# PRESERVING CULTURAL HERITAGE: A CASE STUDY OF CULTURAL TOURISM SUSTAINABILITY DEVELOPMENT IN GIRSANG SIPANGAN BOLON, INDONESIA

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**Abstract:** The objective of this study is to assess the sustainability of cultural aspects within sustainable tourism and to investigate the current conditions and procedures involved in preserving cultural heritage in three selected tourist destinations in Girsang Sipangan Bolon District, North Sumatra Province, Indonesia. This research employs a mixed-methods approach, consisting of quantitative data gathered from questionnaires distributed to 120 respondents (local tourists and residents) and qualitative data obtained through interviews with relevant government officials and direct observations at the study sites. The study's findings reveal the successful preservation of Girsang Sipangan Bolon's culture, which continues to impress many people. However, it is crucial that all stakeholders continue to safeguard local culture to ensure its ongoing preservation. It is hoped that this research can serve as a reference and a consideration in developing cultural tourism, as well as raising awareness of the region's extraordinary cultural diversity. This should be enhanced in terms of management and promotion, extending from the local community to the international level, positioning this area as a key cultural tourism destination within the Lake Toba region, North Sumatra, Indonesia.

Keywords: Culture, Tourism, Sustainable, Tourist destination, Sustainable, Traditional, Cultural Heritage

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## INTRODUCTION

The implementation of economic, social, and environmental aims can enhance competitiveness through sustainable tourism development. However, obstacles continue in the way of changing environmental conditions, increasing consumer motivations, and altering behavior to promote more sustainable tourism services (Streimikiene et al., 2020). Sustainable tourism development attempts to manage tourism using sustainable principles to guarantee a long-term balance of economic, social, and environmental advantages (Pforr and Dirk, 2021). The goal of sustainable tourism development is to promote local development and improve tourism's role in preserving natural resources by finding a balance between economic growth and environmental protection (Sharma and Jain, 2020) and also reflecting economic growth that combines ecological balance and social growth while preserving cultural integrity, diversity, and life support systems (Mateoc-Sîrb et al., 2022). It also promotes local culture and products, influencing tourist satisfaction through motivation, perception of the destination, and travel satisfaction, and establishing policies that lead to jobs for the locals (López-Sanz et al., 2021). Sustainable tourism ensures that natural, social, cultural, and environmental resources should be passed down to future generations (Arini and Mardianta, 2022). It includes destination standards that address social and economic sustainability, environmental sustainability, cultural sustainability, and sustainable management (GSTC, 2019; Kemenparekraf, 2021; UNWTO, 2017). Not only does sustainable tourism improve destinations, but the necessary network

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topology can be described using social networks (Naja et al., 2021). Because of these advantages, sustainable tourism development could be implemented in any tourist destination, particularly those related to aspects, to preserve culture and enhance the prosperity of target destinations, specifically cultural and social influence (Falatoonitoosi et al., 2021).

Tourism planning that aligns with the genius loci of cultural heritage places can be guided by their perceived essentialism and intrinsic value, ensuring its societal acceptance and durability (Roszczyńska-Kurasińska et al., 2021). Cultural heritage may play an essential role in sustainable development, addressing economic, social, and environmental concerns through concrete and intangible components (Giliberto and Labadi, 2021). Sustainable integration between cultural heritage and tourism requires 15 key factors, such as community engagement, education, authenticity, sustainability-based tourism management, integrated planning, and stakeholder participation (Loulanski and Loulanski, 2011). Therefore, sustainable cultural tourism is the ideal model for local tourist development globally, emphasizing authentic qualities and distinctive components of a destination's cultural identity (Parusheva, 2023).

By exploring historical literature, many studies emphasize the importance of historical and cultural tourism (Purnamawati et al., 2022; Wijaya et al., 2022). The region and climate have a close relationship with cultural development, as the physical state of a region often influences the psychological state and behavior of its society (Prayitno et al., 2024). For instance, cultural tourism significantly impacts the local economy in Ban Wangka Village, Thailand, and a religious-based ecotourism village in Bali, both closely linked to the impact of cultural change (Sangchumnong and Kozak, 2018). As a result, this study will specifically focus on the development of cultural heritage in the context of sustainable tourism, dividing it into three aspects based on literary reviews: (1) cultural heritage, (2) cultural artifacts, and (3) the protection of cultural assets. These aspects will serve as a reference for assessing the sustainability of cultural heritage development in Girsang Sipangan Bolon district, North Sumatra, Indonesia.

