DOI: 10.31940/ijogtra.v7i1.74-83 URL: http://ojs.pnb.ac.id/index.php/IJOGTRA

Sustainable Tourism Development Strategy for Area of Mina Mangrove Tunggulsari, Pati Regency: PESTLE Analysis Approach

Afif Nur Khayati¹, Kusumantoro²*, Moch Faizal Rachmadi³

- ^{1,2}Department of Economic Education, Universitas Negeri Semarang, Indonesia
- ³Department of Economic Education, Universitas Ivet, Indonesia

Abstract: Tourism development is directed at sustainable tourism by upholding the principles of economy, social and environment including in the tourist destination of Area of Mina Mangrove, Pati Regency, Central Java Province. However, there are several aspects of external conditions that affect tourism development such as global uncertainty. The urgency of this research is the need for an external condition analysis model in efforts to develop sustainable tourism in Area of Mina Mangrove which includes Political, Economic, Social, Technology, Legal and Environmental aspects known as PESTLE Analysis. Based on this, the purpose of the research is to identify and analyze the relevance of external conditions in the development of tourism in Area of Mina Mangrove, Pati Regency. This research method is a qualitative approach in mapping and analyzing data in a complex, continuous and integrated manner. The results of the study concluded that the Environment (E) aspect plays a very important role, because Area of Mina Mangrove is directly adjacent to the Java Sea. This is an opportunity, potential and challenge in itself which has a major impact on the environment and sustainable tourism ecosystem. Creating environmental innovation, research and development by mitigating the risks of challenges and packaging them into optimal tourism opportunities. Of course, working with various parties at the central and regional levels, including community involvement and groups/communities, companies and academics. Politic (P) also has a major contribution in developing tourism in the Area of Mina Mangrove.

Keywords: global uncertainty, Mina Mangrove, PESTLE analysis, sustainable tourism.

History Article: Submitted 3 May 2025 | Revised 19 May 2025 | Accepted 2 June 2025

How to Cite: Khayati, A. N., Kusumantoro, & Rachmadi, M. F. (2025). Sustainable Tourism Development Strategy for Area of Mina Mangrove Tunggulsari, Pati Regency: PESTLE Analysis Approach. *International Journal of Green Tourism Research and Applications*, 7(1), 74–83. https://doi.org/10.31940/ijogtra.v7i1.74-83

Introduction

Indonesia is the largest archipelagic country in the world with 17,001 islands (Central Bureau of Statistics, 2023). The tourism sector in each region also has its own characteristics and uniqueness in social, cultural, historical and educational aspects (Harahap & Rahmi, 2020). That is why Indonesian tourism is very popular with tourists, both domestic and international. The number of domestic tourist visits per year in 2023 reached 7,518,895 trips. Meanwhile, foreign tourist visits to Indonesia amounted to 11,677,825 trips (Central Bureau of Statistics, 2024). In addition, the growth of the tourism sector also has a significant contribution to the national GDP reaching 3.8% and the foreign exchange value as of September 2023 was recorded at USD 10.46 billion (Ministry of Tourism and Creative Economy of the Republic of Indonesia, 2023).

However, the success of the development of the tourism sector is not only measured by the number of tourist visits but there are various other aspects that

^{*}Corresponding Author: kusumantoro78@mail.unnes.ac.id

influence it such as political, economic, social, technological, legal and environmental conditions (Herawati et al., 2023). For example, the decline in the tourism sector during the Coronavirus Disease (COVID-19) pandemic which caused a decrease in the level of tourist visits, increased operational costs to the policy of refocusing the budget diverted to the health sector (Pambudi et al., 2020). This is due to the government's policy that tourist destinations must be based on digital technology in various forms of services to reduce physical contact between tourists (Sutrisno, 2021).

