talenta PUBLISHER

Journal of Environmental and Development Studies

Journal homepage: https://talenta.usu.ac.id/jeds

The Development of Hapanasan Hot Spring Nature Tourism in Rokan Hulu, Riau, Using the Analysis Hierarchy Process (AHP)

Siti Kholizah[1], Rahmawaty[2*], Hamdani Harahap[3], Mohd Hasmadi Ismail[4]

[1]*Natural Resources and Environmental Management Study Program, Postgraduate School, Universitas Sumatera Utara, Medan, 20155, Indonesia*
[2]*Faculty of Forestry, Deli Serdang, Universitas Sumatera Utara, Medan, 20155, Indonesia*
[3]*Faculty of Social and Political Science, Department of Social Anthropology, Universitas Sumatera Utara, Medan, 20155, Indonesia*
[4]*Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400, UPM, Serdang, Selangor Darul Ehsan, Malaysia*

[*]Corresponding Author: rahmawaty@usu.ac.id

ARTICLE INFO

Article history:
Received 10-07-2023
Revised 11-08-2023
Accepted 26-08-2023
Available online 01-09-2023

E-ISSN: 2745-4592

How to cite:
Siti Kholizah, Rahmawaty, Hamdani Harahap & Mohd Hasmadi Ismail. The Development of Hapanasan Hot Spring Nature Tourism in Rokan Hulu, Riau, Using the Analysis Hierarchy Process (AHP). Journal of Environmental and Development Studies. 2023. 4(2):20-27

https://doi.org/10.32734/jeds.v4i2.12548

ABSTRACT

Hapanasan hot spring, located in Rokan Hulu Regency, Riau Province, is a natural tourist destination with high potential. Despite its potential, the resource utilization carried out by the community and local government is not yet fully developed. This study aims to analyze the priority factors for developing Hapanasan hot spring. This study collects primary data by observing the area and conducting Forum Group Discussions (FGD). Secondary data was obtained from document studies applied to various data sources such as the Tourism Office, Regional Development Planning Agency, and Non-Governmental Organizations. The method used in this study is the Analytical Hierarchy Process (AHP), and the data is processed with expert choice software. Based on the results of the AHP and the software analysis, the priority for developing natural hot spring tourism in Hapanasanis in the criteria for aspects of tourist objects and attractions with a value of 0.438, while the sub-criteria for the structure of natural tourism is improving facilities and infrastructure with a value of 0.869, and there is an alternative in the form of increasing the capacity of elements of facilities and infrastructure with a value of 0.290.

Keywords: analytical hierarchy process, development, expert choice, hapanasan, nature tourism

1. Introduction

Rokan Hulu Regency is a fascinating area with much natural beauty. Rokan Hulu has a wide selection of natural tourist destinations strategically located in the city center, including the Hapanasan hot spring natural tourism in Rambah District. Meanwhile, the management of the Hapanasan hot spring area is still not optimal, especially in the management aspect; this is because there are many obstacles, namely the status of the Hapanasan hot spring area, which is still a Conversion Production Forest where the development has only been carried out with an area of 2. While the total area reaches 9 Ha. Apart from that, the existing buildings and various facilities built by the Provincial Office have not yet been handed over to the Rokan Hulu Regency; this has made it challenging to repair various facilities if there is damage because they have to wait for the Riau Provincial Office to go directly to the location to carry out repairs. In addition, the budget for the development of this tourist area is very minimal, so for the past three years, there has been no development; the conditions of the Covid-19 pandemic caused the Hapanasan hot spring area to be temporarily closed, and the incoming budget also did not work, this greatly affected the quality and capacity of tourism This.

Based on data obtained from the Rokan Hulu Tourism Office of Riau Province, visits to the Hapanasan Rokan Hulu Riau hot spring tourist destination for domestic tourists (Wisnus) totaled 1004 people/year 2021, while for domestic tourists totaled 4.61 people/2022, domestic tourists (Wisnus) totaling 13,970 in 2020. Meanwhile, foreign tourist visits from 2019 to 2021 only amounted to 1 person. So several essential phenomena can be found, namely the not-yet-optimal development of the Hapanasan tourist attraction as evidenced by the damage to several facilities such as bathrooms, gazebos, children's playgrounds, and there has been no improvement, the various plans in previous years that have been set have not been realized, the lack of resources people who have competence and expertise in the development of tourist objects, especially in the development of butterfly breeding centers in this region.

