



# The Influence Of Fisheries Production, Labor, And The Number Of Fisheries Households On Economic Growth In Dumai City In 2012-2023

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## How to Cite :

Ananda, A, H., Zamaya, Y., (2025). The Influence Of Fisheries Production, Labor, And The Number Of Fisheries Households On Economic Growth In Dumai City In 2012-2023. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis, 13(2). DOI: <https://doi.org/10.37676/ekombis.v13i2>

## ARTICLE HISTORY

Received [15 December 2024]

Revised [22 February 2025]

Accepted [26 March 2025]

## KEYWORDS

Fisheries Production, The Number Of Fishermen, Fishery Households, Economic Growth.

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## ABSTRACT

Economic growth is an effort to increase production capacity to achieve additional output. this study aims to analyze the effect of fisheries production, labor, and the number of fishery households on economic growth in Dumai City in 2012-2023. this research was conducted in Dumai City, Riau Province. the research used is quantitative with secondary data in the form of time series. Data obtained from the official website of the Dumai City Statistics Agency, and one data owned by the Dumai City Fisheries and Marine Service. the data was analyzed with SPSS software. this study resulted in fisheries production and the number of fishermen having an influence on economic growth while fishery households have no influence on economic growth because fishery households are more likely to survive to fulfill their own needs, without having a meaningful impact on macroeconomic growth in Dumai City.

## INTRODUCTION

Economic development is a government policy effort in achieving positive results so that it has an impact on the welfare of society (Yusran et al, 2023). Economic development aims to increase per capita income relatively quickly, equity in income distribution, the availability of broad employment opportunities, and prosperity between regions. Economic development is basically always related to economic growth, but often the welfare of the community, which is the goal of economic development, is reflected through the level of income per capita (Nooralam, Laut, & Septiani, 2019). However, this does not reflect the state of a country because per capita income is calculated by summing up the total income of the community divided by the number of people in the country. This means that people's income is considered equal but in reality there is an imbalance in the distribution of this income (Kumendong, Sondakh, & Tarore, 2021).

Indonesia is a developing country that is rich in natural resources. The size of Indonesia's waters and the fish resources within them are potentially the largest in the world, both from

capture fisheries and aquaculture, as well as the potential for sustainable production (Octaviani dan Juliprijanto, 2021). The amount of water that is too large is not proportional to economic growth in Indonesia (Fauziyah, Wahyuni Mustafa, & Muhani, 2023).

The growth of GRDP cannot be separated from the role of each economic sector. The contribution of each sector's income is the result of planning and growth implemented in the region (Bachtiar et al., 2023). So that the greater the contribution made by each sector to the GRDP of a region, the better economic growth will be. Policies and efforts in development that have been carried out show a positive direction (teguh, 2017). In its presentation, GRDP is distinguished at current prices and at constant prices. GRDP at constant prices is used to measure economic growth because it is not affected by price changes while GRDP at current prices is used to see the size of the economic structure in a region.

Dumai City is one of the areas with considerable fisheries production for both capture fisheries and aquaculture which has high potential in the region so that it is expected to have an effect on increasing economic growth in Indonesia, especially in Dumai City. Fisheries production is a unique resource production because of the nature of its resources that can be lost and the complexity of its management requires a separate study. Fisheries production in Dumai City mostly comes from marine fisheries. In 2023, Dumai City produced 1,401,505 tons, of which 1,057,433 tons (75.45 percent) were marine fisheries products and 344,072 tons (24.55 percent) were aquaculture products. The following is the volume of fisheries production in Dumai City (Djunaidi, Sarianto, & Zalmirosano, 2022).

**Table 1 Fishery Production Volume**

Type of Fishery	2019	2020	2021	2022	2023
Capture Fisheries	650.888	585.800	710.577	1.020.300	1.057.433
Aquaculture	302.080	287.550	323.820	382.694	344.072

Source: BPS, 2024

Based on the table above, the amount of fish production in Dumai City tends to increase during the 5-year period, so it can show that Dumai City has great maritime potential, especially in capture fisheries. The potential of fisheries production is expected to improve the welfare of the community and increase economic growth in the region. Each sub-district in Dumai City has different potential fisheries resources, but the local government continues to optimize fisheries production and maintain these natural resources.

