

## Sustainable Economic Development: Study on the Ujung Kulon Geopark

Rani Meida<sup>1</sup>, Adinda Sri Maryam<sup>2</sup>, Ima Amaliah<sup>3</sup>

<sup>1,2,3</sup>Fakultas Ekonomi Dan Bisnis, Universitas Islam Bandung, Indonesia

Ranimeidaa05@gmail.com, Dindaaaasr29@gmail.com, amalia.razi@gmail.com

### Abstract

*Geopark development is one sector that can support economic shifts that have added value and are protective to ensure sustainability. In this study, the Ujung Kulon geopark is one of the appropriate Geoparks to be studied and analyzed how the planning for the development of this geopark can provide benefits for sustainable economic development. The research method used in this research is qualitative which is elaborated by descriptive analysis using the SWOT analysis technique. From the results of the analysis, the Ujung Kulon Geopark has added value. It has various world heritages which are also protected by the United Nations Educational, Scientific and Cultural Organization because its area includes a very wide protected forest and is also the last habitat of the one-horned rhino. This geopark also has the opportunity to develop well because it has government support so that its management is legally valid. However, the weakness of this geopark is the incomplete public facilities for tourists and the threat of natural disasters such as tsunamis and droughts. Therefore, the government must have careful planning so that the development of this geopark can contribute economically. In conclusion, to be able to support sustainable economic development from this geopark development plan, it is necessary to develop economics through investment, agriculture, and environmental policies. Therefore, to build integrated tourism, it is necessary to pay more attention to product and service development, national branding, SME development, protection of natural and socio-cultural resources, and analysis of tourism supply and demand.*

### Keywords

Geopark; tourism; sustainable economic development; SWOT



### I. Introduction

Sustainable development today is not a new issue. Prior to the existence of sustainable development, economic growth was the goal of implementing development without considering other aspects. In sustainable development there are three aspects that must be considered, namely economic sustainability, environmental sustainability, and social sustainability. To achieve the harmony of these three aspects, the implementation of development must refer to the aspects of sustainable development. Sustainable development is a development process aimed at meeting current needs but should not threaten the needs of future generations (Sagala *et al.*, 2018). Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area. (Shah, M. *et al.* 2020)

Currently, the management of Indonesia's natural resources is still partially dependent on extractive industries such as oil and gas and mining, which in terms of reserves and contributions tend to continue to decline. Therefore, the Indonesian economy needs to shift to a direction that prioritizes added value and is protective in nature to ensure sustainability. One of the concepts of sustainable economic and regional development is geopark. Geopark is one type of geotourism. Geopark is a concept based on sustainable development for the development of an area that combines types of biodiversity and cultural diversity (Sagala *et al.* , 2018) . The concept of a geopark was created as a motivation to foster public awareness of nature and the resources in it to be able to maintain and manage it properly.

In the context of sustainable development, the Indonesian government is committed to implementing sustainable development according to the 2020-2024 National Medium-Term Development Plan (RPJMN). The 2020-2024 RPJMN aims to form quality and competitive Indonesian human resources. One of these HR development policies is directed at alleviating poverty, as well as increasing productivity and competitiveness of the workforce. However, the professor of FISIP Unpad, Prof. Oekan S. Abdoellah, MA, PhD., some regional leaders have not been able to carry out sustainable development according to the RPJMN, seen from the many environmental destruction activities whose purpose is only to improve the regional economy. For this reason, the development of geoparks should be carried out as a green economy movement that does not only depend on the economic sector but can have a positive impact on the economy through tourism. Geopark development can be one of the implementations of sustainable development to achieve equitable welfare that does not override environmental factors.

