

Historical Landscape Quality Assessment on Priority Area of Banda Aceh Heritage City, Aceh Province

Muhammad Rizki Mulya*, Nurhayati HS Arifin**, Hadi Sulilo Arifin**

* Landscape Architecture Study Program, Graduate School of Bogor Agricultural University
** Department of Landscape Architecture, Bogor Agricultural University

Abstract- Banda Aceh has developed with historical heritage city. That heritage has through in the kingdom, colonial, and independence period. But that heritage is not managed properly. Research purposes are to inventory the historic heritage and to analyze the historical landscape character of Banda Aceh. The method of this research was preceded by tracing the historical aspect, then the result was used in conducting assessment to determine the historical landscape characteristics of the Banda Aceh. The results are the uniqueness component prioritize of the efforts to preserve Banda Aceh historical landscape. Alternative priority for the preservation of the Banda Aceh historical landscape is the colonial landscape.

Index Terms- authenticity; culture; heritage development; historical period; uniqueness

I. INTRODUCTION

Banda Aceh City, Aceh Province is one of the priorities in the program heritage city of Indonesia. The reason for adoption Banda Aceh as one of the ten cities in the priorities of the program is that the city has a rich culture and history, both tangible and intangible. The heritage city team has conducted an inventory of heritage assets. They also zoned the priority area, but it is not comprehensive.

Banda Aceh has historical tourism of the kingdom period, colonial and independence, but the management has not yet seen the strategy of historical preservation. Some landscape history is also in conditions untreated, abandoned, not functional and demolished. Some historical buildings destroyed due to have fragile after more than 10 years since the affected by the tsunami.

There were 12 historical landscapes type in Banda Aceh. Though every historical landscapes in Banda Aceh have a period that is able to describe the historical development of Banda Aceh City, has a distinctive style, and complement each other. The objective of this study was to assess the quality of the historical landscapes at priority area. So it can be known the priority area in urban heritage preservation.

II. METHODS

LOCATION

Location of this study is Banda Aceh City, Aceh Province (figure 1) [1]. The historical landscape that assessed are: (1) Gampong Pande; (2) Baiturrahman; (3) Makam Raja; (4) Putroe Phang; (5) Meuligo; (6) Kolonial; (7) Museum Aceh; (8) Stasiun Kereta Api; (9) Peunayong; (10) Pasar Atjeh; (11) Soekarno; (12) Darussalam (figure 2).

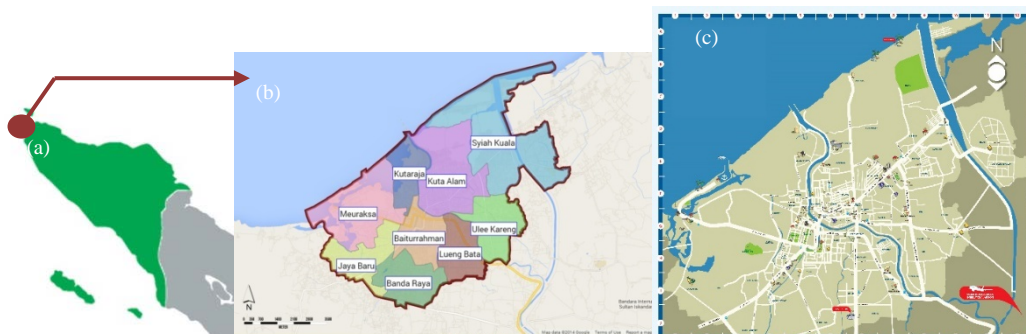


Figure 1: (a) Aceh Province; (b) Banda Aceh City; (c) historical object in Banda Aceh [2]
Source: UPTB GIS Banda Aceh City 2012

DATA COLLECTION

Data were collected by observed: (1) tangible and intangible landscapes; (2) legal aspect and the management of heritage city program; and (3) historical aspect.



