# Spatial Structure of Accomodation Distribution In Belitong Unesco Global Geopark

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**Abstract**. The purpose of this study is to map the geographical distribution of lodging in Belitung, a popular tourist site that is where the spice route is being rebuilt. The amount of accommodations, which included homestays, non-star hotels, and star hotels, was examined using a variety of geographic data analysis techniques. Up till 2021, 88 lodgings were found. Additionally, according to the findings of mapping the availability of lodging, these accommodations were located in relation to region, natural conditions, and growth stages of the tourism destination, offering additional value to prepare lodging for the development of Belitong Unesco Global Geoparks.

Keywords: Hotel, Geopark Tourism, Accommodation Location, Exploration, and Spatial Data Analysis

#### 1. Introduction

Out of the five Indonesian geoparks that were previously listed on the UNESCO Global Geopark list, Belitung Geopark received the highest rating. The Belitung Geopark in Bangka Belitung Province is recognized as a world geopark region by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) due to its many distinctive features, including geology, flora, fauna, and culture. The 17 geosites in the Belitung Geopark-Juru Sebrang, Terong Tourism Village, Kuale Granite Mangrove Forest, Peramun Hill Granite Forest, and Tanjung Kelayang Trias Granite—have become well-known tourist destinations. Next are the following: Burung Mandi cretacious granidiorite, siantu pillow lava, tajam mountain, baginda rocks, punai beach, garumedang tektite, lumut hill, batu pulas granite rock, nam salu open pit, cendil heat forest, and tebat rasau cenozoic swamp. The geomorphology of granite rocks in Belitong Island's waters, the remnants of an ancient underwater volcano, Pillow Siantu lava, the largest tin mineral discovery in Southeast Asia in the Kampit Coconut Formation, and meteorites (tektite/satam) are the four potentially valuable geological heritages in this area. spread throughout the quaternary alluvial zone. Belitung Geopark is Indonesia's sixth geopark to be listed as a UNESCO Global Geopark. In the past, Toba, Batur, Ciletuh, Mount Sewu, and Mount Rinjani Calderas were successfully registered by Indonesia (1). As Indonesia's top tourist destination, Belitung undoubtedly requires the help of other tourism-related products in order to be ready for the sense of tourist attractions. One of the most significant tourism-related products is lodging, which serves as a temporary place for travelers to stay while they are at tourist attractions. The demand for lodging in popular tourist destinations is typically seasonal in the majority of countries. A busy holiday season and a low season are typically caused by factors like the holiday time that is developed in tourist areas and the climate in tourist destinations (2). Geographic clustering helps increase hotel development efficiencies, according to research The agglomeration economy, which offers extra advantages to hotels inside the hotel business cluster, is responsible for this tendency of grouping hotel properties. Agglomeration gives companies from hotel clusters the ability to easily utilize resources within the cluster for their benefit (4).

Examining Belitung's tourist aspects and attempting to synthesize lodging as the Belitung Geopark's carrying capacity from its spatial structure are the goals of this study. The comprehension of hotel positioning mechanisms is enhanced by sets of spatial statistics based on these spatial patterns. As a result, the benefits and drawbacks of a particular area for new hotels can be determined, and other suitable locations for hotel entrance can be displayed. Additionally, the factors influencing this distribution can be found using global spatial analysis of the hotel site distribution (5). Without lodging infrastructure, tourism as a social, economic, and geographic component cannot exist (6).

### 2. Methods

Using a study desk, the researchers synthesized the geographical existence of lodging as the Belitung geopark's carrying capacity. The study team searched for information on lodging and categorized it according to the type of lodging, starting with homestays, non-star hotels, and star hotels, along with locations and coordinates. The researchers' sources of information include the East Belitung Regency's lodging data papers from the East Belitung Tourism Office and the findings of an online poll. The researcher used a variety of additional sources, including verifying information from locals she knew, to fill in some of the gaps in the data. Following data collection, the researchers utilized a geographical information system (GIS) to generate a Google Map map showing the distribution of lodging in the Belitung geopark. This synthesis exercise requires the coordinates of the lodging site. The GIS software platform is used to create a map image when the entire implementation process is completed in Microsoft Excel. to use GIS to ascertain the spatial organization of Madison's area research (7). Strong geographic characteristics are present in tourism, and geographic information systems, or GISs, are information systems that support geographic research and decision-making, both of which can be important to tourism management (8). This technique allows researchers to see through the map image and obtain the desired study outcomes.

#### 3. Results And Discussion

Based on the information gathered via researcher observations and data searches at the Belitung tourism office, 88 lodging options are available, including both star and non-star hotels. Non-star hotels are similar to guest houses or resident homes that are utilized as short-term lodging for tourists, but star hotels have specific requirements and amenities. There are 39 star hotels and 49 non-star hotels spread throughout Belitung, with 51 lodgings in Belitung and 36 in East Belitung (Figure 1).



