

## THE MARKET POTENTIAL AND SUSTAINABILITY BALI ECOTOURISM DESTINATION

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### ABSTRACT

**Objective:** This initial research is to determine the market potential and sustainability Bali ecotourism destination related to the five ecotourism destinations, namely West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung.

**Method:** This study uses descriptive statistics powered by the Google Trends Tool to determine the popularity of the five ecotourism destinations in Bali, namely West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung.

**Results:** The West Bali National Park area is the most popular ecotourism, then Bali Mangrove Denpasar, Batur Geopark Kintmani, Lembongan Mangrove, and finally the Lake Buyan area. Ecotourism in Bali has a fairly strong tourist market segmentation in some of the countries such as Australia, the Netherlands, Belgium, Switzerland, and Germany. The five Ecotourism areas in Bali have experienced fluctuations in visitors in the last five years from 2018 to the present. However, West Bali National Park, Batur Geopark Museum, and Bali Mangrove are almost stable.

**Conclusions:** This research shows that Bali tourism destination managers can direct the promotion of ecotourism to several destination countries Australia, the Netherlands, Belgium, Switzerland, and Germany which are indicated as tourists who have a strong interest in ecotourism.

**Keywords:** ecotourism, tourism Bali, market potential, tourist destination, market segmentation.

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## O POTENCIAL DE MERCADO E A SUSTENTABILIDADE DO DESTINO DE ECOTURISMO BALI

### RESUMO

**Objetivo:** Esta pesquisa inicial tem por objetivo determinar o potencial de mercado e a sustentabilidade do destino de ecoturismo de Bali em relação aos cinco destinos de ecoturismo, a saber, Parque Nacional de Bali Ocidental, Área do Lago Buyan, Museu Geoparque Batur, Manguezal de Bali Denpasar e Manguezal de Lembongan Klungkung.

**Método:** este estudo usa estatísticas descritivas com a ferramenta Google Trends para determinar a popularidade dos cinco destinos de ecoturismo em Bali, a saber, West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar e Lembongan Mangrove Klungkung.

**Resultados:** A área do Parque Nacional de Bali Ocidental é a mais popular para o ecoturismo, seguida por Bali Mangrove Denpasar, Batur Geopark Kintmani, Lembongan Mangrove e, por fim, a área do Lago Buyan. O ecoturismo em Bali tem uma segmentação de mercado turístico bastante forte em alguns países, como Austrália, Holanda, Bélgica, Suíça e Alemanha. As cinco áreas de ecoturismo em Bali sofreram flutuações no número de visitantes nos últimos cinco anos, de 2018 até o presente. No entanto, o West Bali National Park, o Batur Geopark Museum e o Bali Mangrove estão praticamente estáveis.

**Conclusões:** Esta pesquisa mostra que os gerentes de destinos turísticos de Bali podem direcionar a promoção do ecoturismo para vários países de destino: Austrália, Holanda, Bélgica, Suíça e Alemanha, que são indicados como turistas que têm um forte interesse no ecoturismo.

**Palavras-chave:** ecoturismo, turismo em Bali, potencial de mercado, destino turístico, segmentação de mercado.

### 1 INTRODUCTION

The Central Bureau of Statistics noted that Indonesia's forest area was 125.82 million hectares in 2020. That number did not change from the previous year. In detail, an area of 29.58 million hectares of Indonesia's forests are protected forest areas. Then, 27.41 million hectares are nature reserves and nature conservation areas. A total of 26.77 million hectares are limited production forests. Permanent production forests cover 29.22 million hectares. Meanwhile, 12.84 million hectares of convertible production forest. Meanwhile, the size of the forest area in the country has experienced a downward trend in the last five years. On average the average decline reached 0.21% from 2015-2020 (Pirmana et al., 2021); (Sandker et al., 2007). The factors of this decline have not been known in depth, and one of the efforts to mitigate the decline in protected or conservation forest area is by using the protected or conservation forest areas is by implementing a management model based on community empowerment in the management model based on community empowerment of conservation forest buffer



villages. The logic is that if village communities are prosperous with the existence of conservation forests, then they will tend to protect them well. One form of conservation forest management is through development of ecotourism programmes (Prasiasa et al., 2023); (D. I. Utama, 2023).

However, to ensure the correct direction of ecotourism, there are some basic principles that must be followed. Several principles have been suggested by various researchers, but the most common principle was coined by The International Ecotourism Society (Fennell, 2001). Ecotourism is about bringing together biodiversity, culture and sustainable travel. It ensures that communities are embraced and take part in ecotourism activities (Fennell, 2001). The values of good ecotourism are minimising impacts; building awareness and appreciation of ecosystems and cultures; providing positive opportunities for visitors and hosts; providing direct financial benefits for conservation; providing monetary gains and empowerment for locals and increasing exposure to the hospitality of rural communities (Barna et al., 2011); (UTAMA et al., 2021).

Based on the above-mentioned principles of ecotourism, the notion of ecotourism includes the following activities, but is not limited to nature hiking, diving, wildlife watching, and cultural tourism with the concept of attention to conservation and sustainability of key ecotourism aspects applicable to rural areas where biodiversity, climate, conservation areas, and cultural heritage are essential (I. Gusti Bagus Rai Utama et al., 2021); (Rai Utama & Trimurti, 2020).

This research is a preliminary study before conducting in-depth observations and surveys of ecotourism destination management in five ecotourism destinations in Bali, namely West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung. This initial research is to determine the popularity of search keywords related to the five ecotourism destinations (I Putu Okta & I Nyoman Gede, 2016); (I Gusti Bagus Rai Utama & Trimurti, 2019); (Abd Aziz & Ariffin, 2009).

## **2 LITERATURE REVIEW**

The scope of this research is marketing research that focuses on market segmentation analysis based on geographic factors to determine visitor segmentation on five ecotourism destinations. This research is a preliminary study in five ecotourism destinations in Bali, namely West Bali National Park, Lake Buyan Area, Batur Geopark



Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung. This study uses descriptive analysis with the help of the Google Trends Tool to determine the popularity of five priority destinations using the Google Trends Tool (Carneiro & Mylonakis, 2009); (Choi & Varian, 2012); (Strelnikova et al., 2023).

