

Geographica: Science and Education Journal GSEI

Website: http://usnsj.id/index.php/geographica Email: geographica_gsej@usn.ac.id





Creative Commons Attribution 4.0 International License

Implementation of the Triple Bottom Line Principle in Developing the Tourist Attraction of Gunung Nona, Indonesia

AUTHORS INFO

Jasman Jasman Lecture of Politeknik Pariwisata Makassar

jasman270@gmail.com

Masri Ridawan Lecture of Politeknik Pariwisata Makassar masriridwan010@gmail.com

Muhammad Musawantoro Lecture Of Politeknik Pariwisata Makassar musawantoro@poltekparmakassar.ac.id ARTICLE INFO

ISSN: 2716-4837 Vol. 7, No. 1, June 2025

URL: http://usnsj.id/index.php/geographica

Suggestion for the Citation and Bibliography

Citation in Text: Jasman, et al (2025)

Bibliography:

Jasman., Ridawan, M., & Musawantoro, M. (2025). Implementation of the Triple Bottom Line Principle in Developing the Tourist Attraction of Gunung Nona, Indonesia. *Geographica: Science & Education Journal*, 7 (1, June), 47-55.

Abstract

This qualitative descriptive study explores the application of the Triple Bottom Line (TBL) concept—which underscores the importance of balancing profit (economic growth), people (social responsibility), and planet (environmental sustainability) in the management of the Gunung Nona Tourist Attraction in Enrekang Regency. The research employed data collection methods such as documentation analysis, in-depth interviews, and direct observation. Findings reveal that while elements of the TBL framework have been partially adopted by the site's management, significant improvements are still required, particularly in enhancing local community engagement and environmental stewardship. The study suggests that incorporating a more structured and comprehensive TBL approach could lead to more sustainable and inclusive tourism development. The implications of this research highlight the need for tourism managers and policymakers to adopt integrated sustainability models that support economic benefits while fostering social equity and preserving ecological integrity.

Keywords: Tourism Attraction Development, Triple Bottom Line, Mount Nona

A. Introduction

The Triple Bottom Line (TBL) concept emphasizes that organizations should not only pursue profit but also contribute to social well-being (people) and engage in environmental preservation (planet) (Haryanto et al., 2023; Khan et al., 2022; Yusuf et al., 2021). This concept is particularly relevant in the management of tourist attractions especially nature-based tourism which inherently requires a balanced approach that considers community interests, environmental conservation, and economic development through tourism (Phương et al., 2020; Wang et al., 2020).

The primary motivation for conducting this preliminary research stems from concerns about the lack of structured and sustainable management in nature tourism destinations. Mount Nona, a tourist site renowned for its natural beauty, including stunning waterfalls, has seen a

significant increase in visitor numbers due to growing popularity, attracting tourists from both nearby areas and other parts of South Sulawesi (Asniana et al., 2021; Hardanto et al., 2021; Lumanauw & Gupta, 2023; Putri et al., 2020; Ruslan et al., 2021; Yuwono et al., 2020).

With improved accessibility and aggressive promotion, the area has undergone various developments, including the emergence of business activities around the waterfall. However, these changes are not always accompanied by sustainable management practices. Recognizing this, the Gowa Regency Tourism Office has acknowledged the need for greater awareness and education on managing tourist sites in a way that balances tourism development with environmental preservation (HS et al., 2023; Kinasih et al., 2020; Yudawisastra et al., 2023).

Currently, Mount Nona's tourism management remains informal and unstructured, focusing primarily on collecting parking fees and entrance tickets, with limited government involvement restricted to basic infrastructure development such as road construction (Iqbal & Fasyehhudin, 2021; Putri et al., 2020; Yusuf et al., 2021; Haryadi, 2020; Priyatiningsih & Sutrisno, 2020; Wang et al., 2020). Some improvements—such as parking areas, shopping zones, and photo spots—have been implemented, yet they lack coordination and integrated planning (Jin-lian et al., 2020; Kos et al., 2020; Marasigan & Borbon, 2020; Nguyen, 2021; D. Wang, 2020; Z. Wang, 2020).

