

## INFORMATION REGARDING AGRONOMIC PRACTICES AND PLANT PROTECTION MEASURES OBTAINED BY THE FARMERS THROUGH ELECTRONIC MEDIA

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### ABSTRACT

Agricultural sector is exposed to various hazards related to production and protection of crops. However, timely information can pave the way towards uplifting this important sector. In this context, role of electronic media is very critical for keeping the farming community updated by providing them relevant agricultural information. The research paper focuses on the agronomic and plant protection spheres of agricultural information covered by electronic media and effectiveness thereof. The study was conducted in district Faisalabad (mix cropping zone). The data were collected through an interview schedule from 330 randomly selected respondents. The findings of the study showed that as a whole, electronic media played comparatively better role in the context of agronomic practices as compared to plant protection measures.

**Key words:** Electronic media, agronomic practices, plant protection measures.

### INTRODUCTION

Transfer of agricultural technologies contributes towards uplifting the agricultural productivity and ultimately economy of the country (Javed *et al.*, 2010). The development in agricultural technologies by research has given a paradigm shift to communication in agricultural extension for raising farmers' knowledge (Omokore and Modo, 1998). Agricultural technology transfer in the context of greater coverage with the economical use of time and money appeared as a challenge in a developing country like Pakistan (Muhammad, 2005).

Bridging the gap between research and farming community remained a task of extension (Qamar, 2005) but depicting a weaker side in this perspective (Ashraf *et al.*, 2007). Awareness regarding latest agricultural technologies facilitates the adoption of an innovation (Evenson, 1997). Lack of awareness can hinder the adoption of latest technologies (Siddiqui, 2006). This predicament can be removed through effective use of media (Jones and Garforth, 1997; Qamar, 2005).

Quick and timely availability of information can be valuable to its ultimate users (Morrow *et al.*, 2004) whereas delayed information may be of a little use to them and cannot give the desired results. Media role in this regard is conspicuous (Ray, 2003). Electronic media can play a vital role in providing information about production as well as protection technologies regarding various crops. Their role seems indispensable at the time of emergency like pest/disease attack etc. (Muhammad, 2005). In various extension approaches used from time to time in Pakistan, more emphasis on personal contacts

affected the process of speedy information delivery to the farming community. For meeting the emerging challenges extension worker should use electronic media (Telg *et al.*, 2007).

The electronic media (like radio, TV, mobile phone etc.) can expedite the transfer of agricultural information to the farmers. Radio can be an effective tool for educating the rural community in agricultural context (DeYoung, 1992; Awolola, 1995; Raptan, 2001). Likewise, TV has its important role in disseminating information regarding various spheres of agriculture (Muhammad *et al.*, 2004; Bhattacharjee, 2005). Molgaard and Phillips (1991) underlined the importance of hotline information regarding various realms of drought crises. Murthy (2009) pointed out that mobile has opened new avenues for diversified agricultural information.

Farmers need agricultural information predominately regarding agronomic practices and plant protection measures. The data collection about these aspects looks important for understanding the use of various electronic media in these dimensions. So, the data were collected about the extent and perceived effectiveness of agricultural information about agronomic and plant protection acquired through various electronic media.

### MATERIALS AND METHODS

Survey research can smoothen the way for comprehension of the true depiction of the situation (Denscombe, 2003). Considering the importance of survey research, it was used for obtaining the data concerning the farmers' perceptions regarding the extent

and effectiveness of agricultural information obtained by farmers through electronic media with agronomic and plant protection perspectives. For this purpose, Faisalabad district (lies in mix cropping zone) was selected purposively which is one of the important districts of the Punjab, Pakistan in agricultural context. In the present study multistage random sampling technique was used for selecting 330 respondents (Fitzgibbon and Morris, 1987). An interview schedule was developed for the farmers respondents. For developing interview schedule, experts related to agriculture and electronic media were consulted in person and in addition, related researches (Muhammad *et al.*, 2008 and Irfan, 2005) were also under consideration. Taking into account, the appropriateness of scale for assessing the farmers' perceptions, a five point Likert scale was used i.e. 1= Very Low, 2= Low, 3= Medium, 4= High, 5=Very High. The data were analyzed through Statistical Package for Social Sciences (SPSS). Weighted scores were computed by multiplying the score value allotted to each category of the scale with the frequency count and summing up the score values to compute the overall score.