Currently, online reviews are a form of electronic word of mouth delivered by people who have purchased products or services, commented on, and posted who have previously used a product or service (Al Mana & Mirza, 2013); (Livson et al., 2021). Another understanding of online consumer reviews as a form of electronic word-of-mouth promotion can be said as a new and influential way of marketing that also plays a role in the decision-making process (Aprianingsih et al., 2020). From several opinions, online reviews are reviews that have been posted on online media by consumers who have purchased or used products or services and can lead to potential purchases for the next consumer (Krisnayani et al., 2021); (Sulistiyafani & Sastrawan, 2021).

This study also refers to previous research by researchers (Marie & Widodo, 2019) which uses several online review indicators, namely general persuasiveness, general credibility, susceptibility to online product reviews, and content. According (Zhao et al., 2015) argue that there are several conditions for effective online consumer assessment, namely online assessment that is useful in facilitating the consumer purchasing decision process. Online consumer ratings are useful as a benchmark for other users to measure decision-making. The amount of information is so large that only comments and opinions that influence consumer decision-making are of value. The expertise of reviewers is one of the hallmarks of online consumer reviews, which are generated anonymously by individuals. The amount of information from various sources to filter information, users can follow a market expert (Market Mavens) who is an expert in a particular field. A highly skilled person is someone who has more knowledge about a product or service. On social media or the internet, someone who writes or writes a review about the information on the internet will attract others to discuss it because that person feels and is considered an expert. Consumers can identify market experts and follow them when making purchasing decisions. Market experts are defined by the extent to which a source of information is considered and identified by someone with expertise in a particular area of interest. Timeliness of Online Consumer Review is an information search process, consumers are faced with relevant information in bulk related to a certain period (Carneiro & Mylonakis, 2009); (Nafah & Purnaningrum, 2021).



The value of the online consumer rating is the value of the message in the online consumer rating which is divided into two, namely messages that focus on positive things (benefit gain) and vice versa, namely messages that contain negative things (benefit loss). In online consumer reviews, negative and positive messages can be given simultaneously. The completeness of the online consumer assessment is the completeness of the online consumer assessment, which is used to measure how detailed an assessment is. Online consumer reviews on social media or the web vary from simple news stories to more detailed and complex explanations based on facts, because consumers need more detailed and specific information to make decisions in unfamiliar situations (Trimurti & Utama, 2020); (Carneiro & Mylonakis, 2009); (Nafah & Purnaningrum, 2021).

Social media marketing strategy is the basis for the above discussion to create concepts for individuals and then put them together (Li et al., 2021); (Chanthinok et al., 2015). Following are some steps of marketing strategy through social media: (1) Direct customer contact: Social media can be used as a means of creating service to customers. Customers contact the company using messaging, rating, or posting a status on a personal account. In companies with immediate and relatively fast reactions, there is a closeness with customers that is often not accessible by other media. (2) Stakeholder building: Using a Group, blogs and forums can be used to create a purposeful network for the common good. While this is only possible for a particular product and service, the meeting of users with a genuine interest in the product and the possibility of exchange can almost only occur on social networks. (3) Events: Taking advantage of a Concert or event is a popular way to reach customers, especially in the culinary trade. (4) Interactive Campaign: Through Sweepstakes, distributing vouchers, a game app and surveys are ways to attract consumers by engaging potential customers. (5) Sales and Distribution: Sales of products have declining inventory and other sales concepts can be realized here by using the help of franchises or third parties. (6) Reputation, Image, and Authority: By disseminating information about the expertise possessed in the form of campaigns with content that is interesting to build a reputation thus increasing the value of profitability. (7) Viral Marketing: Downloading Content with a unique concept can encourage users to share the content. This content is managed virally by being distributed by many users. This marketing is done by people who are usually called influencers. (8) Search engine optimization: With the existence of Social Networks, what is mentioned (Social Signals) can be sent to search engines by entering keywords. Profiles on social media accounts



such as Twitter, Instagram, and Facebook are usually indexed by search engines. High Interaction Rates (Likes, Comments, Shares) are signals that have this added positive allowing search engines to know that users find the offer attractive. (9) Social media monitoring: Monitoring services and reports on social media have a greater opportunity for companies to conduct research. This data can be managed in many ways. This method is often used by a company to find out customer interest and build a sense of customer loyalty or it is also used to achieve targets within the company by conducting regular monitoring. (10) Traffic (Timeline): Marketing with this method is considered effective in generating user interest to visit blogs or websites. The concept of attractive content has such an important competition (Kurniawati & Arifin, 2015); (Siswanto, 2013); (Petriana, 2017); (Biryukov et al., 2023).

### **3 METHODOLOGY**

Google Trends offers a service that can help users find the latest topics. Google Trend is the service in question, with multi-featured tools, especially for marketers (Tussyadiah et al., 2006); (Choi & Varian, 2012). This study uses descriptive statistics powered by the Google Trends Tool to determine the popularity of the five ecotourism destinations in Bali, namely West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung.. Google Trends has become a fairly complete service tool because it has many interesting functions and features; Displays topics that are widely discussed, search for commonly used keywords by comparing performance between keywords, and generate views in a simple and easy-to-understand way in the form of trend graphs, and query keywords with high mode (Nafah & Purnaningrum, 2021).

### **4 RESULTS AND DISCUSSION**

Based on the results of an analysis using Google Trends, it is known that the popularity of each ecotourism destination in the world is as follows:

#### **4.1 POPULARITY OF WEST BALI NATIONAL PARK**

The West Bali National Park areas are administratively part of Gerokgak Sub-district, Buleleng Regency. The community is mostly dependent on the agricultural sector and only a small portion is dependent on the utilisation of marine resources and tourism.





Beach tourism activities in the West Bali National Park area do not have a significant impact on the socio-cultural life of the local community. socio-cultural life of the local community (Putra et al., 2021).