As tourism development intensifies, unregulated expansion by local residents has also become more widespread, seen in the irregular construction of buildings and uncontrolled land clearing. This poses a risk of environmental degradation, particularly given the hilly and cliff-laden terrain surrounding Mount Nona (Kusumaningrum & Fariz, 2022; Rachmawati et al., 2021). Without proper oversight, such developments could lead to serious long-term problems. Therefore, future management of the Takapla waterfall tourist attraction must be carried out in an integrated manner, involving all stakeholders, including local communities, MSMEs, landowners, and government authorities. Establishing clear Standard Operating Procedures (SOPs) is also critical. This study aims to contribute by proposing a strategic management approach based on the Triple Bottom Line framework (Haryanto et al., 2023; Mehdiabadi et al., 2021; ROJIL_ICSSL 2021, 2021).

B. Methodology

1. Research Design

This study applies a descriptive qualitative approach design. The main objective is to examine the application of the Triple Bottom Line (TBL) principle in the management of the Gunung Nona Tourist Attraction (DTW) in Enrekang Regency. The focus of the study consists of three main aspects: first, the implementation of the TBL principle which includes the dimensions of People (society), Planet (environment), and Profit (profit) in the management of the Gunung Nona DTW; second, identifying various factors that support or hinder the application of the TBL principle in the tourist area; and third, examining the impact of the implementation of TBL on the sustainability of the management of the Gunung Nona DTW. This study is located in the Gunung Nona Tourist Attraction area, Enrekang Regency.

2. Data collection

Data were obtained through various methods, such as field observation, documentation studies, and focus group discussions (FGD) with stakeholders. Observations were conducted directly in the Gunung Nona tourist area to determine the physical environmental conditions, tourism activities, and the relationship between managers, local communities, and tourists. Indepth interviews involved various parties, including destination managers, MSME actors, the Enrekang Regency Tourism Office, and tourists, to obtain information related to the implementation of the Triple Bottom Line (TBL) principle in the area.

3. Time and Location of Research

The study was conducted in the Gunung Nona tourist area located in Anggeraja District, Enrekang Regency, South Sulawesi Province. Data collection took place in the period from December 2024 to January 2025 which was adjusted to the holiday season so that tourist visits reached their peak to ensure the availability of informants, so that the results obtained reflect the reality of tourism management in a representative manner.

4. Language Used

In the data collection process, researchers use Indonesian as the main language of communication. However, when necessary, regional languages are also used, namely Duri as a local language. Where the researcher is a local son, it makes it easier to interact with local residents who are less proficient in Indonesian, in order to ensure the accuracy and depth of the information collected.

5. Research Ethics

Researchers adhere to ethical research principles, including obtaining informed consent from participants before conducting interviews or observations. The confidentiality of informants' identities is maintained and all data is used only for research purposes. Researchers also strive to build harmonious relationships with the community, respect local values and customs, and ensure that no party is harmed during the research process.

6. Instruments

The in-depth interview guidelines in this study were designed to obtain information from various parties involved in the management of the Gunung Nona Tourist Attraction (DTW). The informants interviewed included the managers of the Gunung Nona DTW, representatives of the Enrekang Regency Tourism Office, Micro, Small, and Medium Enterprises (MSMEs) around the tourist area, and the community living around the DTW. Interview topics included the informants' understanding of the Triple Bottom Line (TBL) concept, DTW management practices that reflect the TBL (People, Planet, Profit) principles, and the level of community participation in tourism management. In addition, the interviews also explored information about environmental conservation efforts carried out, the economic impact of the DTW on the surrounding community, challenges and obstacles faced in implementing the TBL principles, and hopes and plans for sustainable DTW development.

Observation sheets are prepared to record various things observed directly at the research location. Aspects observed include the physical condition of the DTW, such as cleanliness, available facilities, and infrastructure; interactions between managers, tourists, and the surrounding community; economic activities around the tourist area; environmental conservation efforts undertaken; and the availability of information related to the TBL principle or sustainability.

In addition to interview and observation methods, this study also strengthens the data by collecting various relevant documents. Documents collected include the profile of Gunung Nona DTW, DTW management and development plans, visitor data, DTW financial reports, and regulations or policies related to the management of tourist areas. Visual documentation in the form of relevant photos and videos will also be collected to support the research results.

7. Data Analysis Technique

The data analysis process in this study consists of several main stages. The first stage is data reduction, which is done by summarizing, selecting, focusing, and simplifying raw data obtained from interviews, observations, and documentation. The next stage is data presentation, where the reduced data is arranged in the form of narrative text, tables, or graphs to make it easier to understand and interpret. After that, verification and drawing conclusions are carried out, namely by comparing and testing data from various sources to ensure the validity and reliability of the research findings. The last step is data interpretation, namely giving meaning and interpretation to the data that has been analyzed, and linking it to the theory and concept of the Triple Bottom Line (TBL).

