

## INDONESIAN CULTURAL LANDSCAPE DIVERSITY: CULTURE-BASED LANDSCAPE ELEMENTS OF MINANGKABAU TRADITIONAL SETTLEMENT

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### Abstract

*Indonesia is an archipelago country that has high diversity in the form of biodiversity, cultural diversity, as well as the diversity of landscape visual characters. These diversities are interrelated to each other and form a tropical character of Indonesian traditional landscape. Minangkabau is one of the largest tribes that is well known for its rumah gadang (big house). The houses were culturally arranged into an attractive traditional settlement. The settlement was constructed by elements that support Minangkabau people's lives. Those elements need to be appointed through research based on local culture. Purpose of the research was to study culture-based elements of Minangkabau traditional settlement landscape. The research site was located in Jorong Pariangan, Tanah Datar Regency, West Sumatra. The research used a descriptive method by using content analysis for custom manuscripts and interview results that contain elements of the settlements. The results show, there are twelve elements grouped into four basic elements: houses, mosque, surau, gelanggang (arena), medan nan bapaneh, cemetery, main road, tapian, river, forest, mixed garden, and ricefield. Minangkabau people activities accommodated by the elements were working, worshipping, learning, mastering self-defense, socializing, family care, recreation, cultural festival, funeral, and making judgment.*

**Keywords:** Vernacular; Rumah gadang; Pariangan; Design concept; Landscape Pattern; Local wisdom

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### Introduction

Settlement is part of living environment outside a conservation area found in either an urban or rural area functioning as a residential area or a place for doing, activities related to living and learning (Regulation no.4, 1992, Housing and Settlement). It is clearly stated that settlement is an area located outside a conservation area. However, a lot of traditional cultural communities occupy conservation areas as their settlements. These communities vary and are in a large number accounting for more than 300 ethnic groups. Their settlements are in various locations having varied environmental conditions ranging from lowland to mountainous areas, stretching from west to east part of Indonesia. All these become the richness of cultural landscapes of the country. Minangkabau is one of the earliest traditional cultural community in Indonesia [1], being well-known and having its own uniqueness of landscape characters [2-3].

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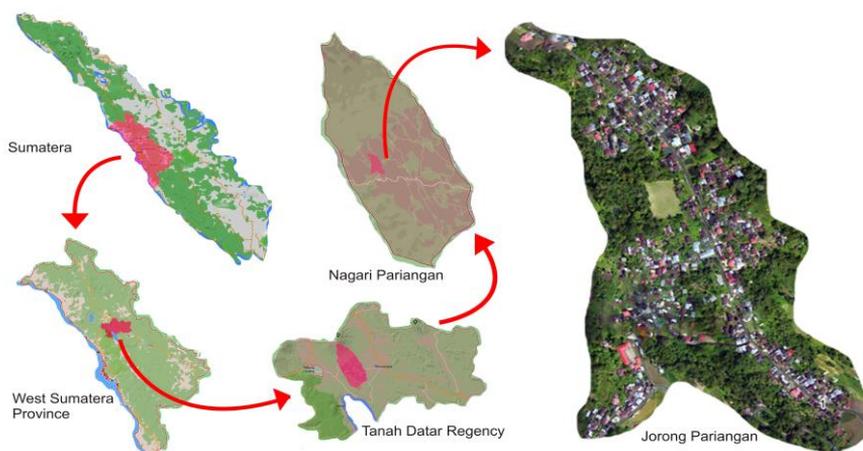
Historically, the settlement of Minangkabau traditional cultural community had its start in Marapi Mountain. A mountainous landscape was the early and basic character of that settlement [2]. As time passed, that landscape experienced some change a long with the community development [4]. The change was due to, among others, the coming back of the people having been away from where they belonged and developing their settlement area. This results in the change of the character into a more modern one leaving behind its traditional character. Traditional cultural landscape has to be preserved for the sustainability of Indonesia development. Nowadays, the landscape of the Minangkabau settlement especially in Jorong Pariangan is well-presented. However, as time passes, there will be some slow but constant changes that can take over that specific cultural landscape [5].

