RJOAS: Russian Journal of Agricultural and Socio-Economic Sciences
ISSN 2226-1184 (Online) | Issue 3(135), March 2023

UDC 332; DOI 10.18551/rjoas.2023-03.08

POVERTY PROBABILITY OF AGRICULTURAL WORKERS IN SOUTH KALIMANTAN

Rachman Faisal Fatchur*, **Yanti Nuri Dewi**, **Fauzi Muhammad**
Master's Study Program of Agricultural Economy, Faculty of Agriculture,
University of Lambung Mangkurat, Banjarbaru, South Kalimantan, Indonesia
*E-mail: rachmanff@gmail.com

ABSTRACT
The agricultural sector is the main sector with the third largest share of GRDP in South Kalimantan after mining and electricity and gas procurement in 2021. Meanwhile, the poverty rate in South Kalimantan in the same year is ranked as the third province with the lowest poverty rate in Indonesia. In line with the mandate of the President of the Republic of Indonesia regarding the eradication of extreme poverty in 2024, a strategy for reducing chronic poverty and accelerating poverty alleviation is needed. Therefore, a picture of poverty is needed, especially for groups of people who are considered vulnerable, such as agricultural sector workers so that the South Kalimantan Provincial Government can formulate appropriate policies to realize this mandate. This study aims to analyze the conditions, percentages, characteristics, and poverty probabilities of the working poor in the agricultural sector in South Kalimantan. The research data used is secondary data obtained from the March 2021 National Socioeconomic Survey (Susenas) which is matched with the 2021 Village Potential Data Collection (Podes) data. The analytical method used in this research is binary logistic regression. The results showed that the variables that had a significant influence on the poverty status of agricultural sector workers in South Kalimantan were area classification, number of household members, education, network, the existence of Bumdes and kiosks/shops for agricultural production facilities in the village/municipality.

KEY WORDS
Poverty, workers, agricultural sector, probability, binary logistic regression.

Poverty is a problem that involves various aspects because it is related to low income, illiteracy, low degree/level of health, the gap between the sexes, and a bad environment. One of the causes of poverty is the lack of income and assets to meet basic needs such as food, clothing, housing, and acceptable levels of health and education. In addition, poverty is also related to limited employment opportunities and usually, those who are categorized as poor do not have a job (unemployed), and their level of education and health is generally inadequate (World Bank, 2009).

The poverty rate is one measurement that can show how the government succeeds in realizing development. A high poverty rate indicates that government programs have not yet worked in achieving development goals. Achievement of development targets is indicated by indicators of economic growth, poverty rate, and reaction rate. The acceleration of economic growth is expected to be able to reduce the level of action and the combination of accelerated growth and various government policy interventions is expected to accelerate poverty reduction.

Ideally, the acceleration of economic growth that occurs in a region will increase the per capita income of the population in that region. An increase in per capita income will have an impact on increasing the level of welfare of the population. However, if this growth does not occur evenly, then this can trigger inequality. The high poverty rate is not only caused by slow economic growth in a region, but rather the high poverty rate can be explained more by economic growth inequality.

South Kalimantan is one of the provinces with the third lowest poverty rate, which is 4.83% in 2021. Even though this figure is relatively low, this does not mean that the provincial government's attention to combating poverty is not important to prioritize. Remembering that the President of the Republic of Indonesia in the Limited Meeting on the

Strategy for the Acceleration of Poverty Alleviation mandated that extreme poverty can reach 0% by 2024 which is also included in one of the SDG's goals, no poverty.

The agricultural sector is the main sector with the third largest share of the Gross Regional Domestic Product (GRDP) in South Kalimantan after mining and procurement of electricity and gas, which is 13.93% in 2021. This sector is also inseparable from the negative impact of the Covid-19 pandemic even though the agricultural sector is one of the sectors that has been able to survive during the pandemic. This is indicated by the growth rate which shows a negative number of -1.82 in 2020 and -1.18 in the first quarter of 2021.

Agricultural sector workers in South Kalimantan are the largest compared to other sectors, with 613.324 people or around 30.07% of the total workers (working age population) in South Kalimantan in 2021. Even though the number of workers in the agricultural sector is large, in terms of welfare, further protection is still needed from the socio-economic side. In terms of gender, two-thirds of this sector is dominated by men. In terms of education, two-thirds of agricultural sector workers also only have low education, namely elementary school or below. Then, judging from the number of hours worked at the main job, it shows that around 37.57% of workers have working hours of more than 35 hours a week with the lowest average net wage/salary among other sectors. Absorption of labor in the agricultural sector has decreased and in terms of the quality of the human resources themselves, it is still relatively low so competitiveness in entering the labor market, in general, is weak.