Not only that, the Indonesian economy has also experienced a drastic decline. In addition, there are other conditions of global uncertainty such as the Russia-Ukraine war, rising interest rates and so on that affect the growth of the tourism sector (Hasyim & Putra, 2023; Anwar, 2022). The strength of competitiveness and resilience in each tourist destination supported by synergy between stakeholders at the central and regional levels is one of the important indicators in creating empowerment of the tourism sector (Tiara & Mas'udi, 2023; Hutabarat, 2022). Therefore, the development of the national tourism sector is currently directed at the concept of sustainability.

Innovation and creativity are needed to maintain the stability of tourism development, especially at the regional level. The condition of global uncertainty must be addressed with great caution, making appropriate policies and decisions that are able to mitigate risks/externalities to a minimum. For example, every tourist attraction during COVID-19 is advised to be digital-based starting from the ticketing system, information communication, reservations and so on. Not only that, tourism managers are also advised to provide various supporting facilities such as sanitation facilities, waste disposal systems, waste management, provision of clean water, medicines, personal protective equipment such as masks, gloves and so on. Certainly, the operational burden will be large and if not anticipated in the long term will cause negative externalities that will lead to the closure of tourist attractions, default, bankruptcy and so on.

The concept of sustainable tourism is the government's focus in anticipating global uncertainty. Preparing various strategic steps to support tourism development in order to have a large multiplier effect on national and regional development. Sustainable tourism is an effort taken by the government by optimizing tourism sector resources in various lines for the long term (Özgit & Öztüren, 2021). The aspects of anticipation, technology optimization, risk management, innovation and tourism resilience are inseparable parts (Ilkhanizadeh, 2021). The concept of sustainability also includes 3 main aspects, namely economic, social and environmental (Pujiati et al., 2023).

One of the potentials for sustainable tourism based on natural resources is the Area of Mina Mangrove in Tunggulsari Village, Pati Regency. The number of tourists per 2022 is the 1st largest in Pati Regency, namely 216,920 visits (Central Bureau of Statistics of Pati Regency, 2024). In 2018, Tunggulsari Village was also designated by the Ministry of Maritime Affairs and Fisheries as one of the largest national saline tilapia cultivation centers (Pati Regency Government, 2018; Marta, 2018).

Table 1. Tourist Attraction Visits According to Tourist Objects in Pati Regency 2021-2022

Attractions Acco	Number of Visitors to Tourist Attractions According to Tourist Attractions	
2021	2022	
15800	50000	
	Attractions Acco Attrac 2021	

Pancur Cave	1500	6260
Wareh Cave	7949	22980
Pancasila Jrahi Tourism Village	18326	16746
Jollong Gardens Agrotourism	83838	71819
Banyutowo Beach	-	-
Edu Agroeduforestry Resort (EAR) Regaloh	370	4406
Kayen View Hill	3351	3388
Lorodan Semar	1359	2730
Idola Beach	7200	-
Talun Tourism Village	4783	17995
Arga Pesona Beketel	693	-
Dam Tepus	763	4468
Bageng Tourism Village	3016	4131
Tunggulsari Tourism Village	83778	216920
Pesona Gunungsari	941	-
Seloromo Reservoir	18055	58995
Kertomulyo Beach	52441	43131

Source: Central Bureau of Statistics of Pati Regency (2024)

In the ticketing system, the Tourism Awareness Group (Pokdarwis) and Village-Owned Enterprises (BUMDes) in managing the Area of Mina Mangrove tourism are able to achieve a turnover of up to 100 million rupiah per month. Meeting room rental facilities, kiosk rentals are also active business fields. However, the high number of tourist visits only stopped until May 2022. This was because in that month there was a tidal wave that damaged the mangrove ecosystem, causing damage and neglect of all facilities, infrastructure, photo spots and so on. Since then, the tourism sector of the Area of Mina Mangrove has experienced a sluggish and weak phase. Economic income in the tourism sector has also decreased drastically, even though this sector was initially the livelihood of the majority of the local community.

