

## Economic Externalities in the Amban Beach Tourism Area in Manokwari District, West Papua Province

Yenny Dita<sup>1\*</sup>, Muh Guzali Tafalas<sup>2</sup>, Selvi Tebaiy<sup>3</sup>  
Papua University

Corresponding Author: Yenny Dita; [yennydita1983@gmail.com](mailto:yennydita1983@gmail.com)

### ARTICLE INFO

*Keywords: Economic Externalities, Positive Externalities, Negative Externalities*

*Received : 5 December  
Revised : 23 January  
Accepted: 23 February*

©2025 Dita, Tafalas, Tebaiy: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

This study aims to identify the Variables or aspects of Economic Externalities from tourism development in the Amban Beach tourism area in Manokwari Regency, and to determine the positive and negative externality values of Beach tourism activities in Amban Village, Manokwari Regency. The method used in this study is a quantitative descriptive method, with a purposive sampling method. The results of the study indicate that there are positive economic externalities such as increased income and conservation and preservation of nature, while negative externalities such as economic losses due to environmental damage and dependence on the tourism sector. Positive externalities have a greater percentage than negative externalities

## **INTRODUCTION**

The tourism sector is an example of how a region can manage its natural resources by leveraging its inherent natural potential, thereby becoming an economic engine that contributes to the nation's prosperity.

The number of tourist visits to West Papua Province has increased year by year. From 2020 to 2023, the number of tourists traveling to Papua Province rose from 348,137 in 2020 to 574,945 in 2023 (BPS Dinas Pariwisata, 2023). This indicates a strong interest in the tourist attractions offered in West Papua Province. On the other hand, the development of the tourism sector can also have negative impacts on the community's socio-cultural aspects, the carrying capacity of natural resources, or the environment – an effect commonly referred to as an externality. Externalities describe conditions that indicate either positive or negative impacts on the environment, society, and economic activities. They can influence the allocation of economic resources and the overall welfare of society. As Cash E. Karl and Ray C. Fair (2007) stated, externalities can be defined as the impact of one party's actions on the welfare of another party. If the impact is beneficial, it is called a positive externality; conversely, if it is detrimental, it is called a negative externality. These externalities arise due to activities or transactions that affect other parties, sometimes referred to as environmental effects.

Several previous studies on economic externalities have provided insights into these impacts. For instance, research by Heru Wahyudi and Eko Ardianto (2022) showed significant differences in the economic and social conditions of communities before and after the implementation of "Wisata Alam 21," noting increases in community income, improvements in infrastructure, heightened environmental awareness, and developments in socio-cultural aspects. Another study by Alvany et al. (2022) on the economic impact of developing tourist areas in Manokwari Regency found that such development has a significant positive effect on the local economy. This is evidenced by increases in community income, the emergence of various new business ventures, and improvements in the infrastructure of the tourist areas.

This research aims to identify the variables or aspects of economic externalities resulting from tourism development in the Amban Beach tourist area in Manokwari Regency, and to assess the values of both the positive and negative externalities arising from beach tourism activities in Amban Village, Manokwari Regency.

## LITERATURE REVIEW

### *Definition of Externalities*

Externalities are consequences experienced by third parties as a result of decisions made by individuals or companies that are not internalized. In economic theory, externalities are defined as side effects of production and consumption activities that can affect the welfare of other parties. As Fauzi (2006) stated, externalities are costs or benefits that must be indirectly borne by others due to an economic activity.

Externalities are also defined as the impact – or what is known as the net cost or benefit – of one party's actions on another. Similarly, Surjanti et al. (2018) explained that externalities are the consequences arising from economic activities affecting other economic agents. Thus, it can be said that externalities occur when individuals or companies engage in actions that impact people outside their organization, particularly when such activities affect the utility of others in an unintended manner, while the party causing the impact does not provide compensation to those affected.

### *Economic Externalities in Tourist Areas*

As previously described, externalities occur when the utility obtained by one party is directly influenced by the actions of another (whether a producer or a consumer), and these are categorized into positive and negative externalities that encompass various economic variables. According to Ambariani and Nasir, as cited in Heru Wahyudi and Eko (2022), economic externalities are events that can provide both benefits and costs to individuals outside the decision-making system.

