

**PERAN PENYULUH TERHADAP PARTISIPASI PETANI PADA PROGRAM
PENDAMPINGAN KELOMPOK DI KECAMATAN BLORA**

**THE ROLE OF AGRICULTURAL EXTENSION WORKERS ON FARMERS'
PARTICIPATION IN THE GROUP ASSISTANCE PROGRAM
IN BLORA DISTRICT**

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ABSTRACT

This research aims to obtain information on the role of agricultural extension workers and farmers' participation in group assistance programs and analyze the effect of agricultural extension workers on farmers' participation in the group assistance program. The method used in this research is a survey method through purposive sampling by considering members of farmer groups still active in mentoring programs. Primary data collection used interviews and observation, while secondary data used documentation. This research used descriptive analysis and Multiple Linear Regression analysis with an SPSS application. The results showed that 59 farmers (49%) assessed the role of agricultural extension workers in the moderate category, 37 farmers (31%) low category, and 24 farmers (20%) high category. The level of farmers' participation in the group assistance program is in the moderate category. The role of the agricultural extension workers as an educator, facilitators, motivators, and evaluators partially had a significant effect on the involvement of farmers in group assistance programs in the Blora District. In contrast, as a communicator hadn't a significant effect. The role of agricultural extension workers as an educator, facilitators, communicators, motivators, and evaluators significantly affected farmers' participation in group assistance programs in Blora District.

Keywords: agriculture, assistance, extensionist role, farmers, participation

ABSTRAK

Penelitian ini bertujuan untuk mendapatkan informasi terkait peran penyuluh dan partisipasi petani pada program pendampingan kelompok serta menganalisis pengaruh peran penyuluh terhadap partisipasi petani pada program pendampingan kelompok. Metode yang digunakan dalam penelitian ini adalah metode survey melalui purposive sampling dengan pertimbangan sampel merupakan anggota dari kelompok tani yang masih mendapatkan program pendampingan secara aktif. Pengumpulan data primer menggunakan wawancara dan observasi, sedangkan data sekunder dengan dokumentasi. Penelitian ini menggunakan analisis deskriptif dan analisis Regresi Linear Berganda dengan aplikasi SPSS. Hasil analisis menunjukkan bahwa secara keseluruhan sebanyak 59 petani (49%) menilai peran penyuluh pada program pendampingan kelompok dalam kategori sedang, 37 petani (31%) menilai dalam kategori rendah, dan 24 petani (20%) menilai dalam kategori tinggi. Tingkat partisipasi petani pada program pendampingan kelompok berada dalam kategori sedang. Peran penyuluh sebagai edukator, fasilitator, motivator dan evaluator secara parsial berpengaruh signifikan terhadap partisipasi petani pada program pendampingan kelompok di Kecamatan Blora, sedangkan peran komunikator tidak berpengaruh signifikan. Peran penyuluh pertanian sebagai edukator,

fasilitator, komunikator, motivator dan evaluator secara simultan berpengaruh signifikan terhadap partisipasi petani pada program pendampingan kelompok di Kecamatan Blora.

Kata kunci: kelompok tani, partisipasi, pendampingan, peran penyuluh, pertanian

INTRODUCTION

The extension is the spearhead of agricultural development which plays an important role in helping the development of agriculture. Agricultural extension workers become agents of change that encourage farmers to change their behavior to become farmers with better abilities and able to make their own decisions, to improve their welfare (Timbulus et al., 2016). Counseling is usually carried out in groups in a farmer group. Counseling with group methods can lead to more intensive interaction between farmers and extension workers. Counseling with the group method also aims to increase efficiency, both time efficiency and business efficiency. Farmer groups in Indonesia have currently reached 646,040 farmer groups, 64,323 combined farmer groups and 11,883 farmer economic groups (Badan Pusat Statistik, 2020). Counseling with this group method invites and guides farmers to carry out more productive activities based on cooperation between members. The success of farmers in efforts to develop their farmer groups is determined by the performance of extension workers (Sasmi & Susanto, 2019) The performance of extension workers is related to the ability of extension workers to play their role so that the process of coaching and mentoring farmer groups can be following the direction of farmer group development.

The problem is, efforts to develop farmer groups is the limited number of existing agricultural extension workers. It is recorded that there are only 4 civil servant extension workers in Blora District. In contrast to this, the number of farmers in Blora District reached 7,291 farmers with 131 farmer groups and 28 combined farmer groups (BPP Kecamatan Blora, 2021) This makes the performance of agricultural extension workers in the form of group assistance not run optimally. It can be seen from not all group members are willing and able to actively participate in group mentoring activities carried out. Extension workers as information carriers must be able to increase the participation of farmers as their target communities. Moreover, the purpose of counseling is to change the knowledge, attitudes and skills of farmers to be more prosperous. The purpose of this study was to obtain information related to the role of extension workers and farmers' participation in group mentoring programs and analyze the effect of extension workers on farmers' participation in group mentoring programs

METHODS

This research was conducted from December 2022 – January 2023 in Blora District, Blora Regency, Central Java. The role of extension workers includes the roles of evaluator, facilitator, communicator, motivator and evaluator. Farmers' participation includes planning, implementing and evaluating. The research method used in this study is the survey method. The sampling carried out in this study was by using purposive sampling of members of farmer groups who were still actively getting assistance. The sample as a whole amounted to 120 farmers. Determination of the number of samples based on (Roscode, 1975; (Raihan, 2017; Ruhimat, 2015): 86) which states that the number of viable samples in the study ranged from 30 to 500. The sampling in this study was based on the number of agricultural extension workers in Blora District as many as 4 extension workers, so from each extension worker a sample of 30 farmers

was taken. The descriptive analysis method is used to explore goals one and two. The multiple linear regression analysis methods is used to achieve goal three.

Sources of data used as a reference in writing research reports consist of two sources, primary sources and secondary sources. Primary data was sourced from 120 farmers who were sampled from the population, while secondary data was sourced from the archives of the Balai Penyuluhan Pertanian, bookkeeping of farmer groups, and previous research. Collecting data in this study using three ways, interviews, observation, and documentation. The interviews were conducted in the form of closed and structured interviews using a Likert scale of 1-4 to measure the level of the role of extension workers and farmers' participation in the group assistance program. Observations are made in the form of non-participant observation. Documentation is done by duplicating or taking photos of data from the archives of the Balai Penyuluhan Pertanian and the bookkeeping of farmer groups needed for research.

