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Acquisition of Agricultural Information from the Social Media and Interpersonal Channels by Farmers



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Abstract: *The primary goal of this research is to discover and explain how farmers in Faisalabad utilise social media and interposed channels to receive agricultural knowledge. Furthermore, the study was intended to investigate farmers' socio-demographic traits and their subsequent link with the usage of social media and interpersonal communication channels. Data for this research study were gathered from 257 farmers in the Faisalabad district. A structured questionnaire was utilised to collect data as part of the survey approach. Among the social media, Facebook is the most used media and among interpersonal channels Cosmopolite's character of famers was rated highest.*

Key Words: Farmer, Interpersonal channels, Agriculture knowledge, Social media

Introduction

Agriculture as a profession is said to be both the art and science of cultivating the soil. In other words, it is growing crops and keeping livestock. It includes several steps such as the preparation of land for planting crops, cattle rearing, and in the end obtaining final products from animals and plants. These products are then delivered to markets for the use of people. In this way, agriculture has become a commercial activity. Most of the world's food and fabrics come from agricultural products, for example, Cotton, wool, and leather are the most used agricultural products.

Wheat, rice, sugarcane, vegetables, and fruits are the most important agricultural products of Pakistan. Pakistan has 80 million hectares of

agricultural land. There are 21 million hectares of cultivable land, but only 16 million hectares are exploited. Pakistan has 6.6 million agricultural families. They are classed as small farmers 86% of the time and large farmers 14% of the time. 2.2 per cent less than 2 per cent hectare, on the other hand (Jallo, 2016)

What makes Interpersonal communication channels more important is the fact proved through prior research that social media do not bring about remarkable changes in human behaviour unless combined with interpersonal communication, it is also notated by many communication theorists that functions of social media and Interpersonal channels are complementary (McAlister, 2000).

Farmers, as the fundamental unit for

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Citation: Salam, A., Iqbal, A., & Parveen, K. (2023). Acquisition of Agricultural Information from the Social Media and Interpersonal Channels by Farmers. *Global Social Sciences Review*, VIII(II), 514-527. [https://doi.org/10.31703/gssr.2023\(VIII-II\).47](https://doi.org/10.31703/gssr.2023(VIII-II).47)

adopting better practices, may boost agricultural productivity by using correct communication tactics. In the information era, the utilisation of information resources is critical to progress. To transmit a proper understanding of modern agriculture among rural people, an excellent communication strategy is required. The audience values timely and efficient communication. This means that information should be disseminated as quickly as possible while being intelligible, well-articulated, and well-liked by consumers.

As agricultural development is a very important aspect of the economy of Pakistan, the Government of Pakistan has initiated many media services to be used by farmers in Pakistan.

Pakistan television corporation PTV is one of the oldest media entities owned "by the government of Pakistan. The decision of establishing television in Pakistan was initially taken by the Ayub regime. The sole purpose was to educate and bring awareness throughout the country. Television has been regarded as an effective tool for education.

Statement of the Problem

In agriculture, relevant and adequate information assists farmers in making the best decisions for the long-term growth of agricultural activities. The use of information resources in agriculture is enhancing agricultural output in a variety of ways. The use of communication technologies for weather forecasting, technological knowledge, and timely access to market trends assists farmers in making informed decisions about which crops to grow and which goods to utilize. Where to buy and trade input.

Objectives of the Study

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1. o explore the use of Social-media by Farmers.
2. To examine the socio-demographic characteristics of Farmers.
3. To find the use of Interpersonal channels by farmers.

Research Questions

- RQ. 1:** Do farmers use different media to acquire information about agriculture?
RQ.2: Which type of medium do farmers use for

agricultural information?

- RQ.3:** Which type of media is available for farmers?

Hypotheses

- H1:** It is more likely that farmers use social media to get agricultural information.
H2: It is more likely that farmers prefer interpersonal communication to social media in acquiring information related to agriculture.
H3: The use of social media and interpersonal channels by the farmers in receiving information is related to each their age, education, farm size, annual income, Cosmo- politeness.

Theoretical Framework

The theoretical framework provides insight into the theory applied to the research study. Following is a brief description of these theories.

Diffusion of Innovation

The theory of the diffusion of innovation defines the process through which innovation gets embraced. This philosophy popularised the terms "innovation" and "innovation." This hypothesis, created by EM Rogers in 1962, is regarded as one of the oldest in the social sciences. It began with an explanation of how an innovation, concept, deed, or product spreads swiftly among the people and is embraced by a certain population over time.

People accept a new concept, habit, action, or product as a result of this spread. An individual or group of people who have been doing something for a long time is referred to as an exerciser. Whatever the situation may be in agriculture, it is an old practice.

Adoption is described as the acceptance of a novel concept, behaviour, or product. This process is complicated and time-consuming, and it does not occur concurrently in the social system. To some extent, this is a process in which some individuals are more excited about implementing an invention than others. Some people, on the other hand, are less interested in embracing any kind of innovation. This procedure is split and detailed into many categories. Researchers have discovered that those who invent early on vary

from those who innovate later. When promoting innovation in a target audience, it is critical to identify the characteristics of the target population that will aid or hinder the adoption of the innovation process.

Innovative research was spread to farmers who adopted hybrid seed work. This theory describes a complex process of communication (Shearon A. Lowery, Melvin L. DeFleur, 1995). This view is even more relevant to farmers' use of social media and mutual channels.

