

The Influence of Transportation Infrastructure on Community Economic Improvement in Makassar Island, Baubau City

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ABSTRACT

Keywords:

island community
economy, transportation
infrastructure

Makassar Island is an island area in Baubau City, Southeast Sulawesi Province which is included in the Kokalukuna District. It consists of two villages, namely Liwuto Village and Sukanayo Village with a land area of 1.04 km². In general, 70% of the livelihood of residents on Makassar Island is fishing, seaweed farming, pearl oysters, fish marketing businesses, and crossing services (sea taxis). As an island area, the movement of both goods and people within this region is closely related to the infrastructure of docks and highways. This study aims to analyze the influence of transportation infrastructure in improving the economy of the people on Makassar Island. The analysis methods used in this study are Likert analysis, correlation analysis and simple linear regression analysis. Based on the results of the analysis, it was found that transportation infrastructure has a strong relationship with the community's economy. Furthermore, the results of the study are presented in the form of a crosstab between each indicator of the transportation infrastructure variable (X) with the economic variable of the community (Y) on the island.



Introduction

Indonesia is known as a maritime country, namely an archipelago. The country of Indonesia consists of large islands and small islands which is a challenge for the government and society to solve problems that usually arise due to its geographical location (Adisasmita, 2011). Meeting the needs of transportation infrastructure is very important for regions, be it rural or semi-urban or urban areas in developing countries, because it provides access for people to meet their daily needs for goods and services, and improves socio-economic life. Access to information, markets, services for specific communities and locations, as well as new opportunities are all important needs in the development process (Amrullah, 2021).

Transportation infrastructure is very necessary in an effort to open an area or growth area for the development of an area. One of the efforts is through improving the level of accessibility of regional centers or remote areas. The low level of mobility of the

movement of people and goods in a particular area and directs the region to become a poor area (Baja, 2012). The development of transportation infrastructure can open up various regional isolations and provide broad benefits and impacts for the development and improvement of the local community's economy (Black, 2018).

As stated in the word of Allah SWT in the Qur'an surah Al-Baqarah: 2/164, which reads:

إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ وَالْفُلْكِ الَّتِي تَجْرِي فِي الْبَحْرِ بِمَا يَنْفَعُ النَّاسَ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ مَاءٍ فَأَحْيَا بِهِ الْأَرْضَ بَعْدَ مَوْتِهَا وَبَثَّ فِيهَا مِنْ كُلِّ دَابَّةٍ وَتَصْرِيفِ الرِّيَّاحِ وَالسَّحَابِ الْمُسَخَّرِ بَيْنَ السَّمَاءِ وَالْأَرْضِ لَآيَاتٍ لِقَوْمٍ يَعْقِلُونَ

Translation:

"Verily in the creation of heaven and earth, the alternation of night and day, the ark that sailed on the sea brought that which was useful to man, and that which God sent down from heaven was water, and with that water he gave life to the earth after its death (dryness), and he spread on the earth all kinds of animals, and the stirring of winds and clouds which was controlled between heaven and earth; truly (there are) signs (of the oneness and greatness of God) for the thinking people."

God has made evidence a sign of His being and divinity for those who will use their intellect to think. Among the proofs are the sky visible to you, the stars that circulate on it regularly, do not precede each other and collide, some of which emit light to this nature. The earth, which consists of sea and land, alternates day and night and the benefits contained therein (Bowersox, Calabro, & Wagenheim, 2021). Allah Subhaanahu wa Ta'aala also subdued the sea and wind for the ship, even He also inspired humans how to make ships so that with the ship humans can easily move goods or passengers from one place to another so that transportation activities occur in an effort to meet human needs about transportation services in order to meet human needs and development (Irwan, 2021).

The economic activities of this community will develop if they have good infrastructure and transportation facilities for accessibility. Accessibility can spur the process of interaction between regions to the most remote areas so as to create equitable development (Jinca, 2019).

Transportation infrastructure has two main roles, namely as a tool to direct development in urban areas and as infrastructure for the movement of people and / or goods arising from activities in urban areas (Kamaluddin, 2023). An area will not be able to develop if there is no transportation infrastructure system, this will result in very high transportation costs.

