

The Role and Effectiveness of the Ciletuh-Palabuhanratu Geopark in Acceleration Achievement of Sustainable Development Goals Pillars of Economic Development

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Abstract: Geoparks are developed areas for sustainable development, both from social, economic, and environmental aspects. The Ciletuh-Palabuhanratu Geopark, Sukabumi Regency, West Java Province, which has been recognized as a UNESCO Global Geopark, is believed to be able to contribute to building the local community's economy with the geotourism activities it offers. It is hoped that improving the local economy will help improve the quality and welfare of people's lives. It will accelerate the achievement of SDGs targets in the pillars of economic development, especially SDGs 8. This research aims to analyze the role and effectiveness of the Ciletuh-Palabuhanratu Geopark as an agent for accelerating the achievement of SDG 8. The method used is a combined method, statistical descriptive and qualitative with structured interviews with business actors and tourism community members. The research results show that three indicators have been achieved: increasing the number of tourists, workers, and industrial linkages, but sub-indicators in industrial linkages, namely restaurants and travel services, have yet to be maximized. In general, the Geopark has been proven to function as a means of contributing to the achievement of SDG 8. Still, it requires particular strategies to increase growth in economic sub-indicators to achieve the SDG 8.

Keywords: Ciletuh-Palabuhanratu Geopark; Economic development; SDG 8; Sustainable development

Introduction

Geopark is an area with allotment for speeding up sustainable development, especially in the region left behind (Wang et al., 2023). Geoparks are also an area of tour interest, especially in diverse geology, biology, and culture public (Cai et al., 2023; Talib et al., 2022; UNESCO, 2022). If managed with the correct expected capability, potency supports development sustainability because of own mark education, conservation nature, and empowerment of public local in social and economic aspects (CPUGG, 2023). Geoparks are promoted with the concept of maintaining and utilizing environmental resources while improving the socio-economic conditions of the surrounding community (Gray, 2019; Khalaf, 2022).

It determined one objective for the Geopark area: to develop an economy with geotourism (BAPPENAS, 2023). Developed geotourism is expected to stimulate the creation efforts of local sustainability (Pemerintah Jawa Barat, 2022). Communities can open new job opportunities at tourist locations, as tourism managers and business people offer tourists goods and services according to the environment's carrying capacity and capacity (Dowling & Newsome, 2011; Duangkrayom et al., 2022; Xu & Wu, 2022). Geopark management was developed to produce maximum economy as much as possible based on the public's participation in objective development (Darsiharjo et al., 2016; Hakim et al., 2022; Insani et al., 2023a; Wang et al., 2022). Thus, the fieldwork created from the characteristics and capabilities of the original will survive more and be

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sustainable. Its creation of a sustainable economy is expected to impact the improvement of the income community, the economy's resilience, and well-being overall.

Development pillars economy includes 5 SDG targets, namely SDG 7, energy clean and affordable. SDG 8 is jobs worth and growth economy, SDG 10 is reduced inequality, and SDG 17 partnerships to reach the goal (BAPPENAS, 2020). The initial goal of forming a Geopark is for the public, so management also requires the participation of society, fine from the planning, formulation, management, and supervision processes (Wearing & McDonald, 2002). Geopark's effectiveness, sustainability, and success are assessed by how big the presence of Geopark enhances the well-being of society (Ilie & Grecu, 2023). Community participation correlates with the creation of new businesses in utilizing resources in the Geopark, such as souvenir businesses, restaurants, accommodation, tour guides, and others (Raharjo et al., 2019). So, the effectiveness of Geoparks in matter development economy depends on the local public in creating opportunities for economic creativity in a way independent (Azman et al., 2010; Eder & Patzak, 2004; Han et al., 2018; Varriale et al., 2022).

Geopark development is also involved in achieving SDG 8, enhancement of decent work, and growth of the economy with push creation of fieldwork new following potential and culture public local (BAPPENAS, 2020; Xu & Wu, 2022). Geoparks align with the development agenda of the Indonesian national government in the 2020-2024 RPJMN. So, to achieve SDG 8, the government has established an internal strategy development encompassing the economy, tourists, total industry linkages (accommodation, restaurant and cafe, travel services, regional souvenir products), and amount of workers. That strategy has a meaning that the method used to achieve SDG 8 is the development of education, the development of the economy community, and the development of infrastructure goods inside or outside the Geopark area.