The data analysis steps were carried out systematically, starting from the transcription of interview results, then reading and understanding all data consisting of interview transcripts, observation notes, and collected documents. Furthermore, the researcher identified key themes related to the application of TBL principles and grouped the data based on these themes. The data in each theme was then analyzed to find patterns, relationships, or differences that emerged. After the analysis process was complete, the researcher drew conclusions based on the findings, then compared them with theories and previous research results to strengthen the interpretation and ensure suitability with the context being studied.

C. Findings and Discussion

1. Findings

Based on the results of observations and interviews with key informants of this study, it can be said that the management of the Gunung Nona Tourist Attraction is still simple. The management is more focused on maintaining the area to remain orderly, neat, and beautiful, especially in the waterfall area. At this location, the manager pays full attention by placing warning signs of danger and prohibiting visitors from standing or taking pictures in certain places for safety reasons. In addition, management also focuses on providing warnings regarding the boundaries of the tourist area, which aims to maintain environmental sustainability, considering that the Gunung Nona area is in a protected forest area that is protected to support nature conservation.

Environmental Aspects (Planet)

In terms of environmental preservation, the interview results show that the management of the Gunung Nona tourist area has paid attention to sustainability aspects through concrete actions. Findings in the field strengthen the efforts to maintain the cleanliness of the tourist area, preserve native plants, and a waste management system that involves the active participation of the local community. In addition, the management together with the Tourism Office routinely provide education to tourists and business actors about the importance of preserving nature, so that tourism activities do not damage the balance of the ecosystem in the area.

Social Aspect (People)

From a social perspective, local community participation appears to be very strong in the management of this tourist destination. In-depth interviews with MSMEs and local residents showed that they not only gain economic benefits, but also actively participate in supporting daily tourism operations. Researchers also used local languages during interviews to ensure smooth and in-depth communication, while maintaining good relations with the community. This approach reflects respect for local culture and strengthens the community's sense of ownership of the tourist area.

Economic Aspect (Profit)

This is very important and is part of the tourism education program organized by the government, especially the Gowa Regency Tourism Office. This is based on the fact that the growth and development of the vast and uncontrolled tourism sector, as well as the rapid increase in the number of residents in the area as a natural consequence of the economic opportunities that arise, are usually followed by damage to natural resources after the development of the tourism zone. If managed properly, tourism can be a financial solution for environmental and natural resource conservation.

This shows that indirectly, the management of Mount Nona has paid attention to the aspect of environmental sustainability, which in the Triple Bottom Line framework is known as the Planet concept. Therefore, considering the importance of this aspect of environmental sustainability in the future, the management of Mount Nona needs to be improved again through the management of Tourist Attractions, so that the principle of nature conservation becomes an integral part of the entire management and development program of the area.

As a tourist destination, Gunung Nona must be able to attract many visitors to become a popular tourist attraction. It is undeniable that the management of tourist attractions is closely related to the level of visitor satisfaction, so that facilities, structures, and infrastructure must be well prepared to create a pleasant and memorable experience. In order to achieve this, the management of the Takapal'a waterfall, supported by the local government, is trying to build easy and comfortable access. This ease of access is one of the important factors in increasing visitor satisfaction. In addition, currently at Gunung Nona a selfie booth has also been built to support the creation of tourist memories, and the management has placed important announcements to ensure the safety and comfort of visitors while in the tourist area. This concept shows concern for the community as visitors, and within the TBL framework, what the management does in providing services to the community is included in the People aspect.

The description above shows that although the manager has not explicitly stated that they are implementing the TBL concept, from the practices carried out it can be concluded that the TBL approach has been applied in the management of the Gunung Nona Tourist Attraction. In addition to the two concepts that have been mentioned, tourism activities in Gunung Nona have also encouraged the entrepreneurial spirit of the surrounding community through various tourism activities. The community is given the opportunity to do business by providing for the needs of tourists, ranging from food and drinks, agricultural products typical of the Malino area, to souvenirs and mementos as keepsakes. This activity is profitoriented and is part of the tourism service business.

