AGRISOCIONOMICS
Jurnal Sosial Ekonomi dan Kebijakan Pertanian

ISSN 2580-0566 EISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
5(2): 1-7, November 2021

AFFECTING FACTORS OF THE JAJANG AND RIMBA MAS FARMERS GROUP ACTIVITY IN GERBO VILLAGE

Liananta Azzahra, Latarus Fangohoi, Sutoyo
Malang Agricultural Development Polytechnic
Email: lianantaazzahra@gmail.com

Submitted 16 July 2019; Accepted 03 February 2021

ABSTRAK

Kelompoktani memiliki fungsi sebagai kelas belajar, wahana kerjasama, dan sebagai unit produksi (Permentan, 2016). Kelompoktani juga memiliki peran penting dalam pembangunan pertanian, upaya untuk meningkatkan Sumber Daya Manusia (SDM) dalam kelompoktani dapat dilakukan apabila petani memiliki keaktifan dalam kelompoktani. Maka dari itu dilakukan penelitian mengenai Faktor-faktor yang berpengaruh terhadap keaktifan kelompoktani Jajang dan Rimba Mas. Penelitian dilaksanakan di desa Gerbo kecamatan Purwodadi Kabupaten Pasuruan Provinsi Jawa Timur dengan mengunakan metode kuantitatif deskriptif. Populasi yang digunakan berjumlah 77 orang dengan 65 sampel dari kelompoktani Jajang dan kelompoktani Rimba Mas. Data diperoleh dari data primer yang didapat melalui kuisioner, wawancara, dan observasi serta data sekunder diperoleh dari pemerintah desa, BPP, kantor kecamatan dan lain-lain. Analisis yang digunakan adalah deskriptif dan analisis regresi logistik dengan menggunakan *softwere* SPSS. Variabel bebas yang digunakan adalah tingkat pendidikan, luas lahan, lama berusahatani, kepemimpinan, keterlibatan penyuluh, dan keterlibatan pemerintah desa serta variabel terikat adalah keaktifan kelompoktani. Hasil analisis regresi logistik menunjukkan bahwa variabel bebas yang berpengaruh secara signifikan terhadap keaktifan kelompoktani adalah Luas Lahan, dan Keterlibatan Penyuluh.
Katakunci: *keaktifan, kelompoktani, regresi logistik*

ABSTRACT

The farmer group has a function as a learning class, a vehicle for collaboration, and as a production unit (Permentan, 2016). Farmers' groups also play an important role in agricultural development, efforts to improve Human Resources (HR) in farmer groups can be done if farmers are active in farmer groups. Therefore, research was conducted on the factors that influence the activeness of the Jajang and Rimba Mas farmer groups. The research was conducted in Gerbo village, Purwodadi sub-district, Pasuruan Regency, East Java Province using descriptive quantitative methods. The population used was 77 people with 65 samples from the Jajang farmer group and the Rimba Mas farmer group. Data obtained from primary data obtained through questionnaires, interviews, and observations as well as secondary data obtained from the village government, BPP, sub-district offices, and others. The analysis used is descriptive and logistic regression analysis using SPSS software. The independent variables used were the level of education, land area, length of farming, leadership, the involvement of the extension agents, and the involvement of the village government. The dependent variable was the activity of the farmer groups. The results of the logistic regression analysis showed that the independent variables that had a significant effect on farmer group activeness were the land area and the involvement of extension workers.
Keyword: *activity, farmers group, logistic regression*

INTRODUCTION

The reduced area of agricultural land and the lack of labor in agriculture will result in unfulfilled food needs. Development in the agricultural sector is urgently needed to overcome this problem. An effort made is to improve existing agricultural human resources (HR), namely by growing activeness in farmer groups.

Farmer groups are one of the forums that bring together farmers based on the same linkages, needs, and goals (Ministry of Agriculture, 2007). The activity of members of the farmer group will foster dynamism in the group, because farmers can build competence and performance in farming or when carrying out plant cultivation activities (Erwandi and Ramainas, 2016).

A well-managed farmer group will have the power to meet the needs, develop potential, and self-actualize members of the farmer group. The activity of farmer groups can be seen from the level of attendance in group meetings, their involvement in group activities, and their involvement in discussions conducted in farmer groups (Kustiari Tanti et al, 2006). The level of activity of these farmers is positively related to the level of farmers' ability to manage their agricultural land.

Gerbo Village, Kec. Purwodadi Kab. Pasuruan has 12 farmer groups. Of the 12 farmer groups, there are active farmer groups and inactive farmer groups. The inactivity of some farmer groups in Gerbo Village makes farmers unable to do good cooperation between farmers, solve their problems, and do not get useful knowledge to increase farmers' production.

Based on these circumstances, the author intends to examine the factors that influence the activity of the Jajang farmer group and Rimba Mas farmer group in Gerbo Village, Purwodadi District, Pasuruan Regency, East Java Province.

