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FACILITATING AGRICULTURAL KNOWLEDGE DISSEMINATION: AN EXPLORATION OF FARMERS' PREFERRED INTERPERSONAL COMMUNICATION CHANNELS AND STYLES

Dr. Adeel Ahmed Amir
Assistant Professor
Department of Mass Communication
Forman Christian College (A Chartered University)
adeelaamir@fccollege.edu.pk

Dr. Parvaiz Akhter
Independent Researcher
Islamabad
pervaizakhter303@Gmail.Com

Ali Nawaz Cheema
PhD Scholar
Center of Media and Communication Studies
University of Gujrat, Paksitan
Email: cheema.uog@gmail.com

Ali Asif
MPhil Scholar
Forman Christian College (A Chartered University)
253061420@formantie.fccollege.edu.pk

Abstract

Effective communication is crucial if farmers are to share ideas and practices and increase agricultural output. Interpersonal communication is the most common method of learning about agriculture. Agricultural research departments, often in collaboration with local, national, and international organizations, have developed communication tools to disseminate information about new farming technologies, fertilizers, and pesticides. Agriculture programming is desperately needed, but it's often ignored and doesn't get much airtime on networks like "Apna." Effective communication channels are essential for the adoption of agricultural innovations, especially for interpersonal communication. Social networks, peer groups, and extension agents are useful resources for persuading farmers to use novel methods. This study investigates the function of many forms and sources of interpersonal communication for discussions about agriculture in the district of Lodhran in South Punjab, Pakistan. Purposive sampling was used in the survey, and structured questionnaires were used to acquire empirical data. The results showed that many forms and sources of interpersonal communication are essential in agricultural discussions among the farmers within the field of study. The outcome of this study confirmed that farmers preferred in-person conversations on agricultural commodities with sales representatives of marketing firms.

Keywords: Farmers, Agriculture, Interpersonal Communication, Agricultural Discussion.

Introduction

In order to improve agricultural output, advice and the exchange of ideas and practices depend heavily on communication. Through good communication, farmers exchange ideas and useful information with one another and share their personal experiences. In order to learn about agriculture, farmers most frequently communicate interpersonally. However, there are several forms and styles of interpersonal communication, depending on the respondent. Agricultural research departments are constantly working to develop new varieties of crop seeds that may be planted in order to boost the yield rate. In collaboration with regional and global organizations, these agriculture departments have lately launched a few communication tools to increase public understanding of fertilizers, pesticides, weedicides, land cultivation technologies, and the newest irrigation systems. Farmers communicate with one another to share these innovations. Interpersonal communication channels are an effective means of educating farmers, claims Ayoda A. R. (2010).

Agriculture-related programming is desperately needed, but sadly, for a variety of reasons, this field is being overlooked. According to Zia, A., and Khan, A. (2012), agriculture programs received 8.3% of the airtime on the "Apna" channel. Additionally, research revealed certain significant causes, such as sponsorship, a low viewership frequency and income, etc. Their findings showed that television news stations with high viewership frequency did not provide the necessary coverage of programs linked to agriculture between 2005 and 2010.

The adoption of innovation in the agriculture sector requires effective communication channels, especially interpersonal communication, in order to be profitable Muthoni et al., (2013). The Lodhran district in Pakistan's Punjab Province is the subject of the study. The Lodhran District consists of 73 Union Councils and three tehsils: Lodhran, KahrorPakka, and Dunyapur. The district is primarily rural. Throughout the summer, the highest and lowest temperatures vary from 52 °C to 28 °C. The range of temperatures in the winter is 21 °C down to 5 °C (Malik, T.J., 2009).

While radio and television have been recognized as significant channels for disseminating agricultural information, Purushothaman, C., Kavaskar, M., Reddy, Y. A., and Kanagasabapathi, K. (2003) apprehended that farmers rely heavily on social networks like the "Baithak System" in countryside areas. Peer groups, influencers, agents of change, and agriculture extension workers are examples of interpersonal communication, and some of these are crucial in convincing and embracing agricultural advancements. According to Hall, K., and Rhoades, E. (2010), interpersonal communication in the media affects people's attitudes. Research from throughout the world has revealed that farmers' decisions to embrace or reject organic farming are influenced by their interpersonal encounters.

Rationale of Study

The agriculture sector has received less attention in the field of innovation diffusion than other areas of life despite the abundance of research on the subject. For

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this reason, the purpose of this study is to examine the part that communication between individuals plays in the spread and acceptance of innovation in the agricultural sector of Lodhran district. The research might also look at how interpersonal communication helps farmers become more aware of the use of hybrid seeds, fertilizers, herbicides, and other modern agricultural technologies.