Figure 2: (a) Gampong Pande; (b) Baiturrahman; (c) Makam Raja; (d) Putroe Phang; (e) Kolonial; (f) Meuligoe; (g) Museum Aceh; (h) Stasiun Kereta Api; (i) Peunayong; (j) Pasar Atjeh; (k) Soekarno; (l) Darussalam
Source: Mulya MR

DATA ANALYSIS

Indicators are used include authenticity, uniqueness, significance, and convenience (Table 1). After a qualitative assessment, carried out by using a scoring component and variable of the landscape preservation. The components and variables obtained from the analytical hierarchy process (AHP) [3]. Formula that used to make scoring is:

$$PL = ((SA \times KA) + (SU \times KU) + (SNP \times KNP) + (SN \times KN) \times A)$$

Note:

- PL = Preservation priority
- SA = Authenticity score
- KA = Authenticity component
- SU = Uniqueness score
- KU = Uniqueness component
- SNP = Significant score
- KNP = Significant component
- SN = Comfort score
- KN = Comfort score
- A = Alternative

Table 1: Quality assessment criteria of historical landscape [4][5]
Source: Harris Cw, Dines Nt (1988) and Supriadi MA. (2010)

No	Criteria	Value		
		Low (1)	Moderate (2)	High (3)
Authenticity				
1	Land use	>50% changing	25-50% changing	<25% changing
2	Building	There are structure and element changing in the building. Doesn't show the classic style. Only have one element >50 years	There are structure and element changing in the building but show classic style. There are 2-5 historical elements >50 years	There aren't structure and element changing in the building and show classic style. There are >5 historical elements >50 years
3	Circulation	There are addition of road and the character changing	There are additions of road but the character not changing	There isn't addition of road and the character not changing
Uniqueness				
1	Historical association	Landscape/element hasn't historical association.	Landscape/element has low historical association	Landscape/element has strong historical association
2	Integrity	Historical landscape element scattered in small amounts and not harmonious	Historical landscape element scattered in moderate amounts and harmonious	Historical landscape element scattered in large amounts and very harmonious
3	Different	Landscape only has one	Landscape has 2-5 historical	Landscape has >5 historical

	diversity	historical element	elements	elements
4	Aesthetic value	Landscape element hasn't distinctive style	Landscape element has distinctive style	Landscape element and detail of ornament has distinctive style
Significant				
1	History	Historical resource not scarce and not memorable by most society	Not the only one but scarce, not too old, and memorable by most society	Only one, scarce, very old, and memorable by most society
2	Science	There isn't important value of science in landscape or object	There is important value of science in landscape or object, not the only one but scarce	There is important value of science, scarce, and only one
3	Culture	Cultural resource not scarce and not old	Cultural resource not the only one but scarce, but not too old	Cultural resource scarce, the only one, and very old
Comfort				
1	Clean from rubbish	Each 1 meter on landscape there are rubbish or there many rubbish in the core object	Each 5 meter on landscape there are rubbish or there some rubbish in the core object	There isn't rubbish on landscape and also in the core object
2	Clean from vandalism	There are >30% vandalism on landscape or there are vandalisms in core object	There are <30% vandalism on landscape but there isn't vandalism in core object there are vandalism in core object	There isn't vandalism on landscape and also in the core object

III. RESULT AND DISCUSSION

Banda Aceh have strong religious character. The kingdom period is the Islamic civilization in Banda Aceh. Up to the present time, historical and cultural against the influential Islamic of Banda Aceh. Historical of Banda Aceh is not just in a grand Islam course, but also the colonial period. Banda Aceh as the capital and the center of governmental still be held until now. A style of colonial architecture affected the spatial of Banda Aceh. The old buildings are many effected by colonial architecture style. Some colonial site still maintained and managed well, but the landscape railway station just leaving a monument and a carriages locomotive, the majority of people do not know its existence.

There are 37 historical sites/objects in Banda Aceh spread over nine district. The classification of historical site explained in (table 2), as well as to spatial described in (figure 3). Baiturrahman District have 17 sites. all off historical sites are managed by the government. only 4 of them managed by city government, and the rest by the provincial governments. Fourth site are: Putroe Phang Park, Taman Sari, RI-01 Plane Monument and Dutch Water Tower. That sites managed well, so we needed any regulations of historical site management for the city government to handle some of the provincial government obligations, so the historical sites can be managed optimally.

