

## The Influence of Community Empowerment Elements and the Role of Farmer Groups on Community Empowerment

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**Abstract.** The elements of community empowerment and the role of farmer groups are very important in increasing community development. This study was aimed to 1) identify elements of community empowerment and the role of farmer groups in community empowerment, and 2) analyze the influence of elements of empowerment and the role of farmer groups on community empowerment. The research was conducted in Merjosari Village, Malang City. Determination of the sample using non-probability sampling of 32 respondents. This study used primary data covering Elements of Community Empowerment and the Role of Farmer Groups. Data analysis used Structural Equation Modeling (SEM) analysis. The results showed that the elements of community empowerment include information accessibility, involvement and participation, accountability, and local organizational capacity. The role of farmer groups includes learning classes, cooperation vehicles, and production units. And also, the element of community empowerment and the role of farmer groups has a significant influence on community empowerment. This study concluded that the better the element of empowerment and the role of farmer groups, the better the community empowerment.

**Keywords:** Community Empowerment  $\cdot$  Empowerment Elements  $\cdot$  Role of Farmer Groups

## 1 Introduction

Agriculture is the most important part of a country, apart from being a pillar of the country's economy, it is also a top priority in future development. Agriculture has an important meaning in the economic development of the Indonesian nation. The government has set agriculture as a development priority in the future. Well-managed and wise development can increase growth as well as sustainable economic equity, overcome poverty and movement, and ultimately prosper the people of Indonesia [8]. Olivier [2] reported that networks, inputs, equipment, and infrastructure sourced from local potential are very important for the development of resilient agriculture.

The empowerment of rural women, the most vulnerable group in the rural sector, is critical as they can influence rural and agricultural development at the grassroots level for gender equality, household security, and poverty alleviation [1]. Empowerment is the process by which the self-determination capacity of vulnerable groups is enhanced using governance and technology. The problem with community empowerment in exploring the local potential of the region is that the community is still reluctant to improve their socio-economic life, and the empowerment of the village government is still not good.

Farmer groups are farmers formed based on common interests, similarity in environmental conditions (social, economic, resources), familiarity, and harmony, led by a chairman [3].

In empowerment through farmer groups, various problems are often encountered. The problem is the attitude of individualism and the lack of an active role in society. In addition, the community is still not optimal in the use of yard land for farming. In the development of society, agriculture plays an important role. Therefore, it is necessary to empower the community to solve problems that arise, especially in the agricultural sector. One of the government's policies toward agricultural communities is to form farmer groups [1].

According to Hamid [4] community empowerment is a participatory activity, which involves all related elements of society, especially those that will become the target group, which must also include the process of assisting problems carried out with the community. However, in Merjosari only a small portion of the community responds to empowerment. Therefore it becomes important to conduct research that aims to 1) identify the elements of community empowerment and the role of farmer groups in community empowerment, and 2) to analyze the influence of the elements of empowerment and the role of farmer groups on community empowerment.

## 2 Materials and Methods

The research was carried out in Merjosari Village, Lowokwaru District, Malang City from January to April 2021. The research was conducted in this place because Merjosari Village, Lowokwaru District, Malang City is an area that is quite active in community empowerment activities and has farmer groups.

Sampling used the non-probability sampling method, because it is known that the respondents needed in the study. Therefore, the non-probability sampling technique used in this study is to use purposive sampling. According to Sugiyono [11] purposive sampling was a sampling technique of data sources with certain considerations. In this study the sample followed criteria:

- 1. Be a member of the "Kenanga" farmer group.
- 2. Communities who play an active role in community empowerment and other farmer group programs.

The total population of Merjosari Village, Lowokwaru District, Malang City was 42 people, consisted of 10 administrators of "Kenanga" farmer groups, 15 members of "Kenanga" farmer groups, and 17 people who play an active role. Based on the criteria above, those who meet the requirements as samples were 32 people.