Although the people in the West Bali National Park area, especially the people of Gerokgak Sub-district, are included in the coastal community, most of their livelihoods do not depend on marine resource utilisation or tourism activities, but on the agricultural sector. tourism activities but rather from the agricultural sector. From an economic point of view, the positive impact of the implementation of tourism activities on economic revenue in this area is not so great because community participation in tourism activities is low. This is due, among others, to the fact that the community does not have skills in the field of tourism, opportunities for work are closed, limited business opportunities, lack of capital, and ignorance of business opportunities. business opportunities (Ernawati, 2011); (Mahmud et al., 2015) .

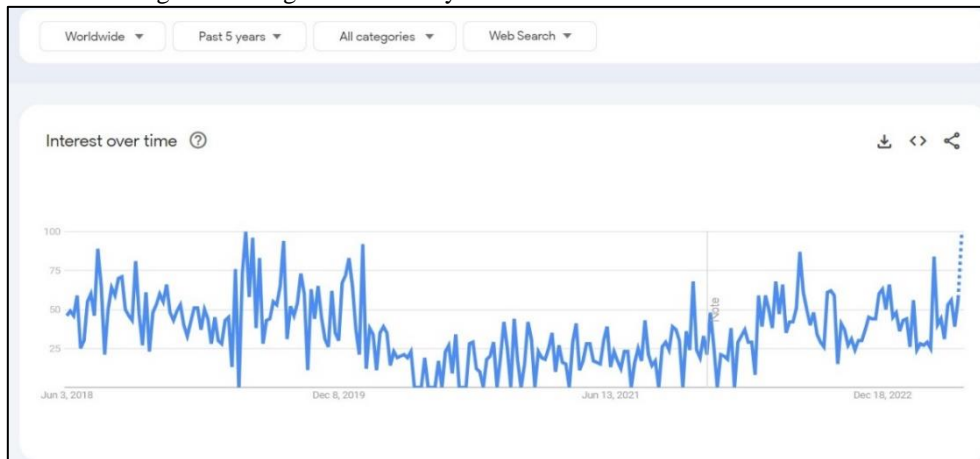
In terms of socio-cultural life socio-cultural life of the local community, beach tourism activities in tourism activities in the West Bali National Park areas also do not have a significant impact on the socio-cultural life of local communities. also does not have a significant impact on socio-cultural degradation. This is thought to be due to the low level of community participation in the organisation of tourism activities, the prohibition of lodging in the area by the local government. In addition, foreign tourists mostly visit the West Bali National Park area only for a day because they are bound by tour packages, so the community rarely interacts directly with tourists (Mahmud et al., 2015). The Ecotourism Location Map is shown in Figure 1. West Bali National Park as follows:





Google Trend Analysis Results of West Bali National Park shows that ecotourism has fluctuated over the last five years. In 2019 to 2021, it was seen to have decreased, but at the end of 2021 to 2023 it increased again. The trend of West Bali National Park popularity can be seen in Figure 2 below:

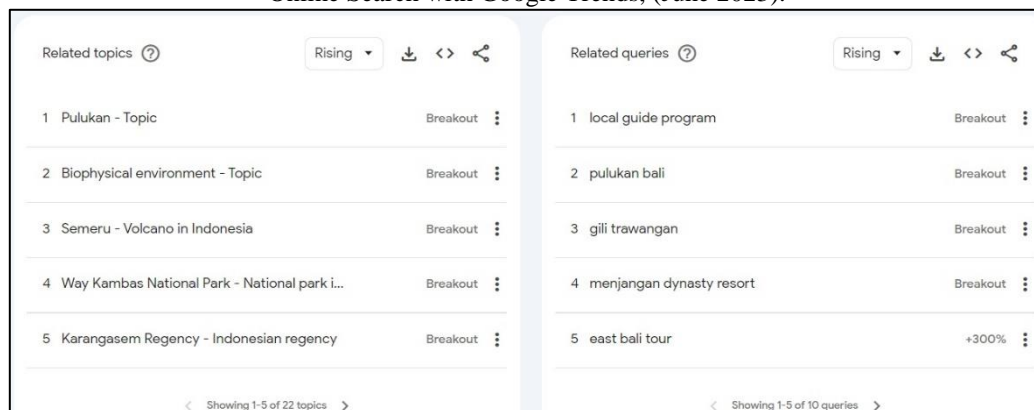
Figure 2. Google Trend Analysis Results of West Bali National Park



Source: Online Search with Google Trends, (June 2023).

The search topic West Bali National Park is mostly related to the following keywords: Pulukan a tourist area in Jembrana Regency, Biophysical environment, Semeru which is an active volcano on Java Island, Way Kambas National Park in Lampung, Karangasem a regency in Bali, Gili Trawangan, Menjangan Dynasty Resort, and East Bali Tour. Some of these keywords are correlated with the search for West Bali National Park. Results of google trend analysis as shown in Figure 3 below:

Figure 3. Results of Google Trend West Bali National Park Analysis based on topics related Source: Online Search with Google Trends, (June 2023).