Table 2: Historical Landscape classification of Banda Aceh

Kingdom Period		
1. Gampong Pande - Gampong Pande - Teungku Di Anjong Mosque 2. Baiturrahman - Mesjid Raya Baiturrahman - Taman Sari - Blang Padang square 3. King Grave - Saidil Mukammil grave	- Teuku Di Bitay grave - Raja Jalil grave - Sultan Iskandar Muda grave - Kings of Bugis cemetery - Kandang Meuh grave - Kandang XII cemetery - Poteu Jeumaloy grave	4. Putroe Phang - Taman Putroe Phang - Gunongan 5. Meuligoe - Keraton/Palace - Krueng daroy - Pulau gajah
Colonial Period		
6. Kolonial - Kherkhof - Sentra Telepon Militer - Dutch water tower - SMAN1 Building - Pante Pirak Bridge	- Bank of Indonesia - Dutch Monument 7. Museum Aceh - Museum of Aceh - Gedung Baperis	8. Stasiun Kereta Api 9. Peunayong - Peunayong Market - Kelentang Cina

Independence Period		
10.Pasar Atjeh 11.Soekarno - Ex-Hotel of Aceh - Plane RI 001 Seulawah Monument - Bioskop Garuda	12.Darussalam - Tentara Pelajar Monument - Darussalam Monument - Teuku Nyak Arif House	

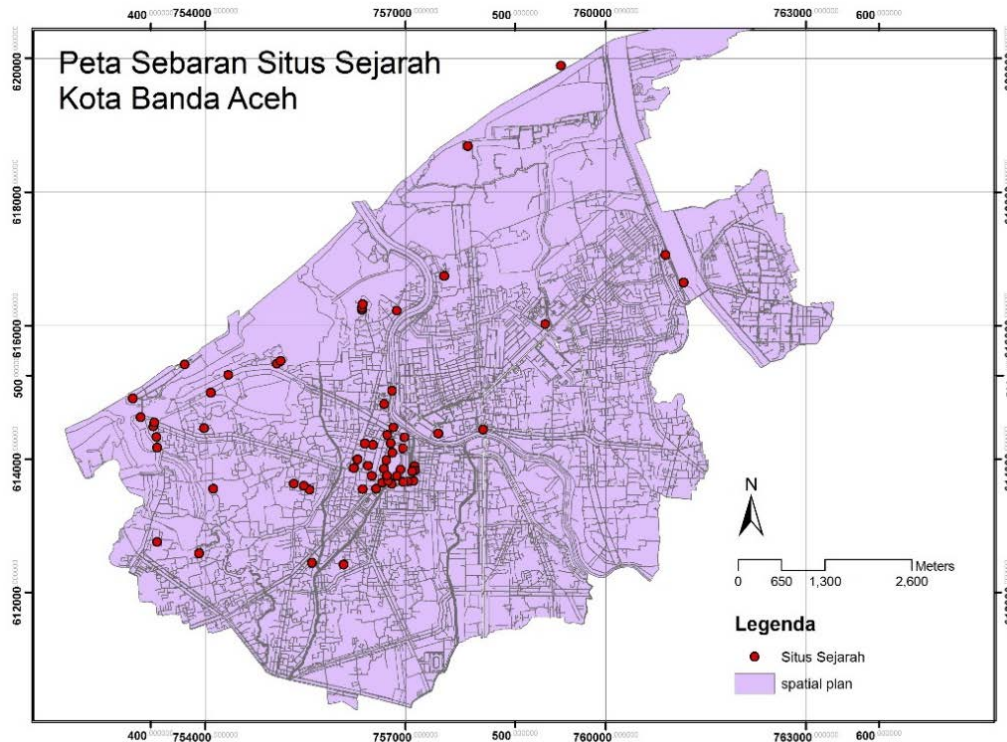


Figure 3: Historical landscape quality assessment

The maximum score of authenticity is 12, uniqueness and significant are 9, and the comfort is 6. The result of qualitative assessment of the 12 landscapes history in Banda Aceh, the authenticity of components showed that the Darussalam obtain the highest score of all. The results of uniqueness and significant components are two historical landscapes that have the highest score, Putro Phang and Aceh Museum. Assessment of comfort component, there are four historical landscapes that have the highest score, fourth landscape history includes Gampong pande, Baiturrahman, Aceh Museum, and Darussalam (Figure 4).