In addition, the verse that describes transportation is the Qur'an in Sura An-Nahl:16/14 which reads:

وَهُوَ الَّذِي سَخَّرَ الْبَحْرَ لِتَأْكُلُوا مِنْهُ لَحْمًا طَرِيًّا وَتَسْتَخْرِجُوا مِنْهُ حِلْيَةً تَلْبَسُونَهَا وَتَرَى الْفُلْكَ مَوَاجِرَ فِيهِ وَلِتَبْتَغُوا مِنْ فَضْلِهِ وَلِعَلَّكُمْ تَشْكُرُونَ

Translation:

"And it is he, God who subdues the sea (for you), that ye may eat of it fresh meat (fish), and you take out out of the sea the jewels which ye wear; and ye saw the ark sailing unto him, and that ye might seek (profit) from his gift, and that ye might be grateful."

Makassar Island is an island area in Baubau City which is included in the Kokalukuna District which is located at positions 5025' - 5026' South Latitude and 122037' - 122038' East Longitude. It consists of two villages, namely Liwuto Village and Sukanayo Village with a land area of 1.04 km². In general, 70% of the livelihood of

residents on Makassar Island is fishing, seaweed farming, pearl oysters, fish marketing businesses, and crossing services (sea taxis) (Karjoredjo, 2019). This economic activity is expected to be able to increase the economic ability of the people on Makassar Island. However, transportation infrastructure on Makassar Island looks still very lacking. The role of transportation is felt in Makassar Island, considering the condition of Makassar Island as an island area, so to channel or distribute goods from and to Baubau City or surrounding areas must be by sea. So that the orientation of the movement of both goods and people in this region is closely related to dock and highway infrastructure.

Based on this background, it is necessary to examine the influence of existing transportation infrastructure on Makassar Island on the economic improvement of the people on the island.

The purpose of this study is to analyze the influence of transportation infrastructure in improving the economy of the community on Makassar Island, Baubau City.

This research is expected to be input for the Baubau City government in an effort to provide facilities and infrastructure in improving the economy of the community on Makassar Island, Baubau City.

Research Methods

This study used qualitative research. Variables have an important role in a study. According to (Arikunto, 2021), the variable itself is a concept that has various values. There are variables or concepts that have more than one dimension, therefore it is necessary to describe first the dimensions that the concept has. After that, the measurement method, unit, and validity of the measurement tool used are selected. After reviewing various theories in Chapter II, several variables have been determined to be used in this study. Based on the literature review, several variables are obtained that are suitable for use in the analysis. These variables are selected based on the suitability of the variables to the object of research. From the indicators, variables and measurement levels, preferences for data collection obtained are more micro and the process of extracting analysis is more in-depth and on target (Martono, 2010).

Results and Discussion

Analysis of Research Respondent Results

Development is currently running on Makassar Island to improve the welfare and prosperity of the people of this area. Regional economic development as the main pillar in supporting efforts to increase economic growth which has an impact on the expansion and income of employment, remembrance of investment, increase in community income, and various improvements in economic phenomena that support the strengthening of the regional and national economy (Purwantini & Rivai, 2018).

Transportation Infrastructure Variables

Accessibility

Accessibility is closely related to the economic and social conditions of a region. Economic growth of a region is usually strongly influenced by the conditions of transportation infrastructure development in the region and for the long term transportation growth has an impact on spatial growth and regional economy (Purwoto et al., 2019).

The development of good transportation can make it easier for people to be able to access to the city and to the port and for daily interests. Thus, transportation in this case transportation infrastructure serves to encourage increased community activities. Good

transportation arrangement will shape the characteristics of the region according to the movement of the community (Utami, 2022).

The transportation system is said to be good if, *at first*, the travel time is fast enough. *Secondly*, the frequency of service is sufficient. *Third*, safe(free from possible accidents) and comfortable service conditions (Marlina & Natalia, 2017). To achieve this ideal condition, it is determined by various factors that become components of transportation, including the condition of the road network and vehicle facilities. The following are respondents' responses about the existing road network on Makassar Island.

