

Faktor-Faktor yang Mempengaruhi Peran Kelompok Tani dalam Meningkatkan Produksi Usahatani Padi

Factors Influencing the Role of Farmer Groups in Increasing Rice Farm Production

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ABSTRACT

The increased rice production can be realized through the role of farmer groups as a forum for farmers to plan and carry out rice farming every planting season. This study aims to identify the factors that influence the role of farmer groups in increasing rice production, and analyze how much influence these factors have on the role of farmer groups. This research uses a quantitative descriptive method. The sampling technique was carried out purposively using the Random Sampling technique, namely by taking 25% of the total population of 280 farmer group members so that the sample results were 70 people. The data of this research are primary and secondary data. Primary data were obtained through interviews using questionnaires with members of farmer groups, while secondary data were sourced from the relevant agencies. The data obtained were then analyzed using multiple linear regression analysis consisting of the F test and t test. The results showed that the factors of motivation, independence, and characteristics of the members of the farmer groups influenced the role of farmer groups in increasing rice production with a coefficient of determination (R^2) of 60.1%. Meaning that the influence of other factors outside this study was only 39.9%.

Keywords: Characteristics, farmers, motivation, production, rice, role, self-reliance

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INTRODUCTION

Agricultural development is an integral part of national development which has a central meaning, because of its role in laying a solid foundation for the nation's economy, especially the food crop subsector which is very strategic in national and regional development. The strategic role of the food crop subsector



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includes the development and growth of food security, Gross Domestic Product (GDP), employment opportunities, sources of income and regional and national economies.

The main crop of agriculture in Indonesia is rice. Rice (*Oryza Sativa* L) is a food crop that produces rice as a staple food source for the Indonesian population. Increasing rice farming production is still a top priority for food security development programs in Indonesia (Jalilov et al., 2022). High production costs, low productivity, and low bargaining position of production prices are the main characteristics of agricultural weaknesses in Indonesia.

A farmer group is a group of farmers consisting of adult farmers and cadet farmers who are informally bound to a group area on the basis of harmony and common needs and are led by a farmer contact (Ayisi et al., 2022). According to Luján Soto et al. (2021) that farmer groups are a learning forum for farmers to increase knowledge, skills and attitudes as well as the growth and development of independence in farming, so that farm business productivity can increase, their income increases and farmers' lives are more prosperous.

Ren et al., (2021) explained that increasing rice farming production through the role of farmer groups will have an impact on the ability of farmers to manage farming, because through the farmer group forum all agricultural technology information submitted by agricultural extension workers can be understood and adopted easily by farmers. According to Kumeh et al., (2021), farmer groups can be a forum for farmers to discuss with each other to find solutions to solving rice farming problems. Indirectly, farmer groups are a management organization to increase farm productivity through group farm business management (Schulze Schwering et al., (2022); Unteawati & Humaidi, (2022.).

The role of farmer groups to increase farm production has basically not been maximized, due to the low participation of farmers in working together to plan farmer group work programs. The low participation of farmers is due to low characteristics, lack of motivation of affiliated farmers in farmer groups, and lack of independence of farmers in providing farm production costs. Therefore, efforts to increase rice farming production through the role of farmer groups are carried out by increasing the motivation, independence, and characteristics of farmer group members which are aspects of the psychology and ability of farmers to carry out farming effectively and efficiently.

Farmers in Bone Bolango Regency in increasing the production of rice farming businesses still rely on the help of production facilities from the government, so that during the growing season farmers are often late to do rice farming. The provision of assistance for rice farming production facilities by the government is distributed through farmer groups, so that farmers who are not registered in the farmer group cannot get assistance in the rice farming production facilities. The lack of motivation and independence of farmers in group cooperation is further exacerbated by the low participation of farmers in each farmer group activity, so that their knowledge and skills do not increase.

