

Utilization of Agricultural Extension Communication Media: Utilization as a Communication for Millennial Farmer Development in the Special Region of Yogyakarta (DIY)

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Abstract: Advances in communication media make it easier for users to get access to the desired information. The development of this progress also has an impact on the information society, especially millennial farmers. They use information media to develop food agriculture, livestock and horticultural crops as their business. Even though they are familiar with using information media in their search for information, they still rely on information from agricultural extension workers. Agricultural extension workers from the Special Region of Yogyakarta (DIY) are very supportive of millennial farmers, it is proven in a short time that they have succeeded in inviting as many as a thousand millennial farmers to join. The purpose of this study is to see how the use of communication media, agricultural extension workers as communication for the development of millennial farmers in DIY. The informants of this research came from agricultural extension workers and millennial farmers from Kulonprogo Regency, Bantul Regency, Sleman Regency, Bantul Regency and Yogyakarta City. Data collection techniques in this study using observation, interviews, and documentation. The data analysis technique was carried out in a qualitative descriptive manner. The results show that the use of communication media by agricultural extension workers is related to coordination with millennial farmers to be effective.

Keywords: Extension, Millennial Farmers, DIY, and Communication Media

I. INTRODUCTION

Millennial farmers are part of the information society, they change society's order by using communication media. Millennial farmers seek information from articles on the internet, videos on Youtube, posts on social media. Millennial farmers are development agents, where they use communication media and are part of the information society. The information society is a society that makes information as something that has economic and strategic value (Savira, et al., 2020). In the competitive information era, the requirements for mastery of information are very important for the community (Damanik, 2012).

George (2004) reported an increase and use of information, in the information society related to quality of life, prospects for social change and economic development. These is relates to

the standard of living, patterns of work, pleasure, the education system, and goods affected by the increase in information. Millennial farmers and development are very interesting to discuss, because they play an active role in development or agents of change and social control that drives social change (Isbah and Iyan, (2016). Development is a planned change process and is a sustainable, continuous activity, and has stages, namely; more advanced and better levels. Iqbal and Sudaryanto, (2008) defined agricultural development as a process of social change. Where its application is shown to improve the welfare status of farmers and develop potential economic/ally, social/ly, politically, culturally, environmentally, as well as improvement, growth and change.

Silaban and Sugiharto, (2016) concurred that agricultural development is oriented towards technology, and it is an absolute requirement. There needs to be an increase for the millennial generation to be willing to go directly to the agricultural sector. In order for the younger generation or millennial generation to want and like the world of agriculture, it is necessary to increase the need for special character development for millennial farmers (Supriyati, 2016). The millennial generation plays an important role in changes in the information society, because agriculture in Indonesia is experiencing an aging period.

According to Salamah et al (2021) the existence of a changing demographic structure in Indonesia is a problem in the agricultural sector. This makes Indonesia need productive farmers to be able to maximize food production (Arvianti et al., 2019). The agricultural sector plays a very strategic role in the structure of national economic development, and quality human resources in agriculture are the foundation for the development of the agricultural sector (Susilowati, 2016). The development of time and technology has shifted the role of farmers, formerly farmers who were more than 39 years old, produced less than optimal agricultural products.

Agricultural development in 2019 underwent a very significant change, where millennial farmers were born. These millennial

farmers were formed because there were new thoughts by the younger generation. Millennial farmers, who are dominated by the younger generation, are very attractive because they use technology when they work in agriculture. Millennial farmers have a significant difference with mainstay farmers or farmers over 39 years of age. Millennial farmers are oriented to the use of agricultural technology and information technology. They use information technology to obtain information, learn agricultural techniques, distribution of agricultural products or marketing (Tutiasri et al., 2022) .

