



The Effect of the Agriculture Sector on Poverty in Aceh Province

Ridho Fatwa*, Srinita, Muhammad Abrar

Faculty of Economics, Syiah Kuala University, Banda Aceh, Indonesia

** Corresponding author email: ridhofatwa29@gmail.com*

Abstract

This study aims to analyze the influence of the agricultural sector on poverty in Aceh Province. In this study, the variables used in influencing the poverty level in Aceh Province are the share of Gross domestic product (GDP) in the agricultural sector, labor in the agricultural sector, agricultural land, Farmer Education and Gross Regional Domestic Product (GRDP) per capita. The regression model used in this study is the method of multiple linear regression analysis (ordinary least squares regression analysis) using panel data and a fixed effect approach (fixed effect model) to determine the effect between variables. The results of this study are based on a simultaneous test (Test F) which shows that overall, the independent variables (share of GDP in the agricultural sector, labor in the agricultural sector, agricultural land, Farmer Education and GRDP per capita together show their effect on the poverty level. The results of the study based on a partial test (t test) showed that the share of the agricultural sector GRDP and the GDP per capita variable had a negative and significant effect on poverty and agricultural sector labor had a positive and significant effect on poverty, while the variables of agricultural land and farmer education negative effect, but not significant. The value of *Adjusted R-squared* in this study is 0.868629. This shows that the 86.86 percent change in the dependent variable, namely the Poverty of Aceh Province, can be explained by the independent variable, namely Share of Agricultural GRDP, Agricultural Manpower, Agricultural Land, Farmer Education and Per Capita GRDP. While the remaining 13.14% is explained by other factors outside the model.

Keywords: Agriculture, Poverty, panel data regression, and Aceh Province.

1. Introduction

Poverty is a problem faced and a concern in every country in the world (Saputro and Sidiq, 2020). At the national and regional levels, poverty has become a complex and chronic problem, so appropriate and sustainable strategies are needed to overcome them. The development programs that have been implemented so far have given great attention to poverty alleviation efforts (Yunus et al., 2020). Nevertheless, the problem of poverty is still an unresolved problem (Wintara et al., 2021).

Poverty is one of the main problems faced by the Indonesian people from the past until now (Aswadi et al., 2017). Poverty occurs because the ability of the community as economic actors is not the same, so there are people who cannot participate in the development process or enjoy the results of development (Jalil et al., 2019). The causes of poverty can be due to natural conditions, structural and social conditions, as well as cultural conditions. Natural poverty arises due to limited natural, human and other resources so that production opportunities are relatively small and cannot play a role in development. Structural and social poverty is caused by uneven development results, institutional arrangements and policies in development (Yunus, 2019). Meanwhile, cultural (cultural) poverty is caused by attitudes or living habits that feel sufficient so that they trap someone in poverty (Pusra et al., 2021).

Aceh Province's poverty percentage is higher than the national average poverty percentage. We can see this in Figure 1, the development of the poverty rate of Aceh Province during 2011-2020 is quite alarming compared to the poverty that occurred in Indonesian poverty. However, from 2011 to 2020 the percentage of poverty in Aceh Province has decreased from 19.57% until 2020 to 14.99%. This decline has not been able to approach the average percentage of the national poverty rate.