Research Questions

1. How much face-to-face communication occurs for agricultural discussions among farmers?

2. Among farmers, what kinds and channels of interpersonal connection are most preferred?

Objectives of Research

The study's goals are to:

- Assess the frequency and function of interpersonal communication in agricultural discussions among Lodhran district farmers and

- Identify the most popular forms of interpersonal communication that are employed in agricultural discussions.

Theoretical Framework

This idea, which was put forth by Katz in 1970, focuses on how people use media to satisfy their wants. Abraham Maslow's hierarchy of demands suggests that people make choices about what they want to read or see and that many media outlets compete to meet the demands of each unique person. As a result, Katz, E., Blumler, J. G., &Gurevitch, M. (1973–1974) discovered that people use the media to fulfill the following particular demands.

Literature Review

Interpersonal communication is used by mass media outlets and agriculture departments to spread various advancements, like the adoption of new technologies. According to research by Ali, S., Jan, M., and Anwar, M. (2011), close friends with relevant experience can act as opinion leaders and have a significant impact on societal decision-making. On the other hand, these people encouraged farmers to accept new ideas in order to boost agricultural productivity. According to Das, D. (2012), a significant amount of knowledge was disseminated to farmers via formal or interpersonal channels. Farmers favored human communication above other mainstream media, according to Das, D. (2012). In particular, face-to-face interaction is a more effective form of communication than interpersonal communication. To disseminate useful information about agricultural advancements, government agriculture extension department staff can get in direct contact with farmers.

In Pakistan, the majority of the population lives in rural areas, and farmers rely on one another and other forms of communication to adopt new agricultural technologies. According to Muhammad, S. M., & Ali, M. (2002), it is most likely that people will use the digests on agriculture-related knowledge to get helpful information about the industry. Interpersonal communication has been found to have an impact on people's attitudes toward advancements in related disciplines (Hall, K., & Rhoades, E., 2010; FAO, 2014). New ideas in agriculture are largely disseminated by opinion leaders, such as government agencies, certain educated farmers in a certain area, and other representatives of agri-marketing firms. According to Ayoade, A.R. (2010), there is a good way to disseminate production practices.

Farmers have been growing maize as a crop over time, and this shift in crop variety is a result of useful information about maize crop spreading. Interpersonal contact was crucial to his transition from traditional crops to the novel notion. Analogously, Cheboi, S. and Mberia, H. (2014) discovered the effectiveness of interpersonal communication tools for zero grazing innovation adoption and diffusion. On the other hand, certain demographic traits also play a role in farmers' decision-making when it comes to pertinent developments. The adoption of agricultural innovations is significantly influenced by the income and education of farmers, according to the findings of Ali et al. (2011) & Leeuwis et al. (2011).

Without communication, ideas and inventions cannot spread; yet, there are certain obstacles in the way of gathering accurate information about advances. According to research by Chachhar et al. (2012), the mainly effective and accessible sources include farmers, other farmers, and vendors or suppliers of agricultural products, as well as agriculture officers during field days and events and farmer training programs. Chen, T.L.Y. & Yang, L. (2000) concluded that people used interpersonal communication to learn about different kinds of innovations Bello-Bravo et al., (2018). According to Okwu, O.J. and Daudu, S. (2011), respondents discovered that interpersonal communication was usually easier to get in touch with when seeking agricultural information from other farmers and extension agents. However, opinion leaders were also readily available when seeking information on a regular basis.

Interpersonal conversations are a crucial tool for farmers to learn about new agricultural generations and alternate information. Ayoade (2010) highlighted the pretty effective channels of interpersonal communication that farmers can use to study better farming practices. His findings suggest that once honest agricultural data is sought, Oyo State farmers select face-to-face interactions. This form of verbal exchange makes it possible to get hold of immediately comments and establish a private connection, both of which can be vital for aiding within the information of difficult agricultural ideas.

Farmers have varying possibilities in terms of conversation channels due to cultural norms, dependability, and accessibility. Okwu and Daudu (2011) diagnosed direct conversations with extension professionals, peer groups, and agricultural products because the primary resources of agricultural information for farmers in Benue State, Nigeria. This choice highlights how vital in-person interactions are to the effective dissemination of agricultural know-how.

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Extension services and peer networks are essential additions to the agricultural verbal exchange landscape. Jan, Sultan, and Ali (2011) investigated the role of verbal exchange in the diffusion and adoption of agricultural innovations in Pakistan. Their study discovered that extension agents and peer networks were the simplest channels for spreading agricultural know-how. Farmers relied heavily on those interpersonal assets for practical advice and validation of new practices.

Similarly, Purushothaman et al. (2003) highlighted the role of mass media and interpersonal communique in agriculture. While mass media, including radio and TV, were sizable for elevating awareness, interpersonal channels like the "Baithak System" in rural regions had been critical for precise discussions and the adoption of recent techniques. This device involves casual gatherings in which farmers exchange information and reports, reinforcing the fee of interpersonal communication.