Agricultural sector workers are still considered a group that is vulnerable to poverty and marginalization. Therefore, this study focuses more on the poverty that occurs in South Kalimantan residents who work in the agricultural sector by looking at the conditions, proportions, characteristics, and likelihood of becoming poor. The concept of poverty used in this study is monetary poverty issued by the Statistic Bureau of Indonesia (BPS) which is approached by the basic needs/fulfillment of minimum food needs approach of 2100 kilocalories per capita per day and non-food basic needs.

Apart from socio-economic and cultural factors, poverty can also occur if infrastructure development in an area is not evenly distributed. Infrastructure development is an indicator that can encourage or hinder economic growth in a region. Availability of adequate infrastructure and facilities is necessary, related to access to production centers, marketing of production results, good knowledge of the sector occupied, and access to markets that have now arrived in the digitalization era. Infrastructure limitations related to this production process, such as the existence of educational facilities related to the quality of human resources, the availability of good network, adequate road access, both access to the main roads in and out of the village or roads to production centers, availability of educational facilities and skills, availability of financial institutions that can support farmer capital, good irrigation channels, the existence of farmer groups, Bumdes, markets and the availability of stalls for agricultural production facilities in villages/municipalities determine the poverty status of workers, especially workers in the agricultural sector.

This study aims to (1) analyze the conditions of poverty and employment, especially in the agricultural sector in South Kalimantan (2) analyze the percentage and characteristics of poor workers in the agricultural sector in South Kalimantan and their relation to infrastructure development in South Kalimantan. (3) Analyze the poverty probability of working poor in the agricultural sector in South Kalimantan.

This research is expected to help the Provincial Government of South Kalimantan and related agencies to know conditions and map poverty, especially in the agricultural sector in South Kalimantan, and to find out the characteristics of poor workers which can then be used as the basis for poverty alleviation policies for agricultural sector workers in South Kalimantan and can also be become evaluation material related to the productivity and availability of agricultural infrastructure in each village/municipality.

METHODS OF RESEARCH

This research was conducted in South Kalimantan Province. The research time was carried out from August 2022 until it was completed, starting from proposing writing a report.

This study uses secondary data obtained from data collected from the National Socio-Economic Survey (Susenas) on March 2021 conditions and Village Potential (Podes) in 2021. This survey was carried out by BPS South Kalimantan Province. Susenas is a survey specifically designed to collect social demographic data that covers a wide range that is extracted from selected household respondents in South Kalimantan Province including education, nutrition/health, housing, social, economy, culture, spending/consumption, and others. While the Village Potential data collection is regional data collection covering all villages/municipalities, sub-districts, and districts/cities throughout Indonesia that collects information, both in the form of potentials and vulnerabilities or challenges faced by each village/municipality. The data used in this study are nominal categorical scale data for the independent variable and binary categorical scale data for the dependent variable. From Susena's data, the researcher got samples of 5597 people who work in the agricultural sector.

The data analysis method used in this research is the descriptive analysis method and binary logistic regression. Descriptive analysis aims to create an overview of general information or descriptions based on existing secondary data. While binary logistic regression analysis is an equation model used to analyze categorical data with response variables consisting of two categories (binary) and explanatory variables in the form of categorical and continuous variables (Hosmer and Lemeshow, 2000).

Unlike ordinary linear regression, binary logistic regression does not assume a linear relationship between the response and explanatory variables. The estimator of the relationship between the response variable (y) and the explanatory variable (x) is expressed by the conditional mean, which is the average value of the response variable obtained from the value of the explanatory variable which is denoted as π(x) which has an opportunity value between 0 and 1. The response variable in logistic regression are variables with values 0 and 1 which are random variables that follow the Bernoulli distribution (Agresti, 2002)

The general form of the logistic regression model with p explanatory variables can be formulated as follows:

$$(x) = \frac{e^{(\beta_0+\beta_1x_1+\beta_2x_2+\ldots+\beta_px_p)}}{1+e^{(\beta_0+\beta_1x_1+\beta_2x_2+\ldots+\beta_px_p)}}$$

