

Analysis of The Sustainability of The Ecology Dimension to the Development of Halal Tourism in Banyuwangi Regency

Dini Nafisatul Mutmainah*¹, Muksin², Sri Sundari³, Ahmad Haris Hasanuddin Slamet⁴, Sekar Ayu Wulandari*⁵, Rahmat Dhandy⁶, Septine Brillyantina⁷, Asmunir⁸

{dini.nafisatul@polije.ac.id¹, muksin@polije.ac.id², sri_sundari@polije.ac.id³}

Departement of Agribussines Management, Politeknik Negeri Jember, Jember, Indonesia^{1,2,3}

Abstract. This objectives of this study were to identify halal tourism's sustainability status and formulate models of the ecological dimension of halal tourism's sustainability in Banyuwangi. The analytical tool used in this paper was Multi-Dimensional Scaling analysis (MDS) to identify the sustainability status of halal tourism. Data was obtained through observation, surveys, expert interviews, and documentation. The ecological analysis showed that the environment on the island of Santen, which was used for halal tourism in the Banyuwangi Regency, was pretty good. This point was supported by the analysis value of 59.5. Then, based on further analysis, the most significant factor that affected the ecological attributes was the opening of new land, with a value of 4.86. The highest attribute value was the potential for opening new tourist areas. This attribute was one that needed attention for the sustainability of halal tourism.

Keywords: Halal Tourism, Multi-Dimensional Scaling (MDS), Banyuwangi Regency, Santan Island, Sharia Beach

1 Introduction

Indonesia is a country that has abundant natural resources, as evidenced by the fact that most of its territory is an archipelago. Indonesia has 17,504 islands spread over 32 provinces. Given Indonesia's potential for natural resources, the tourism industry holds great promise and offers excellent growth potential. Research from the Bank of Indonesia revealed that tourism has grown to be the nation's most significant contributor to foreign exchange [1]. The total foreign exchange earned by the country from tourism in 2019 was Rp 248,987,200,000. This enormous amount demonstrates that the tourism sector in Indonesia has vast potential to contribute significantly to Indonesia's foreign exchange earnings [2].

Marine tourism has become one of Indonesia's most prominent tourism industries. This condition is increasingly supported by the potential of Indonesia's territory, which is primarily a marine area. Marine tourism is also a tourism sub-sector that contributes to foreign exchange for the country by increasing regional income. Marine tourism positively contributes to

positioning a spot as a tourist destination because marine tourism is unique among regions. Referred to in UU No. 10 of 2009, the types of marine tourism consist of tourism on the water and water sports, as well as the provision of other supporting facilities and infrastructure for commercial purposes in sea waters, rivers, lakes, and reservoirs [3].

Tourism has become a priority sector in national development, in addition to the agricultural, oil and gas, and mining industries. One of the government's seriousness in tourism development was shown by making tourism development plans in 2015–2019. Halal tourism segmentation is essential to realizing development plans, which are widely known and have even become a tourist trend. This segmentation provides unique services to Muslim tourists while traveling. This service is in the form of tourist comfort services that maintain Islamic sharia, such as by providing halal drinks and food, adequate prayer facilities, and others [4].

With the support of many Indonesian Muslims, halal tourism's potential is getting stronger. Indonesia, home to the world's largest Muslim population, was named the number one halal tourist destination in 2019. This value is based on calculations from the Global Muslim Travel Index (GMTI). The highest score achieved by Indonesia as a halal tourism destination demonstrates the efficacy of government programs related to the development of halal tourism. Halal tourism continues to expand at a rapid rate. The Muslim population becoming a religious community, the increase of the middle class in Muslim-majority countries (such as Indonesia and Malaysia), and the growth of Muslim millennials who can determine the future of halal tourism are all contributing factors to its expansion. The halal tourism market has the highest growth rate of any global tourism sector. [5].