Efforts to develop geoparks are carried out through concepts that integrate conservation, education, and local economic development (Briggs, Dowling and Newsome, 2021) . Innovative local business activities, new jobs and training that emphasizes quality will trigger the growth of new revenue streams through geotourism and conservation of geological resources especially in geoparks that are the focus (Lee and Jayakumar, 2021) . The development of this geopark is carried out to empower local communities through integrated and collaborative activities (Sagala *et al.* , 2018) . Utilization of geopark development that carries out conservation functions can also encourage community economic development. According to statistical data from the Director General of Natural Resources and Ecosystem Conservation in 2018, the use of environmental services in conservation areas in 2018 generated PNBPN of IDR 167.83 billion, while the number of visitors to conservation areas was 7.88 million people (Ekosystem, 2019)

In Indonesia, the development of geoparks is carried out because they have tourism potential and natural education. Geopark Indonesia has its own charm for tourists because of the diversity and uniqueness of its geological heritage. The *United Nations Educational, Scientific and Cultural Organization* (UNESCO) itself gives awards for the best geoparks in the world with the *UNESCO Global Geopark* (UGG) title, of which five of Indonesia's geoparks fall into this category, namely: Geopark Batur which was designated as UGG in 2012, Gunung Sewu Geopark has been recognized by UGG since 2015, Ciletuh Geopark in 2018, Mount Rinjani Geopark in 2018, and recently was followed by Lake Toba Geopark (Kemenparekraf, 2021) . In addition, one of the potential geoparks that can be developed is the Ujung Kulon Geopark which has been designated by UNESCO as a world heritage since 1992.

Ujung Kulon Geopark is a geopark located in Pandeglang Regency, Banten Province. In this area, 24 areas were identified as geosites and 14 points were verified as geological heritage (Kulon, 2020) . Ujung Kulon Geopark has the privilege of being the only one-horned rhino habitat in the world. This geopark has a lot of potential, especially from geological heritage, namely the presence of deposits from the enormity of the 1883

tsunami caused by the eruption of Mount Krakatoa (Kulon, 2021). Another uniqueness of the Ujung Kulon geopark includes Panitan island including a national park area, about 20 million years ago, Ujung Kulon is an ancient volcano, on Mount Raksa on Panitan Island there is a statue of the god Ganesha, there is also sandstone that comes from sand hardened beach which is also a rare phenomenon but owned in Cibunar (KSDAE, 2019). In addition, the Ujung Kulon geopark also has 14 geological heritages and 16 geological diversity that can be used as tourism (Kulon, 2020) . Based on tourist data on geosite sites in the Ujung Kulon geopark area in January-November 2021, Lalassa Tanjunglesung beach Panimbang received the most visits, namely 29,912 thousand visitors, while based on the list of visits to tourist destinations in Pandeglang in January-November 2021, The Bay Villas Tanjunglesung Panimbang visited the most (Kulon, 2020) .

To analyze the development of the Ujung Kulon geopark from the perspective of sustainable economic development, the Ujung Kulon geopark must have attractiveness as one of the main assets (Lee and Jayakumar, 2021) . In addition to tourist attractions, other facilities that must be owned are supporting facilities, access to tourist attractions, convenient transportation, and a well-integrated management agency. (Lee and Jayakumar, 2021) . Geopark development can run smoothly, so support from all stakeholders is needed, including support from the central government and local governments, communities both locally and from outside the region, academics, and contributions from the private sector (Sagala *et al.* , 2018) . Therefore, the support, commitment and cooperation between these stakeholders is very important for tourism development. In the development of the Ujung Kulon geopark, there were 24 reactions from 2018-2019, and the progress of achieving the response in that year reached 100% (BPG, 2020) .