Studies on the cultural aspects of sustainable tourism at Girsang Sipangan Bolon are still rare. Therefore, this study aims to improve understanding of cultural sustainability in the tourism sector. We anticipate that this research will bridge the scientific gap on sustainable cultural aspects within the framework of sustainable tourism. The study comprehensively examines culture as a major tourist attraction in Girsang Sipangan Bolon district, North Sumatra, Indonesia.

## LITERATURE REVIEW

## 1. Elements of Cultural Sustainability

Many studies have examined the link between cultural tourism and cultural heritage preservation (Hilary du et al., 2023). Some cultural heritage aspects discussed in other research related to cultural sustainability describe supporting elements of cultural sustainability, such as cultural heritage, cultural artifacts, and protection of cultural assets (de Oliveira et al., 2024; Fatimah et al., 2019; GSTC, 2019; Kemenparekraf, 2021; Pop et al., 2019; Sangchumnong and Kozak, 2018; UNWTO, 2017; Yeniasir and Gökbulut, 2018). In this research, these three aspects become benchmarks or indicators in assessing the sustainable development of cultural heritage at the research location.

#### 1.1. Cultural Heritage

Cultural heritage must be passed down to future generations to preserve a community's or area's identity. That is why cultural heritage tourism is linked to cultural and heritage tourism (Sangchumnong and Kozak, 2018). By maintaining a cultural legacy through cultural tourism, a generation can continue to live their life and cherish their culture and customs. The protection of cultural heritage requires the improvement of certificates of origin, a limitation on categories of objects that warrant additional safeguards, and the unconditional return of stolen or unlawfully exported objects to their original states (Vrellis, 2019). Several components support the presence of cultural heritage, namely the respect between communities and cultural heritage (UNWTO, 2017), cultural objects and historical buildings Managed by the local community (Jagielska-Burduk and Stec, 2019), some tradition, Art, Music, Language, Gastronomy, Place identity, Local specialities, Cultural festivals (GSTC, 2019; Kemenparekraf, 2021), and Tradition and oral, Expression, Language, Performance art, Social practice, Rituals and festive events, and Traditional crafts (UNESCO, 2022).

#### 1.2. Cultural Artifacts

Cultural artifacts can be rituals, ceremonies, symbols, and stories, which are visible components of organizational culture (Barnhill et al., 2020). Cultural artifacts can be oral histories as well as visual objects. Narratives such as drawings and specific signals serve as a platform for people to express their fantasies, stories, and dreams. It is similar to the images on cave walls worldwide (Rahman, 2013). Artifacts of organizational culture include rituals, ceremonies, symbols, and stories, which effectively summarize the organization's intrinsic behavior (Barnhill et al., 2020). Cultural artifacts are associated with the most comprehensive data regarding their historical background, traditional configurations, and places of origin (Barnhill et al., 2020). Cultural artifacts are associated with the most comprehensive data regarding their historical background, traditional configurations, and places of origin (Lindsay, 2012).

They can take on specific meanings and serve as a source of identification, understanding, and personal application (López et al., 2015). Archaeological sites represent the combination of the natural sciences and the humanities, with two components: culturological (artifacts) and natural-historical (eco-facts, nature-facts, cultural-natural objects) (Bochkarev, 2021). In this issue, archaeology is one study that shows how cultural artifacts could be exhibited by leaving history (GSTC, 2019; Kemenparekraf, 2021; UNWTO, 2018). Archaeological sites require conservation and exhibition principles, including site planning, conservation methods, and restoration techniques, to protect and display artifacts (Zeren, 2022). Based on these publications, several components of cultural artifacts can be concluded: cultural exhibitions, history, and historical objects. Cultural artifacts, which are historical relics, have values of cultural importance.

