

Radio Listening Pattern Related to Agriculture among Farmers of Sindh Pakistan

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Abstract

Radio is one of the best mediums of transferring information among masses. It was showed radio is reliable source for agriculture information and knowledge among farmers in developing countries. This study investigated radio listening pattern among farmers of Sann, Sindh Pakistan. The target population of this study was farmers. The main objectives of this study were to assess the listening pattern of radio among farmers. The purposive sample method was applied for data collection where one hundred respondents were selected for this study. The findings of the study showed that more than half of the respondents listen agriculture program on Radio and 60% of the respondents revealed that different agriculture programs helped them to improve their farming skills. Most of the farmers believed that by listening radio, they obtain some new information, knowledge and techniques of proper use of seed, pesticides and urea through different Radio programs. The programs, to a large extent, had the desired impact on the listeners. Most of the farmers were satisfied with the Agriculture programs aired on radio.

Keywords: Radio agriculture listening pattern farmers

Introduction

Pakistan is an agriculture country. Agriculture plays a significant role in Pakistan's economic sector as 42.3 per cent employed as labor force and contributes 18.9 per cent to GDP. In 2017 the growth of agriculture was 3.81. Farmers who have not education does not contribute well. It was showed that those farmers are educated and can read newspapers and listen Radio and watch television are more aware about the agriculture and marketing information while the communication experts as well as agriculture extension workers also contribute their expertise in agriculture development (Mohy-ud-Din, 2011). According to Behrens (1984), Mass media stimulate farmers about new information and then farmers got to their peer, extension workers and friends to get more detailed information.

According to the Naveed et al, (2014) nowadays farmers need information not only about the agriculture but similarly finance, politics, infrastructure and community development in rural areas. Zhang and Yu (2009) farmers of the China required information about new agro- technology information as well as regarding the marketing price of their product. However, radio is still one of the best mediums of information among farmers in China where they get latest price information of their product in market. In developing countries due to lack of information and illiteracy most of

the farmers are facing more challenges to sale their production in market on time. In China farmers need a formal education about agriculture technology and Radio can play an important role to transfer information about agriculture production within a time.

Nwagha (1992) in the perspective of the Nigeria living standard of the women farmer is very low specially women farmers are required agro- technology information for farming and maintaining the land farm water supply, forestry machinery, farm buildings and land drainage. Most of the women get such information from their fellow farmers and friends where Radio also broadcast agriculture programs for information. Moreover, some channels are not enough to deliver information\ farmers also need printed material such as posters, newspapers and magazine as sources of information because mostly women and men farmers get such information occasionally. It was showed that women farmers have no proper access of information and mostly they depend on community leaders and the only Radio has one of the best sources of information of new technology and agriculture production in Delta State of Nigeria.

Monu and Omole, (1982) in Nigeria most of the farmers get information about the cocoa from Radio and the extension workers also help farmers to provide information them about agriculture production and use of seed in proper way. Furthermore, result showed that radio is one of the best medium of information among farmers. According to the farmers statement majority of the farmers believe that radio is very useful for keeping up to date about agriculture knowledge and information. While on other side the farmers who did not listen, radio was more advance and aware about agriculture marketing and weather information. In this regard the federal government and the world bank started work for the development of Cocoa. The survey research was conducted where study showed that 13.5% of the farmers never meet and discussed any issue and problem of agriculture with team while 40.6% of the respondents meet with extension officers once in a year. It was revealed that Radio has play an important role to transfer information in distance and far flung areas of Nigeria where the communication extension officials cannot reach. While the findings of the study showed that most of the farmers rely on Radio information and understand that Radio is good source of information for agriculture development and marketing information.

It was indicated that Radio is more effective medium as compare to other media channels however the timing of the agriculture programs are very limited where farmers wait for another week to listen more information about agriculture technology and methods of cultivation of different products in their area. Therefore, there is need more other channels such as television or stage programs and newspapers where farmers can achieve more information about agro-technology in there working places.