One of the government's efforts to advance the economy of Dumai City is to see what potential and sectors should be maximized in the city, one of which is to see the potential of natural resources that exist in each region both regionally and in aggregate. Indonesia as a maritime country that has thousands of islands should be able to maximize existing resources such as resources in sea waters, especially fish food resources (Rubianti, 2023).

To maximize this potential, the regional government, especially the Dumai city government, is working with the central government to optimize fisheries production with the potential of existing resources (Siregar et al., 2024). The economic potential that exists in certain areas and has the feasibility to be built and can always grow so that it is useful for the people in the area as a source of income which can also be an economic driver in the area universally and the area can develop by itself and sustainably.

Economic growth is an effort to increase production capacity to achieve additional output. So it can be said that the amount of production of a good or service that increases will increase economic growth in a region. For this reason, every region that has the potential for a commodity must maximize and maintain existing potential such as production in the fisheries sector in Dumai City. To maximize the marine and fisheries sector, it requires support in the

form of large production capacity, the output obtained is exported, the potential of the industry from upstream to downstream can absorb a large number of workers and renewable products so as to support sustainable development. (Pranata, Fitriyana, & Susilo, 2022).

**Table 2 Details Of GRDP And Fisheries Production In Dumai City 2019-2023**

Year	GRDP at Constant Prices	Fishery Production
2019	24.856.902,32	952.968
2020	24.597.988,44	873.350
2021	26.068.279,54	1.034.397
2022	27.725.867,44	1.402.994
2023	29.402.605,17	1.401.505

Source: BPS,2024

The table above explains the increase in economic growth in Dumai City, and Dumai City Fisheries Production. Where every year economic growth and fisheries production both increase. The tendency in the paradigm of the economy in Indonesia is the empowerment of coastal communities. Coastal communities or known to have quite unique characteristics and have a diversity of potential marine resources, making coastal communities have a tendency to further maximize the potential contained in Dumai City. However, maximizing production in the fisheries sector has not increased economic growth, which is marked by the high poverty rate in Dumai City. Based on data from the Central Bureau of Statistics of Dumai City, the poverty line in 2023 was higher than the previous year, from 543,182 thousand to 601,348 thousand, the percentage of poor people in Dumai City experienced a slight increase from 3.20 percent to 3.21 percent.

This is questionable because the Fisheries Sector has not fully contributed to economic growth. In developing the potential of natural resources in Dumai City, the local government must pay attention to the contribution of a sector to GRDP and GRDP per capita by optimizing the use of natural resources owned. The use of natural resources must be prioritized in sectors that have not been maximally utilized in order to influence decisions taken with optimal targets so that they can use existing resources.

In developing the potential of natural resources in Dumai City, the local government must pay attention to the contribution of a sector to GRDP and GRDP per capita by optimizing the use of natural resources owned. The use of natural resources must be prioritized in sectors that have not been maximally utilized in order to influence decisions taken with optimal targets so that they can use existing resources.

## **LITERATURE REVIEW**

### **Economic Development**

Economic development is a process that can cause an increase in the real income per capita of the population of a country in the long term accompanied by improvements in the institutional system. The purpose of development is to create community welfare, one of which can be seen from increasing economic growth and equitable distribution of income.

### **Fisheries Production**

Production is all business activities that are useful to meet the needs of human life in producing goods and services. Fisheries production includes all aspects of the results of fishing/fish farming that can be caught/harvested from natural fisheries sources and individual aquaculture in a household. In fisheries management, fisheries production is an interaction between fishing effort and fisheries resources ranging from inputs, production factors to outputs.

### **Fisheries Sector Labor**

Labor in the fisheries sector plays an important role in supporting the sustainability and development of the fisheries industry. According to some literature, this sector absorbs a large number of workers, especially in coastal and rural areas, where people's livelihoods are highly dependent on fisheries activities. Fisheries labor covers a wide range of activities, from fishing, processing, to distribution of fisheries products. In the literature review, it was explained that the fisheries sector is often dominated by informal workers, which makes them vulnerable to income instability and lack of social protection.

### **Fishery Households**

Fishery households are family units whose economic activities depend on the fisheries sector, whether in the form of fishing, aquaculture, or seafood processing. As a group living in coastal areas, these households face various challenges, including limited access to infrastructure and technology, dependence on weather conditions, and fluctuations in the market price of seafood. However, despite these challenges, fisheries households remain one of the important pillars of the coastal economy due to their contribution in providing food sources of animal protein, creating jobs, and generating foreign exchange from the export of fishery products.

