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Impact of newspaper and radio in promoting agricultural information among farmers. A case study of Pakistan

Nawab Khan[1*], Badar Naseem Siddiqui[1], Nanak Khan[2], Naqeeb Ullah[3], Sohaib Ismail[4], Siyad Ali[5], Shafiq Hussain[5], Kumail Abbas[5], Hafiz Hassan Javed[6] and Zulfiqar Ahmad[7]

[1]Department of Agricultural Extension, PMAS-Arid Agriculture University, Rawalpindi, Pakistan
[2]Department of Agronomy, Balochistan Agriculture College, Quetta, Pakistan
[3]Directorate of Post-Harvest and Food Technology, Agriculture Research Institute (ARI), Sariab, Quetta
[4]Department of Plant Pathology, Rice Research Institute, Sichuan Agricultural University, Chengdu, China
[5]Institute of Pomology and Olericulture, Sichuan Agricultural University, Chengdu 611130, Sichuan, China
[6]College of Agronomy, Sichuan Agricultural University, Chengdu 611130, China
[7]College of Veterinary Medicine, Sichuan Agricultural University, Chengdu, China
*Corresponding author: *nawabk5554@gmail.com*

Abstract

The media role in Pakistan's agricultural sector is high, and in Balochistan province, its role has become diverse. Against this background, this research was conducted to investigate the significance of the mass media (newspapers and radio) for delivering the better information about agriculture to farmers. The usefulness of the medium was measured through examining the accessibility, frequency, source's selected medium (language) of the source used and the coverage of factors influencing the agricultural productivity of the source. To this aim, the District Ziarat of Balochistan was chosen. Multi-stage sampling method was used to randomly choose (2) tehsils (namely Ziarat and Sinjawi) from Distract Ziarat. In addition, five villages were conveniently selected from these two tehsils and 90 growers were contacted using convenient sampling techniques. The survey results show that newspapers and radio broadcasters have a high number of subscribers, but the use of agricultural information media is less effective than expected. The study showed that most participants could use newspapers and radios, but preferred booklets, brochures, pesticide company agent's extension workers and grower companions to get appropriate information. Most of the effectiveness report regarding agricultural provided through newspapers and radio is in Urdu, and participants have stated that they prefer Pashto or local languages as a medium for such great information. With regard to the reporting of factors affecting the agriculture productivity, livestock, weather forecasts, planting techniques were widely covered, while technology and varieties of crop were covered.

Keywords: Extension worker, mass media, agricultural information.

Introduction

The mass media has developed into an effective communication method in the world today and has been widely recognized as a catalyst for the development process. Agriculture is an important sector of Pakistan economy, contributing for 18.5% o of gross domestic product (GDP) and 38.5% of labor force (Economic Survey of Pakistan, 2018-2019). Inappropriately, this main part is harshly ignored by successive power systems, resulting in low yield and inability to get the essential growth rates (Bukhari, 2016). The lack of progress in the agriculture is due to insufficient investment in research and poor extension and education systems (USAID, 2009; Aldosari, 2017). Therefore, in order to revitalize the agricultural sector, the government and non-government agencies requires to make a better strategy that concentrations on skills or knowledge of growers by increasing productivity through extension services, training, and effective electronic exchange of better information about agricultural, thereby gaining more inputs and increasing its skills to increase productivity. Assure consciousness of improved seeds of high-yielding species, improve agronomic methods and efficient measures of plant protection (Muhammad et al., 2002), advanced market system to disseminate appropriate information in a timely manner. In this regard, traditional methods, such as the provision of extension services through extension workers have been replaced via media (Riesenberg and Gor, 1989; Javaid, 2017) and have outperformed other new technologies in terms of effectiveness (Mohammad and Garforth, 1999; Javaid, 2017). While the effectiveness of new media in farming knowledge has been extensively recognized, it lacks a "hands-on part", that is, practical operations and technical applications (Rola et al., 2002; Javaid, 2017), and entails actual demonstrations (Reid, 2001), so its relevance is also suspected. However, this could be waged through strengthening and activating broad agricultural extension facilities by local agricultural extension workers (Leary and Berge, 2006).

After media liberalization in 2002, particularly the opening of the television sector, Pakistan currently has an active mass media landscape (IMS, 2009). Television accounts for three quarters (76.2%) of adult viewers, of which (69.3%) belongs to remote areas of Pakistan (Gallup, 2014). As for broadcasting, Pakistani Radio Station and FM 101 alone cover 80% of Pakistan ’s territory, with 95.5 million listeners, while 115 FM radio stations are running (UNESCO, 2015), but with mobile phone technology The number of broadcasts that have not yet been confirmed has “the possibility of actually using broadcasts may be higher” (Yusuf, 2013).

