

THE INFLUENCE OF THE AGRICULTURAL SECTOR ON ECONOMIC GROWTH IN THE PERSPECTIVE OF ISLAMIC ECONOMICS (NORTHERN ACEH DISTRICT)

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Abstract: *The agricultural sector is the largest contributor to economic growth in North Aceh Regency. The purpose of this study is to determine the effect of the agricultural sector and harvest area on economic growth and how economic growth in the perspective of Islamic economics. The data used are time series from 1998-2020 published by BPS. The results showed that the agricultural sector and harvest area had a negative and significant effect on economic growth in North Aceh Regency. Economic growth in Islam does not only focus on the welfare of the world but includes welfare in the world and the hereafter.*

Keywords: *Agricultural Sector, Harvest Area, Economic Growth, Islamic Economic Perspective*

Introduction

In essence, economic development is a series of efforts and policies aimed at improving people's living standards, expanding employment, equalizing income distribution and improving regional economic relations. In other words, the direction of economic development is to try to increase people's income, accompanied by the best possible level of equity. Economic growth is reflected in the percentage increase or decrease in the latest GRDP with the previous year's GRDP. Therefore, regional economic growth describes the level of real development or the development of the volume of production of goods and services in the region concerned (Badan Pusat Statistik, 2020).

The agricultural sector has a large contribution to economic growth in Aceh Province, especially in North Aceh District. The contribution of the agricultural sector in North Aceh Regency is the largest among districts / cities in Aceh Province. The following is data on the contribution of the agricultural sector to the GRDP of North Aceh Regency in 2018 (Badan Pusat Statistik, 2018). The contribution of the agricultural sector in North Aceh District in 2018 was the largest compared to the contribution of other districts/cities in Aceh Province. North Aceh Regency contributed 13.94% of the agricultural sector to GRDP. The following is data on the

Gross Regional Domestic Product of North Aceh Regency at current prices by business field for 1998-2020 (BPS, 2020).

The contribution of the agricultural sector is a dominant indicator of Gross Regional Domestic Product and one of the largest contributing sectors in the GRDP of North Aceh Regency. In 1998-2020 the contribution of the agricultural sector fluctuated (increase and decrease). The lowest contribution occurred in 2012, which amounted to 34.88%, while the highest contribution was in 1999, which amounted to 57.15%.

The increase in agricultural productivity is also highly dependent on the size of the harvest. This is because not all land can be used at all times. There are certain lands that can only be used during the rainy season. So that the harvest area in North Aceh District varies every year depending on the climate and weather conditions. The following is a list of rice field harvest areas by Regency

/ City in Aceh Province in 1998-2020. The harvest area of North Aceh Regency changes every year. The largest harvest area was in 1998, which amounted to 93,034 hectares. While the least harvest area was in 2003, which amounted to 43,639 Hectares.

Islamic economics basically views that economic growth is part of economic development. Economic growth in Islamic economic terms is the continuous growth of the correct production factors that are able to contribute to human welfare. While the term economic development referred to in Islam is a process to reduce poverty and create peace, comfort and morality in life (Fitria, 2016).

The agricultural sector is a supporting factor in economic development in North Aceh Regency, the role of the government is needed to improve the agricultural sector so that it can contribute to improving people's welfare. In 1998-2020 the North Aceh Regency agricultural sector always made a large contribution to GRDP, but economic growth seen from the growth rate experienced an increase and decrease (fluctuating) due to low human resources, lack of community knowledge in cultivating their agricultural land, there are still many people who use manual methods in cultivating their agricultural land, seen in terms of changes in agricultural production caused by climate change so that the income from agricultural production obtained by the community is less than optimal. Thus there needs to be an effort to advance the agricultural sector of North Aceh Regency, given the large role of the agricultural sector in the economy is very important.