Previous research was conducted by Sudipa (2021) [1] regarding the response of tourists visiting tourist areas using the Analytical Hierarchy Process (AHP) method. The results obtained were that tourists responded well using concepts like attractions, destinations, destination facilities, accessibility, image, and price. In addition, research conducted by Sweta (2021) [2] states that the government must be involved in a pre-visit marketing strategy to change the negative image of tourist destinations, such as the lack of maximum expansion of various forms of facilities, coordination activities between stakeholders and arrangements for various promotions across regions and regions to other areas. Conducted research to support waterfall tourism destinations in Bogor City using the Analytical Hierarchy Process (AHP) and found that each visitor has criteria that must be considered, such as distance, cost, and tourist area. Therefore, research is needed regarding the decision-selection system to assist in making decisions related to developing tourist areas Bintoro (2018) [3].

According to Sari (2019) [4], local governments need encouragement and a role to develop the community's economy by developing tourist attractions in the area. One of the computational methods intended to help. The rapid development of technology and information and the development of computational methods such as methods for decision-making Gedecho (2017) [5]. According to Abdillah (2020) [6], current decision-making is a decision support system in the form of the Analytic Hierarchy Process (AHP). In a decision support system, any information can be processed into the best alternative as an alternative used for decision-making Pebrianti (2022) [7]. The AHP method is effectively used as a problem-solving method because of its hierarchical structure and considering validity Hasan (2021) [8].

In this regard, it is necessary to carry out tourism management for the development of natural tourism in the Hapanasan hot spring area, Rokan Hulu Regency, using the AHP method. The purpose of this study was to analyze the priority factors for the development of Hapanasan hot spring tourism so that the highest ranking was obtained in the development of Hapanasan hot spring ecotourism, Rokan Hulu Regency manuscript, for example, a questionnaire, citation of the law, transliteration of the manuscript, transcription of records, maps, drawings, or tables/charts of the results of the analytical calculations. Attachments are placed after the list of references.

2. Methods

This research was conducted in the Hapanasan hot spring area, Rambah Tengah Village, Rokan Hulu Regency, Riau. This research was carried out from November 2022 to April 2023. Research on selecting tourist objects using the AHP method can analyze priority factors in developing Hapanasan natural tourism and can produce optimal results in fulfilling satisfaction for ecotourism visitors Olu (2018) [9].

The data collection method is carried out by direct observation; this observation is carried out by systematically observing and recording the various symptoms observed. In observation, there are several advantages; in the form of researchers being able to understand the context in which activities are carried out, information is obtained from the first source. For the secondary data obtained from related agencies, namely by carrying out document studies applied to various data sources obtained from the Tourism Office, regional development planning agencies, and related non-governmental organizations.

The method used in this study is the Analytical Hierarchy Process (AHP) by conducting Focus Group Discussions (FGD) with informants from the Tourism Office, regional development planning agencies, and the Hapanasan Hot Spring Natural Tourism Area management group. Research using AHP includes several steps: choosing experts, creating a hierarchical structure, developing AHP questionnaires, collecting data from informants, processing data using expert choices, and determining weight criteria and alternatives. The

questionnaire is arranged hierarchically to reflect the relationship between objectives, criteria, and alternatives Yanto (2021) [10].

The sample population in this study were all stakeholders involved in the Hapanasan hot spring natural tourism area. This research uses a purposive sampling technique; according to Sugiyono (2018) [11], a purposive sampling technique is a sample that is carefully selected by taking people and/or research objects that are more selective and have specific characteristics. According to Rahmawaty (2015) [12], The informants selected in this research were 9 people. The criteria for selected informants are those who know information related to the problem being studied, are accepted by several groups in determining policy, and know about the problem being studied. As a consideration in determining respondents, residents aged over 17 years and over who have lived at least 4 years in the research location are accepted by various groups with existing policies. For consideration in determining respondents are residents aged over 17 years and over who have lived for at least 4 years at the research location; various groups with existing policies accept them. In addition, interviews were conducted with informants to collect qualitative information regarding the driving factors for managing natural tourism areas.