Based on the description, it can summarize that Geopark is trusted to speed up the achievement of SDG 8 goals; however, it still needs to study more about how much Geopark influences in answer achieving SDG 8. To fill the gap, the study's objective is to analyze the role and effectiveness of the Ciletuh-Palabuhanratu Geopark as an agent for accelerating the achievement of SDG 8. It will describe the success of no's Geopark function in empowering the public for economic sustainability development. The success of Geopark will push other areas with potency similar can be submitted as a Geopark to reach the same benefits, i.e., the development of a compatible economy with a conservation environment.

Method

The study uses a method combined, that is, statistic descriptive analysis and qualitative descriptive analysis. Statistic descriptive analysis is used to describe the role and effectiveness of Geoparks in economic pillar development based on indicator economy. Indicators referring to Kementerian PPN/BAPPENAS (2020) indicate three indicators in the economy: the growth of tourists, growth of industry linkages (hotels, travel services, products area, restaurant), and growth amount absorption worker. The data collected in a time series from 2014-2022 from report official agency, the *Badan Pusat Statistik* (BPS) Sukabumi Regency, West Java Open Data, and the Department of Tourism and Culture Sukabumi Regency (BPS Kabupaten Sukabumi, 2015-2023; Pemerintah Jawa Barat, 2022; Dinpar Sukabumi, 2018). In the *industrial linkages data*, the author also uses the primary data from interviews structured in the Ciletuh-Palabuhanratu Geopark area. Interviews were done with the perpetrator business and member community tourism. Data is processed in a way qualitative descriptive with analysis narrative. Analysis of the narrative in question has a meaning, namely interpreting with understanding explanations and phenomena from the participant (Insani et al., 2023b; Raseuki & Choiriyati, 2019). Analysis Then elaborated in a way holistic and comprehensive until the conclusion of the research.

Result and Discussion

The role of Geoparks in supporting development is analyzed based on indicator data economy with compare achievements before and after the establishment of the Ciletuh-Palabuhanratu Geopark as a UNESCO Global Geopark. The effectiveness of Geoparks is analyzed based on growth economy creative from a public local with utilize worker even services environment from there is a Geopark. The result of the role and effectiveness of Geopark will describe Geopark's contribution to economic pillar development, especially SDG 8 goals.

Geopark-Based Indicator Economy

The role of Geoparks in the development economy is evaluated by achievements indicator economy. On the indicator, the number of visitors who visited showed positive growth (Figure 1) from 2014 to 2018, both domestically and abroad. Quite an increase drastic in 2018, amounting to 21.3% of the average increase in tourists per year, which was 11% yoy before. In 2021, during the COVID-19 pandemic, the number of tourists decreased drastically until it was reduced by 64% of

amount travelers in 2020. Post-COVID-19, in 2022, the number of traveler return experiences increased up to 290% of amount travelers in 2021.

The existence of a Geopark as an object tour is expected to trigger growth in the industry, joined by others like lodging (hotels, homestay), restaurants and cafes, travel, souvenir businesses, and others. Data in 2014 shows House 82 meals and cafes and so on develop. However, it decreases when the UGG status is pinned. The decline in restaurants and cafes happened until 2020. According to the identification author, p the happen relate with exists the COVID-19 pandemic in 2020 made necessary restrictions in various sectors, including restaurants and cafes. Based on the information from participants, Geopark's status is sufficiently influential with the opened restaurant new by the public. The obstacle faced is that the restaurant is not yet managed in a way that there is variation regarding the food menu or even the restaurant's design.

As for sectors, accommodation consisting of hotels and homestays by the community shows consistency enhancement quantity from 2014 to 2022. The increase occurred in 2022, which recorded a total accommodation of up to 273. Participants study explains that lodging is the most effort found on Geoaprk Ciletuh-Palabuhanratu. Lodging business like a homestay is the easiest business without large capital because public use places stay personally rented. The increase in homestays by the community is also driven by the community Ikatan Homestay Ciletuh (IHC). The linkages industry was other is tourist travel services. The growth of tourism travel is yet to be significant (Open Data Jabar, 2023). Tourist travel services were founded in 2019, and several four travel and still endure until 2022. Based on the explanation from the participant, the travel owner is only partially public local. Only when the moment study was carried out was the Ciletuh-Palabuhanratu Geopark tour still needed to be more interesting. The public believes the travel business requires large capital and quality human resources, especially when becoming a tour guide. So, travel needs attention, especially for its development following market demand.

