

# Cultural and Natural Mapping of Koto Sentajo with First Step of Historic Urban Landscape Approach

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## Abstract

Koto Sentajo is a settlement that still maintains its cultural customs and natural and cultural landscape from the many Koto's in the area along the Kuantan River. Koto Sentajo is also a cultural heritage area, as stated in the decision of the Regent of Kuantan Singingi Regency. Therefore, the identification and mapping of the Koto Sentajo area is something interesting to do. This is one of the conservation steps based on the Historic Urban Landscape (HUL) approach. This study employs a qualitative methodology by reviewing and describing relevant literature, field research, and remote sensing. Data were collected through observation, documentation, and aerial photography (drones) and analyzed with a review of the old Dutch literature and archives. Data from drones is processed in three steps to produce maps: the Orthorectified process, the Digital Elevation Model process, and the Lay outting process. The Koto Sentajo mapping is divided into landscape mapping, road network map, land contour map, tribal land area map, map of the existence of the *Godang* house, map of physical settings, and timeline map of the development process.

Furthermore, the identification of cultural products is outlined in a matrix that divides these activities into groups of joint celebrations, activities of daily life, customary law activities, and activities in forest management. The anticipated outcome of this study is a recommendation for the next HUL step and a starting point for further research. These maps become necessary layers of information for indigenous peoples (users), conservationists, policymakers, and the public as part of developing knowledge.

**Keywords:** Koto Sentajo; Historic Urban Landscape; Cultural Mapping; Saujana; Conservation.

### 1. Introduction

The existence of settlements along the *Batang* (river) Kuantan is interesting. This country, or *Nagori*, had already been the focus of anthropological research in the Dutch colonial era. This is based on the records under *Dwars Door Sumatra: Tocht Van Padang Naar Siak* by Ijzerman in 1895. Eighteen countries are grouped into *IX Koto di Mudik*, namely, *Loeboek Ambatjang; Soempoerago; Kota Toea; Soengei Pinang, Loeboek Djambi; Taloeke Baringin; Goenoeng; Toear and Loeboek Tarantang*. After this, it is called *V Koto di Tengah*, namely, *Kari, Taloeke; Simandalak, Sibaroekoen; and Siboeajo*. Meanwhile, *IV Koto di Hilir* mentioned *Pangean, Baserah, Inoeman, and Tjeranti*. This country or settlement is developing administratively into a village or sub-district. Ijzerman (1895) also stated that there are 3 (three) Koto or native lands, namely *Sintadjo, Kopah, and Benei*.

Furthermore, based on the memoirs of the Dutch controller, Swart (1930), and the official report of the colonial department from the *Notulens Institutet Anthropology* written by Grondgebied (1910), there is an autonomous region (Koto) or state territory (standing alone) which is mentioned as *zelfbesturende landschappen* along the Kuantan River. Koto is a country's central government and customary center (*nagori/naghoghi/nagari*) in a residential area along the Kuantan River. This river flows for approximately 800 KM. from upstream, namely, Lake Singkarak in West Sumatra, called Batang Ombilin, and continues to the Kuantan Singingi district, called Batang Kuantan, and continues through the Indragiri Hulu district. Indragiri Hilir district is called the Batang Indragiri River, where in this Indragiri region, there used to be a large kingdom called the Indragiri kingdom.