Furthermore, the data obtained was analyzed using expert choice software. Expert choice software is an application program that can be used to help make decisions in determining a decision Rahmawaty (2011) [13]. The research hierarchy chart from the FGD is shown in Figure 1.

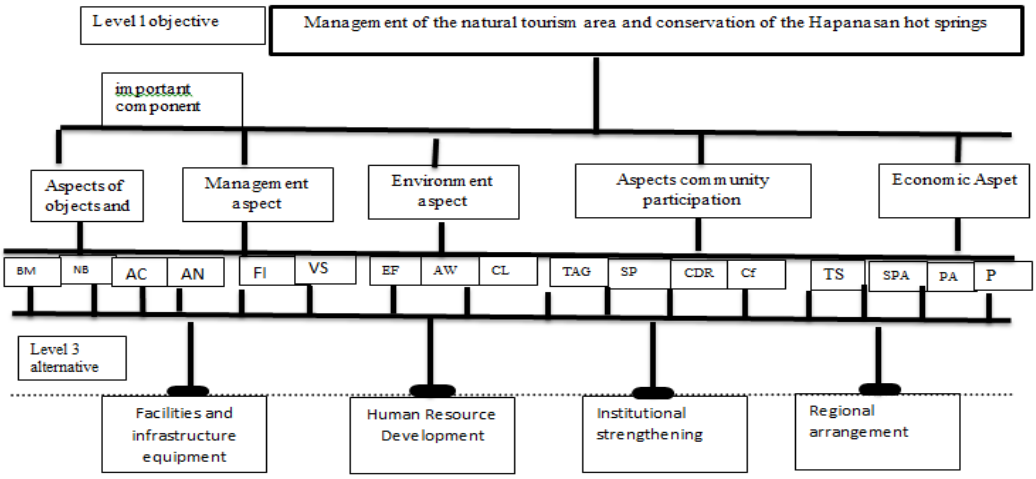

Figure 1. Research hierarchy chart

BM	: Butterfly Museum	CDR	: Community Density Relations
NA	: Natural Breeding	CF	: Central Figure
AC	: Access	TS	: Transportation Services
AN	: Accommodation	SPA	: The Scope of the Promotion Area
LP	: Management Institution	PA	: Promotional Activities
FI	: Facilities and Infrastructure	P	: Promoter
VS	: Visitor Settings		
EF	: Environmentally Friendly		
AW	: Availability of Water		
CL	: Climate		
TAG	: Travel Awareness Groups		
SP	: Society Participation		

3. Results and Discussion

Based on the results of direct observation and document studies conducted in the Hapanasan hot spring natural tourism area, several facilities are presented in Table 1.

Table 1. Hapanasan hot spring area facilities

Facility	Amount	Information
Swing	2 units	1 OK 1 Not Good
flying fox	1 Unit	Not good
Gazebo	17 Units	6 OK 11 Not Good
Entrance gate	1 Unit	Good
Canteen	2 Units	Not good
Swimming pool	3 Units	Good
Pool Therapy	2 Units	Good
prayer room	1 Unit	Good
Service Post	1 Unit	Not good
Selocoran	1 Unit	Not good
Parking lot	1 Unit	Good
Wc/toilet	10 Units	6 OK 4 Not Good
Butterfly Museum	1 unit	Not Good
Natural breeding of butterflies	1 unit	Not good

Source: Saaty (2008) [14]

Facilities are the most important thing to encourage visitors to come to visit, this is to Wirakalam (2015) [15] consumer satisfaction is the needs and expectations of consumers for a facility that is by the expectations and desires of consumers so that it encourages consumers to continue visiting and promoting tourism. to others by word of mouth. This is by the theory *of consumer behavior* in which satisfaction is defined more from the perspective of consumer experience after visiting a tourist area and using the facilities available. Considerations in visiting a tourist attraction that are dynamic according to the needs of visitors. facilities are one of the reasons tourists come to visit, whereas according to Natalia (2016) [16], the facilities of a tourist area are something that is enjoyed the most and participates in various activities in tourist destinations.

3.1. Analysis Development of Hapanasan Hot Spring Tourism

Based on the results of the Focus Group Discussion (FGD) and analysis of expert choice software in the Hapanasan hot spring natural tourism area, which consists of object and attractiveness, management, environmental, economic, and community participation aspects. The weight of the criteria for the Hapanasan hot spring natural tourism area is presented in Table 2.

