
Landscape Design Of The Rudang Mayang Natural Bathing Area In Langkat District Using An Ecological Approach

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Abstract

Currently, the development of tourist attractions in Indonesia is increasing, both cultural tourism and natural tourism. Designing a tourist area is very important because it is basically an effort to develop and utilize the potential to increase the attraction of local and foreign tourists. The Rudang Mayang natural bathing area is one of the tourism potentials in Namu Ukur sub-district, Langkat Regency. However, currently the condition of the Rudang Mayang natural baths is not organized and not managed optimally, where the existing potential is not utilized effectively. The landscape design of the Rudang Mayang natural bathing area is a design that presents a new tourist area design based on the potential that exists from within and outside the area, both in terms of zoning concepts, circulation patterns, materials and other supporting facilities. Landscape ecology is a concept applied in the design of the Rudang Mayang natural bath which displays a geographical area that displays the expression of the natural landscape and the reciprocal relationships within it which have a close relationship with human activities, as well as an aesthetic level.

Keywords: Tourism, Rudang Mayang Natural Baths, Design, Landscape Ecology.

INTRODUCTION

Indonesia is very rich in diversity and potential in the tourism sector, one of which is in Langkat Regency, North Sumatra Province. The potential possessed by Langkat Regency is part of a valuable tourism resource and requires a creative touch and a unique approach in its development. According to Law of the Republic of Indonesia Number 5 of 1990 concerning Conservation of Biological Natural Resources and Ecosystems, natural tourism parks are natural conservation areas that are used primarily for natural tourism and recreation. the function of protecting the life support system around the natural education space and the development of science. All use of biological resources in this area must be carried out in a sustainable manner.

Designing an area that is related to or in direct contact with nature is part of landscape architecture (Nuraini, 2019). Landscape architecture is the part of the land area built or shaped by humans outside of buildings, roads, utilities, and out into the wild that is designed primarily as space for human habitation (Eckbo, 1950 in Negoro dan Nuraini, 2023; Nuraini, dkk, 2023a). In principle, landscape architecture has definitions, concepts and theories that start from a relationship between humans, their natural environment and human activities to control, organize and organize their environment in order to create pleasant open spaces (Nuraini Natural tourist areas as pleasant open environments develop with all recreational activities within them, created to create a physical environment of outdoor spaces/natural landscapes that can support human recreational actions and activities that support their desires, satisfaction and comfort (Knudson, 1980 in Ruhayat, 2008; Nuraini dkk, 2023b; Nuraini dkk, 2024).

The Rudang Mayang natural baths, located in Namu Ukur District, Langkat Regency, have enormous potential for review and planning that is more effective and oriented towards a development model that pays attention to the harmonious balance of the natural environment and the artificial environment between humans, buildings and the environment. . The design of the Rudang Mayang natural bath using a landscape ecology approach was implemented as an effort to create a building that pays attention to environmental balance by integrating design into the process of life. Seeing this, it is hoped that the development of ecologically based natural tourism can increase tourist attraction in Langkat Regency, as well as serve as a forum for the prosperity of the surrounding community.

RESEARCH METHODS

Obtaining data and information using the observation method is by carrying out direct observations and documentation in the field regarding the characteristics of the study location from an environmental perspective (Nuraini dan Sudrajat, 2010), tourist characteristics, patterns of tourist activities, existing problems related to the provision of supporting infrastructure and facilities. In the observation method, the data obtained can later be in the form of a visualization of the condition of the Rudang Mayang natural bathing tourist area, with a qualitative descriptive explanation.

The interview used in this research was a semi-structured direct interview. This interview will be used by preparing a research instrument in the form of key questions with possible answers in the form of a description of the respondent's opinion. In this direct interview, each respondent is asked the same questions, and the data collector records them.

RESULTS AND DISCUSSION

The Rudang Mayang natural bathing tourist area is one of the tourist attractions in Namo Ukure sub-district, Langkat Regency. There are natural resources or what is better known to the public as baths. Rudang Mayang Natural Baths is a tourist attraction located on Jalan Peragahan, Namo Ukur District, Langkat Regency, North Sumatra, which borders the following areas:

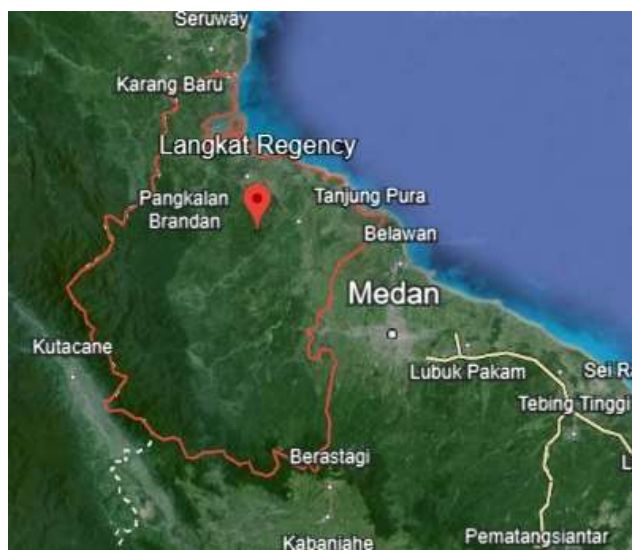


Figure 1 Map of Langkat Regency

Geographically, the Rudan Mayang natural baths are located at 3o 14' 00" - 4o 13' 00" North Latitude, 97o 52' 00" - 98o 45' 00" East Longitude and 4 - 105 m above sea level. The Langkat Regency area to the north borders Aceh Province and the Malacca Strait, to the south it borders Karo Regency, to the west it borders Aceh Province, and to the east it borders Deli Serdang Regency and Binjai City.

The existing conditions at the Rudang Mayang natural bathing site are still classified as very unplanned due to the lack of arrangement of the available landscape elements, making this site

unattractive to tourists who want to visit. The existing conditions of the Rudang Mayang natural bathing site are as follows:



Figure 2 Existing Conditions

Circulation access to get to the Rudang Mayang bathing location is still not effective because the road is still narrow and a bit rocky. And there is no marker at the entrance to indicate the location of the Rudang Mayang natural baths, so this is one of the problems for planning the Rudang Mayang natural baths landscape, so that this site is better known to many tourists. The condition of the Rudang Mayang natural baths on the river bank has been paved, for which retaining walls have been built. However, this condition is still not effective due to several factors, including safety factors and aesthetic factors. So this is what challenges the author to carry out good and correct landscape planning for the scale of natural tourist areas.



Figure 3 Existing Natural Baths

There is a gazebo on the site which is in very ineffective condition. As the number of tourists visiting increases, it is necessary to carry out good planning for the site, starting from thinking about the facilities needed to support tourist activities.



Figure 4 Existing Gazebo

With the existing conditions obtained from the results of this survey, the author can take appropriate landscape planning steps for designing the landscape of the Rudang Mayang natural bathing area using a landscape ecology approach. Ecology is a branch of biology that studies the relationships between organisms and between organisms and their environment. Meanwhile, the landscape is a heterogeneous area formed from various types of ecosystems that interact with each other.

The basic concept in planning and designing the Rudang Mayang natural bathing tourist area is as an ecological and recreational tourism area for visitors which is equipped with tourist service facilities so that visitors feel comfortable and satisfied, connected to a circulation system that covers the entire site, and decorated with greenery. The zoning concept in the Rudang Mayang bathing area is as follows: (a) Entrance & Exit (b) Parking area (c) Guard post (Ticketing) (d) Park (e) Souvenir shop (f) Foodcourt (g) Lodging (h) Mini outbound (i) Camping ground (j) Natural bathing



Figure 5 Zoning Concept

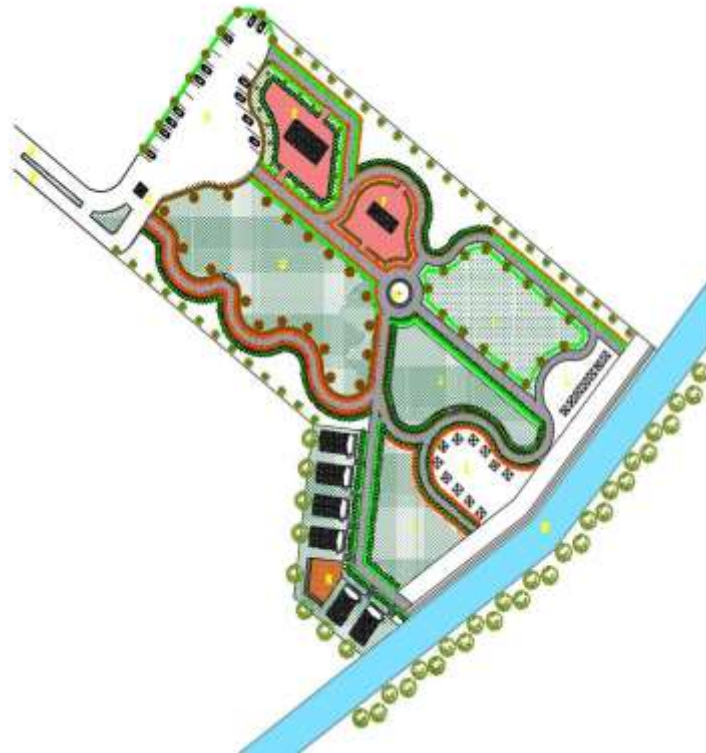


Figure 6 Site Plan

Legend:

- (a) Entrance and Exit (b) Parking area (c) Guard post (Ticketing) (d) Park (e) Souvenir shop (f) Foodcourt (g) Accommodation (h) Mini outbound (i) Camping ground (j) Natural baths.