They create networks between farmers to share and exchange information about agriculture. Some farmers seek knowledge about agriculture and animal husbandry using scientific journals, which are searched on the internet. They filter the information they get, whether the information is true or false, as well as whether the knowledge they get can be applied, given the climate and soil levels that vary by region. Although there is a lot of information about food agriculture, animal husbandry and horticultural crops on the Internet, they still need assistance from agricultural extension workers (Tutiasri et al., 2021)

These farmers are a combination of young farmers with ages, 19-39 years, where they are members of a group that is fostered by the agricultural service (Savira et al., 2020) . Their membership is recognized and recorded through a decree, which makes them members of millennial farmers' group. They are divided into two levels, namely; millennial farmers who are beginners , and farmers who are advanced. Farmers who have developed they are made ambassadors for farmers, where they help foster millennial farmers with extension workers. Millennial farmers in the Special Region of Yogyakarta (DIY) are very interesting to study, even though the area of DIY is not so wide but, is able to combine a thousand millennial farmers.

These millennial farmers cannot be separated from the guidance and direction of agricultural extension workers. Based on the results of research conducted by (Tutiasri et al., 2022) millennial farmers still rely on information from agricultural extension workers. The changing times and technological developments have made agricultural extension workers in DIY also make changes. They use internet-based communication tools to communicate. Although millennial farmers are already familiar with technology, the role of agricultural extension workers is still needed, this is what makes researchers interested in researching how to use communication media by agricultural extension workers as communication for the development of millennial farmers in the Special Region of Yogyakarta (DIY).

II. LITERATURE REVIEW

Agricultural Extension

In the process of transferring information and technology in the agricultural sector, agricultural extension workers are needed as the main link. (Putri and safitri, (2018) An important factor in increasing agricultural production and also

agricultural development is influenced by the role of agricultural extension workers. Makmur et al., (2019) opined that the role and task of agricultural extension workers is very heavy, namely empowering farmers to increase productivity to the maximum. Extension institutions function as a bridge to provide information on science and technology needed by users (Susko et al., 2013). Extension workers have an important role related to the dissemination of information and the ability to resolve or provide solutions when there is an impact (Humaedah et al., 2016).

Agricultural extension workers have two goals, namely: short-term and long-term goals. The short-term goal is to provide changes in knowledge, attitude skills and change the nature of farmers to be active and dynamic, while the long-term goal of agricultural extension workers is to improve the standard of living or welfare of farmers for the better (Kartasapoetra, 1994). In today's era of advanced information technology, the task of agricultural extension workers is not only one direction but also undergoes dynamic changes following changes in era and policy. The policy change in the current era is to motivate farmers to be more rational in developing agricultural businesses based on their capabilities and market potential (Abdullah et al., 2021). Lontoh et al., (2022) from their research stated that extension workers have several very important roles in the development of farmer groups and farmers, namely as organizers and dynamists, and technical trainers.

Development Communication Development

Agriculture is a business that will never stop, and must always be needed, where all humans in the world need the results of agriculture. Agriculture is a very important sector in the development process. Tambunan, (2003) revealed that there are 4 factors why agriculture is important in development:

1. Agriculture produces products needed by the industrial sector.
2. Indonesia as an agricultural country makes agriculture a sector that is very at the stage of the economic development process, namely ensuring food security.
3. Agriculture becomes the provider of production factors, where there is a structural transformation from the agricultural sector to industry.
4. The agricultural sector affects the ideal development process, which is able to produce products for export and import substitutes.

Modern agricultural development is a series of changes, increasing capacity, quality, professionalism and productivity of agricultural workers, making modern agricultural development (Lestari, 2020). The concept of development has changed, namely emphasizing on empowerment or human development, local resource-based development and institutional development. The role of communication in rural development is convergent development communication, where farmers get information and agricultural technology

that supports them to be more advanced (Rangkuti, 2010).

Millennial Farmer

Millennial farmers grow, develop, and it cannot be separated from the support of the government which actively provides support for these young generation of farmers. (Nugroho and Waluyati, 2018) stated that the more active the government is in providing incentives and training in agriculture, the more young people will be interested in activities in the agricultural sector. According to (Supriyati, (2016) efforts to increase the interest of the younger generation in the field of agriculture can be done through the development of a strong character of the young generation and a love for agriculture through the distribution of incentive programs and equitably. In addition (Anwarudin, (2017) reports that government support can be felt by young farmers through entrepreneurship activities and technical training, internship facilities, venture capital assistance, and infrastructure facilities. An increase in the interest of the younger generation in agricultural activities can be done by increasing and strengthening the dynamics of farmer groups and that generation. Strengthening group dynamics can be done by patterns of counseling activities for the younger generation. Increasing the interest of the younger generation and strengthening the dynamics can be done through the development of social and environmental support to attract the interest of the younger generation in agricultural business activities (Junaedi et al 2020).