### **1.3.** Protection of Cultural Assets

By safeguarding cultural assets, we enable communities to continue educating others and making money from their artistic expertise. efforts can occasionally result in the vulnerability of heritage or its destruction (Rosén, 2020). Popular tourist destinations regularly contribute a percentage of tourism revenue to help preserve the area's cultural treasures (GSTC, 2019; Kemenparekraf, 2021). To protect the cultural assets, several aspects must be fulfilled, such as preserving culture, economic opportunity for the local community, and local community knowledge (UNWTO, 2017), how to keep tourism in the market, linking small sites, Improving management and conservation (Snowball and Courtney, 2010).

It was concluded that there are several components of protection of cultural assets, such as rehabilitation of cultural assets and conservation of cultural assets. Table 1, presents the results of several previous studies conducted and summarized in the literature review, the cultural tourism component in this study is cultural heritage, which consists of cultural traditions, rituals, cultural festivals, place identity, and local specialties. Then, there are cultural artifacts, which consist of cultural exhibitions, history, and historical objects. Finally, protecting cultural assets consists of rehabilitating and conservating cultural assets. These sub-variables will be used as indicators, and later, a parameter will be developed that shows sustainable tourism in the Girsang Sipangan Bolon district.

Table 1. Variables of Cultural Tourism Elements (Sources, Autoris analysis)						
Aspects of Sustainable Tourism	Elements of Cultural Tourism	Research variable component				
Culture Aspect	Cultural Heritage	<ul> <li>Cultural traditions</li> </ul>				
		<ul> <li>Cultural rituals</li> </ul>				
		<ul> <li>Cultural festivals</li> </ul>				
		<ul> <li>Place identity</li> </ul>				
		<ul> <li>Local specialties</li> </ul>				
	Cultural Artifacts	<ul> <li>Cultural exhibition</li> </ul>				
		<ul> <li>History</li> </ul>				
		<ul> <li>Historical objects</li> </ul>				
	Protection of Cultural Assets	<ul> <li>Rehabilitation of cultural assets</li> </ul>				
		<ul> <li>Conservation of cultural assets</li> </ul>				

Table 1. Variables of Cultural Tourism Elements (Sources: Authors analysis)

#### METHODOLOGY

This study was conducted in Girsang Sipangan Bolon (Figure 1), located in Simalungun Regency district in North Sumatra Province, Indonesia. This district is on the shores of Lake Toba and is one of the entrances to Samosir Island. The Girsang Sipangan Bolon District has many tourist destinations like Aek Nauli Elephant Conservation. Tigarihit Village has become a tourist destination because of its "colorful village" on Lake Toba's outskirts.

In another area, Parapat Village is one of the tourist destinations in Simalungun Regency, which has one of the crossing ports to Samosir Island and is one of the areas with various lakeside tourist centers. One of the popular tourist destinations is Bebas Beach in Parapat, which is often visited as one of the open spaces and as a public park.



(b) Girsang Sipangan Bolon District

(c) Research Location Points

(f) Warna-Warni Village, Tigarihit

Figure 1. (a) Research Location in Indonesia, (b) Girsang Sipangan Bolon District, (c) Aek Nauli Elephant Conservation, (d) Bebas Beach in Parapat, and (d) Warna-Warni Village in Tigarihit (Source: Figure a, b, c GoogleEarth and Figure d, e, f by Author)

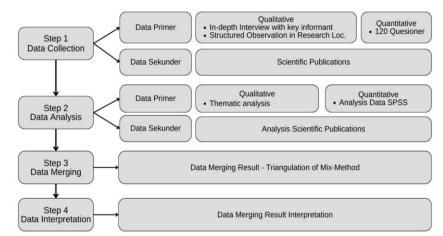


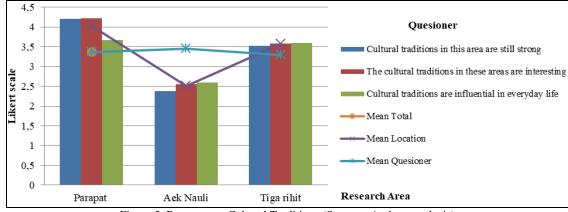
Figure 2. Flowchart of Methodology (Sources: Authors analysis)