Two-Step Flow of Communication

The two-way flow of communication describes the media's limited impact. Paul Lazarfeld, an American-Austrian sociologist, first used it in the field of communication in 1948. The People's Choice, a study of voter decision-making by three sociologists, Paul Lazarfeld, Bernard Berelson, and Hazel Goddard, was released. During the presidential election campaign of 1940. The study finds proof that the flow of mass media is less direct, or that media messages reach the audience in an indirect manner.

Only when the influence of public opinion leaders is blended with media content, can it be successful. The opinion leader to whom media information is communicated is the second component of the media communication process. This study of opinion leaders has piqued the interest of scholars, who are now delving into the actual qualities and characteristics that may be utilised to characterise opinion leaders. This two-step communication cycle may now be extended to farmers in Faisalabad's usage of social media and interpersonal channels. Farmers have access to a wealth of information not only through social media but also through public opinion leaders.

The Opinion Leaders

Keeping in mind the two-way flow of communication theory, research by Robert Merton revealed that opinion leadership is not a universal quality of a person, but is restricted to a few clear concerns. Individuals who serve as opinion leaders on one subject cannot be deemed influential, nor will opinion leaders examine another sort of problem. Robert classified public opinion leaders into two groups.

- Monomorphic
- Polymorphic

Monomorphic is a type of opinion leader who leads people on one type of issue but on the other type of issues, he himself is a follower. A polymorphic opinion leader is defined as a broad-spectrum opinion leader (Mark Balnaves, Stephanie Hemelryk Donald, Brian Shoemsmith, 2009).

Later on, a study directed by Elhu Katz further investigated the personality traits of opinion leaders. This research further proved that the earlier claims of personal influence are more noteworthy in decision-making as compared to mass media (Katz, E. 1957). It is also noted that opinion leaders are equally distributed among the social, economic, and educational levels within their community. But it is important to note that Katz and Lazars Feld did not identify any meticulous personality traits among opinion leaders.

Public opinion leaders are also stated to have crucial roles in their community, making them uniquely qualified for their specialised jobs. They are generally a group of people. Aside from that, he had relationships with the media and had suitable information delivered to him outside of his circle or group.

Research further suggested that fundamentally opinion leaders help then- people to understand media messages. Opinion leaders also act as a foundation for social pressure in the direction of a specific choice and as a foundation of social support to reinforce that choice once it has been made.*¹ (Hornik, 2006). Lazarsfeld and his associates listed the following personality characteristics of personal contacts.

Definitions

Some of the important terms used here can be better understood with their definition.

Communication

The process of sharing ideas, emotions and information is known as communication. There are various types of communication. Communication is said to occur between a source and a receiver.

Social media

Social media are the means of communication through which messages are transmitted in a

shorter time period from a source to friends, family and audiences. Social media included in the research were Facebook, YouTube, WhatsApp

Interpersonal Communication

Interpersonal communication is a type of communication between two persons. It is communication mostly used by farmers. It is a daily conversation between two persons who are in close physical proximity. It can be verbal and non-verbal.

Extension Agents

These are the employees of the agriculture department. Agricultural extension is a branch of the agricultural department, responsible for communication with farmers to provide them with new information about agriculture. It is a bridge between farmers and Govt.

Agricultural communication

Agricultural communication is a branch of development support communication. Here communication is based on Agricultural information. Similarly, Agricultural journalism is also a term used to describe agricultural news and information.

Cosmopolites

It is defined as the habit of visiting outside the environment of someone. Cosmopolites of a person are defined as his or her habit of visiting other people and communities.

This study assumes that respondents would cooperate and provide accurate knowledge as per their best knowledge.

Literature Review

This study is a comparison between the use of social media and interpersonal communication channels by farmers in Faisalabad. Thus, a review of the literature will provide a clear insight into the study. The literature review chapter of this study provides the current status of the Use of Social-media and Interpersonal channels used by farmers.

Farmers' daily activities include the use of social media and interpersonal channels.

Communication for development lies in the

fact that the use of communication puts it further for development (Rogers E. M., Diffusion of Innovation, 2003). Communication as a basic human need is being used for development since ancient times. The use of mass media for communication is considered the best and most efficient source of information. Mass media is used to circulate knowledge, skills and other valuable information to the masses. On the other hand, interpersonal sources are also used as valuable tools (Chaudhary, 2011).

The ability and scope of mass media to reach a large number of audiences make it the most used tool. It reaches masses irrespective of distances and barriers. It is an essential part of modern life, covering and occurring in a wide variety of settings (Turow, 2011).

Social media in its most basic forms that is Facebook, YouTube, and WhatsApp convey messages to a large segment of the farming community. Where social media cannot reach or become less effective, interpersonal sources are used. Interpersonal communication sources are fundamental to bringing real change, especially in rural areas. Social media cannot supplant interpersonal sources when they add authority, effectiveness and credibility to messages (Gary Coldevin, Extension and communication services, Research extension and training division, Food and agriculture organization of United Nations, 2003).

Communication for Development

There are many perspectives on the use of communication for development, but most commonly there are two aspects from which humans need communication for development (Kumar, 2011).

1. Communicators need
2. Users or audiences need

Communication is a continuous process, and it necessarily involves four fundamental aspects, the Communicator, the message, the channels and the receiver. If any element is absent process will remain incomplete (Palati, 2014). Farmers are users of media and interpersonal communication sources to meet their needs in farming.

Agriculture and agricultural productions are important for the development of a country. Agricultural production has been a very important

component of human life since ancient times. Agricultural activities play a direct role in development (World Bank, 1999). The use of mass media and interpersonal channels can increase agricultural production. We can say categorically that the proper use of communication either mass media or interpersonal channels can have a positive impact on agricultural production. JQje's use of information sources to get proper and sufficient information is very important to enhance agricultural production.