Table 11 Respondents' Assessment of Accessibility in Makassar

Respondent Assessment	Frequency	Percentage (%)
Excellent	7	7
Good	60	60
Not good	33	33
Bad	0	0
Very bad	0	0
Sum	100	100

Source : 2015 Calculation Results

Based on the table above, it shows that respondents who answered well as much as 60%, who answered less well as much as 33% and who answered very well as much as 7%. It can be concluded that accessibility in Makassar Island is good.

From this interval, it can also be analyzed by calculating the average answer based on the scoring of each answer from respondents based on a predetermined score can be calculated as follows:

Excellent	: 7 x 5	= 35
Good	: 60 x 4	= 240
Not good	: 33 x 3	= 99
Bad	: 0 x 2	= 0
Very bad	: 0 x 1	= 0
Total amount		= 374

The ideal number of scores for all items = $5 \times 100 = 500$ (in case all answers are greatly increased). Number of scores obtained from the study = 374

So based on that data, the level of accessibility in Makassar Island = $(374: 500) \times 100\% = 75\%$ of what is expected (100%). Accessibility in Makassar Island has been assessed well by the local community at this time however. It is expected to be even better in the future.

Continuously it can be described as follows:

SBR BR CBC BK SBK

100 200 300 (374) 400 500

So based on data obtained from 100 respondents, an average of 374 are located in the BAIK area.

Furthermore, a validity test was carried out on the questions in the questionnaire by calculating the value of r . Based on Appendix 3, the values of $X = P1$ and $Y = T$ are thus obtained

$$\begin{array}{ll} n = 100 & \sum XY = 2879 \\ \sum X = 374 & \sum X^2 = 1432 \\ \sum Y = 762 & \sum Y^2 = 5882 \end{array}$$

$$\begin{aligned} & n \sum XY - \sum X \sum Y \\ r = & \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}} \\ r = & \frac{100 \cdot 2879 - 374 \cdot 762}{\sqrt{[100 \cdot 1432 - 139876] [100 \cdot 5882 - 580664]}} \\ r = & \frac{287900 - 284988}{\sqrt{[143200 - 139876] [588200 - 580664]}} \\ r = & \frac{2912}{\sqrt{3324 \cdot 7536}} \end{aligned}$$

$$\begin{aligned} r &= \frac{2912}{\sqrt{25049664}} \\ r &= \frac{2912}{5004,964} \end{aligned}$$

From the results above, r count = 0.581. The calculated r value obtained is greater than the table r value = 0.195 (r calculate > r table) so that it is concluded that the questions in the questionnaire are valid.

This will certainly affect the smooth access of passengers and goods to be carried. Therefore, in the future it is necessary to develop more transportation infrastructure so that the flow of passengers and goods to and from Makassar Island becomes smooth. So that the economic turnover becomes smooth, which can also affect regional income so that it can support the development of the Makassar Island area.

Infrastructure Condition

**Table 12 Respondents' Assessment of Infrastructure
Conditions in Makassar Island**

Respondent Assessment	Frequenc y	Percentage (%)
Excellent	20	20
Good	48	48
Not Good	32	32
Bad	0	0

Very bad	0	0
Sum	100	100

Source : 2015 Calculation Results

Based on the table above, it shows that respondents who answered very well as much as 20%, who answered well as much as 48% and those who answered less well as much as 32%.

From this interval, it can also be analyzed by calculating the average answer based on the scoring of each answer from respondents based on a predetermined score can be calculated as follows:

Excellent	: 20 x 5	= 100
Good	: 48 x 4	= 192
Not Good	: 32 x 3	= 96
Bad	: 0 x 2	= 0
Very bad	: 0 x 1	= 0
Total amount		= 388

The ideal number of scores for all items = $5 \times 100 = 500$ (in case all answers are greatly increased). Number of scores obtained from the study = 388. So based on that data, the condition of infrastructure on Makassar Island = $(388 : 500) \times 100\% = 78\%$ of what is expected (100%). The current condition of infrastructure has been assessed as good by the people of Makassar Island, but they still hope that the government will further improve the condition of existing infrastructure.