It was observed that most of the farmers believe in their fellow friends and farmers where extension officers also not success to deliver message about agriculture development and new technology innovation where only Radio is some extends information among small number of farmers about latest price of their production time by time (Swanson,2005).

In many developed nations farmers have no such problem of information about agriculture and farmers get latest information very fast and easily Lanjouw, & Lanjouw, (2001). Meanwhile in developed nations radio is one of the useful sources of dissemination of the information about agriculture, pesticides, use of fertilizer and water management Giordano et al (2012). According to Ferroni, & Zhou, (2012) World bank in its suggestions said that there need to create a Radio forum for villagers where the experts come and advise farmers about the proper use fertilizer, water and

pesticides. It was also suggested that some Radio programs must be recorded and given to farmers for improve their agriculture skills. The main purpose of the recorded program was to give farmers an opportunity to listen repeated program as many as they want and understand it properly. While in second phase farmers can discuss with experts their issue and problems about their agriculture harvest and production. However, it was also suggested that farmers can directly call on Radio and talk with experts for their solution of their agriculture issues. Finally, it was also suggested that extension officers should provide more trainings about latest technology.

Problem Statement

The studies were conducted in different countries of South Africa about Radio listening among farmers by Chataira, 2014; Okwu, et al 2007; Osunkunle, 2013; Msoffe & Ngulube, 2017. These studies say that the farmer listens to the radio found the messages relevant to their information needs. The study was also conducted in Punjab by Haider (Naveed et al, 2014,) according to these studies it was showed that the role of mass media specially Radio was not very good source of information among farmers. The study findings showed that most of the poultry and sugarcane farmers preferred Radio as well as interpersonal, informal sources to formal sources of information. The findings of the study showed that farmers prefer to listening Radio and community leaders as compare to reading newspapers, posters and magazine materials. As a result, they preferred to use information sources that were verbal, local, informal and easily accessible. All these researchers find that more farmers listen to the radio more they adopt new techniques in agriculture. They find out that radio is the best medium for disseminating agriculture-related information among farmer. Farmers use many sources for getting information regarding agricultural related information including radio, television, newspaper and magazines, mobile phones, face-to-face encounters, leaflets, libraries and the internet (Mtega, 2012). Nowadays techniques of agriculture have changed. Farmers need new information related to agriculture. So, I have chosen to research this topic to know how the farmers of the rural area of Sindh listen to the radio and know that the farmers are getting the latest information or not.

Literature Review

The cost of educating farmers through mass media is low as compared to extension workers but the on-time feedback cannot be generated through mass media. In mass media mechanisms TV, newspapers, research publications and Radio plays a vital role in disseminating agricultural information (Oakley and Garforth 1985).

Abbas et al., (2003), states that in central Punjab most of the farmers are exposed through Radio and Television. Radio is proved as a strapping tool for dissemination of agricultural information. Mostly the rural areas farmers population depend on the farming for their livelihood (Nakabugu, 2001). According to Msami 2000 nutrition the rural poor survive through various forms of subsistence farming, and the only livestock enterprise available to all farming households, even the poorest, is poultry production.

Agricultural research has a played major role in increasing productivity of the sector and yield through the development of scientific knowledge According to Kapange, (2008) Agricultural extension supports this efforts and strength by transferring information industrialized by the research institutions to the farmers. The information about the need of people must be provide to different communities to fulfill their needs. Specific information needs of a particular community

should be identified in order to meet their aspirations and needs Banmeke and Olowu (2005). Zaverdinos-Kockott 2004 states that in order to achieve relevance, the information needs of communities must be assessed and the correct stocks and services put in place. Television and Radio helps in the elongation of agriculture in the countries states that Both radio and television have been successfully used in agricultural extension in many countries.

Many studies found that farmers mostly get useful information from media like radio. Radio provide applicable information to the farmers. programs. Similarly, farmers generally obtain information from the radio and of about 34 percent of the farmers who sought information from the radio. 31 percent actually obtained useful information from radio. Radio also helps in agriculture sectors to farmers to improve their knowledge related to their farms reported that the viewing of agricultural television programs is significantly and positively related to knowledge of improved farm practices.