In modern society farmers are living in a time where media is available everywhere, no doubt we are living in an information society where every aspect of human life is dependent on the use of communication to get information. Without proper information, humans cannot sustain themselves in society. Information and communication are very essential for the interaction and existence of humans. Information is the elementary need for human beings after air, water, food and shelter (Arnold Picot, 2008).

Farmers Need Information

According to Campbell (1992), the agricultural community need knowledge in order to make meaningful and productive use of productive factors such as land, labour, and capital resources. Of course, information is critical in agricultural output. Farmers want knowledge if they can obtain it about technology, climate, and weather difficulties through media and interpersonal channels in order to obtain the best seeds for their crops. This information is being used solely to provide them with basic facts that will better prepare them for their aims. (Brown & Collins, 1978).

One of the most significant and effective ways to obtain information is through the use of mass media and interpersonal channels. Farmers utilise an average of 6.2 hours of media per week to cover their information needs, while almost 25% of farmers use an additional 10 hours of media per week. (Harris 2005).

Thus, information needs are as important as basic needs in life (Herrman, 2010). Farmers use mass media and interpersonal sources of communication to seek relevant information.

The use of communication for agriculture by farmers has a remarkable influence in many ways.

- I. It is helpful to inform farmers about important decisions about their land, labour, seed and management. Finally, these important decisions impact agricultural production.
- II. Agricultural production can possibly be improved through useful relevant and reliable information.

The right information comes from the right use of reliable sources of information. The mass media such as television radio and agricultural magazines and interpersonal channels are reliable sources of communication to get the right information.

For agricultural development and to increase agricultural production farmers can use many mediums to get information but the two-important media used by the farmers are the following:

- i. The use of social media
- ii. The use of interpersonal channels

While talking about the use of social media there are a lot of media that come under the category of social media such as Facebook, Youtube, WhatsApp, internet, mobile phones, blogs etc., but the most conventional and easily available social media are Youtube and Facebook.

The media (both social and technological) are extremely helpful and significant methods of quick contact with the majority of people. In general, mass media outlets are the most efficient and effective way of informing the public (Rogers E. M., Diffusion of Innovation, 2003). When mass media and interpersonal channels operate together, they are extremely successful. Print media, particularly agricultural publications, is an essential instrument in the media arsenal. Print media may be utilised efficiently because of various qualities such as diverse forms, durability, wide and deep coverage, material selection, affordability, and portability, and they can be used anytime, anywhere without the need for extra tools. can leave. The print medium is well-suited to disseminating agricultural information to farmers. The development and distribution of printed materials aid in the transfer of new information and technology to farmers.

Whereas interpersonal sources used by farmers are of two types.

1. Cosmopolite

2. Locality

Personal cosmopolite channels may be categorized as communication with extension agents or change agents, farm input supply personnel, and persons from other villages.

Personal locality channels may include communication with neighbours and friends, family members, etc.

Use of Social-media and Socio-economic Characteristics of Farmers

The flow of agricultural information will always remain the most important aspect of the development in the field of agriculture. There are several types of media channels available with a wide range of information. Although communication channels and sources are rapidly changing with the passage of time, still mass media in different forms is mostly the preferred source of information for farmers especially in developing countries where agriculture is still based on traditional methods of farming. Mass media usage patterns can be in various forms influenced by variations in the socio-economic characteristics of farmers.

A study shows that Radio and print media are the most used and preferred media in rural farming communities. Major socio-economic factors that are influential are low literacy rates, small land size and limited experience in agriculture. Whereas younger farmers reported that they mostly prefer television (Singh, 2014).

Mass media is a major source of information for farmers. Ali (2011) studied the use of mass media by vegetable growers and their adoption behaviour. Study shows that several socioeconomic characteristics influence the use of mass media by farmers. These are age, education, income, land size, and experience. Most of the active mass media users were young, more educated, with higher income, more land size and experience. This study shows a positive relationship between the use of mass media and the socioeconomic characteristics of farmers.

Gender is an important determinant in using mass media by farmers. Research has shown that agriculture is a male dominant sector. Nenna (2019) Concluded that the majority 77% of farmers were males and all farmers use mass media for information. Several socioeconomic

characteristics play an influential role in the selection of media to use. Between some variables age, education, income, and land size, the experience revealed a strong positive relationship with the use of mass media by farmers. More educated and higher-income farmers were very active users of mass media mainly to seek agriculture-related information.

Comparison Between the Use of Mass Media and Interpersonal * Communication Channels

Research studies are consistent in reporting the use of mass media and interpersonal channels for agricultural information by farmers. Some research studies have indicated that mass media are mostly used sources of information but many Studies have indicated that interpersonal channels are mostly used and preferred sources of information in the agriculture sector. It is evident that farmers use several sources to get information.

The use of information in terms of the adoption of new practices or ideas at any stage of farming can be seen as the diffusion of innovation stages. Mass media are best at the awareness stage, whereas interpersonal communication channels are best at the adoption stage of a new idea in farming because, at the stage of adoption, farmers want to know about the advantages and disadvantages of innovation. In diffusion of innovation, Rogers supported mass media as a more accurate source of information as compared to interpersonal channels because there are very rare chances of the distortion of information in mass media as compared to interpersonal sources (Rogers E. M., Diffusion of Innovation, 2003)

This, therefore tend to further widen the information gap among the users. Several variables especially income also play a decisive role to widen this gap of information among different social groups.