Table 2. The weight of the structure of the hapanasan hot spring nature tourism criteria

No	Criteria	Criteria Values	Ratings
1	Aspects of objects and attractiveness	0.438	1
2	Management aspect	0.219	2
3	Environmental aspects	0.109	3
4	Economic aspect	0.88	5
5	Aspects of community participation	0.146	4

Source: Saaty, 2008 [14]

Based on Table 2, obtained from the results of the Focus Group Discussion and processed using expert choice, it can be seen that the weight of the criteria structure in developing Hapanasan hot spring natural tourism in order of priority is the object and attraction aspects. Aspects of objects and attractions are a top priority; this is essential for developing natural tourism because this aspect is the main reason for tourists visiting a natural tourism area. This is to the theory that one of the activities carried out by tourists is enjoying the beauty of nature or things that cannot be found elsewhere (Tamelan, 2019) [17].

The results of this study by Mawaddah (2021) [18] show that the development of tourist attraction objects is an essential point because it is one of the government's efforts to maintain customs and culture. Based on this,

the Hapanasan hot spring area has uniqueness and potential, such as a captive and butterfly museum, but is constrained in terms of redevelopment after being inactive in recent years, causing the incoming budget not to work; this affects the quality and capacity of the tourist area.

From the data obtained dari dInas Pariwisata Kabupaten Rokan Hulu, the Hapanasan hot spring area is experiencing a rapid decline, especially in terms of the number of visits, as a result of the lack of renewal of various facilities and infrastructure, causing a reduced impression of visiting again. Based on data from the Rokan Hulu Regency tourism office, tourist visits fluctuate yearly, although the numbers are not too drastic. The results of Endah 92018 support this) [19] that the number of visits that occur fluctuating is caused by the development of the tourism sector, which is not fast enough even though it has great potential; this is added by the factor of the Covid -19 pandemic, so the area is closed, and there are no updates in the tourist area. Several damaged facilities such as swings, slides, and pavilions, exist. Therefore, it is essential to repair and rearrange facilities, it is necessary to redevelop butterfly capacity so that it becomes an added value to natural tourism, carry out various repairs, and the need to add unique bathrooms for tourists who come to do health therapy and whole body soaks, so a more closed bathroom is needed.

Based on the results of interviews with a community member who has lived for about 10 years and knows the process of developing natural tourism area, namely Mr. Anto, aged 39 years, he gives the opinion that the lack of community participation is caused by objects that are less promising from an economic point of view. When this object was still experiencing rapid development, the museum was still neatly arranged, the natural breeding of butterflies was still running correctly, and the residents were enthusiastic about contributing to enlivening the tourist area by selling various special Rokan Hulu foods. Community participation decreased very drastically along with the decline in the number of visitors. To develop this tourist area, it would be better for the management to embrace the village community directly adjacent to the natural tourist area, namely Pawan, Sialang Jaya, Haiti. Community participation has an essential role in the development of natural tourism; this is by Permendagri No. 33 of 2009, namely community participation is one of the principles in developing natural tourism. The sub-criteria as assessment is presented in Table 3.

Table 3. Weights on the objective structure –

No	Sub-criteria	Mark Sub-criteria	Ratings
1	Butterfly Museum	0.184	8
2	Natural breeding	0.585	2
3	Accessibility	0.64	17
4	Accommodation	0.167	12
5	Facilities and infrastructure	0.869	1
6	Visitor settings	0.131	13
7	Environmentally friendly	0.540	4
8	Availability of clean water	0.178	11
9	Climate	0.273	7
10	Transportation services	0.114	14
11	The scope of the promotion area	0.377	6
12	Promotional activities	0.415	5
13	Promoter	0.94	15
14	Travel awareness groups	0.183	9
15	Society Participation	0.545	3
16	community density relations	0.91	16
17	Central figure	0.182	10

Source: Saaty, 2008 [14]

Table 3 shows that the sub-criteria structure in the development of the Hapanasan hot spring natural tourism has various aspects that need good cooperation from various stakeholders. The local government is the most important role in developing this area. The government functions that are carried out will provide an overview of the quality of the government itself. In implementing government, it has functions in service, empowerment, and development. The aspect that is the goal of the government's work should produce justice, independence, and development that creates community prosperity Febriana (2017) [20].