Based on this, the main problem faced by the tourism sector, especially the Area of Mina Mangrove, is the condition of global uncertainty such as in the aspects of Politics, Economy, Social, Technology, Legal and Environment or often known as PESTLE. The urgency of this research is the need for an external condition analysis model in efforts to develop sustainable tourism in the Area of Mina Mangrove which includes aspects of Politics, Economy, Social, Technology, Legal and Environment or often known as PESTLE. This is so that the long-term planning system in managing the sustainable tourism sector can be anticipated so that the impact of negative externalities can be minimized as optimally as possible.

Methodology

This study uses a qualitative approach. Qualitative methodology is stated as a research procedure that produces descriptive data in the form of written or spoken words from people being observed (Moleong, 2012). The focus of this study is to identify and analyze external conditions related to the development of tourism in the Area of Mina Mangrove, Pati Regency using the PESTLE (Politic, Economic, Social, Technology, Legal and Environment) approach. Qualitative research is very appropriate

because it is more exploratory and flexible, especially in conducting PESTLE analysis. Researchers can explore contextual data intensively and comprehensively, understand perceptions and views in research objectives.

In addition, this study also aims to formulate a strategy for developing sustainable tourism in the Area of Mina Mangrove, Pati Regency. In this study, the validity of the data to be used by researchers is by using source and technique triangulation techniques. While data analysis in this study uses the Miles & Huberman model. In conducting data analysis, there are several steps taken, namely: 1) Data reduction, 2) Data presentation and 3) Drawing conclusions. Through interview techniques, observation and documentation will provide its own convenience for researchers to understand the relevance, relevance and explore comprehensively holistically between PESTLE.

The data source comes from the results of interviews with key informants who understand external conditions (political, economic, social, technological, legal and environmental). The main informants are the administrators of the Tourism Awareness Group (Pokdarwis), administrators of Village-Owned Enterprises (BUMDes), the surrounding community and the Head of Tunggulsari Village, Pati Regency. Supporting informants in this study are parties who provide information to complement the information provided by the main informants, including the Pati Regency Youth, Sports and Tourism Office, the Pati Regency Regional Development Planning, Research and Innovation Agency, the Pati Regency Cooperatives and UMKM Office and several other related stakeholders.

Results and discussions Results

Politic (P)

This study refers to PESTLE Analysis (Politics, Economics, Social, Technology, Legal and Environment). In the Political (P) analysis, the benchmarks studied are related to politics, law, fiscal and monetary policies, national stability, corruption and trade wars. Government policies at the central and regional levels play a significant role in the development of the Area of Mina Mangrove Tunggulsari, In 2020, the local government through the Provincial Assistance (Banprov) scheme was used for infrastructure development in the form of meeting halls/halls, tracking/access, parking lots and so on. In addition, the central government through the Ministry of Maritime Affairs and Fisheries is also making efforts in the development of sustainable tourism based on tourist bridges. In addition, through the village government, several supporting tourism facilities have also been built to complete the tourism infrastructure ecosystem. Over time, the attention of various agencies in the development of Tunggulsari has also begun to be massive, both from the government, academics, companies and so on. After the high tide in May 2022, the Political aspect also played an important role in rebuilding the mangrove ecosystem. Building and repairing various facilities and supporting tourism facilities.

Economic (E)

In the Economic (E) analysis, it is closely related to tourist satisfaction supported by various indicators including the availability of complete supporting facilities, the charm of natural beauty, hospitality in service and so on. Tourists who are satisfied and not bored with a tourist destination will encourage return visits in the future. Indirectly, it will also provide insight into their travel experiences to others. The more

tourist visits, the more income and economic aspects of tourism will increase. However, this has experienced significant obstacles. Since the high tide in May 2022, tourism activities have weakened. The decline in the spirit of tourism awareness by the community, group participation has decreased, damage to infrastructure and various supporting media for tourism have become obstacles in themselves. As a result, village income from tourism has decreased drastically. Efforts to increase innovation, creativity with the expansion of cross-sectoral cooperation are very important to rekindle the spirit of tourism development in the Area of Mina Mangrove. Involving various cross-sectoral, community, companies, academics and others to jointly build a tourism ecosystem.

