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**ANALYSIS OF THE POTENTIAL AND SUITABILITY TOURISM AREAS AS A  
DIRECTION FOR TOURISM DEVELOPMENT  
IN WANA WISATA CURUG CIPENDOK  
BANYUMAS REGENCY 2018**

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***Abstract and Keyword***

The research was aimed (1) to know tourism potential in Wana Wisata Curug Cipendok, (2) to know carrying capacity of the protection function in Wana Wisata Curug Cipendok, (3) to know the suitability of tourism areas in Wana Wisata Curug Cipendok, (4) to find out the direction of tourism development in Wana Wisata Curug Cipendok Banyumas Regency 2018.

This research is a qualitative descriptive study with a field survey method. There are two types of population in this study, namely (1) the respondent population consisting stakeholder, traders, innkeepers and visitors and (2) population of the tourism area, namely Wana Wisata Curug Cipendok. While the research samples also contained two types, namely (1) sample of respondents and (2) sample of suitability of tourism area. Two sampling techniques that used are : (1) purposive sampling aims for stakeholders, traders, and innkeepers and (2) accidental sampling for tourist visitors. The data collection technique using observation, interviews and document analysis.

The results of this study were (1) Potential in Wana Wisata Curug Cipendok is an enough potential classification (2) Results of carrying capacity of the protection function is in good condition. (3) Results suitability in the area of the waterfall is 67% in class S2 (quite suitable), the results of suitability in the park area amounted to 82.49% in class S1 (highly suitable), and the results of suitability in the area of the lake is at 80% in class S1 (highly suitable). (4) For the direction of development of Wana Wisata Curug Cipendok is to look at weaknesses that become an obstacle and optimize the strength of the research results.

***Keywords: tourism, potential, regional suitability***

**A. INTRODUCTION**

Based on the Banyumas Regency Spatial Plan for 2011-2031 there are six areas of Object and Tourism Attractions (ODTW) in Banyumas Regency. Of the six development areas of Object and Tourism Attractions (ODTW) there are various kinds of potential and tourist attractions that are diverse, but

researchers will only examine one tourist attraction, namely Wana Wisata Cruug Cipendok or better known as Cipendok Waterfall. Cipendok waterfall is located in the Object and Tourist Attraction (ODTW) II Area and at the same time serves as the basis for developing tourism products in the Object and Tourism Attractions (ODTW) II.

Location research selected because Wana Wisata Curug Cipendok is a tour but included in a limited production forest so that the existence of the land must be protected and must be in accordance with the suitability of tourism and environmental carrying capacity for protection functions, so that tourism development does not damage or pollute the environment. In addition, Wana Wisata Curug Cipendok has tourism potential that is quite attractive to tourists, but tourism development is not done well because many facilities have been damaged but not repaired or refurbished.

Wana Wisata is a protected forest area which is included in the working area of Perum Perhutani (PT Perhutani: 2001) in Christiani (2012: 1). Wana Wisata Curug Cipendok is a tourism resort managed by Perum Perhutani Kesatuan Pemangkuan Hutan (KPH) East Banyumas and Banyumas Regency Government (Pemkab) Banyumas together with the Lembaga Masyarakat Desa Hutan Cipendokmas (LMDH). Wana Wisata Curug Cipendok has high natural tourism potential with its main attraction is a waterfall. The waterfall

is in the middle of a protected forest area that functions as a limited production forest, so that the area has diverse potential in terms of natural, flora and fauna views. The objects have high potential in limited production forests certainly need a good development by taking into account the sustainability of ecological functions.

To develop tourism activities in addition to seeing tourism potential is also carried out based on the aspects of conformity and carrying capacity of existing resources. Tourism development looks at supporting factors and tourist inhibiting factors based on analysis of potential, suitability of tourist areas and carrying capacity of natural resources to avoid environmental damage. Especially in Wana Wisata Curug Cipendok which basically falls into a protected forest area whose function is as a limited production forest whose natural authenticity is still maintained to avoid environmental damage.

Wana Wisata Curug Cipendok has three regions that have different attractions. The first area is Cipendok Waterfall which is the main tourist attraction, the second tourist area is

the Tourism Park Area, and the last area is the Telaga Pucung Area. By conducting an evaluation of the suitability of tourist areas in Cipendok Curug Wana Wisata, we can find out how the suitability of tourist areas in the area and if there is a problem there are improvements that need to be made to management, because the evaluation function of this tour is to assess the suitability of tourist areas for a particular land use and give planners various comparisons that best suit the characteristics and quality of the land. Appropriate land use can reduce and even prevent negative impacts on the physical and social environment.

