



## Analysis of Factors Influencing the Level of Tourist Visits in the Klawalu Mangrove Tourism Area, Sorong City

Murni<sup>✉</sup>, La Ibal, Saoda Alting

Urban and Regional Planning Study Program, Faculty of Engineering, Muhammadiyah University of Sorong

Permalink/DOI: <https://doi.org/10.15294/efficient.v8i2.2011>

Submitted: December 2024; Revised: March 2025; Accepted: June 2025

### Abstract

The number of tourist visits to the Klawalu Mangrove Tourism Area is still low, even though this area has enormous potential for sustainable ecotourism development that can improve the welfare of local communities and preserve the environment. The research was conducted in Klawalu Village, Sorong City, Southwest Papua. The method used was a quantitative approach through multiple linear regression analysis, with data collected through questionnaires and interviews with 40 tourists who had visited the location. The results showed that ticket price and service quality were the main factors influencing tourists' decisions to revisit. Tourists considered the suitability of price to the facilities and experience provided as determining factors. Conversely, accessibility, infrastructure, and the attractiveness of the tourist attraction did not have a significant influence.

**Keywords:** Number of Tourist Visits, Ticket price, Service, Supporting facilities and infrastructure, Klawalu Mangrove Tourism Area

**How to Cite:** Analysis of Factors Influencing the Level of Tourist Visits in the Klawalu Mangrove Tourism Area, Sorong City. (2025). Efficient: Indonesian Journal of Development Economics, 8(2), 214-230. <https://doi.org/10.15294/efficient.v8i2.2011>

© 2025 Semarang State University. All rights reserved

<sup>✉</sup> Correspondence Address :

Address: Gedung L2 Lantai 2 FE Unnes  
Kampus Sekaran, Gunungpati, Semarang, 50229  
E-mail : murniums@gmail.com

## INTRODUCTION

Tourism is one of the fastest-growing sectors in Indonesia. Tourism is no longer an activity for side needs but has become an important need (Purwadinata and Ambarwati, 2023); (Murni et al., 2024). Indonesia is an archipelagic country that has natural and cultural wealth, which makes the Indonesian nation known in the international tourism sector. International tourism or the tourism sector (Aliansyah and Hermawan, 2019; Tajuddin et al., 2024).

Indonesia, which has abundant cultural and tourism diversity, is able to overcome fundamental problems by strengthening the economy from foreign exchange earnings/regional income, which is why it is a country with abundant diversity (Raharjo et al., 2020). Indonesia can develop its potential, for example, in terms of tourism, because tourists who visit Indonesia seek or enjoy the beauty of Indonesian tourism, thus providing a domino effect for both domestic and foreign countries. If our country becomes more well-known from abroad, then for domestic countries, our country can increase foreign exchange to improve the welfare of the current community (Raharjo et al., 2020).

The current era of development brings many changes to the tourism sector. The leading tourism sector is nature tourism because of its special natural beauty (Arya, Utama and Yamin, 2022). One proof of the rapid development of tourism is the increasing number of natural tourist attractions in various remote areas by utilizing natural resources such as coastal areas, waterfalls, lakes, and mountains, which have been developed into several tourist attractions visited by domestic and foreign tourists. (Wahyudi, 2021).

The rise of ecotourism that is developing in various regions that have natural wealth has given rise to mangrove ecotourism, namely forests that grow in brackish water and are influenced by the ebb and flow of seawater (Kartika, Utomo and Pulungan, 2023). These forests grow especially in places where there is silting and accumulation of organic matter.

Ecotourism is a tourism concept that reflects environmental insight and follows the principles of balance and sustainable development (Lalika et al., 2020). In general, ecotourism development must be able to improve the quality of relationships between people, improve the quality of life of the community, and maintain environmental quality (Purwaningrum, 2020).

Nature-based tourism and ecotourism are gaining increasing attention and contributing to environmental conservation and socio-economic development in tourist areas (Dwijendra, 2018). One form of sustainable tourism that attracts attention is mangrove forest ecotourism. Mangrove forests, as a special ecosystem that grows on the border of land and sea, have high biodiversity and function as an important ecological buffer for the coastal environment.

Sorong City is an area located in the administrative area of Southwest Papua Province. Sorong City has the potential and natural resources that can be developed to support the regional autonomy program in the tourism sector, so it has the potential to be developed as a tourist area. One of the mainstay tourist attractions of Sorong City is the Klawulu Mangrove Tourism Park in Klawulu Village, East Sorong District, which is a potential tourism sector to be developed and marketed.

Klawulu Mangrove Forest has more tourism potential, but in its development the

local government must pay more attention to many things, especially the Tourism Office Government, which manages and has the authority to manage and develop it. The development of tourist parks such as the Klawalu Mangrove Forest really needs more attention from the government by getting closer to the local community and involving them in managing mangrove forest tourism.

The government needs to think about how this mangrove forest can attract local and foreign tourists while maintaining the sustainability of the mangrove forest by implementing various trainings and guidance in developing the creativity of residents in managing mangrove forest tourist locations and maintaining their sustainability, such as providing direction on limiting the felling of mangrove forests (Murni dan Widayati, 2022).

Based on research from (Sinamo et al., 2024) that tourist satisfaction in mangrove ecotourism consists of service quality, facilities, and price. Further research conducted by (Ginting et al., 2025) that factors that influence the demand for mangrove tourism consist of monthly income, travel costs per person, and travel time. Furthermore, research from (Roslinda & Mondina, 2024) that visitors to the mangrove tourism area feel attracted to tourist objects in the form of natural scenery, flora, fauna, beaches, rivers, and roads.

Therefore, it can be concluded that tourist satisfaction and demand for mangrove ecotourism are influenced by a combination of internal and external factors, namely service quality, facilities, and price (internal management factors), as well as income, travel costs, and travel time (economic factors for tourists), plus the attractiveness of tourist objects.