The Local Government of Bone Bolango Regency in increasing rice production, emphasizes the technical aspects of rice cultivation through the role of farmer groups. These efforts are carried out through various policies, including: coaching farmer groups, technical and managerial training of farmer group members and fulfillment of agricultural production facilities. The development of farmer groups is aimed at motivating farmers to continue to pay attention to the recommendations of cultivation technology in each growing season, so that it will have an impact on increasing rice production. Technical and managerial training is directed at improving the ability of farmers to manage farming together in order to create farmer independence in a sustainable agribusiness system. Based on this, the role of farmer groups in increasing rice farming production can be optimized through motivation, independence, and characteristics of farmers in accordance with the potential of the region for rice farming.

RESEARCH METHODS

This research was conducted in Bone Bolango Regency in three sub-districts, namely Tilogkabila, Kabila and Suwawa Districts in farmer groups that carry out rice farming businesses. The selection of the research site was carried out deliberately (purposively) with the consideration that the three sub-districts have the largest rice productivity in Bone Bolango Regency and farmer groups an active role in rice farming. The study was conducted from June to September 2022.

The research method used is a quantitative descriptive method. Descriptive research is carried out to describe a symptom, event and occurrence that occur factually, systematically and accurately. This study describes quantitative data obtained concerning the state of the subject or phenomenon of a population. According to Sugiyono (2012) quantitative descriptive research is research conducted to determine the value of independent variables, either one or more variables (independent) without making comparisons or linking with other variables.

The population in this study was members of farmer groups located in three selected sub-districts with a total of 8 farmer groups in 280 members. The sampling technique was carried out purposively using the Random Sampling technique. Sampling was carried out proportionally by sampling of 25% of the total number of members of the farmer group, so that the total sample of farmers who were respondents was 70 people. This is in accordance with the opinion of Arikunto, (2002), for respondents less than 100, the sample is taken all from all members of the farmer group while if the number of respondents is more than 100 then the sampling is 10% - 15% or 20% - 25% or more. The number of farmer groups in the three sub-districts where the study was located is described in Table 1.

Table 1. Data on the Number of Farmer Groups in Three Sub-districts of the Research Location

Number	Farmer Group Name	Member (Person)	Sample (25%)
1	Tani Sejahtera	32	8
2	Harapan	26	7
3	Mustika	42	11
4	Bersatu	37	9
5	Karya Jaya	40	10
6	Permata	23	5
7	Sumber Baru	45	11
8	Tani Makmur	35	9
Amount		280	70

Source: Dinas Pertanian Kabupaten Bone Bolango, 2022.

The data in this study is sourced from primary data and secondary data. Primary data is data obtained from the results of observations and interviews with farmers who are respondents through questionnaires that have been prepared in advance. Primary data is in the form of data on factors that affect the role of farmer groups in increasing rice farming production, which includes: variables (X) namely X_1 = Motivation of members of farmer groups, X_2 = Independence of members of farmer groups, and X_3 = Characteristics of members of farmer groups. Meanwhile, the variable (Y) is the production of rice farming. Secondary data is data in a systematic form obtained from the relevant agencies, such as the Central Statistics Agency, the Agriculture Office, and the Agricultural Extension Center.

The data analysis used multiple linear regression. To find out the influence between independent variables and dependent variables using the formula (Sugiyono, 2012):

a. Multiple linear regression analysis:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Information:

Y = Rice farming production

a = Constant

b = Regression Coefficient

X₁= Motivation of members of the peasant group

X₂= Independence of members of farmer groups

X₃= Characteristics of members of the peasant group

b. Partial test (*t-test*):

The partial test (*t-test*) is to test how each independent variable (X) influences the dependent variable (Y) which is considered constant, *t-test* formula (Santoso, 2014):

$$t = \frac{r \sqrt{n - 2}}{\sqrt{1 - r^2}}$$

Information:

t = t Vvaule Count

r = Correlation Coefficient

n = Number of Samples

c. Simultaneous test (*F-test*)

Simultaneous Test (*F-Test*) is a test to determine the simultaneous effect of the independent variable (X) on the dependent variable (Y). The *F-test* is used to determine whether the regression model created is significant or not significant, *F-test* formula (Santoso, 2014):

$$F = \frac{R^2 / k}{(1 - R^2) / (n - k - 1)}$$

Information:

R² = Coefficient of Determination

k = Number of Independent Variables

n = Number of Samples

d. Coefficient of Determination (R²)

