

(Muhammad, 2021) Spatial
Pattern Change of The Nagari
Sianok Anam Suku (April
2021).pdf
by

Submission date: 31-Dec-2021 05:20PM (UTC+0900)

Submission ID: 1736612266

File name: (Muhammad, 2021) Spatial Pattern Change of The Nagari Sianok Anam Suku (April 2021).pdf
(576.63K)

Word count: 2130

Character count: 11217

Spatial Pattern Change of The Nagari Sianok Anam Suku

Rinaldi Mirsa^{1,*}, Muhammad², Rendi Setiawan¹

¹ Department of Architecture, Faculty of Engineering, Universitas Malikussaleh, Lhokseumawe, Indonesia
² Department of Chemical Engineering, Faculty of Engineering, Universitas Malikussaleh, Lhokseumawe, Indonesia

*Corresponding author: rinaldi@unimal.ac.id

Article history

Received: 07.02.2021

Revised: 02.04.2021

Accepted: 25.04.2021

¹ DOI:10.31629/jit.v2i1.3206

Abstract

Nagari Sianok Anam Suku is a historical village where 6 indigenous Minangkabau tribes' settlements have lived since the 16th century. Due to the urbanization development era in Bukit Tinggi City, forcing the surrounding area to change the Nagari Sianok Anam Spatial Pattern; Mass Layout, Road Network, Land Use, Building Forms, and Open Space. The purpose of this study is to analyze changes in the spatial pattern of the Nagari Sianok Anam Suku which is adjacent to Bukit Tinggi City. The method used is a descriptive quantitative method, the researcher aims to describe how spatial pattern change occurred. It can be seen from spatial changes analysis in the Sianok Anam Suku area from 16th to 20th centuries how area change was carried out by the people living in the area.

Keywords: urbanization development, spatial pattern, mass layout

1. Introduction

Cities in developing countries, one of which is Indonesia, are facing the paradox of urban development in the global transformation era where economic growth is very fast, physical development, and also has to deal with an increased urban partial ratio gap which until the present has not been resolved (Cohen, 1997; The United National Human Development Report). In spite of the city's rapid development in Indonesia, and one of them is Bukit Tinggi City in West Sumatra, the existence of the Nagari still exists even though disputes. The existence of a village is very important for the city. Because it is part of the city itself, such as an inherent identity, and it helps to support the economic life of the village producing. It continued several years ago that urbanization formed useful spatial for the community in order to accelerate the city development, either socially or physically (Lim.1990). According to Manuel (1977), the

formation of a city comes from urbanization in which forms of spatial planning based on ideas obtained in the research process.

The research area is in Nagari Sianok Anam Suku in Agam Regency, West Sumatra, Indonesia. There is a Green Canyon which is often called the Cimangko fracture, with a length of 15 km and a width of 200 meters along which borders between Bukit Tinggi City and Nagari Sianok Anam Suku. These characteristics made this location to be a tourist village, a special destination, and it still has original traditions and culture that many people like to visit. Seeing these conditions, the authors are interested in conducting research to find out whether or not change in spatial patterns in the Sianok Anam Suku Nagari Area.

The spatial pattern variables of the Sianok Anam Suku Nagari Village Area are including the mass layout, road network, land use, and building form. The mass layout is the distance orientation between the mass, the setback of the building, the mass shape, to identify the mass

placement pattern, while the road network is the attempts to connect to a place that is located on land to facilitate the motion quality. Also, land use development is the improvement community welfare issue. Finally, the building form is mainly the community efforts to establish activities in facilities form to maintain village prosperity and sustainability. The purpose of this study is to find out what factor that makes the Sianok Anam Suku Nagari area nearby to Bukit Tinggi City and change the spatial pattern at this time, finding the changes in building space patterns, and the spatial patterns have changed in the Sianok Anam Suku area in Indonesia.

2. Materials and Methods

This research was qualitative descriptive research. Qualitative research in this paper was non-mathematical research with the process of data producing from findings based on observations, surveys, and interviews in the research area. The descriptive analysis used in this research described the research area according to data obtained, namely by looking for old sources from traditional leaders and village archives and re-describing how the process of the area forming and persisting to present time.

The area of this research in in Nagari Sianok Anam Suku which located in IV Koto Sub-district, 391.23 Ha with a population of around 2,884,000 people. Historically, the name of Sianok came from someone who was brave and wise, as presented on Fig. 1.