Klawalu Mangrove Ecotourism is one of the mangrove areas located in Sorong City, Southwest Papua (Murni et al., 2023). This area has great potential to be developed as a tourist area. What potential and tourist attractions can be developed in this area, and how much is the value of the beauty of the potential and attraction given by visitors to the tourist attractions around this mangrove forest area?

But currently the number of tourist visitors in the Klawalu Mangrove Tourism Area is very low; even in one day there are no visitors. So it is necessary to conduct research on the analysis of factors that influence the level of tourist visits to the Klawalu Mangrove Tourism Area, Sorong City.

Based on research from (Ayun et al., 2024) states that accessibility has a positive and significant effect on the number of tourist visits, while research from (Miranda et al., 2024) that accessibility does not affect tourist visiting decisions.

Furthermore, research from (Soraya et al., 2025) that ticket prices have a significant effect on tourist visiting decisions. Research from (Firdausi et al., 2025) that service quality has a significant effect on visitor satisfaction. Furthermore, research from (Sari, 2023) that infrastructure facilities have a significant effect on visitor satisfaction. Research from (Umabaihi et al., 2025) that the attractiveness of tourist attractions has a significant effect on tourist visits.

From several previous studies, it has not analyzed the factors that influence the level of tourist visits to the Klawalu Mangrove Tourism Area, Sorong City, specifically. Both in terms of accessibility factors, ticket prices, services, supporting facilities and infrastructure, objects, and natural tourist attractions. So the novelty of

this study is that an analysis of the factors that influence the level of tourist visits to the mangrove tourism area will be carried out.

This study has never been conducted in Sorong City and published, so it is important for this study to be conducted to determine the factors that influence the level of tourist visits to the mangrove tourism area. Several studies of tourist visit factors discuss tourist visit factors using regression analysis with a logit model, descriptive quantitative methods, and conducting analysis with the Kaiser-Mayer-Olkin test.

Meanwhile, this study conducted a multiple linear regression statistical analysis and calculated the classical assumption test, namely the data normality test, autocorrelation test, multicollinearity test, heteroscedasticity test, determination coefficient value, and hypothesis testing with t test and F test to determine the level of tourist visits reviewed from accessibility factors, ticket prices, services, supporting facilities and infrastructure, objects, and natural tourist attractions.

The purpose of this study is to analyze the factors influencing the level of tourist visits to the Klalawu Mangrove Tourism Area in Sorong City, including aspects of accessibility, ticket prices, service quality, supporting facilities and infrastructure, and natural tourist objects and attractions.

The urgency of this research lies in the low number of tourist visits to the Klalawu Mangrove Tourism Area, despite this area's great potential as a mainstay ecotourism object in Sorong City. This condition indicates the existence of obstacles that need to be identified, such as accessibility, ticket prices, service quality, facilities and infrastructure, and tourist attractions.

By understanding the factors influencing the level of visits, this study provides a scientific basis for local governments and tourism managers in developing effective tourism development strategies, increasing destination attractiveness, and supporting sustainable mangrove forest management.

## RESEARCH METHODS

The location of this research was conducted in Klalawu Village, Sorong City, Southwest Papua Province. The research period was conducted for 10 months, starting from October 2024 to August 2025, from the preparation of the proposal to the final report.

The population in this study cannot be precisely determined due to the lack of complete data on the number of tourist visits to the Klalawu Mangrove Tourism Site. Therefore, the sample was determined using non-probability sampling techniques, specifically purposive sampling.

Purposive sampling was chosen because the researcher intentionally selected respondents who met certain criteria: tourists who had visited the tourist site studied at least once in the past three months. Respondent selection was based on the consideration that respondents had direct experience and relevant knowledge to answer the research questions.

To obtain respondents, the researcher distributed questionnaires directly at tourist sites and through social media within the tourism community, including screening questions to ensure that respondents had indeed visited. The number of respondents in this study was 40 respondents.

This study uses primary and secondary data. Primary data were collected through questionnaires and direct interviews with

tourists and communities around the ecotourism location. Secondary data were obtained by collecting data from government agencies in Klawalu Village and the Sorong City Tourism Office.

The data collection methods used were field observation, interviews, questionnaires, and documentation. The questionnaire in this study was written in a closed questionnaire type, where alternative answers were provided by the researcher using a questionnaire in the form of a questionnaire with a Likert scale that refers to five alternative answers, namely: Very Good (5), Good (4), Fairly Good (3), Not Good (2), and Very Not Good (1).

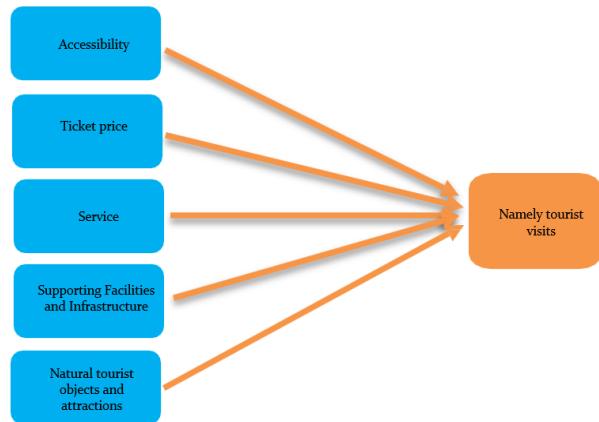
The data analysis method used in this study is descriptive analysis. To determine the factors that influence tourist visits to the Klawalu Mangrove Tourism Area, Sorong City. The variables to be analyzed are grouped into 2 parts, namely independent variables and dependent variables, as follows.

Dependent variable, namely tourist visits in the Klawalu Mangrove Tourism Area. Independent variables, namely: Accessibility, Ticket price, Service, Supporting Facilities and Infrastructure, and Natural tourist objects and attractions.