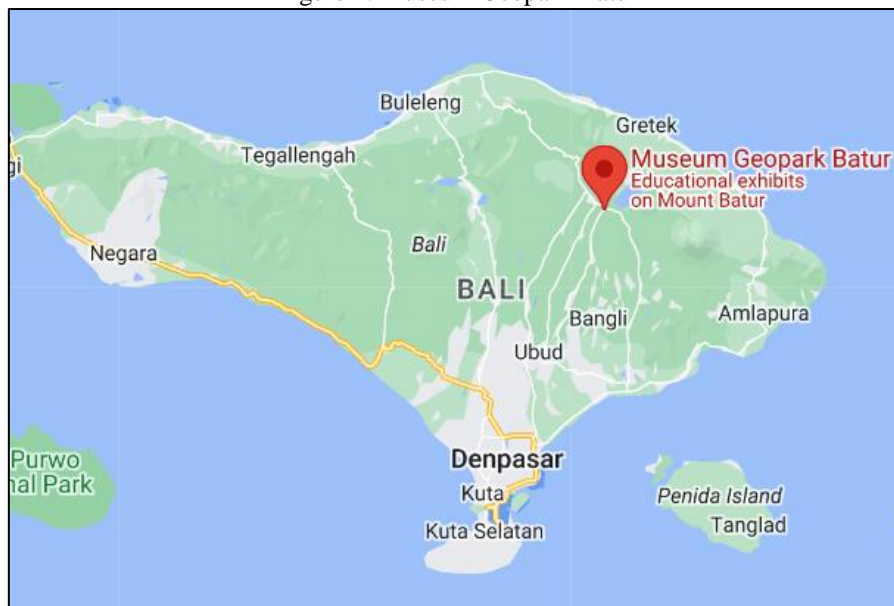


The correlation implications of some of the keywords above indicate that someone who does tourism activities in the West Bali National Park, they also have an interest in visiting some of these places, and if the keyword equation is a hotel or inn, it indicates that they stay around the hotel.

#### 4.2 POPULARITY OF MUSEUM GEOPARK BATUR

Bangli Regency is one of the northern Bali regions that has tourism potential in the form of mountains. The most famous tourist attraction is Lake and Mount Batur. But actually Bangli Regency, especially in the Kintamani area, does not only have beautiful lakes and Mount Batur as its natural attractions (Dewi et al., 2021). The Batur Kintamani Geopark Museum is a new tourist attraction owned by Bali. The museum was inaugurated on 1 April 2016 by the Minister of Energy and Mineral Resources, Sudirman Said (Dewi et al., 2021). In this Batur Geopark Museum, visitors can find out the history and geopark of Mount Batur more closely.

Figure 4. Museum Geopark Batur



Source: <http://www.baturglobalgeopark.com/>

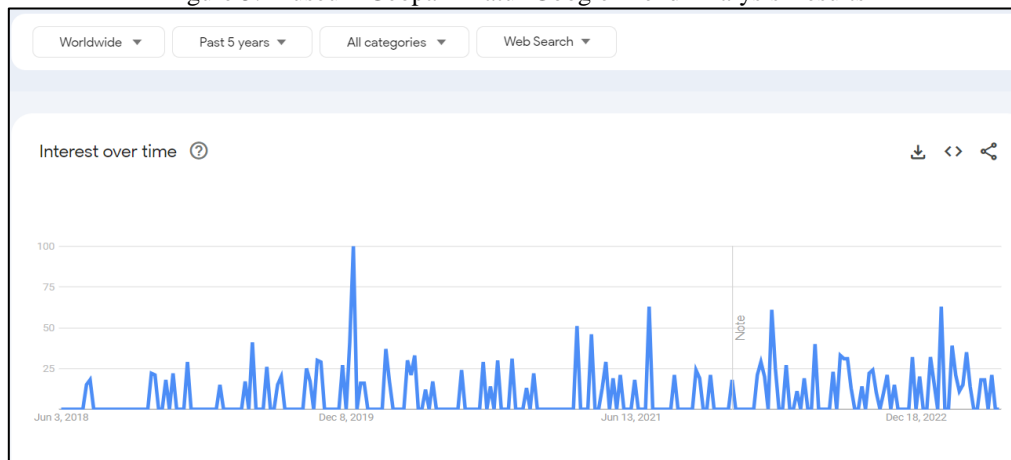
Since the operation of the Batur UNESCO Global Geopark (BUGG) Management Agency has had a positive impact in increasing the Regional Original Revenue (PAD) of Bangli Regency, not even a year of operation since 2019 the revenue raised has almost reached half of the target. According to Bangli Regent I Made Gianyar, the development of the performance of the BUGG Management Banda has been extraordinary, which used



to never reach 15 billion in revenue but is now predicted to reach 25-27 billion (Rosyidie et al., 2018); (Sagala et al., 2018).

Since 2018 until now, the results of google trend analysis show that the development is still on average low and fluctuates, but has a fairly prominent difference with visits to other ectourism. The Kintamani Geopark Museum does not appear to be affected by the Covid-19 pandemic. The trend of popularity of the Batur Geopark Museum can be seen in Figure 5.

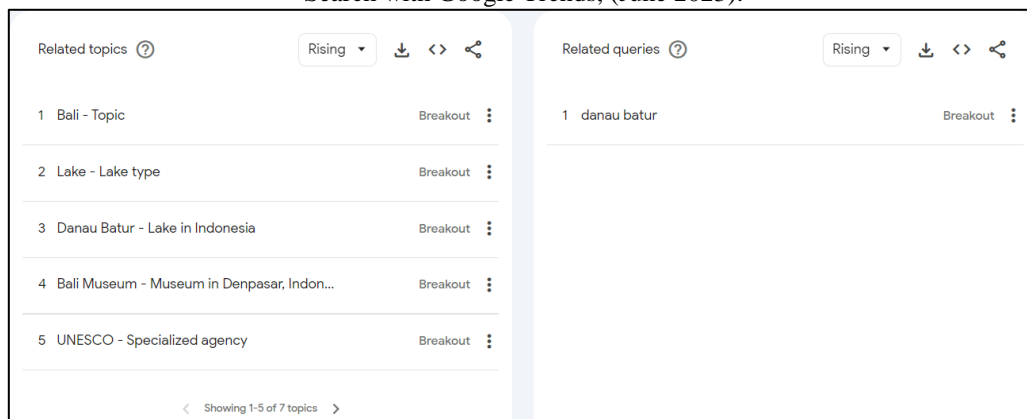
Figure 5. Museum Geopark Batur Google Trend Analysis Results



Source: Online Search with Google Trends, (June 2023).

The search for Batur Geopark Museum on Google Trend Analysis Results shows that there are several keywords with strong correlations, such as the keywords Bali, Lake, Lake Batur, Bali Museum, and UNESCO as shown in Figure 6 below:

Figure 6. Museum Geopark Batur Google Trend Analysis results based on related topics. Source: Online Search with Google Trends, (June 2023).