Method and Material

The purpose of the research project is to investigate how interpersonal communication functions in farmer-to-farmer discussions. 150 farmers in the study area participated in a survey that used purposive sampling and a structured interview process to gather empirical data. The primary goals of the study served as the foundation for developing the questionnaire. The computer program SPSS was used to analyze the pertinent data. The secondary data was gathered by reviewing past relevant studies.

Analysis of Data and Results

Table 1A: Demographic Variables Illustrative

Variables	f	%
Respondents Age Range		
20-40 Years	54	36.0
41-60	92	61.3
61-80	04	02.7
Educational Attainment of respondents		
Primary	25	16.7
Middle	46	30.7
Matric	45	30.0
Intermediate	26	17.3
Graduate	06	04.0
Master & Above	02	01.3

In Table 1A, demographic variables illustrate the age distribution and educational attainment of respondents. The majority of respondents (61.3%) fall within the age range of 41-60 years, followed by those aged 20-40 years (36.0%) and a smaller proportion aged 61-80 years (2.7%). In terms of educational attainment, the largest

groups are those with Middle education (30.7%) and Matric (30.0%), followed by Primary education (16.7%), Intermediate (17.3%), Graduate (4.0%), and Master & Above (1.3%).

Table 1B: Demographic Variables Illustrative		
Respondents' Monthly Income in Pakistani Rupees (PKR)		
11,000 to 30,000 PKR	134	89.3
31,000 to 50,000 PKR	12	08.0
51,000 to 70,000 PKR	1	00.7
71000 and above PKR	3	02.0
Land Ownership /Lease (Acres)		
1-15 Acres	118	78.7
16-30	03	02.0
31-45	04	02.7
Lease	25	16.7
General Agreement on Interpersonal Communication Regarding Agriculture		
Affirmative	149	99.3
Negative	01	00.7
Frequency of Conversations on Agricultural Topics		
Regularly	20	13.3
Occasionally	129	86.0
Not at all	01	00.7
Consent to communicate with one another about agricultural Innovations		
Yes	95	63.75
No	55	36.25

Table 1B presents demographic data on respondents' monthly income, land ownership, and communication habits related to agriculture. Most respondents (89.3%) have a monthly income between 11,000 to 30,000 PKR, with smaller proportions earning 31,000 to 50,000 PKR (8.0%), 51,000 to 70,000 PKR (0.7%), and 71,000 PKR and above (2.0%). Regarding land ownership, 78.7% own 1-15 acres, 2.0% own 16-30 acres, 2.7% own 31-45 acres, and 16.7% lease land. A significant majority (99.3%) agree on interpersonal communication about agriculture, with 13.3% engaging in regular conversations, 86.0% occasionally, and 0.7% not at all. Additionally, 63.75% consent to communicate about agricultural innovations, while 36.25% do not.

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Table 2: Source and Types of Variables in Social Interaction		
Variables	**F**	**%**
Origin of Social Interaction		
Neighboring Farmers	28	18.7
Family Head	03	02.0
Agent of Marketing Companies	70	46.7
Field Staff of Agriculture Department	49	32.7
Categories of Social Interaction		
In-person Communication	108	72.0
Group Discussion	31	20.7
Phone Conversations	9	06.0
Agricultural Learning Centers	2	01.3

Table 2 shows that 18.7 % of survey participants talked about agriculture alongside other farmers in their neighborhood, 2.0% with the heads of their respective families, 46.7% with change agents from agri-marketing companies, and 32.7% with farmers who were specifically targeted. They also talked about agricultural innovations with field staff from the agriculture extension department. Additionally, when it comes to getting information on in agriculture, 72.0% of the targeted farmers prefer face-to-face discussions, 20.7% of respondents participate in group discussions, 6.0% make phone calls, and just 2.0% of the respondents attend Farmers Field Schools. The results showed that whereas 2.7% of the targeted farmers said they don't gather any valuable knowledge about agricultural innovations, 97.3% of respondents said they gather useful information about agricultural innovations.

Discussion

In the district of Lodhran in South Punjab, Pakistan, this study investigates the function of many forms and sources of interpersonal communication for discussions about agriculture. Empirical data revealed that the agents of marketing firms with an agricultural focus had the greatest influence on adoption. Additionally, it seems like an attempt has been made to introduce agricultural advancements. It was discovered that 63.75% of respondents were having specific discussions regarding agricultural advances, indicating that 99.3% of farmers use interpersonal communication channels for agricultural discussions in general. It is shown that in agriculture, interpersonal communication is crucial. Farmers employ interpersonal communication to discover valuable insights into agriculture and advancements in agricultural practices. These findings are consistent with those of Okwu, O.J. and Daudu, S. (2011), who discovered that respondents found human interaction or personal communication to be typically more available or easily reached in the form of agricultural extension agents and fellow farmers when looking for information related to agriculture, while influential figures or thought leaders were also readily available. According to the study's findings, farmers prefer face-to-face interactions over other forms of interpersonal communication when

discussing agricultural innovations. Farmers primarily discuss agricultural innovations with marketing company agents, then field staff from the agriculture extension department. These results are consistent with those of Das, D. (2012), who observed that farmers favored face-to-face interactions over other forms of mass media. He also pointed out that interpersonal communication is more successful than other forms of communication.