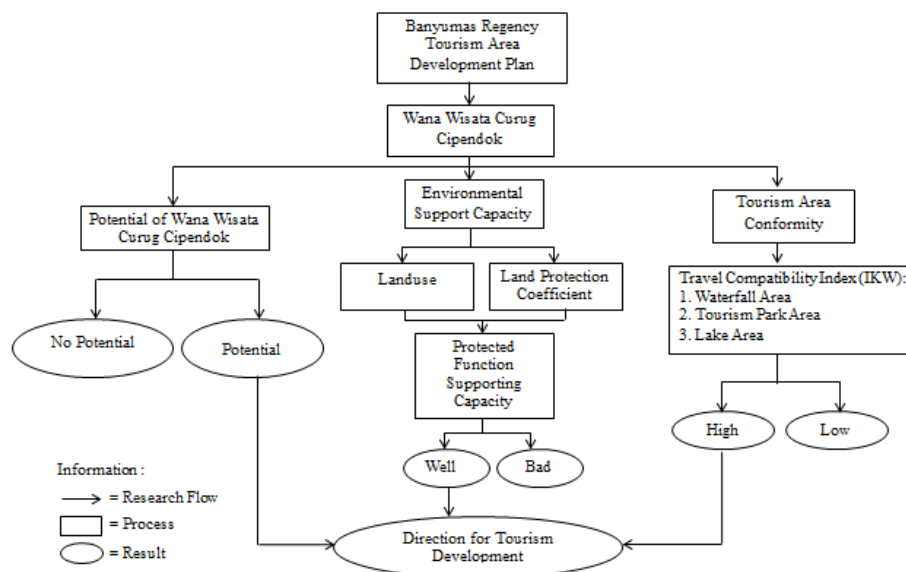
The research was aimed (1) to know tourism potential in Wana

Wisata Curug Cipendok, (2) to know carrying capacity of the protection function in Wana Wisata Curug Cipendok, (3) to know the suitability of tourism areas in Wana Wisata Curug Cipendok, (4) to find out the direction of tourism development in Wana Wisata Curug Cipendok Banyumas Regency 2018.

## B. METHODS

### 1. Research Framework

Wana Wisata Curug Cipendok is located in Menggala, Karang Tengah Village, Cilongok subdistrict, Banyumas Regency. The following framework for this study:



**Figure 1. Research Framework**

## 2. Data Collection

### a. Primary Data

Primary data can be seen in the following table 1:

Table 1. Table of Research Primary Data

No.	Primary Data Types	Data source
1.	Location of Cipendok Waterfall Tourism Object	Direct measurement using GPS
2.	Attraction Object Tourism Parameters 1) Level of completeness / uniqueness 2) Value of tourism objects 3) The beauty of tourism objects 4) Cleanliness of location	Field observations and interviews
3.	Tourism Object Accessibility Parameters 1) Distance from the collector's road 2) The vehicle goes to the object 3) Road conditions	Field observations and interviews
4.	Basic Facilities and Facilities Parameters 1) Clean water facilities 2) Facilities of worship 3) Electricity 4) Parking space 5) MCK 6) Food stalls 7) Hotel accommodation	Field observations and interviews
5.	Data on Suitability of Waterfall Tourism 1) Slope 2) Tourism Potential	Field observations and documents Field observations and interviews
6.	Park Tourism Suitability Data 1) Surface soil texture 2) Slopes 3) Soil drainage 4) Permeability 5) Gravel and gluttony 6) Stone 7) Rocks 8) Danger of flooding	Field observations and laboratory tests Field observations and documents Laboratory test Laboratory test Field observation Field observation Field observation Field observations and interviews
7.	Data on tourism development 1) Strength 2) Weaknesses 3) Opportunity 4) Threats	Field observations and interviews

*Source: Results of analysis of the author*

**b. Secondary Data**

Table 2. Secondary Data Table Research

No.	Secondary Data Types	Data source
1.	Data on Suitability of Waterfall Tourism 1) Land data and distribution 2) Daily data rainfall	Regency Land Map of Banyumas issued by Bappeda in Banyumas Regency. 1) Public Works Center for Water Resources and Spatial Planning of Serayu Citanduy, Banyumas Regency.
2.	Supporting Data for Protection Functions 1) Area of Tourism Area 2) Map of land use	1) East Banyumas KPH 2) Google Earth Ikonos image and field survey
3.	Slope Map	Map of Rupa Bumi Indonesia
4.	Contour Map	Map of Rupa Bumi Indonesia