Social (S)

Social (S) analysis includes social aspects ranging from lifestyle, population, education, demographics, history and culture. The majority of the population of Tunggulsari Village work as pond farmers, tilapia fish farmers and entrepreneurs. This is due to its strategic location close to the coast of the Java Sea, making the marine and fisheries sector a priority for regional development. In addition, in 2018 the government through the Ministry of Marine Affairs and Fisheries also designated Tunggulsari Village, Tayu District, Pati Regency as one of the national tilapia fish farming centers. In the field of community empowerment, in accordance with the policy direction in the 2020-2026 Tunggulsari Village Medium-Term Development Plan (RPJM), including for economic business training, increasing community capacity and training to improve HR competency. The potential of the marine and fisheries sector by being integrated with the tourism sector into a single unit that has the potential for great opportunities in regional development.

Technology (T)

Meanwhile, in the Technology (T) analysis, obstacles such as less adaptive HR competencies are a separate obstacle. Currently, regional development is directed at a sustainable basis by utilizing digital technology as a medium of communication, public information, marketing, research and development and other forms. The low level of digital literacy, especially since the tidal wave in May 2022, has become an obstacle to the development of tourism in the Area of Mina Mangrove. The enthusiasm of the community in building the village has been eroded and must be optimized immediately. The role of youth elements, such as Karang Taruna, is very important as the vanguard in optimizing this Technology (T) aspect.

Legal (L)

Legal Analysis (L) that is compiled includes anti-monopoly, employment, Copyright, data protection, health and data security. Although some regulations are good at the village and district government levels, due to the global uncertainty conditions, it is more directed at how the resilience efforts of each community to continue to rise, innovate and create. More on the efforts and internal factors that exist in the community. A special regulatory scheme is needed in the development of sustainable tourism, especially those damaged by natural disasters.

Environment (E)

Next is Environment (E) which is an important priority in the development of the Area of Mina Mangrove Tunggulsari. The location of the Tunggulsari Village area which

borders directly on the Java Sea creates challenges as well as opportunities. The challenge is when there is a tidal wave which results in a natural disaster. While the opportunity is to be able to package this potential into an attractive natural tourism package, one of which is with the concept of a mangrove area. Mangrove forests have many benefits including protecting the coast from erosion, abrasion, being an ecosystem for various species of animals and fish, preventing seawater intrusion and being able to filter waste and a source of income for coastal communities. Some indicators of Environment (E) are climate change, the concept of reduce-reuse-recycle, waste management and air pollution and sustainability.

Strong mangrove roots are able to bind coastal sediment, preventing it from being carried away by ocean currents and waves. In addition, the coastline will be maintained and able to minimize damage due to storms or extreme weather. The ecosystem of marine animals such as fish, shrimp and shellfish can also be an opportunity for economic income for the surrounding community. The presence of mangroves will also prevent seawater intrusion, thus maintaining the quality of groundwater so that it remains fresh. Ocean waves can also be dampened through an optimal mangrove ecosystem. In addition to tourism, efforts to increase community productivity by utilizing mangroves into various food products, creative economy, crafts and others can also be done. Therefore, mitigation of the risk aspect of the Environment (E) analysis is very important in the management of sustainable tourism in the Area of Mina Mangrove, Pati.

