



Evaluation of Natural Tourism Objects Potential in Nature Tourism Resort Kuningan National Park Management Section I Gunung Ciremai National Park

Taufik Syamsudin^{a*}, Nandi Kosmaryandi^b, Fifin Nopiansyah^c

^a*Natural Resources and Environmental Management Study Program, Graduate School, Bogor Agricultural University, Kampus IPB Darmaga, Bogor 16680, Indonesia*

^b*Department of Forest Resources Conservation and Ecotourism, Faculty of Forestry, Bogor Agricultural University, Kampus IPB Darmaga, Bogor 16680, Indonesia*

^c*Directorate of Biodiversity Conservation, Directorate General of Natural Resources Conservation and Ecosystems, Ministry of Environment and Forestry Indonesia*

^a*Email: taufikhut@gmail.com*

^b*Email: nandi_mkk@hotmail.com*

^c*Email: opinsyah@gmail.com*

Abstract

Gunung Ciremai National Park (TNGC) is one of the nature conservation areas located in the two administrative regions of Kuningan and Majalengka Regency. TNGC has resources that provide as a tourist attraction, especially the Nature Tourism Resort area in Kaduela Village and Padabeunghar Village, Kuningan National Park Management Section I (SPTN) such as waterfalls, hot springs, ponds and community culture as well as flora and fauna diversity. This study originate from the potential existence and the absence of natural tourism development planning in TNGC that established in 2004, and in addition the purpose is to make its development plans. As the location, The study was conducted in 4 natural tourism locations, Kaduela Village and Padabeunghar Village, and SPTN I Kuningan (Telagaremis, Batu Luhur, Seribu Bintang Hill and Tespong Lake). The time of data collection is during October-December 2019 using the modified criteria assessment of the natural tourist attraction operating area (ADO-ODTWA) Director General of the PHKA 2003.

* Corresponding author.

The results of the evaluation recapitulation are expected to be considered in developing existing natural tourism development programs. Based on the results of the evaluation recapitulation of natural attractions, the values have a range between 1515 to 1705. the value is comprised in evaluation classification and the tourism object in the bad category (1515-1578) is Tespong Lake. The tourism object has the potential to be developed, but it is not the main priority of the development of a tourist attraction main operating area at 4 tourist sites in the Natural Tourism Resort of SPTN I Kuningan. Whereas the tourism objects that are categorized as good (1643-1705) are Lake Remis, Batu Luhur and Bukit Seribu Bintang. The tourism object has the potential to be further developed in natural tourism and is a top priority in the development of tourist attraction main operating areas.

Keywords: Evaluation; Natural Tourism; TNGC.

1. Introduction

Gunung Ciremai forest area was designated as a National Park based on the Decree of the Minister of Forestry Number SK.424 / Menhut-II / 2004 on 19 October 2004 that focused on the change of protected forest area function in the Gunung Ciremai forest group covering $\pm 15,500$ (Fifteen Thousand Five Hundred) hectares then determined based on the Decree of the Minister of Forestry Number SK.3684 / Menhut-VII / KUH / 2014 on May 8, 2014 covering an area of 14,841.30 (Fourteen Thousand Eight Hundred Forty One and Thirty Percentions) hectares in Kuningan and Majalengka Regency, West Java Province [1]. One of the reason why Gunung Ciremai become the national park is the function as water catchmen area that supports one city and four surrounding districts which is Cirebon, Indramayu, Majalengka, and Kuningan (CIAYUMAJAKUNING), both for the households needs, agricultures, and companies. Another consideration is the high biodiversity potential in flora and fauna and some of the West Java endemic protected animals, and endangered species based on IUCN, which are leopard, Java Eagle, and Surili. Beside, Gunung Ciremai Area has a tourism potential and supported research for science development and people's economy.

One of the dilemma in the conservation area management including national parks is related to the illegal activities of people in the national park area with the reason to meet their daily needs which can be a source of threats and disturbances. Likewise, that happened in Gunung Ciremai National Park with various threats and interruptions that occur periodically such as: (1) illegal logging and wood theft; (2) land encroachment and claims; (3) illegal buildings in the encroached area; (4) fire.

Contradicting from various pressures around the Gunung Ciremai National Park area and natural potentials that have not been maximally developed, the sustainable development of the region through the concept of nature tourism activities is one alternative to minimize the occurrence of regional degradation in the future. Forest areas that can function as environment-based tourism areas are nature conservation areas (National Parks, Grand Forest Parks, Nature Tourism Parks), Nature reserve areas (Wildlife Reserves) and protected forests through limited nature tourism activities, and production forests that function as Wana Tourism.