The answers obtained are then summed according to the scale of each category and tabulated to determine the level or category of each variable. The variable level consists of three categories based on the tendency of the variable, the high category, the medium category, and the low category. Categorization of respondents' answers based on the tendency of variables according to Sevilla in research (Ruhimat, 2015) can be calculated using the following formula.

$$\text{Total score} = \frac{\text{real score} - \text{minimum score}}{\text{maximum score} - \text{minimum score}}$$

Total score obtained is then categorized based on the distribution of the total score which ranges from 0 – 100, with the following conditions.

Table 1. Distribution of Categorization Scores

Category	Score Interval
Low	$0 < \text{score} \leq 33,33$
Medium	$33,34 < \text{score} \leq 66,67$
High	$66,68 < \text{score} \leq 100$

Source: (Meiliana & Virianita, 2017; Ruhimat, 2015)

THE RESULTS

Characteristics of Respondents

The characteristics of the respondents are an overview of the identity of the respondents used in the study. The respondents in this study were farmers who were members of a combination of farmer groups and were still actively getting group assistance. The characteristics of respondents in this study can be seen based on age, history of education, and length of farming, land area and ownership.

Age

Data on the age of farmers in Blora Distict can be seen in the table.

Table 2. Age of Respondents

No.	Age (year)	Age Group	Number of Farmers (people)	Percentage (%)
1.	< 35	Young	7	5,8%
2.	35 – 54	Intermediate	62	51,7%
3.	> 54	Elderly	51	42,5%
	Total		120	100%

Source: (Research primary data, 2023)

The range of farmers in Blora District is mostly in the middle age group of 51.7%. The number of farmers in middle age is because at that age, the community still has fairly good energy. Research (Meiliana & Virianita, 2017) states that working as a farmer requires strong energy because have to do very heavy and tiring work. However, it can also be seen that there are still many farmers who are at elderly age compared to young age. This is because farmers with elderly age do not have the option to do work in other sectors. The agricultural sector becomes a job that can accommodate people who are elderly age. The ownership of paddy fields from farmers is also one of the reasons why farmers age continue their farming activity. The small number of farmers at a young age makes farmers in Blora District experience a crisis of farmer regeneration. Following the opinion (Zagata and Sutherland 2015; Anwarudin et al., 2020) that farmer regeneration has become an important issue in Europe in agriculture because most of the existing farmers have entered the elderly age. Young farmers have a very important role in helping to improve development in the agricultural sector (Anwarudin et al., 2020) mentioned that farmer regeneration is very important in realizing sustainable agriculture, food security, and food sovereignty related to the ability to meet food needs independently.

History of Education

Based on the results of the study, data on the educational history of farmers can be seen in the table.

Table 3. History of Education

No.	History of Education	Number of Farmers (people)	Percentage (%)
1.	Not going to school	13	10,8%
2.	SD	49	40,8%
3.	Junior High School	21	17,5%
4.	Senior High/Vocational School	34	28,4%
5.	S1	3	2,5%
Total		120	100%

Source: (Research primary data, 2023)

Most farmers in Blora District only study elementary school (SD) with a percentage of 40.8%. Many farmers have elementary schools, because there is no need for higher education or any qualifications to be a farmer. People with low education don't have the opportunity to choose a job. There are few farmers with higher education because people with higher education tend to look for opportunities to choose better jobs. (Panurat et al., 2014) argue that a person who is highly educated will have a low interest in farming because of the social status of each individual. Farmers with high education are indispensable to achieving agricultural progress in Indonesia. (Gusti et al., 2022) Farmers with a higher level of education have a more open mindset and quickly understand in implementing innovations so that they can develop agriculture in a better direction.

Farming Experience

Based on the results of the study, data on farming experience from farmers can be seen in the table.

Table 4. Farming Experience

No.	Farming Experience	Number of Farmers	Percentage
	(year)	(people)	(%)
1.	1 – 10	12	10%
2.	11 – 20	18	15%
3.	21 – 30	6	5%
4.	> 30	84	70%
Total		120	100%

Source: (Research primary data, 2023)

Most of the farmers in Blora District are very experienced, 70% have carried out farming activities for more than 30 years, and the rest have less than 30 years of farming experience. Many farmers have more than 30 years of farming experience because the majority of farmers in Blora District are farming families, so they carry out farming activities since childhood by helping their parents. Following research (Arimbawa & Rustariyuni, 2018) that farmers' children from a young age have been invited and taught how to farm as a provision for farming. Farmers who have experienced farming since childhood have advantages and disadvantages. Its advantage is that it makes farmers quite skilled in carrying out cultivation in agriculture and already know the various problems that exist. It's just that farmers with farming experience since childhood tend to apply traditional agricultural concepts that are hereditary from their families and it is difficult to make changes to increase their farming income.

Land Area and Ownership

Based on the results of the study, the land area and ownership can be seen in the table.

Table 5. Land Area and Ownership

No	Land (ha)	Number of Farmers		Total (people)	Percentage (%)
		Own (people)	Rent (people)		
1.	≤ 0.5 ha	64	9	73	60.8%
2.	0.5 ha – 1.0 ha	28	8	36	30%
3.	> 1.0 ha	11	0	11	9,2%
Total		103	17	120	100%

Source: (Research primary data, 2023)

The land area of farmers in Blora District is mostly in the narrow land category, with a percentage of 60.8%. The narrow area of land owned by this farmer is because the land owned is inherited from his previous parents. Following (Putra, 2020) the still strong culture of land heritage for generations makes the existing land into small fragments of land that are distributed to their family members. Farmers who have a narrow land area are less able to develop their farming business in a better direction. This is because in developing agricultural businesses for the better, farmers must have adequate land to implement the latest innovations that make it easier for farmers to run their farming activities efficiently. (Wardani, 2015) argues that the larger the scale of the business run by farmers, the more efficient the business will be made both in terms of cost and price.

The data also shows that most farmers in Blora District own private land with a percentage of 85.8% while another 14.2% of farmers do not own land and rent land. The area of land leased

by farmers is classified as narrow and medium land. This land ownership certainly affects the enthusiasm of farmers in carrying out their farming business. Farmers with privately owned land ownership tend to be less enthusiastic than farmers with land lease ownership. This is because farmers with land lease ownership are trying to get the proceeds from the land lease to pay the rent costs that have been incurred by the farmer.

The Role of Agricultural Extension Workers

Based on research, the role of extension workers in the group mentoring program in Blera District can be seen in illustration 1.