Emmanuel (2014) His study of rural agricultural communities in Nigeria discovered that, while farmers utilise mainstream media to assess data, it is obvious that mutual channels are regularly used and favoured by farmers. Mutual channels were discovered to be more available, accessible, and utilised by farmers in Nigeria than the media in general to obtain information on better farm technology.

The most often available, accessible, and used mutual channels are relatives, friends, and neighbours. Despite being regarded as the most desired communication medium, extension agents were not easily available and were used by farmers. This study demonstrates farmers' limited usage of media to gather farm information.

Farmers' sources of agricultural knowledge have revealed that interactions are the most common way for them to get agricultural information. According to research data, 88.10 per cent of farmers regarded extension agents and officers as an important and trustworthy source of information, followed by fellow farmers, radio, and television (Opera, 2008). - Extension agents were favoured by the majority of farmers above other sources of information, particularly the media.

The above discussion indicates that a wide range and a huge variety of information are available to farmers. Research studies have revealed that interpersonal channels are mostly used by farmers to get agricultural information. Although the choice of mass media is also available to farmers some features make interpersonal channels mostly used sources of information. These features of interpersonal channels are reliability, availability, and accessibility.

Research Methodology

The methodology is an essential component of every scientific study. Adopting a suitable approach necessitates much thought and effort in developing methods and processes for doing scientific research in accordance with the research topic at hand. The procedure's ultimate purpose should be to allow the researcher to collect accurate and trustworthy data and then evaluate it in order to achieve an accurate and reliable conclusion. Using a quantitative technique, the following study seeks to discover the relationship between farmers' usage of mass media and interpersonal channels in Faisalabad. This chapter describes in full the methodology and processes employed in this investigation.

Faisalabad has very fertile land for Agriculture. District Faisalabad of the Province of Punjab was selected as the study area. There are 4 tehsils in Faisalabad.

These tehsils constituted the locale of the

study. District Faisalabad is diverse in terms of socioeconomic, politics, heritage, culture and land.

Agricultural Profile of Selected Tehsils

Faisalabad

Faisalabad is the main tehsil of district Faisalabad. It has fertile land for agricultural production. The main crops in Faisalabad are Wheat, Sugarcane and Rice. In Faisalabad, the summer season is long, humid, and mostly clear and here winters are short, cool, and foggy-

Tandilianwala

This tehsil is a very big tehsil in the district. Sugarcane and Rice are the main crops in this area. The climate conditions in Tandlianwala are so much suitable for Agriculture. The maximum temperature reaches 47-49 degrees Centigrade in the peaks of summer. The climate in winter is also suitable for Agriculture it is very dry and cold. Wind and storms are quite common during the summer. The average rainfall in the district is 119 mm.

Jarawala

Jarawala is the largest tehsil of Faisalabad. It has very fertile land. Sugarcane and Rice are the main crops of this tehsil.

Sumandri

Sumandri Tehsil has a climate of hot summers and cold winters. The higher altitude makes it dry in winter and has low rainfall as compared to other parts of Punjab. Sugarcane is the main cash crop of this tehsil.

The Population of the Study

The researcher requested the Agricultural Extension Officer (AEO) of the mentioned tehsils to provide data on the farmers. An up-to-date list of all the farmers of the selected tehsils was collected from the Agricultural Extension Officer (AEO). The researcher ordered the taken lists and uploaded the lists to a computer to make random sampling possible as the researcher adopted the random sampling technique for the current research.

Data Collection Method

The data collection method is defined as the method adopted by the researcher to collect relevant data in a particular type of research. In the present study data collection was done with the help of a survey.

Survey

A questionnaire was used to collect data for the study. Farmers' data was gathered by the researcher himself. Every attempt was made to explain the procedure for the aim of the research to the responder so that accurate and relevant reliable information could be acquired from them.

The researcher collected data by conducting a door-to-door survey. People were told ahead of time so that they could be at their houses on time. The researcher developed a fair mutual understanding with the respondents when distributing the questionnaire so that they do not feel hesitant or ashamed to submit the proper responses to the questionnaire in the schedule. Respondents were segregated from other farmers as much as possible while filling out the questionnaire so that appropriate respondents could be given to avoid the influence of others. Farmers who couldn't read or write received enough assistance.

Socio-demographic Characteristics of Farmers

Tehsil

The tehsil is the place of living, the place or area where farmers live. It can be said as the residence of farmers and the area where they cultivate. These characteristics may have a profound impact on the use of social media and interpersonal channels by farmers in Faisalabad.

Age

Five characteristics of farmers were chosen as independent variables in this study. Age, education, agricultural experience, farm size, and annual revenue were all factors.

Education

Education was measured in terms of years of schooling completed by an individual in educational institutions. The person who could

sign only was considered educated.

Agricultural status

By agriculture status, the researcher meant the ownership of the land as reported by the respondent. Whether they have their land to cultivate or they are cultivating other's land on some agreement.

Land size

The researcher considered land size as the demographic feature because it was important to judge their financial worth.

Annual Family Income

On the basis of his total yearly income, the respondent's annual income was measured in rupees from agricultural and non-agricultural sources. Crops, vegetables, fruits, animals, fish, poultry, and other agricultural products provided revenue. Non-agricultural sources of income for respondents or other members of their families included service, business, and wage labour, as well as other types of income.