Source: Results of analysis of the author

**3. Data Analysis**

Research used descriptive qualitative with method survey the field. The population in this study there are two types, namely (1) the population of respondents consisting of: *stakeholders* ; visitors ; traders ; and owner hotel and (2) population of tourist. While the research sample also has two types, namely (1) sample respondents and (2) samples of

suitability of tourist areas. For the respondent sampling technique there are two, namely (a) the sampling technique aims for the sample manager travel ; government; trader or owner shop; and owner hotel and (b) accidental sampling techniques for tourist visitors.

The following formula for calculating Protected Function Support Capacity (DDL):

$$DDL = \frac{\sum(Lgl_1 \cdot \acute{a}_1 + Lgl_2 \cdot \acute{a}_2 + Lgl_3 \cdot \acute{a}_3 + Lgln \cdot \acute{a}_n}{LW}$$

Information :

DDL = The carrying capacity of the protected function

LGL<sub>1</sub> = Land use type 1 (ha)

á<sub>1</sub> = Protection coefficient for land use 1

LW = Area (ha)

Meanwhile, to calculate the suitability formula of tourist areas using a modified formula from Yulianda 2007, in Romaito et al (2015, 3):

$$IKW = \sum \frac{Ni}{Nmax} \times 100\%$$

Information :

IKW = Tourism Conformity Index

Ni = I-parameter value (weight x score)

Nmax = Value of tourist category

In research this, class uaia n e s case tour dibag i in m 4 (four) class suitability, that is : highly suitable (S1), quite suitable (S2), conditional according (S3) and incombible (TS).

### C. RESULTS

#### 1. Tourism Potential in Cipendok

##### Waterfall Tourism

The potential of Wana Wisata Curug Cipendok has enough potential classification, this is because Wana Wisata Curug Cipendok has a variety of attractions ranging from diverse beauty and many tourist activities that can be done by visitors. In addition, good road conditions also cause tourism to attract visitors. However, there are still some shortcomings found in tourist areas such as there are still a number of rubbish in some places and a lack of maintenance facilities that reduce scores on the assessment of tourism potential.

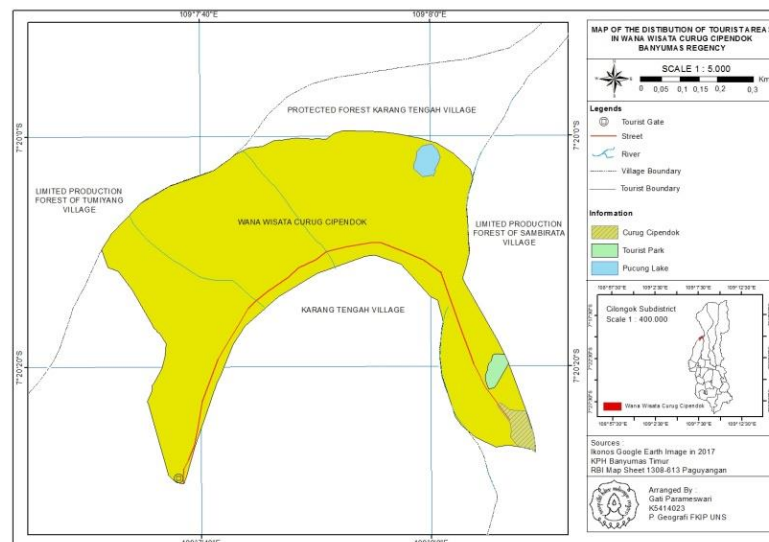


Figure 2. Distribution Map Wana Tourism Region in Curug Cipendok

#### 2. The Supporting Capacity of Cipendok Curug Tourism Protection Function

Wana Wisata Curug Cipendok has a value of Protected Function

Support (DDL) according to Muta'ali (2012: 54) of 0.66. This value is based on the quality of Protected Function Support Capacity (DDL) in the good

category, but it has gone badly because the value is in the middle. This shows that Wana Wisata Curug Cipendok is able to maintain the preservation of the environment well but has headed towards not protecting the environment. To preserve the environment, it is necessary to control landuse and forest protection so that quality is maintained. Based on observations in the field, there has been an effort to protect forest sustainability by enforcing or prohibiting the felling of trees in forest areas even though it is Limited Production Forest, but forest landuse is used for continuous tourism development and there are

other types of landuse such as rainfed gardens and rice fields the protection function is decreasing.