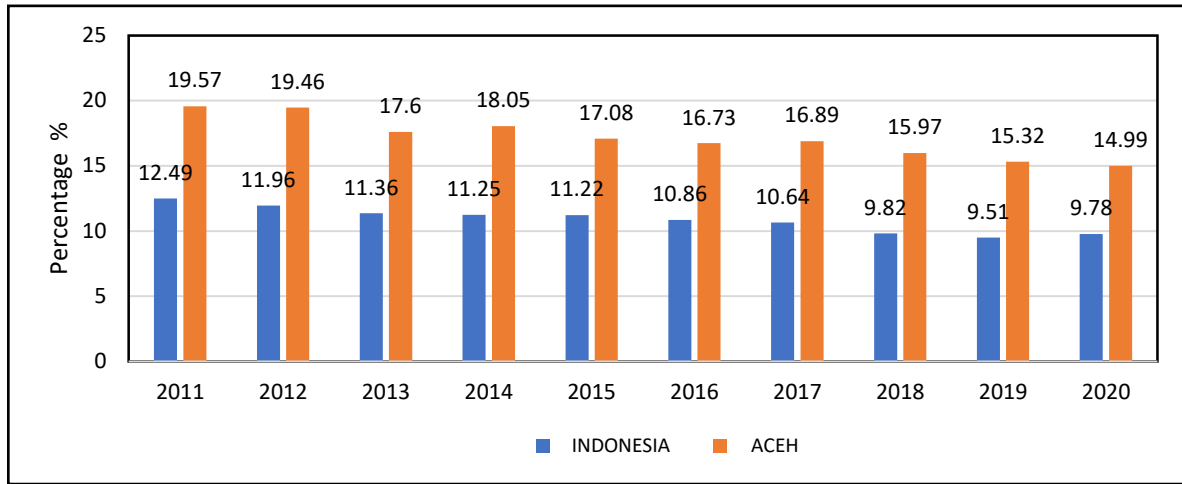


Figure 1 Comparison of the percentage of poor people in Indonesia and Aceh Province in 2011-2020

The population growth will exceed the supply of food. When this situation occurs, it will result in the amount of food being limited. Low-income people who do not get food will be poor. Therefore, Malthus' theory is closely related to the agricultural sector where the agricultural sector plays an important role as the main food supply sector in the economy.

The agricultural sector plays a role in the national economy through the formation of Gross Regional Domestic Product (GDP), provision of food and industrial raw materials, poverty alleviation, providing employment and increasing people's income. In addition to direct contributions, the agricultural sector also has an indirect contribution in the form of a multiplier effect, namely the input-output linkages between industry, consumption and investment. The multiplier impact is relatively large so that the agricultural sector deserves to be used as a mainstay sector in national economic development (Nugroho, 2018).

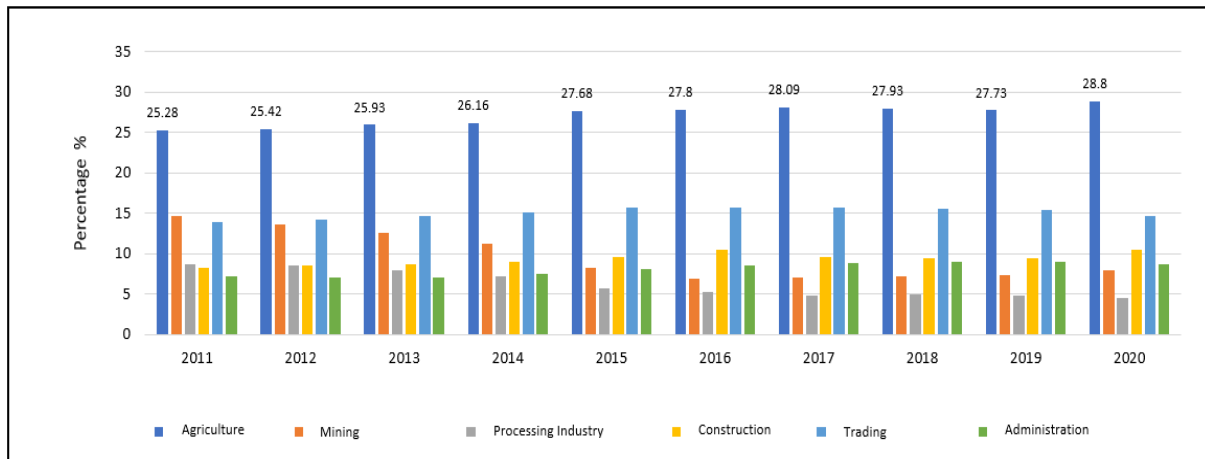


Figure 2. Distribution of the Percentage of the 6 Largest Sectors to the Gross Regional Domestic Product (GRDP) of ADHK Aceh Province in 2011-2020

Figure 2 Distribution of the percentage of GRDP at On the Basis of Constant Prices (ADHK) by business field in Aceh Province in 2011-2020, shows that the agricultural sector provides the highest contribution compared to other sectors to Aceh Province's GRDP. BPS data shows that in 2011-2020 the agricultural sector of Aceh Province contributed 26.58% - 29.74%. The contribution of the agricultural sector in Aceh Province is much higher than the average contribution of the agricultural sector at the national level. The high role of the agricultural sector can have an influence in improving the welfare of the community, especially farmers. The agricultural sector still plays an important role in realizing high economic growth and equitable distribution of income compared to other sectors.

