

Diplomacy of Indonesia's Natuna National Geopark toward a UNESCO Global Geopark

Diplomasi Geopark Nasional Natuna Indonesia menuju UNESCO Global Geopark

Leonard Felix Hutabarat 

Department of International Relations, Faculty of Social and Political Sciences,
Universitas Kristen Indonesia Jakarta
Address: Mayjen Sutoyo No 2, Jakarta 13630 – Indonesia
E-mail: Lfhutabarat@gmail.com

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Abstract

This article explains the current overview of the UNESCO Global Geoparks condition in Indonesia as well as putting public diplomacy of Indonesian UNESCO Global Geoparks into a global context. This article will be useful for all stakeholders involved in developing Indonesian UNESCO Global Geoparks in the future. An analysis of the challenges and lessons learned from Natuna is combined in this study with the views of individual stakeholders in Indonesia. Contextual information about the importance of Indonesian tourism of UNESCO Global Geoparks is derived from many references as well as documents. The research adopts a qualitative method. The analysis explains the circumstances of lack of enthusiasm at this time toward the UNESCO Global Geoparks concept by respective stakeholders in Indonesia. There is a need to see UNESCO Global Geoparks as part of efforts to achieve some of the Sustainable Development Goals for 2030. The Indonesian government accepts the idea of UNESCO Global Geopark growth, which can become an approach in post-COVID-19 tourism recovery planning as well as part of the SDGs' 2030 goals in Indonesia. Future development of Indonesian UNESCO Global Geoparks in the global context is important for Indonesian public diplomacy and very significant for the COVID-19 recovery of the Indonesian leisure industry and in line with the UNESCO Sustainable Development Goals 2030.

Keywords: diplomacy; SDG's 2030; sustainable tourism; UNESCO Global Geopark

Abstrak

Artikel ini menjelaskan gambaran situasi UNESCO Global Geoparks saat ini di Indonesia dan bertujuan untuk memiliki diplomasi publik terhadap UNESCO Global Geoparks Indonesia ke dalam konteks global. Artikel ini akan bermanfaat bagi semua pemangku kepentingan yang terlibat dalam pengembangan UNESCO Global Geoparks Indonesia di masa depan. Analisis terhadap berbagai tantangan dan pelajaran yang dapat dipetik dari Natuna dipadukan dalam studi ini dengan pandangan masing-masing pemangku kepentingan di Indonesia. Informasi kontekstual mengenai signifikansi pariwisata Indonesia terhadap UNESCO Global Geoparks bersumber dari banyak referensi serta dokumen. Artikel didasarkan pada metode kualitatif. Analisis menjelaskan situasi kurangnya antusiasme saat ini terhadap konsep UNESCO Global Geoparks oleh masing-masing pemangku kepentingan di Indonesia. Terdapat kebutuhan untuk melihat UNESCO Global Geoparks sebagai bagian dari upaya untuk mencapai beberapa tujuan pembangunan berkelanjutan 2030. Sementara pemerintah Indonesia menerima gagasan pengembangan UNESCO Global Geopark, yang dapat menjadi strategi dalam perencanaan pemulihan pariwisata pasca-COVID-19 dan bagian dari tujuan SDGs 2030 di Indonesia. Pengembangan Geopark Global UNESCO Indonesia di masa depan dalam konteks global penting bagi diplomasi publik Indonesia dan sangat penting bagi pemulihan COVID-19 pariwisata Indonesia dan sejalan dengan tujuan pembangunan berkelanjutan UNESCO untuk tahun 2030.

Kata kunci: diplomasi; SDG's 2030; pariwisata berkelanjutan; UNESCO Global Geopark

Introduction

Geopark (Earth Park) is an integrated geographical area that has geological heritage sites (geosites) and valuable landforms associated with aspects of geological heritage (geoheritage), geological diversity (geodiversity), biodiversity (biodiversity) and cultural diversity, and managed for conservation, education and sustainable economic development of the community, with the active participation of the

community and local authorities, so as to promote mutual understanding with sharing and caring for the Earth and the environment. The UNESCO Global Geopark (UGG) is a single and unified geographic area where geological sites and landscapes of international significance are managed with the concept of holistic protection, education and sustainable development.

In the 6th Session Meeting of UNESCO Global Parks Council (UNESCO 2021), the members recommended: to incorporate and strengthen their contributions to the Global Agenda, like the 2030 Sustainable Development Goals, the Paris Climate Agreement, or the Sendai Framework Agreement for Disaster Risk Reduction, throughout all their activities; to improve the accessibility for people with special needs within the Geopark as well as within the partner institutions such as museums, interpretation centers, and other facilities, and also during their communication activities including material and tools; and to collaborate closely with youth, involving them in the management and operations of the geoparks.

In the Strategic Plan of the Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency 2020-2024, there is a policy on the development of tourism destinations and value-added creative economy products and competitive, where one of the strategies is comprehensive, integrated and sustainable priority-based preparedness of destinations (Kementerian Pariwisata dan Ekonomi Kreatif 2020). This is also in accordance with the national development plan for a period of five years from 2020 to 2024, where the leisure sector and the creative economy are targeted to be able to contribute and play a strategic role through transformation of national economic development. The contribution of the tourism sector to the country's economy reached 4.2% (2015) and in 2018 it was recorded at 4.8%. The target contribution to gross domestic product (GDP) is expected to reach 5.5% by 2024 (Kementerian Badan Perencanaan Pembangunan Nasional 2019). Tourism has a very important role in Indonesia's development. Indonesia's natural wealth and diversity are potentials that strengthen tourism development. Tourism is also expected to be a lever and a locomotive force to drive economic growth. Tourism is even believed to be one of the largest foreign exchange suppliers.