RESEARCH METHODS

The research method used was a descriptive quantitative method. Descriptive was used to describe or describe the data that has been collected. While the quantitative method was chosen because the data used were in the form of numbers and use statistical analysis. This research was carried out in the Jajang farmer group and the Rimba Mas farmer group in Gerbo Village, Purwodadi District, Pasuran Regency, East Java. The population used was all members of the Jajang farmer group and the Rimba Mas farmer group, totaling 77 people. The sampling technique used stratified random sampling, and proportional sampling using the solving formula. Then the sample obtained is:

$$n = \frac{N}{1 + N\,(e)^2}$$
$$= \frac{77}{1 + 77\,(0.05)^2}$$
$$= \frac{77}{1 + 0.19}$$
$$= \frac{77}{1.19}$$
$$= 64{,}7$$
$$= 65$$

The data used was primary data obtained from the results of Regional Potential Identification (IPW), interviews, and observations, while secondary data was obtained from relevant agencies such as Agricultural Extension Center (BPP), sub-district office, village office, and others.

The data collection technique used was by using questionnaires, interviews, and evaluations. The questionnaires were tested using validity and reliability tests before being distributed to research respondents. The observations made were non-participant observations, where the researcher was not directly involved and only as an independent observer. The interviews conducted were semi-structured because the guidelines used were only an outline of the problems to be asked. The data analysis used was logistic regression analysis where 7 independent

variables affected the dependent variable. The variables were age (X1), an education level (X2), land area (X3), length of farming (X4), group leadership (X5), involvement of extension workers (X6), and involvement of village government (X7) while the dependent variable (Y) was the activity of farmer groups.

RESULT AND DISCUSSION

The analysis of the results was used to determine the factors that influence the Jajang farmer group and Rimba Mas farmer group WAS logistic regression analysis. The logistic regression analysis was calculated using SPSS 20 software. There were 4 tests produced from logistic regression analysis and the partial significance test was the test model construction, predictor test, model fit test, the results of the logistic regression analysis are as follow:

1. Model Construction Test

The model construction test or the entire model test (G test) was used to determine how much influence the independent variables had on the dependent variable simultaneously. The model construction test is seen in the Omnibus Tests of Model Coefficients known from the calculation through the SPSS software. The model is declared feasible and has a simultaneous effect if the value of sig <0.05. The chi-square value obtained was 23,141 with a significant value of 0.002. This showed that the results were declared feasible and the independent variable had a simultaneous effect on the dependent variable, namely the activity of farmer groups because the significant value is less than 0.05.

2. Predictor Test

The predictor test was used to see the magnitude of the effect of the independent variable on the dependent variable in percentage units. The test instrument of the predictor test was the Nagel Kerke R Square, the following are the results of the predictor test: The value of -2 Log-likelihood was 66.953. The cox &snell R Squere value was 0.300 and the Nagelkerke R Squere was 0.399. These data indicated that the independent variable had an effect of 39.9% on the dependent variable while the rest was influenced by other variables.

3. Fit Model Test

The test with the fit model aims to explain that the logistic regression equation can be used to explain the independent variable to the dependent variable. The test tool in the fit model is the Hosmer and Lemeshow Test. This test is inversely proportional to the omnibus tests of model coefficients, if the significant value is >0.05 then the model is said to be feasible. The Chi-square value is 9.641 and the significant value or confidence level is 0.210.

Table 1. Logistic Regression Analysis

Omnibus Tests of Model Coefficients				
		Chi-square	Df	Sig.
Step 1	Step	23,141	7	,002
	Block	23,141	7	,002
	Model	23,141	7	,002

Model Sumary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	66,953	,300	,399

Hosmer and Lemeshow Test			
Step	Chi Square	Df	Sig.
1	9,641	7	,210

Source: Processed primary data, 2019

This showed that the significant value was more than 0.05. Thus, it can be concluded that the model can be used to explain the relationship between the independent variables and the dependent variable.

4. Partial Significance Test

A partial significance test was used to test the effect of the independent variables on the dependent variable individually. The test instrument used in the partial significance test was the wald test with column B or the regression coefficient to see opportunities, column sig. To see the significant value and column exp.B or odds ratio to discuss the factors that affected the dependent variable individually. The results of the partial significance test are as in table 2.