Which is transformed into a logit model:

$$g(x) = \beta_0+\beta_1x_1+\beta_2x_2+\ldots+\beta_px_p$$

In forming a model from logistic regression analysis, there are several steps taken. To obtain an estimate of the value of β, the maximum likelihood (MLE) method is used:

$$\frac{\partial L(\beta)}{\partial \beta j} = \sum_{j=0}^{p} \left(\sum_{i=1}^{n} y_i x_{ji}\right) - \sum_{i=1}^{n} x_{ji}\left[\frac{e^{\left(\sum_{j=0}^{p}\beta_j x_{ji}\right)}}{1+e^{\left(\sum_{j=0}^{p}\beta_j x_{ji}\right)}}\right]$$

Goodness of Fit Test: H_0 - Fit model; H_1 - The model is not fit.

Test statistics:

$$\hat{C} = \sum_{k=1}^{g}\left[\frac{(o_k - n'_k\,\bar{\pi}_k)^2}{(n'_k\,\bar{\pi}_k(1-\bar{\pi}_k)}\right]$$

Where: n'_k – the number of subjects in the k-group; $o_k = \sum_{j=1}^{c_k} y_j$: the sum of the response variable values on the k group; $\bar{\pi}_k = \sum_{j=1}^{c_k} \frac{m_j\hat{\pi}_j}{n'_k}$: the average estimated probability in the k-th group; c_k – the number of combinations of explanatory variables in the k-group; m_j – number of subjects with c_k combination of explanatory variables.

The $\hat{C}$ statistic follows the distribution of $\chi^2_{(0.05,g-2)}$ (Hosmer and Lemeshow, 2000).

Simultaneous Test:

$$H_0: \beta_1 = \beta_2 = \ldots = \beta_p$$
$$H_1: \text{At least there is one } \beta_i \neq 0;\ i=1,2,\ldots,p$$

Test statistics:

$$G = -2\ln \frac{Lo}{Lp} = -2[\ln (L_0 - \ln (L_p)]$$

Lo = likelihood without explanatory variables
Lp = likelihood with explanatory variables

Partial Test:

$$H_0: \beta_i = 0;\ i=1,2,\ldots,p$$
$$H_1: \beta_i \neq 0;\ i=1,2,\ldots,p$$

Test statistics:

$$W = \left(\frac{\hat{\beta}_i}{SE(\hat{\beta}_i)}\right)^2$$

Where: $\hat{\beta}_I$ is an estimator of β_i; $SE(\hat{\beta}_i)$ is $\hat{\beta}_i$ standard error.

Odds are a comparison of the chances of an event occurring or not occurring. Odds show the likelihood of an event occurring compared to the likelihood of not occurring an event (Pampel, 2000).

$$\theta = \frac{\frac{\pi(1)}{1-\pi(1)}}{\frac{\pi(0)}{1-\pi(0)}}$$
$$\theta = \frac{e^{(\beta_0+\beta_j)}}{e^{\beta_0}}$$
$$\theta = e^{\beta_j}, \text{ so } \ln \theta = \beta_j$$

RESULTS AND DISCUSSION

From the results of the March 2021 Susenas data processing, it was found that as many as 40.1 percent of the sample were those working in the agricultural sector (those working in the business fields of rice and secondary crops, horticulture, plantations, fisheries, animal husbandry, forestry and other agriculture), while the remaining 59.9 percent work in the non-agricultural sector.

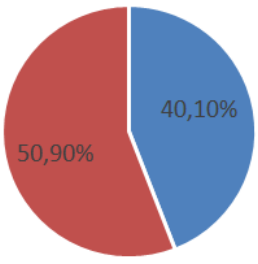

Figure 1 – Respondents based on the work sector

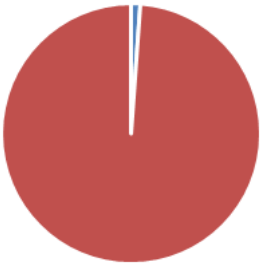

Figure 2 – Respondents based on poverty status

If seen from the categorization of the research unit, namely poverty status, the percentage figure obtained is 1.13 percent of agricultural sector workers in South Kalimantan who are classified as poor while 98.87 percent are categorized as non-poor.