Figure 1. Nagari Sianok Anam Suku
Source: Survey data, 2020.

According to Tambo, the history of Nagari Sianok is the migration of Nagari Pariangan Padang Panjang residents to Luhak Agam which took place

in 4 groups. One of the groups formed a Nagari 4 Koto troop, namely Nagari Guguak, Tabek Sarajo, Sianok, and Koto Gadang. Those who passed Mount Marapi reached Nagari Balai Gurah and Pasia Ampek Angek, and finally entered Bukit Tinggi and settled in the 4 Nagari and made Nagari Sianok Village.

Estimates of the land date to the 16th century. At that time, the people's livelihood was only farming. They were trying to land to expand their plantations, the thickets were burned, and then they were built field huts and then became villages until the current time.

3. Results and Discussions

3.1 Mass Layout

The building mass that has been analyzed by the researcher was all the coverage arrangements in each existing Jorong (sub-village) in order to get the right results. The researcher described this analysis with a spatial approach and in terms of several items; natural, networks, people, and building masses. The following is an objective discussion of observation in the Nagari Sianok Anam Suku Area.

The utilization of open space in the Jorong Lambah area is various. There were five types of open space utilization by residents, as follow:

- **Ground**
It was used as a place for small retail businesses such as retail gasoline, as a place to see a panoramic view of the Sianok Valley, and also as a hangout place for youth in Sianok.
- **Rice field and garden**
Most residents in Jorong Lambah work as farmers and plant gardens on the land they own. So that we can see a lot of rice fields and plantations when passing Jorong Lambah with views of the earth's fracture and a flowing river.
- **Pond**
The pond in Jorong Lambah is used as a fish farm and a fishing rod. Usually, residents make a pond next to the food stall so that when a customer orders food, the shop owner immediately picks up the fish from the pond.
- **Vacant land**
Vacant land was not much activity or function space that was used by residents. Usually, there were little trees planted, bushes, which are

1

tended or not.

• Resident's yard

Utilizing their yard with plant vegetables and fruits, such as chilies, cassava, corn, mango, banana, and coconut trees.

• Corridor

The corridor is the space between the residents' houses, which is usually used as a place to dry the rice that has been harvested before it is pounded in a rice pounding machine

1

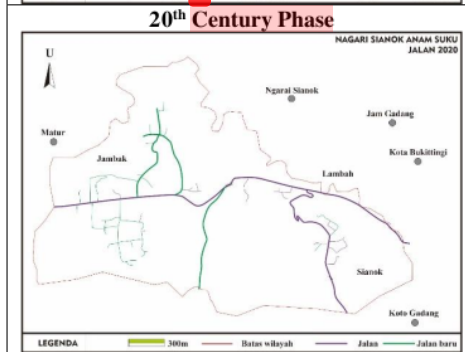
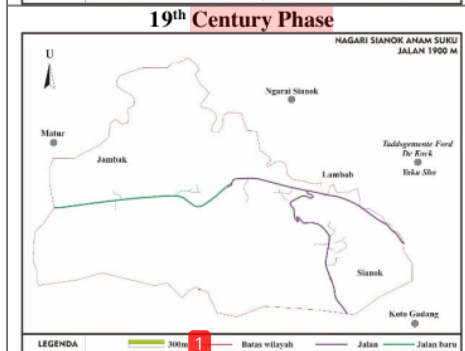
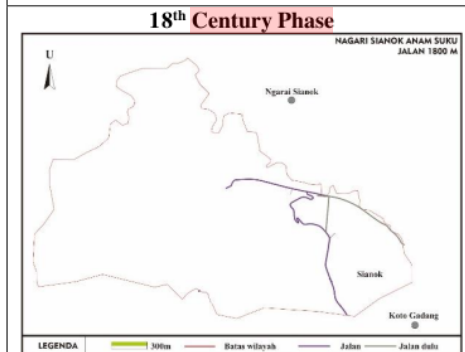
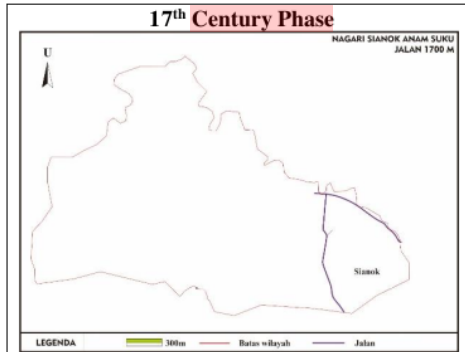
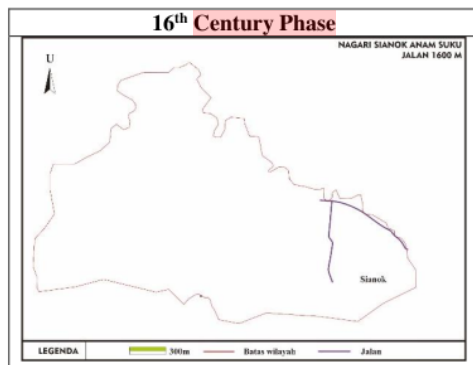
3.2 Road Network

