

# Tourism Potential at Parbaba White Sand Beach, Samosir Regency

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**Abstract**—Samosir Regency is one of the tourist areas which is quite famous for its Lake Toba which has the natural beauty, culture, and waters of Lake Toba. Parbaba White Sand Beach is one of the beaches that takes advantage of the beauty of Lake Toba as a tourist spot. The research was conducted on April 24-26 2023 at Pasir Putih Parbaba Beach, Samosir Regency. The research objective is to determine tourism potential (attraction, access, and facilities). The method used is descriptive qualitative, with data collection by observation, interviews, and documentation. Interviews were conducted with 75 tourists, 20 local people, and 6 managers using a questionnaire. The selection of tourist respondents used the accidental sampling method, while the community and managers used purposive sampling techniques. The results showed the potential for tourist attraction according to tourists Very Attractive with a score of 4.257 and according to managers with a score of 4.542. Tourist facilities are in a good category according to tourists with a score of 3.526 and according to managers with a score of 3.805. Tourism access is included in the Supporting category according to tourists with a score of 3.822 and according to managers with a score of 4.176.

**Indexed Terms**—Lake Toba, Potential, Samosir Regency, Tourism

## I. INTRODUCTION

Samosir Regency is widely recognized by both international and domestic tourists for its remarkable natural landscapes, particularly the captivating Lake Toba, as well as its wide variety of traditional cultural monuments that showcase the distinctive heritage of the Batak tribe. The Samosir Regency's advantageous geographical position inside Lake Toba, along with its abundant array of natural and

cultural tourist sites, serves as a significant draw for visitors [1].

Lake Toba plays a significant ecological and economic function. From an ecological perspective, Lake Toba serves as a habitat for a diverse array of freshwater creatures. From an economic perspective, the waters of Lake Toba serve as a vital source of drinking water. Additionally, they contribute to the local economy through the practice of aquaculture using floating net cages (KJA). The tourism industry, water transportation activities, and different industrial sectors also benefit from the presence of Lake Toba [2].

The imperative nature of tourism development stems from its capacity to generate employment opportunities and bolster the economic growth and financial prosperity of local communities. The tourism industry necessitates the implementation of a strategic approach that encompasses a well-designed and organized framework for tourism growth, so facilitating the realization of its full potential. Sihombing and Hutagalung [3] define tourism development as a comprehensive undertaking that encompasses several coordinated actions and endeavors aimed at enticing tourists, establishing adequate facilities and infrastructure, ensuring accessibility, and meeting the diverse needs of tourists.

Lake Toba is extensively utilized as a popular tourist destination in Samosir Regency, particularly for its beach tourism offerings. Samosir Regency boasts a variety of picturesque beaches, such as Pasir Putih Parbaba Beach, Sibandol Beach, Indah Situngkir Beach, Batuhoda Beach, Sigurgur White Sand Beach, Sibolazi Beach, and several others. Pasir Putih Parbaba Beach is a prominent coastal area located inside the Samosir Regency, known for its utilization of the abundant water resources provided by Lake

Toba. Beach tourism offers guests a plethora of aesthetic delights to appreciate, including the captivating natural landscapes around the beach and the various amenities available for their enjoyment.

II. MATERIAL AND METHODS

The study was conducted from April 24th to April 26th, 2023, at Pasir Putih Parbaba Beach, located in Samosir Regency, North Sumatra. The research methodology employed in this study is descriptive qualitative, including various data gathering approaches including observation, interviews, and documentation. The study used a qualitative descriptive methodology to gain a comprehensive understanding of individual experiences in the development of community-based tourism. Zulkhairi et al. [4] assert that qualitative descriptive research is designed to provide a comprehensive depiction and elucidation of prevailing phenomena, encompassing both natural occurrences and human-engineered constructs. This approach places greater emphasis on delineating the attributes, qualities, and interconnections among various activities.

Data sources can be categorized into two main types: primary data and secondary data. The main source of data utilized in this study comprises the outcomes derived from conducting direct interviews with the research participants or informants, employing questionnaires as the major instrument. The secondary data utilized in this study comprises data obtained from reputable sources of information.