Each variable has subvariables. The subvariables in each variable are as follows: (1) Accessibility consists of subvariables on road conditions and public transportation; (2) Ticket price consists of subvariables on entrance fees and parking fees; (3) Service consists of subvariables on information, security and safety, and tour guides; (4) Supporting Facilities and Infrastructure consists of subvariables on parking facilities, toilets, and food stalls; and (5) Tourist Objects & Attractions consists of subvariables on tracking, nature photography,

natural beauty and scenery, local culture, and nature conservation.

The analysis model used in this study is multiple linear regression analysis, which is continued by calculating the classical assumption test, namely the data normality test, autocorrelation test, multicollinearity test, heteroscedasticity test, determination coefficient value, and hypothesis testing with t test and F test.



**Figure 1.** Relationship between Dependent variable and Independent variables

Source: Data Processed, 2025

This model was chosen because the author wanted to know how much influence the accessibility factor, ticket price, service, infrastructure, and (TOA) of natural tourist objects and attractions have on the level of tourist visits in the Klawalu Mangrove Tourism Area, Sorong City. The general equation for multiple linear regression is as follows:

$$NTF = a + b_1 Ac + b_2 TP + b_3 S + b_4 SFI + b_5 TOA + e$$

Where NTF represents number of tourist visits; Ac is accessibility; TP is ticket price; S is service; SFI is supporting facilities and

infrastructure; TOA is tourist objects & attractions; a is intercept;  $b_1 - b_5$  is regression coefficient and e is standard error. For data analysis purposes, from the total score values obtained based on the type of independent variable, the value is made into an average value based on the number of respondents taken per day, then the average scoring value data is processed via computer using the SPSS program version 27.0.

## RESULTS AND DISCUSSION

Data regarding the general condition of the Klawalu Mangrove tourist area in Sorong City is secondary data sourced from monographic data from Klawalu Village obtained from the local government.

Klawalu Village is located in East Sorong District and is the center of Sorong City. The typology of the Klawalu area is a coastal area. This village is also a center for trade and services, and its area is in the middle of Sorong City.

Administratively, The North side of East Sorong District borders directly with North Sorong District, The South side of East Sorong District borders directly with Aimas District-Sorong Regency, The East side of East Sorong District borders directly with Makbon District-Sorong Regency, The West side of East Sorong District borders directly with Sorong Manoi District.

As with other coastal areas in Sorong City, West Papua Province, the existence of people in Klawalu Village has diverse backgrounds. The population of Klawalu Village is 6,424 people and consists of 1,232 heads of families, with the majority of the population's livelihoods being fishermen, swordsmen, self-employed, private, and civil servants. Klawalu Village, East Sorong

District, with an area of 19.16 km<sup>2</sup> or 1,916 hectares.

Klawalu Mangrove Forest Area is one of the areas that has very interesting mangrove resources in Sorong City. In connection with the development of the city and the community's need for tourist attractions, at the end of 2018, this area was pioneered as an ecotourism area managed by the Sorong City regional government.



**Figure 2.** Klawalu Mangrove Tourism

Source: Field Documentation, 2025

Respondents used in this study were visitors to the Klawalu Mangrove Conservation Area, Soron City, Southwest Papua Province. The results of distributing questionnaires to 40 respondents obtained the characteristics of respondents based on age, gender, occupation, and number of visits.

Based on the data above, the respondents of tourist visitors based on age in this study are respondents aged 10-19 years, as many as 6 respondents with a percentage of 15%; aged 20-29 years, as many as 16 respondents with a percentage of 40%; aged 30-39 years, as many as 14 respondents with a percentage of 35%; and aged 40-49 years, as many as 4 respondents with a percentage of 10%.

In this case, it can be stated that the respondents who most often visit the Klawalu Mangrove Conservation Area, Sorong City, are those aged 20-29 years, as many as 16 respondents, with a percentage of 40%. In this study it can be stated that respondents who visited the Klawalu Mangrove Tourism area in Sorong City were aged 20-29 years, because at that age they tend to visit tourist attractions either in groups or individually.

At this age stage they are also more active in taking moments such as photos, sports, education, and so on. Based on research data obtained from distributing questionnaires, data was obtained according to gender based on 40 respondents.

**Table 1.** Statistics of basic characteristic of the Basic Information

| Basic Information    |                         | Amo<br>unt | Propo<br>rtion |
|----------------------|-------------------------|------------|----------------|
| Age                  | 10-19 years old         | 6          | 15%            |
|                      | 20-29 years old         | 16         | 40%            |
|                      | 30-39 years old         | 14         | 35%            |
|                      | 40-49 years old         | 4          | 10%            |
| Gender               | Male                    | 23         | 57,5%          |
|                      | Female                  | 17         | 42,5%          |
| Employment<br>Status | Government<br>employees | 4          | 10%            |
|                      | Private                 | 16         | 40%            |
|                      | Student                 | 13         | 32,5%          |
|                      | Fisherman               | 3          | 7,5%           |
|                      | Housewife               | 4          | 10%            |

Source: Data Processed, 2025

Based on Table 1, it can be seen that most of the respondents in the study were male, as many as 23 respondents with a percentage of 57.5%, and female, as many as 17 respondents with a percentage of 42.5%. In this case, it can be

stated that respondents who often visit the Klawalu Mangrove Tourism Area, Sorong City, are male because most men tend to group together to do activities such as jogging, as a gathering place, taking documentation, and so on. Based on research data obtained from distributing questionnaires, data was obtained according to employment status based on 40 respondents.

Based on the data above, respondents in this study have a job status as civil servants, as many as 4 respondents with a percentage of 10%; private as many as 16 respondents with a percentage of 40%; students as many as 13 respondents with a percentage of 32.5%; fishermen as many as 3 respondents with a percentage of 7.5%; and for those with the status of IRT (housewife), as many as 4 respondents with a percentage of 10%. In this case, it can be stated that visitors who often visit the Klawalu Mangrove Tourism Area are those who work in the private sector, with a total of 16 respondents and a percentage of 40%.