Indonesia has six UNESCO Global Parks, namely Batur, Ciletuh-Pelabuhan Ratu, Gunung Sewu, Rinjani-Lombok, Belitong, and Toba Caldera. In this context, it is very strategic for Indonesia to develop many of its National Geopark toward UNESCO Global Geopark. In accordance with Law Number 33 of 2008 concerning the Establishment of the Anambas Islands Regency in the Riau Islands Province, several Global Indonesia National Parks are not only located in the East or West, but also include the outermost island groups of Indonesia, such as the Natuna Islands. Its location on a busy path makes Natuna Islands geopolitically and geoeconomically strategic (Juwana 2016, Swastiwi 2020). The shape of the archipelago, the potential of geoparks and tropical climates as well as a location on the front line with busy sea lanes afford Natuna a strategic position to be developed in an integrated manner and sustainable, including development and management in the tourism sector.

In field observations and visits to various locations on Natuna Island, Natuna as an archipelago cluster not only has geological heritage tourism potential (geotourism heritage) that can be developed and utilized for efforts to improve welfare of the local community, but also the Natuna National Geopark can be further developed to be recognized as one of the UNESCO Global Geoparks (Gray 2019, Catana & Brilha 2020). However, in addition to the existing opportunities and potentials, there are also various challenges in efforts to develop and internationalize Natuna tourism destinations in the future (Natuna n.d.). In this effort to internationally brand Natuna tourism, it requires not only a master plan, infrastructure development and connectivity, but also the involvement of the local people and all relevant participants from relevant ministries in an integrated manner.

The Global Geopark Network and the European Geopark Network describe geoparks as large areas where sustainable local development is possible in terms of social, economic, cultural and environmental aspects. Meanwhile, UNESCO defines a geopark as a national safeguarded zone and having a variety of important geological heritage locations with a certain beauty and scarcity and can be developed with an combined construct of preservation, education and economic enhancement of local communities (Jones 2008, Henriques & Brilha 2017). Geopark is a form of utilizing protected area space to achieve sustainable development. There are three perspectives in developing geoparks, namely: preservation/

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conservation, education and sustainable development (Farsani et al. 2011, Newsome et al. 2012). The geopark notion refers to the development of areas based on conservation activities, education and sustainable economic advancement through the growth of tourism destinations based on geological diversity, biodiversity and cultural diversity, which can have implications for improving the welfare of the local community. Geological diversity consists of a number of geological features that have special scientific importance, scarcity and beauty, known as geological heritage, as well as locations that have archeological, ecological, historical or cultural values. Meanwhile, biological or biological diversity, including the richness of flora and fauna, especially those that have protection status nationally and internationally. Furthermore, cultural diversity consists of cultures in the form of objects and intangibles (UNESCO 2016, Gray 2019, Catana & Brilha 2020).

The geopark is also a region that has leading and unique geological elements, including the presence of various archaeological, environmental, and cultural significances. For resident communities, geoparks are also a medium or forum for participation in protecting and improving the function of sustainable environmental heritage. Geopark is a new tourism notion that is currently being developed by the Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency. The concept of a geopark itself refers to the development of areas that have an influence on conservation, education and improving community welfare. In the development of geoparks, in addition to the three pillars of geological, biological and cultural diversity, there is also a need for cooperation between stakeholders through the Pentahelix concept which includes: Government (regional, central), Academics/Research Institutions, Communities (Communities living within the geopark area), Business Entities/BUMN, and Media. With this Pentahelix concept, elements of the government, academia, the business world and the public as well as the media will synergize with each other in developing the National Geopark toward the UNESCO Global Geopark, whereby the use of the geopark area is prioritized for education activities, conservation and *economic sustainable development* (Kementerian Luar Negeri 2021a).

The UNESCO Global Geopark concept was developed since the 38th Session of UNESCO General Conference in 2015 (UNESCO 2016). UNESCO Global Geoparks (UGGps) are conducted in the context of the International Geoscience and Geoparks Programme/IGGP (UNESCO 2016). The concept of geoparks has grown widely in the last three decades since it was introduced in the late 1980s (Henriques & Brilha 2017). UNESCO vigorously facilitated the growth of geoparks in the world by proposing the UNESCO Geoparks Programme in 1997, entering into a partnership arrangement with the European Geoparks Network (EGN) in 2001, and supporting in the establishment of the Global Geoparks Network (GGN) in 2004 (Jones 2008). In addition, geoparks are developing very rapidly with the embodiment of UNESCO Global Geoparks.

Economic, social and environmental are the three characteristics of sustainable development in the Sustainable Development Goals (SDGs) Agenda for 2030 (UN 2015). As part of efforts to achieve the SDGs targets, active community participation and related stakeholders are required, including from the geoscience group (Catana & Brilha 2020). Gill (2017) shows that geological aspects can also support the SDGs, such as in areas of geotourism and geoeducation. These two aspects, together with geoconservation, are the three spheres of the geoparks construct.

The endeavors carried out in the development of UNESCO Global Parks are very important in achieving the SDGs (UNESCO 2017, Han et al. 2018, McKeever 2018). UGGps promote geoheritage and geodiversity for people of all ages, encompassing local people and geopark tourists (SDG 4). UGGps can also prove its contribution to climate change, which is of concern to the international community today (SDG 13). UGGps also create partnerships between local communities, various stakeholders and at the same time build a global network to communicate understanding and know-how for nature conservation and protect geological heritage (SDG 17). The partnerships and links formed also encourage numerous sustainable economic endeavors in the UGGps area (SDG 1 and SDG 8). This also includes the development of cooperatives and encouraging the empowerment of women as part of economic activities (SDG 5). The Ministry of Foreign Affairs of the Republic of Indonesia promoted the notion of Indonesian UNESCO Global Geopark toward Agenda of SDGs 2030 (Kementerian Luar Negeri 2021b:146).