Aceh province has potential in alleviating poverty (Anakusara et al., 2019). This can be seen from the increasing share of agricultural GRDP, the number of agricultural workers is quite high, uncultivated land continues to decrease so that the productivity of agricultural land is increasingly productive and GRDP per capita from year to year continues to increase so that these factors should be able to reduce poverty in Aceh Province. However, in reality, most of the population of Aceh Province who work in the agricultural sector are in poverty and the condition of

education only averages completing junior high school education which makes the human resource capacity of the community low so that people's income is also low and causes the community to become poor.

2. Literature Review

2.1. Poverty

Based on Law Number 13 of 2011, poverty is a socio-economic condition of a person or group of people whose basic rights are not fulfilled to maintain and develop a dignified life. Basic needs that are the rights of a person or group of people include the need for food, health, education, work, housing, clean water, land, natural resources, the environment, a sense of security from treatment or threats of violence, and the right to participate in the implementation of social life. and politics.

The definition of poverty is generally always associated only with the economic sector alone (Abrar et al., 2020). Whereas poverty can be seen from the social and cultural side of society. In principle, poverty describes a condition of lack of ownership and low income, or in more detail describes a condition that basic human needs cannot be fulfilled, namely food, shelter, and clothing. Several definitions describe this state of absence. One of them is the definition of poverty used by BPS, which explains poverty as an individual's inability to meet the minimum basic needs for a decent life (BPS, 2020).

2.2. Share GRDP in Agriculture Sector

Gross Regional Domestic Product (GRDP) is the gross added value of the entire number of goods and services created or produced in the domestic territory of a country arising from various types of economic activities in a certain period without regard to production factors having a resident or no resident (Feriyanto et al., 2020).

2.3. Agricultural Labor

The factors of production of labor (labor) are every effort that is issued in part or all of the physical and spiritual abilities possessed by humans and or the physical capabilities of livestock and machines used for the production of goods and or services.

2.4. Agricultural Land

The Agricultural land can be distinguished from agricultural land. If agricultural land is land that is prepared for farming (Rondhi et al., 2018), then agricultural land is land that is not necessarily cultivated for agriculture. Thus, the area of agricultural land is always wider than agricultural land. The size used to determine the area of agricultural land varies in each region. The units used to indicate the area of agricultural land include hectares (ha), brick, span, stake, shoulder, and so on. The value of agricultural land will change due to the level of soil fertility, location, topography, land status, and environmental factors.

2.5. Farmer Education

Education is a means of improving the quality of human resources to produce a more productive workforce (Anwarudin et al., 2018). The high productivity of the agricultural sector will be the driving force for increasing output and people's purchasing power. The level of education and the productivity of the agricultural sector are the two main determinants in reducing poverty.

The education is a reciprocal process of every human person in his adjustment to nature, friends, and the universe. Education can be obtained through formal or non-formal education. The level of education of farmers, both formal and non-formal, will affect the way of thinking that is applied to their business, namely in business rationalization and the ability to take advantage of every opportunity that exists. Education has a positive relationship with the amount of production. With a high level of education, the amount of agricultural production also increases.

2.6. GRDP Per Capita

GRDP per capita is often used as an indicator of the prosperity of the population in an area. If GRDP shows the performance of the regional economy in general, GRDP per capita shows the average economic performance of the population. Income per capita which reflects the average income of each individual in a region is one of the indicators that is often used to describe the level of prosperity of the population at a macro level. The higher the income received by the population in an area, from an economic point of view, the level of welfare of the population in the region is said to be getting better. Although GRDP per capita is slightly different from per capita income, these two indicators

are not much different, especially for regions with an uncomplicated economic structure and the agricultural sector is still the dominant sector.