The implication for Museum Geopark Batur is to pay attention to some of these keywords as triggers for searching the location of the Museum Geopark Batur for first-time visitors. For the manager of the Batur Geopark Museum can use some of these keywords as hashtags on social media as a backlink to a more detailed search about the Batur Geopark Museum. Some words that can be used as hashtags are #bali, #lake, #danaubatur, #UNESCO.

#### 4.3 LAKE BUYAN POPULARITY

The Lake Buyan-Danau Tamblingan Nature Park is entirely very steeply sloped. The southern part of the forest boundary, especially between the two lakes, is also very steeply sloped. Areas with steep and moderately steep slopes are found between Lake Buyan and Lake Tamblingan. Some areas to the east and south of Lake Buyan and Lake Tamblingan (around the lakes) have gentle to flat slopes (I.G.B.R. Utama & Trimurti, 2020). The forest type in Lake Buyan and Tamblingan Nature Park is a mountainous tropical rainforest (highland) characterised by high rainfall, always wet conditions with a relatively high diversity of plant species. The type of forest vegetation in Lake Buyan-Danau Tamblingan Nature Park is included in the mountain tropical rainforest type with conditions that are generally intact and natural (Rai Utama & Trimurti, 2020).

In addition to intact natural forests there are also jackfruit (*Artocarpus* sp) reforestation plants in 1986/1987 located on the edge of Lake Buyan and Lake Tamblingan, plantation forests with Damar (*Agathis alba*), Rasamala (*Altingea excelsa*) and Cempaka (*Mechelia champaka*) and shrubs which are Murbai reforestation classes. Based on the results of observations in the field, the types of fauna found in the Lake Buyan-Danau Tamblingan Nature Park area consist of jungle fowl (*Gallus* sp), cuckoos (*Pycnonotus goievier*), grey macaques (*Macaca fascicularis*) and other species, especially Aves. Indirect encounters can be found through faeces, tracks and sounds such as the Deluk (*Melogale orientalis*), Scissors (*Dicrurus renifer*) and Kepecit (*Estrilda amandava*) The diversity of species in this area is relatively less than that of other species. in this area is relatively less than in the Batukahu Nature Reserve, this is due to the lack of food sources available (I.G.B.R. Utama & Trimurti, 2020).

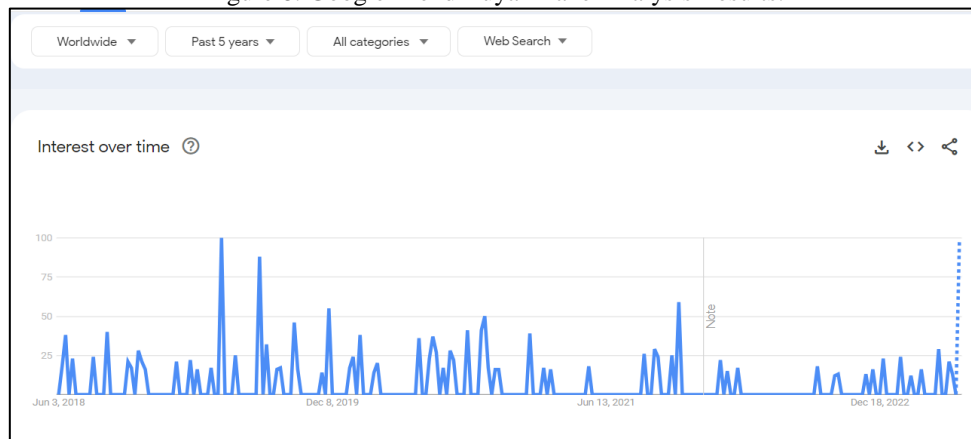
Figure 7. Lake Buyan, Bali



Source: Google Map, June 2023

From the Google Trend Buyan Lake Analysis Results, the Buyan Lake area seems to be experiencing an unstable trend in popularity. It had experienced an increase in popularity in 2018 to 2020, but an increase occurred in early 2023. The trend of Lake Buyan's popularity can be seen in Figure 8.

Figure 8. Google Trend Buyan Lake Analysis Results.

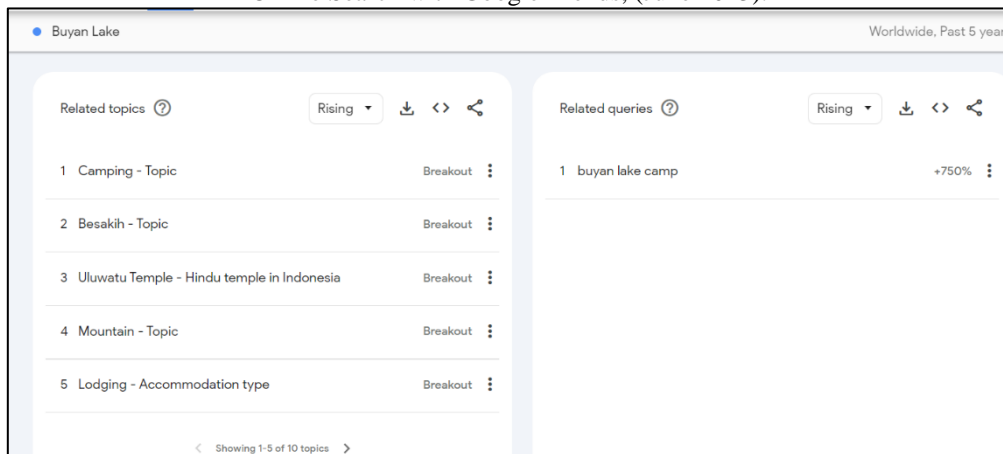


Source: Online Search with Google Trends, (June 2023).

The Buyan lake area is closely correlated with several topics such as Camping area, Besakih, Uluwatu Temple, Mountain, Logging or accomodation, and Buyan Lake as shown in Figure 9 below:



Figure 9. The results of the Buyan Lake Google Trend Analysis are based on related topics. Source: Online Search with Google Trends, (June 2023).