Discussions

Sustainable tourism refers to the development of an integrated and long-term tourism sector that balances economic, social and environmental goals. This concept is very relevant to be implemented in the development of the Indonesian tourism sector, including in the Area of Mina Mangrove, Pati Regency. The elements of sustainability include 3 (three) important things related to economic, social and environmental interests. In addition, efforts to develop sustainable tourism must also pay attention to several important external aspects, including Politics, Economics, Social, Technology, Legal and Environment (PESTLE) (Fasa et al., 2022; Mahadiansar & Aspariyana, 2020; Saragih, 2023). Mapping of external conditions and data analysis are carried out in an integrated, continuous and comprehensive manner.

Research that has been conducted on the Indonesian tourism sector shows that the concept of sustainable development or often known as sustainable tourism is important and strategic. Furthermore, research from other researchers shows that there are several aspects that influence the development of the tourism sector (Streimikiene et al., 2021). The COVID-19 pandemic is a real condition of how it affects the readiness of tourism managers. Those who have preparedness are able to adapt well, while those who do not will end up experiencing losses (Sugihamretha, 2020). Climate change, geographic factors, and disaster risks must also be addressed proactively to ensure resilience in tourism development. These conditions affect the national economy, especially the Indonesian tourism sector (Fairuuz et al., 2022; Dewi, 2021). In addition, elements of climate change, geographic location and natural disaster risks must also be anticipated as optimally as possible.

Furthermore, the 4A approach consisting of Attraction, Amenity, Accessibility and Ancillary is an effective framework model in managing tourist destinations. Every tourist attraction must have a 4A framework in its management so that it can increase tourism development and become a factor in increasing tourist appeal (Sulami Wibowo, 2023; Nugraha et al., 2022). In the Attraction study, the Area of Mina

Mangrove before the 2022 natural disaster was a very beautiful and cool mangrove ecosystem. The mangrove ecosystem is home to various types of animals, both those that live on land and in water. Some examples of animals that are commonly found in mangrove areas are crabs, various types of fish and birds. However, after 2022 the Attraction study was no longer found because the expanse of natural beauty had been damaged.





Source: (Personal Documentation, 2025) **Figure 1.** Condition of Area of Mina Mangrove After High Sea Wave

Meanwhile, Amenity is also no longer available. Several indicators in amenity are facilities available to support tourism activities such as places to eat, toilets and so on. The existing conditions in the field are currently found that Amenity is no longer functioning properly, damaged and neglected. Meanwhile, in Accessibility, such as ease of access to tourist destinations, the availability of transportation in the Area of Mina Mangrove is also damaged. Many roads are full of holes and inundated with sea water, muddy and several other obstacles. Tourists are reluctant to visit because of the condition of the roads that are inundated with sea water, which causes corrosion of iron in vehicles, slippery and others. Finally, Ancillary such as services to support tourism activities such as information services, tour guides and security. This condition has also not been available properly since May 2022 because the interest, attention, and public awareness in managing the Area of Mina Mangrove have decreased drastically.

Novelty of Research

The novelty of this research is integrating external aspects such as political, economic, social, technological, legal/legal and environmental conditions into the development of sustainable tourism towards the tourist destination of Area of Mina Mangrove, Pati Regency. This PESTLE analysis aims to mitigate and form risk management from the start so that it can minimize undesirable conditions towards the development of the tourism sector of Area of Mina Mangrove, Pati Regency.



Source: (Author's Illustration, 2025) **qure 2.** Sustainable Tourism Development Model for Area of Mina

Figure 2. Sustainable Tourism Development Model for Area of Mina Mangrove, Pati Regency: PESTLE Analysis Approach

Conclusions

The combination of natural balance in tourism development by carrying the concept of economy, social and environment. The concept of sustainable tourism is an effort to develop the tourism sector which has a major role in national development must be carried out synergistically, collaboratively, proactively, integratively, integrated, systematically, continuously and sustainably. Starting from the elements of the village, regional and central government, active community involvement and mutual cooperation, expansion of cooperation with various companies and academics are very necessary. Including in handling problems and the realization of sustainable tourism in the Area of Mina Mangrove, Pati Regency, this is also the case. It cannot stand alone, it must work together intensively.