3. Materials and Methods

3.1. Materials

This study analyzes the influence of the agricultural sector on poverty in Aceh province in 19 districts/cities. The time period in this research is 2011–2020. The influence of the agricultural sector on poverty in Aceh province was analyzed using variables such as share of GRDP in the agricultural sector, agricultural labor, agricultural land, farmer education, per capita GRDP and poverty. The type of data in this study is secondary data.

The data sources in this study are the Central Statistics Agency (BPS), the Ministry of Agriculture (Kementan), the Agriculture and Forestry Service, the National Labor Force Survey (Sakernas), and other related agencies. This study also uses data from the literature of previous studies.

3.2. Methods

The data analysis method used in this study is panel data regression analysis and data processing using the Eviews version 10 program. In this study, panel data was used to determine and analyze the effect of the share variable of GRDP in the agricultural sector, agricultural labor, agricultural land, farmer education and GRDP Per Capita to Poverty. The model equation from panel data regression can be made as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

Then it is formulated as:

$$POV_{it} = \alpha + \beta_1 SHARE_{1it} + \beta_2 LABOR_{2it} + \beta_3 LAND_{3it} + \beta_4 EDU_{4it} + \beta_5 CAPITA_{5it} + \varepsilon_{it}$$

Where:

POV	: Poverty
α	: Constant
SHARE	: Share GRDP in Agriculture Sector
LABOR	: Agricultural Labor
LAND	: Agricultural land
EDU	: Farmer Education
CAPITA	: GDP Per capita
β	: Regression Coefficient
ε	: Error term
t	: Time Period/ Year
i	: Cross-section

3.2.1. Model Estimation

Panel data is a combination of time series data and cross section data. The estimation method of panel data regression model can be done with three approaches as follows (Mundlak et al., 2021):

a. Common Effect Model

Common Effect Model is a panel data model approach by combining time series and cross section data that does not pay attention to the time or individual dimensions, so it is assumed that the behavior of company data is the same in various time periods. To estimate panel data, this model can use Ordinary Least Square (OLS) or the least squares technique.

b. Fixed Effect Model

Fixed Effect Model assumes that differences between individuals can be accommodated from differences in intercepts. To estimate panel data, this model uses a dummy variable technique to capture differences in intercepts

between companies, but the slope is the same between companies. This estimation model is often called the Least Squares Dummy Variable (LSDV) technique.

4. Results and Discussion

The results of this study analyzed the panel data regression test consisting of the results of the Chow test and Hausman test, then the classical assumption test consisting of the multicollinearity test and heteroscedasticity test, as well as statistical tests consisting of partial test (t), simultaneous test (F), and coefficient of determination.

4.1 Panel Data Regression Test

The panel data regression test in this study consisted of the results of the Chow test and the Hausman test. Based on Table 1, the results of the Chow test in this study, the probability value of Cross-section F is 0.0000 ($\hat{I} \pm < 0.05$), so the regression model used is the Fixed Effect Model. While the results of the Hausman test in this study the probability value of Chi-Square is 0.0000 ($\hat{I} \pm < 0.005$), so it can be concluded that the regression model used is the Fixed Effect Model. The results of the Chow test and Hausman test in this study can be seen in Table 1.

Table 1. Panel Data Regression Test Results

Chow Test			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	47.101823	(18,166)	0.0000
Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	40.776906	5	0.0000

Based on the results of the data regression that has been carried out, the regression model used in this study is the *Fixed Effect Model*. *Fixed Effect Model* regression results in this study can be seen in Table 2.

Table 2. Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHARE	-32.28296	5.965433	-5.411671	0.0000
LABOR	0.046653	0.013057	3.572984	0.0005
LAND	-2.30E-06	1.80E-06	-1.279578	0.2025
EDU	-0.064383	0.057797	-1.113953	0.2669
CAPITA	-0.617293	0.071511	-8.632121	0.0000
R-squared	0.884616			
Adjusted R-squared	0.868629			
Prob(F-statistic)	0.000000			

Based on Table 2, the results of the *Fixed Effect Model* regression can be written using the following equation:

$$POV = 41.73046 - 32.28296 \text{ SHARE} + 0.046653 \text{ LABOR} - 2.30E-06 \text{ LAND} - 0.064383 \text{ EDU} - 0.617293 \text{ CAPITA}$$

4.2. Classic assumption test

The classical assumption test in this study consisted of a multicollinearity test and a heteroscedasticity test. Based on the data regression that has been carried out, the results of the multicollinearity test in this study can be seen in Table 3.