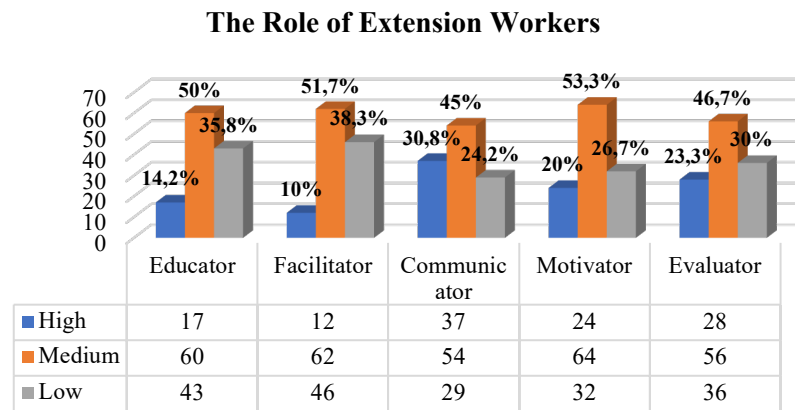


Illustration 1. The Role of Agricultural Extension Workers

Source: (Research primary data, 2023)

The role of agricultural extension workers in the group mentoring program in Blera District is in the moderate category and is more likely to be low. Farmers do not feel the role of extension workers. This is because extension workers are unable to reach all farmers in the group, extension workers are only able to reach the management of the farmer group and some of its members. Agreeing with the research (Sambouw et al., 2020) which states that extension workers more often have meetings with the chairman and management of the farmer group and do not involve members of the farmer group. Extension workers realize that the role played in accompanying the group has not been maximized. This is because currently, extension workers are more focused on the administrative system as a form of transition to digitalization. The change in the focus of the extension workers has an impact on the absence of time from the extension workers to make regular visits to farmer groups and farmers. The lack of optimal role of extension workers in assisting farmer groups has resulted in farmer groups in Blera District experiencing slow development, both in terms of ability and independence.

Extension Role as Educator

Based on the results of the study, the role of educator can be seen in illustration 2

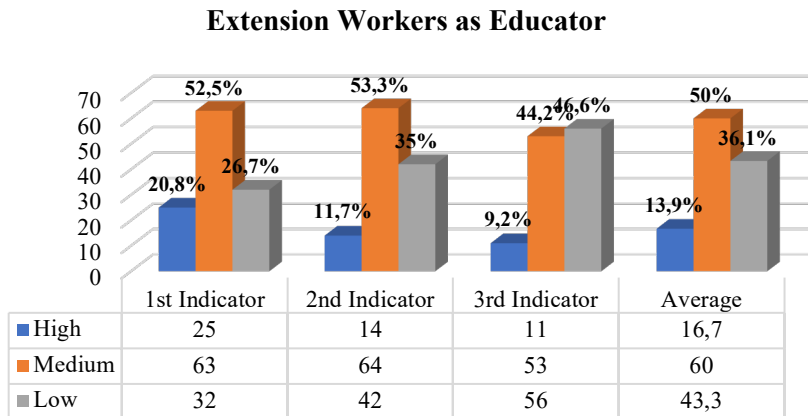


Illustration 2. Extension Workers as Educator
Source: (Research primary data, 2023)

Farmers argue that the role of agricultural extension workers as educators is largely in the moderate category. Farmers have felt the role of educators performed by extension workers, although it is not very influential in improving their knowledge and skills. This is because in performing the role of educator, extension workers do not do it continuously. Most farmers think that extension workers are enough to help farmers in obtaining materials and lessons related to farming in terms of cultivation, assist farmers in overcoming pest problems in their farming activities, and provide education related to the use of fertilizers following the needs of cultivated plants. Unfortunately, extension workers consider that farmers, most of whom have long experience in farming, do not need to learn about agricultural cultivation because they have a high level of expertise in running their farming business. This is what makes counseling activities not carried out optimally and sustainably.

Extension workers are also perceived to be lacking in providing training to farmers and utilizing existing resources to reduce production costs. Extension workers conduct training for three months or even more and are not carried out on an ongoing basis. Farmers have participated in the training, but farmers do not want to continue the training to improve their farming business, so extension workers have begun to reduce the training activities provided to farmers. Farmers need the support of extension workers to continue the results of the training obtained. By (Ketut et al., 2022) that the sustainability of a program depends on farmers as the target, but extension workers are obliged to accompany intensively so that the program can run sustainably.

Extension workers in providing advice related to behavior change are relatively low. Extension workers are only limited to introducing existing technologies and have not tried to implement adaptable technologies. Changes in the behavior of farmers are expected not only in the land management sector, but also in other sectors such as sales and marketing. Extension workers find it difficult to teach farmers to have a bargaining position because most farmers are smallholders who have narrow land, so the production output produced is relatively low and is only used for daily food needs. (Amelia, 2020) states that smallholders who have a narrow business scale and little information cause low negotiation skills, resulting in farmers being in a weak bargaining position.

Extension Role as Facilitator

Based on the results of the study, the role of facilitator can be seen in illustration 3.

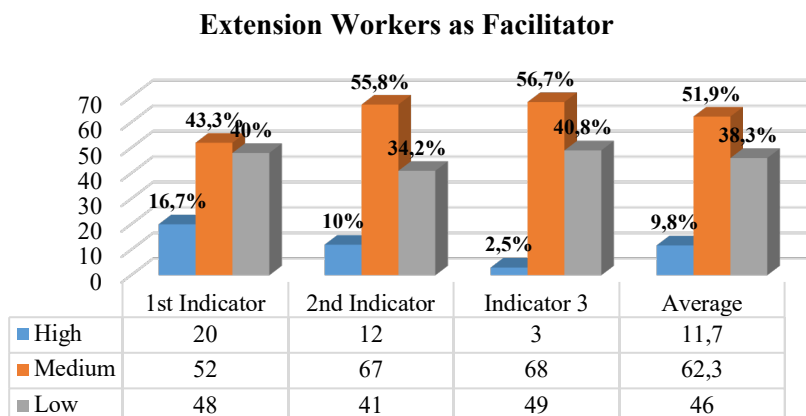


Illustration 3. Extension Workers as Facilitator
Source: (Research primary data, 2023)

The role of agricultural extension workers as a facilitator is in the medium category. Extension workers do not facilitate and participate in discussion activities, do not assist farmers in providing production facilities and are less able to accept aspirations from farmers. Extension workers do not facilitate learning activities and discussions from their assisted farmer groups. Procurement activities for group discussions are carried out by the policies of each group. This group discussion is very important in the running of a group so that the group can develop. Following the opinion (A. Prasetyo et al., 2019) that group discussions apart from being a means for the group leader in conveying information, are also a place for members to exchange information, experiences, and problems being faced in carrying out their farming activities. Extension workers also do not always attend group discussions. Extension workers also came only when the farmer invited the extension worker to join the discussion. This is not in accordance with the opinion (Rasyid, 2012) which states that during group discussions, extension workers must also be present and become part of the group members to solve common problems.