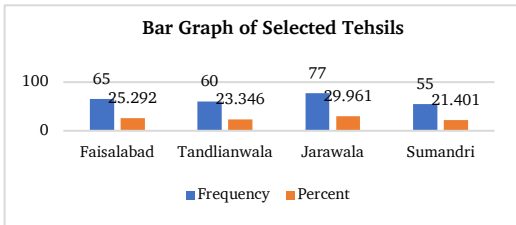
Results and Discussion

This chapter contains the findings and discussions of the research problem, as stated in the objectives of the research. This chapter aims to describe major findings and data in a cohesive and logical pattern. Different types of graphs and charts will be used to represent data. For ease, this chapter has been divided into four parts.

- The first part is related to the selected individual socio-demographic characteristics of farmers, in other words, it is about demography.
- The second part deals with the association between Socio-demographic features along with the use of Social-media and Interpersonal channels by farmers in Punjab.
- Finally, the third and last part deals with comparative statistics between the Use of Social-media and Interpersonal channels. As this is a comparative study thus descriptive statistics will be a dominant portion of this chapter.

Tehsils

Graph 1



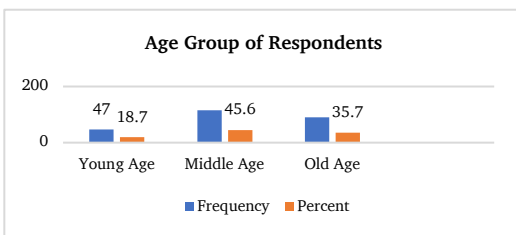
The distribution of farmers according to their respective tehsils has a fundamental significance in Agriculture. Here according to this research problem, tehsils of farmers can be redefined as the area of land where farmers cultivate their crops. Echo-agriculturally every tehsil has its own significance from data it can be seen that 65(25%) of the respondents belong to tehsil Faisalabad. 60(23%) respondents were from Tehsil Tandlianwala. The third tehsil was Jarawala 77(30%) respondents were residents of Jarawala. The fourth and last Tehsil was Sumandri 55(21%) Respondents were from Sumandri.

Age

The age of an individual is recognized to have a straight bearing upon his attitude towards perceiving and attempting the ideas or the things that happen to come into the range of his experience.

Graph 2

Three-Dimensional Bar Graph of the Age Group



The ages of farmers were measured in terms of the number of years in their life. The distribution of farmers' ages is shown in the graph. The result presented above showed that 115(45%) were middle age farmers in the study. Old-aged farmers were 90 (35%). The number of young farmers was less it was only 47(18%). This is concluded from the graph that the study leads to an understanding that the farming community and use of media

would be related more by the middle-aged group, followed by old age and then young age.

Education

The education of farmers was calculated in terms of years of school going. It was further divided into levels of education. The distribution of farmers as per their educational level is shown in the graph.

Graph 3

Three-Dimensional Bar Graph of Education Level

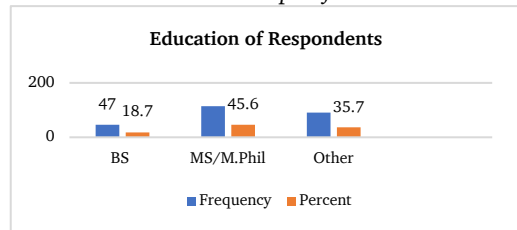


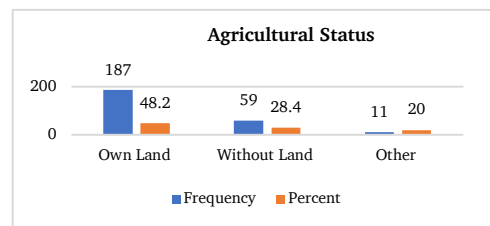
Table 5, shows a higher proportion of 79(31%) farmers were primary pass; On the other hand, it shows that 73(29%) of the farmer were middle and above. This is a satisfactory number that the majority of farmers were educated. 41(16%) of farmers said that they were never been to school but some of them said that they used to go to Madrassas (religious schools) in their early ages. 59(23%) said that they can only sign.

Agricultural Status

Agricultural status was one of the most important variables in the study. This was measured in terms of the possession of agricultural land.

Graph 4

Three-Dimensional Bar Graph of Agricultural Status



Statistics in the graph show that the majority of 187(74%) farmers have their own land; whereas 59(23%) said that they don't have their own land. The category of others is defined as farmers who

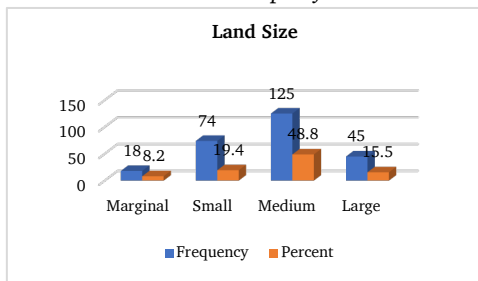
don't have their land but work on others' land on daily wages, their proportion is 6(2.4%). From this graph, it was concluded that the phenomena of using social media and interpersonal channels by the farming community would be led by the group of farmers holding their own land followed by the group of farmers without their own land.

Land Size

The size of land used by farmers was measured in terms of the size of cultivatable land. It was categorized into four types as shown in the graph. Information in Figure 14 concludes that the majority of 123(48%) of the farmers have medium-sized land followed by a small size of landholders which is JZd (29%). Whereas 39(15%) of farmers owned large sizes of land and only 16(6%) owned marginal land size. From this data, it was concluded that the Usage of media would be led by a group of farmers that has medium-sized land, followed by small-sized farmers.

