



Multilevel Analysis: Household and Regional Factors Influence Agricultural Household Poverty in Indonesia, 2019

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Abstract. The agriculture sector is not only a source of food but also a support for the economic activities of most people in Indonesia, especially in rural areas. Unfortunately, most of their life are still below the Poverty Line/*Garis Kemiskinan* (GK). The uniqueness of this study is that this study uses household and regional variables to see their effect on agricultural household poverty. Thus, the policies will be taken are not only from the micro-economic of the household but also from the macro-economic perspective. Using multilevel binary logistic regression analysis, this study aims to examine the household and regional factors that affect the household poverty in agriculture sector in 2019 as the potential sector to alleviate poverty. Household and regional factors that affect agricultural household poverty are education, household size, resident area, ownership of pension social security, ownership of social assistance, credit assistance for businesses, and Gross Regional Domestic Product (GRDP) agricultural per capita. The variation of agriculture household poverty due to differences in characteristics between 514 districts in Indonesia is 35.19 percent.

1. Introduction

One of the main problem issues in actualizing farmers' welfare is the poverty. According to Kementerian PPN/Bappenas, poverty reduction is one of the main focuses in the Sustainable Development Goals (SDGs), especially Goal 1 that is no poverty. In Indonesia, poverty alleviation efforts have always been a national priority in any government work plan, including for the agriculture sector [1].

The agriculture sector is not only a source of food but also a support for the economic activities of most people in Indonesia, especially in rural areas. Unfortunately, most of their life are still below the Poverty Line/ *Garis Kemiskinan* (GK). The low of the Farmers' Terms of Trade/ *Nilai Tukar Petani* (NTP) also describes the welfare of farmers who have not met the expectation [2]. Based on data from BPS-Statistics Indonesia, the Farmers' Terms of Trade upgraded by 1.18 points from 101.28 in 2017 to 102.46 in 2018. This fact presents that the farmers' welfare is better in recent time, but their surplus or profit value (total income minus expenditures) is still very small [3].

In March 2019, the percentage of poor people in Indonesia was 9.41 percent. If seen from the characteristics of the households, 14.02 percent of households members do not work; 49.41 percent work in the agricultural sector; 6.51 percent work in the industrial sector; and 30.06 percent work in other sectors. In addition, other characteristics are poor households headed by women by 16.19 percent, the average number of family members is 4-5 people, with mean years of schooling of 5.61 percent. There are 49.41 percent of poor households in 2019 depended on agriculture sector for their livelihoods



[4]. BPS-Statistics Indonesia uses the concept of the ability to meet basic needs (basic needs approach) in measuring poverty. With this approach, the poverty is seen as an economic inability to meet basic food and non-food needs as measured in terms of expenditure [5].

Poverty is seen not only on the basis of insufficient income but more broadly. The poverty is the absence of one or more of the basic abilities needed to obtain a minimum function in social life. This includes not having sufficient income to obtain sufficient food, clothing, or shelter (income poverty) or not being able to treat illnesses to health facilities (poverty due to poor health), also lack from access to education, political participation, or role in society [6]. According to Ragnar Nurkse, the Vicious Circle of Poverty theory explains that developing countries are poor, because their productivity is not enough, which results in low income of the population, and only sufficient to meet minimum consumption needs [7].

The poverty can be seen at both macro and micro levels. From the macro approach, the poverty can be analyzed by the aggregate level, while the micro approach is needed to know more clearly how poverty is, for example based on its characteristics. The analysis at the household level is one kind of a micro approach. Many previous studies have been conducted in analyzing household characteristics as the determinant of poverty status, including agricultural sector households. A previous study presents that the household characteristics significantly effectuate the household's poor status in Indonesia, such as gender, age, education, and employment status of head of household [8]. Another study argues that the household characteristic (education level) has a significant impact on the household's poverty rate in 15 provinces in Indonesia [9]. In a research with a smaller scope found that the household characteristic (education level) significantly affect the agriculture household's poor status in Pesisir Selatan District, West Sumatera [10].