Literature Review Agriculture Sector

The agricultural sector is a sector that has a strategic role in the structure of national economic development. Agriculture is the activity of cultivating land and planting it with useful plants. Agricultural activities utilize fertile land in the lowlands. In Q.S Al-An'am [8]:141, explaining about natural resources as the Word of Allah:

وَهُوَ الَّذِي أَنْشَأَ جَنَّاتٍ مَّعْرُوشَاتٍ وَغَيْرِ مَّعْرُوشَاتٍ وَالنَّخْلَ وَالزَّرْعَ مُخْتَلِفًا أَكْلُهُ وَالزَّيْتُونَ وَالرُّمَّانَ مُتَشَابِهًا وَغَيْرَ
مُنْتَسِبَةٍ كُلًّا مِنْ ثَمَرِهِ إِذَا أَثْمَرَ وَآتُوا حَقَّهُ يَوْمَ حَصَادِهِ وَلَا تُسْرِفُوا ۚ إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ

Meaning: "And it is He who has made gardens with trees, date palms, plants of various fruits, olives and pomegranates similar in shape and color and not similar in taste. Eat of their fruits when they come to fruition, and fulfill their due on the day of harvest (by giving to the poor); and do not overdo it. Verily, Allah dislikes the excessive" (Q.S Al- An'am [8]:141).

Economic Growth

Economic growth is reflected in changes in GRDP from one period to the next, which is one of the real indicators of development, both directly and indirectly, the success of policy implementation. Economic growth is defined as a process of per capita output growth which simultaneously provides many alternatives in consuming goods and services, and is followed by the increasing purchasing power of the community (Saparuddin & Yolanda, 2015).

Adam Smith is a classical economist who is considered the most prominent. His most famous work is a book entitled *An Inquiry into the Nature and Cause of the Wealth of Nations* published in 1776, especially regarding the issue of economic development. Joseph Alois Schumpeter first put forward his theory of economic growth in the book *Theory of Economic Development* published in Germany in 1911. Schumpeter's theory highlighted the importance of inflationary financing and innovation as key factors in economic development. Inflationary financing is an appropriate method that every underdeveloped country is now trying to implement. His analysis is relevant to underdeveloped countries in terms of the long-term increase in productivity and the absorption of surplus labor in gainful employment as a result of innovation.

Neoclassical theory is the Solow-Swan growth model, first developed in 1950 by Robert Solow and Trevor Swan and was the first growth model to be accepted as a long-term growth model. This model assumes that countries use their resources efficiently, and there are diminishing returns to increased capital and labor (Huda et al., 2015).

Economic Growth According to Islamic Economics

Islamic economics basically views that economic growth is part of economic development. Economic growth according to Islam is an increase experienced by production factors, not considered as growth if the production, for example, includes goods that are proven to have adverse effects and harm humans. While the term economic development intended in Islam is a process to reduce poverty and create peace, comfort and order in life. The goal is not only welfare in the world but also the welfare of the hereafter. Both according to Islam are integrally united (Naf'an, 2014).

Economic growth in an Islamic perspective is not only related to the increase in the volume of goods and services, but also related to aspects of morality and moral quality and the balance between worldly and ukhrawi goals. The measure of success of economic growth is not seen from material achievements alone, but also in terms of improving religious, social and community life. If the economic growth that occurs triggers the uprooting of the values of justice and humanity, then it is certain that the growth is not in accordance with the principles of Islamic economics.

Research conducted by Ovilia in 2018 entitled "The Effect of the Agricultural Sector and the Trade Sector on Gross Regional Domestic Product (GRDP) of Pringsewu Regency 2008-2016 in the Perspective of Islamic Economics". The results showed that the agricultural sector had a positive and significant effect on GRDP. Then simultaneously the agricultural sector and the trade sector have a positive and significant influence on GRDP in Pringsewu Regency, because the probability value is 0.000010, meaning that the probability value is smaller than $\alpha = 0.05$ (0.000069

<0.05) so H_a is accepted and H_0 is rejected, secondly that Islam teaches us to utilize natural resources in accordance with what is ordered by Allah SWT. and can be utilized for the economy of a region.

Research conducted by Salimah in 2019 with the title "Analysis of the Effect of the Agricultural Sector on Economic Growth in South Lampung Regency in the Perspective of Islamic Economics". The results of this study indicate that based on the results of the partial test (t test), it

is known that the significance value for variable X, namely the agricultural sector, is $0.0000 > 0.05$. So it can be concluded that if the significant value < 0.05 then H_0 is rejected and H_a is accepted so that the agricultural sector variable has a positive and significant effect on the economic growth of South Lampung Regency. In this case the agricultural sector is the most dominant sector among other sectors and can contribute income to regional income for community activities sourced from their business harvest.