From the explanation above, it is clear that the TBL concept is very relevant to be applied in the development of Tourist Attractions. Therefore, through this study it is necessary to reveal what has been implemented and what still needs to be improved by the managers of Gunung Nona, when viewed from the TBL approach. as follows

Table 1. Implementation of TBL on the Tourist Attraction of Takapal Waterfall

Table 1. Implementation of TBL on the Tourist Attraction of Takapal Waterfall			
No	TBL Concept	Already implemented	Not yet implemented
1	People	 Support Facility TourFor the Community Support Security And Order for Society Support For interaction social (social media) 	 Community involvement in the form of tourism awareness groups SOP for Area Management related to human elements
2	Planet	 Notice board for proper waste disposal Directions to the area so that the environment is maintained 	 Master plan for development integrated with ecotourism concept Environmental conservation education SOP for Tourism Attraction Management related to conservation natural and the environment Banners and Campaigns for environmental conservation
3	Profit	- Chance try for SMEs in Tourist Attractions	 Arrangement Business area (UMKM) Tourism preneurship education Financial management and reporting system with financial reporting standards Entry ticket management Parking ticket management

2. Discussion

The results of observations and interviews indicate that the management of the Gunung Nona tourist destination is still relatively simple, with the main focus on aspects of security, cleanliness, and environmental preservation. The management prioritizes the arrangement of tourist areas, the installation of warning signs, the prohibition of taking pictures in certain areas for the safety of visitors, and the determination of area boundaries to maintain natural sustainability. These efforts demonstrate a commitment to the Planet aspect in the Triple Bottom Line (TBL) concept, where environmental preservation is the main focus. In terms of education, the management also holds activities that support environmental sustainability and increase public awareness of the importance of conservation, in line with government programs and efforts to increase community participation through tourism-based economic activities, such as the involvement of MSMEs that provide food, drinks, and souvenirs. This community involvement strengthens the People aspect, which emphasizes the importance of social benefits and community participation in destination management.

In addition, the management strives to improve the quality of the tourist experience by building facilities such as photo booths and posting important announcements to ensure the safety and comfort of visitors. This shows attention to the People aspect, especially in terms of tourist service and satisfaction. Indirectly, this management also supports the Profit aspect by opening up business opportunities for the community and encouraging financial management, although it has not been fully implemented optimally. Based on the TBL implementation table, the People and Planet aspects have been realized through the provision of public facilities, environmental management with bulletin boards and directions, and business opportunities for local residents. However, strengthening is still needed in the form of a more integrated strategy, such as developing a master plan, more systematic conservation education, and compiling conservation-based SOPs. In the Profit aspect, economic management such as the entrance ticket and parking systems have been implemented, and business opportunities have begun to form, but more professional

business development, entrepreneurship training, and a transparent financial reporting system still need to be improved so that the economic benefits of tourism can be felt sustainably and evenly.

Environmental Aspects (Planet)

Interviews conducted in the Gunung Nona tourist area showed a strong commitment to environmental conservation. This is reflected in organized waste management, vegetation conservation efforts, and outreach to the community and tourists about the importance of protecting the environment. These initiatives are in line with the results of international studies that emphasize the importance of community involvement in preserving the environment of tourist destinations. For example, success of sustainable tourism management is greatly influenced by cooperation between managers, local communities, and the government in maintaining the ecosystem (Alsaloum et al., 2024). In addition, (Meschini et al., 2021) emphasized that community involvement in ecotourism activities can encourage increased environmental awareness and conservation actions. (Mejjad et al., 2022) also stated that good environmental governance not only maintains natural resources but also increases the attractiveness of a destination in the eyes of foreign tourists.

Social Aspect (People)

From the social dimension, the interview results show that local communities around Mount Nona have an active role in tourism management. They are not only involved as micro, small, and medium enterprises (MSMEs), but also as partners in supporting the operational continuity of the destination. This involvement strengthens social solidarity and fosters a sense of ownership of the tourist area. This finding is in line with (Núñez-Lara et al., 2022) which states that community participation in tourism can improve social welfare and strengthen local cultural identity (Núñez-Lara et al., 2022). In line with that, (Lo & Janta, 2020; Núñez-Lara et al., 2022) stated that the involvement of residents in the decision-making process in the tourism sector contributes to the acceptance and sustainability of the programs being run(Lo & Janta, 2020; Núñez-Lara et al., 2022). Meanwhile, Su et al. (2016) found that the success of sustainable tourism destination management is highly dependent on the harmony of the relationship between managers, the community, and tourists, as well as respect for local values. (Li et al., 2021)