Landscape of a settlement is established by existing forming elements both physically and culturally. Those elements form a certain settlement pattern specific to a related culture. Theoretically [4], a settlement pattern can be generally classified into those of regular, irregular, linear, and agglomeration as well as those with greeneries (vegetation) and without greeneries. The earlier settlement pattern was mostly linear parallel to the main accessibility route/line or with the river flow [6]. Most research revealed that the elements of a settlement landscape were referred to those that were physical in the settlement instead of cultural elements. The existing physical elements found in a settlement location where not/are not always compatible with those represented by the cultural values especially those of Minangkabau's. This needs a special study or review by taking into account physical changes happening as time passes [5] while cultures strongly remain through some generations.

The purpose of the research was to identify and analyze elements of traditional settlement landscape of Minangkabau based on the local culture.

## Materials and Method

The research was conducted in *Jorong Pariangan, Nagari Pariangan*, sub district of Pariangan, Tanah Datar regency (Fig. 1).



**Fig. 1.** Research site (adaptation from Google Earth)

The method used was the qualitative description. There were 3 main stages in the research namely literature study/desk study, interview, and site observation (Fig. 2) [7-8]. The literature study was carried out before the interview and site observation in order to design a list of questions for the interview itself. The interview and site observation were conducted in the research site mentioned in March 2018.

The literature study was reviewing documents in the focus of books, scientific articles and others of similar types. The results were formulated into a tabulation containing important components in a settlement landscape generally related to basic elements such as buildings, open spaces, accessibility, and water (Fig. 2). Those basic elements were developed and used as the basis for the interview questions and referencing the site observation.

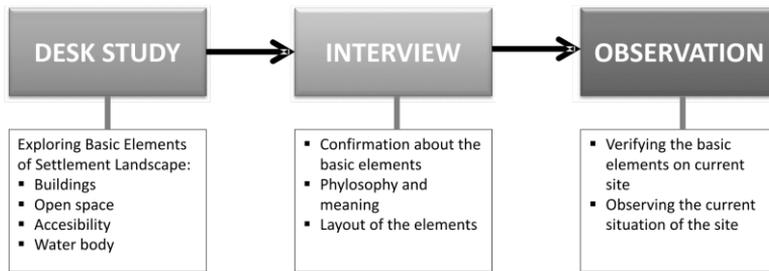


Fig. 2. Stages of research

The prominent custom figures of the cultural community of Minangkabau residing in Pariangan were interviewed to get information related to forming elements of traditional settlement landscape based on a cultural point of view. The custom figures interviewed included senior custom figures, representative of nagari from Karapatan Adat Nagari/KAN (custom representatives) and experts in Minangkabau culture [7-10]. During the interview, the first important question asked to the prominent custom figures was whether there were written custom documents that explained various kinds of ins and outs of Minangkabau culture. Next the questions are directed in accordance with table 1. The results of desk and interview results were analyzed using content analysis method [8-9, 11-12].

The site observation was done after the desk study and interview. The traditional settlement landscape of Jorong Pariangan was observed by a site visit. The observation was done to verify the elements of the settlements already obtained from desk study and interview. The arrangements of the elements were also closely observed. The results of the study was presented in the forms of settlement landscape map and spatial arrangement of the elements forming the landscape.

Table 1. Elements of settlement landscape

No.	Basic Elements <sup>1)</sup>	Elements
1.	Buildings	(1) House ( <i>rumah gadang</i> ), (2) Mosque, (3) <i>Surau</i>
2.	Open spaces	(4) <i>Gelandang</i> (arena), (5) <i>Medan nan bapaneh</i> , (6) Cemetery
3.	Accessibilty	(7) Main road
4.	Water	(8) <i>Tapian</i> , (9) River
5.	Vegetation	(10) Forest, (11) Mixed garden, (12) Ricefield

Note: <sup>1)</sup> the basic elements had been modified from Booth [13].

## Results and Discussion

*Jorong Pariangan* (Priangan settlement) is located at the foot of Merapi mountain being the character and identity of Minangkabau landscape [11]. This *Jorong* is about 4,32km<sup>2</sup> wide and it is 95km from Padang, the Capital of West Sumatera Province. The *Jorong* is located at the altitude of 600 meters above sea level and the average temperature ranges from 20-22°C [14].