The role of extension workers as facilitators in procuring the production facilities needed by farmers is also considered to be less than optimal. Each farmer group receives assistance in procuring production inputs such as seeds and medicines in turn. Farmer groups who are more active will receive procuring production facilities more frequently because they can prepare a definitive group needs plan (RDKK), so they know what the group needs. Unfortunately, the seeds that are usually given by extension workers are of low quality. It can be seen from several types of seeds that are not well known and foreign to farmers and are almost at their expiry date. Many farmers ultimately do not take advantage of it. This is not in accordance with the opinion (Syahza, 2015) which states that the procurement of production facilities must be planned so that they can be used according to needs, the procurement of production facilities is not only related to their availability in sufficient quantities, but also regarding their type and quality.

Most farmers think that extension workers have not been able to fully accommodate information and aspirations from farmers. For example, farmers give the opinion that pest control should be done preventively, namely before the farmers' plants are attacked by pests. However, the extension workers reasoned that the pest control had to wait for evidence of pest attack so that it could be submitted to the relevant agency to obtain pests, which was quite a

time-consuming process. Farmers also try to convey their aspirations for government policies through existing extension workers. This is because farmers feel that the policies set by the local government are still not in favor and profitable for farmers, such as the price policy and the amount of subsidized fertilizer. However, extension workers have not been able to convey the aspirations of farmers. The results of research (Sundari et al., 2015) show that the ability of extension workers to convey aspirations to related parties is still not optimal and needs to be improved again.

Extension Role as Communicator

The role of communicator can be seen in illustration 4.

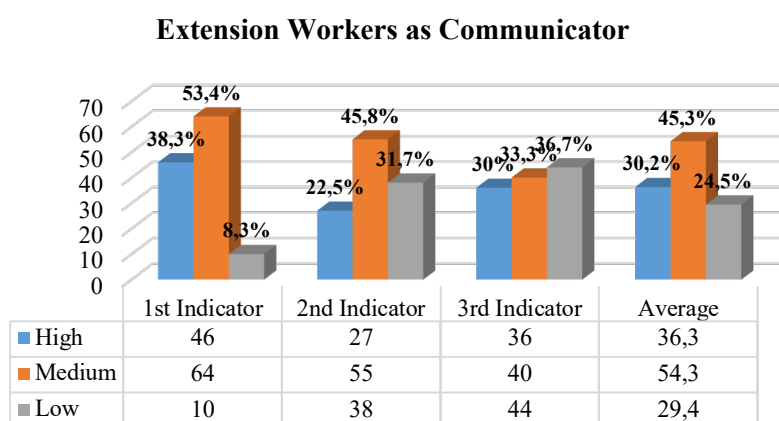


Illustration 4. Extension Workers as Communicator

Source: (Research primary data, 2023)

The role of agricultural extension workers as communicators in group mentoring programs is in the medium category. This is because the communication made by farmers to extension workers is quite good. However, in terms of conveying information and the convenience of farmers in obtaining information, it can be said that it is still lacking. The ability of extension workers to communicate is considered moderate and tends to be high. This is because in carrying out counseling, extension workers always use language that is easily understood by farmers. Extension workers try to use polite language that is commonly used by farmers every day. This is consistent with the results of a study (Srimenganti et al., 2022) that the ability of extension workers to use the local language is important, because farmers can assess the services provided by field extension workers. The use of good language by extension workers makes it easy for extension workers to get along with farmers. Extension workers must be able to become friends with farmers, so that farmers can be more open about the problems they experience. By the opinion (Darmawan & Mardikaningsih, 2021) states that extension workers who easily get along with farmers can establish good relationships with farmers, can eliminate conflicting perceptions, and can build cooperation between the two.

Based on the second indicator, the way extension workers convey information is in the medium category. Extension workers are quite capable of practicing the material provided so that it makes it easier for farmers to understand the information, but quite rare in carrying out practices related to the material provided. Field visits conducted by extension workers are also quite rare. Extension workers conduct field visits to meet farmers and find existing problems once a month, maybe even more. The less frequent the extension workers make field visits, the

worse the extension will be in the eyes of community farmers. This is because the infrequent field visits make farmers feel distant from extension workers. After all, there is rarely interaction between the two. This is inconsistent with (Sugianto, 2017) who argues that field visits should ideally be carried out routinely and regularly to both farmer groups and their members.

Based on the third indicator, it is quite difficult for farmers to obtain information, so they are in a low category. This can be assessed from the pattern of communication and the level of alertness of farmers in receiving complaints from farmers (Alam & Oktaviani, 2020) argue that the ease with which extension workers can be found and contacted will make farmers feel comfortable, feel cared for, and feel those extension workers are there for farmers. The pattern of communication built between farmers and extension workers is always through farmer groups. This is not working effectively because there are still many farmer groups who have not utilized technology in the form of short messages via the WhatsApp application or the like, the reason that not all farmers have smartphones. Routine meetings that are held once a month by farmer groups can also hinder information from extension workers which should be conveyed immediately to farmers.

Extension Role as Motivator

Based on the research results, the role of motivator can be seen in illustration 5.

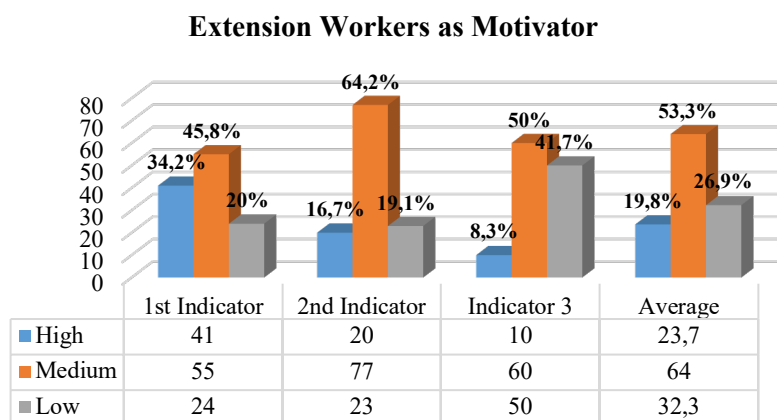


Illustration 5. Extension Workers as Motivator

Source: (Research primary data, 2023)

Farmers argue that the role of agricultural extension as a motivator is in the medium category. This is because extension workers are quite capable but not optimal in encouraging farmers to continue to be passionate about cultivating, inviting farmers to attend training, and encouraging farmers to continue to be active in farmer groups. The role of extension workers in encouraging farmers is related to the role of extension workers as facilitators in assisting the provision of agricultural production facilities. Accordance to research (Sormin et al., 2012) which states that the assistance provided to farmers aims to encourage farmers' enthusiasm in running their farming business. Farmers with guaranteed production facilities will be more enthusiastic because they do not have to think about providing production facilities.