Analysis of the identification of elements of community empowerment and the role of farmer groups in community empowerment used descriptive analysis. While the analysis of the influence of the elements of empowerment and the role of farmer groups used SEM. Analysis with the SEM model was objected to determine the magnitude of the influence of the independent variable on the dependent variable.

- 1. Stage of Structural Equation Modeling and Analysis
- 2. Build a path diagram
- 3. Designing a Structural Model (Inner model)
- 4. Designing the outer model
- 5. Constructing the path Diagram
- 6. Convert the path diagram to a system of equations
- 7. Evaluation of Goodness of Fit
- 8. Hypothesis testing

## 3 Results and Discussion

## 3.1 Identification of Empowerment Elements and the Role of Farmer Groups

The element of empowerment and the role of farmer groups influence increasing income. The elements and roles of farmer groups in community empowerment in Merjosari Village, Lowokwaru District, and Malang City are divided into several aspects. Aspects of the elements of empowerment include:

## 1. Information Accessibility

The results show that the accessibility of information still needs to be improved because the delivery of information for the development of empowerment is still not optimal. So that people still need extensive information and knowledge.

## 2. Involvement and Participation

The results show that in the form of community involvement and participation in the development of empowerment, the community agrees that the empowerment can help and provide space in making decisions and also agrees that the community actively participates in the development of community empowerment.

## 3. Accountability

The results show that accountability in empowerment has been running but is still not maximized. So it must foster a sense of responsibility that must be carried out by the administration that has been determined.

## 4. Local Organizational Capacity

The data shows that the indicators of the capacity of local organizations in community empowerment are still lacking in activities that can be carried out such as training to improve community empowerment and the ability to carry out organizational management.

Aspects of the role of farmer groups in community empowerment include:

## 1. Learning Class

Based on the data obtained, the learning class in farmer groups plays an important role for its members and the community to improve their abilities, knowledge, and skills.

## 2. Cooperation Vehicle

Based on the results show that the cooperation vehicle is very important in the role of farmer groups to improve social attitudes in carrying out cooperation and obeying regulations. However, from the results of the data farmer groups still need more cooperative relationships with other parties.

#### 3. Production Unit

Based on the results illustrate that the role of farmer groups in the production unit plays an important role in increasing production and for the sustainability of farming to make group plans for the future. This is in line with research conducted by Rinaldi Prasetia [10] group acting as a production unit has a positive influence which is in good classification with a value of mode 22 as many as 55 respondents (62%). Based on the situation in the field to increase the ability of farmer groups in carrying out their functions as production units, farmer groups prepare a Group Definitive Plan (RDK) and a Definitive Plan for Group Needs (RDKK) for farming.

# **3.2** The Influence of Empowerment Elements and the Role of Farmer Groups on Community Empowerment

Aspects of community empowerment elements and the role of farmer groups each have variable indicators that are used as benchmarks for each of these variables. To find out how much influence farmer groups have on increasing income, a test is carried out using the SEM method with four tests as follows:

## 1. Cronbach Alpha Test

The first test is seen from Cronbach Alpha. If the test results show a value of more than 0.5 then the data is good to continue at the next stage. The following test data can be seen as follows (Table 1).

Based on Table 1, it can be concluded that the Cronbach alpha value of each variable has a Cronbach alpha value > 0.7. According to a quote from Imam Ghozali [5]

Table 1. Cronbach Alpha Value

Indicator	Cronbach's Alpha	
Latent UPM _(X <sub>1</sub> )	0.878	
Information Accessibility_(X <sub>1.1</sub> )	0.790	
Involvement and Participation_(X <sub>1.2</sub> )	0.700	
Accountability _(X <sub>1.3</sub> )	0.669	
Local Organizational Capacity_(X <sub>1.4</sub> )	0.819	
Latent KT_(X <sub>2</sub> )	0.931	
Learning Class_(X <sub>2.1</sub> )	0.929	
Cooperation Vehicle _(X <sub>2.2</sub> )	0.798	
Production Unit_(X <sub>2.3</sub> )	0.700	
Latent PM_(Y <sub>1</sub> )	0.848	
Income_(Y <sub>1.1</sub> )	0.846	
Farming Continuity_(Y <sub>1.2</sub> )	0.721	
Optimization of natural and human resources_(Y <sub>1.3</sub> )	0.804	