Based on the explanation above, tourism development will undoubtedly lead to the emergence of various economic activities outside of tourism services themselves. For instance, the presence of a tourist attraction will give rise to additional economic activities, as noted by Anwar et al. in Agnesia and Eppy Yuliani (2023), where the construction or development of tourism can have an impact on socio-economic life.

A similar explanation is provided by Ashoer et al. (2021), who noted that tourism activities are accompanied by various economic impacts, with the presence of tourists acting as a catalyst for the emergence of various necessary economic activities. These include the provision of hotel accommodations, restaurants, transportation, entertainment, and even small vendors emerging around the tourist area.

Thus, it can be said that the economic externalities resulting from the presence of a tourist area account for all the economic activities that may arise from tourism, which can be measured by changes in sales, income, and other employment opportunities that support the offered tourism services.

## METHODOLOGY

### *Research Location*

The research location, or area of study, is within the boundaries of Manokwari Regency, specifically in Amban Village, which is one of the villages in West Manokwari District.

### *Research Design*

This study employs a quantitative research method using descriptive analysis. The descriptive analysis will illustrate the characteristics of the respondents, particularly the residents of Kampung Nelayan Modern and its surroundings. This analysis will also reveal the conditions and phenomena related to the types of externalities present in the area, which will then be analyzed further.

### *Data Collection Method*

This study analyzes various economic externalities by examining both positive and negative externalities resulting from natural tourism activities around Amban Beach, using both primary and secondary data.

- Primary data include field observations and the distribution of questionnaires to respondents.
- Secondary data required for this study consist of information regarding the various tourism activities present in Manokwari Regency in general.

### *Data Analysis*

The descriptive data analysis is based on the calculation of Likert scale scores from the questionnaires that have been tabulated beforehand. Several formulas for the percentage frequency distribution that will be used in this study are as follows:

Formula for determining the percentage (%) of positive externalities for each indicator in a variable:

$$\frac{\text{Total positive externality score}}{\text{Ideal positive externality score}} \times 100\%$$

Formula to determine the percentage (%) of negative externalities for each indicator in the variable:

$$\frac{\text{Total negative externality score}}{\text{Ideal negative externality score}} \times 100\%$$

Formula to determine the final percentage (%) of positive externality analysis:

$$\frac{\text{Positive external score}}{\text{Ideal positive externality score}} \times 100\%$$

Formula to determine the final percentage (%) of negative externality analysis:

$$\frac{\text{Negative externality score}}{\text{Ideal negative externality score}} \times 100\%$$

## RESULTS AND DISCUSSION

### 1. Analysis of Economic Externalities

The positive external scores for all economic externality indicators present in Kampung Nelayan Modern are as follows:

Table 1. Positive Externality Indicator Scores

No.	Negative Externality Indicator	Score per Indicator
1.	Increase in Income and Local Economic Welfare	5594
2.	Infrastructure Development	2028
3.	Conservation and Preservation of Nature	3886
4.	.Improved Access to Education and Skills	2793
5.	Economic Diversification	3783
	<b>TOTAL Score</b>	<b>4943</b>

Source: Primary Data Processing, 2024

In the table above, it can be seen that the total score for all positive externality indicators is 18,084, with the highest score obtained for the indicator of increased income and local economic welfare at 5,594, and the lowest score for infrastructure development at 2,028. This indicates that the development of the beach tourist area in the Amban Beach region has a tangible impact in the form of positive externalities – namely, an increase in income and local economic welfare – even though infrastructure development in the tourist area has not kept pace. Furthermore, based on the table, the percentage of positive externalities is calculated as follows:

$$18,084 / 20,250 \times 100\% = 89.30\%$$

Based on this calculation, the positive economic externalities amount to 89.30%, which include various types such as increased income for fishermen, infrastructure development, conservation and preservation of nature, improved access to education and skills, and economic diversification.

The increase in income in the beach tourist area can be observed through the emergence of several new jobs that local residents can undertake in addition to the traditional professions of fishing or farming. New and emerging job opportunities in the tourist area include the need for labor to service the tourist site; additionally, small kiosks around the beach area have begun to develop. There are also several cafés and accommodations for tourists who wish to stay overnight, as well as opportunities to work as a surfing guide for visitors who want to learn how to surf.