Road network/linkage is one of the elements forming a block pattern in an area. In addition, roads can also be called spaces that are in between a hallway of public space or block areas that create a space connecting the network. The existence of roads and conditions of the Nagari Sianok Anam Suku area cannot be described without understanding the development of the area as a whole.

The road was developing and influenced by the agricultural sector, the need for new land, the density of settlements in Jorong Sianok therefore the distribution is centralized, spread out, and rarely formed naturally.

Road development of each century changes quite rapidly. As well as describing and matching information to become a reference material for the development of the Sianok Area were known from previous village archives to traditional leaders' stories to describe the form of road growth in the Sianok Anam Suku Nagari Area, as presented on Table 1 and Figure 2 below.

Table 1. Road pattern development



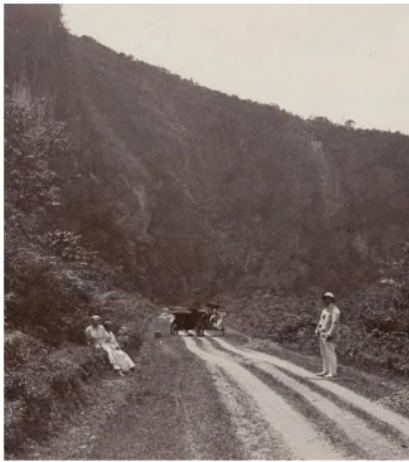


Figure 2. Sianok Anam Suku road between 1900-1939
 Source: Village archive, 2020

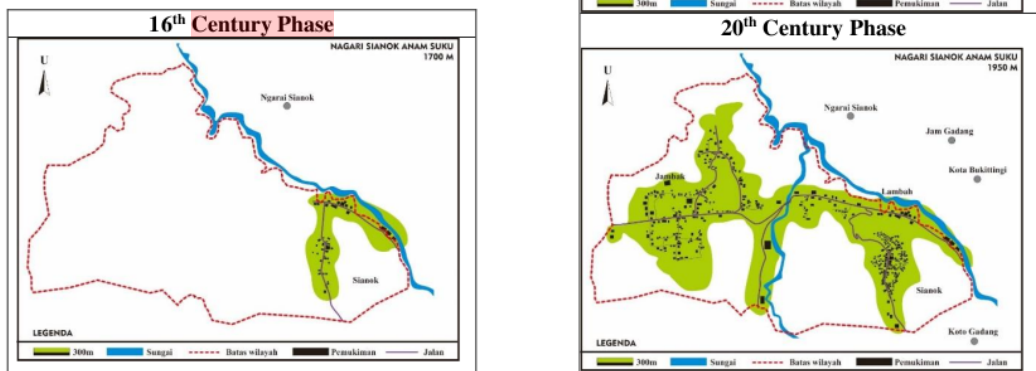
3.3 Land use

Spatial pattern changes of the Nagaris Sianok Anam Suku village in carrying out social activities in the form of the economic activity can be mapped based on their respective land uses. By means of mapping, the authors can identify Figure-Ground.

In 2020, the village is more dominated by residential areas of around 3075 people with a population of 1117 people in Jorong Sianok, 732 people in Jorong Lambah, and 1226 people in Jorong Jambak. Thereby people need commercial functions of staples, thus small and medium businesses have been developed in the area and also grew on the roadside.

The growth of the new function spatial pattern can be seen from the 16th century to the 20th century as on the Table 2.

Table 2. Building mass development



3.4 Open Space

There are several open space areas in the Nagari Sianok Anam Suku area mainly the recreational park, such as Medan Nan Bapaneh Park. The recreation area is at Jorong Lambah, namely as kapal toman and Lambah panoramic. This area was often visited by tourists during the afternoon and was still the tourist destination until this time. This location is in front of the Jamik Sianok Anam Suku Mosque.