Source: Primary data, processed (2021)

**Table 2.** Average Variant Extracted (AVE)

Indicator	AVE
Latent UPM _(X <sub>1</sub> )	0.554
Information Accessibility_(X <sub>1.1</sub> )	0.712
Involvement and Participation_(X <sub>1.2</sub> )	0.744
Accountability _(X <sub>1.3</sub> )	0.750
Local Organizational Capacity_(X <sub>1.4</sub> )	0.846
Latent KT_(X <sub>2</sub> )	0.523
Learning Class_(X <sub>2.1</sub> )	0.672
Cooperation Vehicle _(X <sub>2.2</sub> )	0.622
Production Unit_(X <sub>2.3</sub> )	0.623
Latent PM_(Y <sub>1</sub> )	0.533
Income_(Y <sub>1.1</sub> )	0.866
Farming Continuity_(Y <sub>1.2</sub> )	0.637
Optimization of natural and human resources_(Y <sub>1.3</sub> )	0.836

Source: Primary data, processed (2021)

reported that the Cronbach alpha value between 0.5–0.6 is considered sufficient to meet the requirements. Thus the results of the study showed that each variable has met the

requirements of the Cronbach alpha value so that all variables have a high level of reliability.

## 2. Average Variant Extracted (AVE) Test

The Average Variant Extracted (AVE) was used to strengthen the results of discriminant validity. In this test, it is known that the values are based on the indicators tested and there are regulations that if more than 0.5 is declared good and can be continued at the next testing stage. The results of the AVE test can be seen in Table 2.

Based on the data presented in Table 2, it is known that the AVE value of the internal audit variable, account officer competence, and financing risk management effectiveness is >0.5. Thus it can be stated that each variable has good discriminant validity.

## 3. Hypothesis Test

Hypothesis testing was carried out on each of the partial direct influence paths. From the results of the data that has been done can be used to answer the hypothesis in this study. Hypothesis testing can be done by looking at the T-Statistics and P-Value values that have been analyzed in this study. The hypothesis in this study can be accepted if the P-Value < 0.05. The results of hypothesis testing obtained in this study can be seen as follows through the inner model. The results of hypothesis testing in research from Matia Andriani [7] show that transparency, accountability and community participation affect the management of village funds.

Table 3 showed that all relationships between latent variables and latent variables on indicators have a significant effect. All variables have a t-statistic value > 1.96 and a p-value < 0.05 so that each latent variable has a significant effect on each indicator.

## 4. Correlation Test between Variables

#### 1) Direct Effect

The value of the path coefficient of the inner model contained in Table 2 can be described as a path diagram as follows (Fig. 1).

Based on the path diagram figure, the following equation can be shown:

$$Y = \gamma 1X_1 + \gamma 2X_2 + \zeta$$
  
 $Y = 1.967UPM + 2.589KT + \zeta$ 

The following is an interpretation of the direct influence path diagram based on the above equation:

1. The influence of the latent variable Elements of Community Empowerment (UPM) has a direct effect on the latent variable of Community Empowerment (PM) getting the path coefficient value of 1.967 with a p-value of 0.50. The path coefficient value shows that the value is positive, so it can be concluded that the higher the element of community empowerment, the better the influence on community empowerment.