### **Growth Of GRDP**

Gross Regional Domestic Product (GRDP) is the gross value added of all goods and services created or produced in the domestic area of a region arising from economic activity in a certain period regardless of whether the factors of production owned by residents or non-residents. One important indicator to determine the economy in a region is through GRDP either at current prices or at constant prices. GRDP is basically the amount of added value generated by all business units in a particular region, or is the total value of final goods and services produced by all economic units. GRDP at current prices describes the prices prevailing in each year, while GRDP at constant prices shows the added value of these goods and services which are calculated using prices prevailing at a certain time as the base year (Junrillah *et al.*, 2021).

## **METHODS**

The location of this research was conducted in Dumai City, Riau Province with data published by the Dumai City Statistics Agency and the Dumai City Fisheries and Marine Service. This research was conducted in September 2024 until the research ended. The type of research is quantitative research and the type of data used is secondary data in the form of time series (year period). Data obtained by other parties, not directly obtained by researchers from research subjects. Secondary data is usually in the form of documentation data or report data that is already available. Data obtained from the official website of the Dumai City Statistics Agency, and data owned by the Dumai City Fisheries and Marine Service. The method used in data collection is through literature study.

In this study, researchers will use Statistical Product and Service Solution software version 23 to analyze the data. After successfully collecting the necessary data, the next step is to analyze the data (Sugiyono, 2019). In this study, the data were tested with descriptive statistics and classical assumption tests, such as normality, multicollinearity, autocorrelation, and heteroscedasticity tests. In addition, timeseries regression analysis and hypothesis testing were also carried out, such as the individual parameter significant test (t statistical test), the coefficient of determination test, and the F test (Sugiyono, 2020).

The dependent variable in this study is Economic Growth in Dumai City. GRDP is divided into two, namely Gross Regional Domestic Product at constant prices and at current prices. GRDP is the gross value added of all goods and services produced in a region within a certain

period. The independent variable in this study is Fisheries Production is the result of a fisherman's activity by catching or the result of cultivation which produces an output called fish or other marine products (Mardyani and Yulianti, 2020). Fisheries production is measured using the amount of Fisheries Production Volume. Meanwhile, fisheries sector labor is someone whose job is to catch fish using simple fishing gear or someone who has a profession of catching fish with more modern tools (Mardyani and Yulianti, 2020). The last variable Fishery households (RTP) are households that carry out fishing or aquaculture activities, aquatic animals, or aquatic plants to sell some of the results.

## RESULTS

### Descriptive Analysis Test Results

The highest, lowest, average, and standard deviation values are presented in descriptive statistics to provide clear information. or a description of the data without intending to draw final research conclusions (I. Ghazali, 2018). The following table is the result in descriptive statistics:

**Table 3.Descriptive Analysis Test Result**

Description	N	Minimum	Maximum	Mean	Std.Deviation
Economic Growth	12	111996976	137876508	122715171,33	9691331,509
Fishery Production	12	525	148299	50248,92	44265,275
Number of Fishermen	12	232	494	312,42	94,763
Fishery Households	12	229	494	322,50	89,269
Valid N (Listwise)	12				

Source: spss processed data

### Time Series Regression Test Results

**Table 4 Results Of Time Series Regression Test**

Variables	Undstandardized Coefficients		T	Sig
	B	Std Error		
(Constant)	45938893,365	7803349,866		5,887
Fishery Production	539,205	78,124	0,750	6,902
Number of Fishermen	25,742	7,581	0,308	3,395
Fishery Households	6284,565	10897,864	0,058	0,577

Source: spss processed data

Based on the table above, it can be concluded that the timeseries regression equation generated in this study is as follows:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

$$Y = 45938893,365 + 539,205X_1 + 25,742X_2 + 6284,565X_3 + e$$

**Description :**

Y = Economic Growth  
 X1 = Fishery Production  
 X2 = Number of Fishermen  
 X2 = Fishery Households  
 a0 = constant  
 $\beta_1$ - $\beta_3$  = Regression Coefficient  
 e = Error