Research conducted by Anggraini in 2019 entitled "Analysis of the Effect of the Agricultural Sector and the Processing Industry Sector on Economic Growth in Central Lampung Regency for the Period 2011-2017 in the Perspective of Islamic Economics". The results showed that the agricultural sector had a negative and significant effect on economic growth and the processing industry sector had a positive and significant effect on the economic growth of Central Lampung Regency for the period 2011-2017.

Research conducted by Apriliandanu in 2019 entitled "Analysis of the Agricultural Sector on Economic Growth in Grobogan Regency". The results showed that the variables of exports, production costs and farm labor had a significant effect on economic growth while the variable harvest area had no significant effect on economic growth in Grobogan Regency.

Research Methods

This type of research is *library research*. Library research is research conducted using literature, both in the form of books, notes and reports on the results of previous research on economic growth. This research explores data sourced from data published by the Central Statistics Agency of Aceh Province and the North Aceh District Statistics Agency as well as other literature sources related to this research.

The data used is secondary data on the agricultural sector, the area of harvest in the agricultural sector and the economic growth of North Aceh Regency in 1998-2020. This study aims to analyze the effect of the agricultural sector on economic growth in North Aceh Regency in the perspective of Islamic economics. This secondary data is in the form of time series data. The data selected is data for the period 1998-2020 in annual form.

This research uses an analysis test by collecting data, then implementing the results. The data analysis method used in this research is quantitative descriptive analysis. The analysis test tool uses multiple linear regression analysis. This test tool aims to determine the three variables between the independent variables X1 and X2 with the dependent variable Y which will be subjected to regression statistical analysis procedures whether it shows a relationship or not. In addition, this study also uses hypothesis testing which includes the t test (partial), f test (simultaneous), and the coefficient of determination (R^2).

Results and Discussion

North Aceh District is a district located in Aceh Province, Indonesia, which is divided into 27 sub-districts consisting of 852 villages and 70 settlements. The population of North Aceh Regency according to the BPS report in 2020 amounted to 602,793 people. Of this number, the female population is 301,582 people and the male population is 301,211 people. The sex ratio of the population of North Aceh District is 100 and the population density per km² is 186.

Based on the research results, it can be explained in general that the contribution of the agricultural sector has increased and decreased (fluctuating) from year to year. The agricultural harvest area also experienced an increase and decrease (fluctuating) from year to year. The lowest economic growth of North Aceh Regency was in 2005, which amounted to -5.94% and the highest growth was in 2011, which amounted to 7.50%.

The normality test aims to determine the distribution of data in the variables to be used in the study whether the data is normally distributed or not. The normality test can be seen by looking at the Jarque Bera Probability value.

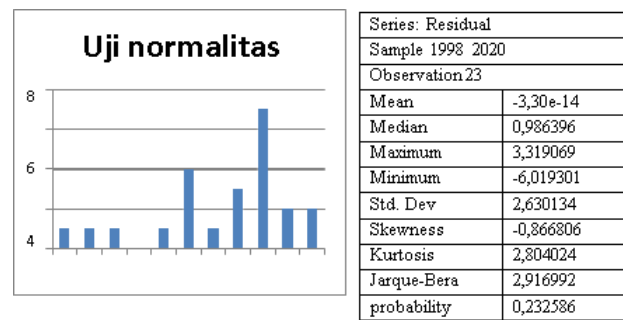


Image 1 Normality Test Results

Source: Data processed with Evies 9 program (2021)

Based on the results of data processing, the Jarque Bera probability value is $0.232586 > 0.05$ so that it accepts H_0 which means that the residuals are normally distributed.

Table 1 Correlation Test Results

Breusch-Godfrey Serial Correlation LM Test:			
F-Statistic	0.190616	Prob.F(2,18)	0.8281
Obs*R-Squared	0.477028	Prob.Chi-Square(2)	0.7878

Source: Data processed with Evies 9 program (2021)

Based on the data above, the Prob Chi Square (2) value is $0.7878 > 0.05$ so that it accepts H_0 which means there is no autocorrelation problem in the model.