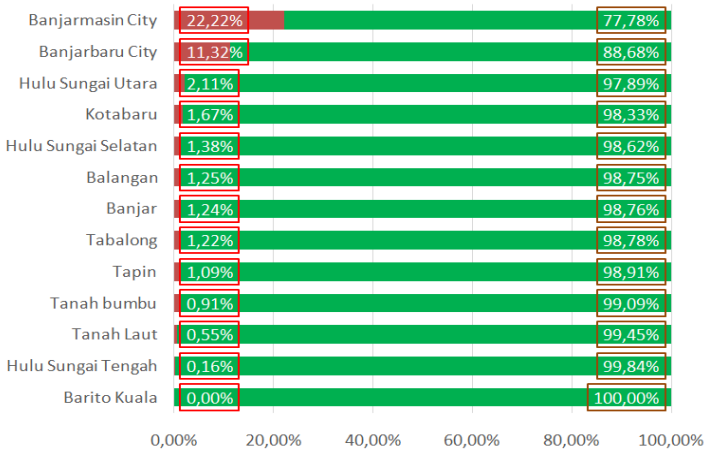

Figure 3 – Poverty in the district/city agricultural sector

Table 1 – Distribution of research variables

Characteristic Variables	Percentage (%)
Region classification	
Urban	11,90
Rural	88,10
Number of a household member	
<=4 person	74,13
>4 person	25,87
Education	
high school and above	15,85
less than high school	84,15
Job Variables	
Job Sector	
Formal	39,38
Informal	60,62
Working hours	
35 hours and up	56,35
less than 35 hours	43,65
Infrastructure variables	
Quality of main road	
Good	91,64
Not good	8,36
Central Agricultural Road	
Good	62,03
Not good	37,97
High school infrastructure	
There is	80,83
There isn't any	19,17
Quality of network	
Good	94,64
Not good	5,36
Loan facilities	
There is	16,53
There isn't any	83,47
Irrigation channel	
There is	21,23
There isn't any	78,77
Reservoir	
There is	75,11
There isn't any	24,89
Skills course facility	
There is	80,47
There isn't any	19,53
Farmers group	
There is	98,07
There isn't any	1,93
LP3A	
There is	25,85
There isn't any	74,15
Bumdes	
Ada	66,30
Tidak Ada	33,70
Production Facilities Shop	
There is	51,58
There isn't any	48,42
Market	
There is	57,24
There isn't any	42,76

Source: Susenas March 2021, processed (2023).

The independent variables used in the study are divided into 3, namely the characteristics, work, and infrastructure variables that are generally described in the table below. Then Table 2 presents the percentage of poor workers based on research independent variables.

Table 2 – Percentage of working poor based on independent variables

Characteristic Variables	Percentage (%)
Region classification	
Urban	2,85
Rural	0,89
Number of household member	
<=4 person	0,82
>4 person	2,00
Education	
high school and above	0,30
less than high school	1,30
Job Variables	
Job Sector	
Formal	1,04
Informal	1,18
Working hours	
35 hours and up	1,30
less than 35 hours	0,90
Infrastructure variables	
Quality of Main road	
Good	1,13
Not good	1,13
Central Agricultural Road	
Good	1,15
Not good	1,08
High school infrastructure	
There is	0,99
There isn't any	1,68
Quality of network	
Good	1,00
Not good	3,33
Loan facilities	
There is	0,86
There isn't any	1,18
Irrigation channel	
There is	0,76
There isn't any	1,22
Reservoir	
There is	1,12
There isn't any	1,15
Skills course facility	
There is	1,07
There isn't any	1,37
Farmers group	
There is	1,07
There isn't any	3,70
LP3A	
There is	0,55
There isn't any	1,33
Bumdes	
Ada	0,75
Tidak Ada	1,86
Production Facilities Shop	
There is	0,83
There isn't any	1,44
Market	
There is	0,97
There isn't any	1,34

Source: Susenas March 2021, processed (2023).

From Table 1, it can be seen that the characteristics of the study sample were dominated by those who live in rural areas (88.10%), the number of household members is less than equal to 4 people (74.13%), education is less than high school (84.15 %), informal work (60.62%), working hours 35 hours and above (56.35%), good main road access (91.64%), good road access to/from agricultural centers (62.03%) , there are senior secondary education facilities or higher (80.83), good network access (94.64%), no credit facilities (83.47%), no irrigation canals (78.77%), no reservoirs /reservoir (75.11%), there are course infrastructure facilities (80.47%), there are farmer groups (98.07%), there are no LP3A (74.15%), there are Bumdes (66.30%), there are kiosks/shops for agricultural production facilities (51.58%), there is a market in the village/municipality (57.24%). Meanwhile, from Table 2, it can be seen that the poor workers in the agricultural sector in

South Kalimantan Province are more dominated by those who live in urban areas, with more than 4 household members, less than high school education, the nature of informal work, and working hours of 35 hours and above with the category of infrastructure variables that are not good or that there is no specific infrastructure in the village/municipality area.