Indonesian diplomacy in UNESCO Global Geoparks is part of Indonesian public diplomacy of sustainable tourism as well as Sustainable Development Goals 2030 (Kementerian Luar Negeri 2021b:146-148). Indonesia developed more UNESCO Global Geoparks in order to achieve many objectives in SDGs 2030. Commitment to the SDGs 2030 is for all countries, including Indonesia. The commitment in sustainable tourism for Natuna National Geopark will support its plan toward UNESCO Global Geopark particularly in the aspects of SDGs. Development Natuna National Geopark toward UNESCO Global Geopark is also related with Indonesia's development of geotourism. Hutabarat & Pratiwi (2022) explained that Indonesia promoted the development of Indonesia national geopark to be nominated as UNESCO Global Geopark as part of its public diplomacy of sustainability tourism and Sustainable Development Goals 2030.

Geotourism, one of the three elements in the geoparks structure, becomes a leverage factor in the framework of sustainable development in UGGps. Geotourism events, such as site visits, festivals, workshops and the sale of geoproducts are part of the appreciation of the culture of the resident community that lives in the same way as its natural environment (Farsani et al. 2012). Thus, geotourism also creates employments and at the same time provides revenue in rural neighborhoods (Farsani et al. 2011, Farsani et al. 2012). Encouraging sustainable leisure industry to create works and endorse local values is one of the goals of the UNESCO Global Geoparks (McKeever 2018).

Marine tourism, ecotourism and geo-tourism in most of the Indonesian Global Geopark have the potential to be developed. However, aspect of transportation access which is still difficult to reach and accommodation facilities that still do not meet international standards are aspects that need to be further developed (Valeri 2016). This article seeks to answer the importance of implementing sustainable tourism in Indonesian Global Geopark and the development of national geoparks according to UNESCO criteria in an effort to internationalize Indonesian National Parks tourism destinations toward the UNESCO Global Geopark. In addition, the article also discusses aspects needed in the expansion of National Geopark toward UNESCO Global Geopark in achieving the UNESCO Sustainable Development Goals for 2030. The area of small islands around the border has a high natural resource value and can be the main capital and has important and strategic aspects in Indonesia's future development. The purpose of the study is exploring strategies of public diplomacy toward the Indonesian UNESCO Global Geopark. Indonesia developed the concept of its national geoparks expansion toward UNESCO Global Geoparks in the context of Agenda 2030 of Sustainable Development Goals. Based on these strategies Indonesia could increase more of its National Geopark to be the UNESCO Global Geopark in the future.

Research Method

Geotourism is the development of geoscience that is socially related and can be understood by different scientific methods, or the use of social science in understanding "natural sciences" that exist in the context of geoparks. A more holistic approach is needed not only in the discussion area, but also in methods, including the existence of a multidisciplinary research procedure approach (Silva et al. 2009, Tashakkori & Teddlie 2021). In an effort to develop the Natuna National Geopark toward the UNESCO Global Geopark, field observations are needed in various geosite areas on Natuna Island. The research carried out is qualitative. Qualitative study is a systematic research method to comprehend human complexities in their social setting by constructing a comprehensive and multifaceted description under ordinary circumstances. The dynamics of human difficulties are attached from the societal and cultural framework that surrounds them (Cresswell 2008, Teddlie & Tashakkori 2009, Tashakkori & Teddlie 2010, 2021).

The research intends to apprehend facts in a social context naturally by highlighting the process of profound communication relations with the reality under study. This qualitative study method is also an interpretive technique because the research data are more related to the interpretation of data and facts. Furthermore, this method is also described as a constructive method because with qualitative methods, data can be discovered and built in a more significant argument to be easier to understand (Sugiyono 2006, Tashakkori & Teddlie 2021). Qualitative approaches with fact-finding observational and descriptive analytical approaches use primary and secondary types of data.

Secondary data collection was obtained through documents, reports related to geoparks, brochures and literature reviews (Sudaryono 2021), while primary data were obtained through semi-structured interviews, focused group discussions and field observations. In addition, data collection was also carried out through documentation and audio-visual. Interviews related to policy development were conducted with the Regent and Deputy Regent of Natuna, as well as the Head of the Culture and Tourism Office of Natuna Regency. In addition, interviews were also conducted with the Head of BP Natuna National Geopark and program managers, as well as academics who knew the geological aspects. Qualitative interviews were carried out with relevant agencies so as to obtain views and opinions from participants. The specific local problems faced were obtained from the focus group discussions attended by the Natuna Regent and the relevant Regional Apparatus Work Unit (Satker/SKPD) in the Natuna Regency Government. The use of this technique is based on calculations and personal judgments as well as personal perceptions while in the field. Data analysis techniques are based on triangulation of the results of literature reviews and existing documents with the results of deepening of respondents/informants during interviews in the field or through focus group discussions with the Natuna Regency SKPD.

The use of data analysis techniques with the "qualitative content analysis" method and descriptive analysis above with the consideration that the data and information collected in the form of documents and interviews require techniques to understand and interpret the existing data (Gabor 2015). This descriptive analysis method will explain the data obtained against existing concepts in order to produce new descriptions.

Results and Discussion

Natuna Geopark was designated as a National Geopark on November 30, 2018, by the Indonesian National Geopark Committee (KNGI). The diversity of geological features in Natuna is associated with the formation of the Natuna islands in the tectonic framework of the double subduction arc system that occurred from the Permian period to the Eocene age (Katili 1981). So that this process was chosen as the theme of the National Geopark Natuna "Double Subduction Arc System."

In the Natuna National Geopark area, several geotourism locations are well-known as general tourism locations, such as beaches, valleys, hills and others (Bunga 2019). These locations are geologically based, meaning they are the formation of natural geological processes. For this reason, information about the processes of formation/occurrence according to earth science (geology) of these places is needed. No less important, its relationship with local biological and cultural aspects will be very meaningful for conservation and sustainability values (Suhardi 2017). To achieve global geopark status, from the aspect of cultural diversity, a deeper understanding and introduction to cultural wealth in the Natuna National Geopark area is needed (Kementerian Luar Negeri n.d., VOI 2020, Kementerian Luar Negeri 2021a). Regent of Natuna (Informant SIS) in a focus group discussion on 13 December, 2022, conveyed his message that its regency had a strong commitment to upgrade the category of Natuna National Geopark toward UNESCO Global Geopark with the assistance of Province Kepulauan Riau as well as central government policy for the UNESCO Global Geopark. Informant SIS underlined that his regency committed to work up a Master Plan for Natuna Geopark for the candidature of UNESCO Global Geopark.

