PAPER • OPEN ACCESS

The potential of the ecotourism area in *Lubuk Minturun*, Koto Tangah Subdistrict, Padang City

To cite this article: Anelia Siska et al 2019 IOP Conf. Ser.: Earth Environ. Sci. 314 012056

View the <u>article online</u> for updates and enhancements.



IOP ebooks™

Bringing you innovative digital publishing with leading voices to create your essential collection of books in STEM research.

Start exploring the collection - download the first chapter of every title for free.

doi:10.1088/1755-1315/314/1/012056

The potential of the ecotourism area in *Lubuk Minturun*, Koto Tangah Subdistrict, Padang City

Anelia Siska^{1,*}, Indang Dewata¹ and Alexander Syam²

¹ Environmental Science Study Program, Postgraduate Program, Universitas Negeri Padang, Prof. Dr. Hamka Street, Air Tawar Padang, West Sumatera, Indonesia 25132 ² High School Teacher Education (STKIP) Pesisir Selatan, Indonesia

Abstract. This study aimed to describe the data potential ecotourism area *Lubuk Minturun* Koto Tangah subdistrict of Padang include an analysis of potential attractiveness, accessibility and infrastructure of ecotourism. This research is a descriptive study with descriptive qualitative done at Village *Lubuk Minturun*. Source of the data required in this study are primary data and secondary data. The data collection technique is by observation, questionnaires, interviews and documentation. Data were analysed using scoring techniques. The results showed that: (1) The potential attractiveness of ecotourism *Lubuk Minturun* Koto Tangah subdistrict with high potential category wuth score 16,3. (2) The potential accessibility of ecotourism *Lubuk Minturun* Koto Tangah subdistrict with high potential for ecotourism infrastructure *Lubuk Minturun* Koto Tangah subdistrict with high potential category with score 14.6.

1. Introduction

Tourism is part of social, economic, psychological, geographic and cultural phenomena [1]. The social aspect of tourism is a basic human need for while the economic aspect is tourism can increase the income of the local community, local government, small traders [2].

Based on the psychological aspects of tourism, it becomes a means to restore one's moral health. While in terms of geography, tourism is a geographic phenomenon, meaning that special geographical appearance will be an attraction for tourists. The aspect of tourism culture attracts tourists so it is motivated and desires to see and get to know another nation's culture [3].

According to Law No. 10 of 2009 concerning tourism referred to as tourism is a variety of tourism activities supported by various facilities and services provided by the community, businessmen, government and regional government. Efforts to develop the world of Indonesian tourism are supported by Law No. 10 of 2009 concerning tourism which mentions the existence of tourist objects in an area will be very profitable, including increasing Regional Original Income (PAD), increasing people's living standards and expanding employment opportunities given the increasing number of unemployed people, increasing environmental love and preserving the culture local. Therefore the development and implementation of tourism must be pursued in a planned, gradual and sustainable manner after going through careful scrutiny. With the many natural beauty of Indonesia's tourism development, it can for tourists to enjoy the beauty of nature and culture to learn more about being sought for natural tourism and ecotourism [4].

Published under licence by IOP Publishing Ltd

^{*}siskaanelia7@gmail.com

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

doi:10.1088/1755-1315/314/1/012056

Ecotourism provides an important opportunity for various kinds of living things in it and local culture that develops in the region [5]. Ecotourism activities can increase the income of the surrounding community and for the cost of preserving the area that is used as an ecotourism area [6].

What is meant by tourism is various kinds of tourism activities which are supported by various facilities and services provided by the community, businessmen, government and local government [7].

Ecotourism provides an opportunity for tourists to enjoy the beauty of nature and culture to learn more about the importance of various kinds of living things in it and the local culture that develops in the region [8]. Ecotourism activities can increase the income of the surrounding community and for the cost of preserving the area made ecotourism [9].