Table 3 – Chi-Square value calculated by the Hosmer and Lemeshow Goodness of Fit Test

Step	*Chi-square*	Degree of freedom	P-value
(1)	(2)	(3)	(4)
1	13,869	8	0,085

Based on the table above, it can be seen that the significance value is 0.085. This signature value is above or greater than the α used, which is five percent (0.05). So it can be concluded that the regression model fits with the data used so that parameter testing can be carried out.

The table below shows that the overall percentage value is 98.9 percent. This value indicates that the overall model has good suitability/ability to predict the poverty status of workers in the agricultural sector in South Kalimantan Province, namely 98.9 percent.

Table 4 – Output SPSS Classification Table

Observed		*Predicted*		
		Poverty Status of Workers		*Percentage Correct*
		Not Poor	Poor	
(2)		(3)	(4)	(5)
Poverty Status of Workers	Not Poor	5534	0	100
	Poor	63	0	0
Overall Percentage		5597	0	98,9

a. The cut value is 0,5.

Table 5 – Statistical calculation of Chi-Square Omnibus Test of Model Coefficient and significance

	Chi-square	Degree	Significance
(1)	(2)	(3)	(4)
Step	73,480	18	0,000
Block	73,480	18	0,000
Model	73,480	18	0,000

Based on the results of data processing in Table 5, the statistical value of the G test which follows the Chi-Square distribution is 73.480 with a p-value of 0.000. The value of these statistics is then compared with α = 0.05 which results in the conclusion of rejecting H_0 because the p-value has a smaller value than the value of α so that it can be concluded that there is at least one explanatory variable that can explain the poverty status of agricultural sector workers in South Kalimantan Province.

The results of the SPSS processing in Table 6 below show significant explanatory variables and explanatory variables that can explain the poverty status of workers in the agricultural sector in South Kalimantan Province, namely area classification variables, number of household members, education, network, Bumdes, LP3A and shops agricultural production facilities. However, because researchers used binary logistic regression with the selection of the enter method model, variables that were not significant at the 5 or 10 percent level (p-value > α=0.05 or p-value > α=0.10) were still included in the model to determine the influence and direction of the relationship to the poverty status of workers, whether it is positive or negative even though the influence is not too big.

From the partial test above and the decision to continue to enter all variables into the model, then the binary logistic regression equation is obtained as follows:

$\hat{g}$ (D) = -8,977 + 1,182 Classification (1) + 0,815 ART (1)+1,541 Education (1) + 0,230 Job Sector (1) - 0,393 Workhours (1) + 0,139 Agricultureroad (1) + 0,34 Mainroad (1) + 0,043 Highschool SM(1) + 1,391 Network (1) + 0,331 Loan facility (1) + 0,324 Irrigation (1) + 0,360 Reservoir (1) + 0,149 Skillcourses (1) + 0,219 Farmergroup (1) + 0,743 LP3A (1) + 0,788 bumdes(1) +0,463 Prodfacilityshop (1) + 0,351 Market (1)

Table 6 – SPSS processing output: Wald statistics (partial test) and odds ratio

Variable	$\hat{\beta}$	*Wald*	*p-value*	*OR*	*Result*
(1)	(2)	(4)	(5)	(6)	(7)
Classification(1)	-1.182	13.684	.000	0.307**	Reject H_0
ART(1)	.815	9.706	.002	2.260**	Reject H_0
Education(1)	1.541	6.627	.010	4.672**	Reject H_0
Job Sector(1)	.230	.706	.401	1.259	Failed to Reject H_0
Workhours(1)	-.393	1.963	.161	.675	Failed to Reject H_0
Agricultureroad (1)	.139	.237	.627	1.149	Failed to Reject H_0
Mainroad(1)	.374	.480	.488	1.454	Failed to Reject H_0
Highschool(1)	.043	.017	.895	1.044	Failed to Reject H_0
Network(1)	1.391	11.338	.001	4.018**	Reject H_0
Loan facility(1)	.331	.669	.414	1.392	Failed to Reject H_0
Irrigation(1)	.324	.730	.393	1.382	Failed to Reject H_0
Reservoir(1)	.360	1.211	.271	1.434	Failed to Reject H_0
Skills courses(1)	.149	.220	.639	1.161	Failed to Reject H_0
Farmer group(1)	.219	.122	.727	1.245	Failed to Reject H_0
LP3A(1)	.743	3.415	.065	2.103*	Reject H_0
bumdes(1)	.788	8.399	.004	2.200**	Reject H_0
Prodfacilityshop(1)	.463	2.754	.097	1.590*	Reject H_0
Market(1)	.351	1.589	.207	1.420	Failed to Reject H_0
Constant	-8.977	73.097	.000	.000**	Reject H_0