*Nagari Pariangan* is such an old village in Minangkabau that it is called or referred to as *Tampuak Tongkat Alam Minangkabau* meaning the place of origin of the Minangkabau people. *Nagari Pariangan* consists of four *jorongs*: Sikaladi, Padang Panjang, Guguak, and Pariangan. Of the four *jorong*, Paringan is considered as the place of origin of Minangkabau culture. The mosque, “surau” and “prasasti” and long cemetery are protected elements and are cultural heritage especially the last two elements.

Table 2 shows basic landscape elements identified during the desk study, interview and site observation. Those elements are buildings, open space area, accessibility, water, and vegetation/greenery. The identified building elements were houses (ordinary houses and gadang house), mosque, and surau. Those of open space include *gelanggang* (arena), open field and cemetery/graveyard. The element of accessibility includes, road system/facilities especially main roads running through settlement area. The water element comprises elements dominated by water or related water utilization represented by rivers and streams (*tapian*). Forest, mixed gardens, and rice fields belong to the greenery elements.

**Table 2.** Elements of settlement landscape based on custom document, interview, and observation.

No.	Basic Elements	Elements	Existence of the elements based			Location
			MO	on: CF	FO	
1.	Buildings	(1) Houses	√	√	√	Spread Center Center
		(2) Mosque	√	√	√	
		(3) Surau	√	√	√	
2.	Open spaces	(4) <i>Gelanggang</i> (arena)	√	√	√	Center
		(5) <i>Medan nan bapaneh</i>	√	√	√	Center
		(6) Cemetery/graveyard	√	√	√	Spread
3.	Accessibilty	(7) Main road	√	√	√	Main axis
4.	Water	(8) <i>Tapian</i>	√	√	√	Center
		(9) River	√	√	√	West border
5.	Vegetation	(10) Forest	√	√	√	Around
		(11) Mixed gardens	√	√	√	Around
		(12) Ricefield	√	√	√	Around

Notes: MO = Old Manuscript; CF = Interview to Custom Figure; and SO = Site Observation

Table 2 indicates that all the elements of the settlement are identified in cultural documents, through interviews with prominent custom figures as well as by the result of the site observation. Those elements formed the traditional settlement of Minangkabau especially that of *Jorong Paringan*. The spatial arrangements of those elements in *jorong* were categorized into three parts: north, central, and south (Fig. 3).

Houses and *rumah gadang* are buildings occupied by a family or some families. *Rumah gadang* (Fig. 4) is a symbol of matrilineal relation, the roofs of which form buffalo horns. This character is specified to Minangkabau culture [2, 11]. The orientation of *rumah gadang* should meet the following criteria: (i) it should face east, where the sun rises, (ii) it should extend from north to south, and (iii) it should face a mountain. The houses and *rumah gadang* are evenly distributed in the settlement area. Jorong Pariangan had all the three requirements applied in its traditional settlement. It had a linear pattern and was located at the foot of Merapi mountain, straightly in line with the contour of the mountain to accommodate natural condition. That kind of pattern resulted in north-south orientation. Houses in Pariangan settlement are parallel to the main road making the roofs of the houses in a parallel position to the road. Having the houses facing the mountain means that the upper parts of the roofs are in a straight line with the contour of Merapi. That position makes it possible for the houses to face east. Jorong Pariangan is considered to meet those three requirements/conditions. This is local knowledge of the people constructing the settlement based on the need for sunlight in human’s daily life [15-16].