The geographical diversity in the Natuna National Geopark spread throughout the Natuna Islands is geologically part of the regional tectonic framework. The north-south-directional arc of the Natuna Islands is bounded by two tertiary-aged basins, the West Natuna Basin and the East Natuna Basin. This area is part of the Sundaland (Eurasian plate) which was formed and colonized in the Late Triassic period so that it became a stable continent (Metcalf 2013). This event caused the Natuna archipelago to be surrounded by an active subduction zone, thus causing the formation of melange and metamorphic rock complexes found in some parts of Natuna Island (Franchino 1983). The subduction zone occurs at the boundary of the convergent plate where two or more plates meet each other and there is a sharpening between the plates resulting in a new product. Subduction zones can occur both between two continental plates, two oceanic plates and between continental and oceanic plates. The difference in the density of

the two plates causes one of them to be able to sharpen under the other plate. This difference in density can occur due to differences in the composition, age and type of rocks that make up the Earth's plate. The collision that occurred between the Pacific Ocean plate and the Eurasian plate of the continent ended in the Eocene age. Then the plate collapsed due to the gravitational process, this process caused the expansion of the Ocean which then formed the South China Sea (Dipowiguno et al. 2019).

On the other hand, the East Natuna Basin, which was once part of the front arc basin, is a place for sedimentation of materials derived from shallow and deep-sea sedimentary deposits formed at the Oligocene age after subduction activity stopped (Dipowiguno et al. 2019). Katili (1981) summed up the tectonic framework of the Natuna Islands as a tectonic *double subduction arc system* formed from the Permian to Paleogene period. During an interview with Deputy Regent of Natuna Rodhial (Informant HUD) on 13 December 2022, informant HUD said that Natuna National Geopark had potential to be improved as the UNESCO Global Geopark considering all its geodiversity, biodiversity, and cultural diversity. He also pointed out that Natuna National Geopark had a strategic location in Indonesian archipelago in the South China Sea region.

Opportunities toward a UNESCO Global Geopark

The UNESCO Global Geopark is a single geographic area, where geological sites (geoheritage) and their landscapes of international (or national) value are managed holistically for the purposes of conservation, education and sustainable change. The UNESCO Global Geopark uses its geological heritage along with other aspects of natural and cultural heritage, to protect its geological legacy for the benefit of forthcoming generations; to understand and teach the community about geological matters related to the physical environment, biophysical, and cultural aspects of tangible and intangible culture; facilitating earth science research activities (geoscience); ensuring the ongoing process of sustainable development, especially to improve the economic level of its people through the development of sustainable tourism activities (Newsome et al. 2012, Dowling 2017).

A bottom-up approach is an approach in the UNESCO Global Geopark concept. The UNESCO Global Geopark empowers local communities and provides opportunities for the development of solid collaborations with the aim of upholding the zone and geographical beauty. The UNESCO Global Geopark was built with this process and involves all stakeholders, both local and regional, including local governments (landowners, communities, service providers tourism, native community, and local establishments). The development also involves a strong obligation from local societies, resident cooperations with continuing political support as well as the advance of an inclusive approach to achieve the goals of indigenous people and at the same time protect existing geological heritage areas (Henriques & Brilha 2017, UNESCO 2017).

The UNESCO Global Geopark concept has a synergy of main elements consisting of geological heritage, biodiversity and cultural heritage. There are at least ten areas in the UNESCO Global Geopark, namely natural sources, ecological hazard, environmental change, education, science, culture, women, sustainable development, local and indigenous understanding and geoconservation. National geopark development areas that will be nominated or become a UNESCO Global Geopark must meet the requirements regulated by UNESCO as the criteria that are the main focus of UNESCO's attention.

First, Natural Resources. From the very beginning of civilization, the natural resources given by the world became the basis of economic and social progress. These natural wealth include minerals, hydrocarbons, rare earth elements, geothermal energy, air and water, and their valuable use, which is important for the sustainability of people's well-being. The natural resources found on earth come from geology and geological processes are non-renewable and their utilization needs to be done prudently. UNESCO Global Geoparks allow society to maintain the sustainable usage of ecological resources from the environment and at the same time also promote efforts to protect the environment.

Second, Geological Hazards. Many UNESCO Global Geoparks encourage understanding of "geological hazards," comprising volcanoes, earthquakes, tsunamis, and also assist natural disaster mitigation plans among local publics. By means of various pedagogic events for local communities as well as geopark

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travelers, numerous UNESCO Global Geoparks provide facts related to the "resource of geological hazards" and efforts to diminish their consequence, together with "disaster response plans." These undertakings develop significant capability and influence to the realization of "more robust societies" who have the know-how and expertise to efficiently react to possible "geographical threats."

Third, Climate Change. UNESCO Global Geoparks conduct education related to climate change and conduct a best practice method to utilize "renewable energy" and implement the best guidelines of "green tourism." UNESCO Global Geoparks encourage "green growth" in the future throughout innovative ventures, and other innovations as a manifestation of "open-air museums" due to current climate change and at the same time has the likelihood to expose travelers to geoparks how climate change affects the ecology. These and other educational actions are substantial to build up consciousness of the possible impacts of climate change in the area and provide local peoples with the wisdom to mitigate and adjust to the consequences of global ecological change.

Fourth, Education. The implementation and development of various educational activities for all ages or all groups is a mandatory requirement for all UNESCO Global Geoparks to disseminate awareness and understanding of geographical heritage and its relationship with ecological and cultural heritage. The UNESCO Global Geopark does not only offer scholastic programs for schools or distinct events for children, it is also expected to propose education, both formal and informal, for grown-ups as well as even provide training for local communities.