On the other hand, the regional economic factors can also affect poor households in the agricultural sector. Several studies show that regional factors such as GRDP, Farmers' Terms of Trade (NTP) and employment rate can affect the poverty status of agricultural households. A study found that the larger Gross Regional Domestic Product (GRDP), the smaller the number of poor households in East Java Province [11]. In addition, another study shows that greater the GRDP in nine sectors (including agriculture sector), the lower the poverty rate in Indonesia [12]. If it is related to the characteristics of the place of residence, a study found the locational factor (rural or urban areas) has a significant impact on the household's poor status in Indonesia [8]. Other study using the Farmers' Terms of Trade (NTP) as a proxy for farmer's welfare explains that there has a significant effect to alleviate the poverty rate in Indonesian rural areas. A study in Pesisir Selatan, West Sumatera found that the job opportunity has a significant influence on the agricultural household's poor status in Pesisir Selatan, West Sumatera [10].

This study aims to examine household and regional factors that affect the household poverty in agriculture sector in 2019 and determine the variation of agricultural household poverty due to differences in characteristics between 514 districts in Indonesian region using multilevel binary logistic regression analysis. This study has a unique analysis because the model of this study uses household variables and regional variables affecting on agricultural household poor status. So, the policies will be taken are not only from the micro-economic but also from the macro-economic perspective. This research will analyze these two factors from districts level scope in Indonesia because there are no previous studies based on authors' knowledge. The hypotheses to be tested in this study are that the household characteristics and regional factors have significant impact on the agricultural sector's poor household in Indonesia.

2. Methodology

This research uses two methods of analysis, descriptive analysis and inferential analysis. Descriptive analysis used in this research is a statistical analysis technique by presenting data in the form of tables and graphs. Inference analysis used in this research is multilevel binary logistic regression to analyze household and regional factors that affect agricultural household poverty of 514 districts in Indonesia.

Multilevel analysis is an analysis used to test the relationship between variables measured at different levels in a hierarchical data structure. The stratified data structure or hierarchy is a data structure in which the units of observation are grouped into a unit that has a higher level. Data with a lower level is



nested at a higher level [13]. A grouping data (data with clusters) and data obtained from multistage sampling, multilevel analysis is very suitable [14].

In this research, the model used is a multilevel model with random intercept. This model is used because it is in accordance with the objectives to be achieved in the research, namely to determine the effect of variations between level 2 units (districts). In addition, this research assumes that the effect of each explanatory variable for each group (districts) is the same.

Hypothesis testing: Likelihood ratio test (LR test) for testing the significance of random effect test

$$H_0 : \sigma_{u0}^2 = 0 \text{ (Random effect is not significant)}$$

$$H_1 : \sigma_{u0}^2 > 0 \text{ (Random effect is significant)}$$

Hypothesis testing: Simultaneous parameter significance test (G test)

$$H_0 : \gamma_{10} = \gamma_{20} = \dots = \gamma_{p0} = \gamma_{01} = \dots = \gamma_{0Q} = 0$$

(There is no effect of the explanatory variable on poverty status of agricultural household)

$$H_1 : \text{There is at least one } \gamma \neq 0$$

(There is at least one explanatory variable that has an effect to the response poverty status of agricultural household)

Hypothesis testing: Partial parameter significance test (Wald test)

$$H_0 : \gamma_{p0} = 0 \text{ (Variable doesn't affect the poverty status of agricultural households partially)}$$

$$H_1 : \gamma_{p0} \neq 0 \text{ (Variable affects the poverty status of agricultural households partially)}$$

The formula in the methods can be written as follows:

Level 1:

$$\eta = \beta_{0j} + \sum_{p=1}^P \beta_{pj} X_{p ij} + \varepsilon_{ij} \tag{1}$$

$$\pi_{ij} = F(\eta) = \left(\frac{e^\eta}{1+e^\eta} \right) \tag{2}$$

$$\ln \left(\frac{\pi_{ij}}{1-\pi_{ij}} \right) = \eta = \beta_{0j} + \sum_{p=1}^P \beta_{pj} X_{p ij} + \varepsilon_{ij} \tag{3}$$

Level 2:

$$\beta_{0j} = \gamma_{00} + \sum_{q=1}^Q \gamma_{0q} Z_{qj} + U_{0j} \tag{4}$$

Where $\beta_{pj} = \gamma_{p0}$ untuk $p > 0$

Level 1 and level 2 combined (Two level binary logistic regression with *random intercept*):

$$\ln \left(\frac{\pi_{ij}}{1-\pi_{ij}} \right) = \gamma_{00} + \sum_{p=1}^P \gamma_{p0} X_{p ij} + \sum_{q=1}^Q \gamma_{0q} Z_{qj} + U_{0j} + \varepsilon_{ij} \tag{5}$$

Equation model of the data:

Level 1 (Household):

$$\begin{aligned} \ln \left(\frac{\pi_{ij}}{1-\pi_{ij}} \right) = & \beta_{0j} + \beta_{1j} \text{Gender}_{ij} + \beta_{21j} \text{Education_of_headhousehold1}_{ij} + \\ & \beta_{22j} \text{Education_of_headhousehold2}_{ij} + \beta_{23j} \text{Education_of_headhousehold3}_{ij} + \beta_{3j} \text{Household_size}_{ij} + \\ & \beta_{4j} \text{Resident_area}_{ij} + \beta_{5j} \text{Ownership of pension social security}_{ij} + \beta_{6j} \text{Ownership of social assistance} + \\ & \beta_{7j} \text{Credit assistance for businesses}_{ij} + \varepsilon_{ij} \end{aligned} \tag{6}$$



Level 2 (Districts):

$$\beta_{0j} = \gamma_{00} + \gamma_{01}GRDP_Agricultural_per_capita_j + \gamma_{02}Employment_Rate_j + U_{0j} \quad (7)$$

Combined model with level 1 (Household) and level 2 (Districts):

$$\begin{aligned} \ln\left(\frac{\pi_{ij}}{1-\pi_{ij}}\right) = & \gamma_{00} + \gamma_{10}Gender_{ij} + \gamma_{210}Education_of_headhousehold1_{ij} \\ & + \gamma_{220}Education_of_headhousehold2_{ij} + \gamma_{230}Education_of_headhousehold3_{ij} \\ & + \gamma_{30}Household_size_{ij} + \gamma_{40}Resident_area_{ij} + \gamma_{50}Ownership\ of\ pension\ social\ security_{ij} \\ & + \gamma_{60}Ownership_of_social\ assistance_{ij} + \gamma_{70}Credit_assistance_for_businesses \\ & + \gamma_{01}GRDP_Agricultural_per_capita_j + \gamma_{02}Employment_Rate_j + u_{0j} + \epsilon_{ij} \end{aligned} \quad (8)$$

where:

$\ln\left(\frac{\pi_{ij}}{1-\pi_{ij}}\right)$: logit function in multilevel model for poverty status of agricultural household

γ_{00} : intercept (overall mean)

γ_{p0} : fixed effects for explanatory variables p -th in households (fixed slope)

γ_{0q} : fixed effects for explanatory variables q -th in districts

ϵ_{ij} : residual for individual i -th in household in j -th group

u_{0j} : random effect j -th group in districts

2.1 Data and Data Sources

The data used in this research is secondary data from the Indonesia National Social Economic Survey (Susenas) March 2019. The analysis was performed on the 514 districts in Indonesia. we only selected households belonging to agricultural households. In this research, a person is engaged with agriculture sector if he/she is a member of the agriculture household (the main source of income comes from the agriculture sector). The unit of analysis is poverty status in agricultural households. Other data used as contextual factors in this research are gross regional domestic product (GRDP) per capita in agricultural sector and employment rate in 514 districts in Indonesia.

3. Results and Analysis

3.1 Characteristics of Agricultural household poverty

Figure 1 shows that the percentage of agricultural household poverty is 9.3 percent, while the percentage of agricultural not poor household is 90.7 percent. In simple terms, it can be said that there is one of eleven agricultural households is in poor condition.

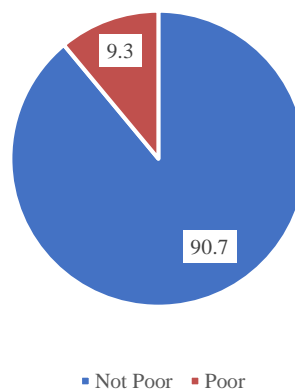


Figure 1. Percentage of Agricultural household povertys, 2019
Source: Susenas Maret 2019 (data processed by researchers)



In general, Table 1 presents that the characteristic of agricultural household poverty were headed by male (9.3 percent). Head of the households had low education (10.6 percent), had more than 4 family members (15.7 percent), living in rural areas (9.7 percent), did not own pension social security (9.5 percent), received social assistance from government (13.6 percent), and did not receive credit assistance for businesses (9.7 percent).

Table 1. Characteristics of agricultural household poverty, 2019.