Different Medium like radio, magazine and other medium may affect and build the perception of many people. They many times makes the perception of people and urge them how to think and how to do work. Previous research shows that people's attitudes and perceptions may be influenced by their media use (Yahaya and Omokhaye 2001, Anigwe. 1990).

Farmers of many countries of the world listen radio and obtain information related to their farm work. Like in Nigeria the research has conducted in its area southwest and the researcher Patel and found that 83 percent of the farmers listen to radio farm programs.

Many causes exist due to which the proper information doesn't reach to the farmers. The main is cause is the lack knowledge about programs or tools which help them to get more knowledge. (Kiplang'at, 1999; Tire, 2006) states that inadequate access to agricultural information in rural areas is caused by many factors including lack of appropriate and effective mechanisms to disseminate information to farmers.

The researcher found that many information carried by different medium of media to the user and then user easily get useful information from it. (Ukachi, 2007) reported that different sources of Information transfer knowledge through different media channels regarding agriculture among farmers.

Media is very effective means of communication. It has power to that helps the farmers in increasing the productivity as well their knowledge. According to Abubakar, et al, (2009) the effective communication of new research findings and technologies in agriculture to rural farmers is a promising strategy for increasing agricultural productivity.

Media in this era playing a vital role in promoting development communication. With help of media now any information easily spread, it has provided forums to the people to discuss various issue and giving people awareness about how to make more effective skills. (Abubakar, et al, 2009; Obidike 2011; Choudhury 2011, 1; Kapoor 2011) states that the media has played an important role in the disseminating information among farmers because in the context of development communication all the media channels they empower and allow to circulate the knowledge and provide forums for discussion of issues, and teach new ideas and skills that are essential for the creation of a better life of farmers.

When the people use media like radio and listen the agriculture programs then the development countries agriculture related programs succeed. (Ango et al. 2013) reported that the

success of agricultural development programs in developing countries largely depends on the nature and extent of the use of mass media towards the mobilization of people for development.

according to Mundy and Sultan (2001, 1) relates to the scientific, economic, technical, or social areas of life and is a basic element of any development activity and must be available and accessible to all. Any kind of information is useful when the information is communicated in appropriate way claim that information is only useful if it is communicated, circulated, and exchanged among people in a proper way.

The farmers knowledge related to the farms or agriculture will decide the productivity and development in the agriculture. Budak and Yurdakul (2004) accord, adding that the capability of farmers is a fundamental indicator of the level of the agricultural sector's efficiency, productivity, development, and sustainability.

Agriculture is a fundamental instrument for sustainable development, poverty reduction and enhanced food security in developing countries. The method for communication to farmers to give them agriculture through which farmers made their decision how to word must be crucial. Oduwole and Okorie (2010) reported that the methods that are used to communicate are crucial in providing farmers with the necessary agricultural information in order for them to make informed decisions. That's why media is very important in development of rural areas.

Haider (2014) examined the characteristics of small farmers in term of land ownership. The main objective of the study is to explore the study statement "More Farmers listen, more they adopt". The study was conducted in Punjab Pakistan among the 150 farmers of district Layyah where it was showed that most of the farmers rely on Radio and Television which provide agriculture information on time. The result indicated that 95% of the respondents listen agriculture program on Radio while the result about the television is almost same where 85% of the respondents watch different agriculture program on television. However, study was also revealed that 57% of the respondents get agriculture information from their fellow farmers.

Haider (2014) research find out that Local radio helps farmers in their purchasing of agricultural commodities. His study results are in favor of the study statement "More farmers listen, more they adopt". Local radio has a significant role in small scale farm extension as farmers adopt new technologies and farm practices through this medium. His study findings explore that local radio plays a vital role in small scale farm extensions.