Continuously it can be described as follows:

SBR	BR	CBC	BK	SBK
100	200	300 (388)	400	500

So based on data obtained from 100 respondents, an average of 388 are located in the BAIK area.

Furthermore, a validity test was carried out on the questions in the questionnaire by calculating the value of r . Based on Appendix 3, the values of $X = P2$ and $Y = T$ are thus obtained

$$\begin{aligned}n &= 100 & \Sigma XY &= 3003 \\ \Sigma X &= 388 & \Sigma X^2 &= 1556 \\ \Sigma Y &= 762 & \Sigma Y^2 &= 5882 \\ n \Sigma XY - \Sigma X \Sigma Y & & & \\ r &= \frac{n \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n \Sigma X^2 - (\Sigma X)^2] [n \Sigma Y^2 - (\Sigma Y)^2]}} \\ r &= \frac{300300 - 295656}{\sqrt{[100 \cdot 1556 - 150544] [100 \cdot 5882 - 580664]}} \\ r &= \frac{4644}{\sqrt{[155600 - 150544] [588200 - 580664]}} \\ r &= \frac{4644}{\sqrt{5056 \cdot 7536}} \\ r &= \frac{4644}{\sqrt{38102016}} \\ r &= \frac{4644}{6172,683} \\ r &= 0.752\end{aligned}$$

From the results above, r count = 0.752. The calculated r value obtained is greater than the table r value = 0.195 (r calculate $\square \square$ r table) so that it is concluded that the questions in the questionnaire are valid.

Economic Variables of Society

Community Income

Based on the results of the questionnaire distribution, the income of people in Makassar Island varies greatly. It is hoped that the existence of transportation infrastructure can have a positive impact on the community, especially increasing income.

Table 13. Respondents' Assessment of Community Income Before
Transportation Infrastructure Development

Respondent Assessment	Frequenc y	Percentage (%)
Greatly improved	3	3
Increase	27	27
Less increased	66	66
Decreased	4	4
Very decreased	0	0
Sum	100	100

From the table above shows that 27% of respondents who answered increased, 66% who answered less increased, 3% who answered greatly increased and 4% who answered decreased.

From this interval, it can also be analyzed by calculating the average answer based on the scoring of each answer from respondents based on a predetermined score can be calculated as follows:

$$\begin{aligned}\text{Greatly improved} &: 3 \times 5 &= 15 \\ \text{Increase} &: 27 \times 4 &= 108 \\ \text{Less increased} &: 66 \times 3 &= 198\end{aligned}$$

Decreased	: 4 x 2	= 8
Very decreased	: 0 x 1	= 0
Total amount		= 329

The ideal number of scores for all items = $5 \times 100 = 500$ (in case all answers are greatly increased). Total score obtained from the study = 329. So based on that data, the level of influence of transportation infrastructure on increasing community income before the development on Makassar Island = $(329: 500) \times 100\% = 66\%$ of expected (100%). The income of the community before the development was assessed by the community on Makassar Island had increased because at that time there was already a dock even though the condition was only in the form of simple concrete. The continuum can be described as follows:

SMRN	MRN	KMT	MT	SMT
100	200	300(329)	400	500

So based on data obtained from 100 respondents, an average of 329 are located in the INCREASE area.

Furthermore, a validity test was carried out on the questions in the questionnaire by calculating the value of r . Based on Appendix 4, the values of $X = E1$ and $Y = T$ are thus obtained.

$$\begin{array}{ll}
 n = 100 & \sum XY = 6164 \\
 \sum X = 329 & \sum X^2 = 1117 \\
 \sum Y = 1862 & \sum Y^2 = 34800
 \end{array}$$

$$n \sum XY - \sum X \sum Y$$

$$\begin{aligned}
 r &= \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}} \\
 r &= \frac{100 \cdot 6164 - 329 \cdot 1862}{\sqrt{[100 \cdot 1117 - 108241] [100 \cdot 34800 - 3467044]}} \\
 r &= \frac{614600 - 612598}{\sqrt{[111700 - 108241] [3480000 - 3467044]}} \\
 r &= \frac{2002}{\sqrt{3459 \cdot 12956}} \\
 r &= \frac{2002}{\sqrt{44814804}} \\
 r &= 0.299
 \end{aligned}$$

From the results above, r count = 0.299. The calculated r value obtained is greater than the table r value = 0.195 (r calculate > r table) so that it is concluded that the questions in the questionnaire are valid.