Conservation areas, both natural conservation areas and nature reserves or protected forest areas, are attractive destinations to eco-tourists, because of the flora and fauna diversity, beautiful natural phenomena, cultural and

historical objects and unique local community life. The Author in [2], The whole tourist attraction object is a resource that has high economic value as well as educational facilities and environmental preservation.

TNGC is administratively divided into two districts, Majalengka Regency and Kuningan Regency. Whereas the management of national parks in each district's administrative area is managed by the National Park Management Section (SPTN) which consists of Nature Tourism Resorts, Biodiversity Resorts and Protection Resorts institutionally. The natural tourism potential in the TNGC region especially in the Kuningan regency administration under the management of the Natural Tourism Resort of SPTN I Kuningan has its own well managed attractions such as waterfalls, hot springs, ponds, community culture and forests as well as flora and fauna diversity. The development of tourism in this region can be a solution that benefit local people in managing tourism while maintaining national parks. According to [3], by recognizing the rights and interests of local communities as natural stakeholders, a sense of community responsibility will emerge and bring out the synergy between environmental sustainability and local community welfare.

The natural tourism in TNGC needs to be developed based on the variety of tourist attractions and should be well planned so that it benefits the community, both in terms of economic, social and cultural. Good planning is based on the suitability and appropriateness of potential tourist objects and attractions, so it is necessary to do study on " Evaluation of Natural Tourism Objects Potential in Nature Tourism Resort Kuningan National Park Management Section I Gunung Ciremai National Park".

2. Materials and Methods

2.1. Location

This study were conducted in October-December 2019 in 4 tourist sites of the TNGC SPTN I Kuningan Tourism Nature Resort located in Kaduela Village and Padabeunghar Village, Pasawahan District. These tourism objects are Remis Lake, Batu Luhur, Tespong Lake and Seribu Bintang Hill (BSB).

2.2. Research Tools

The equipment used in this study comprised in stationery, digital cameras for documenting the activities, modified guidelines for the analysis of the area of operation of objects and natural tourism attractions (ADO-ODTWA) of the Director General of the PHKA 2003 [4], interview guides and questionnaires.

2.3. Data Collection

This study used a descriptive exploratory method with an addition of literature study, field observations, structured interviews and in-depth interviews. The collection data for interview (structure and in-depth) is using the interview guide.

2.3.1. Visitor data

The collection of visitor data and information is estimated by examining a total sample using the Slovin formula

and considering the level of accuracy and the number of tourist populations in a certain time with the accuracy limit used for large population is 0.1 (10%) and small population is 0.2 (20%) [5].

Slovin Formula;

$$n = \frac{N}{1+N_e^2}$$

Annotation : n = total sample size or number of respondents

N = population size or number of tourists in a given time

e = critical value (accuracy limit), 0.15 for the study

The Sampling for visitors is based on dividing the age, which is children (7-12 years old), adolescents (13-21 years old), adults (22-40 years old) and old (middle adults) (41-65 years old) [6]. The proportion of sampling in each age.

$$\text{Sample}_x = \frac{\text{Population}_x}{\text{Total population}} \times \text{Total sample}$$

Annotation :

Sample_x = sample size for x age class

Population_x = population size for x age class

Total population = population size or number of tourists in a given time

Total sample = the overall size of the sample obtained from the Slovin Formula

2.3.2. Management data

The management data collection comprised in the applicable management policy, management system, cooperative relations with external parties and tourism development plans which are collected through guided interviews.

2.3.3. Local community data

The Interview to the community around the location of attractions are carried out with direct interviews guided including information on the level of knowledge, understanding and support regarding the development of attractions, as well as the impact arising from the existence of tourism activities. The sampling technique for the

locals is using a purposive sampling technique with the number of samples based on the data and information needed. The sampling was carried out at each tourist attraction location including both the locals who played an active role or not.

2.3.4. Observation

The purpose of field observation method is to collect data by direct observation at the location of natural attractions. The field observation aim to explore the resources potential that allow it to be developed as a tourist attraction and find out the attractiveness of existing and developed objects, as well as verification of data obtained based on the study of literature with field conditions.

2.4. Data analysis

2.4.1. Analysis of tourism potential

Tourism potential is related to natural resources in the TNGC area. Data analysis was performed by scoring the result of criteria assesment, then described in a descriptive study so that it becomes a natural tourism potential data that can be developed as a tourist attraction. The assessment is based on an assessment table that is adjusted to the each location potential and condition. Criteria assessment in the form of tourist attraction, accessibility and socio-economic community around the tourist attraction.