Because most of those who visit Wista Mangrove Klawalu have a private job status, and during holidays or not working, this is the moment taken by private employees for recreation to Klawalu Mangrove Tourism either individually or in groups, as well as eliminating boredom at work. The classical assumption test in this study uses the multicollinearity test and heteroscedasticity test. The normality test aims to check whether the confounding variables or residuals in the regression model have a normal distribution. As is known, the normality test requires the residual value to follow a normal distribution.

The methods used to determine the normality of the regression model are the normal probability plot and the Kolmogorov-

Smirnov test. The data distribution is declared normal if the p-value of the normal probability plot and Kolmogorov-Smirnov is  $> 0.05$ , and vice versa. The results of the normality test can be seen in Table 2.

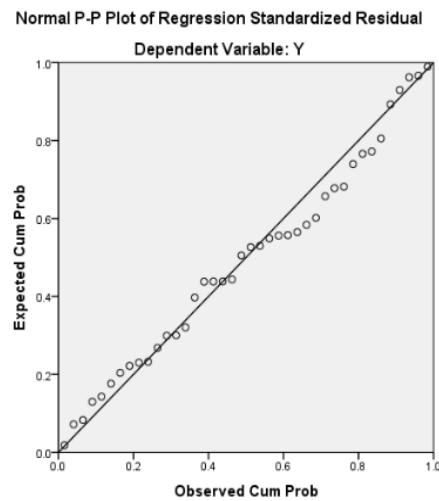
**Table 2.** Kolmogorov-Smirnov Test

| Unstandardized Residual          |           |            |
|----------------------------------|-----------|------------|
| N                                |           | 40         |
| Normal Parameters <sup>a,b</sup> | Mean      | .0000000   |
|                                  | Std.      | 1.18341372 |
|                                  | Deviation |            |
| Most Extreme Differences         | Absolute  | .091       |
|                                  | Positive  | .091       |
|                                  | Negative  | -.058      |
| Kolmogorov-Smirnov Z             |           | .579       |
| Asymp.                           |           | .891       |
| Sig. (2-tailed)                  |           |            |

Source: Data Processed, 2025

Based on the normality test with Kolmogorov-Smirnov, the Asymp.Sig. value is 0.891, which is greater than 0.05, so it can be concluded that the data is normally distributed. In addition, a normal probability plot is used to compare the cumulative distribution of the actual data with the cumulative distribution of the normal distribution data.

If the distribution is normal, the line that describes the actual data will follow its diagonal line. The results of the normality test can be seen in Figure 3. Variables Based on the normal plot graph displayed, it can be concluded that the points appear to be spread around the diagonal line with a distribution pattern that follows the direction of the line. This indicates that the regression model meets the normality assumption so that it is suitable for use.



**Figure 3.** Normal P-Plot of Research

Source: Data Processed, 2025

The multicollinearity test aims to evaluate whether there is a correlation between independent variables in the regression model. Multicollinearity can be detected by analyzing the tolerance and variance inflation factor (VIF) values. The presence of multicollinearity is indicated by a tolerance value of less than 0.10 and a VIF value of more than 10.

Based on the results of the multicollinearity test, the results of the tolerance value calculation also show that there are no independent variables that have a tolerance value  $< 0.10$ , which means there is no correlation between the independent variables.

Likewise with the results of the VIF (Variance Inflation Factor) calculation, of the five independent variables tested, there is no VIF (Variance Inflation Factor) value that is  $> 10$ , so it can be concluded that there is no multicollinearity between the independent variables in the regression model.

The heteroscedasticity test aims to identify whether there is a difference in residual variance between one observation and another in the regression model. If the variance between

observations is constant, this condition is called homoscedasticity.

Conversely, if the variance is different, it is called heteroscedasticity. A good regression model should meet the requirements of

homoscedasticity or not experience heteroscedasticity. The presence of heteroscedasticity in the regression model has an impact on the inefficiency of the estimator, both for small and large samples.

**Table 3.** Multicollinearity Test

| Coefficient Model             | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | Collinearity Statistics |       |
|-------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
|                               | B                           | Std. Error |                           |        |      | Tolerance               | VIF   |
| 1 (Constant)                  | 29.990                      | 5.356      |                           | 5.600  | .000 |                         |       |
| Accessibility                 | -.380                       | .095       | -.476                     | -3.987 | .000 | .735                    | 1.360 |
| Ticket price                  | .579                        | .144       | .519                      | 4.034  | .000 | .633                    | 1.581 |
| Service                       | .286                        | .073       | .406                      | 3.916  | .000 | .975                    | 1.025 |
| Facilities and infrastructure | -.337                       | .081       | -.512                     | -4.144 | .000 | .684                    | 1.461 |
| Tourist Objects & Attractions | -.337                       | .077       | -.459                     | -4.363 | .000 | .947                    | 1.056 |

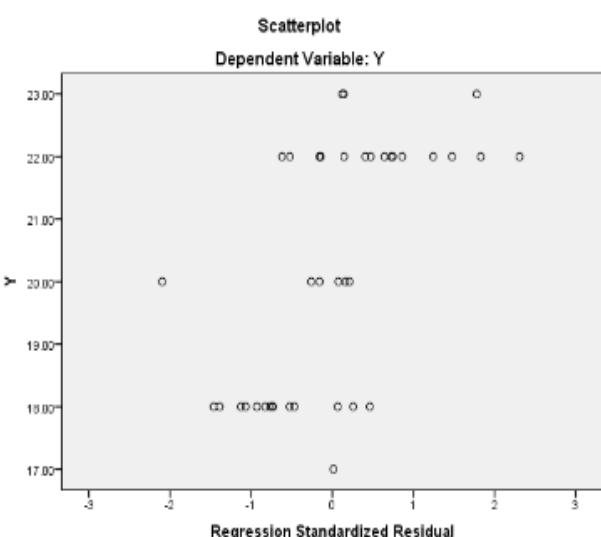
Source: Data Processed, 2025

The heteroscedasticity test aims to identify whether there is a difference in residual variance between one observation and another in the regression model. If the variance between observations is constant, this condition is called homoscedasticity.