Table 2 Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-Statistic	1.957760	Prob. F(2,20)	0.1673
Obs*R-Squared	3.765629	Prob. Chi-square (2)	0.1522
Scaled explained SS	2.568349	Prob. Chi-square (2)	0.2769

Source: Data processed with Evies 9 program (2021)

Based on the results of the table above, the Prob. Chi- Square (2) on Obs*R-Squared is $0.1522 > 0.05$, so accept H_0 which means the regression model is homoscedasticity or in other words there is no heteroscedasticity assumption problem in the model.

Furthermore, based on the results of the multicollinearity test, the *Centered VIF* value of the agricultural sector (X1) and the area of harvest (X2) is $1.002945 < 10$, so it can be stated that there is no multicollinearity problem in the prediction model.

Table 3 Multiple Linear Regression Test Results

Dependent Variable: ECONOMIC GROWTH				
Method: Least squares				
Date: 07/06/21 Time: 14:21				
Sample: 1998 2020				
Included observations: 23				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	141.2093	30.77702	4.588141	0.0002

SECTOR_AGRICULTURE	-20.59320	4.657670	-4.421351	0.0003
LUAS_PANEN	-5.686296	2.389777	-2.379426	0.0274
R-squared	0.569222	Mean dependent var		1.593478
Adjusted R-squared	0.526145	S.D dependent var		4.007294
S.E of regression	2.758507	Akaike info criterion		4.988364
Sum squared resid	152.1873	Schwarz criterion		5.136472
Log likelihood	-54.36619	Hannan-Quinn criter		5.025613
F-statistic	13.21383	Durbin-watson stat		1.762349
Prob (F-statistic)	0.000220			

Source: Data processed with Evies 9 program (2021)

Based on the results of the output above, the *coefficient value of* variable X1 (Agricultural Sector) is -20.59320 and the probability value is 0.0003 < 0.05, so variable X1 (Agricultural Sector) has a negative and significant effect on Y (Economic Growth). And variable X2 (Harvested Area) obtained a *coefficient value of* -5.686296 and a probability value of 0.0274 < 0.05, so variable X2 has a negative and significant effect on variable Y (Economic Growth).

The following is a multiple regression equation of the effect of the agricultural sector and harvest area on economic growth in North Aceh Regency:

$$Y = 141.20 - 20.59 SP - 5.69 LH + e$$

Description:

Y = dependent variable (Economic Growth)

SP = X1 (Agriculture Sector)

LH = X2 (Harvested Area)

The equation can be explained as follows:

1. The constant of 141.20 states that, if the agricultural sector and harvest area are 0, then the factors affecting economic growth are 141.20.
2. If the agricultural sector increases by 1%, economic growth will decrease by 20.59%. Assuming the agricultural sector variable is considered constant or unchanged. The coefficient of the agricultural sector is negative, meaning that the agricultural sector has an unidirectional relationship with economic growth (Y).
3. If the harvest area increases by 1%, economic growth will decrease by 5.69%. The coefficient of harvest area is negative, meaning that the harvest area has an unidirectional relationship with economic growth (Y).

Based on the research results, it can be seen that the *F-statistic* probability value is 0.000220 < 0.05, so the agricultural sector and harvest area variables simultaneously have a significant effect on economic growth in North Aceh Regency. From the regression results, the effect of the agricultural sector on economic growth in North Aceh Regency in 1998-2020, the Adjust R² value is 0.526145. This means that 53% of the variation in economic growth can be explained by the agricultural sector and harvest area variables. While the remaining amount (100% - 53% = 47%) can be explained by other variables outside this research model.

Discussion

This study was conducted to see the effect of the Agricultural Sector (X1) on Economic Growth in North Aceh Regency in 1998-2020. Then after the OLS estimation and the results obtained that the Agricultural Sector has a negative and significant effect on the Economic Growth of North Aceh Regency at the 95% confidence level. This means that if the Agricultural Sector increases, the Economic Growth of North Aceh Regency decreases.

The agricultural sector is the main sector in increasing the GRDP value of North Aceh Regency, but an increase in agricultural sector income will reduce economic growth. This happens because the majority of people who work as farmers in processing agriculture are still individuals. The agricultural sector participates more with community and welfare activities that only increase individual and household income as a daily livelihood. The vast agricultural land has not been maximally utilized by farmers who should be supported by government agencies and private companies in order to increase income and maximize the productivity of agricultural products.

The results of this study are in line with previous research conducted by Anggraini (2019) where the results showed that the agricultural sector has a negative and significant effect on economic growth. Then simultaneously the agricultural sector and the processing industry sector have a positive and significant influence on the economic growth of Central Lampung Regency for the period 2011-2017.