Ecotourism potential is ecological, social and cultural potential [10]. This potential will be an attraction for ecotourism that supports environmental conservation and culture in the ecotourism area. The appeal of ecotourism can be in the form of natural attraction in the form of forests, rivers, lakes, beaches and increasing income and welfare of local communities [11]. Areas that have the potential to be used as ecotourism areas are in the city of Padang.

The city of Padang is one of the tourist visit cities in West Sumatra, especially the coastal areas. During this time both local and foreign tourists are only fixated on tourist areas in coastal areas, and forget many areas that are not beaches are also interesting to visit. Many areas that have the potential to become tourist areas are forgotten because tourists are too obsessed with the beaches of Padang City. City development began to be directed towards the east, both the central government, the center of community activities and settlements. Tourism orientation began to move, the non-coastal areas began to be glanced to be developed such as *Lubuk Minturum*.

Lubuk Minturun Village is located about 15 km from the center of Padang City with a distance of about 20 minutes by vehicle. In addition, there is also access to public transportation with the purpose of Lubuk Minturun. This area has interesting natural potential, as well as very natural forest conditions. In addition, there is also a Lubuk Minturun water stem which is a famous bathing place called Lori Bath, Lubuk Minturun is also known as a place to perform Hajj rituals for West Sumatra pilgrims who are located around the cool forest area. Recently found a bathing place called Ngungun Saok located in the hilly area of Lubuk Minturun, in Ngungun Saok there are cliffs and waterfalls that beautify its attraction.

The number of ecotourism objects in *Lubuk Minturun* Village has been preserved by the local community. With the object of ecotourism, it can prosper the community around the object of ecotourism. *Lubuk Minturun* has been designated as an Agrotourism Area by the City Government of Padang, because it is seen from its physical condition suitable for agriculture. In *Lubuk Minturun* there are many natural attractions that have the potential to be ecotourism areas. But *Lubuk Minturun* village has not been designated as ecotourism offering. Ecotourism activities based on environment and culture should be developed in this area, because ecotourism is a green industry that creates quality tourism that allows tourists in small groups to maintain the quality of natural objects and attractions in the form of forests, rivers, lakes, beaches and increase income and welfare of the local community.

Based on the background above, the importance of ecotourism activities in improving the economy of the community and the large potential of ecotourism possessed by this region. The purpose of this study was to determine the potential of the Ecotourism Area of *Lubuk Minturun*, Koto Tangah District, Padang City.

2. Research Method

The type of research used is qualitative with a score approach. this research is more directed at the study of a problem or situation as it is and reveals facts, although sometimes given an interpretation or analysis given [12]. The assessment of tourist attraction objects is carried out using the assessment criteria specified in the Guidelines for Tourism Attraction Assessment. The five main components that become assessments are attractiveness, accessibility, socio-economic environment conditions, accommodation and supporting infrastructure. Each component is described in specific criteria and

doi:10.1088/1755-1315/314/1/012056

given a score and weighted. After obtaining the total score, the classification interval is ranked and divided into three classifications namely high, medium and low. The source of information in this study is obtained from primary data and secondary data. Primary data is obtained from direct observation / field observations and interviews, while secondary data can be obtained from library materials, articles, journals, documentaries, company internal data and other supporting documents such as *Lubuk Minturum*.

3. Result

3.1. Description of Lori Ecotourism Object in Lubuk Minturun

Lori is the result of natural formation that flows from the stem of Kandis has been enjoyed since the Meneer era and none of the Netherlands. A cemented inscription from the age at the edge of the *Lubuk Minturun* bath is proof. The prasasti carries four lines of writing that show the inauguration of this bath. The first line is engraved "Verse 8-4-1883", "by" in the second line, "penghoeloe", and the fourth line "Achin". The hallmark of this bathing place is the splash of freshness that is served alongside the lorry, cable car transportation inherited from the Dutch. Therefore, the bath is called Lori Bathing.