This study uses a mixed methods approach, integrating qualitative and quantitative techniques commonly employed in comparable studies. For a better understanding of a problem and to enable a wider reach in empirical study (Convention et al., 2020). In the qualitative method, in-depth interviews and direct observation were carried out. The process of determining the interview sample applies the purposive sampling method (Ginting and Michaela, 2020; McCrudden and McTigue, 2019), the research used interviews to obtain the results of respondents' perceptions about the uniqueness of environmental elements in sustainable tourism on Samosir Island consisting of stakeholders (local government), tourism experts, tourist attraction managers, local communities, local tourists, and Foreign tourists (Zhao et al., 2024), studying the evolution of sustainable tourism development through Chinese drama, also used in-depth survey methods and interviews with economic experts, tourism management, ethnographers, and cultural heritage administration who focused on drama. The researched the development of cultural tourism in Ban Wangka Village, Thailand, using in-depth interviews with 50 informants from 5 tourism policy stakeholder groups (Sangchumnong and Kozak, 2018). Following previous research, the key informants used in the present research are stakeholders and local government, tourist attraction managers, Pokdarwis (Tourism Awareness Group), hotel managers, Micro, Small Medium Enterprise (MSMEs) managers, and local communities. For the quantitative method, a questionnaire survey was carried out by selecting respondents using the Slovin method, which is often used because it has a straightforward formula and only requires information on the number of residents in the area to be studied (Purnamawati et al., 2022). Respondents are selected people designated as data sources (Sinulingga, 2018). This research selected a sample of 120 individuals from the total population in Girsang Sipangan Bolon District, which included the regional government, local communities, and tourists. The survey employed a Likert scale, where a score of 1.00 indicates a low quality and strong disagreement with the statement, and a score of 5.00 indicates a high quality and strong agreement with the statement.

Data analysis was carried out in 2 stages, namely for qualitative data, case study analysis with a presentation of the conditions resulting from observations, and the results of interviews with key respondents. Meanwhile, quantitative data obtained through the questionnaire was processed using SPSS, and both of the results were analyzed using triangulation. Secondary data was also collected from archives such as journals, government publications, official government websites, census data, official sites, and literature studies that have been verified.

### **RESULTS & DISCUSSION** 1. Analysis of the Sustainability of Cultural Tourism – Cultural Heritage 1.1. Cultural Tradition

There was a total of 120 respondents answered the survey, consisting of 52.5% female and 47.5% male. This questionnaire is intended for respondents consisting of the public local residents and tourists in the Girsang Sipangan Bolon sub-district.





Based on the results of the questionnaire in Figure 3, it can be seen that the respondents disagree that Aek Nauli has a solid cultural tradition (2.38). In contrast, respondents agree that Tigarihit (3.53) and Parapat (4.2) have strong cultural traditions. The local tribe at Girsang Sipangan Bolon is the Simalungun tribe, which lives in the Simalungun area. From the questionnaire results, respondents also agreed that Tigarihit (3.58) and Parapat (4.23) have fascinating cultural traditions.

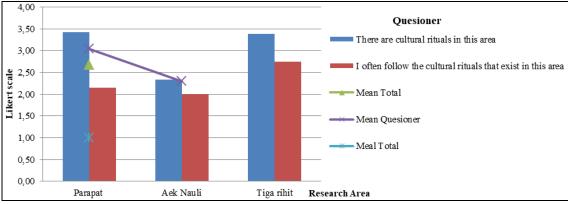
It can be concluded that the cultural tradition in Girsang Sipangan Bolon is quite good (3.37). Local people still pass on their traditions to their children. They introduce the Simalungun tradition through traditional events, such as the *tor-tor* dance competition (Figure 4a) at Bebas Beach in Parapat. In addition, there are also physical things such as *ulos* (Figure 4b), *hiou*, and *suri-suri*, a traditional cloth from the Simalungun tribe. This finding is also supported by the statement from the Head of the Economic and Development Department of Girsang Sipangan Bolon District: "We have instilled in the teenagers now that they should remember their Simalungun tradition through their teachers or parents, and not only to remember but also to learn to love our cultural products." Results also show tourists' interest in the cultural traditions of Simalungun indicating that Girsang Sipangan Bolon still has traditions and culture that are still preserved.



