
ECO-TOURISM IN GEOPARK

Ifhazrin Nurjana¹⁾, Bilal Aditya Yuriadi²⁾

¹⁾Geological Engineering, Universitas Negeri Gorontalo
ifhazrin_s1geologi2019@mahasiswa.ung.ac.id

²⁾Geological Engineering, Universitas Negeri Gorontalo
Adityabilal321@gmail.com

A. Introduction

Indonesia is a world tourism paradise where many sectors have the potential to be used as eco-tourism or sustainable tourism. With 7 Geoparks that can be developed in eco-tourism, 3 world heritages, and there are also more than 50 national parks. The development of eco-tourism in a geopark is an effort that can develop resources not only natural resources but also human resources in the area around eco-tourism areas.

The development of eco-tourism in geoparks is one of the efforts that can be done in developing geological resources in the area so that they can be sustainable which can balance various aspects, namely, economic aspects, environmental aspects, and social aspects to the community around eco-tourism areas and local tourists as well as foreign tourists who come. Eco-tourism includes biodiversity, geological diversity, and cultural diversity that exist in eco-tourism areas, This potential is very strategic to support the geological. (Arifin et al, 2020).

With the existence of eco-tourism in Geoparks, it focuses on increasing economic activity in the community, can increase the level of education and knowledge of the community, get to know the culture of tourists visiting eco-tourism areas, and increase the interest of the surrounding community in preserving and maintaining the existing culture, as well as in social activities.

According to Iswara and Sathayasa (2021), Eco-tourism is a tourism activity that can preserve nature and protect it. Eco-tourism aims to create satisfaction with nature by conserving and preserving ecology that involves the active role of the community and tourists in the development of eco-tourism areas and the development of increasing tourism destinations in line with increasing natural tourism activities.

Eco-tourism Geopark that located in geological areas which can increase the attractiveness of tourists to an existing destination. The pace of the tourism sector is proven by the existence of a faster economic movement than other sectors.

Geopark is a particular geological heritage area by developing a sustainable area. Intending to develop existing natural and cultural tourism, a Geopark also includes a historical site, existing and protected plant and animal species. With the existence of historical monuments, archaeologists and architecture, existing customs and unique crafts in the Geopark area. These are a requirement to develop tourism that can benefit both economic and social aspects of the community (Nikolova and Sinnyovsky, 2019).

A Geopark approach is needed with a strong methodological approach likewise well-defined steps. Therefore, Geopark management can give more attention to the flora and fauna that exist in the Geopark area as well as existing cultural and archaeological sites because these areas are very vulnerable to human activities.

The main purpose of the Geopark is to protect, educate, research, and develop the economy of local communities, has benefits for scientific research that is important for the educational aspect, build and develop the economy of local communities. The existence of the Geopark creates a variety of jobs and new economic plans. Tourism development, as well as local crafts, can be favored. (Patzak & Eder, 1998).

B. Discussion

1. Popular Eco-tourism Geopark in Indonesia

1.1. Eco-tourism Area in Ciletuh Pelabuhan Ratu National Geopark

The eco-tourism area in the Ciletuh Pelabuhan Ratu National Geopark has become a popular Geopark tourist area in Indonesia and has received official recognition from the UNESCO Global Geopark (UGG) (Riyadi et al, 2019).

1.2. Eco-tourism Area in Gunung Sewu National Geopark

Gunung Sewu Karst Area is a region that has a unique landscape, so that, it can be appointed as one of the World International Heritages. Gunung Sewu Karst Geopark Area located in Gunung Kidul district has been appointed as GGN (Global Geopark Network) that was set by the Pacific Geoparks Network in Japan in 2015 (Tyas et al, 2016).

1.3. Eco-tourism Area in Rinjani National Geopark

Rinjani National Geopark area located in Lombok Island (NTB) is an area that has a lot of biological diversity (biodiversity), cultural diversity, and geological diversity (geodiversity). The geological diversity includes the presence of craters, calderas, craters, lakes, hot springs, waterfalls, caves, and volcanic cones and barajuri that often release new and pyroclastic lava flows. The Rinjani Geopark area is designated as UNESCO Global Geopark (Rachmat & Heryadi, 2016).

2. Eco-tourism Geopark Concept in Indonesia

Eco-tourism prioritizes environmental conservation and education as well as community benefits that must be developed to increase the industrial potential and sustainable regional development. By preserving cultural authenticity, uniqueness, typical culinary, and natural preservation (Sino et al, 2016).

The concept of eco-tourism in the Geopark itself seems to have the potential to generate significant revenue for the development of eco-tourism areas, as well as enable full community involvement in the planning, management, and implementation of eco-tourism businesses and all the benefits derived. This also requires an active role from the community because it is the people who have knowledge about nature and culture in the area which has potential as an attraction and selling point for tourists. The full involvement of the community is so important that it becomes an absolute must. The eco-tourism point of view is taken to coordinate tourism that is pro to local communities (Iswara & Santayayasa, 2021).