Figure 1: Belitong UNESCO Global Geopark Accommodation Classification

A similar situation occurred in Belitung, as seen in Figure 2 Distribution of Accommodation in Belitong UNESCO Global Geopark. It is evident that the distribution of hotels is dominated by a green color, indicating the many types of accommodation that are classified as non-star hotel categories. However, as Belitung's tourism industry has grown, so too has the accommodations from the star hotel classification. started to provide color to Belitung's housing dispersion. Belitung is a popular destination for hotels with a 4-star rating and a global network to expand their operations. The center of gravity gradually moves away from the historic core and toward more modern neighborhoods as tourism increases and new hotels are built. Similar to the Western model, this development was undertaken primarily for the following reasons: accessibility, old town congestion, building size constraints, and site availability for new hotels (9).



Figure 2: Belitong UNESCO Global Geopark Accommodation Distribution

An essential first step in comprehending tourism in a certain place is the examination of the spatial structure and variations in tourism (10). After that, hotels are mapped using a geographic information system, and the features of the surrounding land use, attractions, and transportation infrastructure are examined (11). The distribution of lodging in the Tanjung Pandan neighborhood, which is home to several intriguing tourist sites, is shown in Figure 3. Since Tanjung Pandan Beach is a well-known tourist destination, it has the largest spread of lodgings, with 42 total accommodations in various categories ranging from non-star to 1-4 star hotels.



Figure 3: Tanjung Pandan's Accommodation Distribution

There are eight lodging options in this area, although they are mostly four- and five-star hotels, in contrast to the Sijuk area, where the distribution of lodging options is less extensive. As part of the service industry, hotels rely heavily on effective location strategies to successfully attract guests and win the competition. Geographically, the hotel sector became more concentrated upon four major urban tourism nodes, and overproduction of hotel accommodations is an emerging problem in some cities (12). As part of the service industry, hotels rely heavily on effective location strategies to successfully attract guests and win the competition. The agglomeration effect, which describes the advantages that hotels might obtain from clustering, is one area of study in hotel location (4). For hotel developers, it is crucial to consider how facilities fit into the larger picture in terms of satisfying or boosting demand in and around both urban and rural locations (13). The distribution of hotel rooms in Sijuk is shown in Figure 4 in a location close to the beach; naturally, this will appeal to hotel developers.



Figure 4: Sijuk Accommodation Distribution

Instead of prioritizing the sale of alcohol with just rudimentary lodging facilities available, the fundamental character of the hotel product was redesigned with a focus on providing high-quality accommodations. However, local businesses rather than global hotel chains were the main players in the process of restructuring and change, in contrast to many other developing-world locations (12). The most obvious indicator of urban structure is the type of land use, which has a variety of effects on hotel location selection. The substitution/competition impact is one instance. In this instance, the hotel sector (14). Homestays, or local residents' homes utilized as temporary lodging for tourists, continue to dominate the non-star hotel distribution in the Manggar area, which has 23 lodging options overall (figure 5). This is undoubtedly beneficial because it can boost the local economy and, if it has to do with Belitung's nature conservation, it will at least obstruct it if it takes over hotels with tall buildings. Therefore, if there is development, it is hoped that it has undergone a thorough feasibility study and a permit to avoid harming Balitung's nature conservation as a Global Geopark.



Figure 5: Accommodation Distribution at Manggar

#### 4. Conclusion

According to the researcher's findings, Belitung's lodging distribution still needs to be examined in order to accommodate visitors' needs and determine whether building new hotels would be feasible while promoting the Belitong Unesco Global Geopark. Based on the kind of hotel categorization, it is evident that non-star accommodations predominate in Table 1, with the highest accommodation distribution found in Tanjung Pandan and the lowest in the Badau and Mambalong districts. Belitong Regency has more distributed lodging than West Belitong Regency, and non-star hotels are the most common type.

The distribution of upper-class hotels is strongly correlated with the type of commercial land and the quantity of attractions surrounding hotels (11). The quantity of tourist visits and population size are important factors that influence Airbnb placement, according to the spatial econometrics model (15). The most notable manifestation of the expansion of tourism is the construction of hotels (16). Therefore, it is anticipated that future research will examine the viability of accommodation in Belitung with regard to nature conservation. If accommodation development is found within the framework of Belitung's carrying capacity for tourism activities, this could serve as a policy to establish accommodations that provide added value in order to prepare accommodations for the development of Belitung UGGs.

Region		Accommodation						Total
		Non-*	*	**	***	****	****	Total
Regency of	Tanjung Pandan	14	7	9	8	4		42
Belitung	Sijuk	1	1	1	1	3	1	8

Table 1: Belitong UNESCO Global Geopark's Accommodation Spatial Structure

	Badau				1			1
	Membalong					1		1
Regency of East	Manggar	21	1	1				23
Belitung	Kelapa Kampit	4						4
	Gantung	9						9
Total		49	9	11	10	8	1	88

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