The implementation of landscape ecology in the design of the Rudang Mayang natural bath is as follows:

- a. Fruit Plants Usually fruit plants are very effective in inviting their presence. Call it sapodilla, sarikaya, jackfruit, rambutan, talok, water apple, jamblang, durian, star fruit, kemang, or bay tree.
- b. Ornamental Plants Apart from that, there are also ornamental plants which are really loved by birds. These include ylang ylang, red dadap, butterfly flower, bottle brush, frangipani, yellow bamboo, red palm, or soka flower.
- c. Meanwhile, the types of shade plants that birds like are tamarind kranji, banyan, butun, sea pine, kapok, jatropha, flamboyan, eucalyptus, sempur, tanjung, turi, and banyan.

The use of bird-calling trees at the Rudang Mayang natural bathing site will later increase the creation of an interconnected ecosystem, and is also expected to become a very close tourist attraction.



Figure 7 Vegetation



Figure 8 Garden Perspective



Figure 9 Gazebo



Figure 10 Parking area



Figure 11 Foodcourt



Figure 12 Accommodation



Figure 13 Camping Ground



Figure 14 Natural Baths



Figure 15 Regional Perspective

CONCLUSION

The Rudang Mayang natural bathing tourist attraction is one of the ecological and recreational tourism potentials in Langkat Regency. It is necessary to plan and design the Rudang Mayang natural bathing tourist area so that the tourist facilities and activities are more optimal and attractive, so that it can attract visitors to come. Based on the analysis of perceptions and preferences, it is known that the desired activities and facilities, and the carrying capacity of the Rudang Mayang natural bathing tourist area are based on the number of visitors/standards and location capabilities, so the facilities provided are in accordance with the number of visitors so that they are more optimal and can minimize the damage that will occur.

The basic concept in planning and designing the Rudang Mayang natural bathing tourist area is as an ecological and recreational tourism area for visitors which is equipped with tourist service facilities connected to a circulation system that covers the entire site, and decorated with greenery. The space concept is divided into reception space, circulation space, interaction space, service space, commercial space and green space. The reception room, circulation room and interaction room are the primary spaces provided for visitor activities in the Rudang Mayang natural bathing tourist area, service rooms and commercial spaces are spaces provided to support visitor activities in the Rudang Mayang natural bathing area.

REFERENCES

- Aulia, F. (2017). Feasibility Study of Tirta Sayaga Tourist Park as a Tourist Destination in Bogor Regency [Thesis]. Jakarta: Syarif Hidayatullah State Islamic University
- Central Statistics Agency, Langkat Regency
- Hakim, R. and H. Utomo. 2008. Landscape architectural design components: design elements and applications. Jakarta : PT Bumi Aksara.
- <https://medan.tribunnews.com/2020/11/26/pemandian-alam-rudang-mayang-air-terjun-jadi-daya-tarik-bagi-pengunjung>, accessed on 24 December 2023.
- <https://www.timesumut.com/wisata/105212179796/menyelami-keindahan-alam-sumatra-utara-wisata-pemandian-di-namu-ukur-dan-rudang-mayang>, diakses pada tanggal 10 desember 2023.
- Negoro SA dan Nuraini C., (2022). Konsep Kearifan Lokal pada Desain Lounge & Learning Square (LLS) : Flying Space Universitas Pembangunan Panca Budi Medan. *Jurnal Purwarupa*, Vol. 6, No.2, Hal. 87-96
- Nuraini, C, Sitompul, K, Fawwas, D.M., Sofyan, M and Firi, N., (2023a). The separation pf activities spaces in residential Environment as an adaptive Housing Concepts Strategy. *Dharmawangsa University Proceedings*, 3(1), pp. 392-400.
- Nuraini C., Azizah Q., dan Muharrani S., (2024). Arahlan Pelestarian Tata Ruang Permukiman Masyarakat Etnis Mandailing di Sumatera Utara. *Jurnal NALARs*, Vol. 23, No. 1, hal. 1-16.
- Nuraini, C., & Sudrajat, I. (2010). Metode Perancangan Arsitektur. *Bandung: Karya Putra Darwati*.
- Nuraini, C., (2024) The Architecture Tectonics Of Traditional Buldings In Mandailing . *North Sumatera Indonesia, Civil Engineering and Architecture* 12 (2) : 892-916 DOI. 10 13189/cea 2024. 120217
- Nuraini, C, Alamsyah B, Novalinda, Segala, P., Sugiarto, A, (2023b), Planning with Three-Word Structures A Comparative Study Of Settlement In Mountain Vilages. *Journal Of Rigion and city Planning*. Vol 34. No 1 page 55-82 April 2023 DOI.105614/jpwk 2023.32.1
- Nuraini, C, (2019), Morphology of Residential Environment Of Sigengu Village In Mandaling Julu, North Sumatera *Journal Of Ragonal and city Planning (JRCP)* , Vol.30.No.3 Page 241-260, 2019 DOI.10.5614/jpwk.2019.30.3.5 ISSN 2502-6429 online @2019 ITB Institute for Research and Community Service