Table 2 is used to find out which independent variables affected the dependent variable. This partial significance test examined the independent variables individually. If the p-value or column sig. <0.05 then it indicated a significance. From the table, it is known that the independent variables that had a p-value of less than 0.05 are land area and the involvement of extension workers. This showed that of the 7 independent variables tested, there were only 2 variables that had a significant effect on the dependent variable. The logistic regression equation that can be formulated was as follows:

$$Y = -1{,}114 + (-1{,}682)X_3 + 1{,}648X_6$$

Affecting Variable

a. Land Area

The p-value showed the number 0.011. This showed that the land area had a significant effect on the activity of farmer groups because of the p-value <0.05. The regression coefficient value showed a negative symbol (-). It means that the wider the land area, the more likely it is to reduce activity in the group by 1.682 compared to the area of land below it. While the value of exp B showed the number 0.186. It means that the land area had a partial effect on the activity of farmer groups of 0.186. The land area regression coefficient was 1.682, so the regression equation was:

Y = - 1,114 + (- 1.682)X_3

80% of respondents from the Jajang farmer group and Rimba Mas farmer group had an average land area of 0-1.3 Ha. For the female members of the Rimba Mas group, some of them did not have land area, because the female members of the farmer group are mostly the wives of the male members who are focused on being given the material on the use of yards and processed agricultural products. However, the land area of the male members of the Rimba Mas farmer group was wider than the land area owned by the Jajang farmer group.

b. Involvement of Extension

The p-value for the involvement of the extension agent was 0.012.

Table 2. Significant Level of Factors Influencing Farmer Group Activity

		B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I.for EXP B	
								Lower	Upper
Step 1[a]	Age (X_1)	,317	,758	,175	1	,676	1,372	,311	6,059
	Education (X_2)	1,162	,787	2,181	1	,140	3,195	,684	14,927
	Land area(X_3)	-1,682	,663	6,427	1	,011	,186	,051	,683
	Length of business (X_4)	1,420	,783	3,290	1	,070	4,139	,892	19,209
	Leadership (X_5)	-,063	,650	,010	1	,922	,939	,262	3,357
	Extension (X_6)	1,648	,657	6,293	1	,012	5,197	1,434	18,833
	Government (X_7)	-,153	,699	,048	1	,826	,858	,212	3,376
	Constant	-1,114	,674	2,733	1	,098	,328		

It means that the involvement of the instructor has a significant effect on the activity of the farmer group caused by the p-value <0.05. The regression coefficient value showed a positive (+) symbol of 1.648. It means that the higher the involvement of the extension worker, the higher the chance of increasing farmer group activity by 1.648. While the value of exp. B showed the number 5.197. It means that the involvement of extension workers has a partial effect on farmer group activity of 5.197. Then the regression equation was:

$Y = -1{,}114 + 1{,}648\ X_6$

The agricultural extension workers in Gerbo village, who supervised the Jajang farmer group and the Rimba Mas farmer group, often met farmers, both in group meetings and outside group meetings. Because the Jajang farmer group has been on hiatus for a long time because the old farmer group leader passed away, the extension workers are more intensive in conducting outreach at the Rimba Mas farmer group. However, after that, the Jajang farmer group was rebuilt with extension workers, *gapoktan*, and the village government. This showed that the involvement of extension workers will affect the activity of farmer groups.

Affecting Variable

a. Age

The results of the regression analysis for age showed that the p-value or significance was 0.676. It means p-value > 0.05, so age had no significant effect on farmer group activity. The conclusion obtained from the analysis of the effect of age on activity was that age has no significant or no significant effect on activity.

The age of respondents in the Jajang farmer group and Rimba Mas farmer group were mostly 47-65 years old of 47.7% of the respondents are at that age. This explained that the age characteristics between the Jajang farmer group and the Rimba Mas farmer group did not have a significant effect on their activity in the farmer group.

b. Educational Level

The p-value or significance for the level of education was 0.140. The level of education also did not have a significant effect on the activity of farmer groups. This was due to the p-value > 0.05. The Jajang farmer groups and Rimba Mas farmer groups had different levels of education. Respondent data showed that most of the respondents from the Jajang farmer group had a low level of education. Only 8% or 2 respondents had a high school education level while the others were at the elementary and junior high school levels. For the Rimba Mas farmer group, 35% of the respondents had a high school education level, while the others were at the elementary and junior high school levels. This showed that there was a difference in the level of education of the Jajang farmer group and the Rimba Mas farmer group that had a positive but not significant or significant difference.

c. Farming Length

The p-value for the length of farming showed the number 0.070. This indicated that the length of farming had no significant effect on the activity of farmer groups, by showing the p-value > 0.05. The duration of farming had a relationship with the knowledge and experience of farmers in doing farming. Farmers who had long worked in agriculture, in general, would have more experience and knowledge in the field of agriculture. The average Jajang farmer group had been farming for 24 years, while the Rimba Mas farmer group had an average length of 22 years. This showed that the length of farming of the Jajang farmer group and Rimba Mas farmer group was not so far away so that the length of farming did not have a significant effect on the activity of the farmer group.

d. Leadership

The effect of leadership seen in this research was the fair nature of the leader or head of the farmer group. The leader's ability to give suggestions to members of the farmer group, support the goals of the farmer group, its role as a catalyst, create a sense of security for members, as a representative of the

organization, as a source of inspiration, and had an attitude of mutual respect that could affect farmer group members to be active in farmer group activities.