*Notes: Wald statistical test compared to $\chi^2(0,05,1)=3,481$ or $\chi^2(0,10,1)=2,705$; * Significant at α=0,05; ** Significant at α=0,1. Source: Susenas March 2021, processed (2023).*

The intercept value can be shown by the $\hat{\beta}_0$ coefficient which has a value of -8.977. This value means that if all variable values are zero, namely when a worker lives in rural areas, with a total art of fewer than 4 people, high school education and above, has formal jobs, with working hours 35 hours and over, and with good infrastructure and all available then the chance to be not poor (Y=0) is about $\left(\frac{1}{1+\exp\ (-8,977)}\right)$ = 0,999 or 99,9 percent.

The slope value for the regional classification variable is -1,182, which has a negative relationship with the status of workers to have poor status when compared to workers who live in urban areas (reference categories) or it can be said that workers who live in rural areas have the opportunity to have poor poor status than workers who live in urban areas. This is indicated by the value of the odds ratio in the table. 6 It is known that the ratio of ODDS between workers living in rural areas compared to ODDS workers living in urban areas amounted to 0.307, which means that workers living in rural areas have a tendency to have a poor status of 0.307 times compared to workers living in urban areas Or it can also be interpreted that workers who live in urban areas tend to have a poor status of 3.25 times compared to workers who live in rural areas assuming that other variables are constant.

These results are different from the results of research by Agustiyani (2010) which states that workers living in rural areas have a greater opportunity to become poor workers than workers who live in urban areas. The value of this trend shows that in South Kalimantan, a worker who lives in urban areas is more at risk of being poor due to economic problems there. In terms of income, workers in urban areas receive higher wages/salaries. However, the costs incurred both for food and non-food needs are greater than in rural areas. When a worker in rural areas experiences financial problems, they can take advantage of the wealth of natural resources so that they can continue to carry out the consumption process and have a higher survival power, unlike the case with workers in urban areas. When a worker in urban areas experiences financial problems, to simply maintain life, they need a sum of money to continue to carry out the consumption process so a worker tends to become a greater poor in urban areas. It should be noted that in the components of the BPS poverty line, there is food poverty, which includes the provision and the results of their own production which is computed. In addition, if analyzed further, it turns out that agricultural sector workers are dominated by free workers or try their own land whose land is outside the city.

The slope value for the variable ART is 0.815 and has a positive relationship with the status of workers to be poor when compared to workers who have families with several household members (ART) less than or equal to 4 people (reference category) or can be

said that workers Having a family with more than 4 ARTs has the opportunity to be poor than workers who have families with less than or equal to or 4 people. This is indicated by the value of the odds ratio in Table 6 which shows that the ratio of the odds between workers who have families with more than 4 people compared to odds workers who have families with art are less than or equal to 4 people amounting to 2.26 which means that workers Those who have families with ART more than 4 people tend to be poor by 2.26 times compared to workers who have families with ART less than or equal to 4 people assuming that other variables are constant. These results are in accordance with the research of Henri (2013) which states that households with a larger number of household members are more likely to be poor compared to households with a smaller number of household members because the allocation of expenditure per capita must be shared with several members household.

The slope value for the level of education less than high school has a positive relationship with the status of workers to become poor compared to workers with high school education levels or above or it can be said that workers with fewer education levels have the opportunity to be poor than workers with high school education levels to the top. This is evidenced by the value of the odds ratio in table 6 of 4.67 which means that workers with less than high school education tend to be poor at 4.67 times compared to workers with high school education levels upon assuming that other variables are constant.