Table 3. Multicollinearity Test Results

	SHARE	LABOR	LAND	EDU	CAPITA
SHARE	1	0.538358	0.269537	0.523711	0.001812
LABOR	0.538358	1	0.201757	0.221653	0.014092
LAND	0.269537	0.201757	1	0.065287	0.141193
EDU	0.523711	0.221653	0.065287	1	0.095300
CAPITA	0.001812	0.014092	0.141193	0.095300	1

Based on the Table 3, it can be seen that in the multicollinearity test results, the correlation matrix of the independent variables is smaller than 0.80, so it can be concluded that the data in this study does not contain multicollinearity. Meanwhile, the results of the heteroscedasticity test in this study can be seen in Table 4.

Table 4. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHARE	-0.664839	1.997119	-0.332899	0.7396
LABOR	0.550418	3.206434	0.171660	0.8639
LAND	0.011603	0.007018	1.653265	0.1002
EDU	-1.04E-06	9.67E-07	-1.076317	0.2833
CAPITA	0.000422	0.031066	0.013573	0.9892

Based on the Table 4, it can be seen that the results of the heteroscedasticity test using the Glesjer method, the probability value of the independent variable is greater than 0.05, so it can be concluded that the data in this study does not contain heteroscedasticity.

4.3 Statistic test

The statistical test in this study consisted of a partial test (t), a simultaneous test (F), and the coefficient of determination. Based on Table 2, the results of the partial test (t) in this study indicate that the independent variables, namely Agricultural GRDP Share, Agricultural Manpower and Per Capita GRDP have a significant effect on Poverty in Aceh Province (dependent variable) with a probability value less than 0.05. While the independent variables of Agricultural Land and Farmer Education have no effect on Poverty in Aceh Province (the dependent variable) with a probability value greater than 0.05.

Meanwhile, the results of the simultaneous test (F) in this study indicate that the independent variables, namely Share of Agricultural GRDP, Agricultural Manpower, Agricultural Land, Farmer Education and Per Capita GRDP together have a significant effect on Poverty in Aceh Province (dependent variable) with a value of probability is less than 0.05.

The value of the coefficient of determination *Adjusted R-squared* in this study is 0.868629. This shows that the 86.86 percent change in the dependent variable, namely the Poverty of Aceh Province, can be explained by the independent variable, namely Share of Agricultural GRDP, Agricultural Manpower, Agricultural Land, Farmer Education and Per Capita GRDP. While the remaining 13.14% is explained by other factors outside the model.

4.4 Discussion

4.4.1. The Effect of Agricultural Sector GDP Share on Poverty

The results of data regression using the *Fixed Effect Model* (FEM) show that the share of GRDP in the Agricultural Sector has a significant negative effect on poverty in Aceh Province with a coefficient value of -32.2829. Based on these results, it can be concluded that an increase in the share of GRDP in the Agricultural Sector by 1 percent will reduce the Poverty of Aceh Province by -32,28296 percent with the assumption of *Ceteris Paribus*.

These results are in accordance with the hypothesis in this study and in accordance with the theory found by *Thomas Robert Malthus* (1766-1834), indicating that one day population growth will exceed food supplies. When this situation occurs, it will result in the amount of food being limited. Low-income people who do not get food will be poor. This shows that there is a strong relationship and linkage between the agricultural sector and poverty where the agricultural sector acts as a food/food supply sector for the community. So that with sufficient food yields can guarantee food security and the community can meet their daily needs.

The results of this study are in line with research Nugroho (2018). The results showed that the share of GRDP in the agricultural sector had a negative and significant effect on the poverty level. This shows that an increase in the share of GRDP in the agricultural sector can have an impact on decreasing poverty levels.

The results of this study are also supported by the results of previous studies conducted by Siregar & Wahyuni (2007) and Effendy (2017) which concluded that the agricultural sector had a negative and significant effect on poverty levels. These results indicate that development in the agricultural sector needs to be improved. The agricultural sector is a mainstay in generating added value and in absorbing the workforce in rural areas. This business field is also the main hope for poverty alleviation.