The implication for Buyan Lake area is to pay attention to some of these keywords as triggers for searching the location of the Buyan Lake area for first-time visitors. For the manager of the Batur Buyan Lake area can use some of these keywords as hashtags on social media as a backlink to a more detailed search about the Buyan Lake area. Some words that can be used as hashtags are #camping, #mountain, #lakebuyan.

#### 4.4 POPULARITY OF BALI MANGROVE DESTINATIONS

Mangrove ecosystems that have a very unique can be utilised as a natural resource that has the potential to be used as an ecotourism area (Rahmila & Halim, 2018); (Turker, 2023).. The utilisation of mangrove areas to be developed into one of the ecotourism areas is a very rational alternative utilisation applied in coastal areas because it can provide economic benefits and environmental services without exploiting mangroves. coastal areas because it can provide economic benefits and environmental services without exploiting mangroves (Putri et al., 2022). Ecotourism activities integrate tourism activities, conservation, and empowerment of local communities (Utami et al., 2018); (Pricillia et al., 2021). Along with the rapid development of Bali tourism as a foreign tourist destination based on attractiveness, natural beauty and cultural arts, with a mass tourism model, a paradigm began to emerge and the desire of the tourism market with the concept of the environment and back to nature, which is also known as alternative tourism (ecotourism) in the world of tourism (R. Utama, 2015). This model is a manifestation of the desire to develop environmentally friendly, sustainably managed, and responsible tourism, environment, managed sustainably, and responsibly, is conservative and provides greater benefits to the increase in income, provide greater benefits to increase



income and welfare of local communities (Utami et al., 2018); (Pricillia et al., 2021); (Turker, 2023).

One of Bali's natural resources that has high potential to realise a nature-based tourism model, as an alternative tourism, integrates conservation values, is sustainable, and is able to provide economic benefits for improving the welfare of local communities. Ecotourism has now become an alternative tourism that is in demand by the public because it offers something different, namely beauty and environmental education. Ecotourism also supports sustainable economic development efforts because it provides employment opportunities for the community and becomes one of the sources of community income (R. Utama, 2015). Ecotourism is starting to lead to environmental and ecological preservation which is often referred to as ecotourism. So it needs to be explored and developed in order to make tourists aware and care about the environment (Kiss, 2004); (Turker, 2023).

Figure 10. Bali Mangrove, Denpasar

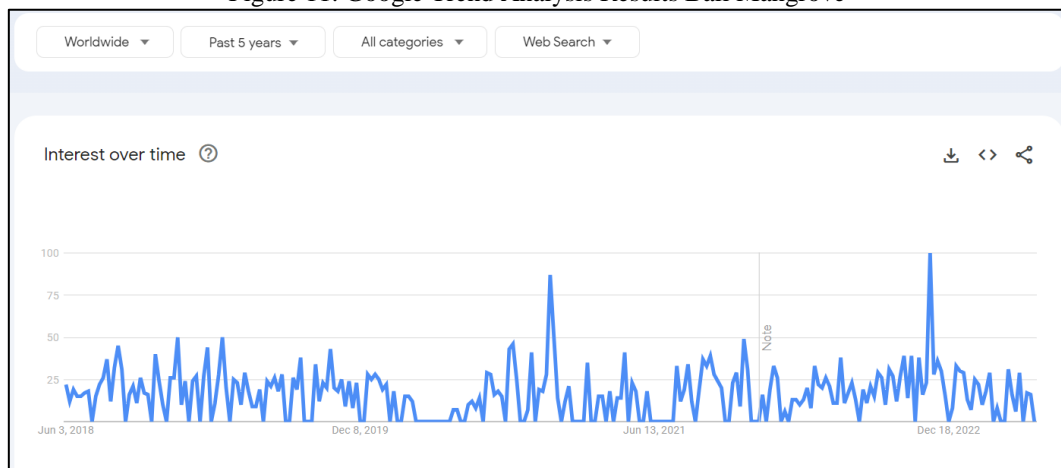


Source: (Utami et al., 2018); (Pricillia et al., 2021); (Turker, 2023).

From Google Trend Analysis Results, Bali Mangrove appears to be in a fairly stable popularity since 2018, and even seems to be unaffected by the Covid-19 pandemic. This destination is often used as a destination for state MICE delegation guests because of its location close to Nusa Dua Resort where the delegates stay. The trend of Bali Mangrove popularity can be seen in Figure 11.



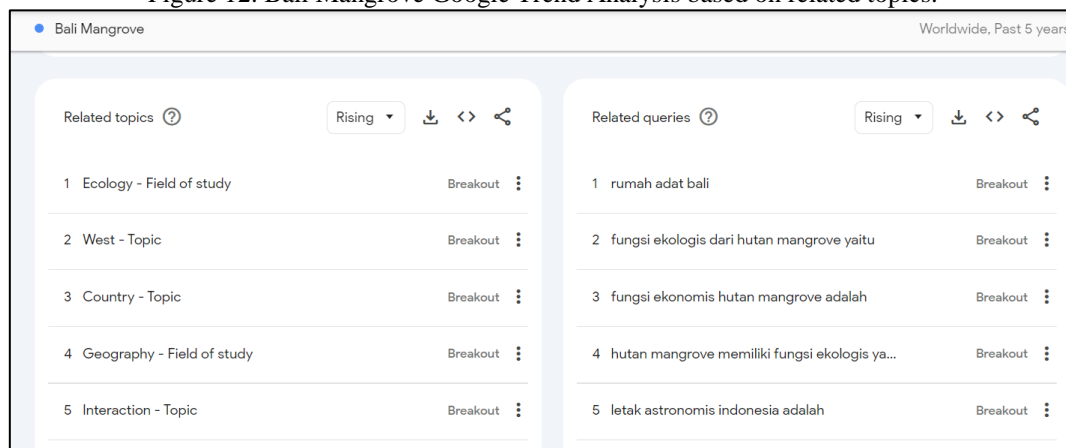
Figure 11. Google Trend Analysis Results Bali Mangrove



Source: Online Search with Google Trends, (June 2023).

