Pak. J. Agri. Sci., Vol. 54(3), 711-715; 2017
ISSN (Print) 0552-9034, ISSN (Online) 2076-0906
DOI: DOI: 10.21162/PAKJAS/17.5751
http://www.pakjas.com.pk

ROLE OF MASS MEDIA IN PROMOTING AGRICULTURAL INFORMATION AMONG FARMERS OF DISTRICT NANKANA

Umbreen Javaid*

Department of Political Science, Centre for South Asian Studies, University of the Punjab, Lahore, Pakistan
***Corresponding author's e-mail: umbreenj62@gmail.com**

The role of media in agricultural sector in Pakistan is considerably high and in case of Punjab its role becomes manifold. In such a backdrop, this study was carried out to explore the relevance and effectiveness of media (TV and Radio) for farmers in providing agricultural information. The effectiveness of media was assessed by investigating the access to and availability of the sources used, frequency, preferred medium (language) of the source and the coverage of factors affecting agricultural productivity by the source. For this purpose, District Nankana Sahib of Punjab was selected. Multistage sampling technique was employed to select two tehsils (Shahkot and Sangla Hill) of Nankana Sahib randomly. Further, five villages from these two tehsils were selected conveniently and 90 farmers were approached employing convenient sampling technique. The findings imply that TV and Radio subscribers are considerably high but the usage of media for agriculture information is not as effective as it should be. The study revealed that most of the participants had access to TV and radio but preferred brochures, pamphlets, newspapers, agents of pesticide companies and fellow farmers for acquiring relevant information. Most of the agricultural information delivered through TV and radio was in Urdu while the participants showed their preference for Punjabi or local language as a medium of such information. As for coverage of factors affecting agricultural productivity, weather forecast, plant protection measures, livestock and sowing methods were given extensive coverage while machinery and crop variety were slightly covered.
Keywords: Mass media, agri. information, sampling technique, extension agents, effective communication.

INTRODUCTION

Media has evolved as an effective form of communication in the contemporary world which has widely acknowledged catalytic impacts on the process of development. Agriculture constitutes a major chunk of Pakistan's economy accounting for 20.9% of its total GDP and 43.5% of employment (Pakistan Economic Survey 2014-2015). Unfortunately, this major sector has been severely neglected by the successive regimes in power resulting in low productivity and failure to achieve required growth rate (Bukhari, 2016). The stagnation of agricultural sector is attributed to inadequate investments in research and development along with lack of agricultural education and extension system (USAID, 2009). Thus, to reinvigorate agricultural sector government needs to formulate a holistic policy focusing mainly on capacity building of farmers by improving access to inputs and enhancing their skills through training, extension services, and effective e-communication of agricultural knowledge to increase productivity an efficient strategy is to ensure awareness about disease free seed of high yielding variety, better agronomic practices, effective plant protection measures (Muhammad *et al*., 2002), innovative market systems and timely dissemination of relevant information**.** In this regard, conventional methods like extension services through extension agents are being replaced by usage of mass media (Riesenberg and Gor, 1989) which have surpassed other media in terms of efficacy (Mohammad and Garforth, 1999). Although the efficacy of mass media in agricultural information is widely acknowledged but its relevance is also questioned on account of the missing "hands-on component" i.e. practical operation and application of technology (Rola *et al.,* 2002) which requires practical demonstration (Reid, 2001). But this can be compensated by strengthening and activating comprehensive extension services through local extension agents (Leary and Berge, 2006).

Pakistan, after the liberalization of media in 2002 especially the TV sector, currently enjoys a vibrant media landscape (International Media Support, 2009) with TV accounting for three-fourth of adults (76.2%) viewership of which 69.3% belongs to rural Pakistan (Gallup, 2014). As for radio, Radio Pakistan and FM 101 alone covers 80% of Pakistan's territory reaching 95.5 million listeners while 115 FM radio channels are functioning alongside (UNESCO, 2015) but figures on radio ownership are not confirmed as with the boom in mobile phone technology "actual access to radio is likely far higher" (Yusuf, 2013).

