ROLE OF TELEVISION IN AGRICULTURAL TECHNOLOGY TRANSFER

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Nothing seems more important in agricultural development than the dissemination of latest agricultural technologies among the farmers. Agricultural extension organizations are entrusted with this primary task for which they use a variety of extension teaching methods/media. Television is one of the media being used for this purpose both by public and private sectors. The present paper aims to assess the role of television in agricultural technology transfer. The data show that majority of the respondents was unaware of the regular agricultural telecasts. Only 5.60% respondents were found to be regular viewers and they preferred watching agricultural telecasts over other assignments. Feedback link between farmers and TV authorities appeared to be totally missing. Majority of the respondents watched agricultural telecasts rarely, a reason able number was occasional viewers, and only a fraction of the respondents was regular viewers. A vast majority got only up to 25% agricultural information through agricultural telecasts, 12.8% got 25-50% information while those who got more than 50% information were negligible in number.

Key words: Agricultural technology transfer, television.

INTRODUCTION

Agriculture occupies a conspicuous place in the economy of Pakistan by contributing about 24% to GDP, employing 48.4% of the country's work force, and earning substantially through its exports (Govt. of Pak., 2002). However, the average yield of various crops obtained in the country is much less than that obtained in many other countries of the world (FAO, 2000). Even within the country, there is a big gap between the potential and average yield of different crops, which implies that the available technologies, if properly communicated to and adopted by the farmers, have the potential to enhance agriculture production manifold. This puts a great responsibility on the extension agencies/organizations to communicate the latest agricultural technologies among the ultimate communication Effective of improved technologies is one of the most important factors of agricultural development (Manandhar, 1990).

Agricultural extension organizations are entrusted with the primary task of educating farmers and disseminating latest agricultural technologies among them for which they use a wide variety of extension teaching methods including individual, group, and mass contacts. Both individual and group contact methods have limited scope in the scenario of vast and scattered areas to be covered and rapid advances in science and technology. It seems difficult for extension to reach the farmers effectively and efficiently through direct personal contacts. In the circumstances, mass media have the potential to provide greater extension coverage to farming community effectively and efficiently. The National Agricultural Policy Report while discussing serious doubts about T&V system, recommended extensive use of mass media instead of

making extension services more intensive in terms of personnel (Govt. of Pak., 1991). In this context Hussain (1993) argued that two-thirds of the farmers in Pakistan meet their information needs through mass media. Khan and Pracha (1994) concluded that main channels of communication in Pakistan were mass media and interpersonal ones. According to them mass media were certainly organized and made use of radio, television, and newspapers. Similarly Muhammad and Garforth (1999) concluded that by and large, mass media proved to be relatively popular among the farming community.

Television seems to be an effective medium among the mass media, which can be used effectively for agricultural technology transfer among the farming community. It has been acclaimed to b one of the most important communication tools available today. Much of its success in teaching lies in the unique combination of sight, sound, and motion. This coupling of audio and visual stimuli has proven that it can change human behaviour (Carpenter, 1983) and ultimately improves farmer learning. It has the potential of providing information very easily to large audience dispersed over wide geographical areas, which is impossible through personal contacts. Calvert (1990) argued that certainly video technology plays an increasingly important role in the economical delivery of information. However, video is not the best tool for every situation. Video production is expensive and time consuming. It should only be used when the message truly visual and action oriented. There are contradictory views about TV as an information source. For example Hanif (1992) reported that TV served as a source of information for only 17% respondents. While Igbal (1993) reported that 54.67% of the responded got information through TV Mohsin (1997) found that TV

served as source of information for only 4.7% respondents. Mirani et al. (2002) rated TV below average as an information source for the farmers. Mazher et al (2003) found that 56.70% farmers watched agricultural programme on TV. Among the viewers, 11.10% watched agricultural telecasts frequently, 48.50% occasionally, and 40.40% rarely. Thus, there exists a dire need to undertake a comprehensive study to critically analyze its effectiveness as a teaching tool used for the education of the farming community. The present study was undertaken to achieve this main objective.