Fifth, Science. Global Geopark is a special reason where the geographical heritage that exists has significance for the international community. The UNESCO Global Geopark is expected to further encourage cooperation with academic institutions to conduct scientific sets in the field of Earth Sciences, and other fields of studies, in order to further develop understanding about the Earth and its evolutions. The UNESCO Global Geopark is not a gallery, but rather a dynamic workshop where the public know how to interact in science from the highest level of educational study to the curiosity of geopark visitors. A UNESCO Global Geopark should not isolate the community from science and evade using methodological scientific ideas on board of communication, leaflets, maps and books addressed to the ordinary people.

Sixth, Culture. The slogan of the UNESCO Global Geopark is "Celebrating Earth Heritage, Sustaining Local Communities" (UNESCO 2017). The UNESCO Global Geopark is basically on the subject of people and the exploration of the linkages between people and the Earth. The Earth shapes man and his society: shaping agricultural practices, building materials and even methods of building houses as well as mythology, and cultural traditions (folklore). The UNESCO Global Geopark is expected to carry out the activities related to this matter, including the synergy between art and community traditions.

Seventh, Women. The UNESCO Global Geopark has a robust importance on women's empowerment amidst various educational agendas or via women's empowerment in the business sector, including the advancement of women's cooperatives. UNESCO Global Geopark is a manifesto for the enhancement and endorsement of "local hotel industry and craft merchandises." In various activities of women's cooperatives developed by UNESCO Global Geopark, it also provided opportunities for women to earn extra revenue in their community, including operating the provision of accommodation amenities for guests to geoparks.

Eighth, Sustainable Development. Although a region has a geological heritage that is "popular geological heritage of exceptional universal value," it cannot be made a UNESCO Global Geopark, if it does not have "a strategy for the sustainable development" for the people who live, live and are in the area. This can take the formula of sustainable tourism, for instance, through the advancement of "walking or cycling trails," tutoring resident communities as tour guides, encouraging lodging providers and other tourism services to abide by international best practices in the field of a context in a sustainable manner. In addition, it can also encourage local people to respect their traditional way of life. The UNESCO Global Geopark ought to have the full endorsement of the neighborhood society. The success of becoming a UNESCO Global Geopark not only limits economic activities in the UNESCO Global Geopark area that are not in line with national/regional/local legislation related to indigenous peoples.

Ninth, Local and Indigenous Knowledge. The UNESCO Global Geopark vigorously involves “local and indigenous peoples,” safeguarding then protecting the culture of local communities. By incorporating these “resident and native groups,” the UNESCO Global Geopark recognizes the existence and significance of local peoples, their customs and their links to their territory. This is one of the principles of the UNESCO Global Geopark where “local and indigenous knowledge, practice and management systems,” together with science are included in the planning and management of the UNESCO Global Geopark zone.

Tenth, Geoconservation. The UNESCO Global Geopark is an area that uses the outlook of “sustainability, worth the heritage of Mother Earth” and recognizes the prerequisite to safeguard the area. Geological spots in a UNESCO Global Geopark are sheltered by “indigenous, local, regional and/or national law and management authorities.” in collaboration with relevant agencies, which allows for the supervision for the area. The safeguard procedures for each site are designed on each “individual site management plan.” The UNESCO Global Geopark Governing Body will also not directly participate in the sale of “geological objects,” such as fossils, minerals, polished rocks and ornamental rock-shops” in the region, nor actively encourage or support the “unsustainable trade in geological materials” as a whole.

Getting the status as a UNESCO Global Geopark is the desire of the local government (provinces as well as districts) and Badan Pengelola Natuna National Geopark, but it is certainly not going to be an easy thing to make it happen. There are four main requirements for building a global geopark, namely: first, members have a geological heritage that has significant international value; second, it is the institution that manages the geopark; third, equipping the visibility of the geopark; and the fourth being the owner and playing an active role in the national/regional/global geopark network. To achieve this goal is certainly a big challenge for the Natuna National Geopark Management Agency and the Riau Islands Provincial Government and Natuna Regency to be able to meet the requirements mentioned above.

However, with hard work and togetherness through an optimal model of Pentahelix partnership between stakeholders, the goal of transforming a national geopark into a global geopark will be realized. With this Pentahelix partnership model, elements of the government, academia, the business world and the community as well as the media will synergize with each other in developing the National Geopark toward the UNESCO Global Geopark. The development of geoparks in the future is not just part of the implementation of the Rencana Aksi Nasional (RAN) Development of Geopark Indonesia by Ministry of Energy and Mineral Resource, Ministry of Tourism and Creative Economy, Ministry of Education, Culture, Research and Technology, Ministry of Environment and Forestry, Ministry of Marine Affairs, Ministry of SMEs and Ministry of Investment, but also involves other stakeholders, such as the business communities, academics and the Indonesian mass media, including the local community. Having a geological heritage (geoheritage) of international value is the main requirement to upgrade the status to a global geopark (Xiang & Gretzel 2010, Jacobsen & Munar 2012, Munar & Jacobsen 2014).

Currently, the Natuna National Geopark has a lot of geological diversity (geodiversity), but not all of this geodiversity can be designated as geoheritage. Currently, the Ministry of Energy and Mineral Resources, through the Geological Agency, has determined that there are 15 geoheritages in the Natuna National Geopark Area spread throughout the Natuna Islands. There are several requirements to be able to increase the status of geoheritage and local value to national and international level, including through continuous research and scientific publications in international standard journals. It also complements infrastructure and amenities, as well as enhances protection efforts at geoheritage sites of local/national and international value (Hernández et al. 2016, Almeyda-Ibáñez & George 2017). In the development of a national geopark toward a UNESCO Global Geopark, it is necessary to do several things, including: (1) Exploring geological heritage through geological identification; determination of geological heritage; looking for links between geological and non-geological heritage; (2) Sustainable management by compiling a geopark master plan; carrying out conservation activities, education, community financing, and local economic development; (3) Build visibility by creating information panels; creating publication and promotional materials, including geopark themes and logos; and (4) Build networks and partnerships through partnerships in terms of preservation, education and development of the local economy; become a member and active in the national (JGI), regional (APGN) and global (GGN) geopark networks.