Various studies have been done on the role of media in disseminating agricultural information in Pakistan. Shahid *et al*. (2007) in their research aimed at investigating role of print media in spreading relevant information found TV the

second most effective source used by farmers of Tando Allahyar of Hyderabad district. Similar results regarding effectiveness of TV and radio in disseminating agricultural information were reported by Lodhi and Khan (2012) while investigating the phenomena in three districts of Punjab namely Faisalabad, Sheikhupura and Rahimyarkhan. Role of media was also found to be more useful in promoting better agronomic and plant protection spheres by Khan *et al*. (2013) in district Faisalabad. Chhachhar *et al*. (2012) in their study on the phenomena in the province of Sindh found wide usage of TV among farmers which can be made useful source of disseminating important agricultural information. Similarly, Memon *et al*. (2014) investigated the role of Mass Media in Jaffarabad District of Baluchistan and found it an effective tool used by the farmer community in solving agricultural problems.

However, the importance and effectiveness of role of media in disseminating agri-information is contested by various scholars on the grounds that mass media (TV and radio) lack interactive features needed for effective communication and lacks the hands-on component required for better understanding of machines. Kakade (2013) in his study found that farmers preferred the demonstration method and discussion format as effective source of acquiring agricultural information. Khatam *et al.* (2013) also found use of media other than TV and Radio by the farmers for agricultural information.

Khan *et al.* (2010) in a study conducted in Faisalabad district of Punjab, found that the use of electronic media as agri. information sources was not substantial. In this context, the effectiveness of TV and Radio in district Nankana of Punjab province is studied to know the role of these media as sources of agri-information. The objectives of the study were to know the access and availability of agricultural information source, infer the frequency of the source used for agriculture information, know the language of used source and preferred language by farmers and find out the extent of coverage given to factors effecting agriculture productivity.

MATERIALS AND METHODS

Population: The population of current study comprised of those farmers who were directly involved in agriculture activities living in District Nankana Sahib. Due to dominance of male farmers in taking decisions related to agricultural activities, it was decided to include only male farmers in population of the study.

***Sample*:** Multistage sampling technique was employed to select participants of the study. At first stage, two tehsils (Shahkot and Sangla Hill) of Nankana Sahib were selected through random sampling. The three tehsils were allotted a serial number and two were selected by using random sample table. Furthermore, Chak No. 18, Chak No. 25, Chak No. 80, Chak No. 81, Chak No. 82 were selected conveniently by keeping in mind the accessibility and convenience of researcher to collect data. At final stage, 90 farmers from these five villages of two tehsils were approached using convenient sampling technique. Those farmers were selected by criteria of their direct involvement in agriculture activities.

***Instrumentation*:** The data were collected by using interview schedule which was developed by the help of relevant literature. To ensure reliability and validity of the instrument, it was presented to panel of experts which was comprised of one lecturer and one assistant professor from Department of Agriculture, University of the Punjab. Furthermore, a pilot study was conducted on 8 farmers of District Sheikhupura who were directly involved in agriculture activities. There were some ambiguous terms found through pilot study and modifications were recommended by the panel of experts. These modifications were incorporated in interview schedule. The data were collected by using Urdu and Punjabi languages.

***Data analysis*:** The data were analyzed employing descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS). The percentage and frequency of categories were presented in tabular form.

RESULTS AND DISCUSSION

The demographic information reveals that all the respondents were male, most (62%) of them had primary education and likewise most of the respondents (67%) had medium size farm lands with income level up to 1 lac. The lack of higher educational qualification is a striking feature among the respondents. We categorized small farms of 5 acre as “small”, of up to 10 acres as “medium”, and of more than 10 acres as “large” farm areas.

Most of the respondents (80%) had access (ownership or outsourcing) to both T.V and radio but when asked about their preferred source of information most (76%) considered pamphlets, newspaper, brochures and posters as more effective and frequently used sources. In this respect, the respondents were probed about their preference of ‘other media’ over TV and Radio. It was revealed that the preferred sources of agriculture information were distributed at their doorsteps by the agent of pesticide companies and who could be easily approached. These findings are in consonance with the study of Khatam *et al*. (2013) in which they found that seed/fertilizer, dealers are the most effective source of agricultural information.

Most of the respondents (47%) watch T.V while (52.22%) listen to radio in the evening while a considerable number of respondents (23%) watch TV and 25 % respondents listen to radio at night owing to the fact that most of the farmers spend their day in the fields.