One of the reasons for the creation of a Geopark is as a form of awareness of the importance of tourism which can conserve a tourist spot. Therefore, sustainability and authenticity can be well maintained. Eco-tourism directly involves local communities as the main actor in tourism activities that are expected to increase the economic level of the local community. Not only that, but eco-tourism also requires an active role in empowering the local community to be more productive, creative, and innovative.

The concept of eco-tourism in Geopark itself is expected to be able to develop development as an effort in education, conservation, economic improvement, and community empowerment, as well as increasing awareness of the importance of preserving nature, culture, history, and culinary uniqueness.

The concept of eco-tourism in Geopark itself is expected to be able to enhanced development as an effort in education, conservation, improving the community economy, and empowerment. Also to increase public awareness of the importance of preserving nature, culture, history, and culinary uniqueness.

3. Eco-tourism Geopark Concept in Botubarani Village, Gorontalo

Botubarani village is located in Kabila Bone, Bone Bolango district that is 12 km away from the downtown. Botubarani is a tourist village that has quite a lot of demand among tourists because of its easy access. Botubarani village is one of the villages that has a coastal area that is used by the community (Sino et al, 2016).

Coastal areas that have beautiful beaches with clear, clean blue water, calm wave currents, and lots of sea glass found on the shoreline add to the exoticism of the beach. Botubarani beach also has a pier that is directly opposite Tomini Bay so that tourists can enjoy the beautiful sunset in the afternoon.

In addition to the beauty of the coast, Botubarani is also often visited by whale sharks (*Rhincodon typus*) which are found in the tourist area of Borubarani village. So that, it increases the interest of tourists who are curious to see this animal (Marsaoly et al, 2017). the presence of whale sharks in this coastal area surely can increase income for communities around the coast. The appearance of whale sharks is known by fishermen when they went to fishing, the appearance of whale sharks in the waters of Botubarani is caused by waste activities generated by companies that manage shrimp around coastal areas which invite whale sharks to come and use the waste of the heads and shells of the shrimp as food.

This absolutely makes the economic situation of coastal communities increase with the number of visitors who come. Supported by limpid beaches, making it easier for tourists to see, enjoy, and interact by feeding the whale sharks. There are three ways to see whale sharks in the Botubarani:

3.1. By Boat

One way for tourists to see whale sharks by boat is a suitable option for tourists. The boats used are boats owned by fishermen from coastal areas. With a maximum of three passengers and one tourist guide, tourists can chat and interact directly with whale sharks by feeding waste shells and shrimp heads to whale sharks. Usually, the whale shark is getting feed in the morning and evening.

3.2. Swimming/snorkeling

Aside from using a boat, to interact directly with whale sharks, there are also rental facilities in the form of snorkeling equipment provided by the village government to give more satisfaction to the tourist who comes and wants to had a swimming experience and see the existing whale sharks more closer

3.3. Diving

Besides snorkeling equipment, Botubarani Eco-tourism also provides diving equipment rental for tourists who want to experience more intensity to interact with the existing whale sharks. Hence, it can be more satisfying for tourists visiting the Botubarani eco-tourism village. The existing diving equipment is a tool provided by the Botubarani government to support the comfort of visiting tourists.

4. The Historical Site of Botubarani Village with the Human Skeleton or Skull Discovery

Besides the whale shark found around the Botubarani sea, there are also historical sites that have become folklore that developed in the local community. Make it an intangible heritage that has been inherited to posterity from time to time, that makes it doesn't get lost in time. Not only a tittle-tattle, but the Botubarani historical site turns out to have evidence of the discovery of human skulls and skeletons in the cave.

The legends and myths discussed are the existence of a young man who became a hero of the village. He fought the pirates who had colonized and killed many villagers in ancient times. Long before the colonial era, pirates from the Philippines come and kidnapped many young lady villagers. This disturbed the village community by the existence of the pirate group and caused unrest. And then, there's a brave young man who comes against the pirates and killed them. The dead bodies of the villagers were hidden in the cave. The brave young man was then given a nickname by the community as "Ti Barani" so that the village was also given the name "Botubarani". "Botu" itself has the meaning of stone while "Barani" means brave.

This is also a very good tourism potential with the theme of folklore which creates a mysterious atmosphere for the tourists. Hence, the tourists not only enjoy the beauty of coastal beaches, or the whale shark but also can find out more about the historical sites that became the origin of the Botubarani eco-tourism village. This absolutely can have an impact on the economic level of the local community in the Botubarani eco-tourism village.