Based on the second indicator, the role of extension workers in motivating farmers to adopt innovations is in the medium category. It's just that the innovations brought by the extension workers have not been fully implemented by the farmers. Farmers feel comfortable with the farming system that has been passed down from generation to generation. Accordance

to research (Mulieng et al., 2018) states that farming experience from generation to generation has become the behavior of farmers in running farming, so it is a challenge for extension workers to be able to adopt innovations by farmers. Most of the farmers in Blora District are not brave enough to take risks. Research (Hidayati et al., 2015) argue that farmers are not brave enough to take risks (risk averse) from innovations that do not have certainty about production results.

Based on the third indicator, the role of extension workers in providing solutions related to business development from farmers is in the medium category. Extension workers are less able to motivate farmers to try cultivating other crops that are more profitable and have not been able to encourage farmers to increase their sales. This is because most of the farmers in Blora District are smallholder farmers whose produce is only used to meet their daily food needs. Farmers only sell their produce when they need it, so sales are made gradually to small traders. Agricultural extension workers should be able to encourage farmers to cooperate with outsiders in terms of partnerships. The opinion (Rachmawati, 2014) is that cooperation with external parties such as related companies can assist farmers in providing physical and non-physical forms of support, from production to marketing.

Extension Role as Evaluator

Based on the results of the research, the role of evaluator can be seen in illustration 6.

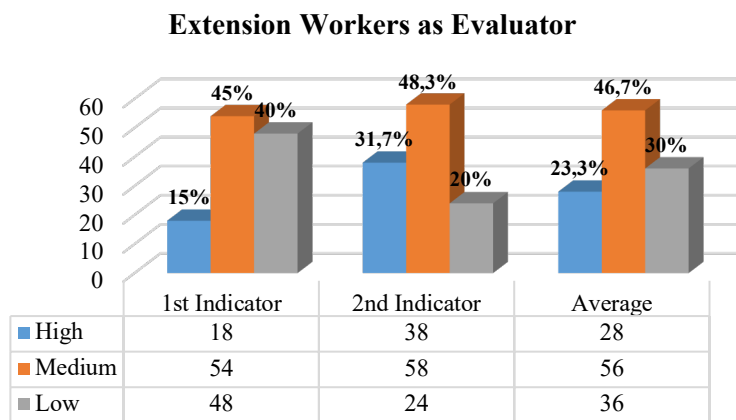


Illustration 6. Extension Workers as Evaluator
Source: (Research primary data, 2023)

Farmers argue that the role of agricultural extension workers as evaluators is in the medium category. This is because extension workers are less able to assess their performance and that of their assisted farmer groups. Extension workers in assessing their performance are in the medium category and tend to be low. Seen based on the evaluation activities carried out by extension workers after each activity is completed which are only carried out internally from the extension center and externally from the agricultural service. Even though the evaluation has been carried out, extension workers still carry out several activities that are not to the conditions of the farmers. Extension workers must improve evaluation activities in order to improve their performance in helping farmers. According to research (Kristiana & Sholeh, 2020) the increase in the performance of agricultural extension workers can be seen based on their ability to evaluate activities. So, they can design policies and carry out further counseling to make it even better.

Extension workers often provide advice and input to their farmer groups regarding problems in the field, but they do not provide input and suggestions regarding group organization. Group organization is very important to improve the performance of farmer groups for the better so that the goals of the group and members can be achieved. Suggestions and input given by extension workers were also not fully accepted by farmers. Following research (Saputri, 2016) argues that the independence of farmer groups comes from the farmer groups and their members, so even though extension workers have provided input to farmers, if these farmers do not participate actively in the group it will hinder the development of the farmer groups.

Farmers' Participation

Based on the research results, farmers' participation can be seen in illustration 7.

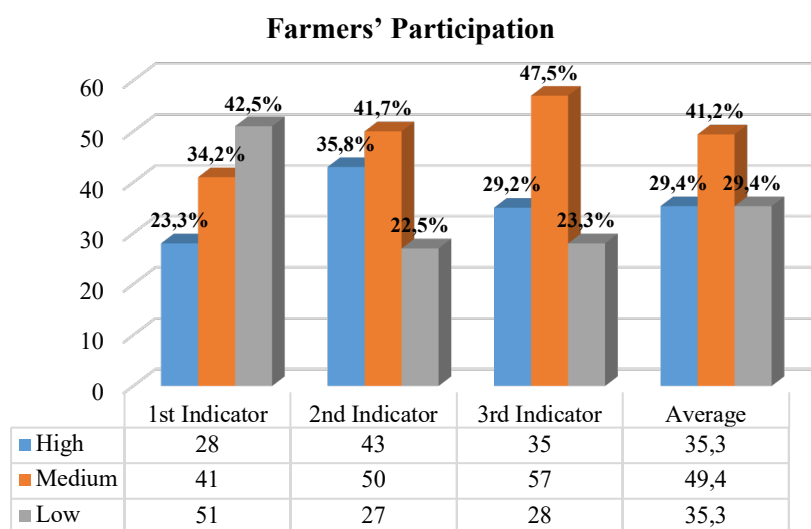


Illustration 7. Farmers' Participation

Source: (Research primary data, 2023)

Farmers' participation in the group assistance program in Blora District is in the moderate category. This is because farmers are less involved by extension workers in the planning activities of extension programs. Extension programs that are arranged are only carried out by farmer groups with extension workers without involving members. Based on the observation, most of the farmers felt that they had never held a meeting to discuss the RDKK. The preparation and planning of the RDKK are only carried out by management from farmer groups and a combination of farmer groups. The results of research from (Anis et al., 2014) stated that all farmers who were used as respondents were not involved and did not participate in the RDKK preparation activities.