The development of the Hapanasan Hot Spring natural tourism area cannot be separated from the government's role. Therefore, it is necessary to carry out more focused development such as improving services and updating

area facilities, which are essential factors in improving the quality of natural tourism areas. The development of Hapanasan hot spring natural tourist destinations can use indicators of tourists, transportation, attractions, and service facilities, as well as various information and promotions, which will be adequately realized by carrying out various collaborations between the government, the community, and related agencies because the development of an area Tourism is a plan that must be prepared in a comprehensive and orderly manner so that optimal benefits can be obtained for the whole community. The results of the interviews conducted showed that the Hapanasan tourist area had several visits originating from local tourists, and only a few came from outside Riau Province; this was due to the minimal promotion process carried out, so this natural tourism area was not well known. The government needs to carry out promotions by utilizing trending technology among the public, such as social media and creative teams, as well as various collaborations with various parties so that this area continues to exist in various circles.

Nature tourism, which has a variety of activities in it, tends to have greater potential to attract tourists to visit, such as research, health, and education activities. This is reinforced by the results of Rashid (2000) [21], which provide limitations on natural tourism park areas, namely by protecting buffer systems, natural educational vehicles, and the development of science as natural tourist and recreational destinations that the natural beauty of the tourist area itself can support.

In the aspect of accommodation and followed by accessibility, the accommodation and accessibility in the Hapanasan area are pretty reasonable. Accessibility and reasonable accommodation can bring in tourists as well as facilities capable of supporting the operations of the area. Accessibility and accommodation have a very positive influence on the development of a nature tourism area, and this is supported by the results of Ramadhani (2022) [22], which states that accessibility and accommodation have a positive and significant influence on tourist satisfaction. Accessibility and accommodation are two important components in meeting tourist needs. The Hapanasan natural tourism area needs to be improved in all aspects, especially in terms of accommodation and accessibility according to standards in a tourist attraction, such as the construction of *homestays* located in rural areas so that tourists do not have to go to a city which is about 9 km from a tourist location. Based on the data obtained in the field, the accessibility to the natural tourist area of Hapanasan Hot Springs is included in the feasible category for development. Besides good road conditions, tourists can use pedicabs and motorbike taxis to go to natural tourist areas. Based on the sub-criteria value obtained on accessibility, if it is correlated with field facts in the Hapanasan hot spring natural tourism area, it can be categorized as good and not a problem in developing Hapanasan hot spring nature tourism.

Facilities and infrastructure are essential aspects of the management of natural tourism areas. The Hapanasan natural tourism area has exceptionally good facilities and infrastructure, but the lack of maintenance and renewal results in damage. Facilities and infrastructure are complementary elements and aim to facilitate the process of tourist activities. This area has ecological importance and as a living space or habitat for several animals such as butterflies, bees, etc. The development of this natural tourism area should have good visitor management so that environmental stability is maintained. The stability of the area can be maintained by monitoring aspects of the spatial organization (zoning), provisions in construction and types of facilities, the separation between play areas, and butterfly diversity visit areas. Perform separation between rooms according to needs so that the number of visits is for vacations and medical therapy does not disturb the balance of the habitat of the butterflies in this area.

This is supported by Chin (2018) [23], which states that techniques that can be used to manage the impact of visitors include increasing space capacity to make it more *flexible*, strengthening land, setting quotas, and *ticketing* systems. The value of the alternative structure of Hapanasan hot spring tourism based on expert choice is presented in Table 4.

Table 4. Weight on alternative structures f attractions hapanasan hot springs

No	Alternatives	Alternate value	Ratings
1	Facilities and infrastructure equipment	0.290	1
2	human resource development	0.173	3
3	institutional strengthening	0.145	4
4	Regional arrangements	0.329	2

Source: Saaty (2008) [14]