Conversely, if the variance is different, it is called heteroscedasticity. A good regression model should meet the requirements of homoscedasticity or not experience heteroscedasticity. The presence of heteroscedasticity in the regression model has an impact on the inefficiency of the estimator, both for small and large samples.

One method to detect heteroscedasticity is to analyze the plot graph between the predicted values of the dependent variable (ZPRED) and the residual (SRESID). The basis for analysis by looking at the plot graph is if there is a certain pattern, such as the existing dots forming a

certain regular pattern, then it indicates that heteroscedasticity has occurred and if there is no clear pattern, such as dots spread above and below zero on the Y-axis, then heteroscedasticity does not occur.



**Figure 4.** Heteroskedasticity Test

Source: Data Processed, 2025

In this study, to determine whether or not heteroscedasticity exists, it can be seen in the scatterplot distribution in Figure 4. Based on the results of the classical assumption test in Figure 4. The scatterplot graph presented above shows

that the points are spread randomly and are spread above and below the number 0 on the y-axis and do not have a clear pattern or do not form a pattern.

**Table 4.** Multiple Linear Regression Analysis

| Nu | Variable                        | Coefficient | T-count | T-table | Information                             |
|----|---------------------------------|-------------|---------|---------|---|
|    | Constant                        | 5.600       |         |         |   |
| 1  | Accessibility                   | -0.476      | -3.987  | < 2.704 | $H_0$ is accepted and $H_1$ is rejected |
| 2  | Ticket price                    | 0.519       | 4.034   | > 2.704 | $H_0$ is accepted and $H_1$ is rejected |
| 3  | Service                         | 0.406       | 3.916   | > 2.704 | $H_0$ is accepted and $H_1$ is rejected |
| 4  | Facilities and infrastructure   | -0.512      | -4.144  | < 2.704 | $H_0$ is accepted and $H_1$ is rejected |
| 5  | Tourist Objects and Attractions | -0.459      | -4.363  | < 2.704 | $H_0$ is accepted and $H_1$ is rejected |

Source: Data Processed, 2025

Therefore, it can be concluded that there is no heteroscedasticity in the regression model, so the regression model is suitable for use as a prediction tool. The results of the analysis of the influence of accessibility variables, ticket prices, services, infrastructure, and tourist objects and attractions on the number of tourist visits can be seen in Table 4. From Table 4, the regression equation formed can be seen. The linear regression equation formed is:

$$NTF = -0.476 Ac + 0.519 TP + 0.406 S - 0.512 SFI + 0.459 TOA + 5.600$$

The constant number (a) 5,600 states that if there are no accessibility variables, ticket prices, services, infrastructure, and tourist objects and attractions, then the number of tourist visits is at 5,600. The accessibility

regression coefficient of -0.476 means that every additional point of the accessibility variable has no effect on tourist visits of -0.476 people or 1 person. The ticket price regression coefficient of 0.519 means that every additional one point of the ticket price variable will increase tourist visits by 0.519 people or 1 person.

The service regression coefficient of 0.406 means that every additional one point of the service variable will increase tourist visits by 0.406 people or 1 person. The infrastructure regression coefficient of -0.512 means that every additional one point of the infrastructure variable has no effect on tourist visits of -0.512 people or 1 person. The regression coefficient of tourist objects and attractions is -0.459, meaning that every additional point of the object and tourist attraction variable has no effect on tourist visits of -0.459 people or 1 person.

According to Imam Ghazali (2011), the t-test is used to determine whether the independent variable has a partial or individual effect on the dependent variable. This test is carried out based on a comparison of the calculated t value of each regression coefficient with the t-table value (critical value) according to the level of significance used: The results of the t-test using the SPSS program can be seen in Table 5.

Based on the analysis of table 5, the results of the hypothesis testing of each variable is that accessibility does not affect the number of tourist visits. The nominal value between the accessibility variable and the number of tourist visits shows the t-count value =  $-3.987$ , lower than the required value, namely, t-table =  $2.704$ , so it is concluded that  $H_0$  is accepted and  $H_1$  is rejected.

**Table 5.** t-test

| Nu | Variable                        | T-count  | T-table   |
|----|---------------------------------|----------|-----------|
|    | Constant                        |          |           |
| 1  | Accessibility                   | $-3.987$ | < $2.704$ |
| 2  | Ticket price                    | $4.034$  | > $2.704$ |
| 3  | Service                         | $3.916$  | > $2.704$ |
| 4  | Facilities and infrastructure   | $-4.144$ | < $2.704$ |
| 5  | Tourist Objects and Attractions | $-4.363$ | < $2.704$ |

Source: Data Processed, 2025

This means that the accessibility variable does not affect the number of tourist visits in the Klawalu Mangrove Area, Sorong City. If accessibility is increased, there is no effect on the number of tourist visits, and vice versa, if accessibility is decreased, there is no effect on tourist visits. Based on the results of the questionnaire in the study, the average respondent filled in quite well and not well.

Ticket prices affect the number of tourist visits. The nominal value between the ticket price variable and the number of tourist visits shows the t-count value =  $4.034$ , which is higher than the required t-table =  $2.704$ , so it is concluded that  $H_0$  is rejected and  $H_1$  is accepted. This means that the ticket price variable affects the number of tourist visits to the Klawalu Mangrove Tourism Area, Sorong City. If the ticket price is lowered, the number of tourist visits will increase, and vice versa; if it is increased, the number of tourist visits will also decrease.

Based on the results of the questionnaire in the study, the average respondent filled in quite satisfied because of the high ticket price. However, the scenery that can be seen in the tourist area is less attractive; moreover, many of the facilities and infrastructure are damaged. And the ticket price to enter the mangrove tourist area is quite expensive, ranging from IDR 10,000.00 for local tourists to IDR 20,000.00 for foreign tourists.