**Table 1.** Number of Visitors of Ujung Kulon Geopark Tourist Attraction in 2021

Number of Geopark Visitors Ujung Kulon			
Month	Traveler Archipelago	Foreign Tourist	Amount
<b>January</b>	5.680	56	5.736
<b>February</b>	3,500	114	3,614
<b>March</b>	4.478	246	4.724
<b>April</b>	4004	148	4.152
<b>May</b>	13,851	101	13,952
<b>June</b>	9.748	82	9,830
<b>July</b>	3.977	28	4,005
<b>August</b>	6.439	86	6.525
<b>September</b>	6.855	71	6.926
<b>October</b>	6,998	275	7.273
<b>November</b>	6.093	108	6.147
<b>December</b>	4.284	285	4,569
<b>Total</b>	<b>7 5,907</b>	<b>1,600</b>	<b>77.507</b>

Source: District Tourism Office. Pandeglang

Based on the tourist visit data of the Ujung Kulon Geopark in 2018 (Dispar, 2019) , the Ujung Kulon Geopark was visited by foreign tourists and domestic tourists. There are far more domestic tourists than foreign tourists, however, Geopark Ujung Kulon has a selling point for foreign tourists. Every visitor to the Ujung Kulon Geopark must pay for a ticket, which is IDR 5,000 on weekdays for domestic visitors and IDR 150,000 for foreign visitors, while on weekends visitors must pay IDR 7,500 for domestic visitors and IDR 225,000 for foreign visitors (Chasanah, 2021)

Several studies identified visitor assessments of Geopark attractions, namely 44.1% of visitors stated that the condition of tourist facilities at Ujung Kulon Geopark was adequate. 55.9% of respondents stated that the condition of tourism facilities at Geopark Ujung Kulon is considered inadequate. According to visitors, accommodation/lodging and information about the Ujung Kulon Geopark are considered good and adequate. However, accessibility to tourist sites is considered inadequate, as many as (73.0%) respondents considered it difficult to reach the Ujung Kulon Geopark tourist location due to damaged road conditions and the lack of signposts. (Prayoga *et al.* , 2013) .

Discussions on sustainable economic development through Geopark tourism are often raised as topics for research. Some of his research results include the Bayah Geopark Development Program, *Geological Park* (Geopark) Tourism in an Economic Perspective, and Analysis of Sustainable Development Concepts in Geotourism Aspects at the Sawahlunto Geopark, West Sumatra, Indonesia. The studies above were taken within a period of no more than ten years, most of which discuss the development of a geopark, geopark tourism potential, economic development through geopark tourism and analysis of the tourism potential of each geopark. However, what distinguishes this research from previous research is that this research explains sustainable economic development by providing an overview of the innovations from the research conducted on the Ujung Kulon Geopark which is linked to the *blue ocean strategy* and analyzed using SWOT analysis. This research also provides views through an explicit explanation of the implementation of the *blue ocean strategy* in the development of geopark tourism to realize sustainable development so as to distinguish it from previous research. The purpose of this research is to analyze and explain sustainable economic development with a study focus on the Ujung Kulon Geopark using the SWOT analysis technique.

## II. Review of Literature

### 2.1 Sustainable Development Theory

Sustainable development is defined as an approach to develop or grow by using resources in a way that allows them to renew or continue to exist for others (Mensah, 2019) . The concept of sustainable development is based on the concept of development (socio-economic development in line with ecological constraints), the concept of needs (redistribution of resources to ensure quality of life for all), and the concept of future generations (possibility of long-term use of resources to ensure the necessary quality of life for generations to come). future) (Klarin, 2018) . In other words, sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainability is a holistic approach that considers ecological, social, and economic dimensions, where all three must be considered to find sustainable prosperity. Economic sustainability is the ability of a human community to maintain their independence and the resources they need, financial and other that can meet their needs (Spangenberg, 2005) . According to Simon Kuznets, sustainable economic growth is a process of increasing the productivity of the national economy which must exceed population growth for the maximum period of time (Chistilin, 2010). To realize a sustainable economy, it is necessary to be wise in utilizing resources, promoting stability and competition, developing skills and respecting work, as well as supplying goods and services that can meet consumer needs by considering their impact on the environment.