Bali Mangrove Google Trend Analysis based on related topics shows some keywords that are quite strongly correlated such as Ecology, Geography, mangrove forest, as shown in Figure 12 below:

Figure 12. Bali Mangrove Google Trend Analysis based on related topics.



Source: Online Search with Google Trends, (June 2023).

The implication for Bali Mangrove destination managers is that they can pay attention that its existence is correlated with visitors' perception that Bali Mangrove is related to the issues of ecology, geography, ecological function, mangrove forest, and economic function. Some of these keywords can be powerful hashtags such as #ecology, #geography, #ecological function, # mangrove forest.

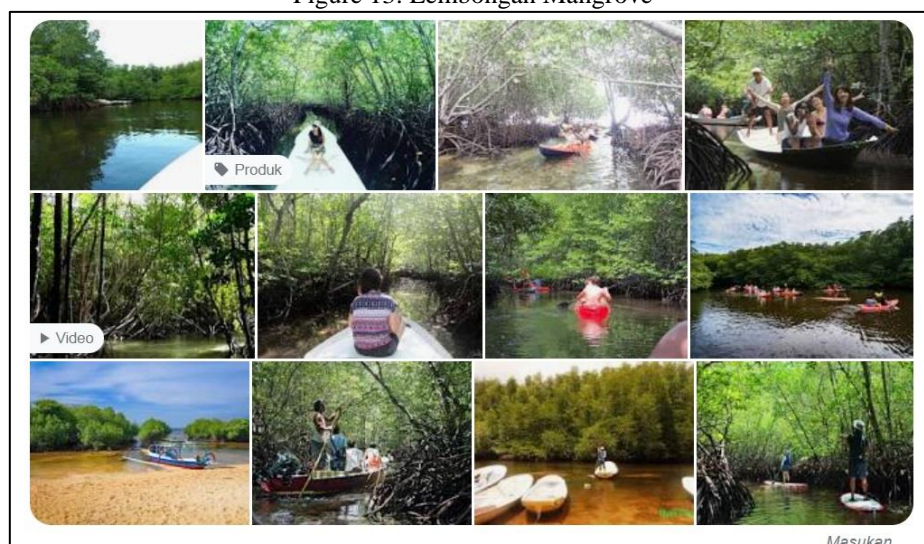


#### 4.5 POPULARITY OF LEMBONGAN MANGROVE DESTINATIONS

The number of plant species in the mangrove forest is 11 types of true mangroves and 13 types of mangrove association plants. The dominating species are *Rhizophora stylosa*, *R. apiculata*, *R. mucronata*, *Sonneratia alba* and *Lumnitzera racemosa*. The diversity of mangrove forest species in Lembongan is in the good category with a diversity index of 1.86 (Ginantra et al., 2018); (Pricillia et al., 2021)

Mangrove zonation on Lembongan island is still natural vegetation, because it still follows the natural zoning pattern of mangrove forests. The natural zonation of mangrove forests is in the front zone (near the sea) generally dominated by *Sonneratia*, *Avicennia*, the middle zone is generally dominated by *Rhizophora*, *Bruguiera* and the back zone (closest to land) is generally dominated by *Bruguiera*, *Lumnitzera* and types of mangrove association plants (Ginantra et al., 2018); (Pricillia et al., 2021). The introduction of plant species, growth zoning, the uniqueness of mangrove species and the uniqueness of their habitat support the attraction for mangrove tour activities. Some of the uniqueness of mangroves for tourist attractions include mangrove plant fruit types (ball shape, cinder, chili-like), root systems (supporting roots, breath roots, knee roots), mud habitat and tides, and the role of mangrove ecosystems for environmental conservation (Ginantra et al., 2018); (Pricillia et al., 2021).

Figure 13. Lembongan Mangrove



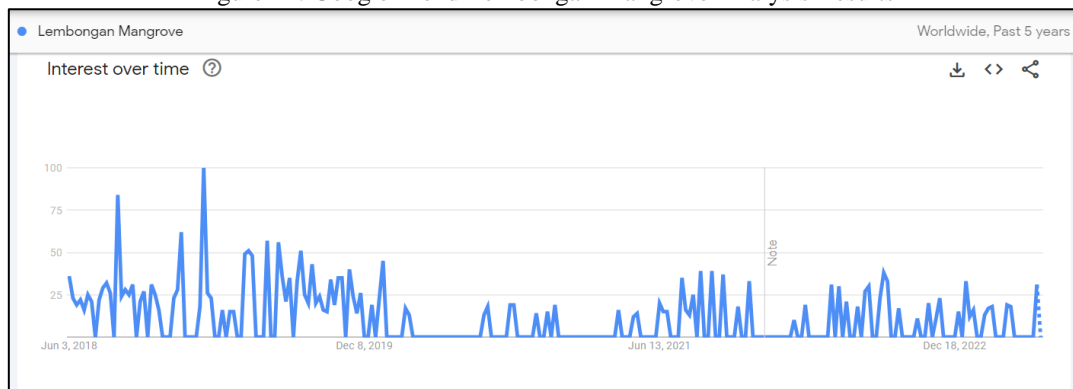
Source: (Ginantra et al., 2018); (Pricillia et al., 2021)

Lembongan Mangroves are an integral part of the protective function of the relatively small and low-lying island of Lembongan. The existence of mangrove



ecotourism can of course have multiple functions as a tourist attraction to carry out several tourist activities such as walking around the mangrove area, fishing, and the like. The Google Trend Lembongan Mangrove Analysis Results show that since 2018 until now, this destination has experienced unstable fluctuations. At the beginning of 2020 until the end of 2021, it appears to have decreased. Lembongan Mangrove trend can be seen in Figure 14.