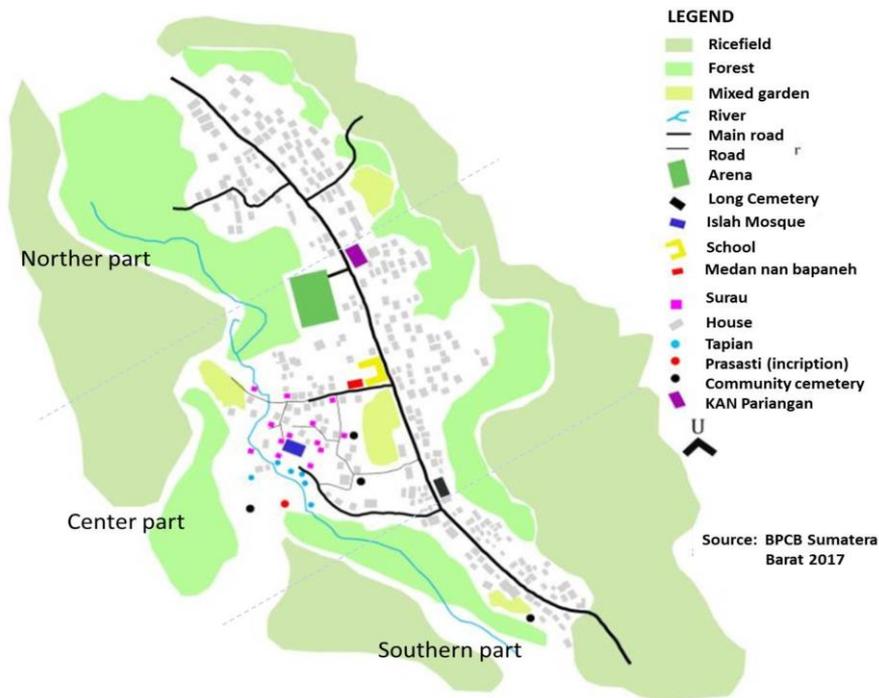


Fig. 3. Layout of Jorong Pariangan

The mosque was located in the centre of the settlement surrounded by 13 *surau*s. The position of *surau* against the mosque can be seen in figure 5. *Surau* is place for the community to learn religion deeply and practice self-defense [11, 17]. The 12 *surau*s introduced different practical religious principles (*tarekat*) but fundamentally referred to the same sources: Al-Qur’an and Hadits from Prophet Muhammad. All the people in the community did their worshipping/praying in the same mosque despite having different *tarekat*. Hence, the mosque is supposed to be a place for uniting the people of Jorong Pariangan. The name of the mosque was “Islah”, which means to unite/unity. Being in the centre of the settlement, this mosque was properly located for lasy access from every corner of the area.



Fig. 4. Rumah Gadang in Jorong Pariangan

Another basic element is the open space, an area without any building on it. This open space has prioritized for public. This space consisted of an arena, a *medan nan bapaneh*, and a cemetery (Table 2). There three landscape elements of the settlement were mentioned in a custom document (Tambo ML 490) as 1 to 11 times [11]. In an interview with some prominent custom figures, the role of those elements was mentioned just like what had been explained in the document. During the observation all the elements were still there and well preserved (Fig. 6).

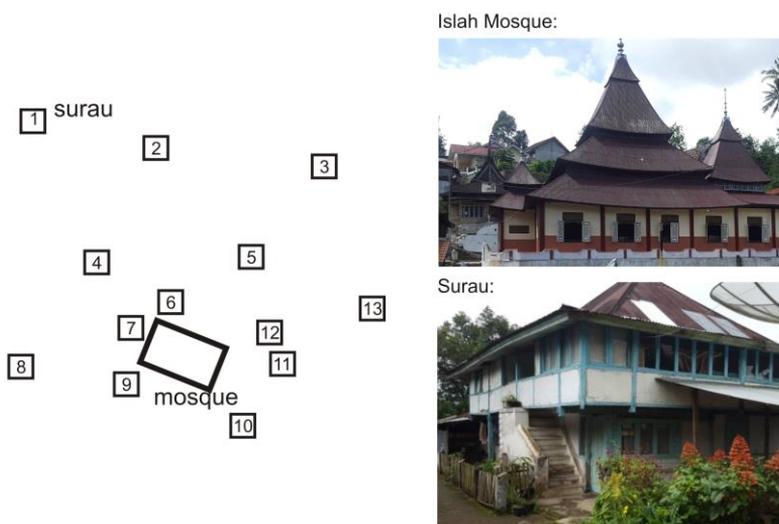


Fig. 5. The location of the mosque right in the middle among *surau*s



Fig. 6. Public open spaces

An arena is a public open space provided for skill competition, cultural festival, and other events related to cultural or non-cultural events. The arena was much wider than the field (Medan nan bapaneh). This space is used to make decisions or judgement on a cultural case happening among the community (like an open court). Public were allowed to come this decision-making event, and this made the place accessible to the people of the settlement. The next element of the open space was cemetery. Each group in the community had their own cemetery/graveyard in order to differentiate between the outsiders coming to the area and the original members of the group. The locations of the cemeteries are across the area of Jorong Pariangan while the arena and the field (*medan nan bapaneh*) are in the centre of Jorong Pariangan.