Graph 5

Three-Dimensional Bar Graph of the Land Size

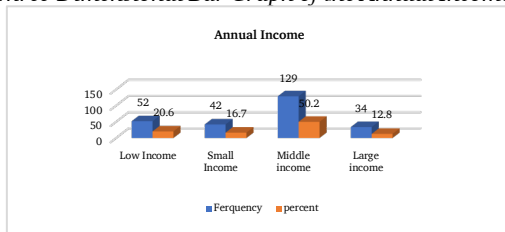


Annual Income

Annual income refers to the total amount of money that an individual farmer earns within a year. This was estimated as reported by farmers and was categorized as shown in the graph below.

Graph 6

Three-Dimensional Bar Graph of the Annual Income



Results presented in the graph show a clear variation among the farmers according to their annual income. The majority 124(49%) of them have middle income. This is followed by low 52(20%), small 42(16%), and large 34 (13%), respectively.

From the above data, it was established that the Usage of social media and interpersonal channels by farmers would be led by the group of middle-sized income of farmers which share a higher proportion, followed by lower-sized income farmers and small-sized farmers.

Uses and Gratification

Implications of Study

The findings of this study are helpful for media practitioners, policymakers, and future researchers. This study has focused on two types of media, Social-media, and Interpersonal media channels.

With the help of this study, these media workers and officials can assess the Usage pattern of social media by farmers, and they can better launch their policies for maximum outcomes. Whereas other types of media studied here were Interpersonal channels. The results of this study are helpful for the Agriculture Department to better train their staff, and team to establish an effective interpersonal link with farmers.

Recommendations

Based on the results and conclusions of this research study the part of recommendations have been divided into two portions.

Recommendations for policymakers

To encourage the adoption of the latest farm technologies and practices information delivery is as much important as the latest improved farm practices. Thus it is an urgent need to develop a sound and efficient system of social media such as Facebook, YouTube and WhatsApp.

It is also recommended that policymakers must give proper attention to developing accurate and valid forums to disseminate agricultural information on social media. It was found in research that although farmers use social media this information is not always valid and reliable. There is the fragmentation of forums, groups, and

pages in social media but there is a need for reliable and valid forums from the side of the agriculture department.

The Department of Agricultural Extension should pay more attention to encouraging farmers for using social media and Interpersonal channels for timely and valid information. This can be done in two ways

- i. Agricultural Extension should cooperate with the Directorate of Agricultural Information with its full passion.
- ii. It is recommended that the Extension department should also enhance its extension services. As it was found that the majority of farmers use interpersonal channels and if these channels are provided by extension offices this can be more fruitful and reliable for farm practices.
 - The research extension system should become more demand-driven and accountable for solving the farmers' farming-related problems. There is a need for close communication between farmers, extension officials, and the research wing in diagnosing the problems of farmers.
 - In this digital age creating an understanding of ICT, potentials are very important as it is much related to both types of communication that is social-media and interpersonal. For this ICT uses skill and capacity development.
 - among the extension personnel and also among farmers will definitely benefit communication networks.
 - It is also recommended that the government should pay attention to developing agricultural YouTube channels. This can help to disseminate large amounts of information to farmers more rapidly on a daily basis.
 - It is a fact that education can play a more important role in the development of Agriculture. Thus the government should take necessary actions to increase the literacy rate in rural areas, especially

where farming is the only profession.

Opportunities for Future Research

As this research study was an education project and it has many limitations thus following recommendations were made for future study.

This research study was limited to only one district of Pakistan so this research cannot show the exact picture of mass media and interpersonal usage patterns among the farming community. Thus similar research projects may be conducted in other palaces of Punjab while considering socio-demographic, geographical, and agroecological variables to find more valid results. The research was limited in finding the relationship with only six socio-demographic variables but there may be many more other variables that must be included in other studies.

The research was also limited to a few social-media and few interpersonal channels but there are many thus other researchers must include other types of mass media and interpersonal channels in their studies.

Limitations of the Study

There are always some limitations to every research study. Limitations of this research are described here.

1. In this research study population is common farmers, and data was collected from farmers according to some specific traits of farmers.
2. The reliability of data depends upon the understanding of respondents and their interests.
3. This research was limited only to four tehsils of Faisalabad.
4. This study was also Faisalabad based, thus it can only be viewed within the socio-economic, geographical, and cultural frame of Faisalabad.

Furthermore, the study was limited to 300 respondents for data collection and finally, data was collected from 252 respondents with a response rate of 84%.