Economic Aspect (Profit)

From an economic perspective, research shows that the presence of tourism in Gunung Nona has a positive impact on increasing community income, especially through the growth of the MSME sector and its contribution to Regional Original Income (PAD). This pattern is in line with international studies that emphasize that inclusive tourism can strengthen the local economy. According to (Kim et al., 2021), tourism designed to involve the wider community can create new economic opportunities and improve the standard of living of local residents. (Mbowe et al., 2021) also noted that the development of small businesses around tourist destinations can distribute economic benefits more evenly. On the other hand, (Yunikawati et al., 2021) emphasized that the economic success of the tourism sector is greatly influenced by collaboration between local business actors, government authorities, and the private sector to ensure sustainable and equitable economic benefits for all stakeholders.

D. Conclusion

Based on the research findings, it can be concluded that the implementation of the Triple Bottom Line (TBL) concept in the management of Gunung Nona Tourism Attraction has begun to be applied, especially in the social (people) and environmental (planet) aspects. However, its implementation is still not fully maximized and not fully in line with the ideal principles of TBL. In the people aspect, active community involvement has not been formally facilitated, for example through the formation of the Tourism Awareness Group (Pokdarwis), which should act as the vanguard in destination management. In fact, community participation through Pokdarwis has great potential to support the implementation of the Sapta Pesona values more effectively.

In terms of governance, tourism management planning is still not well structured, especially in terms of formulating visions, strategies, and long-term policies. This indicates the need for the preparation of clear Standard Operating Procedures (SOP) as a guideline for management, as well as the development of an integrated master plan that supports the principles of ecotourism as a whole to ensure the sustainability of Gunung Nona Tourism Attractions.

Limitations of this studylies in the scope of the data obtained, which is still limited to certain periods and informants. In addition, the qualitative approach used allows for subjective interpretations influenced by the local context, so that generalization of the results to other

destinations needs to be done with caution.

As a recommendation, further research should expand the scope of informants, including the private sector and foreign tourists, and combine qualitative and quantitative approaches to obtain a more comprehensive picture. Local governments are also advised to immediately facilitate the formation of Pokdarwis, prepare SOPs and tourism master plans, and increase the capacity of local communities in managing sustainable tourism.