Table 14. Respondents' Assessment of Community Income after
Transportation Infrastructure Development

Respondent Assessment	Frequenc y	Percentage (%)
Greatly improved	10	10
Increase	83	83
Less increased	6	6
Decreased	1	1
Very decreased	0	0
Sum	100	100

Source : 2015 Calculation Results

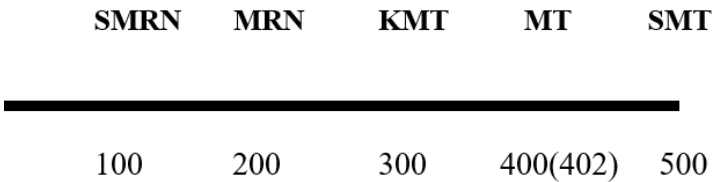
From the table above shows that 10% of respondents who answered greatly increased, 83% who answered increased, 6% who answered less increased and 1% who answered decreased.

From this interval, it can also be analyzed by calculating the average answer based on the scoring of each answer from respondents based on a predetermined score can be calculated as follows:

Greatly improved	: 10 x 5	= 50
Increase	: 83 x 4	= 332
Less increased	: 6 x 3	= 18
Decreased	: 1 x 2	= 2
Very decreased	: 0 x 1	= 0
Total amount		= 402

The ideal number of scores for all items = $5 \times 100 = 500$ (in case all answers are greatly increased). Number of scores obtained from the study = 402. So based on that data, the level of increase in community income after the development of transportation infrastructure on Makassar Island = $(402: 500) \times 100\% = 80\%$ of what is expected (100%). The income of the community after the development is assessed by the community on Makassar Island has greatly increased because currently the pier has been equipped with a passenger waiting terminal that will cross from or to Baubau City and has been paved the axis road between Liwuto Village and Sukanayo Village.

The continuum can be described as follows:



So based on data obtained from 100 respondents, it is located in a VERY INCREASED area.

Furthermore, a validity test was carried out on the questions in the questionnaire by calculating the value of r . Based on Appendix 4, the values of $X = E2$ and $Y = T$ are thus obtained.

$$\begin{array}{ll}
 n = 100 & \sum XY = 7505 \\
 \sum X = 402 & \sum X^2 = 1636 \\
 \sum Y = 1862 & \sum Y^2 = 34800
 \end{array}$$

$$n \sum XY - \sum X \sum Y$$

$$\begin{aligned}
 r &= \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}} \\
 r &= \frac{100 \cdot 7505 - 402 \cdot 1862}{\sqrt{[100 \cdot 1636 - 161604] [100 \cdot 34800 - 3467044]}} \\
 r &= \frac{5085,290}{\sqrt{1996 \cdot 12956}} \\
 r &= \frac{5085,290}{1976} \\
 r &= 0.388
 \end{aligned}$$

From the above results obtained r count = 0.388. The calculated r value obtained is greater than the table r value = 0.195 (r calculate > r table) so that it is concluded that the questions in the questionnaire are valid.

Table 15.

Comparison of Community Income Before and After Transportation Infrastructure Development

No.	Before Development	Sum Sample (person)	(%)	After Development	Sum Sample (person)	(%)
1	Greatly Improved	3	3	Greatly Improved	10	10
2	Increase	27	27	Increase	83	83
3	Less Increased	66	66	Less Increased	6	6
4	Decreased	4	4	Decreased	1	1
5	Very Decreased	0	0	Very Decreased	0	0
	Total	100	100	Total	100	100

Source : 2015 Calculation Results

From the value obtained based on the results of the questionnaire, it will further strengthen how the influence of transportation infrastructure on increasing the income of people on Makassar Island.