MATERIAL AND METHODS

The study was confined to Faisalabad tehsil only, which consists of 161 union councils, of which 113 fall in urban areas and the remaining 48 fall in the rural areas. Since the study related to agriculture, the union councils falling in the rural areas were selected as universe for the study. Out of 48 union councils, 5 were selected at random. From each selected union council, one village was selected randomly and from each selected village, 25 farmers (having their own TV sets) were selected at random, thereby making a sample of 125 respondents. The data were collected with the help of an interview schedule which were then tabulated, analyzed, interpreted and discussed to draw conclusions.

RESULTS AND DISCUSSION

Awareness of respondent about agricultural telecasts

Awareness of respondents about various agricultural telecasts reflects the popularity of the telecasts among the farmers. The data showed that majority (52.80%) of

Relatively less number (30.40 and 37.60%) of the respondents knew the exact timings of these telecasts. **Preference given to agricultural telecasts**

The preference given to agricultural telecasts by the farmers is another indicator of the interest taken by them in the telecasts and also shows the effectiveness of the telecasts. The respondents were asked whether or not they preferred agricultural telecasts over their other assignments. The data show that only 5.60% respondents were found committed and preferred agricultural telecasts over their other assignments whereas a vast majority (94.40%) preferred other tasks to do instead of watching agricultural telecasts.

Feedback to TV authorities

Feedback from farmers to the TV authorities also shows interest of the viewers in agricultural telecasts and establishes a two-way-link. The respondents were asked whether or not they had any feedback link with TV authorities regarding the improvement of agricultural telecasts. The data show that none of the respondents ever wrote a letter to TV authorities in this connection.

Frequency of watching agricultural telecasts

Frequency of watching agricultural telecasts by farmers reflects the popularity and effectiveness of the telecasts. The data in this regard are presented in Table 2, which indicate that only a fraction of the respondents (3.20%) was the regular viewers of agricultural telecasts. Majority (60.80%) of the respondents watched agricultural telecasts rarely A reasonable number (36.20%) were occasional viewers. It may imply that majority of the respondents got very less agricultural information through TV.

Table 1. Awareness of respondents about various aspects relating to agricultural telecast

S.No.	Aspects	Haryali Aware				Kisan Time Unaware			
		1.	Title	44	35.20	81	64.80	32	41.60
2.	Timings	38	30.40	87	69.60	47	37.60	78	62.40

the respondents was totally unaware of regular agricultural telecasts. However, 47.20% respondents were aware of various agricultural telecasts. The respondents who were aware of agricultural telecasts were further asked about the titles and timings of agricultural telecasts. The data in this regard are presented in Table 1, which reveal that about 35 and 42% respondents knew the titles of agricultural telecasts i.e. 'Haryali' and 'Kisan Time' respectively.

Table 2. Frequency of watching agricultural telecasts

S. No.	Frequency (days/month)	No.	%
1.	Regularly (20 and above)	04	03.20
2.	Occasionally (10-20)	45	36.00
3.	Rarely (up to 10)	76	60.80
	Total	125	100.00

Extent of agricultural information obtained through TV

The extent of information obtained through agricultural telecasts may be considered as an indicator of effectiveness of television as an information source for the farmers. The data in this regard Table 3, show that a vast majority (84.80%) of the respondents got only up to 25% agricultural information through TV. Quite a few respondents (12.80%) got 25-50% information through agricultural telecasts. The respondents who got more than 50% agricultural information through TV were negligible in number.

Table 3. Extent of agricultural information obtained through TV

S.No.	Extent of information	No.	%
1	Very low (up to 25%)	106	84.80
2	Low (25-50%)	16	2.80
3	Medium (50-75%)	02	01.60
4	High (Above 75%)	01	00.80
	Total	125	100.00

Nature of information obtained through TV

Agricultural telecasts provide information of diversified nature, which may be of great value to different farmers with varying interests. The data about the specific information obtained by the respondents are given in Table 4, which highlight that most of the respondents (48.80%) got information about sowing methods of different crops. Relatively less number of respondents (42.40%) obtained information about fertilizers/manures. Third important area appeared to be plant protection (35.20%). Only a few respondents (6.40%) reported that agricultural telecasts covered crop varieties. Livestock was reported by none. The contribution of TV with regard to information dissemination regarding farm machinery was almost nil

Table 4. Nature of information obtained through TV

S.No.	Nature of information	No.	%
1.	Crop varieties	08	06.40
2.	Sowing time	61	48.80
3.	Fertilizers/manures	53	42.40
4.	Plant protection	44	35.20
5.	Farm machinery	01	00.80
6.	Livestock	00	00.00

Sharing of TV sets and holding discussion with others

The respondents were further asked whether or not they shared their TV sets with other farmers for watching agricultural telecasts and hold discussion with each other. The data show that only 5.60% respondents were found to be sharing their TV sets with their fellow farmers and were also having discussions with each other on agricultural matters. It showed that there was a tendency to watch agricultural telecasts individually rather in a group setting.