These Koto are called "*Negeri nan koerang oso doea poeloeh*" or countries less than one in twenty (Grondgebied, 1910; Swart, 1930; Tsuyoshi, 1997). The area was then included in the Residency of the Netherlands, the 19 countries or Koto are, the unitary territory of *IV Koto di Ilir*, which includes Cerenti, Inuman, Baserah, Pangean; the unitary area of *V Koto di Tengah*, which includes Siberakun, Simandalak, Taluk, Kari, Sibuyo; the unitary area of *V Koto di Mudik* (Lubuk Jambi) includes Lubuk Terentang, Toar, Gunung, Teluk Ringin, Lubuk Jambi; the unitary area of *IV Koto di Mudik* (Lubuk Ambacang) includes Koto Tuo, Sungai Pinang, Lubuk Ambacang and Sampuraga; Finally joined *Koto di Lubuk Ramo* (Grondgebied, 1910). The Koto Benai, Kopah, and Sentajo are indeed mentioned as not part of the term 19 countries, and another note says that these three Koto are original Koto that are older in settlement than the other Koto. Koto Sentajo is a fascinating settlement. Of the many Koto in the area along the Kuantan River, Koto Sentajo is a settlement that still maintains its cultural customs and natural and cultural landscapes; this settlement, cultural activities are still ongoing, traditional and organizations within the customary community structure is maintained, even though in terms of political and geographical administration, Koto Sentajo has become a sub-district within the Kuantan Singingi district. Koto Sentajo became a cultural heritage based on the Decree of the Regent of Kuantan Singingi.

This is undoubtedly an interesting impetus for efforts to document the Koto Sentajo area. This identification and documentation step is undoubtedly one of the steps in conservation efforts based on the Historic Urban Landscape (HUL) approach. HUL is a new paradigm in heritage conservation based on UNESCO recommendations in 2011. HUL is defined as an area that is understood as the result of historical layers, with cultural and natural values and

attributes that are interrelated both physically and non-physically so that the regional context and the more comprehensive geographical layout are the beginning of the management and development of cities for the future (UNESCO, 2013). According to Taylor (2018), HUL is defined as the whole process that includes the city heritage, culture, nature, tangible and intangible aspects, social, economic, visual images, and experiences of the physical morphology of a city based on the basic concept of an urban area as a series of layers of time, which connects the past, present, and future as in the construction of Saujana. Furthermore, HUL offers contextual dialogue for professionals, such as urban planners and designers, and cultural heritage experts from all walks of life (national and local) to appreciate how multi-layered cultural experiences in urban landscapes generate and involve adaptive renewal, rehabilitation or reuse (Taylor, 2019).

In the HUL approach, several steps become a reference in the conservation effort. The main steps in the HUL approach are Performing a thorough inventory and mapping of natural, cultural, and human resources; Participatory planning and consultation with stakeholders; Assessing the vulnerability of Cultural Heritage due to social, economic, and climate change pressures; Integrating the heritage values of the Saujana and their vulnerability status into the broader framework of Saujana development; Prioritizing conservation and development policies and actions; Establish appropriate (public-private) partnerships and local management frameworks; and Develop a mechanism for coordinating various activities between different actors (UNESCO, 2013, 2016). In addition to the seven main steps, there is the HUL fast scanning method; in this method, there are main concepts, namely exploration, translation, and inspiration (Damayanti et al., 2021). The three principles are translated into five steps: Historical environmental analysis, Challenges and opportunities, Vision determination, Development principles, and Proposals for future perspectives (Damayanti et al., 2022).

Pérez and Verbakel (2022) mentioned during the 2020 Fukuoka meeting that a consensus was reached regarding categorizing Urban Heritage into four distinct groups: the broader context, urban aspects, architectural elements, and intangible cultural elements. Furthermore, the implementation of the "Fukuoka Outcomes," which provide recommendations on the Historic Urban Landscape in World Heritage Cities, can be carried out through a series of eight processes as outlined below: The key areas of focus include priority actions and projects, integration and coherence, governance structure, sustainable development status, needs, and priorities, mapping/survey, vulnerability assessment, partnerships for local management, and capacity reinforcement (UNESCO, 2020).

The whole step of the HUL approach always begins with identification efforts using documentation. This article is the first step in a comprehensive conservation effort by taking a Historic Urban Landscape (HUL) approach. This step was taken in an effort so that in the future, other steps can be carried out efficiently so that conservation efforts are more focused. This paper will map the natural and cultural activities in the Koto Sentajo settlement so that efforts to maintain and preserve the knowledge aspect of living in the Koto Sentajo community can continue to be maintained in the best way.