4.4.2 The Effect of Agricultural Labor on Poverty

The results of data regression using the *Fixed Effect Model* (FEM) show that the variable Agricultural Workforce has a positive and significant effect on Poverty in Aceh Province with a coefficient value of 0.046653. Based on these results, it can be concluded that an increase in Agricultural Workforce by 1 percent will increase the Poverty of Aceh Province by 0.46653 percent with the assumption of *Ceteris Paribus*.

These results are in accordance with the hypothesis in this study and support the theory put forward by Smith which explains that at first the increase in labor will cause an increase in per capita income, but the population continues to grow, the law of surplus yield will decrease or marginal production will decrease and leads to an output equal to marginal production. This situation resulted in per capita income reaching the maximum value. The population at the highest point is called the optimal population. The population continues to increase and exceeds the optimal point, population growth will cause a decrease in output, causing income to decrease.

In terms of the percentage of workers working in the agricultural sector in Aceh province, it is classified as very high. This causes the theory of the *Diminishing Marginal Product of Labor* to apply, namely if the workforce continues to increase continuously, then first the output to be produced will increase but at a certain point the output will decrease as the workforce increases. The agricultural sector is considered a poverty trigger sector because, as stated by Lewis, the agricultural sector is a subsistence sector which is overpopulated and the marginal productivity of its workforce is almost zero.

The results of this study are in line with research Booth (2000), which states that the percentage of workers in the agricultural sector is unable to reduce the factors causing poverty because this sector is generally suspected of having low productivity, excess labor, low wages, and is subsistence. Therefore, the development of the agricultural sector through revitalization of agriculture, fisheries, and forestry as well as community development, especially rural areas, need to be the basis for bringing the Indonesian people out of poverty.

4.4.3. The Effect of Agricultural Land on Poverty

The results of data regression using the *Fixed Effect Model* show that the agricultural land variable has no effect on poverty in Aceh Province. We can know this from the coefficient value of -2.3006 and the probability of 0.2025. These results are not in accordance with the hypothesis in this study and are not in accordance with the theory. The area of agricultural land showed a negative and significant influence on the percentage of poor people. This shows that the wider the area of agricultural land, the higher the income, it is suspected that when the population owns agricultural land, it will increase productivity. The availability of basic capital that has the potential to be used as the basis of the regional (community) economy, namely (intensification) of agricultural, plantation and forestry lands which can be increased in productivity.

Furthermore, the land area has a significant effect on farmer poverty. The wider the area of agricultural land, the production of farming will increase so that people can meet their needs. As an economic source for rural communities, especially farmers, the area of land and the condition of agricultural land greatly determine the production and income of farmers' households.

The factors causing poverty in the agricultural sector is the low productivity in the sector and this is partly due to the increasingly unequal distribution of agricultural land (Effendy, 2017). This view is in line with Amar (2002), which states that poor households tend to control relatively narrow agricultural land, low levels of technology, low levels of education, low levels of health and low accessibility to institutions. Thus, the types of activities and the scale of farming they do are relatively small, so the wages they receive are low. Especially for the poor who do not own land, as farm laborers they receive a very low wage rate compared to other sectors.

The results of this study are in line with the results of research conducted by Amar (2002), that the effect of agricultural land is not significant on poverty. The insignificant influence of the land indicates that the household group that controls the land in this category is still vulnerable to poverty, because the land area is not sufficient to meet household needs and to get a household out of poverty.

Relative poverty can be seen from the inequality of ownership of production assets, especially land as agricultural land and the inequality of income distribution between community groups. Even distribution of land tenure will greatly affect the distribution of community income, because agricultural land is the main production factor for the poor in creating income. With the even distribution of land tenure, it has an impact on the type and scale of farming carried out by the poor.