**Normality Test Results**

To determine whether the values contained in the model can be normally distributed, this study uses the Kolmogorov-Smirnov (K-S) normality test. When the value at  $\text{asympt.sig} > 0.05$ , the test standardized residual value can be considered normally distributed. The results of the Kolmogorov Smirnov (K-S) test in this study are presented in the following table:

**Table 5 Normality Test Result**

One-Sample Kolmogorov-Smirnov		
		Unstandardized Residual
N		12
Normal Parameters <sup>a,b</sup>	Mean	0.000000
	Std. Deviation	3927247,65
Most Extreme Difference	Absolute	0.205
	Positive	0.205
	Negative	-0.161
Test Statistic		0.205
Asymp. Sig. (2-tailed)		.200 <sup>c</sup>

Source: spss processed data

**Multicollinearity Test Results**

Multicollinearity is when we want to see if there is a relationship between the independent variables in the regression model (Ghozali, 2016). to evaluate multicollinearity by looking at the value of the variation inflation factor (VIF) or each independent variable. There is no strong relationship between the independent variables in the regression model if the tolerance value is above 0.1 and the VIF value is below 10. The tolerance and VIF values for each variable can be found in the following table:

**Table 6 Multicollinearity Test Result**

Variables	Collinearity Statistics		Description
	Tolerance	VIF	
Fishery Production	0,590	1,696	No Multicollinearity
Number of Fishermen	0,699	1,431	No Multicollinearity
Fishery Households	0,552	1,810	No Multicollinearity

Source: spss processed data

**Heteroscedasticity Test Results**

The heteroscedasticity test has the aim of knowing whether there are differences in the variation of the regression model between the residuals from one observation to another. By using the Glejser test, there is no heteroscedasticity in this study if the significance level exceeds 5%. The results of the heteroscedasticity test with Glejser are shown below:

**Table 7 Heteroscedasticity Test Result**

Variabel	Undstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1084380,446	3345371,345		0,324	0,754
Fishery Production	22,618	22,006	0,380	1,028	0,334
Number of Fishermen	8783,357	9441,591	0,316	0,930	0,379
Fishery Households	-24,626	11274,236	-0,001	-0,002	0,998

Source: spss processed data

**Autocorrelation Test Results**

The AutoCorrelation test aims to test whether in a linear regression model there is a correlation between confounding errors in period t and errors in period t-1 (previous). If there is a correlation, it is called an autocorrelation problem

**Table 8 Autocorrelation Test Results**

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.974 <sup>a</sup>	0,950	0,931	2551598,190	1,890

Source: spss processed data

**Coefficient Of Determination Test Results**

The coefficient of determination (R<sup>2</sup>) is a method used to determine how well a model can explain the specified variable provided that it has a coefficient value within 0 and 1. The following table shows the results of the coefficient of determination (R<sup>2</sup>) test:

**Table 9 R-Square Result**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.974a	0,950	0,931	2551598,190

Source: spss processed data

Based on the test results of the coefficient of determination, Adjusted R Square (R<sup>2</sup>) is 0.931. It can be concluded that the ability of fisheries production variables, the number of fishermen, and fishery households in influencing economic growth variables is 93.1% while 6.9% is influenced by other factors or other independent variables not observed in this study.

**F Test Results**

The F statistical test basically shows whether the multiple linear regression model is significant or not. The results of the simultaneous significant test (F statistical test) are as follows:

**Table 10 F-Test Result**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	981055744082	3	327018581360737	50,228	.000 <sup>b</sup>
Residual	52085226570424	8	6510653321303,09		
Total	1033140970652	11			

Source: spss processed data



The T test aims to test how much influence one independent variable individually has in explaining the variation in the dependent variable. The t test is done by comparing the t-table value with the t-count and using the significance value. The results of hypothesis testing can be seen in the following table:

**Table 11 Hypothesis Test Results**

Variabel	t-tabel	t-hitung	Sig.	Result
(Constant)		5,887	0,000	
Fishery Production	2.228	6,902	0,000	H1 Accepted
Number of Fishermen	2.228	3,395	0,009	H2 Accepted
Fishery Households	2.228	0,577	0,580	H3 Accepted

Source: spss processed data

## DISCUSSION

### The Effect Of Fisheries Production On Economic Growth

Based on the table, the calculated t value is 6.902 with a significance value of 0.000. The results of this study show  $t_{count} > t_{table}$  ( $6.902 > 2.228$ ) and a significance value greater than 0.05 ( $0.000 < 0.05$ ). This means that the test results between fisheries production and economic growth have a significant effect. The significance level of  $0.000 < 0.05$  which means H1 is accepted, thus it can be concluded that fisheries production affects economic growth in Dumai City. This means that the increase in fisheries production will increase economic growth in Dumai City.