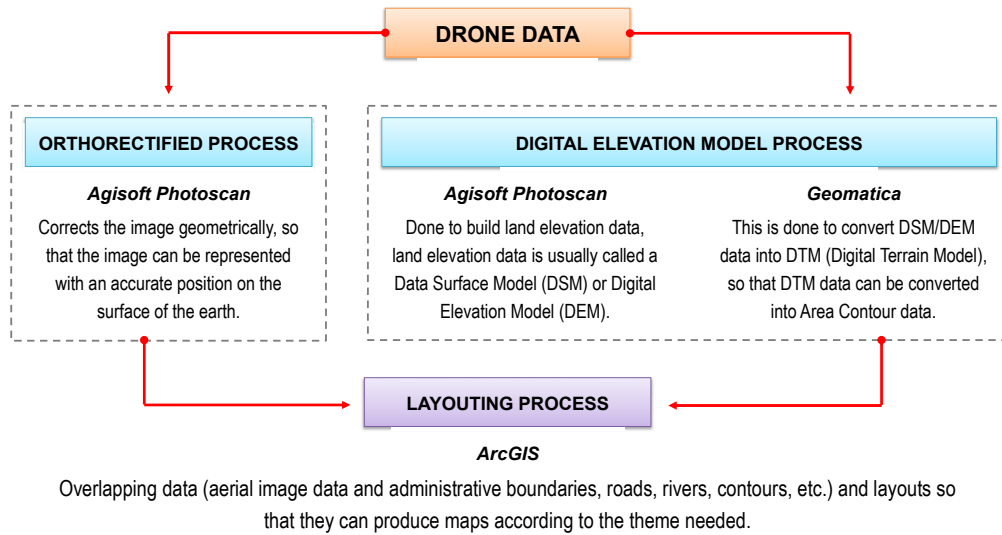
## 2. The Materials and Method

This study uses a qualitative approach by reviewing and describing literature, field studies, and remote sensing. This inquiry seeks clarity and acquires relevant facts about the Koto Sentajo, Riau, Sumatra research site. A comprehensive examination of existing scholarly literature and an analysis of historical records from the Dutch archives will provide a solid foundation for conducting field studies to gather primary material. Using Unmanned Aerial Vehicles (UAV), also known as drones, facilitates data acquisition through observation, documentation, and remote sensing. The focus of this topic pertains to Koto Sentajo, a research subject that continues to persist in its tangible manifestation through its natural and cultural settlements.

The authors conducted ethnographic research by being directly involved in every process of traditional activities in Koto Sentajo. Data was collected by observing traditional activities at Koto Sentajo in the field, recording and documenting each finding, and then analyzing it according to the ethno-grounded method. The authors participate in the activities during the second day of Eid, and the researchers attend the iftar event, the process of paying fine, inaugurating cultural leaders, and building a Rumah Godang from the beginning to the end. The key informants were Datuk Penghulu and Monti as cultural leaders and others who had met during the research.

The process of data analysis entails the identification and classification of cultural and natural elements into distinct themes or categories. This paper examines various aspects of the Koto, including its early historical creation, the presence of cultural attractions, accessibility, architectural style and categorization of buildings in the region, construction duration and periods of renovation, the tribe-fostered area, and other relevant map issues. The findings of this study consist of preliminary summaries of literature findings and field studies, as well as comparisons and discussions about linkage analysis, equations, and mapping. To generate maps, data collected by drones undergoes a series of three distinct stages: the orthorectification process, the digital elevation model process, and the layout process. The orthorectification procedure involves utilizing Agisoft Photoscan software to rectify the geometric properties of an image, enabling an accurate representation of its corresponding location on the Earth's surface.