The coefficient of determination (R²) is used to determine how much variation occurs in the dependent variable (Y) which can be explained by the independent variable (X), The value of the coefficient of determination (R²) can be calculated by the formula (Santoso, 2014):

$$R^2 = \frac{(b_1 \sum x_1 y + b_2 \sum x_2 y)}{\sum y^2} \text{ dimana } 0 \leq R^2 \leq 1$$

RESULT AND DISCUSSION

Factors Influencing the Role of Farmer Groups to Increase Rice Farming Production. The role of farmer groups in increasing rice farming production shows the capacity of farmer group members which is realized through the motivation, independence, and characteristics of farmers as the main actors in rice farming. Factors influencing the role of farmer groups in increasing rice production based on the results of the study are described in Table 2 as follows:

Table 2. Factors Influencing the Role of Farmer Groups in Increasing Rice Farm Production

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
B	Std. Error	Beta				
1	(Constant)	.133	.735		.181	.856
	Motivation of members of the peasant group	.162	.061	.139	2.630	.009

Independence of members of farmer groups	.412	.104	.253	3.945	.000
Characteristics of members of the peasant group	1.262	.090	.902	14.000	.000

a. Dependent Variable: Rice farming production

Source: Research Data After Processing, 2022.

The results of multiple linear regression analysis (Table 3) show that the motivational factors, independence, and characteristics of the members of the farmer group have a significant effect on the role of the farmer group in increasing rice farming production at the level of $\alpha = 5\%$, this is indicated by a *t-count* value greater than the value of $\alpha = 5\%$. Mathematically, the equation of multiple linear regression of the role of farmer groups in increasing rice farming production is explained as follows:

$$Y = 0,133 + 0,162X_1 + 0,412X_2 + 1,262X_3$$

Information:

Y = Rice farming production

0,133 = Constant value

X₁ = Motivation of members of the peasant group

X₂ = Independence of members of farmer groups

X₃ = Characteristics of members of the peasant group

The mathematical equation of multiple linear regression explains that the variables of motivation, independence, and characteristics of the members of the farmer group have a real effect on the good and bad role of the farmer group in increasing rice farming production. This indicates that if there is an increase in one unit of motivation of members of the farmer group, it will increase the role of the farmer group by 0.162 units, if there is an increase in one unit of independence of the members of the farmer group, it will increase the role of the farmer group by 0.412 units, and if there is an increase in one unit characteristic of the members of the farmer group, it will increase the role of the farmer group in increasing rice farming production by 1,262 units.

Motivation of Members of the Peasant Group. The results of this study show that farmers who are members of farmer groups are motivated in carrying out farming as an effort to increase rice farming production. Motivated farmers will try to be independent to carry out their duties of managing farming businesses in the container of farmer groups. The results of this study are in line with the results of research from Knook and Turner (2020) which explains that motivation in farmer groups will have an impact on the behavior of farmers following agricultural counseling which is carried out in a participatory manner. Furthermore, the results of research from Wens et al. (2021) concluded that farmers as farm managers need to have knowledge, skills and attitudes in increasing rice farming production.

The results of the study also explained that the increase in motivation of members of farmer groups can be seen from the increase in physiological motivation, sociological motivation and self-actualization motivation. Physiologically motivated farmers will play a good role in farmer groups to increase rice production, due to the drive to meet the needs of their families. Sociologically motivated farmers will always interact with the environment and other farmers, so that cooperation in farmer groups as a unit of production remains sustainable. Meanwhile, the motivation for self-actualization shows the ability of farmers to increase rice farming production through the management of farmer groups according to farm management.

The results of this study are in line with the results of research from Skaalsveen et al. (2020) which concluded that motivation shows the internal and external ability of farmers in managing farming businesses

in farmer groups. The results of research from Kryshko et al. (2022) explain that motivation is very important to increase individual self-confidence as an effort to achieve the work capacity that is the goal of the organization. Furthermore, the results of research from McCarthy et al. (2021) concluded that the motivation for affiliated farmers in farmer groups will facilitate cooperation to increase farm production.