In 2019, Indonesia ranked first on the Mastercard-Crescent Rating Index "Global Muslim Travel Index" (GMTI). Indonesia also established new halal tourism at the same time, notably on Sharia Beach on Santen Island, located in Karangrejo Village, Banyuwangi Regency, East Java [6]. Banyuwangi is also one of the most popular tourist destinations in East Java. The development of tourism is a severe concern for Banyuwangi Regency. The Sharia Beach on Santen Island is the first beach with a halal or sharia-based tourism concept in Banyuwangi. For the Muslim community, in particular, this halal or sharia label has religious significance. The concept of "halal" or "sharia" tourism refers to Islamic sharia-compliant tourism. The separation of male and female visitors, the availability of mosques as places of worship, and the provision of halal food are all examples of how Islamic Sharia is being implemented on Santen Beach [7].

Mr. H. Abdullah Azwar Anas established Santen Island as a Sharia Beach or halal tourism destination in the Banyuwangi Regency. Given that most of Indonesia's population is Muslim, halal tourism presents a significant opportunity and can boost the income of the lower middle class. Based on the economic expansion of Banyuwangi Regency, Sharia Beach on Santen Island has had halal tourism since early 2017. However, it has not yet been fully developed [8]. This condition is also reinforced by the results of surveys and interviews conducted by Alim et al., where halal tourism experienced a decline in visitors and halal tourism facilities even though it had been running for approximately two years [9].

Banyuwangi County Cultural and Tourism Service has removed many chairs and umbrellas from Sharia Beach on Santen Island due to a lack of concern from all members of the Tourism Awareness Group for Halal Tourism regarding their maintenance. Many chairs and umbrellas on Sharia Beach on Santen Island have been taken back by the Banyuwangi County Cultural and Tourism Service because no one in the Halal Tourism Awareness Group cared about keeping them in good shape. Since last year, Sharia Beach on Santen Island has added facilities,

such as wind chairs, for halal tourists. However, the manager has not previously utilized them as tourist attractions. In this instance, a sustainable development strategy was required to facilitate the growth of halal tourism. To assist and support the successful development of halal tourism on Santen Island, the community surrounding halal tourism on Santen Island's Sharia Beach must be environmentally conscious. It includes the government, the private sector, and village communities. This study's objectives were to identify halal tourism's sustainability status, formulate models and scenarios for the development of halal tourism sustainability in Banyuwangi, and determine the priority attributes of the ecological dimension.

2 Method

Santen Island's Sharia Beach, located in Karangrejo Village, Banyuwangi Regency, East Java, was chosen as the research site due to its halal tourism potential. This research was undertaken between January and May 2021 to identify the essential characteristics for formulating strategies or policies for the sustainable growth of halal tourism in Banyuwangi Regency.

This research employed both quantitative and qualitative methods (mixed methods). This qualitative approach aimed to explain or describe the actual state of the situation or object and what it is, as well as to clarify the study findings. While quantitative methods were used to examine specific populations and samples, collect data utilizing research instruments, and analyze quantitative or statistical data, qualitative methods were used to examine specific populations and samples, collect data utilizing research instruments, and analyses qualitative data (numbers) [10].

This study's sample was selected using a technique known as purposive sampling, in which the researcher purposefully selected the respondents (experts). It was a sampling approach that considered specific considerations so that the sample might be employed as a respondent (expert) [11]. This study sampled the Head of the Development and Management of Tourism Destinations at the Banyuwangi Regency Culture and Tourism Office, the Chairman of the Halal Tourism Awareness Group on Santen Island's Sharia Beach, and academics who understand tourism.

Multi-Dimensional Scaling (MDS) refers to the process of building a map to explain the location of an object relative to other objects depending on their similarity. Each attribute within each dimension is assigned a score based on the scorer's scientific assessment. The score goes from 1 to 3 based on the interpreted status of each attribute, from bad (1) to good (3). The score value is multidimensionally examined to determine one or more points that reflect the position of the sustainability of the development of halal tourism relative to two reference points, namely the excellent point and the bad point, which can be seen in **Figure 1** [12]. The following were some of the attributes of the ecological dimension in this study: tourism land management, clean water management; the potential for opening new tourist spots; tourism land areas; tourism land conservation; waste utilization; the utilization of natural resources; and the standardization of halal products.