The highest weighted value is given to the attractiveness criteria of 6, this is because attractiveness is the main reason why tourists come to visit. While the weight for the criteria assessment in terms of accessibility and socio-economic community are given a number 5 because both of these criteria can affect the potential for the development of these attractions. The calculation of tourism potential assessment data is calculated using formula [7] :

$$\mathbf{S} = \mathbf{N} \times \mathbf{B}$$

Annotation: S = Score B = weighted value

N = The sum of the elements in the criteria

Based on the results of the scoring then each criterion value of each tourism object is calculated to see the weight of the final value. The results of the assessment will be included in the classification assessment. The interval value is obtained from the results of the classification assessment using the formula:

$$\text{Interval} = \frac{S_{\max} - S_{\min}}{\text{Number of classification ratings}}$$

Annotation = S max : the maximum value of the results of the evaluation criteria

S min : the minimum value of the results of the evaluation criteria

The results of the assessment classification are then described by the physical, biological, social and cultural potential for each object, both those that have been developed as tourist attractions and those that have not yet been developed is considered in the plan for developing natural tourism in the TNGC SPTN I Natural Tourism Resort.

2.4.2. Visitor analysis

Data and information obtained from the questionnaire are presented in the form of tables and graphs that will illustrate the relationship the answers for the questions in the questionnaire. Based on these data then described in several categories, such as the characteristics of visitors, visitor objectives, visitor ratings and visitor expectations of objects.

2.4.3. Management analysis

Management data analysis is done descriptively which contain the efforts of development plans and existing forms of management, so as to provide an overview of the cooperation and obstacles that exist in the natural tourism development.

3. Result and Discussion

3.1. Identification of Potential and Tourism Activity

TNGC is a national park with the highest mountain in West Java. TNGC also has natural tourism objects that have the potential to develop. The existence of these attractions gives interest to local governments, local communities and the private sector to participate in the management of attractions in TNGC.

Table 1: Natural tourism objects in the Natural Tourism Resort SPTN I Kuningan Desa Kaduela dan Desa Padabeunghar.

No	Tourism Object	Tourism Object Location	Management
1	Batu Luhur	Padabeunghar Village, Pasawahan District	Kompepar
2	Seribu Bintang Hill	Padabeunghar Village, Pasawahan District	Kompepar
3	Remis Lake	Kaduela Village, Pasawahan District	PDAU Kuningan
4	Tespong Lake	Padabeunghar Village Pasawahan District	Kompepar

3.2. Object Evaluation and Natural Tourism Attractiveness

3.2.1. The Attractiveness

Based on the evaluation results of the four tourist sites located in the values range of 690-810, it indicates that all four tourist sites have different potential attractions. The highest value of the evaluation of attractiveness is Seribu Bintang Hill with a value of 810, this value points out that this tourism object has the advantage of evaluating elements more than other tourist locations as presented in Table 2.

Table 2: ODTWA evaluation results in Kaduela Village and Padabeunghar Village Nature Tourism Resort SPTN I Kuningan.

No.	Evaluation Element	1	2	3	4
1.	The uniqueness of natural resources	15	15	15	15
2.	The number of prominent natural resources	15	20	15	20
3.	The potential natural tourism activities	25	15	15	20
4.	Location cleanliness	25	25	25	30
5.	Area safety	25	25	25	20
6.	Convenience	25	25	20	30
Value (the total x weight (6))		780	750	690	810

Annotation :

- 1 *Remis Lake*
- 2 *Batu Luhur*
- 3 *Tespong Lake*
- 4 *Seribu Bintang Hill*

3.2.2. Accessibility

The Ease of tourist attraction accessibility can be analyzed by the road conditions, distance and travel time, as well as the existence of transportation to the location. Evaluation of accessibility criteria used three evaluation elements, the road conditions, time and distance from the city center. The weight of evaluating this criteria is five, this is because ease of accessibility is one of the factors that deliver visitors to travel in tourist site.

Based on Table 3 the evaluation results of the criteria for natural attractions accessibility have a value of 350-400 in the classification evaluation interval and classified as the good category that is accessibility to locations. The highest evaluation value is 400 on Remis Lake and Batu Luhur, this indicate that the ease of accessibility to this location is the highest compared to other tourist attractions. This is affected by the close distance to the city center and the access to the tourist attraction location is located close to the main road.

Table 3: The evaluation result of accessibility criteria towards tourist attractions in the Natural Tourism Resort of SPTN I Kuningan .