### 3. Suitability of Tourism Areas in Cipendok Waterfall Tourism

The Tourism Suitability Index (IKW) in three areas Wana Wisata Curug Cipendok shows the level of suitability of landuse for tourism in the region. Next is the Index of Suitability of Tourism Areas (IKW) at Wana Wisata Curug Cipendok :

#### a. Suitability of Cipendok Waterfall Areas

Following is the table of suitability of Cipendok waterfall waterfall tourist area:

Table 3. Suitability of Cipendok Waterfall

No.	Parameter	Class	Criteria	Results in the Field	Score	Weight	Ni = Score x Weight
1.	Slope	S1	0-8%		20	0.40	40
		S2	8-15%		40		
		S3	15-25%		60		
		N1	25-40%		80		
		N2	> 40%		100		
2.	Soil erosion sensitivity	S1	Alkuvial, Glei soil, Planosol, Gray Hydromorph, Groundwater laterite (insensitive)		15	0.20	6
		S2	Latosol (somewhat sensitive)	Latosol Chocolate	30		
		S3	Brown Forest Soil, Non Calcic Brown, Mediteran (less sensitive)		45		
		N1	Andosol, Lateric, Grumusol, Podsol, Podsolc (sensitive)		60		
		N2	Regosol, Litosol, Organosol, Rendzina (very sensitive)		75		
3.	Daily rain intensity	S1	up to 13.6 mm / hr (very low)		10	0.10	3
		S2	13.6-20.7 mm / hr (low)		20		
		S3	20.7-27.7 mm / hr (medium)	22.01 mm / day	30		
		N1	27.7-34.8 mm / hr (height)		40		
		N2	> 34.8 mm / day (very high)		50		
4.	Tourism Potential	S1	36.35 - 42.1 (very potential)		100	0.30	24
		S2	30.59 - 36.34 (potential)	31.04	80		
		S3	24.83 - 30.58 (enough potential)		60		
		N1	19.08 - 24, 82 (less potential)		40		
		N2	13.33 - 19.07 (no potential)		20		
Nmax = 100							
Total						1	73
Percentage							73%
Level of							S2

Source: Results of analysis of the author

The tourism Suitability Index in Cipendok Waterfall is 67%. Included in the S2 class category which means quite suitable (*quite suitable*), this suitability class has a rather heavy limiting factor for a sustainable use of certain activities. The limiting factor will reduce land productivity and the profits obtained and increase input to cultivate the

land. The most dominant limiting factor in this area is because the area slope of 52% which enters the slope class is very steep so that it can endanger visitors when traveling.

b. Suitability of Park Tourism Areas

The following is the table of suitability of park at Wana Wisata Curug Cipendok:

Table 4. Suitability of Tourism Parks

No.	Quality and Characteristics of Land	Land Suitability Class				Results in the Field	Total score	Weight	Ni = Score x Weight
		S1	S2	S3	N				
		(Score of 100)	(Score 75)	(Score 50)	(Score 25)				
I.	Burning media								
	1. Soil texture surface	Smooth	Rather smooth, rather rough	Is being	Rude	Rather smooth	75	0.17	12.75
	2. Land Drainage	Good, rather good	A little bad	Bad	Very bad	Well	100	0.19	19
	3. Permeability	Fast, rather fast	Is being	A little slow	Slow	13,89 cm/hour (fast)	100	0.14	14
II.	Mechanization Potential								
	1. Slope	0-8%	8-15%	15-25%	> 25%	8-15%	75	0.22	16.5
	2. Gravel and glutony (2 mm - 25 cm)	0-15%	15-30%	30-50%	> 50%	5%	100	0.06	6
	3. Stone (> 25 cm)	0-3%	3-10%	10-15%	> 15%	5%	75	0.08	0.24
	4. Rocks (> 60 cm)	0 - 0.01%	0.1 - 2%	2-3%	> 3%	1%	100	0.11	11
III.	Flood Hazards	Never	Rarely	Sometimes	Often and very often	Never	100	0.03	3
Nmax = 100									
Total								1	82.49%
Percentage									82.49%
Level of Conformity									S2