Khan & Shabbir (2000) conducted the study on the Effectiveness of Agricultural Program "SANDAL DHARTI" of radio Faisalabad in rural areas of Faisalabad. Their finding suggests that A most of around 71% of the respondents were with the 'Sandal Dharti' radio program. The listeners had a positive view about the information being provided to them through the "Sandal Dharti" program. However, farmers suggested that farming problems be discussed in question-answer pattern, interviews of progressive farmers be broadcast, English names of medicines when used, should be repeated twice and dose of fertilizers be given in terms of bags. A large number of respondents indicated them that they have no radio sets, others said they have no spare time to listen to the program and still others were of the view that they are not interested in such programs. A very small percentage of the respondents had access to television.

According to Chhachhar et al (2012) The finding of the study indicates that 52% of the respondents listen daily agricultural related program on radio. The radio is one of the best medium of transferring information among farmers about agricultural related issues. The further study can

conclude that the information regarding agriculture development was medium and most of the farmers were neither agree nor disagree about most of the programs which broadcast on radio. However there other constrains were also observed in this study that the broadcasting of agricultural programs was not on suitable time where farmers could get good information about pesticides, market, weather as well as new ideas and suggestions of experts for improvement of their productivity related to agriculture.

Research Objectives

- To assess the radio listening preference among farmers of Sann
- To determine the Radio listening pattern related to agriculture among farmers of Sann

Research Methodology

This study applies survey research method to establish the agriculture information seeking trends of small-scale farmers who listen to Radio and its impact to their farming activities. This is a quantitative study. Babbie, (2007) 1970 define the survey research as a method for collecting and analyzing social data via highly structured and questionnaire or often very detailed interview in order to obtain information from large numbers of respondents presumed to be representative of a specific population. The researcher would use a cross-sectional quantitative survey approach for data collection. According to Welman et al (2005) the purpose of selecting cross-sectional survey approach because it allows for a larger sample to be gathered, as opposed to interviews or other forms of data gathering. The survey is used because it provides the main idea about the research topic and based on a questionnaire which is provided to respondents to show their answers (Malhotra, et al 2006). The population of this study was farmers of Sann, Sindh Pakistan. Sann is located near the famous fort RaniKot. Population for this study consist of 100 farmers from Sann. The study employs nonprobability sampling techniques in which purposive sampling method were used for data collection from the farmers of Sann. The technique enables the researchers to produce a purposive random sample that informs to understanding of the whole population. The data were analyzed by using SPSS software.

Result & Discussion

Table 1: *Demographic Information*

Demographic Profile	Frequency	Variables
Gender		
Male	79	79
Female	21	21
Age Group		
20-30	18	18
31-40	40	40
41-50	28	28
51-60	14	14
Marital status		
Single	25	25
Married	75	75
Number of Children		
0-1	10	10
1-2	20	20
3-4	42	42
5-6	28	28
Education		
Non formal education	36	36
Primary	42	42
Matriculation	15	15
Intermediate	7	7
B. A	0	0
Degree/Master/PhD	0	0
Farm Experience		
1-10 years	9	9
11-20 years	65	65
21-30 years	20	20
More than 30 years	6	6
Agriculture Income		
1 to 5 thousand	2	02
6 to 10000 thousand	56	56
More than 10 thousand	42	42

In table 1, result indicates the distribution of the respondents' gender, age group, marital status, number of children, level of education farm experience and agricultural income per month of farmers were asked from respondents. The demographic information is seen to be very important and significant in the study because the demographic variables identified are assumed to have a significant relationship between perceived gratifications sought from radio programs and perceived gratifications obtained from radio programs by the farmers. The data highlights that radio has significant role in increasing information and knowledge regarding agricultural related information among farmers.

Table 1 describes that 100 respondents participated in this study. The 79% of the respondents were male while 21% of the respondents were female. The age group were distributed in different categories from 20 years to 60 years where the result showed that 40% of the respondents' age were 31 to 40 year while 18% of the respondents age was 20 to 30 years, however 28% and 14 % of the respondents' age was categorized in age group of 41 to 50 and 51 to 60 years respectively. The study further indicated that 75% of the respondents were married, while remaining 25% were not married.