CONCLUSIONS

Majority (52.80%) of the respondents was unaware of regular agricultural telecasts. Among the aware respondents, about 35 and 42% knew 'Harvali' and 'Kisan Time' respectively. Only 5.60% respondents were found to be committed viewers and they preferred watching agricultural telecasts over other assignments while a vast majority (94.40%) gave preference to other assignments. Feedback link between farmers and TV authorities appeared to be totally missing, none of the respondents was found to be in contact with TV authorities in this connection. Majority (60.80%) of the respondents watched agricultural telecasts rarely, quite a few responds were occasional viewers. Only a fraction of respondents (3.20%) appeared to be regular viewers A vast majority (84.80%) of the responds got only up to 25% agricultural information through agricultural telecasts, 12.80% got 25-50% information while those who got more than 50% information were negligible in number. Most of the respondents (48.80%) got information about sowing methods of different crops through TV. Relatively less number (42.40%)obtained information about fertilizers/manures. Third important area appeared to be plant protection. Only a few respondents (6.40%) reported crop varieties. Livestock was reported by none. The contribution of TV towards the dissemination of information about farm machinery was almost nil. There was a tendency of watching agricultural telecasts individually rather in a group setting.

REFERENCES

Calvert, P. 1990. The Communicators Handbook: Techniques and Technology. Maupin House, Gainesville, FL, USA.

Carpenter, W. L. 1983. Communication Handbook. The Interstate Printers and Publishers, Inc., Danville, Illinois.

FAO, 2000. Production Year Book, Vol. 54, FAO, Rome, Italy.

Govt. of Pak. 1991. Draft National Agricultural Policy. Ministry of Food, Agriculture, and Cooperatives, Islamabad.

Govt. of Pak. 2002. Economic Survey of Pakistan. Finance Division, Economic Advisor's Wing, Islamabad.

- Hanif, S. 1992. Comparative effectiveness of various sources of information for cane growers in Crescent Sugar Mills zone area. M. Sc. (Hons.) Agri. Ext. Thesis, Univ. of Agri., Faisalabad.
- Hussain, M. 1993. Mass Media. In: Memon, R.A. and E. Bashir (eds.) Extension Methods. National Book Foundation, Islamabad, pp.209-262.
- Iqbal, S. 1993. A study of the role of sources of information and adoption of agricultural innovations in a union council of district Faisalabad. M.Sc.(Hons.) Agri. Ext. Thesis, Univ. of Agri., Faisalabad.
- Khan, M.A. and S.A. Paracha, 1994. Interpersonal communication network in diffusion of innovations at innovative and non-innovative villages. J. Rural Dev. and Admin. 26(2)79-88.
- Manandhar, M.K. 1990 Communication behaviour of extension workers. Paper presented in extension research workshop, Dec. 13-14, 1990, LAC, Pokhara, Nepal.

- Mazher, A., A.D. Sheikh, S. Muhammad, and M. Ashfaq, 2003. Role of electronic media in the adoption of agricultural technologies by farmers in the central Punjab, Pakistan. Int. J. Agri. & Bio. 5(1)22-25.
- Mirani, Z.U., G.W. Laske, and A.H. Labano, 2002. Farmers' adoption of recommended technology for rice in Larkana district of Sindh province of Pakistan, FAO. Mazher, A., A.D. Sheikh, S. Muhammad, and M. Ashfaq, 2003. Role of electronic media in the adoption of agricultural technologies by farmers in the central Punjab, Pakistan.
- Mohsin, M. 1997. Impact of mass media in diffusing agricultural technologies. M.Sc. Rural Sociology Thesis, Univ. of Agri., Faisalabad.
- Muhammd, S. and C. Garforth, 1999. Farmers' information sources and their relative effectiveness. Int. J. Agri. Biol., 1(4)222-226.