Source: Results of analysis of the author

Table 4 above shows that the park area has a tourist suitability index worth 82.49%. very suitable (*highly suitable*) for traveling, and does not have

This class is included in the category S1 class which means that this class is classified as a heavy limiting factor for a certain use in a sustainable



manner, or only has a limitation that is less significant and does not have a significant effect.

c. Suitability of Lake Area

The following is the table of Conformity of the Pucung Lake Area at Wana Wisata Curug Cipendok :

Table 5. Suitability of Pucung Lake Area

No.	Quality and Characteristics of Land	Land Suitability Class				Results in the Field	Total score	Weight	Ni = Score x Weight
		S1 (Score 100)	S2 (Score 75)	S3 (Score 50)	N (Score 25)				
I.	Burning media								
	1. Surface texture	Is being	Rather smooth, rather rough	Smooth	Rude	clay slamming	75	0.20	15
II.	Mechanization Potential								
	1. Slope of the slope	0-8%	8-15%	15-25%	> 25%	8-15%	75	0.40	30
	2. Land closure	shrubs	scrub with scattered trees	forest with shrubs	river vegetation	forest with shrubs	50	0.10	5
III.	Availability of water								
	1. Distance to river	0-250	250-350	350-500	> 500	300 m	100	0.30	30
	Nmax = 4								
	Total							1	80.00
	Percentage								80%
	Level of Conformity								S2

Source: Results of analysis of the author

The Tourism Suitability Index (IKW) of Pucung Lake Area shows that the tourism suitability of Pucung Lake Area has a conformity index with a value of 80%, which means that the suitability of Telaga Pucung tourist area falls into the S1 class category, this class is very *suitable* for traveling, and does not have a heavy limiting factor for a certain use in a sustainable manner, or only has a limitation that is less meaningful and does not significantly affect.

**4. Tourism Development Direction at Cipendok Waterfall Tourism**

Referrals and solutions for tourism development at Wana Wisata Curug Cipendok use basic weaknesses that can be a barrier and optimize the strength of tourism potential, environmental carrying capacity, and regional suitability. Referral and tourism development solutions cannot be separated from the tourism potential that is owned at Wana Wisata Curug Cipendok. Basically, potential can be a separate force in tourism development, but processing that has not been optimal causes this potential to be a weakness too. The

weakness of tourism development in Wana Wisata Curug Cipendok is that there are still some garbage in several tourist areas, besides that there is damage to tourism objects. The most visible weakness is the lack of maintenance of basic facilities such as toilets and prayer rooms.

The direction of tourism development is used to increase the strength of tourism objects, while tourism development solutions are used to overcome the weaknesses of tourism objects. The development direction at Wana Wisata Curug Cipendok is by increasing tourism potential such as adding new tourist attractions so as not to be less competitive with similar tourism objects in the local area, then solutions to overcome weaknesses by periodically improving and bargaining basic facilities such as public toilets and prayer rooms so that visitors feel comfortable. In addition, the laying of bins at the strategic points of the area and the addition of slogans for love for the environment can be a solution to overcome cleanliness at Wana Wisata Curug Cipendok.

#### **D. CONCLUSION**

1. The potential owned by Cipendok Waterfall Tourism Center based on scoring results was obtained that Cipendok Curug Tourism was a enough potential classification.
2. The carrying capacity of the environment at Cipendok Curug Tourism Area is calculated using Protected Function Support Capacity (DDL), the result is Protected Function Support Capacity (DDL) of 0.66 which enters the quality level in a good category but has been directed towards damage.
3. The suitability of tourism in the three Wana Wisata areas of Cipendok Waterfall is as follows:
  - a. The suitability of tourism in Cipendok Waterfall with the number of Tourism Suitability Index (IKW) of 67% is included in the S2 class or quite suitable ( *quite suitable* ).
  - b. Travel suitability in Taman Wisata with the number of Tourism Suitability Index (IKW) of 82.49% which is included in the S1 or class is very suitable ( *highly suitable* ).
  - c. Travel suitability in Telaga Pucung with the amount of Tourism Suitability Index (IKW) of 80%

which is included in the S1 or class is very suitable ( *highly suitable* ).

4. The direction of tourism development at Cipendok Curug Wana Wisata uses weaknesses that can be a barrier at Cipendok Waterfall Tourism and to optimize the strength of tourism potential, environmental carrying capacity, and suitability of each tourist area.

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