Menurut Patarianto [5], rumus metode Slovin untuk menentukan jumlah sampel adalah sebagai berikut :

$$n = \frac{N}{(1 + (Nxe^2))}$$

Where:

n = The desired quantity of samples

N = population size

e = error tolerance limit (20%)

The sample consisted of 75 tourists, who were selected as respondents through the use of the incidental sampling methodology. The research sample consisted of 20 individuals residing in the local community, specifically in close proximity to

the tourist region. These participants were selected based on their engagement in enterprises or activities related to the tourism area. Hence, the study included a sample of six management respondents, selected through the use of Purposive Sampling methodologies.

2.1. Tourism Potential Analysis

The tourism potential of Pasir Putih Parbaba Beach in Samosir Regency encompasses various factors such as its attractiveness and the availability of facilities owned by the beach. The evaluation of tourism potential was conducted on a Likert Scale. Taluke et al. [6] assert that the Likert Scale is a widely employed research instrument utilized for the purpose of assessing attitudes and opinions.

Tabel 2 Tourism Potential Analysis Assessment

| Information                    | Scale |
|--------------------------------|-------|
| Strongly agree (SS)            | 5     |
| Agree(S)                       | 4     |
| Neither agree nor disagree(KS) | 3     |
| Disagree(ST)                   | 2     |
| Strongly agree(STS)            | 1     |

As argued by Sari and Nurmiati [7], the equation provided enables the acquisition of assessment outcomes:

$$RK = \frac{JSK}{JK}$$

Where :

RK : Average Satisfaction

JSK : Total Questionnaire Score

JK : Number of Questionnaires

Tabel 3. The assessment of satisfaction levels can be ascertained by the following methods:

| No | Score       | Information       |
|----|-------------|-------------------|
| 1  | 1.00 – 1.79 | Very dissatisfied |
| 2  | 1.80 – 2.59 | Dissatisfied      |
| 3  | 2.60 – 3.39 | Doubtful          |
| 4  | 3.40 – 4.19 | Satisfied         |
| 5  | 4.20 – 5.00 | Very satisfied    |

III. RESULTS AND DISCUSSION

Lake Toba encompasses a total of seven districts, namely Samosir, Simalungun, Toba, North Tapanuli, Karo, Dairi, and HumbangHasundutan districts. Pasir Putih Parbaba Beach is situated along Jalan Raya Simanindo, within the ParbabaDolok Village, Pangururan District, Samosir Regency, located in the province of North Sumatra. The beach in question was inaugurated in the year 2010, under the management of the Regional Government, with support from the local population.



Figure 1. Map of research location (ParbabaSamosir White Sand Beach)

3.1. Potential of Pasir Putih Parbaba Beach

The tourism potential of Pasir Putih Parbaba Beach is evident through its attractions, accessibility, and amenities. These components serve as contributing aspects to the current tourist potential.

3.1.1. Attractiveness

Table 4. An Evaluation of Tourist Participants' Perceptions Regarding the Attraction of Pasir Putih Parbaba Beach in April 2023.

| Tourism magnetism  | Tourist                 |             |                   |                  |                 |
|--------------------|-------------------------|-------------|-------------------|------------------|-----------------|
|                    | Very Interesting        | Interesting | Quite Interesting | Less Interesting | Not Interesting |
| Total              | 125                     | 130         | 42                | 3                | -               |
| Score              | 625                     | 520         | 126               | 6                | -               |
| Satisfaction Score | 4.257(Very Interesting) |             |                   |                  |                 |

Table 5. Management Respondents' Assessment Regarding the Tourism magnetism of Pantai Putih Parbaba Beach April 2023.

| Tourism magnetism  | Management              |             |                   |                  |                 |
|--------------------|-------------------------|-------------|-------------------|------------------|-----------------|
|                    | Very Interesting        | Interesting | Quite Interesting | Less Interesting | Not Interesting |
| Total              | 15                      | 7           | 2                 | -                | -               |
| Score              | 75                      | 28          | 6                 | -                | -               |
| Satisfaction Score | 4.542(Very Interesting) |             |                   |                  |                 |