Farmers' participation in following the implementation of activities in the group assistance program is in the medium category. The counseling activities carried out were attended by at least 20-30 farmers who were members of farmer groups. However, there were also some farmers whose homes had to be visited so they would participate in extension activities. The attitude of the farmers is a little forced because most of the activities carried out are not in accordance with the conditions of the farmers themselves because they are still top-down. The following research (Hamid, 2018) states that farmers will voluntarily participate in extension and empowerment activities if the material, method, and location of the

implementation of the activities are to the problems and needs of the farmers. This indicates that if the activities held are not in accordance with the farmers, then the interest of the farmers to take part in the activities also decreases.

Based on the third indicator, farmers' participation in evaluating activities in the group assistance program is in the medium category. Farmers are quite capable of advising extension workers. The advice given is based on the farmers' dissatisfaction with the role played by extension workers. Farmers consider that extension workers have not been able to fully carry out their roles properly. It is the same with planning activities where farmers are not involved by extension workers. This can be seen when evaluating activities, that extension workers carry out evaluations without involving farmers. This is not in accordance with (Wijianto, 2018) who argues that extension workers must increase the involvement of farmers in every activity, including evaluation activities so that the assessment is carried out more objectively. Farmers as recipients of activities should participate in providing suggestions so that subsequent activities can be even better and farmers feel the benefits.

The Effect of Agricultural Extension Workers on Farmers' Involvement

Table 6. Multiple Linear Regression with an SPSS

No.	Model	B	t	Sig.
1.	Konstanta	-0,456	-0,289	0,773
2.	Edukator (X1)	0,324	2,154	0,033
3.	Fasilitator (X2)	0,306	2,081	0,040
4.	Komunikator (X3)	0,165	1,039	0,301
5.	Motivator (X4)	0,866	5,162	0,000
6.	Evaluator (X5)	0,328	2,367	0,020
	F	147,86		
	R Square	0,866		
	Adjusted R Square	0,861		

Source: (Research primary data, 2023)

Based on Table 17, it can be seen that the results of multiple linear regression between the role of extension workers and farmers' participation in the group assistance program are as follows:

$$Y = -0.456 + 0.324 X_1 + 0.306 X_2 + 0.165 X_3 + 0.866 X_4 + 0.328 X_5$$

The constant value is negative (-0.456) indicating that by assuming the presence of other independent variables. This means that if there is no role from extension workers (all variables=0) then the participation of farmers will decrease by 0.456. Following the results of observations, when farmer groups do not receive intensive assistance from extension workers, the members of the farmer group have low participation in the group. A low level of participation in farmer groups over time can result in these farmer groups becoming inactive. This is because there are no activities carried out by the management or members of the farmer group.

The role of educators variable (X_1) has a sig value of $0.033 < 0.05$ and t count $2.154 > 1.981$, which means that it has a significant effect on farmers' participation with a regression efficiency of 0.324 which means that every increase of one unit will increase farmers' participation by 0.324. This indicates that the role of educators is less able to increase farmers' participation because farmers do not really feel the role of educators is carried out by extension workers. The counseling that is being carried out is still related to on-farm activities which are usually carried

out by farmers. Extension workers have not really educated farmers regarding the use of the latest technology and off-farm activities that should be carried out.

The role of facilitator variable (X_2) has a sig value of $0.040 < 0.05$ and count $2.081 > 1.981$ which means that it has a significant effect on farmers' participation with a regression efficiency of 0.306 which means that every increase of one unit will increase farmers' participation by 0.306. This is because farmers do not feel the assistance of agricultural production facilities provided by extension workers, they are still lacking in facilitating group discussions and accepting aspirations from farmers. Extension workers still have difficulties in providing production inputs, such as quality seeds, fertilizers and pesticides as well as the unequal distribution of the use of agricultural implements. This is in accordance with research (Erfrissadona et al., 2020) which states that farmers sometimes feel unsuited to seed assistance provided by the government through agricultural extension workers.

The role of communicator variable (X_3) has a sig value of $0.301 > 0.05$ and t count $1.039 < 1.981$, which means that it has no significant effect on farmers' participation with a regression efficiency of 0.165 which means that every increase of one unit will increase farmers' participation by 0.165. The insignificant effect of the communicator's role on farmers' participation is that even though extension workers use language that is easily understood and easy to get along with farmers, receiving information from farmers is still quite difficult. The ease with which the language is used remains less influential because extension workers rarely meet directly with farmers which results in a lack of interaction between each other. This is not in accordance with the opinion (Azhari et al., 2013)) which states that the role of the communicator from extension workers has a positive influence on the participation of the community, because good communication can increase the interest of the community to listen and understand what is conveyed.

The role of motivator variable (X_4) has a sig value of $0.000 < 0.05$ and count $5.162 > 1.981$, which means that it has a significant effect on farmers' participation with a regression efficiency of 0.866 which means that every increase of one unit will increase farmers' participation by 0.866. The role of the motivator has a higher influence than other roles in increasing farmers' participation in group assistance programs. Extension workers encourage farmers to continue farming despite the many problems that arise in the agricultural sector and remain active in their farmer groups. This is because farmers still need encouragement and direction from extension workers to develop their farming activities. Following the opinion (Pujakesuma & Karyani, 2020) states that farmers still need support and encouragement from various parties such as the government, institutions and partners to overcome the problems that exist in developing their farming business.

The evaluator role variable (X_5) has a sig value of $0.020 < 0.05$ and count $2.367 > 1.981$ which means that it has a significant effect on farmers' participation with a regression efficiency of 0.328 which means that every increase of one unit will increase farmers' participation by 0.328. The role of the evaluator can influence farmers' participation in the group mentoring program because the existence of performance appraisals and farming activities carried out by extension workers can make farmers a little moved to make changes. However, extension workers are considered to be incapable of assessing their performance and the performance of their assisted farmer groups. Assessment of its performance can be seen from the better outreach activities from time to time. The performance of extension workers is considered by farmers to have not changed and extension activities have decreased over time. (Bahua, 2016; Kadir et al., 2016) in his research stated that there was a positive and significant effect of extension workers' performance on community participation.

The results of the F test showed that the significance value is $0.000 < 0.05$ and the F count is $147.86 > F$ table is 2.29 which means that the role of extension workers includes the role of educator, facilitator, communicator, motivator and evaluator simultaneously has a significant effect on farmers' participation in the program group assistance in Blora District. The role of extension workers is still an important factor in the development of farmer groups, which of course must also be balanced with the farmer's participation, both management and members of farmer groups. The role of good agricultural extension workers can indirectly increase the participation of farmers. (Mardikanto, 1993; (Bahua, 2016) which states that the continuous development of the role of agricultural extension workers can increase the awareness and participation of farmers in the process of agricultural development. A high level of participation from farmers can bring better farmer groups. (Prasetyo et al., 2020) states that every program can run well if every member participates and works together, so that the goals of the group can be achieved and can develop to be more advanced.