Table 1. Demographical information of farmers including their marital status, educational level, land ownership, farm size and their income level

Demographical Variables	Frequency	Percent
Marital status		
Married	67	74.44
Unmarried	23	25.56
Educational Level		
Primary	56	62.22
Middle	27	30.0
Matric & Above	07	7.78
Ownership		
Personal Land	43	47.78
Tenant	21	23.33
Family Land	17	18.89
Community Land	09	10.0
Farm Size		
Small	19	21.11
Medium	61	67.79
Large	10	11.11
Income Level		
Up to 50 Thousand	09	10.00
Up to 1 Lac	57	63.33
More than 1 Lac	24	26.67

Table 2. Access and preference regarding mass media sources in getting agricultural information.

Statement	TV Freq. (%)	Radio Freq. (%)	TV & Radio Freq. (%)	Other Media Freq. (%)
Do you have access to media	6 (6.67%)	9 (10.0%)	72 (80.0%)	3 (3.33%)
What is your preferred source of agriculture information	5 (5.5%)	3 (3.33%)	13 (14.44%)	69 (76.66%)

One of the interesting findings of the study is that most of the agri-information is disseminated through media in Urdu language while preferred language of the farmers turned out to be Punjabi (53% respondents preferring Punjabi) followed by 19% respondents favoring regional or local language as medium for agricultural information.

Most of the respondents were barely aware of the agricultural programs but a considerable number of respondents (56%) showed their familiarity with PTV National followed by 16% who named Sohni Dharti but also reported that the channel is not covered by the local

Table 3. Preferred time to watch TV and listen Radio.

Statement	Morning (05am to 12 Noon) Freq. (%)	Afternoon (12 pm to 04 pm) Freq. (%)	Evening (04 pm to 08 pm) Freq. (%)	Night (08 pm to 12 am) Freq. (%)
At what time do you watch TV or listen Radio	12 (13.33%)	08 (08.89%)	47 (52.22%)	23 (25.56%)

Table 4. Time-spent to watch TV and listen Radio.

Statement	Less than 1 Hour Freq. (%)	(1-2 Hour) Freq. (%)	(2-3 Hour) Freq. (%)	(3-4 Hour) Freq. (%)	(4 & Above Hour) Freq. (%)
How much time do you spent watching TV or Listening Radio	47 (52.22%)	17 (18.89%)	08 (8.88%)	11 (12.22%)	07 (7.78%)

Table 5. Language of media for agriculture information.

Statement	Urdu Freq. (%)	Punjabi Freq. (%)	Regional / Local Freq. (%)	Other Freq. (%)
In what language agriculture information is disseminated to you through TV and Radio	63 (70%)	17 (18.88%)	07 (7.7%)	03 (3.33%)
What is your preferred language to understand agriculture information	16 (17.77%)	53 (58.88%)	19 (21.11%)	02 (2.22%)

Table 6. Preferred channel of TV or Radio.

Statement	Sohni Dharti Freq. (%)	PTV National Freq. (%)	Channel 5 Freq. (%)	Wasaib Freq. (%)	FM 95 Freq. (%)	Other Freq. (%)
What is your preferred channel of media for agriculture information	15 (16.66%)	51 (56.66%)	04 (4.44%)	05 (5.55%)	02 (2.22%)	13 (14.44%)

cable service.

The breakup of agri-information disseminated by the media (T.V & radio) appeared to be insufficient with Weather Forecast being the most efficient service mostly covered by the news bulletins.

Table 7. Factors affecting agriculture productivity covered by media.

Factors	Frequency	Percentage
Farm Management Practices	03	3.33
Machinery	06	6.66
Sowing Method	13	14.44
Crops Variety	05	5.55
Plant Protecting Measure	17	18.89
Livestock	15	16.66
Weather Forecast	31	34.44

***Are you aware of variety of crops*?** Most of the farmers said that they are well aware of variety of crops. However, they mentioned that they got information through their peers, friends, experienced persons, market representatives of pesticide companies.