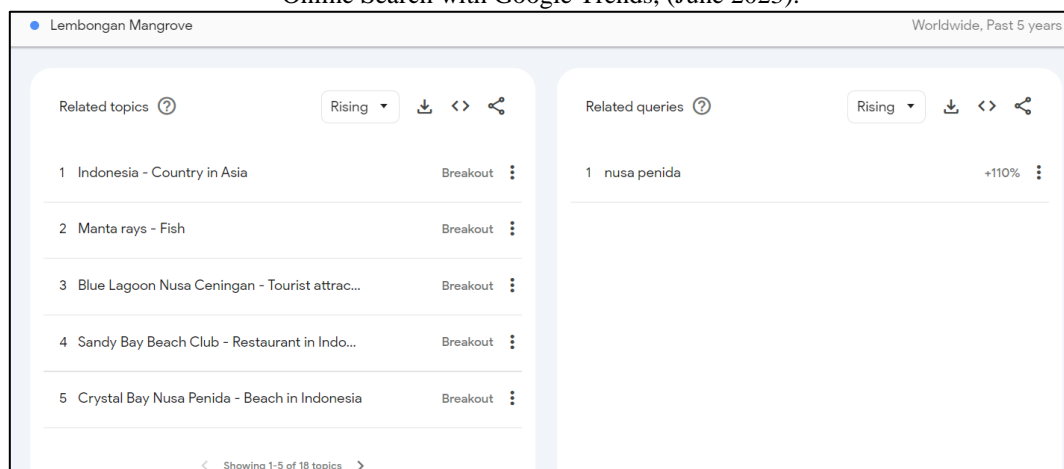
Figure 14. Google Trend Lembongan Mangrove Analysis Results



Source: Online Search with Google Trends, (September 2022).

From the Google Trend Analysis Results of Lembongan Mangrove based on related topics, there are several keywords that are strongly correlated with Lembongan Mangrove, such as Indonesia, Blue Lagoon Nusa Ceningan, Sandy Bay Beach Club, and Nusa Penida, as shown in Figure 15 below:

Figure 15. Google Trend Analysis Results of Lembongan Mangrove based on related topics. Source: Online Search with Google Trends, (June 2023).

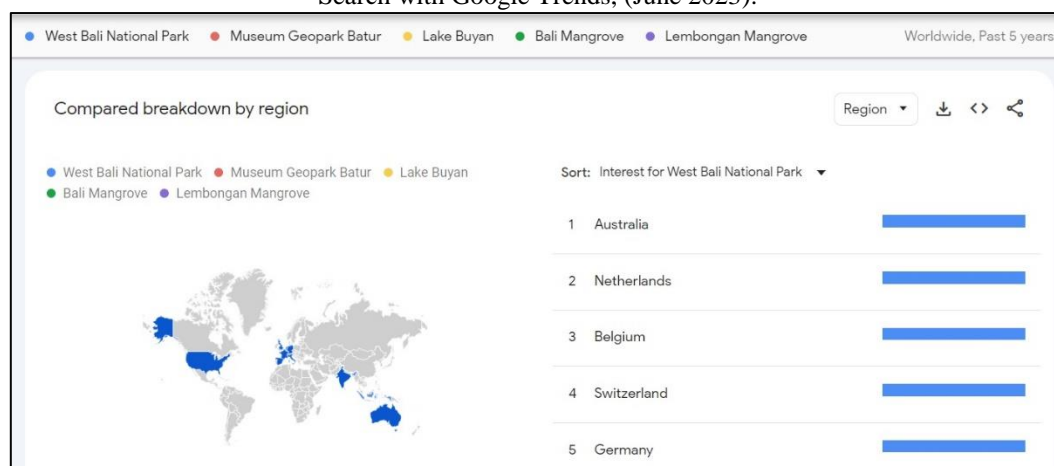


Some of the keywords above can be used as hashtags that have a strong correlation with the popularity of Lembongan Mangrove. Lembongan Mangrove can use some of these words to increase its popularity on social media by posting the following hashtags #Indonesia, #BlueLagoon, #Nusa Ceningan, #SandyBayBeachClub, and #Nusa Penida.

#### 4.6 SEGMENTATION COMPARISON OF BALI'S FIVE ECOTOURISM DESTINATIONS

When viewed from the Popularity of Bali's Five Ecotourism Destinations from the Results of Google Trend Analysis of Bali's Five Ecotourism, it can be explained that the tourist segmentation of Bali's Five Ecotourism Destinations are Australians tourist, Dutch Tourist, Belgian Tourist, Swiss Tourist, and German Tourist as shown in Figure 16.

Figure 16. Results of Google Trend Analysis of Bali's Five Ecotourism Destinations. Source: Online Search with Google Trends, (June 2023).



In Figure 16, it appears that the development of ecotourism in Bali has a fairly strong tourist market segmentation in some of the countries mentioned above, so specifically for Bali ecotourism promotions can be directed to Australia, the Netherlands, Belgium, Switzerland, and Germany. This also indicates that tourists from these countries like ecotourism adventures in the form of protected forests, lakes, and mangroves in several areas in Bali.

## 5 CONCLUSION

From the beginning of 2018 to the end of June 2023, it shows that the West Bali National Park area is the most popular ecotourism, then Bali Mangrove Denpasar, Batur Geopark Kintmani, Lembongan Mangrove, and finally the Lake Buyan area. Ecotourism



in Bali has a fairly strong tourist market segmentation in some of the countries such as Australia, the Netherlands, Belgium, Switzerland, and Germany.

The five Ecotourism areas in Bali have experienced fluctuations in visitors in the last five years from 2018 to the present. However, West Bali National Park, Batur Geopark Museum, and Bali Mangrove are almost stable.

The implication of this research shows that Bali tourism destination managers can direct the promotion of ecotourism to several destination countries Australia, the Netherlands, Belgium, Switzerland, and Germany which are indicated as tourists who have a strong interest in ecotourism.

This research was only conducted online using google trends analysis so that not many facts in the field can be conveyed, so it is recommended to conduct research using survey and observation methods related to the type and diversity of ecotourism flora and fauna in some of these areas. And what is more important is to conduct research related to the impact of ecotourism on social, and economic for the community nearby the ecotourism.

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