If the ticket price is increased with facilities or infrastructure being repaired and added, it will increase income, so visitors will be satisfied if the ticket price paid is in accordance with the facilities provided. In addition, to facilitate the process of selling tickets online, one can use certain applications. This can be used as a promotion to attract visitors both in electronic media and print media.

Service influences the number of tourist visits. The nominal value between the service variable and the number of tourist visits shows the results of the t-count value =  $3.916$ , which is higher than the required t-table =  $2.704$ , so it is concluded that  $H_0$  is rejected and  $H_1$  is accepted. This means that the service variable affects the number of tourist visits in the

Klawalu Mangrove Tourism Area, Sorong City. If the service is improved, the number of tourist visits will increase, and vice versa; if the service is reduced, the number of tourist visits will also decrease.

Based on the results of the questionnaire in the study, the average respondent filled in quite satisfied because of the lack of information, security and safety supervision, and tour guides. If the service is improved in terms of information, safety, and security, as well as tour guides, it will have a positive effect on visitors.

If every visitor who comes to the Klawalu Mangrove Tourism Area is not guided or directed or even not given education by officers, then visitors will only enjoy it without being given knowledge of the history of the Klawalu Mangrove Tourism Area, ecology, and the tourist environment. In addition, supervision is important in monitoring all activities of visitors to avoid accidents, theft, and so on.

Facilities and infrastructure do not affect the number of tourist visits. The nominal value between the variable of facilities and infrastructure and the number of tourist visits shows the result of the t-count value = -4.144, lower than the required t-table = 2.704, so it is concluded that  $H_0$  is accepted and  $H_1$  is rejected.

This means that the variable of facilities and infrastructure does not affect the number of tourist visits in the Klawalu Mangrove Area, Sorong City. If the facilities and infrastructure are increased, there is no effect on the number of tourist visits, and vice versa, if the facilities and infrastructure are reduced, there is no effect on tourist visits. Based on the results of the questionnaire in the study, the average respondent filled in quite well and not well.

because some of the available facilities have been damaged.

If the facilities and infrastructure are renovated or repaired, visitors will not worry about their safety, such as tracking for visitors around the Klawalu Mangrove Tourism Area, which is starting to become fragile or have holes, as well as the provision of seats or gazebos as resting places and gathering places for visitors, which are starting to be said to be unfit, including toilets around the tourist area. If the facilities and infrastructure are repaired, it will allow the number of visitors.

Tourist objects and attractions do not affect the number of tourist visits. The nominal value between the variables of objects and tourist attractions on the number of tourist visits shows the results of the t-count value = -4.363, lower than the required t-table = 2.704, so it is concluded that  $H_0$  is accepted and  $H_1$  is rejected. This means that the variables of objects and tourist attractions do not affect the number of tourist visits in the Klawalu Mangrove Area, Sorong City.

If the objects and tourist attractions are increased, there is no effect on the number of tourist visits, and vice versa, if the facilities and infrastructure of objects and tourist attractions are reduced, there is no effect on the number of tourist visits. Based on the results of the questionnaire in the study, the average respondent filled it out quite well and was less satisfied because of the lack of tourist attractions displayed to visitors; animal cages have begun to die.

If the objects and attractions of tourism are added, especially tourist attractions to attract visitors, then tourists can enjoy the biodiversity in the Klawalu Mangrove Area. Lack of tourist attractions or events, performances,

competitions, and damaged animal cages; lack of photo spot design to capture the moment; and the decreasing number of animals/wildlife. This can reduce visitor interest due to the lack of tourist attractions in the Klawalu Mangrove Tourism Area.

Based on the calculation results presented in the table above, it can be seen that the F-count value is greater than the F-table value ( $12.311 > 2.64$ ). It is concluded that  $H_0$  is rejected and  $H_1$  is accepted, which means that the regression model used proves that simultaneously the variable number of tourist visits, consisting of accessibility, ticket prices, services, facilities, infrastructure, and tourist objects and attractions, has a positive effect on the number of tourist visits.

Therefore, in this study, the average respondent filled in the answers affordable and

quite affordable on the questionnaire variables of accessibility and ticket prices. For the service variable, some visitors who chose the answers are not good and quite good; this is very important in improving guiding visitors who enter, providing information and knowledge, and the existence of security to maintain the safety of tourists.

In the variable of facilities and infrastructure, many visitors chose the answers that are not good and quite good (because the condition of all facilities that already need renovation besides that it can also endanger visitors because some facilities are starting to be damaged, such as toilets, gazebos, tracks, and others), and in the variable of objects and tourist attractions, many chose the answer quite good because there are still minimal activities or attractions interesting to be observed by visitors.

**Table 6. F-Test**

| <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b>        |
|--------------|-----------------------|-----------|--------------------|----------|--------------------|
| 1 Regression | 98.882                | 5         | 19.776             | 12.311   | 0.000 <sup>b</sup> |
| Residual     | 54.618                | 34        | 1.606              |          |                    |
| Total        | 153.500               | 39        |                    |          |                    |

Source: Data Processed, 2025

The  $R^2$  value (Coefficient of Determination) shows the magnitude of the contribution of the influence of the independent variables on the dependent variables in a model. The calculation results presented in the table above show the  $R^2$  value = 0.644. This means that 64.4% of the number of tourist visits is influenced by accessibility, ticket prices, services, infrastructure, and tourist objects and attractions, while the remaining 35.6% is influenced by other variables outside the model, such as promotion, levies, travel costs, security, community/environment, and others.

The results of this study significantly emphasize the urgency discussed in the introduction, namely the low level of tourist visits to the Klawalu Mangrove Tourism Area in Sorong City, which should be a leading ecotourism-based destination. Through a multiple linear regression approach, it was found that not all factors theoretically assumed to influence the number of visits actually provided a significant positive contribution.