No.	Natural Object	TourismRoad Condition	Evaluation Element		Value (The Total x weight (5))
			Travel time to city center	Distance to city center	
1.	Remis Lake	30	30	20	400
2.	Batu Luhur	30	30	20	400
3.	Tespong Lake	20	30	20	350
4.	Seribu Bintang Hill	20	30	20	350

3.2.3. Locals Socio-Economical Condition

The evaluation elements used for this criteria are the level of unemployment, the livelihood of the population, the level of education and the general response regarding the development of natural attractions in their area. The different elements of the evaluation give different interaction intensity on each of the existing tourism objects, which the value is in accordance with the social, economic and cultural conditions of the people. For example the high level of unemployment of the local community causes greater interaction between attractions and visitors. The large unemployment rate is considered to have a good impact on tourism development plans, as there will be more workers involved directly in managing tourism objects, so the greater the support for the development of tourism activities in their respective areas.

Tabel 4: The evaluation result of the local community socio-economic conditions around natural attractions in the Natural Tourism Resort I SPTN Kuningan.

No.	Evaluation Element	1	2	3	4
1.	The Level of Unemployment	25	25	25	25
2.	The Livelihood of the population	20	20	20	20
3.	The Level of Education	30	30	30	30
4.	The general response of Tourism Attraction	30	30	20	30
Value (The total x weight (5))		525	525	475	525

Annotation :

- 1 Remis Lake
- 2 Batu Luhur
- 3 Tespong Lake
- 4 Seribu Bintang Hill

3.3. Evaluation Recapitulation

The evaluation of tourist objects and attractions is to determine the natural tourism potential objects for tourism development priority in SPTN I Kuningan Natural Tourism Resort. The evaluation recapitulation result are expected to be a consideration in developing existing natural tourism development programs. Based on the evaluation recapitulation result, the natural attractions in Table 5 has a range of values between 1515 to 1705. The Tespong Lake values in Table 4 for classification evaluation included in the bad category (1515-1578).

The tourism object has the potential to be developed, but it is not the main priority of the development of a tourist attraction which is operating in 4 tourist sites at the Kuningan SPTN I Nature Tourism Resort. Whereas the tourism objects that are categorized as good (1643-1705) are Remis Lake, Batu Luhur and Seribu Bintang Hill. The tourism object has the potential to be further developed in natural tourism and is a top priority in the development of tourist attraction operating areas.

Table 5: The evaluation recapitulation of objects and tourist attractions in the TNGC region of SPTN I Kuningan

No.	Natural Tourism Object	Attractiveness	Evaluation Criteria			Total
			Accessibility	Local Socio-Economical Condition	Community	
1.	Remis Lake	780	400	525		1705
2.	Batu Luhur	750	400	525		1675
3.	Tespong Lake	690	350	475		1515
4.	Seribu Bintang Hill	810	350	525		1685

Based on Table 5 each tourism attraction location has advantages of each criteria. Seribu Bintang Hill has an advantage in attractiveness (810). Remis Lake and Batu Luhur is excellent at these high tourist attractions accessibility (400), which is located close to the main road access to the city of Kuningan Regency. Therefore, every tourism object development plan in the Natural Tourism Resort of SPTN I Kuningan has a different development focus on each tourist location.

3.3.1. Infrastructure

The availability of the facilities and infrastructure at the location of the tourist attraction can provide convenience to visitors. The condition still requires arrangement and improvement in quality and quantity. The facilities and infrastructure that are available at tourist sites are prayer rooms, toilets, shelters, trash bins, parking lots and stalls. In general, facilities and infrastructure that are expected to be available based on questionnaires around the location of attractions are information centers, interpretation boards, lodging, souvenir shops, canteen and facilities and infrastructure maintenance.

3.3.2. Visitors Characteristic

Visitors are the regulars of natural tourism activities. Therefore, the characteristics of visitors need to be known in case to determine the direction of the development of a tourist attraction both the form and type of activities, to match the character of visitors. The visitor characteristic data are presented in Table 6 which consists of sex, age, education level, occupation level, income level and visitor origin.