Moreover, the digital elevation model (DEM) process involves two sub-steps. The first step entails utilizing Agisoft Photoscan to generate land elevation data, referred to as the Data Surface Model (DSM) or Digital Elevation Model (DEM). The second step involves employing Geomatica to convert the DSM/DEM data into a Digital Terrain Model (DTM). Subsequently, the DTM data can be further transformed into area contour data. Ultimately, the procedure concludes with a layout phase utilizing ArcGIS software. This facilitates the integration of various data components, such as aerial photo image data, administrative boundaries, roads, rivers, and contours, into cohesive map layouts that align with the specified thematic requirements.



**Figure 1:** Data Processing Chart of Mapping Koto Sentajo Settlement  
**Source:** Authors

### 3. Results And Discussion

Koto is a habitation situated in an elevated terrain or elevated portion of a region adjacent to the Kuantan River, serving as the focal point for the nation's cultural and traditional practices. Here, the Datuk Penghulu, Monti, Dubalang, and Urang Siak (Khatib/Imam), along with the Urang Godang (dignitaries) tribes, administer their governance. Koto serves as the administrative hub of the government. Within a particular nation, various distinct features exist, like Koto, Banjars (residential villages), safeguarded woods, prohibited forests, reserved forests, and additional topographical elements such as rivers and hills (Faisal, et al., 2023). Koto serves as the regional capital due to the presence of customary governance elements inside the Koto area, such as the Balai (hall), Rumah Godang (Big/Tribal/Traditional Houses), and Mosques, which are not commonly observed in other residential areas under the country's administrative framework (Faisal & Ikaputra, 2022).

The Koto region encompasses a geographical expanse that serves multiple purposes, including the production of rice fields, the preservation of protected or customary forests known as Kukoks, and the operation of livestock farms. A Rumah Godang, a traditional dwelling, and a Balai, a communal hall, serve as a significant locus for indigenous groups to convene and engage in deliberations about customary matters. Additional structures in the area include Rangkiang, used for rice storage, a mosque for religious practices, and a designated training ground known as Halaman/Sosoran, utilized explicitly for Silat training, a form of martial arts. Moreover, the area is home to a tribal burial cemetery where the indigenous community is interred.



**Figure 2:** Koto Sentajo Settlement with Kuantan River in the background  
**Source:** Authors

Koto Sentajo is the sole Koto that encompasses exclusively natural and cultural components. The persistence of traditional activities remains steadfast in contemporary society, coexisting alongside advancements in technology and the growing influence of globalization. Koto Sentajo is situated close to the town of Taluk Kuantan, serving as the capital city of the Kuantan Singingi region. The distance between the two locations is a mere 15 km, which can be covered in approximately 20 minutes. Despite its proximity to the district government center, the residents of Koto Sentajo demonstrate continued adherence to their forebears' traditional customs and practices. The community still obeys the law, hand in hand with the ceremonial law from the government.





**Figure 3:** Godang House, Mosque, Custom Hall, Rangkiang, Sosoran/Pondam Hall (Courtyard for Martial Arts), and Buffalo Stable at Koto Sentajo