Table 1. Potential Attraction of Lori Ecotourism Object

Indicator	Score	Criteria	Information
The uniqueness of	2	Medium	In the Lori area there is a waterfall with a height of
natural resources			about 10 meters, but the waterfall does not yet have a name and various kinds of flora.
Sensitivity of natural resources	2	Medium	Sensitivity of natural resources in the Lori region is historical value and knowledge.
Variety of activities	3	High	Variations in activities that can be done in the Lori region are enjoying natural beauty, fishing, swimming, camping and education / research.
Prominent natural resources	1	Low	A prominent natural resource is the waterfall.
Location cleanliness	2	Medium	The cleanliness of the Lori ecotourism area is not affected by industry, highways and pollution.
Comfort	3	High	Comfort of the ecotourism area Lori has no disturbing smell, no disturbing traffic, no noise and the air is cool.
Safety	3	High	Lori's ecotourism area has no illegal logging, no theft, no disturbing beliefs and no dangerous diseases.
Total	16	High	Regions that have very high attraction to tourism
		potential	objects based on set parameters.

Source: [10]

Table 2. Potential Infrastructure Facilities of Lori Ecotourism Object

Indicator	Score	Criteria	Information
Criteria for parking	3	High	a. places of worship such as mushalla and
spaces, places of worship			mosques are in good condition and complete
and toilets			facilities.
			b. spacious parking lots can accommodate in a capacity of> 100 vehicles.
			c. the toilet is in a clean and good condition.
Criteria for accommodation facilities	1	Low	No accommodation facilities available.
Restaurant criteria	3	High	There are restaurants close to tourist areas and

doi:10.1088/1755-1315/314/1/012056

Criteria for clean water	3	High	adequate services. The availability of clean water such as PDAM has been evenly obtained by the community around tourist sites.
Criteria for the availability of electricity	3	High	The availability of electricity is evenly obtained by the community around tourist sites.
Criteria for availability of health	3	High	There are health services and are easily accessible in the form of health centers, hospitals and others.
Total	16	High potential	Regions that have very high infrastructure conditions for tourism objects based on the
		potentiai	parameters set.

Source: [10]

Table 3. Potential Accessibility Facilities of Lori Ecotourism Object

Indicator	Score	Criteria	Information
Road criteria	2	Medium	Ecotourism areas are easily accessible with road conditions and the level of rough / permanent asphalt road hardness.
Transportation criteria	2	Medium	There are types of transportation such as ojek more than 5 or angkot more than 3 vehicles / hour.
Travel time from the city center	3	High	Travel time from the city center is around 15 minutes.
Total	7	Medium potential	Regions that have moderate accessibility to tourism objects based on the parameters set.

Source: [10]

3.2. Description of Ngungun Saok Ecotourism Object in Lubuk Minturun

Derived from the Minang language, Ngungun means mandanguang (buzzing) while Saok means closed. According to the story of local residents, the origin of this name originated from a rock that covered the flow of water, so there was a buzz. Then the place that has green water clarity is named Ngungun Saok.

Table 4. Potential Attraction of The Ngungun Saok Ecotourism Object

Indicator	Score	Criteria	Information
The uniqueness of natural	3	High	Natural resources found in the Ngungun Saok
resources			area are waterfalls, caves, flora and fauna.
Sensitivity of natural	1	Low	Sensitivity of natural resources in the Ngungun
resources			Saok area is the value of knowledge.
Variety of activities	3	High	Variations in activities that can be done at
			Ngungun Saok are enjoying natural beauty,
			swimming, fishing, tracking, camping, hiking
			and research / education.
Prominent natural	2	Medium	The most prominent types of natural resources in
resources			Ngungun Saok are waterfalls and natural
			phenomena.
Location cleanliness	3	High	Cleanliness of the area is not affected by
			industry, busy roads, residential areas and
			pollution.

doi:10.1088/1755-1315/314/1/012056

Comfort	3	High	Ngungun Saok is very comfortable because
			there is no disturbing odor, disturbing traffic,
			noise and the air is cool.
Safety	3	High	The security of the Ngungun Saok area has no
			illegal logging, there is no theft, disturbing
			beliefs and infectious diseases
Total	18	High	Regions that have very high attraction to tourism
		potential	objects based on set parameters.