Furthermore, in table 1 result showed about the family size of the respondents. The maximum larger family size recorded was 3 to 4 children which accounted 42% of the total respondents. About 28% of respondent were found with medium family size having 5-6 children and remaining 20% of the respondents fall in the category of small family size with 1-2 members and 10% of the respondents were only one child.

The respondents were also asked about level of their education the result shows that 42% of the respondents' level of education was primary while 36% of the respondents were illiterate 15% were matriculation however only 7% were intermediate. The result shows that most of the farmers were educated and this is beneficial for farmers to adopt new innovations for increase their productivity in farms. It was also showed that the higher education have made farmers very active for learning new things and ideas by Radio and extension programs and policies (Obinne, 1991, Agwu & Anyanwu, 1996).

In the context of farm experience more than half 65% of the respondents were 11 to 20 years farm experience in their field while 20% of the respondents were 20 to 30 years 9% of the respondents were 1 to 10 years' experience in farming. Furthermore only 6% of respondents have more than 30 years' experience of agriculture. It was indicated that most experience in farming increased the agriculture productivity by using new technologies in farming (Obinne, 1991). Table 1 also indicates 2% agricultural income per month of the farmer was rupees 1000-5000 while 56% of respondents was 6000-10,000. However, 42% of respondents' income was more than 10,000 per month.

Table 2: *Pattern of Listening Radio*

Radio listening Pattern	Frequency	Percentage
Radio ownership		
Yes	76	76
No	24	24
Regular listening Agriculture program		
Yes	68	68
No	32	32
Appropriate time listening Radio Program		
Morning	15	15
Afternoon	21	21
Evening	40	40
Night	24	24
Time spend listening Radio		
5-20 minutes	17	17
21-40 minutes	45	45
41-60 minutes	30	30
More than one hour	08	08

Table 2 indicates the state of respondents' ownership of the radio set listening agricultural related programs on radio, time preference for listening agricultural related programs, their most favorite agricultural related program on radio.

In terms of the ownership of radio sets, the findings of the study as presented in Table 2 indicate that a majority of the respondents, comprising of 76% respondents revealed that they have their own radio set however a small number of the respondents, comprising of 24% respondents indicated that they have no radio set. As far the daily listening any agricultural related program on radio is concerned, more than half 68% of the respondents explored that they listen regularly agricultural related program on radio followed by 32% of the respondent said that they do not listen agricultural related program regularly. While asking the respondents about appropriate time for listening agricultural related program, 21% of respondents indicated that afternoon is also good for agriculture program for listening agriculture related program because almost farmers in morning time busy in farming activities and they have no time for listening programs. However, 15% of respondents told that from morning 7am to 12noon are not appropriate time for these programs. 40% of the respondents showed that evening is the best time for listening these programs on radio. However, 24% of respondents said that night time is good for listening Radio agriculture programs. The finding of the study shows that timing of agriculture programs was not on appropriate time for farmers because most of the farmers were in field during the time of broadcast these programs on radio. When the farmers comeback from field were looking very tired and have no more interest to listen radio programs daily. This result agrees that farmers were not totally satisfied with timing of on-air programs about agriculture. Furthermore, the allocation of time is very short where farmers could not understand full concept of the programmed (Ekumankama, 2000).

While the respondents were also asked about time spend listening Radio where result indicated date 45% of the respondents listen radio 21-40 minutes in a day while 30% of the

respondents listen Radio 41-60 minutes in a day 8% of the respondents listen radio more than one an hour while 17% of the respondents only 5-20 minutes in a day.