4.4.4. The Effect of Farmer Education on Poverty

The results of data regression using the *Fixed Effect Model* show that the Farmer Education variable has no effect on poverty in Aceh Province with a coefficient value of -0.064383 and a probability of 0.2669. The results of this study relate to the low achievement of the average length of schooling in Aceh Province. The achievement of the average length of schooling, which is 8.8 years, which on a macro level shows that the average adult population has an education at the level of junior high school. This condition shows the level of community participation in the implementation of education,

The increase in the number of junior high school graduates to bachelor's degrees in Aceh Province is not followed by employment opportunities that can accommodate them. From year to year there is an increase in job seekers with a junior high school education up to a bachelor's degree. This shows that the education improvement that has been achieved has not been able to significantly reduce the poverty level in Aceh Province.

The level of education possessed by the poor is relatively low due to various factors, especially the limited economy. In addition, the thinking of the poor is more important to earn a living than to seek knowledge. This is all due to the circumstances in which they live. The skills possessed are limited because they are also supported by low education if many poor people criticize higher education in addition to acquiring knowledge, there are also skills that can be obtained at school. So that with these skills it can be used to find income to be able to meet their lives. In general, the higher the level of education a person has, the greater the chance of finding a job that pays more.

The results of this study are in line with research conducted by Nugroho (2018), which shows that the education level of the community completing junior high school education and above has a negative, but not significant, effect on the poverty level. This shows that the increasing number of people whose education is equivalent to junior high school and above does not have much of an impact on reducing poverty levels.

Furthermore, the level of education has no significant effect on farmer poverty. This is because the average level of education of farmers in the study area is junior high and high school graduates, so that on average farmers do not have different enough knowledge in farming management. The level of education shows differences in the level of knowledge, attitudes and skills of farmers, so that those with higher education have broader insights. Higher education will affect the level of adaptation, have wider choices in life, including in carrying out their work so that the higher the knowledge, attitudes and skills at work, the more benefits they will get.

4.4.5. The Effect of GRDP Per Capita on Poverty

The results of data regression using the *Fixed Effect Model* show that the GRDP per capita variable has a negative and significant effect on poverty in Aceh Province with a coefficient value of -0.617293. Based on these results, it can be concluded that an increase in GRDP per capita by 1 percent will reduce the Poverty of Aceh Province by 0.617293 percent with the assumption of *ceteris Paribus*.

This is in accordance with research Wiguna (2013), which indicates that if the GRDP per capita increases, the population in the region will be more prosperous or if the GRDP per capita increases, the poverty level will also decrease. Income per capita which reflects the average income of each individual in a region is one of the indicators that is often used to describe the level of prosperity of the population at a macro level. The higher the income received by the population in an area, from an economic point of view, the level of welfare of the population in the region is said to be getting better. Although GRDP per capita is slightly different from per capita income, these two indicators are not much different, especially for regions with an uncomplicated economic structure and the agricultural sector is still the dominant sector.

5. Conclusion

The results of this study are based on a simultaneous test (Test F) which shows that overall, the independent variables (share of GDP in the agricultural sector, labor in the agricultural sector, agricultural land, Farmer Education and GRDP per capita together show their effect on the poverty level. The results of the study based on a partial test (t test) showed that the share of the agricultural sector PRDB and GDP per capita variable had a negative and significant effect on poverty and agricultural sector labor had a positive and significant effect on poverty, while the variables of agricultural land and farmer's education had a negative and negative effect, but not significant. The value of Adjusted R-squared in this study is 0.868629. This shows that 86.86 percent of the change in the dependent variable, namely the Poverty of Aceh Province can be explained by the independent variable, namely Share of Agricultural GRDP,

Agricultural Manpower, Agricultural Land, Farmers' Education and GRDP Per Capita. While the remaining 13.14 percent is explained by other factors outside the model.

The Aceh Provincial Government is expected to be able to further develop the agricultural sector through the utilization of agricultural sector research results that produce superior products to be developed in the Aceh Province region. Regional development has begun to focus on broadly developing the agricultural sector as the foundation of the regional economy. The Aceh provincial government is also expected to make appropriate policies to increase employment opportunities, especially in the agricultural sector.

The Aceh Provincial Government is expected to be able to increase regional and community economic growth evenly so that it can improve economic performance and people's per capita income through increasing agricultural sector productivity. In addition, the development of rural areas, expanding access to capital and product marketing, so that increased economic growth can be a stimulus for the community to increase economic activities that can promote economic growth and reduce poverty.