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The Natuna National Geopark area is a geopark area dominated by marine areas consisting of several islands, so it is included in the category as "Island Geoparks." So that, in an effort to develop a geopark for the commitments of safeguarding, education as well as sustainable economic progress, the potential in the marine (marine) also needs to be included, so that later there will be several objects of geological heritage (marine geology), biology (coral reef and various fish), and culture (shipwreck) under the sea (Media Indonesia 2021). During interviews with the Head of Tourism Office of Natuna (Informant HAR) and Chairman of Natuna National Geopark (Informant KIK) on 12 December, 2022, in Natuna Islands, informant HAR and informant KIK agreed that the Natuna Regency needed all the supports from the related Ministry in Jakarta in order to have the status of UNESCO Global Geopark.

For this reason, in an effort to improve the economy in a sustainable manner, tourism can be the main driving force. So that the Government of Natuna Regency and the Natuna National Geopark Management Agency can develop the concept of tourism development in the Natuna Area by raising all potentials, consisting of marine potential, diversity of flora and fauna as well as ecology, geological diversity and geological heritage (geodiversity/geoheritage), and thus cultural diversity and its historical remains (archeology) became the main theme of the tourism objects that were developed. The potentials that exist in the Natuna National Geopark, Natuna Regency can be used as the basic capital in the advancement of tourism for the goal of sustainable economic growth. This will also be more optimal with the support and improvement of accessibility to the Natuna National Geopark area. Support for air transportation and international airports and accommodation and other supporting facilities according to international standards will further complement the tour packages and attractions that will exist in the UNESCO Global Geopark area (Polycarpus 2016).

Geo-tourism is an essential part of the UNESCO Global Geopark concept and is also an example of "niche marketing" (Nella & Christou 2016), a strategic opportunity that ultimately provides economic or commercial benefits. The inauguration of the Natuna tourist area into the Natuna national geopark is more value than the destination branding process of the tourist area. Branding is the main tool for tourism destinations to create the experience that tourists expect when visiting tourist attractions (Aaker 2016). Hernandez also stated the importance of tourism destination brand image (Hernández et al. 2016).

The National Action Plan (RAN) in the Development of Indonesian Geoparks with integrated commitments from all relevant ministries will be more successful in making the Natuna National Geopark a UNESCO Global Geopark. The achievement of this goal will also be in line with the commitment and efforts of the Government of Indonesia in accomplishing the goals of the 2030 Agenda of the SDGs in the context of sustainable development and at the same time further improving the welfare of community economics (UN 2015, Brilha et al. 2018, Catana & Brilha 2020). In this context, priority strategies based on the hierarchy of processes include preparing a Master Plan for BP Natuna National Geopark toward a UNESCO Global Geopark, implementation of the National Action Plan for the Development of Indonesian Geoparks integrated with the 2030 SDGs, particularly with regard to strategic priorities in the Natuna National Geopark located on Indonesia's border to the South China Sea (Hutabarat 2005, 2018), facility construction/Natuna National Geopark infrastructure as one of the special tourism destinations, and the diplomatic efforts of the Indonesian Geopark towards the UNESCO Global Geopark. Director of Socio-Cultural and Developing Countries Organizations, Ministry of Foreign Affairs of the Republic of Indonesia, Penny D. Herawati, stated that Natuna National Geopark to be UNESCO Global Geopark is in accordance with Indonesian public diplomacy of sustainable tourism as well as part of achieving of the Sustainable Development Goals 2030.

Conclusion

The determination of realizing the UNESCO Global Geopark for the Natuna National Geopark is to discover, expand and manage connections between geological inheritance and all other aspects of environmental, civilization and intangible heritages. Geological heritage, biodiversity and cultural heritage are the three main pillars of the UNESCO Global Geopark notion. Natuna National Geopark is one of Indonesia's national geoparks proposed to UNESCO to become one of the UNESCO Global

Geoparks in 2023. This proposal is to further optimize the use, development and preservation of the area, educational facilities, and empowerment of local societies in order to further improve the standard of living and welfare. The development of the Natuna National Geopark into a *UNESCO Global Geopark* is not only part of efforts to protect or conserve geo-sites, but can also be a “lucrative activity,” capable of establishing new businesses (geo-products, geo-tours, geo-restaurants, geo-sports, and geo-monuments) and also at the same time become a stimulus for commercial and communal enhancement.

The novelty of the Indonesian policy to advance its National Geopark to be a UNESCO Global Geopark in the context of fulfilling Agenda 2030 of Sustainable Development Goals will give more impacts toward numerous numbers of Indonesian UNESCO Global Geoparks in the coming decade. The challenges of infrastructure and more integrated endeavors among related ministries and agencies in Indonesia and participation from private sectors will be significant in the future. The undertakings of Natuna Regency to include development of the Natuna Geopark to be a UNESCO Global Geopark in its local development plan will also be crucial as well as establishing a particular Master Plan for Natuna Geopark.

The brand identity formed as a global geopark area by UNESCO will make the Natuna National Geopark area a sustainable tourist area and at the same time the internationalization of the tourism area Indonesia in the Natuna Islands. Efforts to internationalize the Natuna tourism area not only require a master plan, the Natuna National Geopark website, infrastructure and connectivity development, but also the participation of the local community and all relevant stakeholders from relevant ministries/agencies in an integrated manner. The Master Plan for BP Natuna National Geopark toward UNESCO Global Geopark, implementation of the National Action Plan for The Development of Indonesian Geoparks integrated with SDGs for 2030, especially with regard to strategic priorities in the Natuna National Geopark which is on Indonesia’s border to the South China Sea, the construction of facilities/infrastructure of the Natuna National Geopark as one of the special tourism destinations, and the diplomatic efforts of the Indonesian Geopark toward a UNESCO Global Geopark can be an option for Indonesia’s Geopark development strategy toward a public diplomacy of an Indonesian UNESCO Global Geopark in the future.