Source: [10]

Table 5. Potential Infrastructure Facilities of Ngungun Saok Ecotourism Object

Indicator	Score	Criteria	Information
Criteria for parking	2	Medium	a. there is no place of worship but can stay in
spaces, places of worship			the parking lot cabin.
and toilets			b. the parking lot is quite coordinated
			c. available but in less clean conditions.
Criteria for	2	Medium	There are inns, guesthouses with adequate
accommodation facilities			services and facilities.
Restaurant criteria	2	Medium	Stalls are available but only in the form of a
			coffee shop. With inadequate service.
Criteria for clean water	1	Low	The availability of clean water has been evenly
			obtained by communities around the ecotourism
			area.
Criteria for the	3	High	There is no electricity available at tourist sites.
availability of electricity			
Criteria for availability of	2	Medium	Health services are available but are still
health			difficult to reach by the community and services
			are still unsatisfactory.
Total	12	Medium	Regions that have moderate infrastructure
			conditions for tourism objects based on set
			parameters.

Source: [10]

Table 6. Potential Accessibility Facilities of Ngungun Saok Ecotourism Object

Indicator	Score	Criteria	Information
Road criteria	1	Low	The ecotourism area can be reached but the road conditions are not good, there are still gravel roads and land.
Transportation criteria	1	Low	There are types of transportation to the ecotourism area, namely ojek with a frequency of <3 vehicles / hour.
Travel time from the city center	1	Low	Travel time from the village center or sub- district to the ecotourism area is> 40 minutes long
Total	3	Low	Regions that have low accessibility to tourism objects based on the parameters set.

Source: [10]

3.3. Description of Miniature Mecca Ecotourism Object in Lubuk Minturun

doi:10.1088/1755-1315/314/1/012056

Nur Zikrillah Mosque is a Mecca Miniature in Lubuk Minturun, the Construction of the Mecca Miniature began on December 13, 2000 and was completed on September 8, 2001. As the name implies, miniature Mecca is not as large and as large as the holy land of Mecca. giant Qur'an monuments like those in Mecca are only smaller in size. In front of the location there is an inscription that mentions the founder of this place. Entering the building turned to the left there is the Nurzikrillah Mosque with a miniature Ka'bah inside it. This mosque besides being used for worship is also used for Hajj rituals. The Nurzikrullah Mosque is opened only at prayer times.

Table 7. Potential Attraction of The Miniature Mecca Ecotourism Object

Indicator	Score	Criteria	Information
The uniqueness of natural	2	Medium	The resources contained in the Mecca Miniature are flora and fauna.
resources	2	M . 1	
Sensitivity of natural resources	2	Medium	Sensitivity to natural resources, namely the value of knowledge and beliefs / religious
resources			values.
Variety of activities	2	Medium	Variations in activities that can be done are
			enjoying beauty, camping and education /
			research.
Prominent natural	1	Low	A prominent type of natural resource is rock.
resources			
Location cleanliness	2	Medium	Cleanliness of Mecca Miniature is not affected
			by industry, waste and pollution.
Comfort	3	High	The Mecca Miniature area is comfortable
			because there is no annoying odor, noise free
			and the air is cool.
Safety	3	High	Mecca Miniature Zone Security has no
			dangerous currents, no illegal logging, no theft,
			no disturbing beliefs and no infectious /
			dangerous diseases.
Total	15	Medium	Regions that have very medium attraction to
			tourism objects based on set parameters.