The development of infrastructure has not progressed rapidly because this tourist site has essentially not been prioritized by the local government as a key tourist destination. The infrastructure built or allocated in the area is primarily due to the presence of residential settlements and roads connecting villages to the city. Moreover, in addressing the ongoing issue of coastal erosion – a major challenge at the tourist site – the community is currently managing the problem independently by installing various barriers along the beach to prevent incoming waves from directly eroding the coastal sand.

Furthermore, the results of the calculation and analysis of negative economic externalities for each indicator in this study are as follows:

Table 2. Negative Externality Indicator Scores

No.	Negative Externality Indicator	Score per Indicator
1.	Economic Loss Due to Environmental Damage	2,357
2.	Increase in Prices of Goods and Services	878
3.	Cost of Waste Cleaning and Management	642
4.	Dependence on Tourism	1,066
	<b>TOTAL SCORE</b>	<b>4,943</b>

Source: Results of Primary Data Processing (2024)

In the table above, it is evident that the total score for all negative economic externality indicators is 4,943, with the highest score obtained for the indicator of economic loss due to environmental damage at 2,357, and the lowest score for the cost of waste cleaning and management at 642. This indicates that the development of the beach tourist area in the Amban Beach region has a tangible negative impact in the form of economic losses due to environmental damage. Furthermore, based on the table, the percentage of negative externalities is calculated as follows:

$$4,943 / 12,150 \times 100\% = 40.68\%$$

From this percentage, it appears that the negative externalities resulting from the development of the beach tourist area in Amban Beach are still relatively low. The community perceives economic losses due to environmental damage, as evidenced by some changes in the ecosystem around the beach area resulting from development or the clearing of coastal forests. Additionally, the increasing coastal erosion from sea waves at several beach spots is concerning and requires serious attention.

The negative externality concerning the increase in prices of goods and services, as experienced by the community, is largely influenced by the remote location, which affects the selling prices of goods and services in the area. Moreover, as the number of beach visitors increases, service providers gradually raise prices to secure higher profits, which in turn impacts the residents living near the beach. Regarding the externality of waste generated by tourism activities, the community does not find it overly concerning at this time because both visitors and local business operators consistently manage the waste in the area effectively, preventing accumulation and keeping the area clean and comfortable.

Similarly, the negative externality of dependence on the tourism sector remains very low, as the local community still primarily relies on agriculture and fishing to meet their daily needs, even though some community members have begun collaborating with café owners as suppliers of raw food materials.

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research and discussion, the following conclusions can be drawn:

1. The research identified several economic externalities, both positive and negative, arising from natural tourism activities. The positive economic externalities include increased income and local economic growth, conservation and preservation of nature, followed by economic diversification, improved access to education, and lastly, infrastructure development. In contrast, the negative economic externalities include economic losses due to environmental damage, dependence on tourism, rising prices of goods and services, and finally, the costs associated with waste cleaning and management.
2. The percentage of positive economic externalities is higher than that of negative externalities.

## FURTHER STUDY

1. For the local community, the development of natural tourism that generates positive economic externalities is very important. Therefore, the existing positive externalities should be further enhanced, such as by increasing fishermen's incomes through various programs and training that support tourism management, improving supporting infrastructure, and raising environmental awareness—emphasizing the importance of proper environmental management.
2. It would be wise to minimize the negative externalities by implementing regulations from the local government, such as designating the Amban Beach tourist area as one of the tourist destinations in Manokwari Regency to ensure better management.