Conclusion

The primary goals of the current study, a quantitative survey, are to ascertain the frequency of interpersonal communication as well as the preferred forms and sources of such communication for agricultural discussions. The data indicates that farmers communicate with one another at a high frequency. The respondents indicated that they agreed to talk about agriculture. On the other hand, marketing organizations' representatives have been shown to be the primary means of interpersonal communication for in-person discussions regarding the exchange of agricultural ideas, practices, and information.

References

Ali, S., Jan, M., & Anwar, M. (2011). Media Usage: Understanding the extension services in the diffusion of agricultural innovations. dialogue, *6462*(6), 2.

Ayoade, A. (2010). Effectiveness of information sources on improved farm practices among cowpea farmers in Oyo State. *Global Journal of Human Social Science*, *10*(4), 39-45.

Bello-Bravo, J., & Pittendrigh, B. R. (2018). Scientific Animations Without Borders and Communities of Practice: Promotion and pilot deployment of educational animations for low-literate learners in Mali. *International Journal of Agricultural Extension*, 6(2), 19-28.

Chachhar, A. R., Osman, M. N., Omar, S. Z., & Soomro, B. (2012). Impact of satellite television on agricultural development in Pakistan. *Global Media Journal*, *2*(2), 1-25.

Cheboi, S., & Mberia, H. (2014). Efficacy of interpersonal communication channels in the diffusion and adoption of zero grazing technology. *International Journal of Academic Research in Business and Social Sciences*, *4*(9), 352.

Das, D. (2012). Sources of agricultural information among rural women: A village-level study in Assam. *International Journal of Ecology Research*, 1-12.

FAO. (2014). *The State of Food and Agriculture 2014: Innovation in Family Farming*. Rome: Food and Agriculture Organization of the United Nations

Hall, K., & Rhoades, E. (2010). Influence of subjective norms and communication preferences on grain farmers' attitudes toward organic and non-organic farming.

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Journal of Applied Communications, 94(3-4), 51-65.

Infante, D. A., Rancer, A. S. and Womack, D. F. (2003). *Building communication theory*(4th ed.). Prospect Heights, IL: Waveland.

Jan, M., Sultan, K., & Ali, S. (2011). Role of communication in diffusion and adoption of agricultural innovations. *Gomal University journal of research, 27*(1), 111-118.

Katz, E., Blumler, J. G., &Gurevitch, M. (1973-1974). Uses and gratifications research. *Public Opinion Quarterly, 37*(4), 509–523. https://doi.org/10.1086/268109

Leeuwis, C., & Aarts, N. (2011). Rethinking communication in innovation processes: Creating space for change in complex systems. *Journal of Agricultural Education and Extension*, 17(1), 21-36.

Malik, T.J. (2009). Pre-Investment Study District Lodhran.

Ministry of Finance, Pakistan (2015), *Economic Survey of Pakistan, 2014-15*.

Muthoni, F. K., & Wangui, E. E. (2013). The role of agricultural innovation systems in enhancing food security and climate resilience in Eastern and Southern Africa. *Journal of Agricultural Extension and Rural Development*, 5(6), 135-143.

Mwangi, M., & Kariuki, S. (2015). Factors determining adoption of new agricultural technology by smallholder farmers in developing countries. *Journal of Development and Agricultural Economics*, 6(5), 89-96

Okwu O.J and Daudu, S. (2011). Extension communication channels' usage and preference by farmers in Benue State, Nigeria: *Journal of Agricultural Extension and Rural Development 3* (5), 88-94.

Purushothaman, C., Kavaskar, M., Reddy, Y. A. and Kanagasabapathi, K. (2003), Role of Mass Media in Agriculture. International Conference on Communication for Development in the Information Age: Extending the Benefits of Technology for All.

Rogers, E. M. (1995). Diffusion of Innovations: New York Free Press, New York.

Rogers, E. M. and Singhal, A. (1996).*Diffusion of innovations*. In M. Salwen& D. Stacks (Eds.). An integrated approach to communication theory and research (p. 409).Mahwah, NJ: Lawrence Erlbaum Associates.

Zia, a., & khan, a. (2012). media coverage for development of agriculture sector: an analytical study of television channels in Pakistan. *J. Agric. Res, 50*(4), 555-564.