Source: [10]

Table 8. Potential Infrastructure Facilities of Miniature Mecca Ecotourism Object

Indicator	Score	Criteria	Information
Criteria for parking	3	High	a. places of worship such as mushalla and
spaces, places of worship and toilets			mosques are in good condition and complete facilities.
			b. spacious parking lots can accommodate in a capacity of > 100 vehicles.
			c. the toilet is in a clean and good condition.
Criteria for accommodation facilities	2	Medium	Available lodging, guesthouse with adequate services and facilities.
Restaurant criteria	3	High	There are restaurants close to the ecotourism area and adequate services.
Criteria for clean water	3	High	The availability of clean water such as PDAM has been evenly obtained by the community around tourist sites.
Criteria for the	3	High	The availability of electricity is evenly obtained
availability of electricity			by the community around tourist sites.
Criteria for availability of	3	High	There are health services and are easily

doi:10.1088/1755-1315/314/1/012056

health			accessible in the form of health centers, hospitals and others.
Total	17	High	Regions that have high infrastructure conditions for tourism objects based on set parameters.

Source: [10]

Table 9. Potential Accessibility Facilities of Miniature Mecca Ecotourism Object

Indicator	Score	Criteria	Information
Road criteria	3	High	Ecotourism is easy to reach, road conditions with hardness and good quality like hotmix asphalt.
Transportation criteria	3	High	Transportation for tourism transportation has been done like pedicab, motorcycle taxi and public transportation with a frequency of more than 10 vehicles / hour.
Travel time from the city center	3	High	Travel time from the city center is around 15 minutes.
Total	9	High	Regions that have High accessibility to tourism objects based on the parameters set.

Source: [10]

4. Discussion

To see the level of tourism potential regarding attractiveness, accessibility, and infrastructure facilities in the Lubuk Minturun Ecotourism Area in Koto Tangah Subdistrict, the overall value is classified based on the ideal score category, which is 3.01 to 4.00 high classification, 2.01 to 4, 00 medium classification and 0.001 up to 2.00 including low classification.

4.1. Potential attraction of the Lubuk Minturun ecotourism area in Koto Tangah District, Padang City Based on several areas in Lubuk Minturun Village, the results are: On Ecotourism Lori attraction including high classification because there are many variations of activities that can be done, besides that there is a waterfall that can add to the beauty of Lori Baths. The waterfall has a height of about 10 meters, but the Lori waterfall does not have a name, so visitors are not too familiar with the existence of the waterfall. The total score of the Lori ecotourism object is 16, Ngungun Saok is classified as high because there are two waterfall waterfalls which first have a height of about 140 meters and the second waterfall is not too high but has 3 levels. Besides the waterfall, which is the hallmark of Ngungun Saok, namely Batu Tasapik. The total score of Ngungun Saok Tourism Objects is 18, Miniature Mecca attractiveness with a moderate classification because of the lack of prominent natural resources. The total score of Mecca Miniature Ecotourism Objects is 15, so that the average score produced by the three regions spread in Lubuk Minturun village with a score of 49 to determine the results of the attractiveness level of the ecotourism area in Lubuk Minturun Subdistrict.

$$\frac{49}{3} = 16.3$$

That the value of 16.3 is classified as medium potential.

4.2. Infrastructure Facilities for the Ecotourism Area in Lubuk Minturun, Koto Tangah District, Padang City

Based on a number of zones in Lubuk Minturun Subdistrict the results are: On Ecotourism Objects Lori infrastructure includes high with a score of 16, Ngungun Saok prasaranan facilities with a moderate value with a total score of 11, Miniature Mecca with high high infrastructure facilities with a total score of 17, recording the average score produced by the three regions spread in Lubuk Minturun

doi:10.1088/1755-1315/314/1/012056

Village with a total score of 44 to determine the results of the accessibility conditions of the Ecotourism Area in Lubuk Minturun Village then the costs for the facilities in this study were determined 3.

$$\frac{44}{3} = 14,6$$

That the value of 14.6 is classified / categorized as medium potential.

4.3. Accessibility of the Ecotourism Area in Lubuk Minturun, Koto Tangah District, Padang City
Based on some of the areas in Lubuk Minturun Village, the results are: On Ecotourism Objects
Accessibility lori includes a moderate classification with a score of 7, Ngungun Saok accessibility
with a low classification with a score of 3, Miniature Mecca accessibility with a high classification
with a score of 9, so the average score produced by the three regions spread in Lubuk Minturun
Village with a score of 19 to determine the results of the accessibility conditions of the Ecotourism
Area in Lubuk Minturun Subdistrict, therefore the weight for accessibility in this study was
determined 3.

$$\frac{19}{3} = 6.3$$

That value 6.3 is classified / categorized as medium potential.