References

- Abrar, M., Juanda, B., Firdaus, M., & Hakim, D. B. (2020). The Impact of Special Autonomy Funds on Poverty of Human Development and Unemployment in Aceh. *International Journal of Innovation, Creativity and Change*, 12(10), 713-734.
- Amar, S. (2002). Kajian Ekonomi Tentang Kemiskinan Di Perdesaan Propinsi Sumatera Barat. *Economic Journal of Emerging Markets*, 7(2), 103-111.
- Anakusara, R., Jamal, A., Seftarita, C., & Maipita, I. (2019). Economic Growth and Employment in Agricultural Sector on Poverty In Aceh Province. *Trikonomika*, 18(1), 1-7.
- Anwarudin, O., Sumardjo, S., Satria, A., & Fatchiya, A. (2018). A review on farmer regeneration and its determining factors in Indonesia. *International Journal of Progressive Sciences and Technologies*, 10(2), 218-230.
- Aswadi, K., Mutia, R., & Mardhani, M. (2017). Agricultural and its contribution to poverty reduction: Evidence from aceh, Indonesia. In *International Conference on Science Technology and Modern Society* (pp. 172-177).
- Booth, A. (2000). Poverty and inequality in the Soeharto era: An assessment. *Bulletin of Indonesian Economic Studies*, 36(1), 73-104.
- Effendy, R. S. (2017). Peranan Pendidikan Dan Produktivitas Sektor Pertanian Terhadap Penurunan Tingkat Kemiskinan Di Jawa Tengah. *Media Ekonomi Dan Manajemen*, 32(2), 108-118.
- Feriyanto, N., El Aiyubbi, D., & Nurdany, A. (2020). The Impact of Unemployment, Minimum Wage, and Real Gross Regional Domestic Product on Poverty Reduction in Provinces of Indonesia. *Asian Economic and Financial Review*, 10(10), 1088-1099.
- Jalil, H., Yani, T. A., & Kurniawan, A. (2019). Optimization of Special Autonomy Funds Allocation to Alleviate Poverty in Aceh (A Case Study in Districts/Cities). *Optimization*, 9(4), 93-108.
- Mundlak, Y., Butzer, R., & Larson, D. F. (2012). Heterogeneous technology and panel data: The case of the agricultural production function. *Journal of Development Economics*, 99(1), 139-149.
- Nugroho, P. A. (2018). *Kontribusi Sektor Pertanian Terhadap Penurunan Kemiskinan Di Kabupaten Kebumen*. Phd Thesis, Universitas Padjadjaran.
- Pusra, C. M., Srinita, S., & Seftarita, C. (2021). Effect of Selected Economic Sectors on Poverty. *International Journal of Business, Economics, and Social Development*, 2(1), 37-49.
- Rondhi, M., Pratiwi, P. A., Handini, V. T., Sunartomo, A. F., & Budiman, S. A. (2018). Agricultural land conversion, land economic value, and sustainable agriculture: A case study in East Java, Indonesia. *Land*, 7(4), 148.
- Saputro, E. G., & Sidiq, S. (2020). The role of zakat, infaq and shadaqah (ZIS) in reducing poverty in Aceh province. *International Journal of Islamic Economics and Finance*, 3(SI), 63-94.
- Yunus, S. (2019). Cooperation among farming stakeholders in farmers poverty reduction in aceh. *International Journal of Innovation, Creativity and Change*, 9(5), 177-186.

- Yunus, S., Zainal, S., Jalil, F., & Sari, C. M. A. (2020). Correlation of Social Capital and Poverty Farmers in Aceh. *Humanities & Social Sciences Reviews*, 8(1), 20-26.
- Wiguna, V. I. (2013). Analisis Pengaruh PDRB, Pendidikan dan Pengangguran terhadap Kemiskinan di Provinsi Jawa Tengah Tahun 2005-2010. *Jurnal Ilmiah Fakultas Ekonomi Dan Bisnis Universitas Brawijaya*, 1(2), 1-17.
- Wintara, H., Masbar, R., & Suriani, S. (2021). Determinants of socio economic and demographic characteristics of poverty in Aceh Province. *International Journal of Business, Economics, and Social Development*, 2(2), 50-56.