Based on Table 4, it can be seen that the alternative weight of the area arrangement aspect occupies the top position with a value of 0.329, while in the second position, namely, the aspect of equipment and infrastructure. These two aspects, of course, go hand in hand with the results obtained in the previous sub-criteria. Rearranging natural tourism, updating facilities that are no longer feasible, and repairing various damaged facilities can be done to improve ecotourism locations by taking into account butterfly conservation efforts that previously had developed rapidly in this region. Structuring the area to be better certainly goes hand in hand with tourist interest. It increases community participation in management and development, such as re-active productive business of the local community around natural tourism areas, which will directly provide significant benefits for the development of natural tourism and the local community's economy. In the 3rd position, there is an aspect of human resource development with a value of 0.173, followed by institutional strengthening with a value of 0.145l. Human resource development can be in the form of providing education to the local community. This is by the statement Susilawati (2020) [24]. The development of human resources is intended to increase the capacity of the local community, especially in the field of tourism. In this case, the development of human resources will be in line with institutional strengthening, in which cooperation between government agencies, the tourism industry, non-governmental organizations, local communities, and tourists who come to visit is an element that has a very close relationship in efforts to develop a tourist area.

Developing ecotourism is closely related to conservation, so ecotourism is a form of tourism that has an attitude of responsibility and is friendly to the environment Pratiwi (2019) [25], however, along with the increasing awareness of various parties on development issues that are environmentally sound to provide views on the principles of sustainable tourism. The tourism principle should be able to maintain environmental and cultural sustainability and provide empowerment and economic benefits to local communities and the government Teshome (2021) [26]. In addition, the community needs to be empowered with ecotourism activities, and this is due to the decreasing quality of forests and reducing community pressure on forests. Thus, the community will absorb more ecotourism activities and minimize the damage to the forest. The development of ecotourism from an alternative tourism perspective makes it seem as if the government is reducing obstacles in the forest and community participation is protecting the environment while the government is taking a role in the coordination and guidance function. Development Hoiriyah (2019) [27]. Ecotourism development is regulated in PERMEN Domestic Affairs Number 33 of 2009, which must pay attention to elements of education, understanding, and support for efforts to conserve natural resources and increase the income of local communities.

5. Conclusion

Based on the results of observations and document studies carried out, the Hapanasan Hot Spring, natural tourist area, needs to repair and renew facilities because this is the basis and reference for a natural tourist attraction.

Based on the results of the AHP analysis, the priority for the development of natural hot spring tourism in Hapanasan, Rokan Hulu Regency, Riau, is on the criteria for aspects of tourist objects and attractions with a value of 0.438, while the sub-criteria for natural tourism structure objectives are in the form of improving facilities and infrastructure with a value of 0.869, and there are alternatives in the form of capacity development of elements of facilities and infrastructure equipment with a value of 0.290.

References

[1] Sudipa I, Arya G, Wiguna IN, Tri, Putra A. " Implementation of the Analytical Hierarchy Process and Linear Interpolation Method in Determining Tourist Locations in Karangasem Regency." *Science journal Komput Inform* 5, no. 2 (2021):866-878.

[2] Sweta IN. "Design of a Tourism Object Determination System in Bali During the Covid-19 Pandemic Using a Modified Weighted Product Method.: Matrix of Information Engineering and Computer Engineering Management Journal 20. No. 2 (2021):367-378.

[3] Bintoro, Ketut B. "Decision Support System for Waterfall Tourism Destinations in Bogor City Using the AHP Method." *Synchronous* 2, no. 2 (2018):164-171.

[4] Sari A. "Application of Analytical Hierarchy Process (AHP) to Support Decisions on Selecting Tourist Attractions in the Yogyakarta Special Region for Non-Asian Foreign Tourists." SIMETRIS Journal 10, no. 2 (2019): 2549-3108.