E. References

- Alsaloum, M., Romagosa, F., & Alotaibi, S. (2024). Residents' Perceptions of the Benefits and Costs of Tourism Development: A Case Study of Riyadh City (Saudi Arabia). *Tourism and Hospitality*, 5(3), 753. https://doi.org/10.3390/tourhosp5030044
- Asniana, Supratman, S., & Achmad, A. (2021). Economic valuation of area management Latuppa Nature Tourism Palopo City. IOP Conference Series Earth and Environmental Science, 886(1), 12078. https://doi.org/10.1088/1755-1315/886/1/012078
- Hardanto, A., Ardiansyah, A., Mustofa, A., & Taryana, A. (2021). Waterfall Exploration in Banyumas Regency Based on Ecotourism Environmental Protection (EEP) Approach for Water Conservation. IOP Conference Series Earth and Environmental Science, 757(1), 12044. https://doi.org/10.1088/1755-1315/757/1/012044
- Haryadi, B. (2020). Optimization Strategy of Taxes and Parking Retribution Management. International Journal of Managerial Studies and Research, 8(12). https://doi.org/10.20431/2349-0349.0812003
- Haryanto, A., Shandy, I. R., & Setyawan, Q. A. (2023). Analysis of the Dieng Culture Festival from the Perspective of Sustainable Tourism. KnE Social Sciences. https://doi.org/10.18502/kss.v8i3.12855
- HS, B. R., Pramono, J., & Haryanto, A. T. (2023). Analisis Strategi Dinas Kebudayaan Pariwisata, Pemuda Dan Olah Raga Dalam Pengembangan Pariwisata Di Kabupaten Ponorogo. JIP, 11(2). https://doi.org/10.33061/jp.v11i2.7256
- Iqbal, I. I., & Fasyehhudin, M. (2021). Kewenangan Pengelolaan Wisata Alam Sebagai Destinasi Wisata Daerah di Wilayah Kecamatan Padarincang Kabupaten Serang Berdasarkan Peraturan Daerah Nomor 8 Tahun 2014 tentang Rencana Induk Pembangunan Kepariwisataan Kabupaten Serang Tahun 2014-2025. *Yustisia Tirtayasa Jurnal*, 1(2). https://doi.org/10.51825/yta.v1i2.12303
- Jin-lian, H., Liu, H., Chen, J., & Sun, F. (2020). Study on City-Level Optimization of Tourism Industry Spatial Organization Nodes and Organization Mode for Tourist Destinations. Complexity, 2020, 1. https://doi.org/10.1155/2020/2807817
- Khan, M. P., Hubacek, K., Brubaker, K. L., Sun, L., & Moglen, G. E. (2022). Stormwater Management Adaptation Pathways under Climate Change and Urbanization. *Journal of Sustainable Water in the Built Environment*, 8(4). https://doi.org/10.1061/jswbay.0000992
- Kim, S., Kang, Y., Park, J.-H., & Kang, S. (2021). The Impact of Residents' Participation on Their Support for Tourism Development at a Community Level Destination. Sustainability, 13(9), 4789. https://doi.org/10.3390/su13094789
- Kinasih, R. S., Roessali, W., & Prasetyo, E. (2020). Visitors' satisfaction and development strategy of agrotourism: evidence from Semarang, Indonesia. *Journal of Socioeconomics and Development*, 3(2), 101. https://doi.org/10.31328/jsed.v3i2.1450
- Kos, G., Ivandić, N., & Vidović, K. (2020). Tourism as a Factor of Demand in Public Road Passenger Transportation in the Republic of Croatia. Tehnički Glasnik, 14(1), 76. https://doi.org/10.31803/tg-20191210120738
- Kusumaningrum, N., & Fariz, N. (2022). Pemanfaatan Ruang Kawasan Tebing Breksi Untuk Kegiatan Pariwisata Pada Periode Tahun 2016-2017. *Jurnal Arsitektur ARCADE*, 6(1), 98. https://doi.org/10.31848/arcade.v6i1.807
- Li, X., Kim, J. S., & Lee, T. J. (2021). Contribution of Supportive Local Communities to Sustainable Event Tourism. Sustainability, 13(14), 7853. https://doi.org/10.3390/su13147853
- Lo, Y.-C., & Janta, P. (2020). Resident's Perspective on Developing Community-Based Tourism A Qualitative Study of Muen Ngoen Kong Community, Chiang Mai, Thailand. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.01493
- Lumanauw, N., & Gupta, Gst. Bgs. W. (2023). Identifikasi Potensi Desa Melalui Pengemasan