Variable	Category	Percentage	
		Not Poor	Poor
Head of household's gender	Female	90.8	9.2
	Male	90.7	9.3
Head of household's education	< Primary School	89.4	10.6
	Primary school	91.2	8.8
	Junior high school	92.7	7.3
	Senior high school or above	94.7	5.3
Household size	Less than or equal 4 family members	93.7	6.3
	More than 4 family members	84.3	15.7
Resident area	Urban	92.3	7.7
	Rural	90.3	9.7
Ownership of pension social security	Does not own pension social security	90.5	9.5
	Owned pension social security	97.5	2.5
Ownership of social assistance	Does not received	93.5	6.5
	Received	86.4	13.6
	Does not receive credit assistance for businesses	90.3	9.7
Credit assistance for businesses	Received credit assistance for businesses	93.9	6.1

Source: Susenas, March 2019 (data processed by researchers)

3.2 Household and Districts Factors Affect Agricultural household poverty

Based on the data output, processed by using STATA, the value of the Likelihood Ratio Test (LR Test) is $12,469.84 > \chi^2_{(0,05,1)} (3.84)$ or it can also be seen from the p-value $(0,000) < \alpha (0.05)$. The decision is rejecting H_0 . It can be concluded that with a significance level of 5 percent, there is a significant random effect on agricultural household poverty. In other words, the data is more suitable using a multilevel binary logistic model than using single level logistic regression.

Then, Simultaneous test (G test) is used to see whether there is at least one explanatory variable is significant to affect the agricultural household poverty. The value of G test is 13,966.96 where $G > \chi^2_{(0,05;9)} (16.92)$ or it can be seen from the p-value $(0,000) < \alpha (0.05)$. The decision is to reject H_0 . It can be concluded that there is at least one explanatory variable that affects the agricultural household poverty. In other words, a model with a conditional variable is better to use than a model without an explanatory variable (null model).

After that, to see which variables that affect agricultural household poverty, the Wald test is used. The Wald test will give the decision to reject H_0 if the W value is more than the $Z_{0,025;1} = 1.96$ or the



p-value (0,000) < α (0.05). The test results of each explanatory variable in the binary logistic multilevel model can be seen in the following table:

Table 2. The estimation results of multilevel binary logistic model parameters.

Variable	Coefficient	Standard Error	W	p> z	Odds Ratio
I. Household Factors					
Head of household's gender					
- Female (ref)					
- Male	0.03	0.0351	0.65	0.52	1.02
Head of household's education					
- < Primary School (ref)					
- Primary school	-0.17	0.0297	-5.88*	0.000	0.84
- Junior High School	-0.30	0.0391	-7.63*	0.000	-0.74
- Senior High School or above	-0.53	0.0421	-12.70*	0.000	0.59
Household size					
- Less than or equal 4 family members (ref)					
- More than 4 family members	1.47	0.0260	56.67*	0.000	4.36
Resident area					
- Urban (ref)					
- Rural	0.25	0.0440	5.59*	0.000	1.27
Ownership of Pension social security					
- Doesn't own pension social security (ref)					
- Owned pension social security	-1.45	0.1257	-11.51*	0.000	0.24
Ownership of social assistance					
- Does not receive (ref)					
- Received	0.54	0.0272	-19.76*	0.000	1.71
Credit assistance for businesses					
- Doesn't receive credit assistance for businesses (ref)					
- received credit assistance for businesses	-0.60	-0.0461	-13.09*	0.000	0.55
II. Contextual Factors					
GRDP Agricultural per capita	-0.0241	0.0081	-2.96*	0.003	0.9762
Employment Rate	0.0376	0.0294	1.28	0.201	1.0383
Constant	-7.1168	2.8037	-2.54*	0.011	0.0008

Note : * means significant at $\alpha = 0.05$; ref is a reference category

Source : Susenas, March 2019 (data processed by researchers)

Based on the results of the Wald test, it can be seen that the variables that significantly affect agricultural household poverty in Indonesia are education attainment, household size, resident area, ownership of pension social security, ownership of social assistance, credit assistance for businesses, and GRDP agricultural per capita.