## RESULTS AND DISCUSSION

**Extent of agricultural information received through electronic media:** The use of latest information sources looks essential to cope with various global challenges with the perspective of agri. productivity (Chaudhry *et al.*, 2008). The impact of judicious use of media is very much crucial for creating awareness and uplifting the adoption level (Butt *et al.*, 2008). Farmers may get information from various electronic media to a varied extent depending upon the needs or the suitability of a particular medium for specific information. It seems rationale to find out the farmers' perceptions regarding the extent of getting information pertaining to agronomic and plant protection spheres through various electronic media under study. The data in this regard are reflected in Table 1.

**Table 1: Extent of getting information regarding agronomic practices and plant protection measures through electronic media**

Electronic media	Agronomic practices		Plant protection measures	
	Score	Rank	Score	Rank
Radio	76	3	54	3
TV	167	1	95	1
Mobile phone	78	2	61	2
Telephone	29	4	31	4
Agricultural help line	6	5	4	5
<b>Total</b>	<b>356</b>		<b>245</b>	

The data given in Table 1 reveal that in total perspective, the cumulative score (356) for agronomic practices was higher than that of plant protection measures (245). TV followed by mobile phone appeared to be the prominent electronic media in disseminating the information related to agronomic and plant protection. Radio attained the 3<sup>rd</sup> position in both cases. However, telephone and agricultural help line appeared to be the weaker electronic media in this regard. These results are in line with those of Muhammad *et al.* (2004) who found that TV provided agricultural information regarding various areas of agronomic practices and plant protection measures. Agwu *et al.* 2008 revealed that agricultural radio programme contributed for adoption of agronomic and plant protection practices. However, the level of adoption was low. Likewise, Okwu *et al.* (2007) manifested that majority of the respondents obtained agricultural information encompassing various agronomic areas and plant protection aspects of crops.

**Effectiveness of agricultural information obtained through electronic media:** The efficacy of electronic media is the reflection of extent of getting information by the farmers as well as their perceptions about effectiveness of the information. So, the data regarding the effectiveness with respect to the said spheres of agricultural information were gathered, which are presented in Table 2.

**Table 2: Respondents' perceived effectiveness of information regarding agronomic practices and plant protection measures delivered through electronic media**

Electronic media	Agronomic practices		Plant protection measures	
	Score	Rank	Score	Rank
Radio	75	3	55	3
TV	162	1	92	2
Mobile phone	129	2	96	1
Telephone	44	4	43	4
Agricultural help line	8	5	6	5
<b>Total</b>	<b>418</b>		<b>292</b>	

The data recorded in Table 2 reflect that the respondents' perceived effectiveness depicted more or less similar picture as in case of extent of obtaining information (Table 1). However, TV was at the top in case of effectiveness regarding agricultural information about agronomic practices. While mobile phone was leading in case of plant protection measures having a little difference of score with TV.

The results are similar to those of Irfan *et al.* (2006) who found that TV was more effective than radio in the dissemination of agricultural information. Khan

and Shabbir (2000) also disclosed the effectiveness of a radio programme in the context of agronomic practices and plant protection measures.

Nosheen *et al.* (2010) pointed out that TV appeared more prominent information source as compared to radio. They also emphasized that TV being a popular medium should be under consideration for educating rural community about various aspects of their livelihoods. However, Butt *et al.* (2008) revealed that the use of radio was more common as compared to TV. Whereas, Khan *et al.* (2010) found that the use of TV was ranked 1<sup>st</sup> for getting agricultural information followed by mobile phone and radio. Likewise, Muhammad *et al.* (2012) found that TV was relatively more effective than radio in the context of agricultural information regarding agronomic practices and plant protection measures. Moreover, Chaudhry *et al.* (2008) disclosed that among various sources of agri. information sources TV acquired 4<sup>th</sup> while radio was at 5<sup>th</sup> position.

**Conclusions:** As a whole, the extent and effectiveness of agricultural information disseminated through electronic media regarding agronomic practices was comparatively more than that of plant protection measures. Moreover, TV and mobile phone were comparatively prominent electronic media in providing information about agronomic practices and plant protection measures.

**Recommendations;** Since both agronomic practices as well as plant protection are important, so the later one should also be given equal consideration. There should also be concerted efforts to use the electronic media more effectively.

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