One of the important issues seen in economic progress is how to manage the compromise between addressing development needs from one perspective but on the other

hand there is an effort to follow the ecological carrying capacity to preserve the environment (Fauzi, 2004). In measuring adequate economic sustainability, we need to know how efficient our economic resources are, both in terms of the natural resources consumed and their wastes as well as their utilization of labor capital (Reddy and Thomson, 2015) . This is necessary because traditional economic indicators alone cannot be used as benchmarks for economic sustainability, so additional indicators are needed such as waste production and energy and water consumption, education and employment, transportation indicators, environmental management and reporting, and consumer spending. Sustainable economic development will always pay attention to social and ecological aspects because economic progress that does not focus on the boundaries of environmental and resource management will cause development problems in the future.

The importance of doing sustainable development has to do with the kind of future we leave for the next generation. The motivations behind sustainability are often complex, personal, and diverse. Sustainability is a value shared by many individuals and organizations that show this value in policies, activities, and daily behavior. Individuals as the main actors in developing environmental and social conditions together with future generations must create solutions and adapt. Thus, sustainability is important for reviving growth, changing the quality of growth, ensuring sustainable population levels, conserving and enhancing the resource base, reorienting technology and risk management, meeting basic needs for jobs, food, energy, water and sanitation, and combining the environment and economics in decision making (Brundtland, 1987) .

The advantages of sustainable development theory compared to development economic theory are that sustainable development theory involves the management of the environment and natural resources as a homogeneous set in which all are interrelated with each other, while the economic theory of development requires the achievement of high economic targets without involving the environment which if the consumption of resources Irrational power can lead to natural disasters and increase social inequality. Thus, sustainable development has the advantages of sustainable development theory over previous theories, namely that it helps in ensuring a better life for present and future generations, reduces the impact on the environment by reducing air, water and soil pollution, and helps in achieving long-term economic growth (Scutaru). , 2013) .

To be able to adapt to the sustainability process, where the spread of industry has moved quickly to transform into an innovation-driven economy, a strategy is needed. Innovation is very important not only for the company but also for the community and the nation. Therefore, in order to continue to compete in the market, organizations need to be more innovative by developing their own market so that their products and services are more marketable. This is in accordance with the *blue ocean strategy*, which aims to find and grow markets without competitors and avoid over-developed and saturated markets.

## 2.2 Blue Ocean Strategy

Blue ocean strategy is a business approach with the simultaneous pursuit of differentiation and low costs to open new market spaces and create new demands (Muzha, 2015) . The focus of the blue ocean strategy is not to limit output at high prices, but rather to create new demand through buyer value at affordable prices (Abaza, 2020) . In carrying out a *blue ocean strategy*, companies must develop a strategy in the order of utility, price, cost, and adoption, which are a single criterion to ensure commercial success. The first principle of *blue ocean strategy* is to reconstruct market boundaries to get out of competition and create a *blue ocean*. This principle addresses the search risks that many

companies face. The challenge is to successfully identify, from the stack of possibilities, so as to draw profits (Mauborgne, 2005) .

The six principles of *blue ocean strategy* are, among others, the principles of formulation, reconstructing market boundaries, focusing on the big picture not numbers, reaching beyond existing demand, getting the strategic sequence right, overcoming major organizational hurdles, building execution into strategy. (Mauborgne, 2005) . So that the *blue ocean strategy pattern* is to create an undeniable market space, make competition irrelevant, create and capture new demand, destroy value-cost exchanges, align the entire system of company activities in pursuit of differentiation and low costs (Mauborgne, 2005)

### **III. Research Method**

#### **3.1 Research design**

The qualitative method used in this research is described in an exploratory descriptive manner with the aim of knowing how to plan the development of the Ujung Kulon geopark in the perspective of sustainable economic development. A qualitative approach is used because it is the right approach for tourism development and for collecting data with scientific and methodological backgrounds by explaining what happened so that a useful explanation is obtained (Nugrahani, 2014).

