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1571

# EFFECTIVENESS OF USE METHODS AND MEDIA ON AGRICULTURAL EXTENSIVE IN LUBUK RAJA DISTRICT OF OGAN KOMERING ULU REGENCY

by

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## **Article Info**

ABSTRACT

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This study aims to analyze what methods and media are effective in delivering agricultural extension materials and how farmers respond to the use of media used by agricultural extension workers in Lubuk Raja District, OKU Regency. This research was conducted in Lubuk Raja District, Ogan Komering Ulu Regency. This research was carried out for 3 months, namely from January to March 2022. The location of the research was determined deliberately considering that in Lubuk Raja Subdistrict using methods and media for Agricultural Extension facilities. The method used in the research is the survey method. The sampling method used is a simple random method. The sampling process uses the Slovin formula where a population of 2150 people is taken as many as 215 people as samples. The results showed that agricultural extension with the discussion method got the best response from rubber farmers in Lubuk Raja sub-district with the highest number of agreeable responses, namely 215 respondents and 0 respondents who disagreed, while for the demonstration method there were 202 respondents who said yes and 13 respondents. who stated that they did not agree, on the widyawisata method as many as 139 respondents said yes they agreed and 76 respondents said they did not agree. The existence of results with very different amounts is due to several factors such as; natural or financial factors. The discussion method is stated to be more efficient because it does not use a lot of costs, while the widyawisata method gets the answer yes to agree at least from the respondents because this method requires greater costs than the discussion method and demonstration method, such as transportation and accommodation costs.

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#### 1. INTRODUCTION

Extension is a process of disseminating information related to efforts to improve and develop the sector in order to achieve an increase in quality, productivity, and increase the income of farmers and the welfare of their families. According to (Ginting & Andari, 2020) Extension as a motivator in the delivery of knowledge in agricultural development is expected to be an educator for farmer groups in terms of learning and can facilitate farmers in instilling an understanding of attitudes to the application of modern agricultural technology from government program policies. Agricultural instructors in their activities as agents of change in development always provide directions that can awaken the awareness of farming business actors (Nur Jaya, 2018). Counseling is one of the non-formal educations provided to farmers in the form of assistance to increase their productivity in farming.

Sundari J (2015), stated that agricultural extension is an agent of change that is directly related to farmers. Its main function is to change the behavior of farmers with non-formal education so that farmers have a better life in

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a sustainable manner. Extension agents can influence targets in their role as motivators, as well as farmer advisors. This is supported by the Law on Agricultural, Fisheries and Forestry Extension System (SP3K) No. 16 of 2006 states that extension is a learning process for key players and business actors so that they are willing and able to help and organize themselves in accessing market information, technology, capital and other resources, as an effort to increase productivity, business efficiency, income and welfare as well as increase awareness. in the preservation of environmental functions.

Extension plays a role or functions in increasing farmers' knowledge of new technology and information in order to improve the welfare of farmers and their families. The role of extension in providing knowledge to farmers can function as a process of disseminating information to farmers, as a process of explaining or providing explanations, as a process of changing farmers' behavior (attitudes, knowledge, and skills), and as an educational process. The success of agricultural development is largely determined by the participation of farmers, so the new paradigm of agricultural extension workers in the future prioritizes the active participation of farmer groups, because farmers are also part of planning agricultural extension cooperation. So activities will be more effective and efficient carried out in a farmer group (Aslamia, 2017).

The process of organizing agricultural extension can run properly and correctly if it is supported by professional extension workers, reliable extension institutions, continuous flow of extension materials, correct extension system and appropriate extension methods. However, agricultural extension activities are faced with limitations, including the limitations of extension workers, limitations on the part of farmers, for example the level of formal education of farmers is very varied, limited facilities and time for extension for farmers. The limited number of extension workers can be seen from the small number of extension workers compared to the number of villages. For this reason, it needs to be balanced with increasing agricultural extension media. Through agricultural extension media, farmers can increase interaction with extension workers so that the extension process runs. The role of agricultural extension media can be viewed from several aspects, namely in terms of the communication process, in terms of the learning process and in terms of demonstration in the communication process. Communication plays an important role in establishing good cooperative relationships between extension workers and farmers, and has a great influence in the process of achieving agricultural goals. The success of communication will be achieved if the sender of the message and the recipient of the message both understand the purpose of delivering the message and have reached the same conclusion according to the intent contained in the message conveyed (Nurjasmira, 2014).