Figure 4. (a) Tor-tor Dance and (b) Ulos (Sourse: a.author & b.googleImage)

## 1.2. Cultural rituals

As the results show in Figure 5, respondents in Aek Nauli disagree that certain taboos or prohibitions exist in this area (2.32). In Tigarihit (3.37) and Parapat (3.42), the questionnaire respondents agreed that some specific bans exist. It can be concluded from these three places that cultural rituals are typical (2.67). The observation results also showed that no statue or other worship object was found in the area of Girsang Sipangan Bolon.





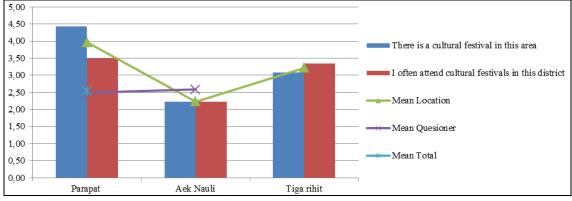


Figure 6. Responses to Cultural Festivals (Sources: Authors analysis)

## **1.3. Cultural Festivals**

In the questionnaire statement of Figure 6, the respondents disagree that there is some cultural festival in Aek Nauli (2.22). However, the cultural festival in Tigarihit is average (3.1), and the local community and tourists in Tigarihit follow the existing festival (3.35). The Tigarihit community presented their unique food, namely *Dolung-dolung*, as shown in (Figure 7a) and Saok Beans in (Figure 7b). However, it is best to use as a souvenir because it is easy to carry anywhere. This is reinforced by the statement of the Aksari hotel manager located in Girsang Sipangan Bolon.



Figure 7. (a) Dolung-dolung and (b) Saok Beans (Sourse: author)

"Yes, there is a special food they should try because it is only available here and nowhere else. Instead of promoting, the sale of saok beans can help the economy of the Tigarihit community." However, respondents strongly agreed that cultural festivals still exist in Parapat (4.42), and Parapat respondents often attended cultural festivals on Parapat beach (3.5). It can be concluded that the cultural festival is average (3,13). The festival may attract tourists not just because of the handicrafts but also because of the regional specialties and other attractions (Sugiyarto and Amaruli, 2018).

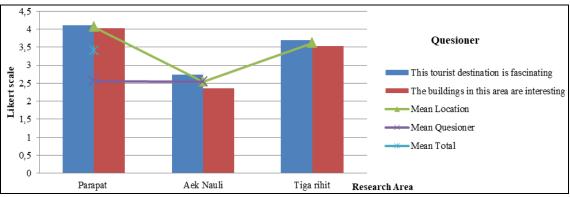


Figure 8. Responses to Place Identity (Sources: Authors analysis)

# 1.4. Place Identity

From the questionnaire statement in Figure 8, respondents assessed that Aek Nauli Elephants Conservation Camp is quite average (2.75). Some respondents disagreed about exciting buildings in the Aek Nauli area (2.35).



Figure 9 (a) Aek Nauli Elephant Conservation Camp marker board and (b) Aek Nauli Elephants (Sourse: author)

Based on the observation results, Aek Nauli Elephant Conservation Camp (ANECC) is relatively easy to find because it is on the side of the main road on Parapat Street and is equipped with vast and clear signage (Figure 9a). The specialty of this area is the elephant itself (Figure 9b). However, some Tigarihit respondents agree that this area is attractive (3.7), and the buildings in Tigarihit are also interesting (3.52).

The village is said to be colorful because this settlement is filled with various colors. Not only are the streets (Figure 10a) but the bright walls and roofs of the community's houses can be seen in (Figure 10b).



Figure 10. (a) Street condition in Tigarihit and (b) Local houses in Tigarihit (Sourse: author)



Figure 11. (a) the Condition of Bebas Beach and (b) Toba Lake in Bebas (Source: author)

Respondents in Parapat agreed that this area is attractive (4.1), and the buildings in this area are also beautiful (4.0). The conclusion from the three tourist destinations is that the identity of the place in Girsang Sipangan Bolon is good (3.40). From the results of an interview with one of the respondents in Parapat, Bebas Beach, Soekarno's guesthouse, and Lake Toba are Parapat's identities. Tourists can enjoy the beauty of Lake Toba (Figure 11b). The condition of Bebas Beach in Parapat shows that the place is being treated (Figure 11a). The diverse, unique, and attractive place identity in Girsang Sipangan Bolon serves as a key appeal that can enhance tourist visits. With the identity of the place, tourists will come. Due to its distinctiveness, the owned location will stand out from other locations (Wang and Xu, 2015).