References

- Chacharr, A. R., Osmaan, M. N., Omar, S. Z., & Soomro, B. (2012). Impact of Satellite television on agricultural development. *Global Media Journal, Malaysian Edition*, 2(2).
- Kharmudai, A., Devarani, L., Pandey, D.K., Singh, R., & Singh, R.J. (2018). Communication Behaviour of Farmers Registered Under E Scheme. *Indian Res. J. Ext. Edu*, 18(3) 1-5. <https://seea.org.in/uploads/pdf/2018-57-1-5.pdf>
- Aderibige, A. (1990). An evaluation of the efforts of communication patterns on the adoption of HTA research programs. IITA Research Programs. Ibadan, Nigeria: Department of Communication and Language Arts University.
- Adhikari, P. (2014). Usage of Mass Media by Farmers in Sri Lanka. *Developing Country Studies*, 4(4), 1. <https://iiste.org/Journals/index.php/DCS/article/view/11098>
- Agricultural Information Department. (2019). Agriculture Department. Retrieved from Directorate of Agricultural Information Punjab <http://dai.agripunjab.gov.pk/>
- Agriculture Department, Punjab Government. (2019). Punjab Agriculture Profile. Lahore.
- Agri-Punjab (2019, June 10). Overview. Retrieved March 3, 2020, from Agri- Punjab: www.agripunjab.gov.pk
- Akshaya Kumar K. S., & Dr.Vijayakumar, K. P. (2017, December). Role of Mass Media IN Dissimilating Agricultural Information to Farmers of Kerala. *International Journal of Information Movement*, 2(VIII), 44-51. <https://www.ijim.in/2017/12/31/paper-9-role-of-mass-media-in-disseminating-agricultural-information-to-farmers-of-nedumangad-block-in-kerala/>
- Ali, J. (2011). Adoption of Mass Media Information for Decision-Making Among Vegetable Growers in Uttar Pradesh. 66(2), 1-14. <https://doi.org/10.22004/ag.econ.204748>
- Amir khatam, S. M. (2013). Communication of Agriculture information through group contact methods in Pakistan. *Pakistan Journal of Agriculture*, 26(3), 245-253.
- Amusat, O. (2018). Media use pattern of fish farmers in Oluyole local Government area Oyo state Nigeria. *International Journal of Advance Agriculture Research*, 47-54. http://www.bluepenjournals.org/ijaar/pdf/2018/April/Amusat_and_Oyedokun.pdf
- Ani, A. (2015). Utilization of Mass Media Among Farmers in Ikwere local and their awareness and adoption of short agricultural messages telecast on Television. *Intimation Journal of Advance Research in Biological Sciences*,
- Ani, A. U. (2015, July). Utilization of Mass Media by Farmers in Nigeria. *Journal of Agriculture and Vetemery Science*, 8(7), 41-47.
- Picot, A., Reichwald, R., & Wigand, R. (2008). *Information, Organization and Management*. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-71395-1>
- Arnold Piet, R. R. (2008). *Information, Organization and Management*. Berlin: Springer.
- Bachhav, N. (2012). Information Needs of the Rural Farmers: A Study from Maharashtra, India: A Survey. *Library Philosophy and Practice (E-Journal)*. https://digitalcommons.unl.edu/libphilprac/866?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F866&utm_medium=PDF&utm_campaign=PDFCoverPages
- Balamurugan, V. (2015). Learning Experience of Small Farmers in Sugarcane Cultivation. *Journal of Extension Education*, 27(1), 5379-5381. <https://www.extensioneducation.org/index.php/jee/article/view/31>
- Ban, A. W. van den. (1981). *Interpersonal communication and the diffusion of innovations*. Research.wur.nl. <https://research.wur.nl/en/publications/in-terpersonal-communication-and-the-diffusion-of-innovations>
- Choudhury, P. (2011). MEDIA IN DEVELOPMENT COMMUNICATION. *Commentary Global Media Journal -Indian Edition*, 2(2). <https://www.caluniv.ac.in/global-media-journal/Winter%20Issue%20December%202011%20Commentaries/C-5%20Sen%20Choudhury.pdf>
- Soylu, D., Cevher, N., Schirone, M., & Medeni, T. (2016). A COMPARATIVE STUDY OF INFORMATION-SEEKING BEHAVIOR AND DIGITAL INFORMATION NEEDS OF FARMERS IN TURKEY AND SWEDEN. *Online) INTERNATIONAL JOURNAL OF EBUSINESS and EGOVERNMENT STUDIES*, 8(2), 2146-0744. https://sobiad.org/eJOURNALS/journal_IJ

- [EBEG/arhievs/2016_1-2/DemetSoylu.pdf](#)
Devaraj, D., Kumar, S. M., Kumari, S. U., & Machendranath, D. (2019). A Study on the Usage of Mass Media Information Communication Technology among the Farming Community of Mandya District, Karnataka State, India. *Qualitative and Quantitative Methods in Libraries*, 6(3), 423–432.
<http://www.qqml.net/index.php/qqml/article/view/419>
- Finance Ministry. (2018-2019). *Economic Survey of Pakistan*. Islamabad: Finance Ministry.
- Ngwira, F., & Majawa, F. (n.d.). *DISSEMINATING AGRICULTURAL INFORMATION SERVICES TO FARMERS FOR ATTAINING FOOD SECURITY IN ZOMBWE EXTENSION PLANNING AREAS (EPA) MZUZU AGRICULTURAL DEVELOPMENT DIVISION (MZADD) MZIMBA, MALAWI*. Retrieved July 17, 2023, from https://www.scecsal.org/publications/papers2018/037_ngwira_2018.pdf
- Food and Agriculture Organization of United States. (2009). *FAO Representation Pakistan*. Islamabad: FAO.
<https://www.fao.org/pakistan/en/>
- Donohue, G. A., Tichenor, P. J., & Olien, C. N. (1975). Mass Media and the Knowledge Gap. *Communication Research*, 2(1), 3–23.
<https://doi.org/10.1177/00936502750020101>
- Gachuhi, L. (2020). *SME's Agribusiness Challenges & Solutions in Africa*. Nairobi, Kenya: Exceller Books.
- Ganlire, B. (2007, October). The observation and experiment of Field dependence, Field independence based on R and T users. Behavioural of information searching. *Journal of Canadian Social Science*, 3(5), 58–65.
- Griffin, E. (2012). *A first look at communication theory*. New York: Me Grawhill.
- Mwololo, H., Nzuma, J., & Ritho, C. (2019). Do farmers' socio-economic characteristics influence their preference for agricultural extension methods? *Development in Practice*, 29(7), 844–853.
<https://doi.org/10.1080/09614524.2019.1638344>
- Nicholas, D., & Herman, E. (2010). *Assessing Information Needs in the Age of the Digital Consumer*.
<https://doi.org/10.4324/9780203855799>
- Hornik, R. (2006). Personal Influence and the Effects of the National Youth Anti-Drug Media Campaign. *The ANNALS of the American Academy of Political and Social Science*, 608(1), 282–300.
<https://doi.org/10.1177/0002716206291972>
- Information and facts of Punjab. (2018, *Districts of Punjab Information*): <http://www.pakistaninformation.com/punjab/district.html>
- Balnaves, M., Donald, S., & Shoosmith, B. (2008). *Media Theories and Approaches*. Palgrave MacMillan.
- Masrur, A., Khan, P., & Akhtar. (n.d.). INTERPERSONAL COMMUNICATION AND DIFFUSION OF INNOVATION IN THE AGRICULTURAL SECTOR OF PAKISTAN. *Journal of Development Communication*, 30(1). Retrieved July 17, 2023, from <https://jdc.journals.unisel.edu.my/index.php/jdc/article/download/135/112>
- Egwoke, F., Edna, M. N. C., Anaeto, F. C., & Nagozi e, E. O. (2009). Socioeconomic Factors Affecting Farmers' Use of Mass Media. *Nigerian Journal of Rural Sociology*, 9(1), 155–160.
- McAlister, A. (2000). *Handbook of Community Psychology*. New York: University of Texas.
- Hassan, M., Azril, H., Shaffril, M., Sham, M., Ali, S., & Ramli, S. (2019). Agriculture agency, mass media and farmers: A combination for creating knowledgeable agriculture community. *African Journal of Agricultural Economics and Rural Development*, 7(5), 1–014.
<https://www.internationalscholarsjournals.com/articles/agriculture-agency-mass-media-and-farmers-a-combination-for-creating-knowledgeable-agriculture-community.pdf>
- Awili, M. A., White, P., & Kimotho, D. S. (2016). Factors That Influence Effective Communication of Agricultural Information among Farmers – The Case of Farmers in South West Kisumu Ward, Kisumu County. *Journal of Developing Country Studies*, 1(1), 1–20.
<https://www.iprib.org/journals/index.php/JDCS/article/view/21/64>
- Mgbakor, M., & Okezie, U. (2013). Contributions of Mass Media to the Development of Agricultural Extension in