#### **3.2 Data collection technique**

This study uses secondary data collection techniques, namely using documents related to research. This data can come from books, journals, newspapers, published electronic sources, public websites, government reports, etc. (Buchanan, 1981). The data needed in this study are the Ujung Kulon geopark tourism data and Indonesia's economic growth from the tourism sector. Sources of data in this study came from books, journals, proceedings, study documentation and other sources related to the sustainable development of the Ujung Kulon geopark.

#### **3.3 Data analysis technique**

The data analysis used in this study is a SWOT analysis because of its simplicity and high accuracy in determining the development strategy, in this case the sustainable development strategy for the Ujung Kulon Geopark tourist area (Phadermrod, Crowder and Wills, 2019). SWOT analysis is an analytical technique that includes an analysis of opportunities, challenges, weaknesses, and strengths to get the best strategy to achieve a goal. The purpose of the SWOT analysis is to provide a geopark development strategy. The SWOT component consists of strengths, weaknesses, opportunities, and threats.

### **IV. Result and Discussion**

Geological Park or better known as geopark in Indonesian means geological park or earth park. Geopark is an area with elements that invite local people to participate in the protection and improvement of the function of a nature reserve that contains archaeological, ecological, and cultural values (Girault, 2018). Geoparks present nature along with life including plants, animals, and humans as geological monuments. The existence of geoparks can increase the economic value of local communities in line with sustainable conservation activities and academic interests in them.

UNESCO upholds the improvement of geoparks as earth relics that tell the historical background of the earth's order and life in it. Plan 21 of 1992 as a science plan for climate

drive The United Nations Conference on Ecology and Development included the idea of geoparks. In 2000, European Union countries also began implementing the Manifesto on Earth Heritage and Biodiversity (Girault, 2018). In the Asia Pacific Region, a geopark network under UNESCO was also established.

Two important things in the development of Geoparks are to improve the local economy and also to preserve the environment. The purpose behind the existence of geoparks is to investigate, create, and extol the connections between land heritage, protected areas, social heritage, and immaterial heritage. To have the option to join GGN and be perceived as an international geopark, UNESCO through GGN has set several steps that must be met. However, if the geopark cannot fulfill every step set by GGN, GGN will set several steps that must be taken to ensure that the GGN standard rules are still complied with (UNESCO, 2010). The geopark rules set by GGN include, among others, an adequate area to carry out geopark activities, establishing management that also involves local residents, economic development for local residents, education for the community in general, conservation and protection, and geoparks must be incorporated in a geopark organization in worldwide and additional or territorial organizations.

Geoparks are determined based on level status consisting of national geoparks and world geoparks, UNESCO. One of the geoparks in Indonesia is Ujung Kulon Geopark.



*Figure 1. Geopark Ujung Kulon Maps*

This area has been designated by UNESCO as a world heritage starting around 1992 (Kulon, 2021) with the advantage of having the best-in-class one-horned rhino on the planet. Moreover, the Ujung Kulon National Park area with different views is very interesting, especially as a source of information and knowledge such as morphology and also rock classification that reflects the topographical cycles over the previous years. This geopark holds a lot of potential, especially hidden geological relics. One of which came from the devastating tsunami caused by the eruption of Mount Krakatoa in 1883. The potentials of this geopark can be used as a way to realize sustainable economic development in Pandeglang. The potential and heritage in this geopark will be analyzed further along with a development plan for the local community in the Pandeglang area.

The basis of the government's plan mainly focuses on concentrating on strengthening the ecotourism system, agrotourism, and marine travel industry. This is also a step to further develop the region and the advancement of human resources in the region. The Pandeglang government's references in terms of complying with action programs relevant to the tourism sector and disaster risk management include the Regional Tourism

Development Master Plan (RIPPDA), the Pandeglang Regional Spatial Plan (RTRW) 2011-2031, and the Regional Medium Term Development Strategic Plan (Renstra). RPJMD) Pandeglang 2016-2021 (Science and Technology and Lipi, 2016) . This reference defines the details of conceptual and strategic spatial planning for the tourism sector including a network of destinations and conservation areas.