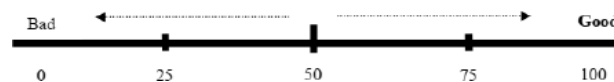


Fig. 1. Bad and Good Reference Points

In addition, the Ordination Analysis was performed utilizing the MDS approach, in which the horizontal and vertical axes represented the location of the sustainability point. By rotating the point, the sustainability index value might be displayed on the horizontal axis as a percentage between 0 (bad) and 100 (good). If the system's score on the sustainability index was more than or equal to 50% ($\geq 50\%$), it was considered sustainable. However, it was deemed unsustainable if the index value was below fifty percent (50%). As shown in Table 2 [13], the value of the sustainability index was calculated using a scale developed by the University of Columbia, Canada.

Table 2. Sustainability Status Category

Index Value	Category
0,00-25,00	Bad (unsustainable)
25,01-50,00	Less (less sustainable)
50,01-75,00	Enough (sustainable enough)
75,01-100,00	Good (very sustainable)

3 Results and Discussion

3.1. Santen Island

This halal tourism on Santen Island's Sharia Beach is located in Karangrejo Village, Karangnom Village, Banyuwangi City District, Banyuwangi Regency, which is also located in the Bali Strait. This island is called Santen Island because numerous coconut palm trees surround the shore. There is a river with a reasonably calm current flowing for about 2 kilometers on this island. This river, surrounded by mangrove forests, separates Banyuwangi from Santen Island, and a wooden bridge spanning the river makes the crossing to Santen Island convenient for tourists.

Before, the area around Karangrejo Village was known as one of the Pakem prostitution areas, and the gate to Santen Island Beach is not far from where the Pakem prostitution area used to be. However, the place has been officially closed since 2013. Santen Island Beach began to be developed as a halal tourist destination in Banyuwangi. It was done to alter the appearance of this area, formerly a slum and localization site. This idea arose when Regent H. Abdullah Azwar Anas met a businessman from Qatar who asked him, "Are there any beaches in Indonesia that have the concept of Shariah?" Given the size of the market, the idea arose to develop the concept of sharia tourism on Santen Island, so Santen Island Beach changed its name to Santen Island's Sharia Beach.

Given that most of Indonesia's population is Muslim, halal tourism represents a tremendous opportunity and can transfer the economy to the lower classes. Mr. Rais Aam, the Executive Board of Nahdlatul Ulama (PBNU), and Mr. KH. Ma'ruf Amin, General Chairperson of the Indonesian Ulama Council (MUI), visited Banyuwangi in mid-2016 to appreciate the idea.

Regent H. Abdullah Azwar Anas initiated this halal concept with the hope of becoming a Beach Club for Women or Sharia Tourism. This beach is deliberately and explicitly branded for women because it was intended to reach a broader market, namely women. The Banyuwangi

Regency Government slowly improved the area around Santen Island by doing things like taking down illegal buildings, painting the bridge to the beach in different shades of pink, building a prayer room out of bamboo, building toilets, planting flowers, and putting up colorful umbrellas for shelter, which can be seen in **Figure 2** [14].

This beach tourism destination, which is branded as halal tourism, was opened on March 2, 2017, as Santen Island's Sharia Beach. Halal tourism on Santen Island's Sharia Beach prioritizes things that are Islamic, from cleanliness, ethics, and manners to the culinary product sold [15].