In particular, the fisheries sector is one of the sectors that contribute to increasing regional income and providing employment. The existence of fisheries production can provide income for the community, the income obtained by the community from fisheries production is to meet economic needs. This means that if the community's income is good, it will automatically affect regional income. In other words, fisheries sector production can explain significantly to economic growth in Dumai City. This result is in line with research conducted by Mardiyani, (2020).

### The Effect Of The Number Of Fishermen On Economic Growth

Based on the table, the t value is 3.395 with a significance value of 0.009. The results of this study show  $t_{count} > t_{table}$  ( $3.395 > 2.228$ ) and a significance value greater than 0.05 ( $0.009 < 0.05$ ). This means that the test results between the number of fishermen on economic growth have a significant effect. The significance level is  $0.000 < 0.05$ , which means that H1 is accepted, thus it can be concluded that the number of fishermen has an effect on economic growth in Dumai City.

The number of fishermen has a significant influence on economic growth, especially in coastal areas that depend on the fisheries sector. The more active fishermen, the greater the potential production of marine products, which can increase community income and contribution to Gross Regional Domestic Product (GRDP). In addition, the presence of fishers creates a multiplier effect through other economic activities, such as fish trade, seafood processing, and fishery-related services. However, the increase in the number of fishers must also be balanced with sustainable management of marine resources to prevent overfishing and ecosystem damage, which can hamper long-term economic growth. This result is in line with research conducted by Yulianti, (2020).

### The Effect Of Fishery Households On Economic Growth

Based on the table, the calculated t value is 0.577 with a significance value of 0.580. The results of this study show  $t_{count} < t_{table}$  ( $0.577 < 2.228$ ) and a significance value greater than



0.05 ( $0.580 > 0.05$ ). This means that the test results between fishery households on economic growth have no significant effect. The significance level of  $0.580 < 0.05$  means that H3 is rejected, thus it can be concluded that fishery households have no effect on economic growth.

RTPs are households that carry out several activities including fishing, processing and marketing of fish. These activities aim some or all of the results to be sold. Fishery households are the economic unit in the community business. Households that conduct fishing activities and other household members who are fisheries laborers are categorized as capture fisheries households. Reliance on traditional methods and lack of innovation can also make the contribution of fisheries households to the economy stagnant. In addition, pressure on marine resources or unsustainable fishing can lead to declining yields, so the local economy does not feel a significant positive impact. Under these circumstances, fishery households are more likely to survive to fulfill their own needs, without having a meaningful impact on macroeconomic growth. This result is in line with research conducted by Arsandi et al., (2022)

## CONCLUSION

Based on the research results and discussion obtained, fisheries production and the number of fishermen have a significant influence partially and have a positive effect on economic growth in Dumai City. Meanwhile, fishery households do not have a significant effect partially and positively on economic growth in Dumai City. With this research, it is hoped that future researchers can expand the scope of the research area so that the number of samples will be greater and more specific ones will be obtained. In addition, it is expected to consider other independent variables outside of this study such as inflation, fisheries exports, exchange rates and others by using this research as a reference for conducting new research on economic growth in the fisheries sector.

## LIMITATION

It is expected that future researchers can expand the scope of the research area so that the number of samples is greater and allows for more specific and more accurate results in research on economic growth. Future researchers are expected to consider other independent variables outside of this study such as inflation, fisheries exports, exchange rates and others by using this research as a reference for conducting new research on economic growth in the fisheries sector.

