53	44.2

with those of Ali (1993), Akhtar (1997) and Shuaib (2000), who found that fellow farmers were the main source of agricultural information.

The data given in Table II reflect that 14.2 and 25.0% of the respondents gave 1st and 2nd preference respectively to radio as source of agricultural information respectively. A simple majority (54.1%) of the respondents gave 1st preference to television as source of agricultural information, whereas only 8.3% gave 2nd preference to television. Only a negligible number (1.7%) gave 3rd preference to radio and television. The data also reflect that 18.3 and 16.7% of the respondents gave 2nd and 3rd preference to print media, respectively. Only 9.1% gave 1st preference to print media.

It is clear from Table III that a majority (59.2%) of the respondents did not listen agricultural radio broadcasts, quite a good number of respondents (37.5%) listened radio rarely. Only a fraction of the respondents (3.3%) appeared to be occasional listeners of agricultural radio broadcasts. No one was the regular listener. It may imply that a vast majority of the respondents got very less information through radio.

Table IV shows that most (47.5%) of the respondents watched TV rarely, quite a few respondents (15.8%) watched TV occasionally. Only a fraction of the respondents (0.9%) appeared to be regular viewers of agricultural telecasts. More than one-third respondents never watched TV for obtaining agricultural information. It may imply that a large majority of the respondents was getting very less information through TV. These results are closely related with those of Bukhari (2000), Butt (2002) and Muhammad *et al.* (2002, 2004). The respondents were further asked to rate various mass media on the basis of their effectiveness. Based on the data, the relative ranking of the mass media has been done as given in Table V.

It is evident from the data given in Table V that despite the fact that a large majority of the respondents was getting very less information through TV, it was ranked 1st with regard to its effectiveness in the dissemination of agricultural technologies with score value of 372 followed

Table III. Frequency of listening agricultural radio broadcasts by the respondents

Frequency	No.	%
Regularly	-	-
Occasionally	04	3.3
Rarely	45	37.5
Never	71	59.2
Total	120	100.0

Table IV. Frequency of watching agricultural TV broadcasts by the respondents

Frequency	No.	%
Regularly	01	0.9
Occasionally	19	15.8
Rarely	57	47.5
Never	43	35.8
Total	120	100.0

Table V. Ranking of mass media on the basis of their effectiveness

Mass media	Rankorder	Score	Mean	
Television	1	372	4.83	
Radio	2	208	4.24	
Newspapers	3	206	3.96	
Posters	4	197	3.94	
Charts	5	188	3.92	
Books/Booklets	6	150	3.75	
Bulletins	7	16	3.20	
Ziraat Nama	1	125	4.03	
Magazines	Zari Digest	2	09	4.50
	Jadeed Ziraat	3	05	2.50
	Nida-i-Kisan	4	-	-

by radio with score value of 208. Newspapers, posters, charts, books/booklets and bulletins were ranked 3rd, 4th, 5th, 6th and 7th on the basis of effectiveness, respectively. Within magazines, the respondents ranked Ziraat Nama as 1st followed by Zari Digest and Jadeed Ziraat.

CONCLUSIONS

All the respondents regarded fellow farmers and pesticide agencies as their major sources of agricultural information followed by TV (64.2%) and extension field staff (51.7%). Among the mass media, the respondents ranked TV, radio and print media 1st, 2nd and 3rd, respectively with regard to effectiveness. A vast majority of the respondents did not listen/watch agricultural radio/TV broadcasts regularly or occasionally. Either they never listened/watched agricultural radio/TV broadcasts or they did so rarely. It may imply that a large majority of the respondents was getting very less information through radio and TV.

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