Regarding economic indicators of workers, tourist attraction workers include restaurant, lodging, travel, and tourist attraction workers and members of tourist attraction managers. Figure 1 shows a stagnant trend from 2014 to 2018, meaning no increase exists. In 2019, there was an increase in workers absorbed. It is in line with UGG's status. However, in 2020-2021, there was another decline. It could be related to the Covid-19 pandemic. In 2022, the number of workers will increase rapidly. It shows that geotourism at the Ciletuh-Palabuhanratu Geopark is starting to become active again. Based on the participants' explanations, women

dominate workers in accommodation and creative businesses by making souvenirs and processing local food resources.

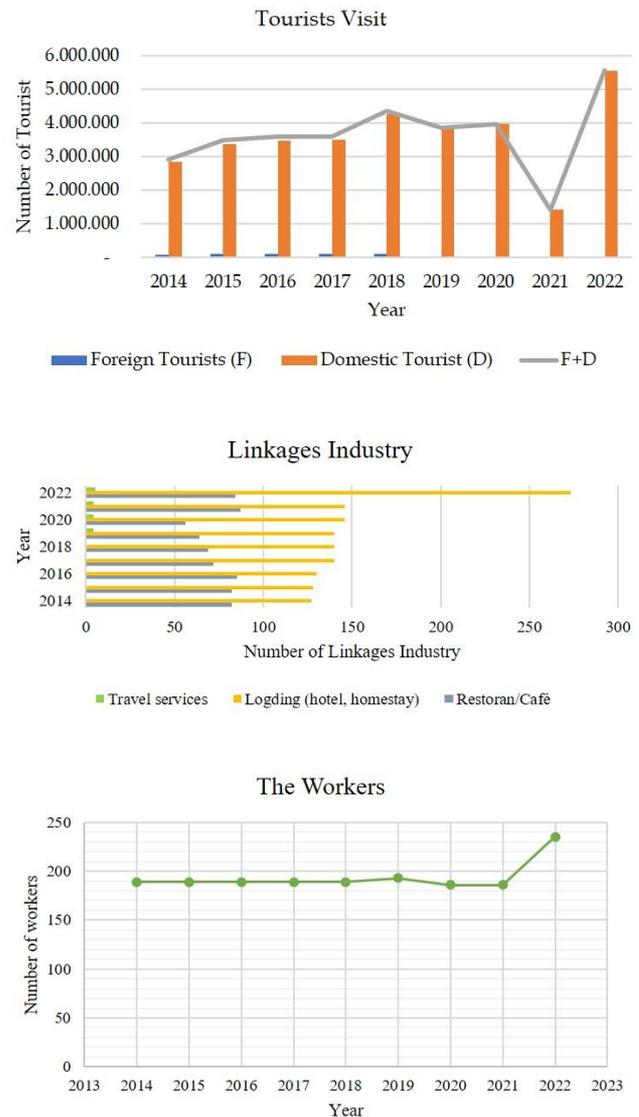


Figure 1. Graph amount tourists, industry linkages, and numbers of workers absorbed in 2014-2022

Based on Figure 1, the income original district Sukabumi experience enhancement from 2014-2020 (Dinpar Sukabumi, 2018). Before the inauguration of the Ciletuh-Palabuhanratu Geopark, UGG looked like the income original district was relatively stagnant and sourced only from levy. There was a coincident increase in income in 2018 with the start of UGG status going into effect, and it soared sharply after 2018, indicating the start of the spread of industrial linkages. The increase in district income in Sukabumi in 2018 was 1.1 times that in 2017, while in 2019, 2.2 times in 2018, and 2020, it amounted to 2.8 times in 2019. It shows the trend of

Geopark's positive impact on district income growth in Sukabumi Regency.



Figure 2. Regional original income in the Sukabumi regency-tourism sector

Effectiveness Geoparks

The community is both a subject and an object in pursuing local economic growth and governance. It indicates that community participation is the key to creating Geopark effectiveness in achieving SDG 8 goals. The existence of this Geopark has also been established turn on participation public local with its member group mover tourism. The existence group becomes a marker that the public around the Geopark enthusiastically participates and contributes to the progress of the Geotourism Regency Sukabumi.

In this regard, the Ciletuh-Palabuhanratu Geopark has several community-based economic driving activities, namely communities that operate in the environment around the Geopark and social media communities. Communities include Paguyuban Alam Pakidulan Sukabumi (PAPSI), Tourism Activator Community, and Ikatan Homestay Ciletuh (IHC). This community consists of local people who educate and empower the community to manage the Geopark area to be useful (Raseuki & Choiriyati, 2019). The practice carried out takes the form of training and outreach from academics and the government to the community; then, the community acts as an agent to channel the knowledge gained to the community. This knowledge transfer is hoped to create an active and innovative society for the economic development of the Geopark area.

