

# Preservation on Geotourism Bakara Caldera Toba, Indonesia

Nurlisa Ginting<sup>1,2</sup>, N. Vinky Rahman<sup>1,2</sup>, Achmad D. Nasution<sup>1</sup> and Fitri A. Sinaga<sup>1,2</sup>

<sup>1</sup>Department of Architecture, Faculty of Engineering, Universitas Sumatera Utara, 9 Dr. T. Mansyur Street, Medan 20155, Indonesia

<sup>2</sup>Toba Lake & Sustainable Tourism Working Group, Universitas Sumatera Utara, 9 Dr. T. Mansyur Street, Medan 20155, Indonesia

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Abstract: Caldera Toba is one of the tourist destination made from the volcanic eruption which is currently a tourist destination that tourists have frequently visited in North Sumatra. Bakara is one of the areas located in the Lake Toba Region, in Geo area Sibandang, which is part of Lake Toba Caldera Geopark which has tourism potential, which can improve the economy and quality of life of the people there. Bakara is one of the leading tourist destinations in HumbangHasundutan Regency which has extraordinary natural phenomena. To increase tourism in Bakara, there is a need for the regional arrangement. Preservation is one of the elements of regional arrangement that can attract attention when tourist visit destination. The aims of this study to explained aspects of preservation based on Geotourism, such as aspects of education, economics, promotion, and conservation. The results of this study are recommendations for managing preservation that can be used to develop tourism in Bakara.

## 1 INTRODUCTION

Tourism is an important sector for a country, which can improve the economy of the community. Tourism is a very strategic sector because it can improve the economy and also the quality of life of the community . One form of tourism that can meet the desires of tourists who provide benefits for the community and the environment, as well as the trigger for local economic development is Geotourism. Geotourism is one way to develop the Lake Toba Geopark and attracts more tourists. Preservation is an effort to maintain and preserve monuments, buildings or the environment in its existing conditions and prevent the occurrence of the damage process, besides preservation is usually used as an effort to maintain inheritance both physical and non-physical. In the development of Geotourism, one aspect of the arrangement of the area, namely preservation must be applied, to maintain and preserve cultural aspects and heritage at the Geopark location. This study aims to produce suitable preservation recommendations based on Geotourism in Bakara.

## 2 LITERATURE REVIEW

Along with the development of knowledge and planning methods, many approaches are taken by experts in planning or structuring an area. One of the theories that grow fast and spread widely is Urban Design (UD). Inside the UD some elements form an area. There are eight elements of urban design, and one of them is preservation. Preservation is one of the aspects of environmental design that aims to maintain the inheritance of a place and sense of place from the place, both physically and non-physically. Needs such as tourism, art, recreation, and aesthetics, which will be felt by tourists have a relationship with the preservation in an area. Conservation will also provide identity in a tourist spot. Conservation also has to do with permanent structures in places economically and culturally.

## 3 METHOD

### 3.1 The Method

Location of the research is Bakara which is 211 km from Medan City and 20 km from Doloksanggul, the

capital of Humbang Hasundutan Regency (figure 1). This region was chosen as a research location because it is one of the Lake Toba geosite point areas and also one of the tourist destination areas in North Sumatra Province.

The research is based on observations to get appropriate results. That is why this study uses qualitative methods. Qualitative research methods not only focused on finding data but also consider the sociocultural that exists to produce results. Data was collected through field observations in the form of field conditions and using interviews with the local government, local community, tourism figures. The results of the data analysis will be the research findings for structuring the bakara. Geotourism based Geopark structuring has several principles as follows: (1) Economy; (2) Education; (3) Conservation; (4) Promotion.

### 3.2 Research Area

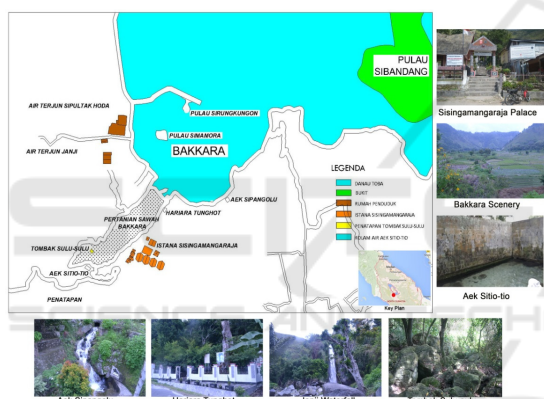


Figure 1: Research Area.

This area has been chosen because Bakara is one part of the Toba Caldera region with amazing natural beauty. Its extraordinary natural beauty and rural atmosphere are the main attraction. Also, Bakara has tourism potential that is worthy to be developed; these potentials include Geodiversity, Biodiversity, and Cultural Diversity.