Maslow (1956) in his theory explains that each individual is motivated by physiological needs that become innate from birth and make the individual satisfied with his needs, so as to survive. Herzberg's (2000) theory explains that, motivation can influence a person's working conditions on aspects of satisfier and hygiene. Satire factors are motivational factors that are intrinsic or sourced in a person, while extrinsic motivation factors are factors that originate from outside the self and help determine a person's behavior in life.

Independence of Members of Farmer Groups. Independence is an individual physiological aspect that determines a person's ability to utilize his potential in meeting the needs of his life. Independence is characterized by the ability and freedom to make the best choice. The results showed that the role of farmer groups in increasing rice farming production was influenced by the independence of farmer group members. This means that with the increasing independence of farmer group members, the role of farmers in farmer groups increases to access information, interact between members of farmer groups, and make decisions. This indicates that the role of farmer independence in farmer groups to increase rice farming production can determine the direction and policy of farmer groups accessing information in making decisions on farmer group programs that are useful in increasing rice farming production.

The results of this study are in line with the results of research from Kropf et al. (2020) which concluded that independence is a psychological aspect that can determine the attitude of individual farmers in making decisions to manage farming in accordance with their knowledge and abilities. Furthermore, the results of research by Breitenbach and Brandão (2021) explained that the lack of independence in farm business management is caused by the low managerial ability and dynamics of farmer groups in planning farming programs.

The independence of farmer group members to access information, interact, and make decisions can be directed by extension workers as agricultural consultants in guiding farmers to get access to agricultural technology information. The results of the research by Kassem et al. (2021) explained that the role of extension workers as agricultural consultants in providing information can help farmers in accessing and receiving agricultural technology innovations that can increase farm productivity. Furthermore, the results of research from Hayden et al. (2021) explain that farmer independence is not a statement that farmers do not need help, but independence can make farmers more professional and cooperate through farmer group efforts, making it easy to manage farming businesses.

The results of this study are in line with the theory from Monks et al. (2001) which explains that individual independence in organizations includes: behavior of being able to take initiative, being able to overcome obstacles / problems, having self-confidence and being able to do things on their own without the help of others. Independence implies: (1) the state of a person who has a competitive desire to advance for his own good, (2) able to make decisions and initiatives to overcome the problems faced, (3) has confidence in doing his tasks and (4) is responsible for what he does.

Characteristics of Members of the Peasant Group. Individual characteristics are traits possessed by a person that are displayed through mindsets, patterns of attitude and patterns of action towards their environment. The characteristics of farmers are the abilities possessed by farmers in terms of demographics, social character and economic conditions of farmers. These characters distinguish the type of behavior of farmers in certain situations. The results showed that the role of farmer groups in increasing rice farming production was influenced by the characteristics of farmer group members. This means that with the characteristics of members of the farmer group, the role of farmers in the farmer group also increases.

The characteristics of the members of the farmer group can be seen from the age of the farmer, farmer education, farming experience, and the area of farm land. This means that the characteristics of the members of the farmer group are the individual competence of farmers in carrying out rice farming in accordance with the knowledge, skills and attitudes of farmers to increase the production of rice farming businesses managed by farmer groups.

The results of this study are in line with the results of research from Kernecker et al. (2021) which explains that farmers as humans who live in society, have the freedom to interact with the surrounding environment, learn various new things, and follow every development of agricultural technology. This will form the characteristics of farmers related to the level of competence of farmers in farming. The results of research from Buitenhuis et al. (2020) concluded that the characteristics reflect the motivational behavior, self-concept, knowledge and expertise of individuals in farming. The results of research from Mao et al. (2021) explain that farmers' age, education, experience, and land area are characteristics of farmers who play a role in rice production through farmer groups. Furthermore, the results of research from Suchá and Dušková (2022) concluded that the characteristics of group members can directly determine the knowledge, skills, and attitudes of farmers in collaborating to manage farming in farmer groups.