Therefore, the multilevel binary logistic regression equation with the random intercept formed is:

$$\ln\left(\frac{\hat{\pi}_{ij}}{1 - \hat{\pi}_{ij}}\right) = -7.1168 - 0.17 \text{ Education_attainment1}_{ij} - 0.30 \text{ Education_attainment2}_{ij} \\ - 0.53 \text{ Education_attainment3}_{ij} + 1.47 \text{ Household_size}_{ij} + 0.25 \text{ Resident_area}_{ij} \\ - 1.45 \text{ Ownership_of_pension_social_security}_{ij} + 0.54 \text{ Ownership_of_social_assistance}_{ij} \\ - 0.60 \text{ Credit_assistance_for_businesses} - 0.0241 \text{ GRDP_Agricultural_per_capita}_j \quad (9)$$



3.3 Intraclass Correlation (ICC)

The effect of variations between districts on variations in agricultural household poverty could be seen through the intraclass correlation (ICC).

$$ICC = \frac{\hat{\sigma}_{u0}^2}{\hat{\sigma}_{u0}^2 + \hat{\sigma}_{e0}^2}$$

$$= 0.3519 \text{ (35.19 percent)}$$

The ICC value is 0.3519 or 35.19 percent. This can be interpreted that 35.19 percent of the diversity of agricultural household poverty is caused by differences in the characteristics of districts in Indonesia.

3.3 Binary Logistic Multilevel Model Interpretation with Random Intercept

To find out the magnitude of the affection of the tendency from each explanatory variable (household and districts explanatory variables) on agricultural household poverty, the odds ratio is used. The odds ratio is a comparison of the risk of an event from one category compared to another.

3.3.1 Head of household's gender. Generally based on previous research, women as heads of households are identical to poverty. Female workers are more vulnerable than male. In Indonesia, male has responsibility for making a living. One of the reasons women become the head of the household is because the husband has died or the husband cannot earn a living, so the wife is responsible to earn a living for his family. But, in this case, these results shows that there is no difference in the condition of household poverty between male and female as head households.

3.3.2 Head of household's education. The level of education from the head of the household has a significant effect on agricultural household poverty. Education indirectly affects the mindset of the head of the household, namely the motivation that is seen in behavior to achieve a certain level of income. The higher the level of education achieved by the head of the household, then they have a big enough opportunity to improve their standard of living so they can get out of poverty. The level of education has a significant effect on agricultural household poverty. The higher the level of education attainment, the smaller the tendency of agricultural households to become poor assuming all other variables are constant. From odds ratio, we could interpret that those with high education (senior high school or above) have a tendency to be poor 0.59 times less than those with low education (<primary school) assuming all other variables are constant. A previous study found that the factors that influence household poverty is level of education. The higher level of education that has been completed by head of household, the lower tendency to become poor. The education variable is one of variables that has the most influence on household poverty status [15].

3.3.3 Household Size. The higher household size (more than 4 family members), the higher tendency of agricultural households to become poor assuming all other variables are constant. One of the characteristics of poor is that there are so many children or members in a households. A study about the determinants of household poverty in Jambi Province explained that the bigger size of the household has a strong influence on poverty [16]. From odds ratio, we could say that the households with a family size of more than 4 family members have a 4.36 times greater tendency to be poor compared to those with a family size of less than or equal 4 family members assuming all other variables are constant. The relationship between a large number of household members and poverty are mutually reinforcing. Poor households tend to have more children. It can't be separated from the assumption that children are the guarantee of the future for their parents. On the other hand, household with a greater number of children tend to be poor because to some extent certain income must be used to support more household members [17].

3.3.4 Resident Area. Resident area has a significant effect on agricultural household povertys. Agricultural households in rural area will tend to be poorer than those living in urban area. The households living in rural areas have a tendency to be poor 1.27 times greater than households living in urban areas assuming all other variables are constant. A previous study found that the variables that



affect household poverty are resident area where many poor people live in rural areas. The poor are mostly distributed in rural areas [16]. In March 2019, in Indonesia, 12.85 percent of the poor lived in rural areas and 6.69 percent lived in urban areas [18].

3.3.5 Ownership of Pension Social Security and Social Assistance. Ownership of social assistance has a significant effect on agricultural household poverty. The Agricultural household who has social assistance has more tendency to be poor than those who has no social assistance. The households that have social security pensions have a tendency to be poor 0.24 times smaller than households that do not have social security pensions and the households that have social assistance have a tendency to be poor 1.71 times greater than households that do not have social security assistance assuming all other variables are constant. This indicates that agricultural households that receive assistance are classified as poor. A previous study had been conducted by other researchers on the issue of multidimensional poverty and social protection. In this study, social protection resulted from manifest variables including *Beras Sejahtera* (Rastra), Family Hope Program (PKH), educational assistance (*Bantuan Siswa Miskin SD*, *Bantuan Siswa Miskin SMP*), pension insurance, and health insurance (*Jamkesmas and Jamkesda*) [19]. The results show that there was a positive relationship between multidimensional poverty and social protection for poverty alleviation, human development, and improved quality of life. Social protection is not only aimed at the poor and disadvantaged but involves the whole community in social inclusion in poverty protection.