The park has existed since the beginning of 16th-century civilization and is still used by residents in various village activities until the current time. The roads in this area are considered village roads that are used by the community for mobility activities

4. Conclusion

It is founded that there are some changes of the spatial pattern at Sianok Anam Suku Nagari Village area when comparing the situation between the 16th to 20th century. Spatial changing is including the mass layout, road network, land use, as well as the building form. Factors that makes the changing are includings: the utilization of open space in the Jorong Lambah area, road developments, the existence of small and medium enterprises, as well as development of new recreation parks. Those changes are mainly aims for the better and improvement of Sianok Anam Suku people living quality.

References

- [1] F. Mery. 2009. Kajian Tingkat Resiliensi Kawasan Pariwisata Sanur terhadap Tsunami ditinjau dari aspek atraksi, aktivitas dan amenitas. Denpasar.
- [2] Antonius, Hari Prasetyo. 2012. Perancangan Desa Wisata Kebonangung. Universitas Atma Jaya. Yogyakarta. Carmona, M. et al. 2003. Urban Design Urban Spaces. Oxford.
- [3] Ernawati, Jenny. Tata Ruang Hunian Pengrajin Akar Jati Desa Tempellemahbang. Universitas Brawijaya.
- [4] Evansyah, Eggy. 2014. Kebertahanan kampung tua sekayu terkait keberadaan mal paragon di kota Semarang. Semarang.
- [5] Gerald, Krauses. 1975. The kampung Jakarta, Indonesia A Study Of Spatial Patterns In Urban Poverty. Jakarta.
- [6] Khudori, Darwis. 2002. Kampung Pemerdekaan. Yogyakarta.
- [7] Mirsa, Rinaldi. 2016. Elemen Tata Ruang Kota. Penerbit Graha Ilmu. Yogyakarta.
- [8] Mohammad Ridjal, Abraham. 2016. Building Form Berdasarkan Sejarah Kawasan Bangunan Pada Jalan Basuki Rahmat. UB. Malang.
- [9] Puspita Dewi, Dhyah. 2015. Kebertahanan Kawasan Perkampungan Pedamaran. Undip. Semarang.
- [10] Rizal Aprianto. 2016. Proses Kebertahanan Kampung Petempen dalam Perkembangan Kota. Semarang.
- [11] R. Puspita Ayu. 2012. Kebertahanan permukiman sebagai potensi keberlanjutan di kelurahan purwosari Semarang. Semarang.
- [12] Sullivan, John. 1992. Local Government And Community In Java. Yogyakarta.
- [13] Suparman, Agus. Ruang Terbuka Kota. Universitas Gunadarma. Jakarta.
- [14] Soetomo, S. 2009. Urbanisasi & Morfologi. Graha Ilmu. Yogyakarta.
- [15] Yunus, H. S. 2000. Struktur Tata Ruang Kota. Pustaka Pelajar. Yogyakarta.
- [16] Zahnd, Markus. 1999. Perancangan Kota Secara Terpadu. Penerbit Kanisius. Yogyakarta.
- [17] Guinness, Patrick. 1993. Harmony And Hierarchy In Javanese Kampung. Yogyakarta.
- [18] Indahing Ilyas, Widji. 2013. Kajian bentuk tata massa di Kawasan bangunan ci-walk, Iteas Bandung.
- [19] Juwono, Sudarmawan. 2009. Kampung Kuningan Di Kawasan Mega Kuningan Jakarta "Kebertahanan Kampung Dalam Perkembangan Kota". Jakarta.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY).

(Muhammad, 2021) Spatial Pattern Change of The Nagari Sianok Anam Suku (April 2021).pdf

ORIGINALITY REPORT

18%

SIMILARITY INDEX

11%

INTERNET SOURCES

6%

PUBLICATIONS

1%

STUDENT PAPERS

PRIMARY SOURCES

1	Rinal Mirsa, Muhammad, Rendi Setiawan. "Spatial Pattern Change of The Nagari Sianok Anam Suku", Journal of Innovation and Technology, 2021 Publication	12%
2	garuda.ristekbrin.go.id Internet Source	5%
3	www.sciencegate.app Internet Source	1%

Exclude quotes On

Exclude matches Off

Exclude bibliography On