Study of Cultural Landscape Character in Gampong Lubuk Sukon, Aceh

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Abstract. Banda Aceh is one of the oldest Islamic cities in South East Asia that still highly value Islamic culture both in their landscape structure and community activities. In order to maintain the cultural values, in 2012 Aceh Government established Gampong Lubuk Sukon as a cultural tourism village. After being designated as a cultural tourism village, there are no preservation guidelines regarding the cultural landscape. This research is conducted to identify the landscape elements that formed the landscape character so it can be used to determine conservation actions. The method of this study is Landscape Character Assessment (LCA). LCA are the process of identifying and describing the elements and unique characteristics that formed the landscape and a tool which can make a significant contribution to the objectives that relate to ‘environmental protection’ of sustainable development. As a result, the character of Lubuk Sukon cultural landscape is the traditional settlement that depends on local natural resources (agriculture) with centralized spatial planning (tumpok). Based on the landscape character integrity, this study proposes a zoning for conservation management, namely the core zone for strict conservation to safeguard the character of cultural landscape, the development zone as an areas that can be developed to support cultural tourism, and the buffer zone to protect and barrier between inside and outside the village.

Keywords: Conservation action, cultural landscape character, Gampong Lubuk Sukon

1. Introduction
Gampong Lubuk Sukon is one of the cultural tourism villages in Aceh that is categorized into an organically landscape because the landscape is formed and developed organically which is the result of cultural association of the local community. In 2012, the Government of Aceh established Gampong Lubuk Sukon as a cultural tourism village to preserve cultural heritage and protect the local wisdom of Acehnese people. In addition, this establishment is because the people in this village still maintain local wisdom in the form of settlement and cultural activities, maintain social values and maintain the arrangement of the environment.

Along with its development, several problems have begun to be encountered such as the absence of conservation management that can synergize or support the existence of a cultural tourism village. The problems that are happening and the importance of the cultural context in Gampong Lubuk Sukon are the main part to be explored and sought so that cultural values can provide meaning in recognizing the character of Aceh’s cultural landscape as the identity of the Acehnese people. Both self-identity and group identity are intimately connected with the events and history that are associated with the tangible environment. Culture and identity are therefore not just about social relationships, but are also profoundly spatial [1]. Inventory review and classification of landscape characters are very important to maintain the true character of the landscape. Character can provide information about the relationship of humans, nature, and culture [2] and source of information that ultimately offers a framework for planners and decision-makers for the maintenance and protection of landscapes [3].
Utilizing the knowledge of this character history, landscape planners and other professionals may be alerted to conservation and preservation practices which can retain and enhance the landscape character, rather than obliterate it [4]. This research is conducted to identify the landscape elements that formed the landscape character so it can be used to determine conservation management and support the cultural tourism village.

2. Methods

2.1. Study site and research period

This research was conducted in Gampong Lubuk Sukon, Aceh Province (Figure 1). This research was conducted for five months from January 2019 to May 2019.

![Figure 1. Research location](image)

Figure 1. Research location

2.2. Methodology

Identification of the characteristics of the cultural landscape of Gampong Lubuk Sukon was carried out using the Landscape Character Assessment method. Landscape Character Assessment (LCA) is the process of identifying and describing the elements and unique characteristics that formed the landscape and a tool which can make a significant contribution to the objectives that relate to ‘environmental protection’ of sustainable development [5]. This method consists of four stages. The first stage includes preparatory activities, namely determining the object of research, research objectives, scale, determination of data and related parties. The second stage is secondary data collection activities that support research and landscapes identified. Identification of the characteristics of cultural landscapes refers to eleven landscape elements consisting of land uses and activities, patterns of spatial organization, responses to the natural environment, cultural traditions, circulation networks, boundary demarcation, vegetation related to land use, buildings and structures, clusters, archeological sites, and small-scale elements [6] However the character of archeological sites have not yet found in Gampong Lubuk Sukon. The third stage is field survey activities, identification, and description of the character of the cultural landscape. The final stage is the propose conservation management based on character of the cultural landscape.

3. Result and discussion

3.1. Identification of landscape character

a. Boundary demarcation

There are two types of boundaries, namely formal administrative village boundary and customary boundaries. Formal village boundary defined by the government that is cover 112 ha as the center of settlement and important rituals activities. Administratively, the northern
part of Gampong Lubuk Sukon bordering by Gampong Dham Pulo, in the south bordering by Gampong Lambarieh, in the east bordering by Gampong Lubuk Gapuy, and in the west bordering by Gampong Pasie Lubuk. The customary boundaries cover larger areas that include Gampong Dham Pulo, Gampong Lambarieh, Gampong Lubuk Gapuy, and Gampong Pasie Lubuk. These gampong still have connectivity with Gampong Lubuk Sukon due to most of rice fields and forest garden in these surrounding gampong still belong to community in Gampong Lubuk Sukon. Rice field is one of the cultural spaces where Blang Keunduri rituals are held. The boundaries of Gampong Lubuk Sukon can be seen in Figure 2.

b. Land uses and activities
The character of land cover in the Lubuk Sukon cultural landscape includes water bodies, green open spaces, built space, and vacant land (Figure 2). Land uses and activities in Gampong Lubuk Sukon are still related to land that is located outside the village. This is because the livelihoods and ownership such as rice fields and forest gardens of the community are outside the village that is still directly adjacent to the village.