Not only has a historical site, but the village government of Botubarani also makes various craft products with the theme of whale sharks so that they can increase the creativity of local communities and the community's economy in the product sector. Crafts made by the local community such as whale shark keychains that are made of wood carvings. Not only using wood as the main material, in making key chains, local people also use coconut shell material. In addition to key chains, there are also other handicrafts in the form of room decorations such as miniature whale sharks made of wood that are carved and shaped so that their shape can be the same as the whale shark which is one of the attraction objects.

Culinary tourism is also an opportunity for the community to earn income. Because culinary is also a primary need that humans need. Culinary tourism is one of the determining factors for determining or choosing a tourist destination. The food and drinks made are also regional specialties such as binte (corn soup), fried bananas, skipjack noodles, and goroho fried bananas.

The food and drink needs of local and foreign tourists are a great opportunity in increasing the economic level of the local community. so that in addition to being served with the beauty of the beach, tourists can also enjoy new experiences by trying various types of special foods in the village of botubarani. (Anugrah, 2018).

5. The Purpose of the Eco-tourism Geopark Destination in Botubarani Village, Gorontalo

Eco-tourism Geopark that developed in the Botubarani village is based on nature, environment, and local communities. Where not only expected in recreation, but domestic and foreign tourists also can enjoy the beauty of nature and mingle with the local community. But that's not all, tourists also get to know the culture, historical stories by visiting the Botubarani site, and enjoy the existing culinary. So, the tourist not only focuses on whale shark tourism but also has more memorable experiences from the botubarani eco-tourism village.

The eco-tourism village itself has a more detailed purpose than the usual tourist village or nature tourism, tourists will not only enjoy its natural beauty but can be educated about culture, customs, and things that become habits of local people in coastal areas. Therefore, it can introduce various kinds of culture and customs which later will be widely known by the general public. Inviting tourists and the community to jointly preserve the environment, resources that exist around eco-

tourism places. In addition, eco-tourism villages can also provide economic benefits for communities around Eco-tourism Geopark in Botubarani village.

6. The Benefits of Eco-tourism Geopark Destination in Botubarani Village, Gorontalo

Eco-tourism-based in Botubarani village Geopark has many benefits that are felt by the people in the village of Botubarani. The benefits for the community are not only in increasing economic income but also in terms of conservation, community empowerment, and environmental education

6.1. Conservation Aspect

In the conservation aspect, it has a close relationship with endangered animals, to preserve and increase biological empowerment and also to protect the nature and cultural heritage. With conservation, we also can provide an increase in effective economic incentives and provide tourism that has a positive correlation.

6.2. Community Development

Eco-tourism provides job opportunities for local communities in planning, organizing, and managing eco-tourism places that fully involve the role of local communities. Eco-tourism is an effective way to develop local community empowerment to break the ropes of poverty and improve living standards in tourist areas based on eco-tourism geopark.

6.3. Environmental Education Aspect

Eco-tourism must have experience which in this case should be in line with the awareness of tourists and local communities about the importance of protecting the tourism environment through interpretation. This must also be supported by providing proper understanding to local communities and tourists.

C. Conclusion

Indonesia is a world tourism paradise where many sectors have the potential to be made into eco-tourism or sustainable tourism, this supports ecotourism-based tourism activities in the Geopark, especially in the Gorontalo area. Which is expected can change people's lives to be better, and develop sustainable tourism-based tourism areas in Botubarani Village. By introducing the tourists not only the existing whale shark, but also the historical sites, cultural sites, and culinary specialties in Botubarani Village. So that, tourists are not just enjoying the beauty of nature, but also can learn about the cultural heritage and historical sites that exist. Therefore, it will give a great influence on the local community's welfare by increasing the economic aspect, creativity through various kinds of souvenirs, community empowerment, environmental education, and nature conservation.

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References

1. Anugrah, Krishna. 2018. Optimalisasi Usaha Kuliner di Obyek Wisata Hiu Paus Desa Botu Barani Kabupaten Bone Bolango, Gorontalo. Program Diploma Pariwisata Universitas Negeri Gorontalo. *Jurnal Pariwisata Pesona* Volume 03 No 2, 192-204.
2. Arifin, Y. I., Manyoe, I. N., & Napu, S. S. S. (2021, July). Geological study of Pantai Indah for geotourism development based on geological observation and assessment of science, education, tourism and the risk degradation. In *Journal of Physics: Conference Series* (Vol. 1968, No. 1, p. 012048). IOP Publishing.
3. Darsiharjo., Upi Supriatna., Ilham Mochammad Saputra. 2016. Pengembangan Geopark Ciletuh Berbasis Partisipasi Masyarakat Sebagai Kawasan Geowisata di Kabupaten Sukabumi. Program Studi Manajemen Resort & Leisure, Fakultas Pendidikan Ilmu Pengetahuan Sosial, Universitas Pendidikan Indonesia. *Jurnal Manajemen Resort dan Leisure* Vol.13, No.1, 55-60.
4. Iswara, I Putu Hindu. I Komang Gede Santhayasa. 2021. Evaluasi Daya Dukung Wisata di Taman Wisata Alam Sangeh, Bali. Program Studi Perencanaan Wilayah dan Kota, Fakultas Teknik, Universitas Hindu Indonesia. *Jurnal Riset Planologi* 2[1]:27-35.
5. Marsaoly, Muhammad Fajar., Marjan Bato., Nurhani Widiastuti. 2017. Manfaat Ekonomi Ekowisata Hiu Paus (*rhincodon typus*) di Kampung Akudiomi Distrik Yaur. Kabupaten Nabire