3.3.6 Credit Assistance for Businesses. Credit assistance for businesses assistance has a significant effect on agricultural household poverty. A socio-economic study showed that the existence of credit assistance for businesses could affect farmer poverty. The households that have credit assistance for businesses have a tendency to be poor 0.55 times smaller than households that do not have credit assistance for businesses assuming all other variables are constant. A previous study also explained that the existence of capital factor had a significantly negative correlation with the poverty level of farmers [20]. For the government, it is necessary to provide capital through bank credit so that farmers can increase their farming area to increase farmers' income.

3.3.7 GRDP Agricultural per Capita. GRDP agricultural per capita has a significant effect on agricultural household poverty. The result show that for every 1 percent increase in GRDP agricultural per capita, the percentage of household poverty will decrease by 0.000241 percent assuming all other variables are constant. This effect is quite small, but the increase in GRDP still has an impact on reducing poverty. A previous study about poverty diagnoses showed that increasing incomes in agriculture remains the main driver for poverty reduction in Indonesia. Panel data between 1993 and 2000 show that 40 percent of agricultural workers in rural areas were able to escape poverty by continuing to work in the rural agricultural sector [21]. Moreover, other research had been analyzed the effect of output from the agricultural sector, processing industry and trade on the number of poor people in East Java Province. In this study, the data used were Gross Regional Domestic Product (GRDP) data at constant prices (ADHK) 2000 for the period 2005 to 2013. The results showed that the output of the agricultural sector, processing industry, hotel and restaurant trade had a negative and significant effect on the decline. the number of poor people in East Java Province. Among the three sectors, the agricultural sector is a sector that can be relied upon in dealing with the number of poor people in East Java [11].

3.3.8 Employment Rate. A previous study showed that the employment rate or unemployment rate has a significant effect on poverty. The study explains that the unemployment rate (TPT) has a significant effect on reducing poverty in districts and cities in East Java Province [22]. The greater the unemployment rate, the more the number of poor people will be. Therefore, a policy is needed to reduce the open unemployment rate, including by expanding job opportunities. On the other hand, results of this research showed that the employment rate has no significant effect on the agricultural household poverty. This is because many jobs available from sectors other than agriculture. Statistics Indonesia notes that the workers in the agricultural sector was decreasing. In the last 4 years the number of people



working in the agricultural sector has decreased from 37.77 million in august 2016 to 34.58 in august 2019 [23].

4. Conclusion And Recommendation

The characteristic of agricultural household poverty is headed by a male, has lower education, has more than 4 family members, living in rural areas, doesn't own pension social security, received social assistance from the government, and doesn't receive credit assistance for businesses. In addition, the various conditions of agricultural household poverty in each district in Indonesia are also a challenge in terms of handling poverty which must be handled by collaboration between the central and regional governments according to the characteristics of each region.

Reducing poverty in agricultural households, there are several suggestions that can be taken. The government has to increase business credit programs for farmer households. That program has a significant impact in reducing poverty and expanding access, especially in rural areas. Farmers are expected to be empowered and have sufficient capital for their agriculture. It is hoped that the productivity of farmers and farmers' income will increase. Based on the previous study conducted by the World Bank found that the increase of income in the agricultural sector remains the main factor for poverty reduction [21].

The governments are expected to create conducive economic conditions, for example equitable economic development in each region, increasing the regional productivity of the agricultural sector to reduce poverty in the agricultural household. GRDP is significant for reducing poverty. Previously, it was discussed that the higher GRDP, the greater the potential to reduce poverty. Although in this study unemployment is not significant enough to affect household poverty, the government is expected to keep opening opportunities in terms of employment opportunities. Due to the higher employment opportunities in a region, it is expected that the absorption of labor in the agricultural and non-agricultural sectors is expected.

Then, the sustainability of social assistance programs must be continued and monitored to help them out of poverty. Social assistance in the form of food or non-food provides them wider access to a more decent life and increases the degree of household welfare. Rice for the Prosperous Population/*Beras Sejahtera* (Rastra), Family Hope Program/*Program Keluarga Harapan* (PKH), *Bantuan Pangan Non-Tunai* (BPNT) operations, and assistance from the local government are strongly enough to reduce poverty.

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