***Conclusion*:** The study reveals that interactive communication is pivotal in determining the efficacy of Agricultural information. The interactive role provides the farmers with prompt answers to their queries pertaining to the given information. The targeted community in this case understands and speaks Punjabi while the agricultural programs broadcasted in this area are predominantly in Urdu with frequent usage of jargons and technical terms in English forcing the farmers to turn towards traditional sources of information mostly from the experiences of fellow farmers or peer-groups indicating a barrier of language**.** However, T.V and Radio are providing sufficient coverage to weather forecast and plant protection methods hence address major factors affecting agricultural productivity. Some other important agricultural factors like machinery and information about variety of crops are slightly covered.

It is thus important to frame a media policy targeted and designed exclusively to address and match the requirements of agri-based communities which will ultimately result in enhancing the agricultural sector of Pakistan, this can be ensured by keeping in view the local settings and language preferred by the farmers. The format of the agricultural programmes should be interactive and discussion oriented with "on the spot" programmes broadcasted ensuring participation by farmers.

REFERENCES

Bukhari, A. 2016. Improving profile of agriculture sector. Dawn, Business and Finance Weekly, March 28, 2016. Available online at https://www.dawn.com/news/1248337

Chhachhar, A.R., M.S. Hassan, S.Z. Omar and B. Soomro. 2012. The role of television in dissemination of agriculture information among farmers. J. Appl. Env. Biol. Sci. 2:586-591.

Farooq, S., S. Muhmmad, K.M. Chaudary and I. Ashraf. 2007. Role of print media in the dissemination of agricultural information among farmers. Pak. J. Agri. Sci. 44:378-380.

Gallup. 2014. Contemporary media use in Pakistan. Available online at https://www.bbg.gov/wp-content/media/2014/10/Pakistan-research-brief-FINAL.pdf

GoP. 2015. Pakistan Economic Survey 2014-2015. Economic Advisor's Wing Finance Division, Ministry of Finance, Islamabad, Pakistan.

International Media Support. 2009. Between radicalization and democratization in an unfolding conflict: Media in Pakistan. International Media Support, Islamabad, Pakistan.

Kakade, O. 2013. Present status and future preferences of electronic media as agricultural information sources by the farmers. IOSR J. of Hum. Soc. Sci. 12:18-22.

Khan, G.A., S. Muhammad, K.M. Chaudhary and M.A. Khan. 2013. Information regarding agronomic practices and plant protection measures obtained by the farmers through electronic media. J. Anim. Plant Sci. 23:647-650.

Khatam, A., S. Muhammad, B.N. Siddiqui, M.Z.Y. Hassan, I. Ashraf, M.Z. Khan and A. Kuharoo. 2013. Communication of agricultural information through group contact methods in Pakistan. Pak. J. Agric. Res. 26: 245-253.

Leary, J. and Z.L. Berge. 2006. Trends and challenges of eLearning in national and international agricultural development. Int. J. Edu. Dev. ICT 2:51-59.

Memon, I., K.N. Panhwar, R.A. Chandio, Bhutto, A.L. Bhutto and A.A. Khooharo. 2014. Role of mass media in dissemination of agriculture technology among the farmers of Jaffarabad district of Balochistan. J. Basic Appl. Sci. 10:525-531.

Mohammad, S. and C. Garforth. 1999. Farmer's information sources and their relative effectiveness. Int. J. Agric. Biol. 14:222-226.

Muhammad, S., I. Ashraf and B.N. Siddiqui. 2002. Effectiveness of different communication methods/media used by Novartis Pesticide Company in tehsil Arifwala. Int. J. Agric. Biol. 4:335-337.

Rola, A.C., S.B. Jamias and J.B. Quizon. 2002. Do farmer filed school graduates retain and share what they learn? An investigation in Iloilo, Philippines. J. Int. Agri. Ext. Edu. 9:65-76.

Reid, J.F. 2001. From lab to farm. Engg. Tech. Sust. World. 8:33-38.

Riesenberg, L. and C.O. Gor. 1989. Farmer's preferences for methods of receiving information on new or innovative farming practices. J. Agri. Edu. 30:7-13.

UNESCO. 2015. Situation Analysis of "Right to Information" in the Communication and Information Sector in Pakistan, Islamabad, Pakistan.

USAID. 2009. Pakistan's Food and Agriculture System, Rome, Italy.

Yusuf, H. 2013. Mapping digital media: Pakistan. A Report by the Open Society Foundations. Available online with updates at http://www.opensocietyfoundations.org/sites/default/files/mapping-digital-media-pakistan-20130902.pdf