Soekarwati (2005) in her theory explained that the younger the age farmers usually have the spirit to want to know what they do not know, so they try to adopt an innovation faster, even though they are actually not experienced in the matter of adopting the innovation and this needs to be supported by the area of farmland, because if the area of land cultivated is large, then the resulting production will be high. Thus, members of farmer groups through the individual characteristics of farmers will have a good impact on the development of farmer groups in increasing rice farming production.

Partial Effect of the Role of Motivation, Independence and Characteristics of Farmer Group Members in Increasing Rice Farming Production. Motivation, independence, and characteristics of members of farmer groups are psychological factors that shape individual personalities to do work according to their knowledge and abilities. Partially the influence of motivation, independence, and characteristics of farmer group members in increasing rice farming production is explained through the *t-test* which is described in Table 3.

Table 3. Results of the *t-test* of the factors that influence the role of farmer groups in increasing rice farming production

Model	Coefficients ^a				T	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
1 (Constant)	.133	.735		.181	.856	
Motivation of members of the peasant group	.162	.061	.139	2.630	.009	
Independence of members of farmer groups	.412	.104	.253	3.945	.000	
Characteristics of members of the peasant group	1.262	.090	.902	14.000	.000	

a. Dependent Variable: Rice farming production

Source: Research Data After Processing, 2022.

Based on the *t* test for each independent variable, the following results were obtained: The *t-value* of the variable motivation of farmer group members (X1) is 2.630 and a significance value of 0.009 means that the variable motivation of farmer group members has a significant effect on increasing rice farming
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production (Y) at a significant level of $\alpha = 5\%$, because $t\text{-count} = 2.630$ is greater than $t\text{-table} = 2.009$ and a significance level of 0.009 is smaller than a significance level of $\alpha = 5\%$.

The $t\text{-value}$ of the independent variable of farmer group members (X₂) is 3.945 and a significance value of 0.000 means that the independent variable of farmer group members has a significant effect on increasing rice farming production (Y) at a significant level of $\alpha = 5\%$, because $t\text{-count} = 3.945$ is greater than $t\text{-table} = 2.009$ and a significance level of 0.000 is smaller than a significance level of $\alpha = 5\%$.

The $t\text{-value}$ of the characteristics of the members of the farmer group (X₃) is 14,000 and a significance value of 0,000 means that the variable characteristic of the members of the farmer group has a significant effect on the production of rice farming (Y) at a significant level $\alpha = 5\%$, because $t\text{-count} = 14,000$ is greater than $t\text{-table} = 2.009$ and a significance level of 0.000 is less than the significance level $\alpha = 5\%$.

The results of the research in Table 3 can be explained that the role of motivation, independence, and characteristics of farmer group members can determine the success of rice farming, because psychologically the farmer group members have a responsibility in carrying out farmer group work programs based on the abilities of farmer group members. The results of this study are in line with the results of research from Hu et al. (2022) which explain that motivation is part of human resources that can spur individual activity at work, so that it will create business independence according to their abilities and character.

The Influence of the Role of Motivation, Independence and Characteristics of Farmer Group Members in Increasing Rice Farming Production. The motivation, independence, and characteristics of members of farmer groups are psychological and physiological capital factors that can determine the knowledge and ability of farmers to manage and develop farmer groups, so that they can influence the increase in rice farming production which is a joint effort of farmer groups. The role of motivation, independence, and characteristics of farmer group members in increasing rice farming production has always changed, because each member of the farmer group has different abilities, knowledge, and attitudes in their role of managing the farmer group.

The motivation of the members of the farmer group shows the ability of farmers to realize the goals of the farmer group, so that it will affect the sustainability of the farmer group work program. The independence of members of farmer groups will give birth to the empowerment of farmers who are always optimistic about their role in managing farmer groups. The characteristics of members of the farmer group are the basic capital of farmers to know their role as farm actors in accordance with their knowledge, skills, and attitudes. The simultaneous influence of motivation, independence and characteristic variables on increasing rice farming production is explained through the $F\text{-test}$, described in Table 4.

Table 4. The simultaneous influence of motivation, independence, and characteristic variables on increasing rice farming production

ANOVA ^b						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.727	3	17.242	73.886	.000 ^a
	Residual	33.138	142	.233		
	Total	84.865	145			

a. Predictors: (Constant), Characteristics of members of the peasant group, Motivation of members of the peasant group, Independence of members of farmer groups

b. Dependent Variable: Rice farming production

Source: Research Data After Processing, 2022.