- Produk Wisata Di Desa Wanagiri, Buleleng, Bali. *Jurnal Widya Laksana*, 12(1), 66. https://doi.org/10.23887/jwl.v12i1.45335
- Marasigan, M. A. Y., & Borbon, N. M. D. (2020). Destination competitiveness in the view of resort managers. *International Journal of Research Studies in Education*, 10(1). https://doi.org/10.5861/ijrse.2020.5919
- Mbowe, W. E., Ndunguru, E., & Gervas, J. (2021). Tourism Development in Northern Circuit of Tanzania and Its Contribution in Improving Local People's Livelihood. *Applied Economics and Finance*, 8(4), 56. https://doi.org/10.11114/aef.v8i4.5311
- Mehdiabadi, A., Wänke, P., Khorshid, S., Spulbăr, C., & Birău, R. (2021). A New Hybrid Fuzzy Model: Satisfaction of Residents in Touristic Areas toward Tourism Development. *Mathematical Problems in Engineering*, 2021, 1. https://doi.org/10.1155/2021/6650735
- Mejjad, N., Rossi, A., & Pavel, A. B. (2022). The coastal tourism industry in the Mediterranean: A critical review of the socio-economic and environmental pressures & impacts.
- Meschini, M., Toffolo, M. M., Caroselli, E., Franzellitti, S., Marchini, C., Prada, F., Boattini, A., Brambilla, V., Martinez, G., Prati, F., Simoncini, G. A., Visentin, M., Airi, V., Branchini, S., & Goffredo, S. (2021). Educational briefings in touristic facilities promote tourist sustainable behavior and customer loyalty. *Biological Conservation*, 259, 109122. https://doi.org/10.1016/j.biocon.2021.109122
- Nguyen, Q. H. (2021). Impact of Investment in Tourism Infrastructure Development on Attracting International Visitors: A Nonlinear Panel ARDL Approach Using Vietnam's Data. *Economies*, 9(3), 131. https://doi.org/10.3390/economies9030131
- Núñez-Lara, E., Beltran, V. H., Laffon-Leal, S., & Martínez-Fernández, C. N. (2022). An indicator-based evaluation of sustainability in a coastal region of southern Mexico transitioning from traditional activities to tourism. *Environmental Development*, 42, 100700. https://doi.org/10.1016/j.envdev.2022.100700
- Phương, N. T. M., Song, N. V., & Quang, T. X. (2020). Factors Affecting Community-Based Tourism Development and Environmental Protection: Practical Study in Vietnam. *Journal of Environmental Protection*, 11(2), 124. https://doi.org/10.4236/jep.2020.112009
- Priyatiningsih, K., & Sutrisno, M. (2020). Road infrastructure asset management strategy and its impact on the environment. IOP Conference Series Materials Science and Engineering, 830(2), 22030. https://doi.org/10.1088/1757-899x/830/2/022030
- Putri, H., Ichsan, A. C., & Setiawan, B. (2020). The Potential Study Of Segenter Waterfall As A Tourist Destination In The Tahura Nuraksa. *Journal of Sylva Indonesiana*, 3(2), 97. https://doi.org/10.32734/jsi.v3i02.2850
- Rachmawati, R., Haryono, E., Ghiffari, R. A., Reinhart, H., Permatasari, F. D., & Rohmah, A. A. (2021). Best Practices of Capital City Relocation in Various Countries: Literature Review. E3S Web of Conferences, 325, 7004. https://doi.org/10.1051/e3sconf/202132507004
- ROJIL_ICSSL 2021. (2021). https://download.atlantis-press.com/article/125967643.pdf
- Ruslan, R., Nurhikmah, A. I., & Salim, A. (2021). Strategi Pengembangan Obyek Wisata Air Terjun Lacolla Kabupaten Maros. *Journal of Urban Planning Studies*, 2(1), 76. https://doi.org/10.35965/jups.v2i1.104
- Wang, D. (2020). Study on the Construction Technology of Visual Environment in Highway Tourism Service Area. IOP Conference Series Earth and Environmental Science, 453(1), 12022. https://doi.org/10.1088/1755-1315/453/1/012022
- Wang, L., Li, K., & Luo, Y. (2020). Research and Design of Road Intelligent Parking Based on IoT. IOP Conference Series Materials Science and Engineering, 719(1), 12001. https://doi.org/10.1088/1757-899x/719/1/012001
- Wang, Y., Shen, S., Sotiriadis, M., & Zhang, L. (2020). Suggesting a Framework for Performance Evaluation of Tourist Attractions: A Balance Score Approach. Sustainability, 12(15), 6220. https://doi.org/10.3390/su12156220
- Wang, Z. (2020). The Tourism Rural Landscape Planning Based on Multi-scale Factors under Computer Modeling. Journal of Physics Conference Series, 1574(1), 12111. https://doi.org/10.1088/1742-6596/1574/1/012111
- Yudawisastra, H. G., Burhanudin, J., Samoedra, A. D. A., & Voda, M. (2023). The effect of green products on sustainable tourism through green marketing in natural tourism destinations in Garut, West Java. *International Journal of Green Tourism Research and Applications*, 5(1),

- 45. https://doi.org/10.31940/ijogtra.v5i1.45-51
- Yunikawati, N. A., Istiqomah, N., Priambodo, M. P., Puspasari, E. Y., Sidi, F., & Marzanah, A. (2021). Community Based Rural Tourism (CBRT): The Impact on Local Residents Quality of Life in Indonesia. *E3S Web of Conferences*, 228, 2012. https://doi.org/10.1051/e3sconf/202122802012
- Yusuf, G., Fahurrahim, F., Putra, I. N. T. D., & Masyhudi, L. (2021). Pelatihan Citation Dan Reference Berbasis Aplikasi Dengan Mendeley Dan Endnote Bagi Dosen Di Sekolah Tinggi Pariwisata Mataram. *Journal Of Responsible Tourism*, 1(1), 9. https://doi.org/10.47492/jrt.v1i1.987
- Yuwono, E., Maulany, R. I., & Barkey, R. (2020). Identifying Tourism Attractions' Potentials of Protected Area: A Case Study in Bulue Village, Soppeng District, Indonesia. *Journal of Indonesian Tourism and Development Studies*, 8(2), 105. https://doi.org/10.21776/ub.jitode.2020.008.02.07