This is reflected in the results of the t-test, where the ticket price and service variables were proven to have a significant influence on the

number of tourist visits, with t-values of 4.034 and 3.916, respectively, both of which were greater than the t-table of 2.704. This means that

tourists are more sensitive to entrance fees and service quality.

**Table 7.** Results of the Determination Coefficient test

| Model | R                  | R-Square | Adjusted R-Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1     | 0.803 <sup>a</sup> | 0.644    | 0.592             | 1.26745                    |

Source: Data Processed, 2025

This is in line with research by (Soraya et al., 2025) that ticket prices have a significant influence on tourist visiting decisions, followed by research by (Firdausi et al., 2025) that service quality has a significant influence on visitor satisfaction. Meanwhile, physical factors such as infrastructure or the attraction of the object itself were found to be insignificant. These results suggest that while infrastructure and attractions are crucial elements of ecotourism, without excellent service and prices commensurate with expectations, visitors are reluctant to return.

This contrasts with research by Sari (2023) that found infrastructure significantly impacts visitor satisfaction and research by Umabaihi et al. (2025) that found the attractiveness of tourist attractions significantly impacts tourist visits.

Furthermore, statistical test results also indicate that accessibility variables do not significantly influence the number of visits. This is in line with research by Miranda et al. (2024) that found accessibility does not influence tourists' visiting decisions. This finding contrasts with the general assumption that ease of access and the physical quality of a destination are key factors in attracting tourists.

However, even adequate access does not necessarily lead to increased visits, especially if it is not accompanied by friendly service and meaningful tourism experiences. In fact, the

negative regression coefficients for accessibility (-0.476), infrastructure (-0.512), and tourist objects and attractions (-0.459) indicate that physical improvements alone are insufficient and may even lead to unmet expectations, thus lowering tourist perceptions.

This is consistent with interview and questionnaire results, in which visitors expressed dissatisfaction with the physical condition of the area, such as damaged mangrove tracking, a lack of attractive spots, and limited sanitation facilities.

On the other hand, ticket price has the strongest positive impact ( $\beta = 0.519$ ) on visits, indicating that customers prioritize the benefits received over the costs incurred. Interest in visiting a tourist site will decrease if the price is above customer expectations. Conversely, during peak periods, if the price matches the level of service offered to customers, it will effectively increase visits and revenue simultaneously.

Service, as the second strongest variable ( $\beta = 0.406$ ), highlights the important role of human capital in tourism, such as guides, security guards, and information staff. Highly personalized and interactive experiences, such as mangrove forest ecological interpretation activities and other educational activities, have a far greater impact on visitor decisions than beautiful scenery or magnificent physical structures.

Simultaneously, the five independent variables studied were able to explain 64.4% of the variation in the number of tourist visits ( $R^2 = 0.644$ ), while the remaining 35.6% was influenced by external factors not yet included in the model, such as promotion, security, cleanliness, local community involvement, and tourism product innovation. The calculated F-value of 12.311, which far exceeds the F-table of 2.64, indicates that this model is collectively significant.

This finding is highly relevant to being the basis for policy-making by the Sorong City Tourism Office, which until now has focused too much on physical development rather than human empowerment and improving service quality. Therefore, the direction of future tourism area development policies should prioritize integrated marketing strategies, improving tourism human resources, adjusting ticket prices based on experience value, and creating regular events that can increase the attractiveness of the tourist area in a sustainable manner.

The results of this study are important because they provide empirical evidence that ecotourism area management cannot simply focus on physical aspects such as facility construction or the provision of tourist attractions. In the context of Klawalu Mangrove Tourism, the presence of non-physical variables such as service and ticket prices are actually the main determinants in influencing tourist visit decisions.

This broadens the understanding that sustainable tourism must be managed holistically, where visitor satisfaction and comfort are the main indicators of a tourist destination's success, not just natural beauty or available facilities. Academically, these findings

also enrich the literature on ecotourism destination management in eastern Indonesia, especially those that have not been widely touched by previous studies, thus strengthening this research's position as an original contribution to the development of tourism science and regional planning.

## CONCLUSION

Based on the research results, it can be concluded that of the five variables analyzed, only ticket prices and services have a positive and significant effect on the number of tourist visits to the Klawalu Mangrove Area in Sorong City, while accessibility, infrastructure, and tourist attractions show a negative influence. Overall, these variables explain 64.4% of the variation in tourist visits, while the remainder is influenced by other factors such as promotion, security, travel costs, and community support.

Based on these findings, it is recommended that the regional government and the tourism office focus on improving service quality, experience-based digital promotion strategies, and reviewing ticket pricing policies. Destination managers need to improve human resource competencies, provide tourist-friendly services, and develop mangrove educational tourism packages. While local communities are encouraged to maintain cleanliness, support services based on local wisdom, and develop creative businesses such as culinary and souvenir businesses.

## REFERENCES

Aliansyah, H. and Hermawan, W. (2019) 'The Role of the Tourism Sector in Economic Growth of Districts/Cities in West Java', *Bina Ekonomi*, 23(1), pp. 39–55. Available at: <http://ejournal.ub.ac.id/index.php/binaekonomi/article/view/1000>

Andri Wahyudi (2021) 'Developing natural tourism into an environmentally conscious local tourism area', *Journal of Sustainable Tourism*, 29(1), pp. 1–12. Available at: <http://ejournal.ub.ac.id/index.php/jst/article/view/1000>

Jurnal PUBLICIANA, 13(2), pp. 106–116. Available at: <https://doi.org/10.36563/p.v13i2.174>.

Arya, I.P., Utama, A. and Yamin, M. (2022) 'Review of International Relations 2022 Bali Berbasis Environmental Security', 4, pp. 67–86.