Social Exchange Theory

Social exchange theory discusses cultural transactions between individuals and individuals, and individuals within a group. The hallmark of exchange theory is the existence of costs and rewards, which are obtained from these interactions. If the sacrifice is not in accordance with the reward, it will have an impact on the social relations (Machmud, 2015). The value of the profits obtained minus the sacrifices made is the formula of the theory of social exchange. In assessing a relationship by means of calculating the totality of a relationship, namely the benefits obtained minus the sacrifices made (Monge et al., 2003).

Innovation Diffusion

Diffusion is a special form of communication related to the spread of messages in the form of new ideas or ideas (Nisrokha, 2020). (Rusdiana, 2014) observed that diffusion is related to messages conveying something new, and there is a risk for recipients, namely differences in behavior in the case of acceptance of innovation when compared to ordinary messages. The role of extension workers in conveying technological innovations, through the information shared, can at least change the behavior of farmers. Any changes will have an impact on increasing the standard of living of farmers, so that an increase in behavior will improve the quality and capacity of farmers (Supharman, 2020). Notoatmodjo (2007) pointed that behavior change follows the stages of the change process from knowledge, attitudes, and practices. The performance of the extension agent has a very important

influence on the of farmer groups through the extension activities carried out.

III. RESEARCH METHOD

On extension workers and millennial farmers in the Special Region of Yogyakarta. The informants came from agricultural extension workers and millennial farmers from Kulonprogo Regency, Bantul Regency, Sleman Regency, Bantul Regency and Yogyakarta City. In this study primary data were obtained through direct interviews using a list of questions, then secondary data obtained from the Center for Agricultural Human Resources Development at the Yogyakarta Agriculture and Food Security Service. The type of research that the author uses is a phenomenological approach, which seeks to reveal the reality and experiences experienced by individuals to find and understand something that can be seen from the individual's subjective experience. Therefore, the author cannot develop his assumptions in his research (Hasbiansyah, 2008). The phenomenological approach aims to describe the meaning of life experiences experienced by several individuals in relation to certain concepts or phenomena by examining the structure of human consciousness.

IV. RESULT AND DISCUSSION

The Importance of Agricultural Extension for Millennial Farmers

Millennial farmers, are farmers aged 19 to 39 years, they are who are motivated to build the country in agriculture. Farming is synonymous with hard work, heat, and does not make a lot of money. They are several stages more advanced than farmers with the age of over 39 years or so-called mainstay farmers. Millennial farmers get information on the world of agriculture: food crops, plantations, livestock to horticulture from utilizing information technology. Even though information technology about agriculture has helped farmers a lot, they still need agricultural extension workers.

Informant 1: Actually, we still need agricultural extension workers, because most of the farmers here use titen science or customs from year to year- all they use. Farmers here do not understand very well about the content of fertilizers and drugs, therefore there is a need for counseling.

Informant 3: Important, because the planting system is good

Informant 5: Very important, adds insight and knowledge about animal husbandry

Informant 6: Important because to study again.

Informant 10 : Important. Because to add insight for beginners and want to learn.

All millennial farmers interviewed answered that although they could seek information related to agriculture, they still needed agricultural extension workers. The presence of agricultural extension workers in their agricultural activities, provides support, provides additional insight, knowledge, is

able to guide novice farmers, so that their agricultural, plantation and livestock activities are successful. The extension workers provide information and assistance as a form of development in the field of modern agriculture. Lestari (2020) changes, increasing capacity, quality, professionalism, and productivity of agricultural workers are a series of changes from modern development. Some of the reasons millennial farmers still need extension workers are:

Informant 1: The existence of extension workers is very important, for example overcoming the problem of pests and diseases, because pests and diseases spread quickly from one field to another. Have to ask what is right, to the extension worker.