The strategic location of Tunggulsari Village with the tourism potential of the Area of Mina Mangrove it has is a challenge as well as an opportunity in itself. Stakeholders must be able to analyze various external conditions including Politic, Economic, Social, Technology, Legal and Environment (PESTLE) in tourism development because all of these indicators are interrelated with each other. Research findings show that the Environment (E) indicator plays a very big role. This is because the area is directly adjacent to the Java Sea, so environmental analysis including natural disasters, disaster risk mitigation, innovative and creative efforts, community responsiveness is very necessary.

The development of mangrove ecosystems is a priority in itself because it has various long-term benefits, which will also play a major role in realizing sustainable tourism. Mangroves can be the front line in overcoming disaster risks such as erosion, abrasion, seawater intrusion and so on. In addition, environmentally friendly technology and innovation of breakwater systems such as hybrid engineering can be an anticipatory option in dealing with these marine disasters. Intensification of cooperation with various partners is very important to do. Therefore, Political (P) analysis is also very related to the development of tourist areas supported by other related analyzes. Assistance and training in efforts to improve the competence, capabilities and skills of the surrounding community, tourist groups in efforts to develop sustainable tourism are very necessary.

Suggestions for further research are to identify which parties (stakeholder engagement) have significant roles and contributions in the development of sustainable tourism, especially in the Area of Mina Mangrove, Pati Regency.

Intensification of roles and real contributions is also very necessary so that tourism development can run optimally. Studies on environmental analysis must also be more comprehensive to determine its effectiveness and efficiency in disaster risk management, especially in coastal tourism areas/destinations that are directly adjacent to sea water activities such as the Area of Mina Mangrove.

References

- Anggara, B., Taufik, M., & Mandala, O. S. (2024). Eksplorasi Potensi Pengembangan Wisata Alam Menggunakan Pendekatan 4A dalam Mendukung Pariwisata Berkelanjutan. *TOBA: Journal of Tourism, Hospitality and Destination*, 3(2), 33-39.
- Anwar, M. (2022). Green economy sebagai strategi dalam menangani masalah ekonomi dan multilateral. *Jurnal Pajak Dan Keuangan Negara (PKN),* 4(1S), 343-356.
- Central Bureau of Statistics of Indonesia. (2023). *Statistik Indonesia 2023.* Jakarta: Central Bureau of Statistics of Indonesia.
- Central Bureau of Statistics of Indonesia. (2024). *Jumlah Kunjungan Wisatawan Mancanegara per bulan ke Indonesia Menurut Pintu Masuk, 2017 sekarang (Kunjungan), 2023.*
- Central Bureau of Statistics of Pati Regency. (2024). *Jumlah Pengunjung Tempat Wisata Menurut Objek Wisata 2020-2022*.
- Dewi, N. M. T. (2021). Perlindungan Hukum Pramuwisata Yang Tidak Berlisensi. *Jurnal Analisis Hukum*, 4(1), 79-88.
- Fairuuz, N., Nofrian, F., & Desmintari, D. (2022). Peranan Jumlah Wisatawan Asing, Nilai Tukar, dan PMDN dalam Sektor Pariwisata terhadap Pendapatan Devisa Pariwisata Indonesia. *Jurnal Indonesia Sosial Sains*, 3(04), 694-707.
- Fasa, A. W. H., Berliandaldo, M., & Prasetio, A. (2022). Strategi pengembangan desa wisata berkelanjutan di Indonesia: Pendekatan analisis PESTEL. *Kajian*, 27(1), 71-88
- Government of Pati Regency. (2018). *Pati Pembudidaya Nila Salin Pertama Terbesar di Indonesia.*
- Harahap, S. A., & Rahmi, D. H. (2020). Pengaruh kualitas daya tarik wisata budaya terhadap minat kunjungan wisatawan nusantara ke kotagede. *Gemawisata: Jurnal Ilmiah Pariwisata*, 16(2), 118-129.
- Hasyim, F. A., & Putra, F. K. (2023). Prediksi Ancaman Resesi terhadap Ekonomi Makro Indonesia. *Jurnal Ilmiah Penalaran dan Penelitian Mahasiswa*, 7(1), 194-202.
- Herawati, A. R., Widowati, N., & Astuti, R. S. (2023). Inovasi Pelayanan Publik Dalam Pengembangan Pariwisata di Kabupaten Bintan. *Jurnal Good Governance*, 80-91.
- Hutabarat, G. F. I. (2022). Arah Kebijakan Luar Negeri Indonesia Pasca Perang Rusia-Ukraina Berdasarkan Perspektif National Interest. *Jurnal Al Azhar Indonesia Seri Ilmu Sosial e-ISSN*, 2745, 5920.
- Ilkhanizadeh, S. (2021). Sustainable tourism and the role of stakeholders in North Cyprus: a literature review. *Worldwide Hospitality and Tourism Themes*, 13(4), 468-475.
- Mahadiansar, M., & Aspariyana, A. (2020). PEST Analysis Model dalam Pengembangan Potensi Wisata Pulau Benan, Kabupaten Lingga, Kepulauan Riau. *Indonesian Journal of Tourism and Leisure*, 1(1), 14-25.
- Marta, M. F. (2018). *KKP Dorong Kabupaten Pati Jadi Kawasan Budidaya Nila Nasional.* https://www.kompas.id/baca/ekonomi/2018/08/04/kkp-dorong-kabupaten-pati-jadi-kawasan-budidaya-nila-nasional. Accessed on 01 May 2025.