![Figure 2. Land cover map](image)

Figure 2. Land cover map

c. Patterns of spatial organization
The pattern of spatial organization formed in Gampong Lubuk Sukon is radial (centralized) (Figure 3). The spatial organization pattern consists of meunasah, settlements and agricultural land.
Figure 3. Pattern of spatial organization

Meunasah is a center for religious activities and a gathering place for the community to discuss and solve problems related to the culture of the village. Meunasah is also the center of a village that surrounded by settlement area. Settlement that formed in the Gampong Lubuk Sukon is traditional settlement with traditional Aceh houses as the main element. In this space, each person knows each member of their community. The closeness of Gampong Lubuk Sukon community is based on blood relations. This kinship system is also based on local culture that is the parents give inheritance to children in the form of the land to build the house so the affinity of relatives in this village is very close. The outermost part of the village is agricultural land consisting of rice fields and gardens. Agricultural land is used for farming and gardening activities.

d. Cultural traditions
The culture prevailing in the village community does not have factors that contradict the rules of syara’. In practice, it does not require and bind materially. The tradition is still practiced in the Lubuk Sukon community such as peusijuk in the context of marriage celebrations, births, circumcision, and procession of engagement. This tradition is usually carried out to invoke salvation, peace, and happiness in life.

According to the pattern of spatial organization and the existence of the rituals form the structure and hierarchy of cultural space in the village. The structure and hierarchy of the cultural spaces that formed are permanent cultural spaces and temporal cultural spaces. The permanent cultural space used for religious rituals that held once a year such as Eid al-Fitr, Eid al-Adha, and the birthday of the Prophet Muhammad and the temporal cultural space are used for temporal religious rituals. Temporal cultural place in this village consist of settlement area and agricultural land. In the settlement area, the ritual which is carried out related to birth, death, and marriage. In the agricultural land, rice fields are used as a place for rituals. At the beginning of farming, peusijuk pade bijeh are done with the aim that the rice seeds planted will produce good quality rice. After the harvest, the Keunduri blang ritual is also performed as a form of gratitude to Allah SWT for the harvest they get.

e. Response to the natural environment
The beginning of regulation to not formed a village around the river area is how the society of this village adapts to the environment. This regulation was formed to evade annual flooding and also to keep water area sustainable. Society’s response to environmental conditions also could be seen from the construction of Aceh Traditional House. Society of this village was live on rumoh panggung that construct from wood. Rumoh panggung on this village was built with earthquake-resistant principles [7]. Rumoh panggung was constructed using peg as the barrier of the house and it will be interconnected in terms of response to the earthquake. Not
only using the principle of earthquake resistance, *rumoh panggung* is also used to avoid annual flooding.

Aceh Traditional House constructed by some round pole that creates space under the house. Space under the house has function to efficiency produce air circulation to the upper house. The wall of the house consists of carving for air entering the house. The spiritual aspect of Aceh society that follow Islam religion leads them to build house headed to west as the direction of qibla.

f. Clusters
The beginning of the village formation, settlement area was built in central with surrounded by agricultural area so that the arrangement of the cluster pattern formed in the Gampong Lubuk Sukon reveal information related to the history of the initial formation of the village. This cluster arrangement in the Lubuk Sukon settlement had a centralized pattern (*tumpok* system). Cluster pattern in Gampong Lubuk Sukon was formed by four hamlets which lead by hamlet leader, namely Darussalihin Hamlet located in the south, Darul Makmur Hamlet in the north, Darul Ulum Hamlet in the east, and Darussalam Hamlet in the west.

g. Buildings and structures
Gampong Lubuk Sukon is one of village in Aceh that still maintains tradition and culture in the form of settlement and activities. Settlement buildings and structures that still have Aceh's distinctive character are called *Rumoh Aceh*. There are two types of traditional houses found in Gampong Lubuk Sukon, namely *Rumoh Rambat* (69 units) and *Rumoh Santeut* (58 units) (Figure 4).