Fig. 2. Santen's Island

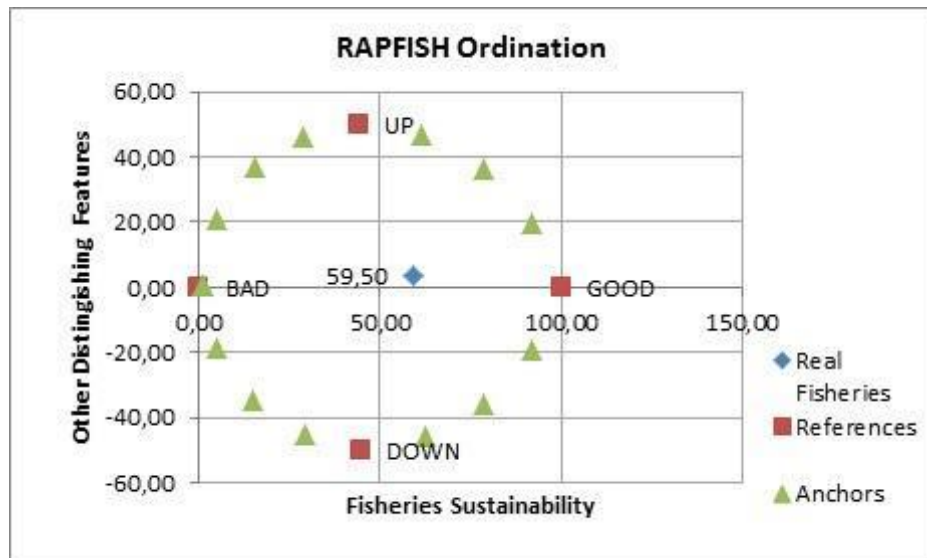
3.2. Identifying Sustainability Status Conditions

The sustainability analysis of tourism in Banyuwangi Regency was done to establish the sustainability status of halal tourism on Santen Island and Sharia Beach in Karangrejo Village, Banyuwangi Regency. According to the Ministry of Environment, the sustainability of development is founded on three criteria: 1) no waste of natural resource use; 2) no pollution and other environmental problems; and 3) activities must be able to increase usable or replaceable resources [16]. This study examines the sustainability of halal tourism on Santen Island's Sharia Beach in Banyuwangi Regency from various perspectives, most notably the ecological perspective, which is the most influential in terms of sustainability.

Ecological sustainability is essential for the growth and continuation of life. The earth's biosphere will be sustained by ecological sustainability. Efforts that can be made to ensure ecological sustainability include maintaining the integrity of the environmental order so that the earth's life support systems are protected and establishing systems for the productivity, adaptability, and restoration of soil, water, air, and all sustainable life [17]. Carrying capacity, assimilative capacity, and the sustainability of recovered resource utilization are three factors that must be considered to preserve the environmental order. These three factors are utilized to carry out actions that do not compromise the integrity of the environmental order and preserve the diversity of life that determines the viability of ecological processes.

There are three aspects of biodiversity: genetic diversity, species diversity, and environmental order. Environmental development management is vital for ecosystem sustainability. This management can be implemented by preventing environmental contamination, rehabilitating and restoring damaged ecosystems and natural resources, and boosting the productive capacity of natural and human-made ecosystems. The construction of a

development strategy for the sustainability of tourism in Banyuwangi Regency is based on a previously conducted sustainability study. The sustainability of halal tourism in Banyuwangi Regency based on the ecological dimension is depicted in **Figure 3**. **Figure 3** indicates that the halal tourism industry in Banyuwangi Regency is sustainable, with a value of 59.50.

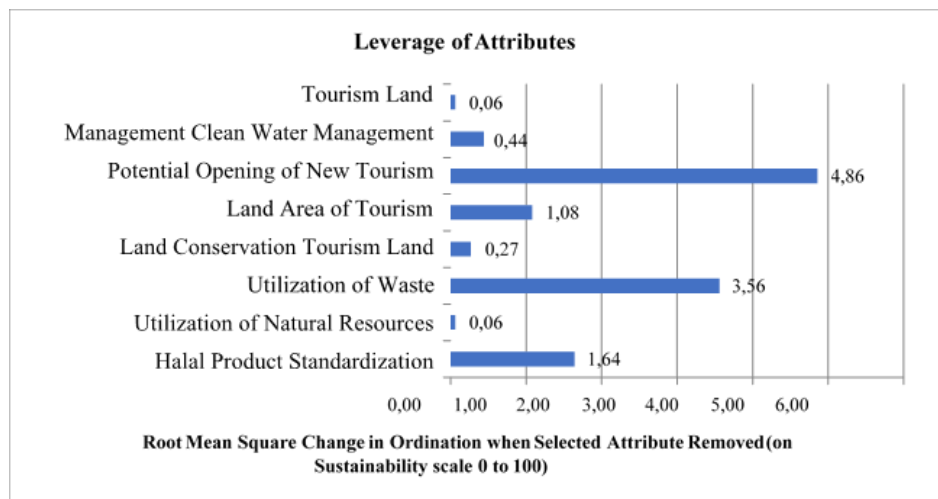


Source: Processed Data

Fig. 3. Sustainability Status Based on Ecological Dimension

3.3. Formulate Sustainability Development Models and Scenarios

The influence of each attribute on the ecological dimension on the sustainability of halal tourism in Banyuwangi Regency can be seen in the following **Figure 4**.