Based on the feedback provided by tourists, Pantai Putih Parbaba Beach is regarded as highly appealing. This assertion is supported by the outcomes of

interviews conducted, wherein a majority of respondents expressed their strong attraction to the beach, as indicated by a score of 4,257. Additionally,

the manager's assessment of 4,542 further reinforces the beach's allure. These numerical values are presented in Table 4 and Table 5. Parbaba Beach offers a plethora of enticing features, such as breathtaking natural landscapes, the renowned Lake Toba, pristine white sand, and a diverse array of water-based recreational activities that cater to the preferences of visiting tourists. The aesthetically

pleasing natural landscape, characterized by the panoramic view of Lake Toba and the verdant hills encompassing its vicinity, serves as a compelling draw for tourists seeking to explore this destination.

3.1.1. Facility

Table 6. Assessment of Tourist Respondents Regarding Pasir Putih Parbaba Beach Tourism Facilities April 2023.

| Facility           | Tourist      |      |            |      |          |
|--------------------|--------------|------|------------|------|----------|
|                    | Very Good    | Good | Quite Good | Fair | Not Good |
| Total              | 60           | 218  | 191        | 50   | 6        |
| Score              | 300          | 872  | 573        | 100  | 6        |
| Satisfaction Score | 3.526 (Good) |      |            |      |          |

Table 7. Management Respondents' Assessment Regarding Pasir Putih Parbaba Beach Tourism Facilities April 2023

| Facility           | Management   |      |            |      |          |
|--------------------|--------------|------|------------|------|----------|
|                    | Very Good    | Good | Quite Good | Fair | Not Good |
| Total              | 2            | 29   | 10         | -    | -        |
| Score              | 10           | 116  | 30         |      |          |
| Satisfaction Score | 3.805 (Good) |      |            |      |          |

The amenities available at Pasir Putih Parbaba Beach encompass a range of facilities, including parking spaces, restroom facilities, lodging options, waste disposal containers, shaded pavilions, food service establishments, and souvenir vendors. Based on feedback from tourists, the beach amenities have been positively assessed, as indicated by the outcomes of the interviews. The majority of respondents, scoring 3.526, expressed satisfaction with the facilities, while the manager's rating of 3.805, as presented in Table 6 and Table 7, further supports this observation. The amenities provided at the beach are capable of accommodating the diverse requirements of tourists who frequent this particular coastal destination. The beach is adorned with numerous tranquil tents, with various gazebos that showcase well-appointed amenities, reflecting the distinctive characteristics of the Batak region, such as the use of ulos textiles used as decorative elements.

The canteens found in tourist regions often comprise food stalls, snack vendors, and establishments offering a variety of beverages. Regrettably, a limited number of these canteens in tourist destinations offer regional specialties, which is regrettable as regional specialties serve as a significant draw for tourists. Based on interviews conducted with visitors, it has been observed that vendors continue to exhibit a lack of transparency in presenting comprehensive menu lists and pricing information, hence posing challenges for tourists in their endeavors to make informed purchases of food items.

A significant number of restroom facilities are accessible at this beach, including those provided by the beach management as well as the local residents. Nevertheless, the restroom facilities at tourist destinations exhibit substandard conditions and continue to suffer from inadequate service provision.

The evidence gathered supports the assertion that tourists are subject to a fee of IDR 2,000 for utilizing restroom facilities and IDR 3,000 for engaging in bathing activities.

3.1.1. Access

Table 8. Tourist Respondents' Assessment Regarding Access to Pasir Putih Parbaba Beach Tourism April 2023

| Access             | Tourist            |            |         |                    |                   |
|--------------------|--------------------|------------|---------|--------------------|-------------------|
|                    | VerySupportiv<br>e | Supportive | Average | Less<br>Supportive | Not<br>Supportive |
| Total              | 45                 | 109        | 58      | 12                 | 1                 |
| Score              | 225                | 436        | 174     | 24                 | 1                 |
| Satisfaction Level | 3.822(Supportive)  |            |         |                    |                   |