0.050

1.967

Influence T Statistics P Values  $(X_2)$  -> Learning Class 50.341 0.000  $(X_2)$  -> Latent PM 2.589 0.010  $(X_2)$  -> Latent UPM 7.425 0.000  $(X_2)$  -> Production Unit 9.166 0.000  $(X_2)$  -> Cooperation Vehicle 36.933 0.000  $(Y_1)$  -> Farming continuity 44.625 0.000 (Y<sub>1</sub>) -> Optimization of natural and human resources 4.957 0.000  $(Y_1) \rightarrow Income$ 15.442 0.000  $(X_1)$  -> Information Accessibility 56.377 0.000  $(X_1) \rightarrow Accountability$ 20.423 0.000 (X<sub>1</sub>) -> Local Organizational Capacity 66.125 0.000 (X<sub>1</sub>) -> Involvement and Participation 2.934 0.004

**Table 3.** Path coefficient value of the inner model

Source: Primary data, processed (2021)

 $(X_1) \rightarrow Latent PM$ 

Table 4. Comparison of direct and indirect effects

Effects	Path Coefficient	P Values	Results
$KT_{-}(X_2) -> PM_{-}(Y_1)$	2.589	0.010	Received
$KT_{-}(X_{2}) \rightarrow (X_{1}) \rightarrow PM_{-}(Y_{1})$	1.894	0.059	Rejected

Source: Primary data, processed (2021)

2. The effect of the latent variable of the Farmer Group (KT) has a direct effect on the latent variable of Community Empowerment (PM) getting the path coefficient value of 2.589 with a p-value of 0.010. The path coefficient value shows a positive value, so it can be concluded that the higher the role of the Farmer Group (KT), the better the influence on Community Empowerment (PM). This agrees with the research by Ella Latiffaruhma, et al. [6] that if the role of farmer groups as a learning class, a cooperation vehicle, production units, and business units is 0 then empowerment has a value of -12,338. The value of 0.401 in the X variable is positive, which means it has a unidirectional influence, or the larger the farmer group, the greater the level of empowerment. Pramono et al. [9] explain that if the role of farmer groups is 0 then empowerment is equal to the constant value and the positive X variable means that it has a unidirectional influence.

#### Indirect Effect

In addition to the direct influence, there is an indirect effect on the latent variable of community empowerment. Based on Fig. 2, showed that the latent variable of the Farmer Group (KT) through the latent variable of the Elements of Community Empowerment (UPM) on the latent variable of Community Empowerment (PM) has an indirect effect with a path coefficient of 1.894 with a p-value > 0.05 in the indirect effect directly specific. So it can be concluded that the elements of community empowerment are dimensions of forming community empowerment that have no significant positive influence. This is because the role of farmer groups is greater and aims directly at community empowerment, without going through the community empowerment element, which is the formative aspect of community empowerment.

The following comparison of the latent variables in farmer groups between the direct and indirect influence coefficients can be seen in Table 4. Based on Table 4, the effect of the latent variable of farmer groups through the elements of community empowerment on community empowerment with the indirect effect path coefficient is lower than the direct influence coefficient, which is supported by the indirect influence value with the path coefficient < 1.96 and p-value > 0.05 so that the value obtained does not have a significant effect. This is because the role of farmer groups is greater and aims directly at community empowerment, without going through the community empowerment element, which is the formative aspect of community empowerment.

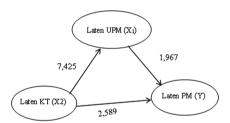


Fig. 1. Path Diagram of Direct Effect

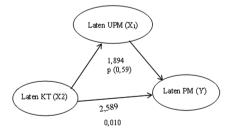


Fig. 2. Path Diagram of Indirect Effect

## 4 Conclusion

Based on the results and discussion in this study about the influence of elements of community empowerment and the role of farmer groups on community empowerment in Merjosari Village, Lowokwaru District, Malang City, the following conclusions can be drawn:

- Elements of community empowerment include accessibility, involvement and participation, accountability, and local organizations' capacity. Meanwhile, the role of farmer groups includes learning classes, cooperation vehicles, and production units.
- 2. The elements of community empowerment have a significant influence on community empowerment. However, the elements of empowerment that have been implemented are less than optimal due to a lack of information or knowledge about improving empowerment. The role of farmer groups also has a significant influence on community empowerment. However, in carrying out, farmer groups are still not optimal because they are still lacking in establishing relationships with other institutions to improve community empowerment.

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