The results of this study are also in accordance with the theory of the contribution of the agricultural sector put forward by Tulus & Tambunan (2003) which states that the agricultural sector has 4 contributions to economic growth including the expansion of other economic sectors is highly dependent on output growth in the agricultural sector, agriculture acts as an important source of domestic demand growth for products from other economic sectors, the agricultural sector as a source of capital for investment in other economic fields and as an important source of trade balance surplus (source of foreign exchange) both from exports and by increasing domestic agricultural production replacing imports.

This study was conducted to see the effect of Harvested Area (X2) on Economic Growth in North Aceh Regency in 1998-2020. Then after the OLS estimation was carried out and the results obtained that the Harvest Area had a negative and significant effect on the Economic Growth of North Aceh Regency at the 95% confidence level. This means that if the Agricultural Harvest Area increases, it does not necessarily mean that the Economic Growth of North Aceh Regency will also increase.

The results of this study are in line with previous research conducted by Apriliandanu (2019) which shows that the harvest area has no significant effect on economic growth in Grobogan Regency, Central Java in 2013-2015. This is due to the utilization of the harvest area that has not been maximized and done in the right way. Because the people of Grobogan Regency have low quality human resources. This can be seen from the length of time of education experienced by the community is six years or elementary school graduates.

The results of this study are also in accordance with the theory put forward by Rusdiah (2008) that the wider the harvest ownership used in agricultural business, will affect the high level of efficiency and output produced. Conversely, if the harvest tenure is relatively narrow, it will reduce the level of efficiency and the output produced will be less than the wider harvest ownership, assuming that the farming business is not run in an orderly manner or is still traditional. Which means that the wider the harvest tenure used is not necessarily able to increase economic growth directly, because there are many factors that must be considered during agricultural activities such as weather factors, pests, diseases, low selling prices and so on.

The impact of the agricultural sector on economic growth is as a provider of employment, with the existence of the agricultural sector can improve people's standard of living for the better, can reduce poverty, and can be an alternative in reducing unemployment. The processing of the agricultural sector in Islam is well regulated so that it will not cause harm or damage to humans and nature. Because the goal to be achieved by Islamic economics is the welfare of society both in this world and in the hereafter.

The simplest and clearest example of the implementation of Islamic economics is the application of agricultural zakat according to its rules to maintain a balance of welfare and

blessings. Enforcing agricultural zakat and alms as the basis of social activities in order to avoid usury, fraud, and other despicable acts in economic activities.

A well-organized application of agricultural zakat is an alternative to narrow the social gap between the rich and the poor. So it is highly expected that the agricultural sector can develop and continue to advance along with the times.

One of the main components of Islamic banks' consideration in channeling financing is the ability to manage business risk. The agricultural sector is often considered less responsive to climate and market changes resulting in high farming risks. The response to changes in agricultural sector financing policies can experience transmission over a long period of time, which is also followed by the risk of NPF in the agricultural sector. The agricultural sector is also faced with a high level of risk, with the findings of NPF affecting the allocation of banks in channeling agricultural sector financing. The level of farmer welfare based on the Farmer Exchange Rate measure in short-term relationships is more influenced by the policy side of the agricultural sector itself, meaning that the Farmer Exchange Rate in Indonesia is faced with the problem of agricultural sector performance that has not been responsive to farm business financing (Maulana & Iskandar, 2018). The existence of financing products in the agricultural sector is very important in driving agricultural activities, so there needs to be a balanced contribution between agricultural sector policies and financing policies. In order to be able to make a maximum contribution to the growth of both sectors, namely growth in the agricultural sector as well as growth in the financial institutions sector.

Conclusion

Based on the partial test results (t test), it is known that the agricultural sector variable has a negative and significant effect on economic growth in North Aceh Regency. In the partial test (t test) it is known that the variable Harvested Area has a negative and significant effect on the economic growth of North Aceh Regency. In an Islamic economic perspective, the agricultural sector has a very important role in supporting the growth of North Aceh Regency. If the potential of the agricultural sector can be optimized and carried out in accordance with the provisions of sharia business, the agricultural sector can become a facilitator that can bring prosperity to the people in North Aceh Regency.

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