The communication carried out by the extension worker can be said to be good (successful) if there is feedback or backflow. Thus the extension worker will be able to find out to what extent his communication can achieve the expected target so that the extension worker can take the next steps so that the target is actually fully achieved. With feedback or feedback, extension workers can evaluate or evaluate their extension efforts. Good communication, actually must have a specific and clear goal, both clear according to the communicator and clear to the communication that is not clearly purposed, can interfere with or can cause communication failure. In simple terms, communication is said to be effective when people succeed in conveying what they mean. In general, communication is considered effective when the stimuli conveyed and their intentions by the sender or source are closely related to the stimuli that are captured and understood by the recipient of the message.

As is the case with agricultural extension in Lubuk Raja sub-district, OKU district, where agricultural extension workers in this area have their own way of delivering agricultural information to the farmers they foster in accordance with their respective work areas. There are 7 villages in the Lubuk Raja sub-district and are within the scope of BPP Batumarta I, where 1 village should be held by 1 agricultural extension worker but due to limited agricultural extension workers, there is also one extension who holds 2 villages. In addition, in the working area of the Lubuk Raja sub-district there are 110 farmer groups, each farmer group having a varying number of members. The program currently running is the distribution of seeds for rice, corn and other programs. Agricultural extension meetings with farmers are held 4 times a week, thus meaning the role of extension workers is very important for fostering farmer groups to change behavior, attitudes and skills Agricultural extension plays a role in developing a sustainable agricultural system, an effort is needed to improve the quality of human resources that are useful in supporting agricultural development. The number of agricultural extension workers based on the target area can be seen in Table 1 below:

Table 1. Data showing the number of PPLs based on the target area

No	Built area	Number of farmer group
1	Lekis Rejo	26
2	Lubuk Banjar	19
3	Batumarta 1	13
4	Marta Jaya	14

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5	Batumarta 2	9		
6	Battuwinangun	15		
7	Baturaden	14		
Amount		110		

Source: Primary data (2022)

In agricultural extension activities such as conveying agricultural information and technology to users, agricultural information and technology can be conveyed directly or indirectly by using extension media. Various extension media can be used to package information in such a way that it will be conveyed to farmers, such as print media (brochures, pamphlets) and audio-visual media. By using extension media, extension workers/facilitators/teachers can enrich and deepen the teaching and learning process to generate motivation, provide orientation, conduct evaluations, give assignments, provide summaries, and so on.

Agricultural extension media serves as a tool to clarify the presentation of messages so that there is no longer any misunderstanding of the meaning conveyed by agricultural extension workers. The media can also overcome time constraints, such as problems that occur, namely the limitations of agricultural extension workers with agricultural extension media, they can use the available time to convey agricultural information to farmers. This agricultural extension media can help agricultural extension workers in conveying various materials or

This agricultural extension media can help agricultural extension workers in conveying various materials or information conveyed in extension activities (Nurjasmira, 2014).

The purpose of using the media to clarify the information conveyed can stimulate the mind, attention and ability of the target. Thus the media plays an important role in the delivery of agricultural extension materials, besides that the media can concrete according to the needs of the target, so that what is conveyed by the communicator to the communicant can have an effect. In Lubuk Raja District, Ogan Komering Ulu District, the delivery of agricultural extension materials is carried out in groups and discussions, therefore, agricultural extension workers must use effective media. There are various communication media used by agricultural extension workers in the working area of Lubuk Raja sub-district, the use of these media can help in achieving a goal that has been planned and succeeded in making farmers want to apply it in the field.

In line with this, agricultural extension workers in the working area of the Lubuk Raja sub-district also use media and methods to facilitate the dissemination of information about agriculture to farmers. The success of extension is determined by the effectiveness of the use of extension methods and media. This is what is interesting to study further regarding the "Effectiveness of the use of methods and media on agricultural extension workers in Lubuk Raja District, OKU Regency"

# 2. RESEARCH METHOD

The method used in the research is the survey method. The sampling method used is a simple random method. The sampling process uses the Slovin formula where a population of 2150 people is taken as many as 215 people as samples. To answer the first objective, the Likers analysis is used, namely the bipolar scale method in statistics which is used to measure quantitative data in the form of positive and negative response data. There are 5 choices of responses that are commonly used on Likert scale questionnaires, namely strongly agree (SS), Agree (S). Neutral (N), Disagree (TS), and strongly disagree (STS). The main purpose of using the Likert scale questionnaire method is to produce accurate and verified data.