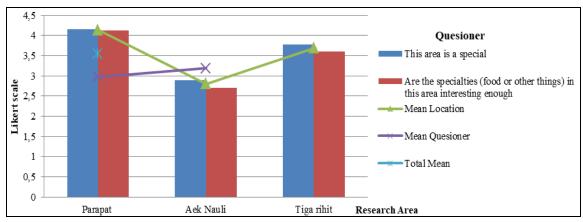


Figure 12. Respondents' Opinions about Local Specialties (Sources: Authors analysis)

#### 1.5. Local Specialties

With the arrival of tourists, instead of enjoying tourist attractions, the place must own authentic souvenirs. Local specialty items are products with unique qualities originating from specific regions, elevated to luxury status through historical or popular storytelling (Kim and Lee, 2021).

According to Figure 12, the respondents feel that Aek Nauli is not very special (2,9), and the uniqueness of this direction is also typical (2,7). The observation results indicate that Aek Nauli Elephant Conservation Camp lacks cultural significance as a tourist spot. However, the respondents agree that Tigarihit is unique (3.77) and has certain peculiarities (3.6). Tigarihit has local specialty foods such as *saok* beans and dolung-dolung.

Wrapped in bamboo leaves, Dolung-dolung (Figure 13a) combines rice, brown sugar, and coconut. Not only that, but the way it is sold is also unique. Unfortunately, there are no more Dolung-dolung sellers like that. If there were still Dolung-dolung sellers, many tourists might be intrigued by their distinctive sales approach. Next, Figure 13b illustrates the production process of Saok Beans. Saok beans also have similarities with Sihobuk beans. Sihobuk beans roast with ordinary sand, while Saok beans roast with Lake Toba sand.



Figure 13. (a) Dolung-dolung Manufacturing Process and (b) Saok Bean Manufacturing (Source: author)

Respondents agreed that Parapat is a unique place (4,15) and Parapat also has local specialties (4,12). The conclusion is that the regional specialties in Girsang Sipangan Bolon are good (3.54). As the Head of the Economic and Development Department of Girsang Sipangan Bolon District said:

"This batak culture is non-physical and physical, such as ulos, hiou, and suri-suri. There are even special Simalungun foods, such as nabinatur dayok and traditional medicinal ingredients".

From the information obtained, only two people who make the *ulos* in Parapat are left, and so far there is no successor to the *ulos* maker. The local specialty in Girsang Sipangan Bolon is the specialty of Simalungun culture. It could be more specific where the specialty is made, such as *Dolung-dolung* and *Saok* Beans made directly by local Tigarihit residents, and the making of *Ulos* Cloth that gets in the Parapat. Local specialties are distinctive foods exclusive to a particular area, serving as tourist attractions and enriching the region's culture (Dalem, 2021). Therefore, local specialities are needed to make them unique from the area and attract tourists to try new things.

### 2. Cultural Artifacts

Cultural artifacts are indicators of communication that cultural groups employ to discern identity in their communications. Therefore, cultural items might be the most attractive tourist attractions (Isnaini et al., 2022; Rahardjo et al., 2022). Cultural artifacts are also human-made objects that reveal historical information about cultural values, beliefs, and traditions, and can enhance the learning experience by fostering historical thinking and multicultural literacy (Chung, 2009). Cultural heritage artifacts embody human identity and provide evidence of past existence and activities over time (Fistos, 2022), Cultural artifacts reflect identity, attract tourism, and offer historical insights, enhancing learning by revealing past human activities and values, The artifacts are categorized into three sections: Cultural Exhibitions, History, and Historical Objects.