**Source:** Authors

*Map of Koto Sentajo Landscape*

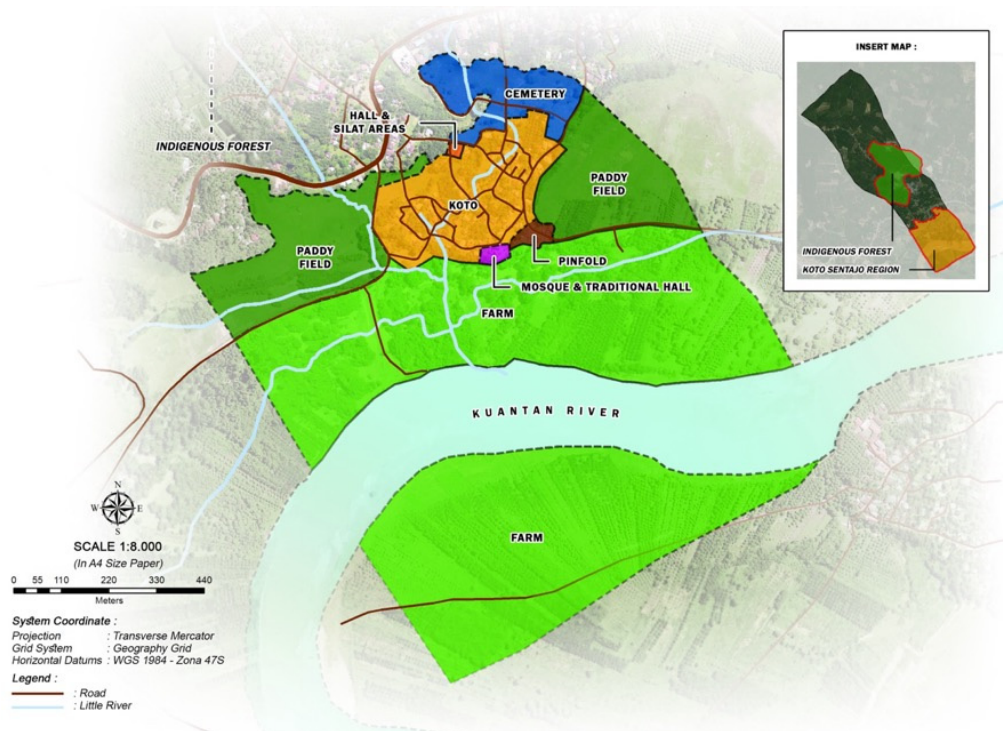
Landscapes are an essential part of the HUL approach. Landscapes are the first elements that need to be identified and documented. Then, this landscape is mapped to make it easier to see developments or changes that occur without destroying the natural order later. In the structure of the Koto Sentajo state space, there is a jungle area of forest, which is a place for storing natural reserves, gardening, and looking for wood, honey, and other forest products. Then, the Darek area is the Koto area, the highest area of the place, land, and houses as settlements, Koto land, and cemeteries. Furthermore, other landscapes are in the form of a Padang area that contains rice fields, fields, grazing areas, and pastures for livestock.



**Figure 4:** Protected Forest (Customary Forest) of Kenegerian Sentajo

**Source:** Authors





**Figure 5:** Map of the Koto Sentajo Settlement Landscape  
**Source:** Authors

### 3.1 Map of Transportation and Access Networks in Koto Sentajo

The river was the main transportation route for the people of Koto Sentajo in the past. In addition, the Kuantan River is a liaison between the regions of all the countries and the existing Koto. This river stretches from Ombilin in West Sumatra until it empties into the Strait of Malacca. Apart from being a transportation route, the river is also a place to earn a living in the form of fish and other water catches. The river is no longer the direct access but is still used as a natural resource and food. The tradition of Pacu Jalur (boat race) on the Kuantan River is still a commemoration of the anniversary of the independence of the Republic of Indonesia. Now, access to transportation is replaced by a highway (landline) that connects the provincial and district capitals. The main road that passes through Koto Sentajo is a national arterial road connecting cities on Sumatra Island. In addition, there are local roads, residential roads, and roads to the stables and rice fields in the Koto Sentajo area. Small rivers are still used for irrigation and fishing routes.



**Figure 6:** Map of Transportation Routes in the Koto Sentajo Settlement  
**Source:** Authors

### 3.2 Map of Koto Sentajo's Settlement Land Contour

Koto Sentajo's position is on a high land or hill. This is, of course, based on the considerations of previous parents to avoid residential areas from overflowing river water, in addition to being a fortress against natural enemies such as wild animals and war. The highest area is also seen as the best place in a landscape. Koto Sentajo is located at an altitude of 91-121 mdpl, the burial ground area being the highest, followed by the mosque's location.