Different surveys have been conducted on the role of the mass media in spreading better knowledge regarding agricultural in Pakistan. Shahid et al. (2007) A study of the role of mass media in disseminating related information showed that television was the 2nd effective resource used *via* growers in Tando Allahyar District of Hyderabad stated by Lodhi and Khan (2012) also reported on the effectiveness of newspapers, TV and radio in broadcasting information about agriculture when investigating phenomena in the areas of Faisalabad, Sheikh Kupura and Rahemiah Khan in three regions of Punjab sexually similar results. Also found that the role of culture media is more advantageous in boosting better agronomy and plant protection in Faisalabad district.(Aker, 2011; Khan et al., 2013; Chhachhar et al., 2012).A phenomenon study in Sindh province found that newspaper and television is widely used by growers which can be a beneficial source for disseminating significant information about agricultural. Again, Memon et al. (2014) studied the mass media role of in district Jaffarabad of Balochistan Province and initiate that it is an effective device for growers' communities to resolve agricultural difficulties.

Furthermore, the importance and usefulness of the media's role in dissemination information about agricultural has been questioned *via* many investigators on the grounds that media (radio and newspapers) lack the cooperative functions essential for communication and a better understanding of the role of information. Required hands-on components machines Kakade (2013) found in his research that growers prefer demonstration approaches and conversation formats as an effective source of information about agriculture Khatam et al. (2013) also stated that growers use mass media other than radio and newspapers to obtain information and knowledge about agriculture production Khan et al. (2010).Information accomplished in the District Faisalabad of Punjab province got electronic media to be used for better information regarding agriculture There were not many sources of information. In this regard, the efficiency of newspapers and radio in the District Ziarat of Balochistan was analyzed to understand the position of these mass media as sources of knowledge about agriculture. The purpose of this research is to understand the availability and accessibility of agri-information sources to infer the frequency of bases used for best material about

agriculture to understand the source language and favored language used through growers and to know the coverage of influencing factors on agricultural yield.

Materials and Methods

Study area: The population of this research includes growers who were engaged in agricultural sector in Ziarat District of Balochistan. As male farmers dominated decision-making associated to agriculture and livestock activities, it was obvious to involve only male growers in the study area.

Sampling method and sampling size: Multi-stage sampling methods were used to select study participants. In the first phase, two tehsils (namely Ziarat and Sinjawi) in the Ziarat District of Balochistan, were chosen by random sampling technique. In the final phase, 90 growers from (5) villages of these (2) tehsils were contacted using appropriate sampling methods. These growers were chosen based on criteria for their direct participation in agricultural activities.

Instrument: For the collection of data used an interview questionnaire, which was made with the support of appropriate information. To certify the reliability and effectiveness of the instrument, the instrument has been submitted to a panel of experts consisting of one associate professor and one assistant professor at the Department of Agricultural Extension, PMAS-Arid Agricultural University Rawalpindi, Pakistan. In addition, a preliminary research was carried out on 15 farmers directly engaged in agricultural activities. Some confusing terminology was found through the pilot study and the expert team suggested that it be modified. These changes have been incorporated into the interview questionnaire. Information were together using Urdu and Pashtu languages.

Data analysis: Use descriptive and inferential statistics to analyze the data using the Statistical Package for the Social Sciences (SPSS). The percentages and frequencies of the types are displayed in a tabular shape.

Results and Discussion

Information regarding demographic shows that all the farmers were male majority of them (61.11%) have primary schooling, and similarly(66.66%) of the farmers have middle-sized cultivated land with levels of income not exceeding 1 lac. Moreover, the lack of higher education of farmers. We classified small farms (5 acre) as “small”, of up to (10 acres) as “medium”, and of up to 10 acres as “large” farm areas.

Furthermore majority (78.88%) of the respondents have access to (outsourced) newspapers and radio, but when questioned regarding their favorite source of agricultural update, most respondents (72.22%) consider brochures, booklets and posters to be More effective and commonly used sources of information. In this regard, interviewees were surveyed, which revealed that they prefer “other media” to newspapers and radio stations. According to reports, the preferred source of pesticide information is distributed by pesticide company agents at their doorsteps, and they can be simply found. Most similar outcomes reported by Khatam et al. (2013) whose stated that fertilizer and seed distributors are very efficient source information regarding agriculture, (47%)of the growers read newspapers at night, (52%) listen radio in the evening, (23%),(25%) watch television, video at night and most growers who spend a day in the field area.