Makmur et al (2019) Extension workers have the task and role to empower farmers to be able to increase their productivity to the maximum. Even though millennials are used to using information technology, they still believe that the information provided by agricultural extension workers is more reliable.

Informant 8: searching for information from the internet to add information about what we do, such as: agricultural activities that are going viral, although we also know from the internet, we can search from google, from youtube, but we still need information from extension workers

Informant 11: I think that information related to agriculture is more valid from extension workers than the internet.

The answers from informants 8 and 11 show that even though millennial farmers can easily access information from the internet, they still need new information, ideas, and ideas conveyed by extension workers. Updating information can have an impact on changes in the quality level of farmers. Farmers have the latest knowledge of the agricultural world from extension workers.

Utilization of agricultural extension communication media

Millennial farmers are known as media literate farmers, which is easy to access information. The pandemic period which made all face-to-face communication turned into communication using the media, made extension workers also study the use of information technology. Millennial farmers enjoy using information technology:

Informant 7: Extension for farmers is really needed, but sometimes we afford it, but when there is the use of online extension like during the pandemic yesterday, it really helps a lot.

Information technology plays a very important role in development, where comprehensive development related to information and agricultural technology will support an increasingly advanced agricultural world (Rangkuti, 2010). DIY agricultural extension workers use technology media as a means of communicating with millennial farmers to share information to support their activities. Agricultural extension workers take advantage of Zoom meetings and WhatsApp groups to discuss and share information.

Informant 12: In the future, we hope that agricultural extension workers can use information technology, so that the activities of millennial farmers can be integrated together. This makes it possible to achieve common goals between millennial farmers and agricultural extension workers

The role of the extension worker is very important related to the dissemination of information as well as the ability to provide solutions or problem solving (Humaedah et al., 2016). Millennial farmers, who are identical with the use of information technology as a means of finding information, have made extension workers also change in providing information, namely using technology. As in social exchange theory, where cultural transactions between individuals and individuals and individual-group interactions occur. The use of information technology can be adapted to its users

Informant 13 : we do coordination, or counseling using zoom meeting, so that millennial farmers can join.

Informant 14: During the pandemic yesterday we communicated and coordinated with millennial farmers using the whatsapp group, there if there was a problem we answered.

Informant 15: because yesterday there was an outbreak of the covid-19 pandemic, and it made us accustomed to using whatsapp groups as a means of communicating, and it was very petrified. Until now we also still use it to coordinate.

The use of communication media, both zoom and WhatsApp instant messaging applications, is a diffusion in agricultural extension. Communication media serves as a means of liaison between extension workers and farmers. The WhatsApp group application makes it easy for people to connect in a virtual group to exchange information and discuss (Tutiasri et al., 2021). Millennial farmers are also greatly helped by the whatsapp group when there are problems related to agriculture that they are doing.

Informant 2: Very important. The problem is that each season the pest or disease is different and must be observant. That's why we communicate with each other directly or using Whatsapp.

Informant 12: Every three months we plan to meet, such as having casual conversations, coincidentally the secretary general from the center also provides opportunities and support. Also, the support from the center is good, hopefully it will continue to get support so that it becomes even better. We are interested in forming and facilitating millennial farmers so that in the future communication between extension workers and millennial farmers will be facilitated by using information technology.

Agricultural instructors from the Agricultural Human Resources Development Center at the Yogyakarta Agriculture and Food Security Service provide support to millennial farmers so that they can progress and be successful. They share information related to food agriculture, livestock and horticultural crops, as well as opportunities to market products

or produce. To facilitate coordination or providing information, extension workers use communication media.

V. CONCLUSION

Agricultural instructors from the Special Region of Yogyakarta (DIY) are able to coordinate, and form millennial farmers who are members of a coordination. DIY agricultural extension workers are very interesting, because they are able to form or make a thousand millennial farmers to join. This can be done because of the commitment made by the extension agents as agents of change. Extension workers use social media to coordinate and communicate with millennial farmers, to be more efficient and effective.

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