Source: Processed Data

Fig. 4. The Influence of Ecological Attributes on The Development of Halal Tourism

With a value of 4.86, **Figure 4** indicates that opening additional territory is the most influential factor affecting ecological features. Because opening new land will boost the resale value of halal tourism in Banyuwangi Regency, the land leverage factor is significant to the development of halal tourism. Developing new tourist lands will help stimulate economic expansion, particularly in Banyuwangi [18].

Halal tourism in Banyuwangi Regency has much potential that can still be developed further because halal tourism has a reasonably large grassland area. The view of the grass is magnificent enough to be used as a photo spot for tourists visiting halal tourism. The potential for tourist attractions will be enhanced by establishing attractive photo spots to optimize the number of tourists. With the development of social media platforms such as Instagram, photo spots have become part of what tourists consider when visiting. Photo spots can also be rented out for special events such as pre-weddings [19].

In their research, Najmi et al. explain that land suitability is a priority lever in the ecological dimension [20]. The success of sustainable development depends on regulating the land and water capacities according to the area's characteristics. Another lever factor is the utilization of waste, with a value of 3.86. Waste in the area of Santen Island that has great potential to be utilized is shell waste. Shell waste can be used as the main material for making handicrafts such as mementos and souvenirs for halal tourism on Santen Island's Sharia Beach. According to Choironi, this development program can reduce shell waste and some shell waste disposal sites on the coast [21].

Halal tourism on Santen Island's Sharia Beach has a youth group, Kelompok Pelajar Pulau Santen (PEPUSAN). The younger generation has implemented development programs utilizing potential shell waste in halal tourism. Due to the lack of attention and support from the Tourism Awareness Group, the Local Government, and the Central Government, both infrastructure and

materials, the activities were not running optimally. If this development is given more attention, halal tourism will receive many positive impacts and benefits.

4 Conclusion

The ecological analysis shows that the island of Santen and halal tourism in Banyuwangi Regency have a reasonably good ecological perspective. This point was supported by the analysis value of 59.5. Then, based on further analysis, the most significant factor that affected the ecological attributes is the opening of new land, with a value of 4.86.

The highest attribute value was the potential for opening new tourist areas that need attention for the sustainability of halal tourism. The opening of new tourist areas could attract tourists. The opening of a new tourist area that has the potential to be developed on the island of Santen is the opening of land for photo spots.

Based on the analysis given, the authors recommend that existing Banyuwangi Regency Government programs in counseling, training, empowerment, or social assistance be maintained by applicable legislation. So that it can be pursued to make halal tourism in Banyuwangi Regency more developed and efficient for the local community. It also exists as a destination for all tourist layers, especially foreign tourists. By sustaining and optimizing the initiatives of the Banyuwangi Regency Government, it is envisaged that halal tourism on Sharia Beach on Santen Island would grow more established and become one of the most popular tourist destinations.