Table 6: Visitors Characteristics at the Natural Tourism Resort SPTN I Kuningan

No.	Visitors Composition	Total (individual)				Total percentage (%)
		1	2	3	4	
Gender						
1.	Male	27	22	12	25	63,70
2.	Female	13	16	7	13	36,30
Age Structure						
1.	Children (<12 years)	2	21	-	5	20,74
2.	Adolescent (13-21 years)	20	10	15	15	44,45
3.	Adult (22-40 years)	16	3	3	15	27,40
4.	Elderly (>41 years)	2	4	1	3	7,41
Education Level						
1.	SD	2	21	-	5	20,74
2.	SLTP	11	5	-	7	17,04
3.	SLTA	20	10	19	13	45,92
4.	Higher Education	7	2	-	13	16,30
Job						
1.	Student	13	14	10	14	37,78
2.	Civil servant	3	6	-	4	9,63
3.	Employee	7	7	-	15	21,48
4.	Entrepreneur	-	2	-	-	1,48
5.	Others	17	9	9	5	29,63
Income Level						
1.	< 700.000	13	14	10	14	37,78
2.	700.000 – 1.400.000	-	-	-	-	-
3.	1.400.000 – 2.100.000	7	9	6	4	19,25
4.	>2.100.000	20	15	3	20	42,97
Visitors Origin						
1.	Kuningan	10	11	19	7	34,81
2.	Outside the area	30	27	-	31	65,19

Based on the data from the questionnaire (Table 6) it can be shown, visitors who travel at the Nature Tourism Resort of Kaduella Village and Padabeunghar Village SPTN I Kuningan are quite diverse. Based on gender, Most visitors are male (63.7%), on age classes were adolescent (44.45%) and adults (27.40%). Most of the income level is less than Rp. 700,000 (37.78%) because most of them are still students. The highest level of education is SLTA (45.92%) and higher education (16.30%). Tourist attraction at SPTN I Kuningan Nature Tourism Resort that come from Kuningan is 34.81% and from outside 665.19% which is dominated by visitors from Cirebon, Majalengka and Indramayu. But there are also those who come from Bandung, Jakarta, Sumedang and Central Java areas.

4. Conclusion

Gunung Ciremai National Park, especially in the Kaduela and Padabeunghar Villages, the Natural Tourism Resort of SPTN I Kuningan, has the potential to be developed. Tourism objects in the area are: Remis Lake, Batu Luhur, Seribu Bintang Hill and Tespong Lake. Based on the results of the overall assessment, the total value of potential natural tourist attraction objects in Telagaremis, Batu Luhur and Bukit Seribu are classified as good. This condition indicates that the tourism object has the potential to be developed as a tourist destination priority. Visitors who come to tourist sites in Kaduela Village and Padabeunghar Village Resort Nature Tourism SPTN I Kuningan are dominated by visitors who come from outside the area, the most age level consist of adolescent and adults. The attraction of tourism objects in Kaduela Village and Padabeunghar Village lies in the beauty of the unique natural panorama at each object location. While the management of tourism objects including the local government through regionally-owned enterprises and the community through Kompepar. Visitors who come to tourist sites in Kaduela Village and Padabeunghar Village Resort Nature Tourism SPTN I Kuningan are dominated by visitors who come from outside the area, the most age level consist of adolescent and adults. The attraction of tourism objects in Kaduela Village and Padabeunghar Village lies in the beauty of the unique natural panorama at each object location. While the management of tourism objects including the local government through regionally-owned enterprises and the community through Kompepar.

References

- [1] BTNGC. Rencana Pengelolaan Jangka Menengah Taman Nasional Gunung Ciremai Tahun 2010-2014. Kuningan: Balai Taman Nasional Gunung Ciremai, 2009, pp. 1-57.
- [2] Flamin, Asnaryati. "Potensi Ekowisata dan Strategi Pengembangan TAHURA Nipa-Nipa, Kota Kendari, Kota Kendari Sulawesi Tenggara". *Jurnal Penelitian Kehutanan*, vol. 2, pp. 154-168. Jun. 2013.
- [3] Y. Ginting, A.H. Dharmawan, S. Sekartjajarini. "Interaksi komunitas lokal di Taman Nasional Gunung Leuser". *Jurnal Transdisiplin Sosiologi, Komunikasi dan Ekologi Manusia*, vol 4(1), pp. 39-58.
- [4] PHKA. Pedoman Analisis Daerah Operasi Obyek dan Daya Tarik Wisata Alam. Bogor: Direktorat Wisata Alam dan Pemanfaatan Jasa Lingkungan, 2003, pp. 1-46.
- [5] B. Prasetyo, L.M. Jannah. *Metode Penelitian Kuantitatif : teori dan aplikasi*. Jakarta: PT Raja Grafindo Persada, 2005, pp. 1-172.
- [6] A. Dariyo. *Psikologi Perkembangan*. Bandung: PT Refika Aditama, 2007, pp. 1-85.
- [7] S. Romani. "Evaluasi Potensi Obyek dan Daya Tarik Wisata Alam Serta Alternatif Perencanaannya di Taman Nasional Bukit Duabelas Provinsi Jambi". Skripsi, Institut Pertanian Bogor, Bogor, 2006.