## REFERENCES

- Abdul Wahid, Strategi Pengembangan Wisata, Alfabeta, Bandung. 2015
- Agnesia Berlina Oktaviani, Eppy Yuliani. Dampak Pengembangan Pariwisata Jurnal Kajian Ruang Vol 3 No 1 Maret. 2023
- Ahmad Raihan, Fendy Oktavianus . Dampak Pengembangan Wisata Pantai terhadap Kondisi Sosial Ekonomi Masyarakat pesisir. 2022 Alam 21"). Jurnal Studi Perhotelan dan Pariwisata (JSPP) Vol 1, No 1, 2022.
- Alvany T. Wanma, Rosmina Sasarari, Yomima D. Salamuk. Dampak Ekonomi Pengembangan kawasan wisata di Kabupaten Manokwari (Studi Kasus pada Kawasan Wisata Tanjung Papaya-Amban Pantai). Lensa Ekonomi, Vo.6 No.2. 2022
- Fauzi, Akhmad. 2006. Ekonomi Sumber Daya Alam Dan Lingkungan. Gramedia Pustaka Utama. Jakarta. 2006
- Hasan, M. K. et al. Determining factors of tourists' loyalty to beach tourism destinations: a structural model', Asia Pacific Journal of Marketing and Logistics, 2019
- Heru Wahyudi, Eko Ardiantoro. Analisis Eksternalitas Positif "Wisata Alam 21" (Positive Externality Analysis of "Wisata Suryaman, R.A, Maqin, H. A.

- Dampak Eksternalitas dari Keberadaan Sentra Industri Penyamakan Kulit Sukaregang. Fakultas Ekonomi dan Bisnis Unpas Bandung.2018.
- Hidayah Arif. Analisis Dampak Eksternalitas Ekonomi Terhadap Pendapatan Pedagang Kuliner Di Sentra Wisata Kuliner Medan Marelan. Internasional Repository.2024.
- Isdarmanto. Dasar-Dasar Kepariwisata dan Pengelolaan Destinasi Wisata. Gerbang Media Aksara: Yogyakarta 2016
- Ismayanti. Dasar dasar pariwisata sebuah pengantar. Grasindo Jakarta 2020
- Khusaini, Mohamad . Ekonomi Publik. UB Press. Malang. 2019.
- Lina Aprilianti, Sri Herianingrum. Dampak Eksternalitas PT.Eratex Djaja Probolinggo Dalam perspektis Ekonomi. Jurnal Ekonomi Syariah Teori dan Terapan Vol. 8 No. 1 .Januari 2021
- M. Adhiyaksaa, Annisa Mu'awanah Sukmawati Journal of Urban and Regional Planning, Vol 2, No 2, September. 2021
- Nana Suwilna, Abdul Wahab Abdi. Dampak Pengembangan ojek wisata Pantai Suak Geudubang Terhadap Perekonomian Masyarakat Gampong Suak kecamatan Samatiga Kab. Aceh Barat. 2022
- Nurlatifah, Eva. Analisis Eksternalitas Peternakan Ayam Ras Petelur Terhadap Pendapatan Masyarakat Di UD Kidul Rawa Farm Desa Menganti.2020.
- Parmawati, Rita. Valuasi Ekonomi Sumberdaya Alam dan Lingkungan Menuju Ekonomi Hijau. UB Press. Malang. 2019.
- Pongtuluran, Yonathan. Manajemen Sumber Daya Alam dan Lingkungan Edisi Revisi. Andi Offset. Yogyakarta2015.
- Prasetyia, F. Bagian V: Teori Eksternalitas . Fakultas Ekonomi dan Bisnis Universitas Brawijaya. Malang. 2013.
- Siti Sahara Nurdin, Vivi Silvia. Eksternalitas Positif Objek Wisata (Studi Kasus Pantai Lampuk Kabupaten Aceh Besar. Jurnal Ilmiah Mahasiswa Vo.4 No.2. 2019
- Suparmoko. Ekonomi Publik Untuk Keuangan Dan Pembangunan Daerah. Andi Yogyakarta. 2006
- Surjanti, Jun, Musdholifah dan Boediono. 2018. Edisi Belajar Teori Ekonomi (Pendekatan Mikro) Berbasis Karakter. Yogyakarta: Deepublish (Group CV. Budi Utama). Jurnal Ekonomi Syariah Teori dan Terapan Vol. 8 No. 1
- Sutarjo. Eksternalitas Pedagang Kaki Lima. AdbispreneurVolume 1 No. 1. 2016
- Tania Feronika. Eksternalitas Farmhouse dan The Great Asia Afrika di Desa Gudangkahuripan Kecamatan Lembang Kabupaten Bandung Barat Jurnal Bandung Conference Series;Economic Studies Vol.3 No.1. 2023
- Wahyunindyawati dan Dyanasari. Ekonomi Sumber Daya Alam dan Lingkungan. Deepublish Group CV. Budi Utama Yogyakarta.2017.