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Research paper

Quality Assessment of Visual Landscape for Sustainable Tourism in Bogor, Puncak Cianjur, West Java, Indonesia

Ina Krisantia[1] , Nur Intan Mangunsong[2], ,Rustam Hakim [3],Ida Bagus Rabindra[4]

[1,2,3,4] Department of Landscape Architecture,
Faculty of Landscape Architecture and Environmental Technology,
Trisakti University, Indonesia
**Corresponding author E-mail: [1]inakrisantia@trisakti.ac.id*

Abstract

Visual scenery of an area is very important in the destination of a tourist destination. In Indonesia there are many tourist areas that experience an increase in visual appeal because of the faster construction.The purpose is to identify and to quanti- fy quality of visual landscape in the tourist area of Bogor, Puncak Cianjur. Method was used Visual Resources Assess- ment Procedure (VRAP). Visual quality were the sum of visual elements water, vegetation, land surface, user activity and other con- siderations. The results obtained were Cisarua subdistrict has a high visual quality while Cibodas Botanical Garden has the highest value in tourist destinations. These results can contribute to the sustainable tourism through visual management
class such as class II for Retentention areas in Cisarua district and Cipanas district, class III for partial retention areas in Megamendung district and class IV for modify areas in Ciawi and Pacet district.

Keywords: *visual landscape, visual quality*

1. Introduction

1.1. Background

Indonesia is increasingly taking measures to develop its tourism industry; there are many tourist areas which possess special character that have been developed. Particularly in the case of West Java where there was a 74% change in the use of preserved land (Witular, 2002). This development has affected by the visual quality of coastal, as well as highland landscapes. These areas have their own outstanding beauty, high visibility, and natural values. Most of these areas are starting to lose their special character and regional identity due to the rapid development of the tourism industry. Therefore it is necessary to know a visual landscape quality to manage a sustainable visual landscape. The purposes of this paper are to identify and to quantify the quality of the visual landscape in the tourist area of Bogor, Puncak Cianjur Indonesia.

1.2. Visual resources Component

Based on Smardon et.all on 1988 the Visual Resources Component could be a land form, water resources, Land use (use intensity), vegetation and user activity.
The type of land form is presented in an area which contributes to the general landscape composition. Description of physiographic and ecosystem areas provide maps and general information on the character and relative relief of land form
The existing vegetation can determine the visual boundaries of view, provided canopy cover, or screen. Land use and intensity used which are normally encountered are industrial, commercial, residential, agricultural, recreational, forest, grass land and barren land. The Intensity used such as urban, sub urban, rural and undeveloped and the water resources included streams, lakes, reservoirs, river, wetland and marine.

1.3 Visual Landscape

Landscape, can be defined in many ways. A general definition of landscape, by Hull and Revel (1989), is "the outdoor environment, natural or built, which can directly be perceived by a person visiting and using that environment. A scene (visual), is the subset of a landscape, which is viewed from one location (vantage point) looking in one direction
Visual / scenic is the views of the observed from a point of vantage. Often the extraordinary panorama can be reason enough to choose a property. Once the site has been established, however, the panorama is often not fully used in excess. (Simonds , 2006)

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In addition, the proper treatment of the panorama is less understanding of the various approaches have a place in the art of planning (and design). Panorama should be analyzed and composted with high perception of beauty, to support every fraction of a dramatic visual potential in full.
As well as other landscape features, scenic through a specific treatment allowing it to be preserved, neutralized, modified, or be accentuated. But before we go any further treat the panorama, we need to learn more about critical matters concerning this natural things.

2. Methodology

The survey was done at Ciawi district, Megamendung district, Cisarua district and Cipanas district and Sukaresmi district in Bogor-Puncak-Cianjur tourism areas .
Primary data were collected from foto questioner and observations on the site in 2016
Secondary data were collected from digital maps and literature reviews
The method used is a comprehensive assessment through descriptive analysis and classification of landscapes, visual quality,
Visual Quality Analysis modification of the Visual Resources Assessment Procedure (VRP) by Smardon et al.(1988) in Canter (1996) in the paper entitled "Environmental Impact Assessment" are the sum of water variables, topography, plants, land use, activity activities and other considerations using the Likert scale of 1-3. (Distinct, Avarage, Minimal)
Distinct: Something that is considered unique, has visual / aesthetic assets,
Average: has no uniqueness
Minimal : has no aesthetic value
VLQ = ∑X1,X2,X3,X4,X5,X6.
VLQ = Visual Landscape Quality
X.1= Water, X.2= land form , X.3= vegetation , X.4 = land use , X.5= user Aktifitas
X.6= spacial consideration such as Do these zones a. have Cultural or Historical Landmarks ?, b. there are different visual qualities and or observations of wildlife, c. free from reserves and garbage ?, d. there are additional aesthetic elements?
Management class such as Preservation has total visual quality score >17 , Retention has 14 – 16 , Partial retention has 11 – 13, Modification has 8 – 10 and Rehabilitation has < 7 score.