Todaro (2012) states that education plays a key role in shaping the ability of a developing country to absorb modern technology and develop sustainable growth and development capacity. The relationship between poverty and education is very important, where education is the key to increasing economic growth and reducing poverty. With better education, the income earned will be higher so the opportunity to become poor will be less. Increasing the level of education can improve living standards and reduce poverty (World Bank, 2009).

The slope value for network variables has a positive relationship with the status of workers to become poor compared to workers where the area of residence has a good network signal or it can be said that workers, where the area of the network signal is not good have more opportunity to be poor than workers where he lives there is a good network signal. This is evidenced by the value of the Odds Ratio in Table 6 of 4,018 which means that workers whose area of the network signal is not good tend to be poor of 4.018 times compared to workers where area of residence has a good network signal with the assumption that other variables are constant. These results are in line with the research of Christiana (2021) the results show that the network has a significant effect on poverty alleviation.

Lazuardi (2018) found that BUMDes had a major contribution both in terms of economic and socio-cultural, ranging from employment with the existence of job vacancies for the local community, to the management of farming. In addition, BUMDes can also be used to manage agricultural tourism villages that have the potential to add cultural value and increase the income of the community of a village/municipality.

The slope value for the BUMDes variable has a positive relationship with the status of workers to become poor compared to workers where the area of residence has BUMDes or it can be said that workers, where the area of residence does not have BUMDes, has the opportunity to be poor than workers where the area where he lives has BUMDes. This is evidenced by the value of the odds ratio in Table 6 of 2.20 which means that for workers, where the area of residence does not have BUMDes, Des tends to be poor by 2.20 times compared to workers where the area of residence has BUMDes with the assumption that other variables are constant.

CONCLUSION

Poverty in South Kalimantan Province is low compared to other provinces in Indonesia, with 4.83% ranks third in the lowest poverty level. If further analyzed regarding the poverty rate of agricultural sector workers, it is known that the poverty of the agricultural sector

workers in South Kalimantan is 1.13% with the highest poverty rate is Banjarmasin City and the lowest poverty rate in Barito Kuala Regency.

Poor workers in the agricultural sector in South Kalimantan Province are more dominated by those who live in urban areas, the number of household members is more than 4 people, less than high school education, informal work nature, working hours 35 hours and above, with the category of not good infrastructure variables or there is no certain infrastructure in the village/municipality area where workers live.

From the results of binary logistic regression analysis, it is known that the variable classification of regions, the number of ARTs, education, network, and BUMDes affects the poverty of agricultural sector workers in South Kalimantan significantly at α = 0.05, while the variables of the existence of LP3A and kiosks/shops in agricultural production facilities are valuable significant at α = 0.10. That is, agricultural sector workers who live in urban areas, with a total of more than 4 ARTs, without good network access, and there are no BUMDes, LP3A, and Kiosk/Stores for Agricultural Production Facilities in the village/municipality where they have a higher probability to become poor.

RECOMMENDATIONS

The focus of poverty reduction by local governments should not only be focused on rural areas, but must also pay attention to agricultural sector workers in urban areas. One of them is by providing counseling about modern agriculture in urban areas (urban farming), which is a farm business method by optimizing the land owned or agricultural intensification. In addition, the government can provide capital assistance or incentives to modern farmers in urban areas to advance agriculture in urban areas and improve the welfare of farmers in urban areas.

The government can create a special program for agricultural households that are elaborated into several segments, such as:

- Provision of scholarships for household members who are still in school age. Education is very important for a person's life in the future so if someone has a high education, the opportunity to enter the labor market is wider, not only limited to the agricultural sector;
- Provision of skills/soft skills for those who are not school age but are still included in the productive age so that they can create innovations in the agricultural sector and also expand their business outside the agricultural sector;
- For old-age farmers, the government can focus on providing agricultural counseling so that farming productivity can be maintained and can even be improved;
- The government can expand the network reach that has a strong signal to each remote village, in collaboration with the provider so that farmers who are in remote areas can still get the flow of information related to the agricultural sector;
- The role of village-owned enterprises (Bumdes) in villages can be strengthened so that they can contribute more in terms of economic and socio-cultural so that it is expected to improve the welfare of farmers. The form of this contribution can be in the form of: assisting farmers in buying or marketing agricultural products, both to distributors and consumers; helping farmers in providing and stabilizing prices for agricultural production inputs; helping farmers in branding and processing agricultural products so that they can increase added value to agricultural products.

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