5. Conclusion

Based on the results of the research and discussion of the results of the analysis, it can be concluded as follows:

- 1. The attractiveness of the object of *Lubuk Minturun* ecotourism in Koto Tangah Subdistrict on object 1, namely Lori Bathing is classified as a high classification. For object 2, *Ngungun Saok* is classified as high. And for object 3, namely the Mecca Miniature is classified as a medium classification. So, the potential appeal of the *Lubuk Minturun* ecotourism area is potentially medium with an average score of 16.3.
- 2. Accessibility towards the object of *Lubuk Minturun* ecotourism in Koto Tangah Subdistrict on object 1, namely Lori Bathing is classified as a moderate classification. For object 2, *Ngungun Saok* is classified as a low classification. And for object 3, the Mecca Miniature is classified as a high classification. So, the potential for accessibility of the *Lubuk Minturun* ecotourism area is potentially medium with an average score of 6.3.
- 3. Infrastructure facilities in the object of *Lubuk Minturun* ecotourism in Koto Tangah Subdistrict on object 1, namely Lori Baths are classified as high. For object 2, *Ngungun Saok* is classified as medium coding. And for object 3, that is, the Mecca Miniature belongs to the high category. So, the potential of the *Lubuk Minturun* ecotourism infrastructure facilities is high with an average score of 14.6.

References

- [1] Bakarudin 2008 Perkembangan dan Permasalahan Kepariwisataan (Padang: UNP Press)
- [2] Syam A 2017 Strategi pengembangan objek wisata Pantai Sumedang di Kecamatan Ranah Pesisir Kabupaten Pesisir Selatan *Jurnal Kepemimpinan dan Kepengurusan Sekolah* **2**(2) 191-200
- [3] Oka A Yoeti 1996 Pengantar Ilmu Pariwisata (Bandung: Angkasa)
- [4] Undang-Undang Republik Indonesia Nomor 10 Tahun 1990 tentang Kepariwisataan (Law of the Republic of Indonesia Number 10 of 1990 concerning Tourism)
- [5] The International Ecotourism Society 2015 Jurnal www.world-ttourism.org.omt/ecotorism 2015.hmtl. accesed on Februari 2016.
- [6] Hanif Larantika 2012 Strategi Pengembangan Ekowisata di Jalur Tracking Negeri Suah Hingga Tongkoh Propinsi Sumatera Utara *Tesis* (Bogor: Institut Pertanian Bogor)

doi:10.1088/1755-1315/314/1/012056

- [7] Wisantisari Purwani 2005 Penyajian Informasi Pariwisata di Kabupaten Tegal Berbasis SIG Skripsi (Semarang: Universitas Negeri Semarang)
- [8] Damanik, Janianton and Hemlut F Weber 2006 *Perencanaan Ekowisata dari Teori ke Aplikasi* (Yogyakarta: Penerbit Andi)
- [9] Kasuardi, Soekmadi R and Kartodihardjo H 2010 Strategi pengembangan ekowisata di Kabupaten Kepulauan Yapen Provinsi Papua *JMHT* **XVI**(3) 148-154
- [10] Romani Siam 2006 Penilaian potensi obyek dan daya tarik wisata alam serta alternatif perencanaannya di Taman Nasional Bukit Dua Belas Provinsi Jambi *Skripsi* (Bogor: Institut Pertanian Bogor)
- [11] Latupapua Yosevita 2000 Studi potensi kawasan dan pengembangan ekowisata di Tual Kabupaten Maluku Tenggara *Jurnal Agroforestri* II(1) 65-71
- [12] Syam A 2016 Kelayakan jalur evakuasi tsunami di Kecamatan Padang Utara Kota Padang Jurnal Kepemimpinan dan Pengurusan Sekolah 1(1) 11-22