3. Discussion and Conclusion

Landscape Description
District of Ciawi
District of Ciawi , an area of about 4,706.83 hectares have land cover in the form of: Freshwater / river 5:31 hectares,and river length 34.41 Forest, Region Settlement, Grassland, Plantation , Paddy field, Rice Rainfed , Shrubs , moor / Field, Majority , Region Settlement 912.79 ha, Forest 1,718.68 ha, and Plantation 710.30 ha. The shape of its surface in the form of: Slope 8-15% , Slopes 15-30% Slopes 30-50% and , Slope> 50% . Majority Slope> 50% area of 2,010.23 hectares.
District of Megamendung
District of Megamendung , an area of about 6,073.43 hectares , there have , there have water in lake , freshwater/ river 22:25 hectare, and river length 34.41 km and land cover in the form of: Freshwater / river, Forest, Region Settlement, Grassland, Plantation , Paddy field, Rice Rainfed , Shrubs , moor / Field, Majority Forest 1,874.61 ha and Plantation 1,362.05 ha,
The shape of its surface in the form of: Slope 8-15% , Slopes 15-30% Slopes 30-50% and , Slope> 50% . Majority Slope 8-15% covering an area of 1,993.76 hectares,
District of Cisarua
District of Cisarua , an area of about 7,844.89 hectares , there have water in lake , freshwater / river 13.63 hectares, , river length 17:27 km. and land cover in the form of: Freshwater / river, Forest, Region Settlement and Villas Grassland, Plantation , Paddy field, Rice Rainfed , Shrubs , moor / Field, Majority Forest 2,602.46 ha and Plantation 1,564.99 ha
The shape of its surface in the form of: Slope 8-15% , Slopes 15-30% Slopes 30-50% and , Slope> 50% . Majority Slope 8-15% covering an area of 1,993.76 hectares,
District of Pacet
District of Pacet , an area of about 4,073.44 hectares, there have water in lake , pond and river length 70.23 km and land cover in the form of: Freshwater / river, Forest, Region Settlement and Villas Grassland, Plantation , Paddy field, Rice Rainfed , Shrubs , moor / Field, Majority Forest 2,602.46 ha and Plantation 1,564.99 ha
The shape of its surface in the form of: Slope 8-15% , Slopes 15-30% Slopes 30-50% and , Slope> 50% . Majority Slope 8-15% covering an area of 1,993.76 hectares,
District of Sukaresmi
District of Sukaresmi , an area of about 9,486.82 hectares, there have water in lake , freshwater / river 16.47 hectare, and river length 72.20 km and land cover in the form of: Freshwater / river, Forest, Region Settlement and Villas Grassland, Plantation , Paddy field, Rice Rainfed , Shrubs , moor / Field, Majority Forest 79.13 ha and Plantation 1,533.33 ha,
The shape of its surface in the form of: Slope 8-15% , Slopes 15-30% Slopes 30-50% and , Slope> 50% . Majority Slope 30-50% area of 3,786.82 hectares
Tourist destination :
a. Taman Wisata Matahari is a tourist place in Puncak, an area of about 30 hectares, has entertainment facilities swimming pool, ATV, rafting, lodging, outbound facilities, restaurants, water games, children's games, to shopping and tourist fields. Land cover in the form of water in the lake / situ, fresh water / river, forest Rimba, Meadow, Gardening / Gardens, Shrublands / Alang Alang. The shape of its surface in the form of: Slope 8-15% Slope 15-30%, Slopes 30-50%, Slope> 50%. (see picture 1)
b. Gunung Mas Agro Tourism is a tourist spot in the Peak that offers natural beauty and facilities tea walk, swimming pool, children's games, a restaurant, outbound facilities, lodging and treatment of fish. At this location there is a villa of President Sukarno, complete with legacy items. Land cover in the form of water in the lake / situ, fresh water / river, Woods Forest, Grassland, Plantation. The shape of its surface in the form of: Slope 8-15% Slope 15-30%, Slopes 30-50%, Slope> 50%.(See piture 2)

c. Telaga Warna is a tourist spot on the Top of the famous beauty of the lake with a natural atmosphere tranquil and beautiful and can play different types of games water bike and boat raft. Land cover in the form of water in the lake / situ, fresh water / river, Woods Forest, Grassland, Plantation, Shrubs, moor / Field . The shape of the land surface in the form of: Slope 8-15% Slope 15-30% , Slopes 30-50%, Slope> 50%.(See picture 3)

d.Taman Bunga Nusantara located in the village Kawungluwuk, district of Sukaresmi, Cianjur, Jawa. Taman Bunga Nusantara has a wide collection of flowers and ornamental plants both locally and overseas. Flowers as well as supporting facilities laid out as beautiful and as beautiful as possible in order to provide recreational and educational mission for the visitors. Land cover in the form of water in the lake / situ, fresh water / river, Woods Forest, Grassland. The shape of its surface in the form of: Slope 0-3%, Slope 3-8%. Slopes 15-30%.(see picture 4)

e. Cibodas Botanical Garden located in the village of Kawungluwuk, District of Cipanas with land cover in the form of water in the lake / Forest Woods, Grassland. The shape of its surface in the form of: Slope 3-8%, Slope 8-15% Slope 15-30%, Slopes 30-50%, Slope> 50%. (see picture 5)