[5] Gedecho E, Guangul A T. "Tourism Potential And Constraints: Considering the natural and cultural attractions of South Omo, Ethiopia ." *African Journal of Hospitality, Tourism and Leisure* 6, no. 1 (2017): 0–23.
[6] Abdillah DA." Analysis Of Strategi For The Development Of Tourism Right Object Tourism In Banjar Regency." *Jurnal Ilmu Ekonomi Dan Pembangunan* 3, No. 2 (2020): 390-406.
[7] Pebrianti L, Gian PS, Yeremia TPP." Implementation of the AHP Method in the Medan City Park Tourism Decision Support System." *Amplifier Journal* 12, no.1 (2022):2089-2020.
[8] Hasan P, Yunita R, Thamrin, Pawan E, "Implementation of the AHP Method for selecting lecturer admissions at STIMIK Ten November Jayapura." *Journal of Exploration Inform* 10, no. 2 (2021):176-185.
[9] Olu AJ, Ben, OO, Paul, OT "Assessment of Tourism Potentials and Their Contributions to The Socio-Economic Development of Idanre People Ondo State, Nigeria ." *World Journal of Research and Review* 6, no. 4 (2018): 52–58.
[10] Yanto. "Decision Support System Using the AHP Method in Product Selection." Journal of *Business Technology and Information Systems* 3, no. 1(2021):167-174.
[11] Sugiyono. *Management Research Methodology*. Alphabet, 2018
[12] Rahmawaty, Najimatul K, Abdul R. "Land Use Change Assessment As An Effort To Mitigate Climate Change In Belawan Watershed Using Integrated Approach. International Conference on Tropical Biology." *Ecological Restoration in Southeast Asia* (2015):12-13.
[13] Rahmawaty. "Application of Analytical Hierarchy Process (AHP) for Land Use Allocation." *Indian Journal of Ecology* 38 (2011):159-165.
[14] Saaty TL. "Decision making with the analytic-hierarchy-process." *Int J Serv Sc* 1, no. 1 (2008):83–98.
[15] Wirakalam L. "Prospects for the Development of the Lemor Botanical Park Tourism Object in Increasing the Income of the Community of Suela Village, Suela District, East Lombok Regency." Jamplifier 1, no. 1(2022):64-72.
[16] Natalia, Clarisa Y NMO, Karini NPE, Mahadewi . " The Effect of Accessibility and Facilities on Tourist Satisfaction to Broken Beach and Angel's Billabong." *Journal of IPTA* 8, no. 1 (2020):2338-8637.
[17] Tamelan PG, Harijono H." "Concept of Nature Tourism as an Alternative for Tourism Infrastructure Development in Rote Ndao Regency, NTT." *Technology Journal*. 13, no. 2 (2019):29-35.
[18] Mawaddah." "The Influence of Accessibility and Entry Fees for Tourist Attractions on Visitor Satisfaction at the Lake Cibogas Hierarchy Tourist Attraction." *Scientific Journal of Management and Business* 3, no. 2 (2021):201-221.
[19] Endah D, Tuhpawana PS, Yosini D, Sri F, Lucyana T." Study of Ecotourism Potential in Supporting Regional Development in the Cikandung Sub Watershed and the Mount Tampomas Area, Sumedang Regency." *Integrated Agribusiness Journal* 11, no. 1(2018):18-20.
[20] Febriana, Rahmita P, and Suharsono. "The Impact of Npayung Rafting Tourism Object Development on Socio-Cultural and Economic Community." *Journal of Business Administration* 45, no. 1 (2017):179-187.
[21] Rashid. *Meaning of Government*. Mutiara Sumber Widya, 2000.
[22] Ramadhani D, Rahmawaty."Natural Ecotourism Development In The Krueng Geunie Lhok Keutapang Area, Pidie Regency." *Journal of Humanities and Social Studies* 6, no. 2 (2022):203-205.
[23] Chin . "The Impact of Accessibility Quality Accommodation Quality on Tourists' Satisfaction and Revisit Intention to Rural Tourism Destination in Sarawak The Moderating Role of Local Communities' Attitude . "*Journal of Global Business and Management Research*, 10 no. 2 (2018):115-127.
[24] Susilawati, Susilawati S, Fauzi, A, Kusmana, Cecep and Santoso, Nyoto ."Strategy and policy in the management of Sumatran Orangutan (Pongo abelii) conservation tourism on the Lawang Hill in the Langkat district of North Sumatra." *Journal of Natural Resources and Environmental Management* 10, no. 1 (2020): 1-11
[25] Pratiwi N." "SWOT Analysis to Increase Tourist Visits at the Goa Gajah Tourist Attraction, Bedulu Village, Blahbatu District, Gianyar Regency in 2017." *Undiksha Journal of Economic Education* 11, no.1 (2019): 95-101.
[26] Teshome E, Shita F, Abebe F." Current Community Based Ecotourism Practices In Menz Guassa Community Conservation Area." Ethiopian *Geojournal* 86, no. 5 (2021): 2135-2147.
[27] Hoiriyah, Syaiful B. "Implementation of the Ahp (Animal Hierarchy Process) Method in Determining Agro Tourism Places (Case Study in Pegantenan District, Pamekasan, Madura)." *Technokom* 2, no. 1 (2019):2621-8070