![Rumoh Rambat](a) Rumoh Rambat](b)Rumoh Santeut

*Figure 4. Types of Aceh's traditional house in Lubuk Sukon Village*

*Rumoh Aceh* in Lubuk Sukon Village is a stilt house that has a variety of heights with poles made from wood, wall made from board, and roof from thatch. Combining parts of the house does not use nails, but using a peg or a strap. In general, the height of *Rumoh Aceh* is 2.5-3 meters high from the ground level. *Rumoh panggung* has a length of 10 m and a width of 10 m. *Rumoh Aceh* has 16-24 poles with a size from 20 until 35 cm. The height of the door of *Rumoh Aceh* ranges from 120 until 150 cm, this is intended for anyone who goes inside bow and greeting. Vertically, the division of space in traditional Acehnese houses consists of three arrangements, namely *saleub bubong*, *donya teungoh*, and *duek tanoh*. Horizontally, the function space of the Acehnese people is also divided into three rooms namely *seuramoe keue*, *seuramo teungoh*, and *seuramo likot*.

h. Circulation networks
The circulation pattern in Gampong Lubuk Sukon is formed by the development of a village that follows the main framework of a *tumpok* system. The type of circulation pattern is a network type. The types of roads in Gampong Lubuk Sukon are main road, village road, and
footpath. Main road functions to connect between provincial and village road with a width of 7 meters. Village road has a function to connect spaces in the village. The width of the road with this type is around 4 meters. The last type is the type of footpath that connects the house in one yard with a width of 1.5 meters.

i. Vegetation related to land use
   The characteristic of green open space in Gampong Lubuk Sukon consists of green space of riverbanks, garden, green way, and pekarangan.
   (a) Green Space of Riverbanks and local garden community. According to customary rules, green space of riverbank is tanah hareum where is forbidden to build any structure because it is a conservation area. Green space of riverbank in Gampong Lubuk Sukon could be used for agriculture activity. Society of Gampong Lubuk Sukon plant vegetables, fruits, seasoning plants or herb plants, and feed plants on green space of riverbanks. In the garden, the society plant vegetables, fruits, and seasoning plants or herbs plant with the organic pattern.
   (b) Green way. There are no special arrangements in Gampong Lubuk Sukon green way. The layout of green way using linear patterns following the road lane, and there are some plants that have function as shade plants and directional plants such as Tamarindus indica.
   (c) Pekarangan. Pekarangan consist some of the plants that have a certain function such as barrier function, herbal plants, consumption plants, and decorative plants with natural pattern.

j. Small scale elements
   The character of small-scale elements has a strong relation with various life activities and the culture of the community in Gampong Lubuk Sukon. An illustration of the layout of the small scale elements that form the Lubuk Sukon landscape can be seen in Figure 5.

![Figure 5. Illustration of the small scale-elements](image)

Based on the identification of landscape characteristics, the type of cultural landscape in Gampong Lubuk Sukon is a traditional settlement with three development zone using a centralized spatial pattern (tumpok system). Tumpok system makes meunasah as the center of Gampong Lubuk Sukon and surrounded by Aceh Traditional House with the society that follows Islam religion. Generally, the characteristic was formed by three-segment, namely core zone, supporting zone, and buffer zone (Figure 6).
The core zone is a central area of the traditional settlement in Gampong Lubuk Sukon. The elements in the core zone are meunasah and settlement area. Meunasah is a core cultural space of the permanent rituals activities that are still applied by the village community. In this zone, there is a traditional settlement that has existed since the early formation of the village. Spaces in rumoh Aceh are also used as temporal cultural spaces such as celebrations related to birth, marriage, and death. The second zone is support zone. In this zone, there are supporting facilities such as schools and clinics. Buffer zone is the outer zone of tumpok system. Buffer zone is used for agricultural activity and also has a function as protected area boundaries, to buffer the inner area from outside influences [8]. Buffer zone also a space for the cultural ritual activity such rice field as a ritual place to perform Keunduri Blang.

3.2. Conservation Management System
Conservation management that has been done by the government is to establish Gampong Lubuk Sukon as a cultural tourism village and provide funding for Rumoh Jamee which is used as a reception area. Conservation actions that have been done by the community maintain the existing traditional buildings, still upholding customary rules, and forming a community related to tourism.

Gampong Lubuk Sukon has been designated as a cultural tourism village that has a highly cultural value. This is reflected in the character of the landscape that forms the landscape. Zoning is an effort to maintain the conservation of a cultural landscape, elements, and important cultural values [9]. Based on the character of the landscape, this study proposes a zoning for conservation management, namely the core zone, the development zone and the buffer zone (Figure 7).
4. Conclusion
This study shows the type of the character of Lubuk Sukon cultural landscape is the traditional settlement that depends on local natural resources (agriculture) with centralized spatial planning (tumpok system) whose society is Islam religion. Based on LCA method, it can be seen that the elements that have the most powerful influence in the formation of Gampong Lubuk Sukon landscape is cultural activities, patterns of spatial organization, and the response to the natural environment. Cultural activities based on Islamic religion form the spatial organization pattern of the cultural landscape. Besides cultural activities and spatial organization patterns, the response to the environment also has the strongest influence on the formation of gampong landscape in terms of how residents protect the river by enforcing customary rules not to build structures along the river.

Based on the landscape character integrity, this study proposes a zoning for conservation management, namely the core zone has a function as protected area and conservation priority that have important value. The core area in this village is meunasah that surrounded by the traditional settlement. The second zone is development zone as a function to support activities in the core zone. This zone functions as an area that can be developed to support cultural tourism facilities such as welcome area, toilets, and parking lots. Buffer zone has functions for agricultural land, protect, and a barrier between inside and outside the village.

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