The accessibility element or road facilities are an important element forming the settlement pattern [4]. The main road in Jorong Pariangan settlement extends straightly from the south to north of the settlement. This road is at the ridge of the mountain, which is visually potential for us to view the surrounding area of the Jorong. The settlement pattern formed in Jorong Pariangan is a linear type parallel to the existing main road. However, the houses of the inhabitants of the area are not only located by the side of the main road, the houses can also be found in the second, third layer, etc., but the same pattern is maintained.

Elements closely related to water are the streams and the rivers. The river is the bordering of the area, and streams/river side are commonly used for washing, bathing, etc. They are located at the edges of the settlement. However, streams are not only found by the river. They can also exist by rice fields or mixed garden areas, the water of which flow down from a water source somewhere and it will flow to the nearest river as well. All these streams are used by the people living in Jorong.

The last basic element is vegetation including forest, mixed garden, and rice field. In general, the people of Minangkabau are farmers and thus the agricultural land there is quite extensive covering rice field and mixed garden. The nearest agricultural area that is close to the settlement is that of mixed garden. Rice field is located the farthest, in the area bordering Jorong Pariangan. The forest area relatively borders the settlement area both in the west part and in the east. Ecologically this condition is quite good beneficial or advantage for the health of the community around the settlement. The wind blowing from outside the area carries clean oxygen into the settlement. This is similar to the condition in the settlement of old city Buton, Southeast Sulawesi where forests and farming land spread the area [7].

The landscape elements of the settlement in Minangkabau Pariangan are the reflection of the people’s activities in that area consisting of daily and incidental activities. The relationship between the elements and the activities can be seen in Table 3. The road is the element that the people of Minangkabau used daily to their activities except family care that is done inside the house. The daily family care done outside and using the road element is bathing at the *tapian*. Daily activities done by the people in the area are working, worshipping, learning, self-defense, socializing, and family care. Mosque is the most visited element as they have to pray 5 times a day. It is obligation for the youth to learn their religion, Islam, so they are at a *surau* almost every day. *Surau* is also a place to practice self-defense. Their main daily activity is working mostly as farmers in their rice field, garden, or forest. Visiting neighbors or relations in the settlement is a socializing activity that is done almost every day.

**Table 3.** Relationship between the activities of the people and the element of the settlement landscape.

No.	Activities	Elements of the settlement											
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	Daily Activities:												
	a. Working							•			•	•	•
	b. Worshipping		•					•					
	c. Learning			•				•					
	d. Self-defense			•				•					
	e. Socialisation	•	•		•			•		•			
	f. Family care	•						•		•			
2.	Incidental Activities:												
	a. Recreation							•	•	•			
	b. Cultural festival		•		•			•					
	c. Funeral		•					•					
	d. Making judgement					•		•					

Notes: (1) houses; (2) mosque; (3) *surau*; (4) arena; (5) *medan nan bapaneh*; (6) cemetery; (7) main road; (8) *tapian*; (9) river; (10) forest; (11) mixed garden; and (12) ricefield.

Some incidental activities in the area are recreation, cultural festival, funeral, and decision making. The main road is the element used by the people to do these activities. The daily and incidental activities also used the elements of road, mosque, arena, and streams. The people of Minangkabau are very religious. They always learn more about their religion and apply all values learned in their daily life including in socializing within the community.

**Conclusion**

The basic elements forming the landscape of traditional settlement of Minangkabau based on the local culture are building, open space, accessibility, water, and vegetation/greenery. The building element consists of houses (including *gadang* house), mosque, and *surau*. That of the open space includes arena, field (*medan nan bapaneh*), and cemetery. The accessibility covers road facilities especially the main road. The water element consists of river and *tapian*. While that of vegetation comprises forest, mixed garden, and rice field.

The elements mentioned above accommodate the people’s daily and incidental activities. The daily activities are working, worshipping, learning, mastering self-defense,

socializing, and family care. Those that are incidental are recreation, cultural festival, funeral, and decision making. Their closeness to mosque and *surau* has made the people of Minangkabau religious.

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