References

- [1] A. A. Rahma, "Potential and Strategies for Developing Sharia Tourism in Banyuwangi (Potensi Sumber Daya Alam dalam Mengembangkan Sektor Pariwisata Di Indonesia)," *Jurnal Nasional Pariwisata*, vol. 12, no. 1, p. 1, Apr. 2020, doi: 10.22146/jnp.52178.
- [2] S. F. Handayani, "Effect of Selling Price and Promotional Costs on Revenue (Pengaruh Harga Jual Dan Biaya Promosi Terhadap Pendapatan)," *Jurnal Indonesia Sosial Sains*, vol. 1, no. 2, pp. 133–142, Sep. 2020, doi: 10.36418/jiss.v1i2.17.
- [3] Y. E. Nugraha and F. Lussie, "Development of Thousand Mouth Beach Marine Tourism as a Sustainable Tourism Attraction in Rote Regency, East Nusa Tenggara (Pengembangan Wisata Bahari Pantai Mulut Seribu Sebagai Daya Tarik Wisata Berkelanjutan Di Kabupaten Rote, Nusa Tenggara Timur)," *Journey : Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management*, vol. 2, no. 2, pp. 25–46, Jun. 2020, doi: 10.46837/journey.v2i2.46.
- [4] A. R. Subarkah, "Potential and Prospects of Halal Tourism in Improving Regional Economy (Case Study: West Nusa Tenggara) (Potensi dan Prospek Wisata Halal Dalam Meningkatkan Ekonomi Daerah (Studi Kasus: Nusa Tenggara Barat))," *JURNAL SOSIAL POLITIK*, vol. 4, no. 2, p. 49, Dec. 2018, doi: 10.22219/sospol.v4i2.5979.
- [5] Y. Patriella, "Indonesia is the World's Number One Halal Tourism Destination (Indonesia Destinasi Wisata Halal Nomor Satu Dunia)," *Ekonomi.bisnis.com*, Apr. 09, 2019. <https://ekonomi.bisnis.com/read/20190409/12/909546/indonesia-destinasi-wisata-halal-nomor-satu-dunia> (accessed May 26, 2022).
- [6] A. Fanani, "Banyuwangi Has Been Implementing Halal Tourism for 2 Years (Banyuwangi Sudah 2 Tahun Terapkan Wisata Halal)," *news.detik.com*, Feb. 27, 2019. <https://news.detik.com/berita-jawa-timur/d-4446543/banyuwangi-sudah-2-tahun-terapkan-wisata-halal> (accessed May 26, 2022).