Picture 1. Taman Bunga Matahari	Picture 2 Wisata Agro Gunung Mas	Picture 3. Telaga Warna	Picture 4. Taman Bunga Nusantara	Picture 5. Cibodas Botanical Garden

Relative Visual Quality analysis

The result of Visual quality in Bogor , Puncak Cianjur were in visual quality in Cisarua and Cipanas reached 16 while in Megamendung district skor 12, , Sukaresmi distrct skor 10 , Ciawi distric and Pacet district skor 9, Visual quality in Cisarua and Cipanas is better than other areas because of in Cisarua have user activity becouse many natural tourist destination especially Wisata Agro Gunung Mas areas there have Variety of vegetative in Telaga Warna have water Resources movement, common meandering and there have variasi land form 30 – 60% slopes and (moderately dissected) Cipanas district have one natural tourist destination such as Botanical Garden have High vegetation patterns, large and old trees, diversity of plants species variety interesting shapes, textures and patterns

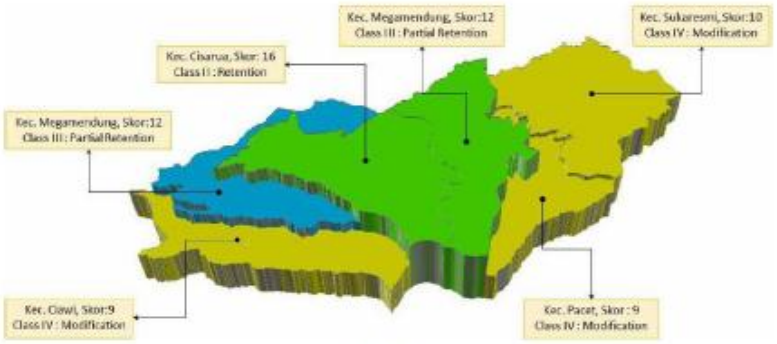
and there have special consederation such as distinct visual quality and Wildlife observation and there have variasi land form 30 – 60% slopes and (moderately dissected)

Contribution Visual Landscape Quality to Sustainable Tourism

Base on management class the result Cisarua district and Cipanas district areas have high visual quality with high sensitivity to landscape changes therefore of critical scenic value to region . Proposed for maximum protection of visual landscape value and features. This area entered the second class retention in the management class. Therefore retention especially in Cibodas Botanical Garden and Wisata Agro Gunung Mas

Ciawi and Pacet district (score 9) have a low scenic quality and tolerance of landscape change , and recommendations for management

Megamendung (score 12) Have moderate scenic quality and moderate sensitivity to landscape changes. ; recomended for partial retention because this region has scenic quality in particular places.



Picture 6.
Visual Quality

4.Conclusion

1. Cisarua district and Cipanas district have a high visual quality (with the score is 16) which is related to the high sensitivity of landscape change, this area entered the second class retention in the management class. Therefore visual value is an important thing to this area.

2. Ciawi and Pacet district (with score 9) have progressively lower scenic quality and higher tolerance of landscape change in the fourth class modify in the management class. Therefore visual value in this area should be modified.

3. Megamendung (with score 12) have moderate visual quality and moderate sensivity to landscape change in the third class partial retention in the management class.Therefore this region has scenic quality in particular places

Recommendation

1) Recommendation were need maximum protection of the value visual landscape and its features for Cisarua district and Cipanas district by protecting the dominant natural character in the hillside area in zone A Management by ensuring the visual impact of development is minimal Side of the hill , by protecting the dominant natural character in streetscape in zone A with minimal impact due to the construction on the main street, by protecting the dominant natural character in the resort area in zone A with minimal impact due to the construction on the resort. Especially in Cibodas Botanical Garden and Wisata Agro Gunung Mas need a partial retention for these area
2) Recommendation for Megamendung District as partial retention area are by grading
the dominant natural character in streetscape in zone C with minimal impact due to the construction on the main street and by grading the dominant natural character in tourism object in zone c with minimal impact due to the construction on the resort areas
3) Recommendation for modify areas such as Ciawi and Pacet District is by modifying
the dominant natural character in streetscape in zone c with minimal impact due to the construction on the main street

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