The results of the multiple linear regression also show that the coefficient of determination (R^2) is 0.861 or 86%. This means that the role of extension workers affects farmers' participation by 86%, while the remaining 14% is influenced by other variables not explained in this study. There are still many farmer groups in Blora District that have not been able to make all of their members active. An assistance program by extension workers is needed as a companion so that all farmers can be active in the group, so that they really feel the benefits of joining the farmer group.

CONCLUSION

Conclusion

1. The role of agricultural extension workers in the group assistance program in Blora District is in the medium category and tends to be low. As many as 49% of farmers considered the role of extension workers to be in the medium category, 31% were in a low category, and 20% were in the high category. This can also be seen from the majority of farmers who assess the roles of educators, facilitators, communicators, motivators and evaluators to be in the medium and low categories.
2. The level of farmers' participation in the group mentoring program carried out by extension workers is in the medium category. A total of 50 farmers (41.2%) had a moderate participation category, 35 farmers (29.4%) had a low participation category and 35 farmers (29.4%) had a high participation category. Farmers participate more in the implementation process and participate less in the planning and evaluation process in the group assistance program.
3. The role of agricultural extension workers as educators, facilitators, motivators and evaluators partially has a significant effect on farmers' participation in group assistance programs in Blora District, while the role of agricultural extension workers as communicators has no significant effect. The role of agricultural extension workers as educators, facilitators, communicators, motivators and evaluators simultaneously has a significant effect on farmers' participation in group assistance program in Blora District.

Advice

1. Extension workers need to re-enhance their role as educators, facilitators, communicators, motivators and evaluators in group mentoring programs so that they are maximized and provide real benefits for farmers.

2. Extension workers must always involve farmers, both members and managements of farmer groups, in each group assistance program, starting from planning, implementation and evaluation.
3. Farmers as group members need to increase their awareness to participate in every activity held either by farmer groups or agricultural extension workers.

REFERENCES

- Alam, A. S., & Oktaviani, N. (2020). Tingkat kepuasan petani terhadap kinerja penyuluh lapangan (Studi Kasus di Desa Sukasari Kecamatan Cilaku Kabupaten Cianjur). *Agri (AGri)*, 2(1), 32–45.
- Amelia, G. (2020). Identifikasi saluran dan permasalahan pemasaran padi sawah di kecamatan lubuk sikaping kabupaten pasaman. *Menara Ilmu*, 14(2), 47–54.
- Anis, S. M., Effendy, L., & Juhdi Muslihat, E. (2014). Partisipasi anggota kelompok tani dalam penyusunan rencana definitif kelompok/rencana definitif kebutuhan kelompok. *Jurnal Penyuluhan Pertanian*, 9(1), 37–42. <https://doi.org/10.51852/jpp/v9i1/324>
- Anwarudin, O., Sumardjo, S., Satria, A., & Fatchiya, A. (2020). Proses dan pendekatan regenerasi petani melalui multistrategi di Indonesia. *Penelitian Dan Pengembangan Pertanian*, 39(2), 73–85.
- Arimbawa, I. P. E., & Rustariyuni, S. D. (2018). Respon anak petani meneruskan usaha tani keluarga di kecamatan Abiansemal. *Ekonomi Pertanian*, 7(7), 1558–1586.
- Azhari, R., Pudji, M., & Prabowo, T. (2013). Peran penyuluh dalam peningkatan diversifikasi pangan rumah tangga. *Agro Ekonomi*, 31(2), 181–198.
- Badan Pusat Statistik. (2020). *Statistik Pertanian*. bps.go.id/statistik-pertanian
- Bahua, M. I. (2016). *Kinerja penyuluh pertanian*. Deepublish.
- BPP Kecamatan Blora. (2021). *Jumlah kelompok tani di Kecamatan Blora*.
- Darmawan, D., & Mardikaningsih, R. (2021). Pengaruh Keterampilan Interpersonal, Pengalaman Kerja, Integritas dan Keterikatan Kerja terhadap Kinerja Penyuluh Pertanian. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, 3(2), 290–296. <https://doi.org/10.47065/ekuitas.v3i2.1153>
- Erfrissadona, Y., Sulistyowati, L., & Setiawan, I. (2020). Valuasi ekonomi lingkungan akibat alih fungsi lahan pertanian (Suatu Kasus di Kota Tasikmalaya, Jawa Barat). *JSEP (Journal of Social and Agricultural Economics)*, 13(1), 1–15. <https://doi.org/10.19184/jsep.v13i1.15784>
- Gusti, I. M., Gayatri, S., & Prasetyo, A. S. (2022). The Affecting of Farmer Ages, Level of Education and Farm Experience of the farming knowledge about Kartu Tani beneficial and method of use in Parakan District, Temanggung Regency. *Jurnal Litbang Provinsi Jawa Tengah*, 19(2), 209–221. <https://doi.org/10.36762/jurnaljateng.v19i2.926>
- Hamid, H. (2018). Peran pemerintah daerah dalam pemberdayaan petani padi di Kecamatan Pallangga, Kabupaten Gowa, Provinsi Sulawesi Selatan. *Ilmu Berazam*, 1(3), 32–48.