## REFERENCES

- Bachtiar, Bayu Aji, Haq, Fika Sabila, Janah, Maidatul, Amalia, Novi Rizqi, Novaldi, Jeremia, & Budiasih, Budiasih. (2023). Penyerapan Tenaga Kerja Sektor Pertanian Tanaman Pangan pada Generasi Z. *Seminar Nasional Official Statistics*, 2023(1), 491–502. <https://doi.org/10.34123/semnasoffstat.v2023i1.1706>
- Djunaidi, Djunaidi, Sarianto, Deni, & Zalmirosano, Zalmirosano. (2022). Analysis of Catch Results and Catching Rate of Sondong in the City of Dumai, Riau Province. *Pena Akuatika : Jurnal Ilmiah Perikanan Dan Kelautan*, 21(1), 43. <https://doi.org/10.31941/penaakuatika.v21i1.1549>
- Fauziyah, Nur, Wahyuni Mustafa, Sri, & Muhani, Mustafa. (2023). Analisis Penyerapan Tenaga Kerja pada Sektor Pariwisata di Indonesia. *Syntax Literate; Jurnal Ilmiah Indonesia*, 8(7), 5066–5073. <https://doi.org/10.36418/syntax-literate.v8i7.13054>
- Kumendong, Stenly, Sondakh, Mex L., & Tarore, Mellisa L. G. (2021). Peranan Sektor Pertanian Dalam Penyerapan Tenaga Kerja di Kabupaten Minahasa Selatan. *Agrirud*, 3(1), 148–158.
- Mardyani, Yeyen, & Yulianti, Atik. (2020). Analisis Pengaruh Sub Sektor Perikanan Terhadap

- Pertumbuhan Ekonomi Di Provinsi Kepulauan Bangka Belitung. *Equity: Jurnal Ekonomi*, 8(2), 41–50. <https://doi.org/10.33019/equity.v8i2.47>
- Nooralam, Afia Yunus, Laut, Lorentino Togar, & Septiani, Yustirania. (2019). Peran Sektor Pertanian Dalam Penyerapan Tenaga Kerja Di Indonesia Tahun 2010-2018. *DINAMIC: Directory Journal of Economic*, 2, 798–809.
- Octaviani, Dian, & Juliprijanto, Whinarko. (2021). ANALISIS PENGARUH SEKTOR PERTANIAN TERHADAP PENYERAPAN TENAGA KERJA DI JAWA TENGAH (Tahun 2010-2019). *Jurnal Paradigma Multidisipliner (JPM)*, 2(1), 1–8.
- Pranata, Alfin, Fitriyana, Fitriyana, & Susilo, Heru. (2022). Tingkat Kesejahteraan Pembudidaya Ikan Dalam Karamba Di Desa Penyinggahan Ilir Kecamatan Penyinggahan Kabupaten Kutai Barat Kalimantan Timur. *Jurnal Perikanan Unram*, 12(3), 418–427. <https://doi.org/10.29303/jp.v12i3.351>
- Rubianti, Nisa Azizah. (2023). Pengaruh Karakteristik WPP 712 Dan WPP 714 Terhadap PDB Perikanan Dan Produksi Perikanan Tangkap. *Journal of Economic, Bussines and Accounting (COSTING)*, 7(1), 2235–2346. <https://doi.org/10.31539/costing.v7i1.7958>
- Siregar, Emil Salim, Rohela, Rohela, Anwar, Yusrijal, Iswahyudi, Iswahyudi, Butar-Butar, Sabungan, Juanda, Ilham, & Khoiriah, Umi. (2024). Pengaruh Hasil Tangkap Ikan Terhadap Pembangunan Dan Perkembangan Perekonomian Masyarakat Pesisir. *Innovative: Journal Of Social Science Research*, 4(1), 6352–6360. Retrieved from <https://j-innovative.org/index.php/Innovative/article/view/8598>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2020). *Metode Penelitan Kuantitatif, Kualitatif dan Kombinasi (Mixed Methods)*. Bandung: Alfabeta, Bandung.
- teguh fahrur rozi, sofyan, Edy Marsudi. (2017). Sektor Pertanian Tk Provinsi Aceh. *Ilmiah Mahasiswa Pertanian*, 2(2), 156–170.
- Yusran Yusran, Muhammad Aris, & Riska Riska. (2023). Pengaruh Disiplin Terhadap Efektivitas Kerja Aparat Pada Kantor Desa Ujung Tanah, Kecamatan Bola, Kabupaten Wajo. *Jurnal Ilmu Administrasi Negara*, 20(1), 140–156. <https://doi.org/10.59050/jian.v20i1.205>