The p -alue for leadership was 0.922. It means that the leadership variable did not have a significant effect on farmer group activity, showing the p-value > 0.05. The head of the Jajang farmer group was the group leader elected by members and community leaders to be the head of the Jajang farmer group. Meanwhile, the chairman of the Rimba Mas farmer group was a community leader elected by the members to be the head of the farmer group. The selection of community leaders as the head of the farmer group was expected to provide encouragement, direction and be respected by members.

e. Village Government Involvement

The village government is the organizer of government affairs by the village government and the Village Consultative Body (BPD). It regulates the interests of the local community based on local origins and customs. In farmer groups, the village government also has several roles, such as providing facilities in the form of facilities and infrastructure needed by farmer groups, providing services to farmers, and providing useful information for farmers. The involvement of the village government in farmer groups is expected to have an effect so that farmer groups become more active.

The p value of the involvement of the village government was 0.826. It means that the involvement of the village government had no significant effect on the activity of farmer groups because the p value was > 0.05. The involvement of the Gerbo village government towards the Jajang farmer group and the Rimba Mas farmer group was considered to be the same or not significantly different. This was because the village government treats all farmer groups equally in Gerbo village, namely providing services in the form of infrastructure, providing information, as well as participating and supporting activities held by farmer groups. Therefore, the involvement of the village government does not have a real influence on the activities of farmer groups.

CONCLUSION AND SUGGESTION

The effect of internal factors and external factors on farmer group activity is that land area (internal factor) significantly affects farmer group activity and has a negative value. It means that the wider the farmer's land area, the opportunity to reduce activity in farmer groups. Furthermore, the external factor that has a significant effect is the involvement of the extension worker that has a positive value. It means that the higher the involvement of the extension worker, the more likely it is to increase the activity of farmer groups.

It is expected that farmers will be more active in participating in farmer group activities. By participating in farmer groups, there will be many benefits for farmers in running their farming.

REFERENCES

Damanik, Inta P. N. 2013. Faktor-faktor yang mempengaruhi dinamika kelompok dan hubungannya dengan kelas kemampuan kelompok tani di desa Pulokencana Kabupaten Serang. Jurnal penyuluhan. 9(1).

Erwandandi dan Ramainas. 2016. Tingkat keaktifan anggota kelompoktani di Kecamatan Tanjung Tiram Kabupaten Batu Bara. Jurnal Agrica Ekstensia. 10(2): 45-54.

Hariadi Sunarru Samsi. 2011. Dinamika Kelompok. Sekolah Pasca Sarjana Universitas Gajah Mada. Yogyakarta.

Harlan Johan. 2018. Analisis Regresi Logistik. Penerbit Gunadarma. Depok

Krisnawati, Purnaningsih Ninuk, Asngari. 2013. Persepsi petani terhadap peranan penyuluh pertanian di Desa Sidomulyo dan Muari, Distrik Oransbari,

Kabupaten Manokwari Selatan. Jurnal Sosiokonsepsia. 18(3).

Kustiari Tanti, Djoko Susanto, Sumardjo dan Pulungan Ismail. 2006. Faktor-faktor penentu tingkat kemampuan petani dalam mengelola lahan marjinal (kasus di Desa Karangmaja, Kecamatan Karanggayam, Kabupaten Kebumen, Jawa Tengah). Jurnal Penyuluhan. 2(1).

Manopo Imelda, Jenny Baroleh, Charles R. Ngangi. 2018. Peran pemerintah desa terhadap kelompoktani karya lestari di Desa Talikuran Satu Kecamatan Sonder Kabupaten Minahasa. Jurnal Agri-Sosio Ekonomi. 14(1).

Mustari, Isra. 2012. Pengaruh Motivasi Terhadap Keaktifan Anggota Kelompoktani Sapi Perah di Kabupaten Enrekang. **Skripsi**. Fakultas Peternakan Universitas Hasanuddin Makasar. Makasar

Permentan. 2007. Peraturan Menteri Pertanian tentang Pedoman Pembinaan Kelembagaan Petani. Kementerian Pertanian Republik Indonesia. Jakarta.

Permentan. 2016. Peraturan Menteri Pertanian tentang Pembinaan Kelembagaan Petani. Kementerian Pertanian Republik Indonesia. Jakarta

Santoso, Agung Budi. 2008. Analisis Faktor-faktor yang Mempengaruhi Keputusan Petani Wortel Memilih Sistem Pertanian Organik di Desa Tugu Selatan, Kecamatan Cisarua, Kabupaten Bogor. Program Studi Manajemen Agribisnis Fakultas Pertanian. Institut Pertanian Bogor.