- Hidayati, R., Fariyanti, A., & Kusnadi, N. (2015). Analisis Preferensi Risiko Petani pada Usahatani Kubis Organik di Kecamatan Baso, Kabupaten Agam, Sumatera Barat. *Jurnal Agribisnis Indonesia (Journal of Indonesian Agribusiness)*, 3(1), 25–38.
- Kadir, S., Hariadi, S. S., & Subejo, S. (2016). Efek interaksi kinerja dan sense of humor penyuluh sosial pada peningkatan partisipasi masyarakat dalam program kesejahteraan sosial di Indonesia. *Sosio Konsepsia*, 5(2), 317–325. <https://doi.org/10.33007/ska.v5i2.183>
- Ketut, N., Adnyani, S., Putu, I., Wage Myartawan, N., Pasek, N., & Saputra, H. (2022). Pemberdayaan kelompok petani déwi sri dalam mewujudkan keberlanjutan pangan berkelanjutan. *Jurnal Pertanian*, 2(2). 283–289.
- Kristiana, L., & Sholeh, Moh. S. (2020). Implementasi GAP (*Good Agricultural Practices*) pada petani hortikultura dan strategi pengembangannya di kabupaten pamekasan. *JSEP (Journal of Social and Agricultural Economics)*, 13(3), 242–252. <https://doi.org/10.19184/jsep.v13i3.17921>
- Meiliana, Y., & Virianita, R. (2017). Persepsi remaja terhadap pekerjaan di sektor pertanian padi sawah di Desa Cileungsi Kecamatan Ciawi Kabupaten Bogor. *J. Sains Komunikasi dan Pengembangan Masyarakat. Sains Komunikasi Dan Pengembangan Masyarakat*, 1(3), 339–358.
- Mulieng, Z. F., Amanah, S., & Asngari, P. S. (2018). Persepsi petani terhadap kompetensi penyuluh pertanian tanaman pangan di Kabupaten Aceh Utara. *Jurnal Penyuluhan*, 14(1), 159–174.
- Panurat, S. M., Porajouw, O., Loho, A. F., & Rumagit, G. A. J. (2014). Faktor-faktor yang mempengaruhi minat petani berusaha padi di Desa Sendangan Kecamatan Kakas Kabupaten Minahasa. *Jurnal Cocos*, 4(5), 122–133.
- Prasetyo, A. S., Sumekar, W., Kurniasari, D. A., & Musabikin, A. (2020). Aktivitas dan Tingkat Partisipasi Anggota dalam Usahatani Ternak Sapi Perah di Kelompok Tani Ternak Rejeki Lumintu Gunungpati, Kota Semarang. *Jurnal Agrinika : Jurnal Agroteknologi Dan Agribisnis*, 4(2), 186. <https://doi.org/10.30737/agrinika.v4i2.1053>
- Prasetyo, A., Safitri, R., & Hidayat, K. (2019). Strategi Komunikasi Ketua Dalam Meningkatkan Eksistensi Kelompok (Kasus di Kelompok Tani Sidodadi di Desa Junrejo, Kecamatan Junrejo Kota Batu Jawa Timur). *HABITAT*, 30(1), 26–34. <https://doi.org/10.21776/ub.habitat.2019.030.1.4>
- Pujakesuma, D. D., & Karyani, T. (2020). Faktor-faktor yang berhubungan dengan kemandirian petani dalam pengambilan keputusan usahatani di KSM Jaya Amanah, Kabupaten Bandung. *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 6(2), 919–935.
- Putra. (2020). *Karakteristik Kepemilikan Luas Lahan Pertanian pada Pendapatan Petani untuk Pendidikan Anak Petani di Desa Wringinagung Kecamatan Jombang Kabupaten Jember*. STIE Mahardika.
- Rachmawati, A. (2014). *Peran gabungan kelompok tani (gapoktan) dalam upaya pemberdayaan petani melalui program puap studi kasus di Desa Butungan Kecamatan Kalitengah Kabupaten Lamongan*. Universitas Brawijaya.
- Raihan. (2017). *Metodologi Penelitian*. Universitas Islam Jakarta.

- Rasyid, A. (2012). Metode komunikasi penyuluhan pada petani sawah. *Jurnal Ilmu Komunikasi (JKMS)*, 1(1), 31–35.
- Ruhimat, I. S. (2015). Tingkat motivasi petani dalam penerapan sistem agroforestry (Farmers motivation level in application of agroforestry system). *E-Journal Penelitian Sosial Dan Ekonomi Kehutanan*, 12(2), 131–147.
- Sambouw, S. A. S., Manginsela, E. P., & Tambas, J. S. (2020). Analisis kinerja penyuluh pertanian berdasarkan persepsi kelompok tani di Kelurahan Taratara Satu Kecamatan Tomohon Barat Kota Tomohon. *Agri-Sosioekonomi*, 16(3), 403–412. <https://doi.org/10.35791/agrsosek.16.3.2020.31130>
- Saputri, R. D. (2016). Peran penyuluh pertanian lapangan dengan tingkat perkembangan kelompok tani di kabupaten Sukoharjo. *Agrista*, 4(3), 334–352.
- Sasmi, M., & Susanto, H. (2019). Hubungan Kinerja Penyuluh Pertanian dengan Keberhasilan Kelompok Pemasaran Bersama Bahan Olahan Karet Rakyat (Bokar) di Kabupaten Kuantan Singingi. *Unri Conference Series: Agriculture and Food Security*, 1, 127–133. <https://doi.org/10.31258/unricsagr.1a17>
- Sormin, E. U., Supriana, T., & Sihombing, L. (2012). Analisis tingkat pengetahuan petani terhadap manfaat lahan padi sawah di kabupaten serdang bedagai. *Journal of Agriculture and Agribusiness Socioeconomics*, 1(1), 153–163.
- Srimenganti, N., Nataliningsih, N., & Yunizar, E. Y. (2022). Analisis Kepuasan Petani Terhadap Kinerja Penyuluh Pertanian Di Masa Pandemi Covid-19 (Studi Kasus di Desa Genteng Kecamatan Sukasari Kabupaten Sumedang). *Paspalum: Jurnal Ilmiah Pertanian*, 10(2), 168–179. <https://doi.org/10.35138/paspalum.v10i2.426>
- Sugianto, A. (2017). Peranan penyuluh pertanian lapangan (ppl) sebagai komunikator pembangunan terhadap kelompok tani. *Jurnal Lensa Mutiara Komunikasi*, 1(2), 1–11.
- Sundari, S., Yusra, A. H. A., & Nurliza, N. (2015). Peran penyuluh pertanian terhadap peningkatan produksi usahatani di Kabupaten Pontianak. *Jurnal Social Economic of Agriculture*, 4(1), 26–31.
- Syahza, A. (2015). Paradigma baru: pemasaran produk pertanian berbasis agribisnis di daerah Riau. *Ekonomi*, 8(3), 110–120.
- Timbulus, M. V. G., Sondakh, M. L., & Rumagit, G. A. J. (2016). Persepsi petani terhadap peran penyuluh pertanian di Desa Rasi Kecamatan Ratahan Kabupaten Minahasa Tenggara. *Agri-Sosioekonomi*, 12(2A), 19–40. <https://doi.org/10.35791/agrsosek.12.2A.2016.12590>
- Wardani, N. S. (2015). Perilaku Petani Terhadap Risiko dalam Usaha Tani Tembakau di Kabupaten Klaten. *Jurnal Entrepreneur dan Entrepreneurship*, 4(2), 25–32.
- Wijianto, A. (2018). Hubungan Antara Peranan Penyuluh dengan Partisipasi Anggota Dalam Kegiatan Kelompok Tani di Kecamatan Banyudono Kabupaten Boyolali. *AGRITEXTS: Journal of Agricultural Extension*, 24(2), 106–114.