The research location (see Figure 1) is in Sumur and Cimanggu Districts, Pandeglang Regency, Banten Province (NSA, 2020) . The Ujung Kulon Geopark was agreed to advance to become a national geopark according to the Regent's Decree Number: 660.1/ Kep. 133 – Huk/2019 whose area includes Sumur, Cimanggu, Panimbang, Pagelaran, Cigeulis, Labuan, Sukaresmi, and Carita sub-districts (KSDAE, 2019) . UNESCO has designated the Ujung Kulon geopark as a world heritage since 1992. Ujung Kulon as a national geopark is organized with the main objective of developing a travel industrial area for the protection of biological, cultural and social diversity.

There are 3 main pillars that will be developed in Ujung Kulon, which include: Geo-Diversity (nature conservation), Cultural Diversity (Geo-Heritage), and Geo-Site (geological site) (Perpres, 2019) . From previous geopark developments that have been carried out in Indonesia, the reciprocal linkages between the travel industry and socio-economic aspects will increase the carrying capacity and versatility of the travel industry in the local area. Some of the main tourism programs and activities of the Ujung Kulon geopark are described in table 1, below:

**Table 2.** Ujung Kulon Geopark Development Planning

<b>Ujung Kulon Geopark Planning</b>			
<b>Sector</b>	<b>Program</b>	<b>Location</b>	<b>Gap</b>
<i>Geo-Diversity and Geo-Heritage</i>	Identification of flora-fauna biodiversity and its correlation with geological and intangible cultural heritage.		
	Identification of the potential of the regional/village community for the development of geoproducts and tourist villages.		A feasibility study and socio-economic readiness are ongoing, including a <i>marketplace</i> and <i>homestay</i> for visitors.
<i>Geo-Site</i>	Feasibility studies and 3A ( <i>Accessibility, Attraction, and Amenities</i> ) or providing access to geoparks, attractions and facilities.	Ujung Kulon Geopark	Construction was delayed due to the COVID-19 pandemic.
	<b>Master plan implementation.</b>		

*Source: IOP Conf journal. Series: Earth and Environmental Science*

As shown in Table 1, tourism and disaster recovery plans are focused on human resource development, artificial attractions, and the local creative economy. The existence of a gap in the economic aspect is related to the national and local economic conditions as well as the tourism supporting sector. This is mainly because the provision of access and



tourism facilities continues to be prioritized for the priority tourism areas that have been determined, so that people still find it difficult to visit tourist destinations that are not yet well known. This explains the lack of balance in the use of environmental resources and the economic benefits of tourism in Pandeglang, which will complicate the implementation of sustainable tourism.

#### 4.1 Implementation of Blue Ocean Strategy

To be able to create a *blue ocean strategy* in the development of the Ujung Kulon Geopark, it can be done using a *six-path process* (Abaza, 2020), which is the first to focus on looking at alternative industries. This can be done by combining various types of tourism to later create unique and innovative programs. The second step is to reach across groups of buyers by utilizing technology such as the creation of mobile applications that tourists can download to guide tourists and book travel tickets online. This application must be able to meet tourist information needs such as information on operating hours, ticket prices, content and various acquisitions which can also be ordered electronically through the application. Applications can also provide *bundle-tickets* for more than one place to visit and provide discounts for selling more than one place at a time. Third, cross strategic groups to see other competitors and find the advantages of Geopark Ujung Kulon such as information and communication technology, the existence of tourism service infrastructure, and ease of transportation to make it easier for tourists.