References

- Aaker D (2016) Brand equity vs brand value. Prophet. [Accessed 19 December 2022]. <https://www.prophet.com/thinking/2016/09/brand-equity-vs-brand-value/>.
- Almeyda-Ibáñez M & George BP (2017) The evolution of destination branding: A review of branding literature in tourism. *Journal of Tourism, Heritage & Services Marketing* 87884 (1):9-17. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-67084-7>.
- Brilha J, Gray M, Pereira DI, & Pereira P (2018) Geodiversity: An integrative review as a contribution to the sustainable management of the whole of nature. *Environmental Science and Policy* 86 (May):19-28. <https://doi.org/10.1016/j.envsci.2018.05.001>.
- Bunga H (2019) Kampung segeram; Natuna dan sejarah yang terlupakan. *Tempo*, 28 September. [Accessed 19 December 2022]. <https://nasional.tempo.co/read/1253396/kampung-segeram-natuna-dan-sejarah-yang-terlupakan>.
- Catana MM & Brilha JB (2020) The role of UNESCO global geoparks in promoting geosciences education for sustainability. *Geoheritage* 12 (1). <https://doi.org/10.1007/s12371-020-00440-z>.
- Cresswell JW (2008) *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (3rd Editio). Hoboken, New Jersey: Pearson Merrill Prentice-Hall.
- Dowling R (2017) Geoparks - A vehicle for fostering community based, sustainable, regional development in Northern Australia. www.aph.gov.au/DocumentStore.ashx?id=1bc20fbd-62b6-4a34-a9af-b5180046a5f0&subId=515536.
- Dipowiguno AP, Setiawan VE, Arifin AS, & Kusworo A (2019) Geological history of Natuna Island : Geodiversity, geoheritage, and sustainable development based on geodiversity inventory and geoheritage assessment. *Proceeding, Joint Convention Yogyakarta 2019*, February.
- Farsani NT, Coelho C, & Costa C (2011) Geotourism and geoparks as novel strategies for socio-economic development in rural areas. *International Journal of Tourism Research* 13 (1):68-81. <https://doi.org/10.1002/JTR.800>.

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- Farsani NT, Coelho C, & Costa C (2012) Geotourism and geoparks as gateways to socio-cultural sustainability in Qeshm rural areas, Iran. *Asia Pacific Journal of Tourism Research* 17 (1):30-48.
- Franchino LP (1983) Geological notes on the stratigraphy of the island of Natuna. *Memorie Di Scienze Geologiche*, 36:171-193.
- Gabor M (2015) A content analysis of rural tourism research. *Journal of Tourism, Heritage & Services Marketing* 1 (1):25-29. <https://doi.org/doi.org/10.5281/zenodo.376327>.
- Gill JC (2017) Geology and the sustainable development goals. *Episodes* 40 (1):70-76. <https://doi.org/10.18814/epiiugs/2017/v40i1/017010>.
- Gray M (2019) Geodiversity, geoheritage and geoconservation for society. *International Journal of Geoheritage and Parks* 7 (4):226-236. <https://doi.org/10.1016/J.IJGEO.2019.11.001>.
- Han J, Wu F, Tian M, & Li W (2018) From geopark to sustainable development: Heritage conservation and geotourism promotion in the Huangshan UNESCO global geopark (China). *Geoheritage* 10 (1):79-91. <https://doi.org/10.1007/S12371-017-0227-2>.
- Henriques MH & Brilha J (2017) UNESCO global geoparks: A strategy towards global understanding and sustainability. *Episodes* 40 (4):349-355. <https://doi.org/10.18814/epiiugs/2017/v40i4/017036>.
- Hernández MR, Talavera AS, & Parra López A (2016) Effects of co-creation in a tourism destination brand image through Twitter. *Journal of Tourism, Heritage & Services Marketing* 2 (2):3-10. <https://doi.org/http://doi.org/10.5281/zenodo.376341>.
- Hutabarat LF (2005) Analisis kebijakan luar negeri dalam studi hubungan internasional. *Sociae Polites* 5 (22):13-22. <http://repository.uki.ac.id/6443/>.
- Hutabarat LF (2018) Diplomasi ekonomi Indonesia dan pasar prospektif di kawasan Pacific Alliance: Studi kasus Meksiko dan Chile. *Jurnal Asia Pacific Studies* 2 (2). <https://doi.org/10.33541/japs.v2i2.806>.
- Hutabarat LF & Pratiwi NI (2022) Pengembangan pariwisata Natuna menuju UNESCO global geopark. *Jurnal Ilmiah Dinamika Sosial* 1-19.
- Jacobsen JKS & Munar AM (2012) Tourist Information Search and Destination Choice in a Digital Age. *Tourism Management Perspectives* 1 (0):39-47. <https://doi.org/doi:http://dx.doi.org/10.1016/j.tmp.2011.12.005>.
- Jones C (2008) History of geoparks. *Geological Society Special Publication* 300: 273-277. <https://doi.org/10.1144/SP300.21>.
- Juwana H (2016) Kehadiran secara Nyata. *Media Indonesia*, 10 Oktober. [Accessed 19 December 2022]. <https://mediaindonesia.com/opini/71119/natuna-kehadiran-secara-nyata>.
- Katili JA (1981) Geology of Southeast Asia with particular reference to the South China Sea. In: *The South China Sea*. Amsterdam: Elsevier. 1077-1091.
- Kementerian Pariwisata dan Ekonomi Kreatif (2020) Rencana strategis (Renstra) Kementerian Pariwisata dan Ekonomi Kreatif 2020-2024.
- Kementerian Badan Perencanaan Pembangunan Nasional (2019) Rencana pembangunan jangka menengah nasional 2020-2024, 313.
- Kementerian Luar Negeri (n.d.) Geopark Nasional Natuna. Unpublished.
- Kementerian Luar Negeri (2021a) Geopark Natuna.
- Kementerian Luar Negeri (2021b) Laporan akhir keragaman budaya geopark Nasional Natuna. Unpublished.
- McKeever P (2018) UNESCO Global geoparks and agenda 2030. *Proceedings of the 8th International Conference on UGGps: Geoparks and Sustainable Development*. Adamello Brenta UNESCO Global Geopark, Madonna Di Campiglio, 22.
- Media Indonesia (2021) Wisata bawah air di Pulau Natuna. *Media Indonesia*, 29 September. [Accessed 19 December 2022]. https://mediaindonesia.com/galleries/detail_galleries/20510-wisata-bawah-air-di-pulau-natuna.
- Metcalf I (2013) Tectonic evolution of the Malay Peninsula. *Journal of Asian Earth Sciences*, 76: 195-213. <https://doi.org/10.1016/j.jseaes.2012.12.011>.
- Munar AM & Jacobsen JKS (2014) Motivations for sharing tourism experiences through social media. *Tourism Management* 43 (0):46-54. <https://doi.org/http://dx.doi.org/10.1016/j.tourman.2014.01.012>.
- Natuna P (n.d.) Natuna selang pandang Kabupaten Natuna, Provinsi Kepulauan Riau. <https://natunakab.go.id/selang-pandang-kabupaten-natuna-provinsi-kepulauan-riau/>.