Table 9. Management Respondents' Assessment Regarding Access to Pasir Putih Parbaba Beach Tourism April 2023

| Access             | Management         |            |         |                    |                   |
|--------------------|--------------------|------------|---------|--------------------|-------------------|
|                    | VerySupportiv<br>e | Supportive | Average | Less<br>Supportive | Not<br>Supportive |
| Total              | 5                  | 10         | 2       | -                  | -                 |
| Score              | 25                 | 40         | 6       | -                  | -                 |
| Satisfaction Level | 4.176(Supportive)  |            |         |                    |                   |

The provision of access to Parbaba White Sand Beach encompasses an entrance point, transportation infrastructure, and the presence of road signage. The data obtained from interviews conducted with tourists and managers, as presented in Table 8 and Table 9, indicates that the existing access infrastructure strongly facilitates tourism activities. The majority of tourist respondents expressed their support for this, with a score of 3.822, while managers scored it even higher at 4.176.

There are two primary methods for accessing Samosir, namely the lake route, which involves crossing by boat, and the land route, which entails traveling via SimpangTiga Tele in TurpukLimbong village. There are several ports available for visitors to Samosir Island. These include Ajibata Harbor in Parapat, which provides access to Tomok on Samosir Island, Tigaras Harbor in Simalungun, which allows docking in Simanindo on Samosir Island, and Ajibata Harbor in Parapat, which facilitates docking in Ambarita Harbor on Samosir Island. In order to

expediently reach Pangururan, visitors have the option of disembarking at Simanindo Harbor, which is around 12 kilometers away.

CONCLUSION

The findings of the conducted research indicate that Pasir Putih Parbaba Beach possesses a considerable potential as a highly appealing tourist destination, as perceived by both tourists (4.257) and managers (4.542). Furthermore, the tourist facilities are deemed satisfactory by tourists (3.536) and managers (3.805). Additionally, the accessibility for tourists is deemed favorable by both tourists (3.822) and managers (4.176). The research findings suggest that enhancing beach infrastructure and implementing more effective management practices would likely increase tourist interest and visitation.

REFERENCES

[1] Pardede, F. R. E. P dan I. B. Suryawan. 2016.

Strategi

Pengelolaan Kabupaten Samosir sebagai Daya Tarik Wisata Alam di Provinsi Sumatera Utara. *Jurnal Destinasi Pariwisata*, 4(1): 14 – 19.

- [2] Harianja, D., M.R.S. Damanik dan Restu. 2018. Kajian Tingkat Pencemaran Air di Kawasan Perairan Danau Toba Desa Silima Lumbu Kecamatan Onanrunggu Kabupaten Samosir. *Jurnal Geografi*, 10 (2) : 176– 183.
- [3] Sihombing, N.  
Edan I. J. B. Hutagalung. 2021. Strategi Pengembangan Sektor Pariwisata Kabupaten Toba dalam Upaya Meningkatkan Pendapatan Asli Daerah. *Jurnal Ilmu Sosial dan Politik*, 1 (2) : 150– 172.
- [4] Zulkhairi., Arneliwati dan S. Nurchayati. 2018. Studi Deskriptif Kualitatif: Presepsi Remaja terhadap Prilaku Menyimpang. *Jurnal Ners Indonesia*, 8 (2): 145 – 157.
- [5] Patarianto, P. 2015. Analisa Kualitas Pelayanan terhadap Kepuasan Nasabah di PT. Bank Mandiri (Persero) Tbk. Cabang Sidoarjo Gedangan. *Jurnal MAKSIPRENEUR*, 4 (2) : 28 –37.
- [6] Taluke, D., R. S. M. Lakardan A. Sembel. 2019. Analisis Preferensi Masyarakat dalam Pengelolaan Ekosistem Mangrove di Pesisir Kecamatan Loloda Kabupaten Halmahera Barat. *Jurnal Spasial*, 6 (2): 531– 540.
- [7] Sari, Y. R dan E. Nurmiati. 2021. Analisis Kepuasan Penggunaan *Google Classroom* menggunakan PIECES Framework (Studi Kasus: Prodi Sistem Informasi UIN Jakarta). *Jurnal Nasional Informatika dan Teknologi Jaringan*, 5(2): 308–313.