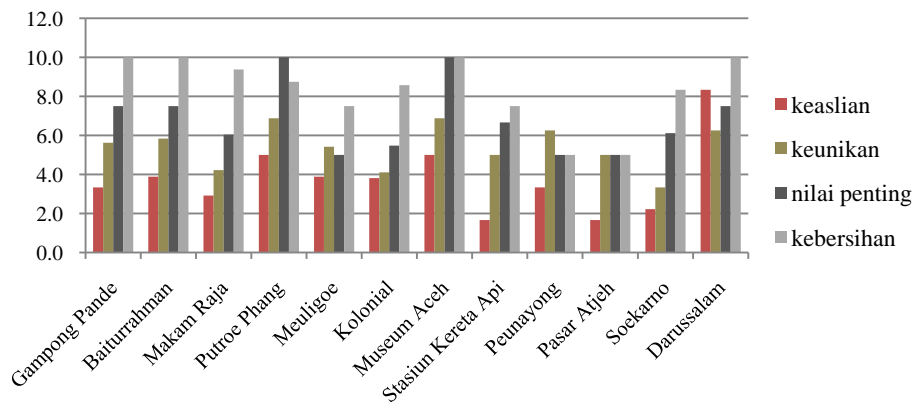


Figure 4: Historical landscape quality assessment

Table 4: Preservation priority score of historical landscape

Table 3: Component and alternative score of AHP

No	Landscape	Score
Component		
1	Authenticity	0.231
2	Uniqueness	0.547
3	Significant	0.058
4	Comfort	0.166
Alternative		
1	Kingdom	0.307
2	Colonial	0.586
3	Independent	0.109

No	Landscape	Score
Kingdom		
1	Gampong Pande	3.375
2	Baiturrahman	3.437
3	Makam Raja	3.062
4	Putroe Phang	3.750
5	Meuligoe	3.083
Colonial		
6	Kolonial	3.035
7	Museum Aceh	3.812
8	Stasiun Kereta Api	3.000
9	Peunayong	3.000
Independent		
10	Pasar Atjeh	2.750
11	Soekarno	2.875
12	Darussalam	3.812

The final scoring that used AHP components and variables showed the highest score 3.812 by Aceh Museum and Darussalam, followed by Putroe Phang and Baiturrahman (Table 4). The fourth landscapes are become potential priority to preserve historical landscape tourism of Banda Aceh.

Nevertheless, the landscapes that showed low score, which are Pasar Atjeh, Soekarno, Stasiun Kereta Api, and Peunayong landscape, should not be overlooked but its management should be improved. The purpose is to created strong sense of place as historical city, because the 12 historical landscapes in Banda Aceh have historical connectivity as a unity.

IV. CONCLUSION

Most of the historical landscapes in center of Banda Aceh City obtained the highest quality score. Aceh Museum and Darussalam, and also Putroe Phang and Baiturrahman are the landscape that recommended to preserve seriously to keep their quality. As a unity, the lowest quality score, which are Pasar Atjeh, Soekarno, Stasiun Kereta Api, and Peunayong landscape, needs to be improved in order to create more strong sense of place as a heritage city.

ACKNOWLEDGMENT

Foremost, I would like to express my sincere gratitude to Head of Social Development Planning Division on Regional Development Planning Agency of Banda Aceh City. Also to Tourism and Culture Department of Banda Aceh City.

REFERENCES

- [1] Regional Development Planning Agency. Banda Aceh City Government. *Draft Dokumen Rencana Aksi Kota Pusaka*, 2012
- [2] Departement of Culture and Tourism. Banda Aceh City Government, “*Banda Aceh: A Place Blessed with Natural Beauty and as a Spiritual Gateway.*” Aceh. 2011.
- [3] R. M. Syahadat, *Historical landscape quality assessment on priority area of Baubau heritage city, Southeast Sulawesi*. Semarang: Soengijapranata Chatolic University, 2014, pp. 81-86.
- [4] C. W. Harris, *Time-saver standars for landscape architecture: design and construction data*. New York: The McGraw-Hill Companies, 1988.
- [5] M. A. Supriadi, *Nilai penting Leang Mandaudeng dan Leang Tengngae*. Bulletin Somba Opu, 2010, pp. 2:7-15.

AUTHORS

First Author – Muhammad Rizki Mulya, Landscape Architecture Study Program, Graduate School of Bogor Agricultural University, muhammadrizkimulya@gmail.com

Second Author – Nurhayati HS Arifin, Department of Landscape Architecture, Bogor Agricultural University, nurhayati@ipb.ac.id

Third Author – Hadi Sulilo Arifin, Department of Landscape Architecture, Bogor Agricultural University, hsarifin@ipb.ac.id