The results of the linear regression analysis showed that the *F-count* value was **73.886** at a significant level of 0.000. Next to determine the joint influence of the free variable (X), which consists of: the motivation, independence, and characteristics of the members of the farmer group towards the bound variable (Y), namely the production of rice farming, then the *F-count* value will be compared with the *F-value* of the table. The *F-table* value is obtained through the formula $(k ; n - k)$, where (k) is the number of independent variables, and (n) is the number of samples of research respondents.

Based on this, the value of *F-table* is obtained: $(3 ; 70 - 3) = (3 ; 70)$, the value of *F-table* at the level of $\alpha = 0.05$ which is 2.74, so that the value of *F-count* 73.886 is greater than *F-table* 2.74. This means that the role of farmer groups which is a manifestation of the free variables (X) of motivation, independence, and characteristics of members of the farmer group together has a real effect on increasing the production of rice farming which is a bound variable (Y). This means that increasing the motivation, independence, and characteristics of farmer group members will increase their role in farmer groups to increase rice farming production through physiological motivation, sociological motivation, self-actualization motivation, independence in accessing information, independence in interacting between members of farmer groups, independence in making decisions, age of farmers, education, farming experience, and land area.

The coefficient of determination (R^2) for the influence of motivation, independence, and characteristics of farmer group members which are the independent variable (X) on increasing rice farming production or the dependent variable (Y), is described in Table 5.

Table 5. The coefficient of determination (R^2) of the effect of variable X on variable Y

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.781 ^a	.610	.601	.48308	.610	73.886	3	142	.000

a. Predictors: (Constant), Characteristics of members of the peasant group, Motivation of members of the peasant group, Independence of members of farmer groups
 b. Dependent Variable: Rice farming production

Source: Research Data After Processing, 2022.

The results showed that the role of farmer groups in increasing rice farming production was influenced by factors of motivation, independence, and characteristics of farmer group members. This can be seen from the large influence of the coefficient of determination (R^2) of these factors on the increase in rice farming production by 60.1%, meaning that the influence of other factors outside this study was only 39.9%. This shows that motivational, independence, and characteristic factors are internal factors of members of farmer groups that can be used as a basis in assessing the role of farmer groups in increasing rice farming production. The results of this study indicate that the role of farmer groups in planning the management of rice farming requires motivation, independence, and characteristics of farmer group members in planning, implementing and evaluating farmer group work programs, so that the goal of increasing rice farming production can be achieved and sustainable in accordance with the farmer group work program.

The results of this study are in line with the results of research from Oyinbo et al. (2019) which concluded that the role of farmer groups is a task carried out by farmer groups based on the recommendations of agricultural extension workers applied by farmers who are members of farmer groups in trying to farm rice. Furthermore, the results of research from Adnan et al. (2020) explained that the role of farmer groups in rice farming is determined by the individual abilities of farmers, namely the motivation,

knowledge and skills of farmers in rice cultivation, namely: choosing good seeds, managing irrigation water needs, determining planting times, fertilization, pest and disease control, and handling crop yields.

The results of this study are in line with the opinion of Mosher (1966) who explained that farmers play an important role as the core of agricultural development, especially in understanding and applying new innovations in agricultural technology to make their farming business more productive. The results of research from Marescotti et al. (2021) explain that the role of farmers in managing farmer groups as an effort to implement new innovations through the process of adopting agricultural technology delivered by agricultural extension workers. Furthermore, the results of research by Marvuglia et al. (2022) explain that farmers in modern times, feel underprivileged, lack of energy, lack of time, and helpless if they have to meet their own basic needs to manage their farming business, so that collaborating in farmer groups is a method that must be done for the sustainability of farm production.