With the development of transportation infrastructure, entrepreneurs will find it easier to export their business goods because it is supported by visits to transportation facilities both on land and at sea. Fishermen are increasingly aggressively looking for and marketing their fish catches. With this increase, it will have a positive influence on the

increasing income of the people of Makassar Island. So that it can indirectly affect the development of the area in Baubau City.

From the table above, it can be concluded that before the development of transportation infrastructure on Makassar Island, the level of community welfare in it in this case work income did not increase. However, after the development of transportation infrastructure, the income of the people on Makassar Island has increased.



Figure 12. Makassar Island Pier past and present

Social (i.e. basic needs such as houses, schools, markets, hospitals, etc.) is one of the indicators of economic growth which is basically a sector that connects various kinds of economic activities. The following are respondents' responses about the development of infrastructure development after the existence of roads and pedestrian bridges on Makassar Island.

Table 16.
Respondents' Assessment of Non-Physical and Social Infrastructure Development in Makassar Island

Respondent Assessment	Frequenc y	Percentage (%)
Greatly improved	7	7
Increase	76	76
Less increased	15	15
Decreased	2	2
Very decreased	0	0
Sum	100	100

Source : 2015 Calculation Results

Based on the table above, it shows that respondents who answered increased by 76%, those who answered less increased by 15%, those who answered greatly increased by 7% and those who answered decreased by 2%.

From this interval, it can also be analyzed by calculating the average answer based on the scoring of each answer from respondents based on a predetermined score can be calculated as follows:

$$\begin{array}{lll} \text{Greatly improved} & : 7 \times 5 & = 35 \\ \text{Increase} & : 76 \times 4 & = 324 \end{array}$$

Less increased	: 15 x 3	= 45
Decreased	: 2 x 2	= 4
Very decreased	: 0 x 1	= 0
Total amount		= 388

The ideal number of scores for all items = $5 \times 100 = 500$ (in case all answers are greatly increased). Number of scores obtained from the study = 388.

So based on that data, the level of non-physical and social infrastructure development on Makassar Island = $(388: 500) \times 100\% = 78\%$ of the expected (100%). The hard, non-physical and social infrastructure sector on Makassar Island has been assessed by the community to have increased, especially since the operation of the Marine and Fisheries Vocational High School (SMK) in Baubau City there.

The continuum can be described as follows:

SMRN	MRN	KMT	MT	SMT
100	200	300	(388)400	500

So based on data obtained from 100 respondents, an average of 388 are located in the INCREASE area.

Furthermore, a validity test was carried out on the questions in the questionnaire by calculating the value of r . Based on Appendix 4, the values of $X = E3$ and $Y = T$ are thus obtained.

$$\begin{aligned}
 n &= 100 & \Sigma XY &= 7262 \\
 \Sigma X &= 388 & \Sigma X^2 &= 1534 \\
 \Sigma Y &= 1862 & \Sigma Y^2 &= 34800
 \end{aligned}$$

$$\begin{aligned}
 r &= \frac{n \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n \Sigma X^2 - (\Sigma X)^2] [n \Sigma Y^2 - (\Sigma Y)^2]}} \\
 r &= \frac{100 \cdot 7262 - 388 \cdot 1862}{\sqrt{[100 \cdot 1534 - 150544] [100 \cdot 34800 - 3467044]}} \\
 r &= \frac{3744}{\sqrt{726200 - 722456}}
 \end{aligned}$$

$$\begin{aligned}
 r &= \frac{3744}{\sqrt{2856 \cdot 12956}} \\
 r &= \frac{3744}{\sqrt{37002336}} \\
 r &= \frac{3744}{6082,954} \\
 r &= 0.615
 \end{aligned}$$

From the results above, $r_{\text{count}} = 0.615$. The calculated r value obtained is greater than the table r value = 0.195 ($r_{\text{calculate}} > r_{\text{table}}$) so that it is concluded that the questions in the questionnaire are valid.