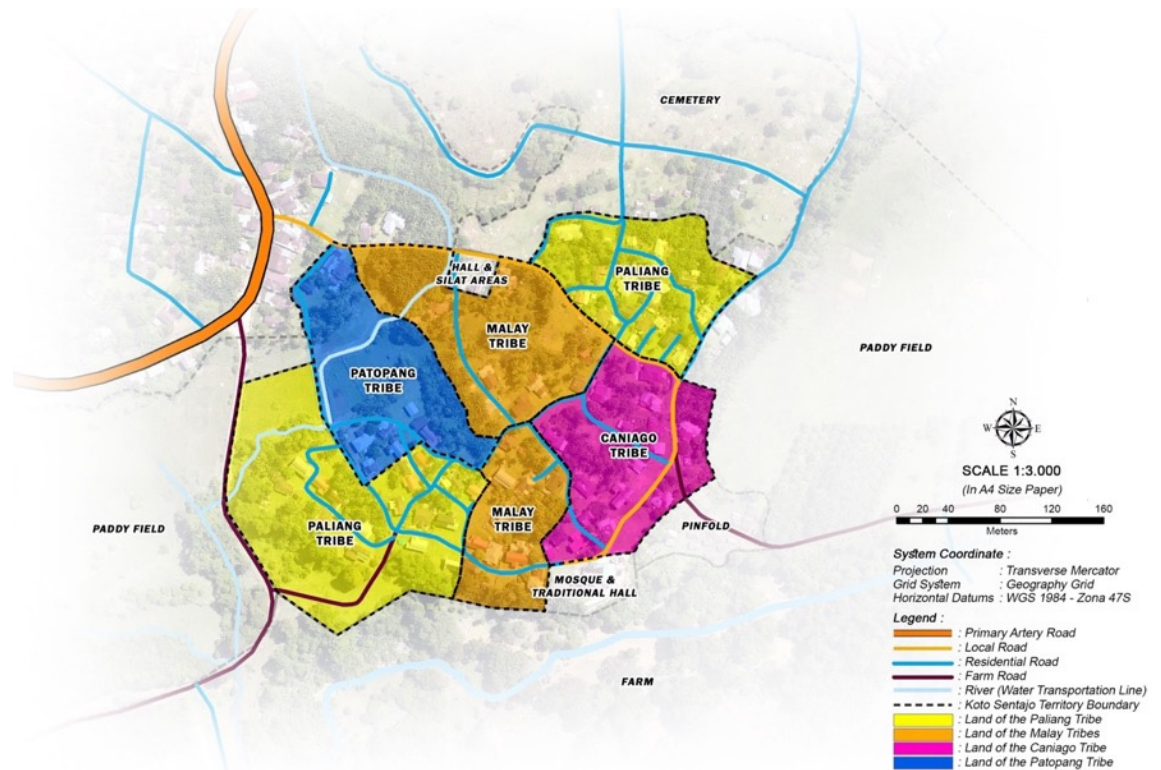
**Figure 7:** Koto Sentajo Land Contour Map  
**Source:** Authors