#### 4.2 Ujung Kulon Geopark SWOT Analysis

SWOT analysis is an analysis that explains the factors that are the strengths, weaknesses, opportunities, and threats found in tourism objects. The following is a SWOT analysis at the Ujung Kulon Geopark:

##### a. Strength

Ujung Kulon Geopark is a UNESCO protected world heritage because this area has a large protected forest. The strength of this geopark is the existence of geological site objects as very unique, rare and valuable heritage as well as aesthetic value, getting local community support through the community, composition of government bodies, multi-departmental, multi-disciplinary, integrated, and also supported by the provincial government. In this area there are various types of tourist objects that can be explored by tourists, the diversity of the Ujung Kulon geopark is different from other geoparks including:

- a) Geological diversity, for example, Ujung Kulon is an ancient volcano about 20 million years ago which is indicated by the Honje formation. In addition, Panaitan Island is included in the National Park area, there are also archaeological remains, namely the Ganesha statue at the top of Mount Raksa located on Panaitan Island, there is a rare geological phenomenon in Cibunar with *sandstone* formed naturally from hardening of beach sand, and the presence of tsunami deposits that caused by the eruption of Mount Krakatoa in 1883.
- b) In addition to geological diversity, there is biological diversity. This diversity includes endemic flora of Ujung Kulon called kokoleceran. The flora that can only be found in the Ujung Kulon geopark is the identity of Banten which can grow up to 30 meters. In addition, there are also large trunked plants that belong to the *Moraceae family*, namely a tree located on Peucang Island called the Kiara tree, this tree is also a century old. Other plants that can only be found in Ujung Kulon include *Heritiera percoriacea*, *Batryohora geniculata*, *Knema globularia*, and *Cleidion spiciflorum*.

- c) There are also many historical sites, such as the Muruy slate inscription which is closely related to the history of the Sultanate of 1733-1750 AD, which is a great tourist and educational attraction. interesting. In addition, relics of prehistoric times, ranging from Hindu-Buddhist to colonialism are scattered at various sites in the Ujung Kulon Geopark area.

#### **b. Weakness**

In the development of the Ujung Kulon geopark, the weaknesses are the lack of professional tour guides in the area and the lack of coordination between the parties involved in the travel industry both locally, nationally and regionally. Furthermore, the lack of socialization about the Ujung Kulon geotourism concept that will be developed so that promotion of this tourism is still not extensive and minimal. In addition, the facilities available at each tourist site have not yet been completed and the availability of tourist information on each site has not been completed, so that easy access to information about existing sites is still difficult to obtain.

#### **c. Opportunity**

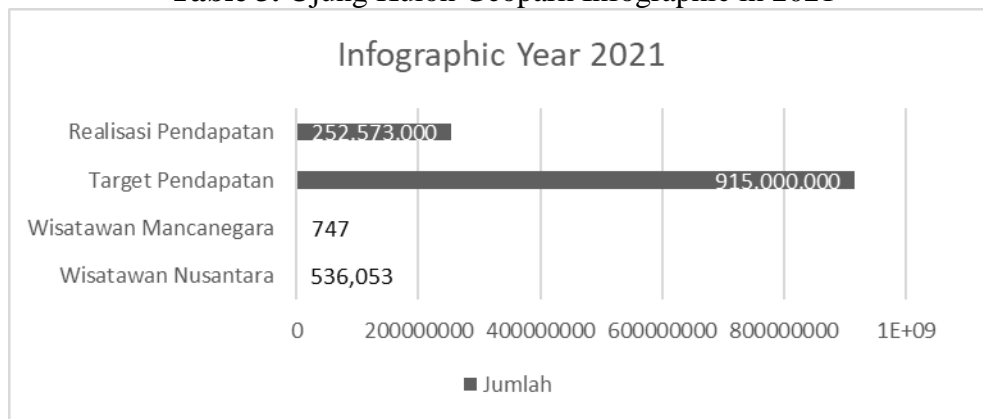
Nature tourism with the concept of natural beauty (return to nature) is a growing tourism trend. This can encourage tourism managers to compete to provide the best service to tourists in order to attract as many tourists as possible, especially through offering good service. According to data obtained from the manager, most tourists come to Ujung Kulon tourist attractions for vacations. In addition, the Ujung Kulon Geopark also has an opportunity because of the designation of a geological site as a geoheritage, which provides legal authority and strong support from all parties as partners to develop community empowerment and education, conservation.