Hard, non-physical, and social infrastructure also play an important role as one of the driving wheels of economic growth so that the operation of ports/docks and roads will be smooth. So that the economic turnover becomes smooth, which can also affect regional income so that it can support the development of the Makassar Island area.



Figure 13. Fisheries and Marine Vocational High School (SMK) of Baubau City on Makasa Island

Conclusion

Based on the correlation analysis between transportation infrastructure and the community's economy, a value of $R = 0.612$ was obtained. This shows that the relationship between the two variables is strong.

The regression equation obtained using SPSS is $Y = 12.51 + 0.80X$. This shows that the economic variable of the community can increase by 12.51 without being influenced by the variable of transportation infrastructure. The regression coefficient value of 0.80 indicates that every increase of 1 unit of transportation infrastructure variable will increase the economic variable by 0.80 units.

Based on the values of df_1 and df_2 obtained the value of $F_{\text{table}} = 3.94$, because $F_{\text{calculate}} \geq F_{\text{table}}$, the hypothesis H_0 is rejected while the hypothesis H_a is accepted. The relationship between these two variables is significant because the value of $p\text{-value/sig} = 0.000... < \alpha = 0.05$ so it can be concluded that "there is a positive influence of transportation infrastructure on the economic improvement of the people on Makassar Island".

Bibliography

- Adisasmita, Sakti Adji. (2011). *Transportation and Regional Planning*. Graha Ilmu, Yogyakarta.
- Amrullah, Abdulmalik Abdulkarim. (2021). *Tafsir al-Qur'an*. Jakarta: Yayasan Nurul Islam.
- Arikunto, Suharsimi. (2021). *Dasar-dasar evaluasi pendidikan edisi 3*. Bumi Aksara.
- Baja, Ir Sumbangan. (2012). *Perencanaan tata guna lahan dalam pengembangan wilayah*. Penerbit Andi.
- Black, John. (2018). *Urban transport planning: Theory and practice*. Routledge.
- Bowersox, Donald J., Calabro, Pat J., & Wagenheim, George D. (2021). *Introduction to transportation*. (No Title).
- Irwan, Muhammad. (2021). *Kebutuhan Dan Pengelolaan Harta Dalam Maqashid Syariah. Elastisitas: Jurnal Ekonomi Pembangunan*, 3(2), 160–174.
- Jinca, M. Yamin. (2019). *Keterpaduan Sistem Jaringan Antar Moda Transportasi Di Pulau Sulawesi*. *Jurnal Transportasi*, 9(1).
- Kamaluddin, Rustian. (2023). *Ekonomi transportasi: karakteristik, teori, dan kebijakan*. Ghalia Indonesia.
- Karjoredjo, J. Sardi. (2019). *Desentralisasi pembangunan daerah di Indonesia*. Fakultas Ekonomi, Universitas Kristen Satya Wacana.
- Marlina, Endy, & Natalia, Dita A. R. (2017). *Land Transportation and Tourism Development*. *International Journal of Economic Perspectives*, 11(2).
- Martono, Nanang. (2010). *Metode penelitian kuantitatif: Analisis Isi dan Analisis Data Sekunder (sampel halaman gratis)*. RajaGrafindo Persada.
- Purwantini, Tri Bastuti, & Rivai, Rudi Sunarja. (2018). *Dampak Pembangunan Prasarana Transportasi Terhadap Kesejahteraan Masyarakat Pedesaan: (Kasus Kabupaten Bulukumba Sulawesi Selatan)*. *Jurnal, Pusat Analisis Sosial Ekonomi dan Kebijakan Pertanian, Bogor*.
- Purwoto, Hengki, Sutomo, Adi Heru, Widhyharto, Derajad Sulisty, Kurniawan, Dwi Ardianta, Soemardjito, Joewono, Lastito, Hafid, & Jati, Jagad Hidayat. (2019). *Analysis of socio-economic impacts of infrastructure projects with PPP scheme*. *Journal of Infrastructure Policy and Management*, 2(1), 1–15.
- Utami, Nur Taqwa. (2022). *The role of social media instagram community to tourism promotion in Baubau city*. *COMMICAST*, 3(1), 67–74.