- Ika North East L.G.A of Delta State, Nigeria. *Academic Journal of Plant Sciences*, 6(3), 127–133.
<https://doi.org/10.5829/idosi.ajps.2013.6.3.1113>
- Nwalieji, H. U., Ezeakunne, C. C., Enwelu, I. A., Okeke, M. N., Udemezue, J. C., & Uzuegbunam, C. O. (2019). Mass media utilization by poultry farmers in Anambra State, Nigeria. *Journal of Agricultural Extension*, 23(2), 1.
<https://doi.org/10.4314/jae.v23i2.1>
- Nazari, M. (n.d.). *IMPACT OF TELEVISION ON RURAL DEVELOPMENT*. Retrieved July 17, 2023, from [https://eprints.um.edu.my/3342/1/IMPACT OF TELEVISION ON RURAL.pdf](https://eprints.um.edu.my/3342/1/IMPACT_OF_TELEVISION_ON_RURAL.pdf)
- Okwu, O., & Umoru, B. (2019). A study of women farmers' agricultural information needs and accessibility: A case study of Apa Local Government Area of Benue State, Nigeria. *International Journal of Agricultural Extension and Rural Development*, 7(7), 1-007.
<https://www.internationalscholarsjournals.com/articles/a-study-of-women-farmers-agricultural-information-needs-and-accessibility-a-case-study-of-apa-local-government-area-of-b.pdf>
- Oo, N. (2013). Assessment of mass media contributions to agricultural technology adoption in Owerri Agricultural Zone of Imo State, Nigeria. *Global Advanced Research Journal of Management and Business Studies*, 2(7), 389–394.
<http://beta.garj.org/garjmbms/pdf/2013/July/Nwankwo%20and%20Orji.pdf>
- Tijjani Abu Rimi, A. J. (2015, March). Sources of agricultural information used by Cowpea farmers in Rimi Local Government Area of Katsina State. *Journal of Agricultural and Crop Research*, 3(2), 21-26.
- Turow, J. (2011). *Media Today, An Introduction to Mass Communication* (4th ed.). New York: Routledge.
- Khalique, M., Madu, U. A., & Umar, M. H. (2012). Farmers' media use pattern in Adamawa state, Nigeria. *International Journal of Academic Research in Bussiness and Social Sciences*, 2(1), 167-174.
- Van Derwarker, M. A. (2006). *Farming, Hunting and Fishing in the Olmec World*. Texas: University of Texas Press.
- VanDerwarker, A. M. (2006). *Farming, Hunting, and Fishing in the Olmec World*. Texas: The University of Texas Press.
- Volo, J. M. (2006). *Family Life in 17th and 18th Century America*. London: Greenwood Press.
- Volti, Rudi. (2008). *An Introduction to Sociology of Works and Occupations*. London: Sage.
- Severin, W. J., & Tankard, J. W. (2001). *Communication theories: origins, methods, and uses in the mass media*. Addison Wesley Longman.
- Faruqee, R. (1999). *Strategic Reforms for Agricultural Growth in Pakistan Public Disclosure Authorized Public Disclosure Authorized Public Disclosure Authorized*.
<https://documents1.worldbank.org/curated/ft/205781468780276574/pdf/multi-page.pdf>
- Zumalt, J. R. (2007). Identifying the core periodical literature of the agricultural communications documentation center. *Journal of Agricultural & Food Information*, 8(3), 43-63. https://doi.org/10.1300/j108v08n03_05