The tourism-driving community has had a growing number of members after the existence of the Ciletuh-Palabuhanratu Geopark. In 2014, the tourism community had 160 members and continued to survive until 2018. In 2019, community members doubled and will continue to exist in 2022. This fact indicates that the existence of Geopark can attract the public's attention to join as members of tourism drivers. However, the number of community members will stagnate until 2022, namely 320. Tourism group members are relatively low,

only 0.04-0.07% of the total population of the Geopark area, or only increasing by 0.03% when the Geopark status changes (Figure 3). It indicates that the actual number of community members is still very small.

The tourism driving communities on social media include: Ciletuh-Palabuhanratu Sukabumi Geopark Nature Tourism Lovers (4065 members), Ciletuh-Palabuhanratu Traveler Geopark (5669 members), Ciletuh-Palabuhanratu-Palabuhanratu UGGP Community (1411 members), and Soekaboemi Heritages (16,659 members). This community activity includes promoting tourist attractions, major Geopark events, industrial linkages, and sales of typical Ciletuh-Palabuhanratu Geopark products. The number of community members on social media is greater than the tourism-driving community in the field, namely 1.44% (Figure 3).

Comparison of Tourism Driving Groups and Number of Population in the Ciletuh Geopark Area

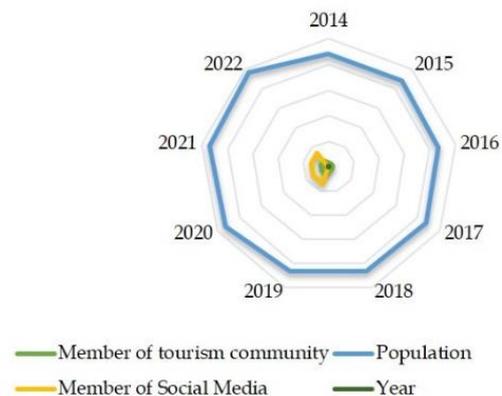


Figure 3. An overview of the number of tourism groups compared to the population of the Ciletuh-Palabuhanratu Geopark

Geopark Contribution to Economic Pillar Development

Achievement of targets contributed by Geoparks to SDGs-8 based on analysis of the role and effectiveness of Geoparks is as follows the development of higher economic productivity and effectiveness. Geotourism is a special interest in tourism that combines the human need for beauty with earthly educational value. Economic movement is created in Geotourism because it has higher added value than tourism in general. Suppose tourism, in general, only has the attraction of beauty. In that case, geotourism offers beauty and certain knowledge, history, and culture, which needs to be explained specifically by geographers to tourists. This attraction has proven to attract tourists to visit the Ciletuh-Palabuhanratu Geopark. The increasing number of tourist visits has implications for increasing local economic resources, such as restaurants, accommodation, souvenirs, and travel. It shows that the

Ciletuh-Palabuhanratu Geopark geotourism can meet SDG 8 targets to achieve productivity and economic effectiveness in the tourism sector with more added value.

The Economic development based on creativity and innovation. The Ciletuh-Palabuhanratu Geopark shows the creation of tourism-driving groups, which also create jobs for and from local communities. The increasing employment of both men and women and young people proves that Geoparks positively impacts increasing employment numbers. The economy grows in line with environmental conservation. The Ciletuh-Palabuhanratu Geopark is a breakthrough that allows the economy to grow without destroying the environment and is even active in environmental conservation, building higher productivity and economic effectiveness that focuses on sectors that provide higher added value.

Conclusion

Ciletuh-Palabuhanratu Geopark has proven its own role and effectiveness positive in frame acceleration objectives of the economic development pillar in SDGs-8. Indicator economy shows trend growth positive on the amount tourists and numbers of power Work absorbed. In general, industry linkages indicators also experienced positive growth, but the sub-indicator of linkages industry, restaurant, and travel tourism services still grow slowly or not yet maximum. There is a community mover tourists contribute positively to the growth activities economy public local. However, the community members are relatively small and stagnant compared to the total population of the Ciletuh-Palabuhanratu Geopark area. So special strategies are needed To develop House eating, traveling, and amount member mover tourism. In general, the achievements of the Ciletuh-Palabuhanratu Geopark have contributed to SDG 8.

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Author Contributions

This work is completed with the collaboration of all authors. U. K., conceptualization, observations, conducting research, methodology, data collection and analysis; draft preparation, writing-original draft preparation; D. N. M. and S., writing-review and editing, supervision, validation. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

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