#### **d. Threat**

In the development of geoparks, of course there are several threats in the development process, for example there are still some geological sites that are not maintained and awareness of cleanliness between tourists (visitors) and managers is still lacking, at each site there is no visible effort to increase the attractiveness of site objects, and there are natural factors such as tsunamis, droughts, and landslides.

Based on the SWOT analysis of the Ujung Kulon geopark above, there are opportunities that can encourage the development of the Ujung Kulon geopark that can help realize a sustainable economic development program. The planning for the development of Ujung Kulon Geopark Tourism can later become a leading sector and become a regional income that can continue to grow. This is in line with the concept of sustainable economic development because tourism development is seen as an instrument of job creation and income. A useful tool for demonstrating the potential effectiveness of geoparks in promoting sustainable economic development is the use of *impact assessments* (IA). Impact assessment is a structured process to consider the consequences for society and the environment. Specifically, the impact assessment asks questions such as: Is the geopark policy/development (or other planned intervention) having the desired impact? (Sagala *et al.* , 2018) .

**Table 3.** Ujung Kulon Geopark Infographic in 2021



Source: [tipkulongeopark.com](http://tipkulongeopark.com)

The direct impact on the economic sector from tourism is an increase in local people's income and an increase in tourist visits from both local and foreign tourists through the involvement of tourism management in the form of increasing income from the management of lodging, restaurants, and also from the management of tourism itself, as well as the creation of new jobs. The indirect impact of the flow of purchases of tourism needs by the management on other industries which are also beneficial for economic growth. This direct and indirect impact will be felt in the economic sector if the beneficiaries spend their income. The existence of the Ujung Kulon geopark tourism development will be able to see its impact on the community by reducing the national poverty level through economic growth and sustainable development goals. However, the government must also pay attention to the threats that exist in the development of the Ujung Kulon geopark in order to find the best solution and establish policies that are in line with the goals of sustainable tourism and economic development.

The negative impact of the Ujung Kulon geopark development plan on the sustainable economy is the negative impact on the environment and the economy. Negative impacts on the environment include; 1. Damage to the environment, such as: increasing levels of pollution in water, air and traffic jams and damage to coastal ecosystems due to indiscriminate disposal of waste. The negative impacts on the economy include; increase the cost of building facilities and infrastructure 2. Increase the price of local goods and basic materials and the flow of money abroad because consumers demand imported goods for certain consumption materials (Fernando, 2020).

#### IV. Conclusion

From the results of the analysis conducted on the Ujung Kulon geopark development planning, the use of tourism as a sustainable instrument against poverty depends on how well tourism development policies are linked to economics, investment, and environmental policies. The use of blue ocean strategy and innovation will be an advantage to create new market segments. Judging from the SWOT analysis above, in order to further strengthen the contribution of sustainable tourism to the economy, an integrated tourism policy should be developed that focuses on product and service development, national branding, SME development, natural and socio-cultural resource protection, and tourism supply and demand analysis. Therefore, it is recommended to develop a friendly business environment to attract tourism-related investment.

In addition, in planning the development of the Ujung Kulon geopark, the conservation efforts of the area should not be forgotten. The government should encourage entrepreneurs to use green energy and energy-efficient equipment to minimize environmental impact. Tourism development that can have a positive impact on the economy must develop quality, reliable, sustainable and resilient infrastructure, including regional and cross-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for the community. Therefore, to be able to maximize tourism development from the perspective of sustainable economic development, it must be done seriously so that development goals are achieved so that tourism can help achieve several SDGs directly or indirectly, such as poverty alleviation and food security.

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