Ayun, F. K., Prasetyo, D., & Nusanto, T. S. (2024). The Effect of Tourist Accessibility on the Number of Tourist Visits to the Borobudur Temple Tourist Destination. *Journal of Tourism Destinations*, 12(2), 212. <https://doi.org/10.24843/jdepar.2024.v12.i02.p03>

Dwijendra, N.K.A. (2018) 'Ecotourism: Sustainable Tourism Development Options in the Central Bali Region', *Senada*, 1(1), pp. 393–402. Available at: Mangrove Tourism Area, Sorong City <https://eprosiding.std-bali.ac.id/index.php/senada/article/vie w/81>.

Firdausi, H. S., Alvianna, S., Puspawigati, A., & Ulya, A. F. (2025). The Effect of Service Quality on Visitor Satisfaction at The Legend Star Park, East Java Park 3, Batu. *Journal of Tourism, Tourista*, 4(2), 75–79.

Ginting, N. M. B., Sinaga, R. B., Hasibuan, S., Manik, M., Lubis, A. R., Budiman, I., Sinaga, A., & Lase, A. (2025). Factors Influencing Demand for Mangrove Tourism in Serdang Bedagai Regency. *Agricola*, 15(2), 241–249. <https://doi.org/10.35724/ag.v15i2.7083>

Kartika, D., Utomo, S. and Pulungan, A.R. (2023) 'Mangrove Ecotourism in Sustainable Tourism in North Sumatra', *Tourism Society: Journal of Community Services in Tourism*, 4(2016), pp. 46–60. Available at: <https://doi.org/10.34013/mp.v4i2.1393>.

Lalika, H.B., Herwanti, S., Febryano, I. G., dan Winarno, G. D., (2020) 'Visitors' Perception Towards Ecotourism Development in Liwa Botanical Garden', *Jurnal belantara*, 3(1), pp. 25–31.

Miranda, Awaliyah, F., Adinasa, M. N., & Febrianti, T. (2024). The Influence of Tourist Attractions, Accessibility, Facilities, and Electronic Word of Mouth on Tourists' Visiting Decisions at Eptilu Agrotourism. *Jsep: Journal of Agricultural Socioeconomics*, 20(2), 173–186. <https://journal.unhas.ac.id/index.php/jsep>

Murni dan Widayati, W. (2022) 'Analysis of Mangrove Ecotourism Development in Kendari City', *Jurnal Georafflesia*, 7(2), pp. 156–164.

Murni, Kadir, M. A. A., Abu, N., Ibal, L., (2023) 'Community Participation in Mangrove Planting to Improve Ecotourism in Klawalu Village, Sorong City', AJAD : Jurnal Pengabdian kepada Masyarakat, 3(3), pp. 365–372. Available at: <https://doi.org/10.59431/ajad.v3i3.222>.

Murni, M., Masniar, M., Wahidah, N., Rahmatullah, A., (2024) 'Community Empowerment Strategy in Reducing Extreme Poverty Through Sustainable Tourism (Case Study of Tanjung Kasuari, Sorong City)', *El-Jughrafiyah*, 4(1), p. 98. Available at: <https://doi.org/10.24014/jej.v4i1.32022>.

Purwadinata, S. and Ambarwati, A. (2023) 'Analysis of the Potential and Attraction of Saliper Ate Beach Tourism Object, Sumbawa Regency', *Journal of Economics & Business*, 11(1), pp. 61–71. Available at:

Purwaningrum, H. (2020) 'Development of Mangrove Forest Ecotourism in Baros Beach, Titihargo Village, Kretek District, Bantul Regency', *Journal of Tourism and Economic*, 3(1), pp. 31–40. Available at: <https://doi.org/10.36594/jtec.v3i1.52>.

Raharjo, A., Hadi, A. F., Fitri, D. A., Sofiyah, K., Marzukoh, T., Santoso, A., Alfani, L. A. Z., Zamroni, Z., Anhar, A., Murni, S. W., Firmansyah, D., (2020) 'Development of Natural Tourism Objects and Attractions of Coban Srengenge as a Tourist Destination', *Journal of Community Empowerment Learning (JP2M)*, 1(2), p. 92. Available at: <https://doi.org/10.33474/jp2m.v1i2.6524>.

Roslinda, E., & Mondina, R. R. (2024). Visitor Perceptions of the Tourist Attraction of Setapuk Mangrove in Singkawang City. *Makila*, 18(1), 78–93. <https://doi.org/10.30598/makila.v18i1.11440>

Sari, P. K. D. I. C. (2023). The Influence of Infrastructure Facilities on Visitor Satisfaction at the Ampenan Beach Tourist Destination, Mataram City. *Journal of Tourism Destinations*, 11(2), 358. <https://doi.org/10.24843/jdepar.2023.v11.i02.p24>

Sinamo, R. K. M., Simbolon, R., Simbolon, E. T., Nadeak, T. R. J., & Sinambela, M. (2024). Analysis of Factors Influencing Tourist Satisfaction in Mangrove Forest Ecotourism in Gosong Telaga Selatan Village, North Singkil District, Aceh Singkil Regency, 2023. *NAWASENA: Scientific Journal of Tourism*, 3(1), 116–133. <https://doi.org/10.56910/nawasena.v3i1.137>

Soraya, N., Syukriati, & Jumaidin. (2025). The Influence of Ticket Prices and Tourist Attractions on Tourists' Visiting Decisions at the D'gonggres Bilebante Tourist Destination, Central Lombok. *JoTIS: Journal of Tourism and Interdisciplinary Studies*, 11(1), 28–40.

Tamrin Tajuddin, Murni, Masniar, J.A.H. (2024) 'Planning of the Bobo Beach tourist area in Ransiki District, South Manokwari Regency', (02), pp. 193–203.

Umabaihi, R., Leuwol, F. S., & Lasaiba, M. A. (2025). The Influence of the Attractiveness of Sopapei Beach Tourist Attraction on Domestic Tourist Visits in

Suli, Salahutu District, Central Maluku Regency. Lani Journal: Studies in History and Culture, 6(April), 1–11. <https://doi.org/10.58406/jeb.viii1.1154>.