The classification of the effectiveness of agricultural extension methods and media in Lubuk Raja District is then divided into several class categories (high, medium, low) and intervals are used with formulas. The scoring used in this study was 3, 2, and 1 with the criteria of "Rating Scale" (Singarimbun and Effendi, 1999) as follows:

1. Low / ineffective	: 1.00-1.66
2. Moderate / moderately effective	: 1.67-2.33
3. High / effective	: 2.34-3.00

To answer the Second Objective, the Cochran Q test method is a part of non-parametric statistical testing. In general, this method is used to examine events with more than two variables.

In the Cochran Q Test, to get the desired Q value, the formula is used:

$$Q = \frac{(k-1)[k\sum_{i}^{k} C_{i}^{2} - (\sum_{i}^{k} C_{i})^{2}]}{k\sum_{i}^{n} Ri - \sum_{i}^{n} Ri^{2}}$$

With description:

Q = Q count k = Number of attributes (2) Ri = Number of YES on attributes for all respondents Ci = Number of NO on attributes for all respondents n = Number of samples tested

## 3. RESULTS AND ANALYSIS

Agricultural extension with the discussion method got the best response from rubber farmers in Lubuk Raja sub-district with the highest number of agreeable responses, namely 215 respondents and 0 respondents who disagreed, while for the demonstration method there were 202 respondents who said yes and 13 respondents who said they did not agree., on the widyawisata method as many as 139 respondents stated yes agree and 76 respondents stated disagree. The results with very different amounts are due to several factors such as; natural or financial factors. The discussion method is stated to be more efficient because it does not use a lot of costs, while the widyawisata method gets the answer yes to agree at least from the respondents because this method requires greater costs than the discussion method and demonstration method, such as transportation and accommodation costs. The results of this study are very significant with the results of previous studies which stated that the level of knowledge of farmers after counseling with the discussion method was relatively high. This increase was caused by the emergence of an interest stage from respondents, namely the growth of interest which is often marked by a desire to ask questions or to know more about everything related to the innovations offered by extension workers (Rosda, SL, 2019). In addition, the agricultural extension method consisting of demonstrations and visits is included in the high category, which was stated by Ramlawati, 2019 through her research entitled "The Use of Communication Methods and Media in Rice Agricultural Extension in Bantaeng District, Bantaeng Regency". The results of Cochran's Q analysis can be seen in Table 2 below:

Type of method	Value	
	0	1
Discussion	0	215
Demonstration	13	202
Widyawisata	76	139

Table 2. The results of Cochran's Q analysis

Table 2 shows that agricultural extension with the discussion method got the best response from rubber farmers in Lubuk Raja sub-district with the highest number of agreeable responses, namely 215 respondents and 0 respondents who disagreed, while for the demonstration method there were 202 respondents who said yes and 13 respondents. who stated that they did not agree, on the widyawisata method as many as 139 respondents said yes they agreed and 76 respondents said they did not agree. The existence of results with very different amounts is due to several factors such as; natural or financial factors. The discussion method is stated to be more efficient because it does not use a lot of costs, while the widyawisata method gets the answer yes to agree at least from the respondents because this method requires greater costs than the discussion method and demonstration method, such as transportation and accommodation costs.

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The results also showed that the extension media using brochures got a yes agree answer as many as 173 respondents and 42 respondents disagreed, in the extension media using electronic media got a yes agree answer as many as 143 respondents and a disagree answer as many as 72 respondents, while for the media Counselors who use cellphone get 212 respondents yes and agree answers and 3 respondents disagree, and extension media using social

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media get 183 yes agree answers and 32 respondents disagree. Table 3 below shows the respondents' answers about the use of media in counseling carried out in Lubuk Raja District, OKU Regency:

Statement				
Agree	42	19,5	19,5	19,5
Disagree	173	80,5	80,5	100,0
Amount	215	100,0	100,0	

Source: Primary Data (2022)

From the results of this study, it was found that the extension media through cellphone got the highest total number of yes agree compared to other extension media, this is because most farmers already have cellphones so that agricultural information can be easily disseminated via SMS (Short Message Service/ Short Term Letters) or the WA application (WhatsApp), which is a free application that provides simple, safe, and reliable message and call exchange services and is available on various telephones around the world. The results of the study are significant with previous research which states that the use of agricultural extension media which is classified as high is brochure and cellphone media (Ramlawati. S 2018).

### CONCLUSION

The results of this study shows that :

- 1. Agricultural extension with the discussion method got the best response from rubber farmers in Lubuk Raja District of OKU Regency with the highest number of agreeable responses, namely 215 respondents and 0 respondents who disagreed
- 2. It was found that the extension media through cellphone got the highest total number of yes agree compared to other extension media

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