The Relationship Between the Role of Farmer Groups with Increasing Rice Farming Production. The increasing production of rice farming through the role of farmer groups is a manifestation of the motivation, independence, and characteristics of farmer group members. The results showed that the manifestation of the role of this farmer group can be seen from physiological motivation, sociological motivation, and self-actualization motivation. Independence in accessing information, independence in interacting between members of farmer groups, and independence in making decisions. Characteristics of farmers' age, farmer education, farming experience, and farm area.

The results of the study are in line with the results of research from Arthur-Holmes and Abrefa Busia (2022) which explains that sociological motivation and physiological motivation will realize the independence of interacting and seeking information on agricultural technology, this is because of the mindset of farmers based on education and farming experience. The relationship between the role of farmer groups and the production of rice farming is described in Figure 3.

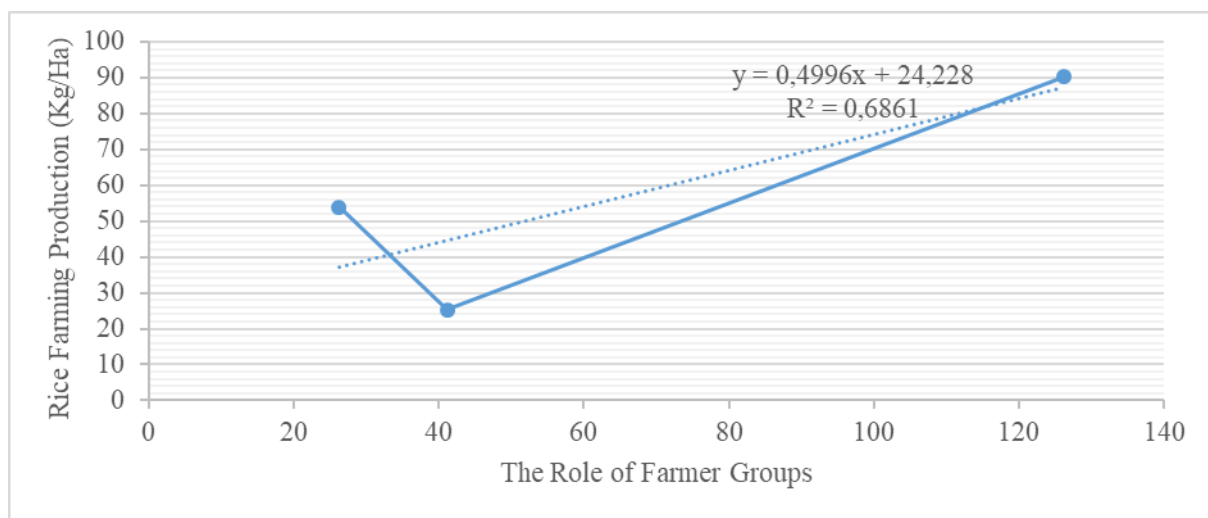


Figure 3. The Relationship between the Role of Farmer Groups and Rice Farming Production

Source: Research Data After Processing (2022)

Figure 3 shows that the results of the regression analysis of the relationship between the role of farmer groups and the increase in rice farming production show a linear pattern, so that an increase in the role of farmer groups by 49.96% will increase rice farming production by 24,228 Kg/Ha. Compulsively (R^2) the relationship between the role of farmer groups and rice farming production was 68.61%, meaning that the increase in rice farming production was influenced by other factors by 31.39%. The results of this study are in line with the results of research from Milovanovic and Smutka (2018) which concluded that the increase

in rice farming production is indirectly influenced by the role of members of farmer groups in aspects of land use area, motivation, and farmer independence.

CONCLUSION

Factors that influence the role of farmer groups in increasing rice farming production are motivations, namely: sociological motivation, physiological motivation, and self-actualization motivation. Then independence, namely: independence in accessing information, independence in interacting between members of farmer groups, and independence in making decisions. Furthermore, the characteristics of the members of the farmer group, namely: the age of the farmer, farmer education, farming experience, and the area of rice farming land. The magnitude of the influence of factors of the role of motivation, independence, and characteristics of members of farmer groups in increasing rice farming production by 60.1%. Communatively (R^2) the relationship between the role of farmer groups and the increase in rice farming production by 68.61%, the remaining 31.39% is the influence of other factors outside this study.

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