#### 2.1. Cultural Exhibitions

Cultural exhibitions are venues that provide services and experiences designed to foster a sense of cultural unity among participants (Zeng and Uo, 2019). Based on the results of interviews and observations, there are no cultural exhibitions in Girsang Sipangan Bolon. There is a need for Simalungun cultural exhibitions here. In an interview with the Head of the Economic and Development Department of Girsang Sipangan Bolon District, the statement: "*Girsang Sipangan Bolon could not host any cultural exhibitions. This place does not have any cultural exhibits. However, sometimes there are traditional performances like the Simalungun Tor-tor dance.*"

#### 2.2. History

One thing that attracts tourists to a place may be its history. Tourist attractions can be created by excavating,

protecting, and sustaining cultural treasures (Simamora et al., 2016). Cultural history involves examining prehistoric social, political, economic, and religious behaviors through material culture, offering a productive and adaptable approach to archaeology (Richard, 2016). Figure 14 states that the respondents in Aek Nauli feel familiar with the history of Aek Nauli Elephant Conservation Camp and are not too interested in hearing the history of this area. Unlike Tigarihit, respondents agreed that Tigarihit has a history (3.45) and wants to hear this place's history (3.17).

According to Pokdarwis Tigarihit's interview results, Tigarihit Village means *pasar pasir*, or in English, it is called a sand market (Figure 15a). The respondents concurred with the final statement, stating that Parapat has a history (4,17) and expressed a desire to learn more about the history of the location (3,8).

It can be inferred that the history of Girsang Sipangan Bolon is conventional (3,33). Soekarno's guesthouse (Figure 15b) is the most historically significant structure in Parapat. It is evident from the history of Girsang Sipangan Bolon that each region in the area has its own unique narrative. Historical tourism attraction in specific regions may be influenced by historical value, historical history, character, and cultural heritage (Wijaya et al., 2022).

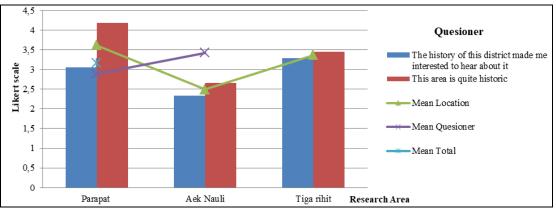


Figure 14. Respondents' Opinions about History (Sources: Authors analysis)



Figure 15. (a) Tigarihit Condition and (b) Soekarno's guesthouse in Parapat (Sourse: author)

### 2.3. Historical Objects

Historical objects are historical relics that must be protected and preserved. This effort should be done by the government and even the surrounding community (Tuppang, 2020). Historical objects are items that have been preserved or historically designed, highlighting the importance of analyzing building height composition for improved design integration (Sobczyńska et al., 2023). The presence of these relics can attract tourists to see what old things look like.

No.	Questions	Location			Mean
INO.	Questions	Aek Nauli	Tigarihit	Parapat	wiean
1.	In this area, some objects have historical values	1.65	1.9	2	1.85
Mean		1.65	1.9	2	1.85

Table 2. Respondents' Opinions about Historic Objects

Table 2, indicate that the respondents do not agree with this statement. In Girsang Sipangan Bolon (1.85), there are historical objects. Historical relics in Girsang Sipangan Bolon no longer exist and have even become extinct. The Simalungun Museum, located in Pematang Siantar, houses relics of Simalungun history. An interview with Aksari's hotel manager confirms this assertion Girsang Sipanganbolon writes, *"Historical things are extinct and no longer exist.things here. Maybe you can go to the Simalungun museum, but it's far from here."* 

## **3** Protection of Cultural Assets

### 3.1. The Rehabilitation of Cultural Assets

Cultural asset rehabilitation includes conservation, restoration, and enhancement, with smart sensors, data mining, and artificial intelligence playing crucial roles (Talamo et al., 2020). Restoration of a building's form is known as rehabilitation of cultural assets. This procedure is analogous to fixing a broken part of the structure.

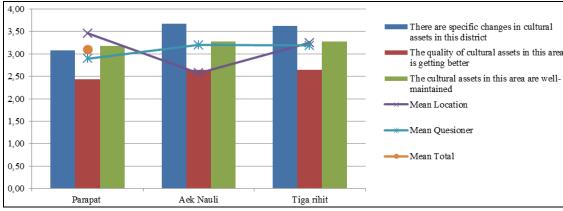


Figure 16. Respondents' responses about rehabilitating cultural assets (Sources: Authors analysis)

It can restore the architectural form and function properly (Pereira et al., 2021). Based on Figure 16, the average respondent did not agree that there were specific changes in Aek Nauli (2.42). Respondents also disagreed that the quality of cultural assets is improving (2.65) and that the quality of cultural assets in Aek Nauli is maintained (2.64). Unlike Tigarihit, respondents agree that there are changes in Tigarihit (3.17) and that the quality of culture is maintained (3.27). Lastly, Parapat respondents also agree that there are changes in this area (3.07), the quality of cultural assets in Parapat is getting better (3.67), and the quality is maintained (3.62). Then, it can be concluded that Girsang Sipangan Bolon has average cultural asset rehabilitation (3,09). The colorful village, or *Kampung Warna-warni* of Tigarihit before rehabilitation, was just an ordinary settlement, and there was nothing special about it.