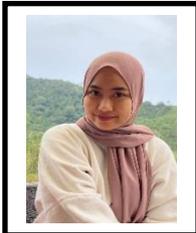
- Jurusan Perikanan, FPIK UNIPA, Manokwari. *Jurnal Sumberdaya Akuatik Indopasifik*, Vol. 1 No. 1, 105-117.
6. Murianto & Lalu Masyhudi. 2021. Identifikasi Potensi Pengembangan Ekowisata Desa Karang Sidemen Untuk Mendukung Berkelanjutan di Lingkar Geopark, Lombok Tengah. Sekolah Tinggi Pariwisata Mataram. *Jurnal Ilmiah Hospitality* Vol.10 No.1, 79-86.
 7. Nikolova, Valentina; Sinnyovsky, Dimitar (2019). Geopark in the legal framework of the EU countries. *Tourism Management Perspectives*, (29), 114-147.
 8. Patzak M., Eder W. 1998. UNESCO Geopark. A new programme- A new UNESCO label. – *Geologica Bale.*, 28, 3-4;33-35.
 9. Rachmat, Heryadi. 2016. Peran Pemerintah Daerah Untuk Mendukung Geopark Nasional Rinjani Menjadi Rinjani Unesco Global Geopark. Fakultas Teknik Geologi, Universitas Padjadjaran Bandung. Seminar Nasional Ke – III Fakultas Teknik Geologi Universitas Padjadjaran.
 10. Riyady, Slamet., Hendrik Fasco Siregar., Nurhayati. (2019). Aspek Yuridis Kewenangan Pemerintah Daerah Kabupaten Sukabumi Srovinsi Jawa Barat Dalam Pengelolaan Kawasan Geowisata Geopark Nasional Ciletuh Palabuhan Ratu. Fakultas Hukum, Universitas Pamulang. *Jurnal Hukum* Vol 2, No 1, 575-585.
 11. Sino, Abd. Rafiq., Faizal Kasim., Sri Nuryatin Hamzah. (2016). Evaluasi Ekowisata Hiu Paus di Desa Botubarani. *Jurnal Ilmiah Perikanan dan Kelautan*. Volume4 Nomor4, Desember 2016.

Glosarium

- Biodiversity:** Existing biodiversity both animals and plants.
- Culture diversity:** the cultural diversity that provides uniqueness of an area.
- Geodiversity:** a description of the various types of geological components of a certain area
- Conservation:** preserve tourist areas and also maintain culture and historical sites that are unique.
- UNESCO:** a special organization under the auspices of the United Nations founded in 1945 which is engaged in education, culture.

Biography

Ifhazrin Nurjana



Born on September 25, 2001, in Purworejo Village, Modayag, East Bolaang Mongondow. Ifhazrin is the first child of Mr. Junaidi and Mrs. Sujaryami Mamonto. She received her first education at Budi Luhur Kindergarten in 2006 and graduated in 2007. She continued her elementary school at SDN 1 Negri Purworejo Timur in 2007 and graduated in 2013. Then went to MTs N 1 Bongkudai in 2013 and graduated in 2016. And SMA N 1 Kotamobagu. Now she is a college student at Gorontalo State University, through the SBMPTN in the Geological Engineering study program. Active in organizational activities of SM-

IAGI UNG as General Treasurer, in SC-MGEI organization as Secretary of the Seminar and Fieldtrip Division, and active in HMTG J.A.K UNG organization as Fund Business Division member.

Bilal Aditya Yuriadi



Born in Makassar on January 3, 2002, Bilal is the youngest child of two siblings, he first entered formal education at SD Panaikan 2 Makassar in 2007 and graduated in 2013, in the same year he continued his education to SMP Negeri 23 Makassar and graduated in 2016 after graduated from junior high school, Bilal continued to SMA Negeri 16 Makassar and graduated in 2019. And in the same year, Bilal was registered as a student of the Geological Engineering Study Program, Gorontalo State University, through the SBMPTN, and active until no.

Bilal is also active as a daily administrator at the Indonesian Geology Student Association (PERHIMAGI) for the 2020-2021 period and also active in the Student Section-Geology Expert Association (SM-IAGI) for the 2020-2021 Period.