- [7] A. Fawaid and J. Khotimah, "Public Perceptions and Attitudes towards Sharia Tourism (Halal Tourism) on Santen Island, Banyuwangi Regency (Persepsi Dan Sikap Masyarakat Terhadap Wisata Syariah (Halal Tourism) Di Pulau Santen Kabupaten Banyuwangi)," *Al-Banjari : Jurnal Ilmiah Ilmu-Ilmu Keislaman*, vol. 18, no. 1, p. 85, Jun. 2019, doi: 10.18592/al-banjari.v18i1.2532.
- [8] F. Hadi and M. K. H. Al-Asy Ari, "Study of Potential and Strategy for Development of Syari'ah Beach Tourism (Study on Santen Island, Banyuwangi Regency) (Kajian Potensi Dan Strategi Pengembangan Wisata Pantai Syari'ah (Studi di Pulau Santen Kabupaten Banyuwangi))," *Jurnal MD*, vol. 3, no. 1, pp. 99–116, Jul. 2017, doi: 10.14421/jmd.2017.31-07.
- [9] S. Alim, Z. Mukaffi, and M. N. Choiruddin, "Potential and Strategies for Developing Sharia Tourism in Banyuwangi (Potensi dan Strategi Pengembangan Wisata Syariah di Banyuwangi)," in *1st Annual Conference on IHTIFAZ: Islamic Economics, Finance, and Banking (ACI-IJIEFB) 2020*, 2021, pp. 307–342.
- [10] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, 2nd ed. Bandung: CV Alfabeta, 2021.
- [11] M. N. Alizah and Mokh. Rum, "Marketing Performance and Development Strategy for Superior Hybrid Maize Madura MH-3 in Bangkalan Regency (Kinerja Pemasaran Dan Strategi Pengembangan Jagung Hibrida Unggul Madura MH-3 Di Kabupaten Bangkalan)," *AGRISCIENCE*, vol. 1, no. 2, pp. 448–463, Nov. 2020, doi: 10.21107/agriscience.v1i2.8177.
- [12] A. Susanto, "Institutional Analysis of Sustainable Situ Utilization Management (Case Study of Situ Kedaung, Pamulang District, South Tangerang) (Analisis Kelembagaan Pengelolaan Pemanfaatan Situ Berkelanjutan (Studi Kasus Situ Kedaung, Kecamatan Pamulang, Tangerang Selatan))," in *Prosiding Seminar Nasional FMIPA-UT 2015: Optimalisasi Peran Sains dan Teknologi Menuju Kemandirian Bangsa*, 2015.
- [13] I. Fidaruziar, N. Dwi Wahyono, Y. Wibisono, and N. Hasanah, "Sheep Farming Export Business Sustainability Strategy as an Export Commodity in Jember Regency (Strategi Keberlanjutan Usaha Ekspor Peternakan Domba sebagai Komoditas Ekspor di Kabupaten Jember)," *Jurnal Ilmiah Fillia Cendekia*, vol. 7, no. 1, p. 21, Mar. 2022, doi: 10.32503/fillia.v7i1.2311.
- [14] Y. Nurdianik, "Pantai Pulau Santen Jadi Wisata Syariah Pertama di Indonesia," *goodnewsfromindonesia.id*, Sep. 09, 2017. [https://www.goodnewsfromindonesia.id/2017/09/09/pantai-pulau-santen-jadi-wisata-syariah-pertama-di-indonesia\[03/11/202212:07:33\]](https://www.goodnewsfromindonesia.id/2017/09/09/pantai-pulau-santen-jadi-wisata-syariah-pertama-di-indonesia[03/11/202212:07:33])
- [15] N. I. Susanti, "Community Response to Sharia Beach on Santendi Island, Karangrejo Village, Banyuwangi (Respon Masyarakat Terhadap Pantai Syariah Pulau Santendi Kelurahan Karangrejo, Banyuwangi)," *Jurnal Istiqro: Jurnal Hukum Islam, Ekonomi dan Bisnis*, vol. 4, no. 1, pp. 18–13, 2018.
- [16] I. Firmansyah, "Model for Conservation of Rice Fields in the Citarum Watershed (Model Pengendalian Konservasi Lahan Sawah di dalam DAS Citarum)," Doctoral dissertation, Bogor Agricultural University, 2016. Accessed: May 26, 2022. [Online]. Available: <http://repository.ipb.ac.id/handle/123456789/82384>
- [17] I. N. S. Arida and I. N. Sunarta, *Sustainable Tourism (Pariwisata Berkelanjutan)*. Denpasar: Sustain-press, 2017.
- [18] D. Setiawan, "Tourism-Based Community Economic Development Strategy in the Bung Karno Tomb Area (Study in Sentul Village, Blitar City) (Strategi Pengembangan Ekonomi Masyarakat Berbasis Wisata Di Wilayah Makam Bung Karno (Studi di Kelurahan Sentul Kota Blitar))," *REVITALISASI: Jurnal Ilmu Manajemen*, vol. 7, no. 4, pp. 319–336, 2018.
- [19] R. Salambue, Fatayat, E. Mahdiyah, and Y. Andriyani, "Development of Tourism Object Attractions in Teluk Jering, Tambang District, Kampar Regency (Pengembangan Daya Tarik Objek Wisata Teluk Jering, Kecamatan Tambang Kabupaten Kampar)," *Jurnal Pengabdian Masyarakat Multidisiplin E-ISSN*, vol. 4, no. 1, pp. 9–18, 2020.

- [20] N. L. Najmi, al Jaktas, Suharno, and A. Fariyanti, "Sustainability Status of Sustainable Palm Oil Smallholder Nuclear Plantation Management in Trumon, South Aceh District (Status Keberlanjutan Pengelolaan Perkebunan Inti Rakyat Kelapa Sawit Berkelanjutan Di Trumon, Kabupaten Aceh Selatan)," *Forum Agribisnis*, vol. 9, no. 1, pp. 53–68, Mar. 2019, doi: 10.29244/fagb.9.1.53-68.
- [21] R. Choironi, "Community Empowerment Based on Local Potential Through Shell Shell Waste Treatment at PKBM Kridatama, Sendang Sikucing Village, Rowosari District, Kendal Regency (Pemberdayaan Masyarakat Berbasis Potensi Lokal Melalui Pengolahan Limbah Cangkang Kerang di PKBM Kridatama desa Sendang Sikucing Kecamatan Rowosari Kabupaten Kendal)," Universitas Islam Negeri Walisongo Semarang, 2018.