- Ministry of Tourism and Creative Economy of of Indonesia. (2023). *Jumpa Pers Akhir Tahun, Kemenparekraf Paparkan Capaian Kinerja di Sepanjang 2023*.
- Moleong, L. J. (2012). *Qualitative Research Methodology*. Bandung: PT Rosdakarya.
- Özgit, H., & Öztüren, A. (2021). Conclusion: how could tourism planners and policymakers overcome the barriers to sustainable tourism development in the small island developing state of North Cyprus?. *Worldwide Hospitality and Tourism Themes*, 13(4), 545-552.
- Pambudi, A. S., Masteriarsa, M. F., Wibowo, A. D. C., Amaliyah, I., & Ardana, A. K. (2020). Strategi pemulihan ekonomi sektor pariwisata pasca Covid-19. *Majalah Media Perencana*, 1(1), 1-21.
- Pujiati, A., Feronica, S. M. F., & Ridzuan, A. R. (2023). Measurement of The Role of Innovation in Increasing Environmental Performance Index: Empirical Study in Developed and Non-Developed Countries. *International Business and Accounting Research Journal*, 7(1), 18-36.
- Saragih, R. (2023). Usulan Model Strategi Dengan Pestle Framework Dan Vrio Framework Pada Industri Pariwisata. *Jurnal Ilmu Manajemen METHONOMIX*, 6(1), 1-13.
- Streimikiene, D., Svagzdiene, B., Jasinskas, E., & Simanavicius, A. (2021). Sustainable tourism development and competitiveness: The systematic literature review. *Sustainable development*, 29(1), 259-271.
- Sugihamretha, I. D. G. (2020). Respon kebijakan: Mitigasi dampak wabah Covid-19 pada sektor pariwisata. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, 4(2), 191-206.
- Sutrisno, E. (2021). Strategi Pemulihan ekonomi pasca pandemi melalui sektor UMKM dan pariwisata. *Jurnal Lemhannas RI*, 9(1), 167-185.
- Tiara, D. T., & Mas' udi, S. Y. F. (2023). Diplomasi Indonesia dalam Konflik Rusia-Ukraina: Sebuah Kajian Tentang Soft-Power. *Journal of Political Issues*, 4(2), 74-88.