Table 1. Socio-economics characteristics of the respondents comprising their marital status, level of education, ownership of land, size of farm and level of income

Demographic characteristics of the respondents	F	%
Level of education		
Primary	55	61.11
Middle	28	31.11
Matric and above	07	7.78
Marital status		
Married	67	74.44
Unmarried	23	25.56
Ownership of land		
Personal	44	48.88
Tenant	20	22.22
Family	17	18.89
Community	09	10.0
Size of farm		
Small	20	22.22
Medium	60	66.66
Large	10	11.11
Level of income		
Up to 50 thousand	10	11.11
Up to 1 lac	56	62.22
More than 1 lac	24	26.67

Table 2. Access and preferred about mass media sources in receiving knowledge about agriculture

Source of information	Newspaper		Radio		Newspaper & Radio		Other Media	
	F	%	F	%	F	%	F	%
What is your favorite source of agriculture information	6	6.67	9	10.0	71	78.88	4	4.44
Do you have access to mass media	9	10	3	3.33	13	14.44	65	72.22

Most stimulating results of the research is that the information about agriculture is dispersed via mass media in Urdu language whereas favored language of the growers turned out to be Pashtu (55.55% farmers preferring Pashtu), and (8.88%) of the farmers favoring local language as a best source for agri-information. Moreover, most of the farmers were aware of the farming programs while many of the growers (55.55%) demonstrated their knowledge with Jung newspaper followed by (17.77%) Mushriq newspaper. Furthermore, the breakup of information about agriculture disseminated through mass media (newspaper and radio) seemed to be inadequate with climate forecast being the very effective services mostly covered through the news update. Similar result was reported by Farooq (2004) showed that (95%) of the respondents received in their information about agriculture through newspaper, magazine and pamphlets. Also, most related result was reported by Khushk and Memon (2004) stated that (75%) of the respondents gaining agriculture information through radio.

Table 3. Best time to read Newspaper and listen Radio.

Timing	Morning 08 am to 12noon		Afternoon 12pm to 04pm		Evening 04pm to 8pm		Night 08pm to 12am	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
At what time do you read newspaper or listen radio	12	13.33	08	8.89	47	52.22	23	25.56

Table 4. Time-spent to read Newspaper and listen Radio.

Timing	Less than 1 hour		1-2 hour		2-3 hour		3-4 hour		4 & above hour	
	F	%	F	%	F	%	F	%	F	%
How much time do you spend to read newspaper or listening Radio	47	52.22	17	18.89	08	8.88	11	12.22	07	7.78

Table 5. Language of mass media for information about agriculture.

Language	Urdu		Pashtu		Local		Other	
	F	%	F	%	F	%	F	%
In what language information about agriculture is delivered to you via news paper and radio	63	70	17	18.88	08	8.88	03	3.33
What is your favorite language to get agriculture information	19	21.11	50	55.55	19	21.11	02	2.22

Table 6.FavoriteNewspaper or channel Radio.

Source of information	Jung newspaper	Mushriq newspaper	Channel 5	FM 99	FM 95	Other
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
What is your favorite news paper and radio channel for agricultural information	50 (55.55)	16 (17.77)	04 (4.44)	05 (5.55)	02 (2.22)	13(14.44)

Table 7. Factors affecting agriculture productivity covered via mass media.

Method/approach	F	%
Farm management	04	4.44
Crop variety	04	4.44
Sowing methods	13	14.44
Plant protection measure	17	18.89
Weather forecast	30	33.33
Livestock	16	17.17
Technology	06	6.66

Are you aware of crops variety? Majority of the growers stated that they are aware regarding variety of crops. Moreover, they revealed that they gained better knowledge from their colleagues, fellow farmers, expert people and market representative of pesticide agencies

Conclusion

Research shows that effective communication is essential to determine the validity of information regarding agriculture. Cooperative roles deliver growers with quick answers to their questions about a given piece of information. In this case, the target community can understand and speak Pashto, and the agricultural programs broadcast in the area are mainly in Urdu, and often use professional and English terms, forcing growers to switch to traditional information resources, mainly It is obtained from the experience of farmers. Represents the same group of language barriers. Moreover, newspapers and radio broadcasts provide adequate coverage for weather forecasting and plant protection methods, thus addressing the main factors influencing agricultural productivity. Other crucial agricultural factors such as technology and information regarding crop varieties are also slightly covered.

Therefore, it is important to develop media policies that specifically target and design to meet and meet the needs of agricultural communities, which will ultimately lead to the development of Pakistan 's agricultural sector, which can be ensured by farmers by considering the local environment and preferred language. The system of the agriculture project would be interactive, and conversion motivated by "on the spot" plans to ensure farmers' participation.

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