- Nella A & Christou A (2016) Extending tourism marketing: Implications for targeting the senior tourists' segment. *Journal of Tourism, Heritage & Services Marketing* 2 (2):36-42. <https://doi.org/http://doi.org/10.5281/zenodo.376336>.
- Newsome D, Dowling R, & Leung YF (2012) The nature and management of geotourism: A case study of two established iconic geotourism destinations. *Tourism Management Perspectives*, 2–3, 19–27. <https://doi.org/10.1016/j.tmp.2011.12.009>.
- Polycarpus R (2016) Presiden: Perbanyak maskapai ke Natuna. *Media Indonesia*, 6 October. [Accessed 19 December 2022]. <https://mediaindonesia.com/politik-dan-hukum/70742/presiden-perbanyak-maskapai-ke-natuna.html>.
- Silva E, Warde A, & Wright D (2009) Using mixed methods for analysing culture: The cultural capital and social exclusion project. *Cultural Sociology* 3 (2):299-316. <https://doi.org/10.1177/1749975509105536>.
- Sudaryono (2021) *Metodologi Penelitian: Kuantitatif, Kualitatif, dan Mix Method*. Edisi Kedua. Depok: Rajawali Pers.
- Sugiyono (2006) *Metode Penelitian Kuantitatif dan Penelitian & Pengembangan*. Bandung: Alfabeta.
- Suhardi H & WS (2017) Baju dan pakaian melayu. Pemerintah Kabupaten Natuna, 1 May. [Accessed 19 December 2022]. <https://natunakab.go.id/baju-dan-pakaian-melayu/>.
- Swastiwi A (2020) Natuna (tetap) milik kita. *Media Indonesia*, 15 January. [Accessed 7 January 2023]. <https://mediaindonesia.com/opini/283408/natuna-tetap-milik-kita>
- Tashakkori A & Teddlie C (2010) *Handbook of Mixed Methods in Social and Behavioral Research* (3rd Editio). London: SAGE Publications.
- Tashakkori A & Teddlie C (2021) *Sage Handbook of Mixed Methods in Social & Behavioral Research*. London: SAGE Publications.
- Teddlie C & Tashakkori A (2009) *Foundations of mixed methods research. Integrating quantitative and qualitative approaches in the social and behavioral sciences*. London: SAGE Publications.
- UN (2015) Transforming our world: The 2030 agenda for sustainable development. Resolution 70/1 adopted by the General Assembly on 25 September 2015.
- UNESCO (2016) *Records of the General Conference, 38th Session, Volume 1*.
- UNESCO (2017) UNESCO Global Geoparks contributing to the Sustainable Development Goals: celebrating Earth heritage, sustaining local communities. UNESCO Digital Library. <https://unesdoc.unesco.org/ark:/48223/pf0000247741>.
- UNESCO (2021) UNESCO global geoparks council 6th session (virtual) Jeju Island UNESCO global geopark, Republic of Korea, 8-11 December 2021.
- Valeri M (2016) Networking and cooperation practices in the Italian tourism business. *Journal of Tourism, Heritage & Services Marketing* 2 (1):30-35. <https://doi.org/http://doi.org/10.5281/zenodo.376333>
- VOI (2020) Mengulik sejarah laut Natuna sebagai teritori sebuah negeri. *VOI*, 10 January. [Accessed 26 February 2023]. <https://voi.id/memori/1638/mengulik-sejarah-laut-natuna-sebagai-teritori-sebuah-negeri>.
- Xiang Z & Gretzel U (2010) Role of social media in online travel information search. *Tourism Management* 31 (2):179-188. <https://doi.org/http://dx.doi.org/10.1016/j.tourman.2009.02.016>.

Author Biography

Leonard Felix Hutabarat was Indonesian Consul General in Toronto, Canada (2018-2021) and former Peacekeeper of the UNIFIL. He was awarded Indonesian Veterans Medal for Peace, UN Peacekeeping Forces Military Medal, and Satyalancana Santi Dharma. He was a Liaison Officer at Asian-African Legal Consultative Organization in New Delhi. He got special training in UN Civil-Military Course, and Senior Diplomatic Course, Netherlands Institute of International Relations, and Daniel K. Inouye Asia-Pacific Center for Security Studies, Honolulu. He also has teaching experience at Christian University of Indonesia, and University of Indonesia, and is an alumnus of Gadjah Mada University, Yogyakarta.