Table 3: *Perceived Gratification Sought From Radio*

Radio Programs	SA	A	ND	D	SD
Radio help good markets information	10 (10%)	38 (38%)	29 (29%)	18 (18%)	5 (5%)
Provide information regarding credits and loans provision	0 (0%)	15 (15%)	64 (64%)	21 (21%)	0 (0%)
To help farmers to inform about crop problems and livestock production	0 (0%)	66 (66%)	25 (25%)	01 (01%)	8 (8%)
Helps to improve farmers skills and knowledge	10 (0%)	60 (60%)	23 (23%)	01 (1%)	6 (6%)
Provides knowledge regarding pest control	5 (5%)	67 (67%)	17 (17%)	11 (11%)	0 (0%)
To keeps farmers updated with weather and climate information	5 (5%)	65 (65%)	27 (27%)	03 (3%)	0 (0%)
farmers to deliver accurate weather information timely	0 (0%)	65 (65%)	18 (0%)	11 (11%)	6 (6%)

Strongly agree (SA) Agree (A) Neither agree nor disagree (NA) Disagree (D) strongly disagree (SD)

Table 3 shows the respondents' response about how they find radio helpful in finding good market price for their products of farms where result showed that 38% of the respondents were agree that radio provide latest marketing information while 29% of the respondents indicated that neither they agree nor disagree that radio help farmers to find good market information. While 18% of respondents revealed that they were disagree and said that radio does not broadcast such kind of information regarding helping the farmers to find good markets information for their product. Furthermore 10% of respondents said that they were strongly agree and understand that radio provide good information for helping the farmers to find good markets for their product. However, only 5% of the respondents were strongly that radio did not provide them good market information as source of pricing information for farmers.

Moreover, table 3 also showed that how many farmers responded to radio provide information regarding credits and loans provision. 15% of farmers were agree that radio provide information related to credits and loans provision. 21% are disagree with this. However, 64% of farmers are neither agree and nor disagree that radio provide information regarding credits and loan provision.

Table 3 also show the farmers respond to radio help farmers to inform about crop problems and livestock production. 66% of famers were agree that radio helps farmers to inform about crop problems and livestock production. 25% of farmers were neither agree nor disagree to that radio help farmers to inform about crop problems and livestock production. However 8% of the respondents were strongly disagree that provide solution information about agriculture issues and

problems only 1% of farmers are disagree that radio help farmers to inform about crop problems and livestock production.

Table 3 also show that respond of farmers that radio helps to improve farmers skills and knowledge. 60% of farmers are agree that radio helps to improve farms skills and knowledge. 23% are neither agree nor disagree that radio helps farmer to improve skills and knowledge related to farms. While 10% of the respondents were agree and said that Radio has improved their farming skills and 8% of the respondents were strongly disagree and only 1% is disagree that radio helps farmer to improve skills and knowledge related to farms. Table 3 also shows farmers respond or radio provide knowledge regarding pest control. 67% of farmers are agree that radio provide knowledge regarding pest control. 11% are disagree that radio provide knowledge regarding pest control. 17% of farmers are neither agree nor disagree that radio provide knowledge regarding pest control and 5% were strongly agree that radio provide the proper use of pesticides.

Table 3 also shows respond of farmers to radio keep farmers updated with climate and information. 65% of farmers were agree that radio keeps them updated with climate and information. 27% of famers are neither agree nor disagree that radio keeps updated with climate and information related to farms. However only 3% of farmers are disagree that radio keep updated them with climate and information related to farms 5% of the respondents were strongly disagree Table 3 also show respond of farmers to radio keeps informed regarding management of on farm crops and livestock. 65% of farmers are agree that radio keeps informed regarding management of on farm, crops and livestock. 18% of farmers are neither agree and nor disagree that radio keeps informed regarding management of on farms, crops and livestock. 11% of the respondents were disagree. However, 6% of the respondents were strongly disagree that radio inform us about management system of agriculture.

Conclusion

The finding of the study indicates that 68% of the respondents listen daily agricultural related program on radio. The radio is one of the best mediums to transfer information among to farmers about agricultural field related issues. The study can conclude that the information regarding agriculture development was medium and most of the farmers neither agreed nor disagreed about most of the programs which were broadcasted on radio related to farms productivity and pest control. However there other constrains were also observed in this study that the broadcasting of agricultural programs was not on suitable time where farmers could get good information about pesticides, market and weather as well as new ideas and suggestions of experts for improvement of their productivity in the farm.

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