## 4 RESULT AND DISCUSSION

### 4.1 Preservation Economy Aspect

The Toba Caldera Geopark has many benefits, one of which is for sustainable economic growth and development. Bakara is a part of Toba Geopark Caldera, which has high potential, if all stakeholders cooperate, Geopark Bakara will be able to influence

the community, especially in the economic sector. The arrangement of good tourist facilities will increase tourist visits, which will also have an impact on improving the economy of the community from the Tourism sector. Geopark Bakara, famous for its typical agricultural products, such as onions, rice which has good quality, which if it is well preserved, will increase the economic value of Geopark Bakara.



Figure 2: Local People house's in Bakara



Figure 3: Bakara Agriculture

Tourist facilities are needed at tourist attractions, both main facilities, and supporting facilities, such as environmental hygiene facilities. In research locations, lodging facilities are rarely found, even though many residential houses have the potential to be developed to become Homestays, which are attractive to visitors and tourists, lodging facilities are located only in the city which is an even 1-hour drive from Geopark Bakara.

## 4.2 Preservation Education Aspect

Geopark education management aims to initiate and advance the Geopark public education mission, together with all elements of society, with economic and infrastructure development. At the research location, the aspect of preservation of Geopark in Bakara already exists, in the form of signboards that can educate tourists and residents about the knowledge of Geopark, but the signboard conditions have started to have poor conditions. The signboard also is not well maintained, other than that the placement of Geopark signboards is limited, and still have a small amount, so there is a need for additional signboards at Geopark Bakara. In the research location, Signage is still rarely found explaining the tourist attraction, and historical stories on the location of the tourist attraction, as well as the Aek Sipangolu tourist attraction. Signage in geopark important, to attract tourist and educated tourist about geosite.



Figure 4: Signboard Geopark Danau Toba

## 4.3 Preservation Promotion Aspect

The promotion aspect of Geopark Bakara has been carried out by the government, in the form of promotions at hotels in Doloksanggul, which is the capital of Humbang Hasundutan. But, Geopark Bakara is still lack of activity, this can be indicated by the lack of the number of tourist visits to Geopark Bakara. The lack of promotion will make tourist destinations, less known by the general public,

so both the government and local communities need that promotion.



Figure 5: Banner Promotion on Geopark Bakara

## 4.4 Preservation Conservation Aspect

Historical heritage is an attraction of tourist objects. At the research location, some attractions need to be conserved, namely natural and cultural attractions. Natural attractions are the Promise Waterfall, Panoramic view of Bakara, Aek Sipangolu, and Sulu-sulu Spear, while the cultural tourism objects are Sisingamangaraja Palace and Hariara Tunghot Tree. The strength of culture found in Geopark Bakara, requires strong preservation as well, because keeping historical buildings such as Sisingamangaraja Palace is a form of historical evidence of civilization of the past, historical buildings also have special meaning in science and education, historic buildings can also create regional character and as the attraction of visitors to the region. In the Aek Sipangolu tourism object, for example, conservation is not yet felt, especially the design that is not by this historical tourism object, so that the design of aek sipangolu tourist objects must be developed again and also preserved.

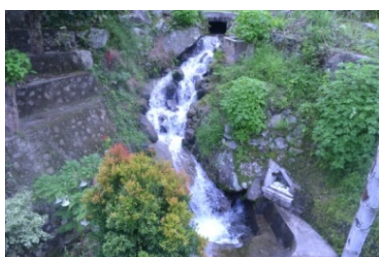


Figure 6: Tombak Sulu-sulu, Aek Sipangolu, Sisingamangaraja Palace

The application of the Batak Culture is also needed in the preservation of tourist objects located in Geopark Bakara tourist sites. The use of ornamental plants can also be applied in Geopark Bakara. These plants can be used one of them for the benefit of tourism. A row of ornamental plants can complement the shrub trees around the location of Bakara tourism objects. The use of ornamental plants is one of the efforts in environmental preservation can also improve the economy and welfare of ornamental plant farmers in the Bakara area.

## 5 CONCLUSIONS

Sipiso-Piso Waterfall, seen from the land use is good enough. The three elements of land use, namely land use intensity, land function, and relationships between functions are quite good. However, even so there are still some deficiencies in these three elements. In the element of land use intensity because there is no land use plan, there are some unplanned viewpoint developments. In the element of land function, there is still an important function in the

geotourism area which is not owned by Sipiso-Piso Waterfall, namely Stoppoint and information centers and irregular parking spaces. In the element of relationship between functions, circulation for pedestrian pathways is still not good and adequate. Therefore, this paper provides the concept of land use planning to address these problems. Unfortunately, not all problems can be solved by conceptualizing land use planning, such as the problem of less representative building design and less geotourism activities that cannot be resolved. Therefore, the author recommends a study of other tourism area planning elements in the Sipiso-Piso Waterfall geotourism area to complete this research.

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