However, the local community agreed that Tigarihit should be made into a tourist spot that has its uniqueness. The house has many colors, and Warna-warni village has a good photo spot direct to Lake Toba (Figure 17a). After the rehabilitation, the current condition of Bebas Beach is better and quite comfortable for visitors (Figure 17b).



Figure 17. (a) Photo spot in Tigarihit and (b) Bebas Beach (Source: author)

## 3.2. The Conservation of Cultural Assets

Most nations aim to preserve their cultural treasures as part of the global legacy. Around the world, many creative cultural tours work to conserve cultural assets, including entertainment, design, architecture, and cultural goods and services. Based on Figure 18, respondents disagreed that cultural assets in Aek Nauli are preserved (2.57), as well as Tigarihit's dan Parapat respondents (3.25). However, the respondents disagreed that Aek Nauli has the government's efforts to preserve culture (2,6). At the same time, the Tigarihit respondents stated that there are expected to be government efforts to protect culture (3,27), and the Parapat respondents agreed that there will be government efforts to preserve culture.

However, from all the research locations, it can be concluded that conserving cultural assets at Girsang Sipangan Bolon is quite average (3,02). Since no historical objects exist in Girsang Sipangan Bolon, this area's tourist attractions,

buildings, and traditions are most appropriate to preserve. Tourism cannot be viable unless the cultural essence and core principles characterizing various art forms are preserved (Zhao et al., 2024).

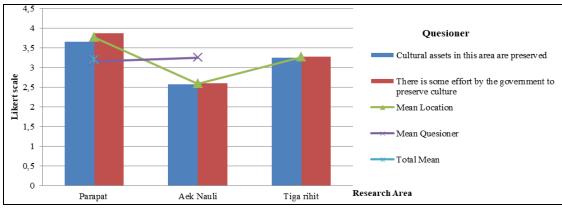


Figure 18. Respondent's opinion about the conservation of cultural assets (Sources: Authors analysis)

#### CONCLUSION

The results show that Tigarihit and Parapat have stronger cultural traditions than the Aek Nauli area, although cultural rituals are more prevalent, with the exception of the annual celebration in Parapat and Tigarihit. The results of place identity and local speciality revealed that the areas of Parapat and Tigarihit were quite good, with an average score of 3 to above 4, but this was inversely proportional to Aek Nauli, which only received an average of above 2, indicating that place identity and local speciality were low in Aek Nauli. Cultural artifacts are quite good in Parapat and Tigarihit, with an average score of 3 to above 4, but this is inversely proportional to Aek Nauli because Aek Nauli Conservation Camp only focuses on elephant conservation and education, not on Girsang Sipangan Bolon's culture. The three places each attract a certain amount of visitors, with Bebas Beach in Parapat being the most popular. The government should also actively promote the Girsang Sipangan Bolon tourism destination. If the government is engaged, the place has to be monitored. Visitors will continue to visit and appreciate the cultural charm of this tourist site as long as it exists.

The implication of this research is the discovery of the influence of the cultural aspects of the Simalungun community in the Girsang Sipangan Bolon area, North Sumatra, Indonesia, which is still one of the tourist attractions, such as celebrations, festivals, and dance performances, and typical food from the area. which still exists today, but its management and development are still not optimal. It can be seen from the results which provide scores with varying averages, and most scores are quite low, showing that cultural development has not been a priority because several tourist destination areas have focused on another development. From these findings, it is hoped that this research can become a reference and material for consideration in preparing the development of cultural tourism, as well as a realization that this area has extraordinary cultural diversity, so it needs to be improved in management and promotion from the local community level to abroad as a tourist destination. in the Lake Toba area, North Sumatra, Indonesia.

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