### 3.3 Map of Tribal Land Areas and Fractions

The people of Koto Sentajo adhere to their tribal customs. The Tribe reflects the indigenous community; the Tribe is a collection of families with matrilinear lineages from the mother. The tribal leaders are called Datuk Penghulu, then assisted by Monti, Dubalang, and the Urang Siak (Khatib/Imam) in running the wheels of customary government. There are 4 (four) main tribes in Kenegerian Sentajo, namely the Paliang, Melayu, Caniago and Patopang tribes. Tribal land as customary land is also found in Koto Sentajo, where the division of this land into areas that they must obey. Tribal land cannot be traded and is regulated by the respective tribal holders. The tribal leader must agree upon the use and cultivation of tribal land, and if a dispute occurs, it will be resolved by deliberation, internally and between tribes. The tribal land is not only used by tribal members as a Rumah Godang (big house) but also as a rice field or farmland. Each member of the Tribe may only use the land based on the permission of the tribal leader by the territory owned by the Tribe. Each Rumah Godang from the Perut (stomach) or clan (mother's lineage) stands on the land of their respective tribes. Additions or developments and divisions of the parent tribe may only build a Rumah Godang on the land of the parent tribe. Likewise, land management is based on the rules made by the parent tribe. From the beginning of settlements in Koto Sentajo, only the Paliang tribe developed regarding the number of settlements and the addition of sub-tribes. The Paliang tribe has tribal divisions into 3 (three) tribes: Paliang Lowe, Paliang Soni, and Paliang Tanjung (Ujung Tanjung). The addition of this Tribe occurred because of the number of families or



clans, then the number of their godang houses also increased. It can be seen from the distribution map that the houses of the Paliang sub-tribe are located on the land of the parent tribe (see Fig 9).



**Figure 8:** Map of Tribal Lands in Koto Sentajo  
Source: Authors





**Figure 9:** Map of Land Use by Tribal Fractions in Koto Sentajo

**Source:** Authors

### 3.5 Map of the Existence of the Rumah Godang and its Distribution

The Godang House (Rumah Godang) is a place where all members of the Tribe gather. Rumah Godang has a typology of houses on stilts with a gable roof that is split in two with the material using wood from protected forest areas (Kuswoyo & Faisal, 2021). The Rumah Godang was built with customs that cannot be violated. All customary rules in development procedures must be implemented so other indigenous peoples recognize the Rumah Godang. This house is the traditional center of Rang Sentajo (Sentajo tribal community) and a gathering place for the four major tribes (Yasir et al., 2021). The functions of the Rumah Godang are to enter the Tribe (parents), friendship, resolve customary disputes of a household, and build tribal consensus, as well as a replacement place for "pisoko patah tumbuah hilang berganti" or replacement for day-to-day management (Faisal et al., 2018). At first, there were 4 (four) Rumah Godang, which symbolized the existence of the prominent Tribe in Koto Sentajo. It is estimated that the age of the Rumah Godang is more than hundreds of years. The existence of the Rumah Godang continues to grow with the number of people. As can be identified and mapped, there are 27 Rumah Godang from various tribes. The Rumah Godang is divided into 2 (two) units of Caniago tribal houses, 6 (six) units of Malayu tribes, and 3 (three) units of Patopang tribes, followed by Paliang tribal houses with a total of 16 (sixteen) units. The house of the Paliang tribe is divided into 7 (seven) units of the Paliang Soni tribe, 2 (two) units of the Paliang Lowe tribe, and 7 (seven) units of the Paliang Tanjung tribe.



Figure 10: Map of the early Tribal House (Rumah Godang) in Koto Sentajo  
Source: Authors



Figure 11: Map of the Existence of the Godang House in Koto Sentajo  
Source: Authors



### 3.6 Map of the Distribution of Physical Settings in the Koto Sentajo Area

Koto Sentajo settlement has an interesting physical setting. In addition, the natural landscape also makes Koto Sentajo a complex settlement. Cultural activities here also result in the emergence of spatial settings as a place to live and cultural activities. The Rumah Godang became a noticeable physical artifact that remains vital today. There is the Jamik Mosque, which is hundreds of years old, as a religious center alongside the traditional deliberative hall as a place to solve societal problems, such as cross-tribal disputes. Meanwhile, internal problems within the Tribe are resolved in the Rumah Godang.

In addition to the three main elements, another thing is the existence of customary forests that are guarded to take natural resources used to preserve houses, mosques, and bridges (footbridges) for the benefit of the community. A *Rangkiang* functions as a rice granary and stores food resources that can last for the next season. *Rangkiang* is in line with the existence of rice fields that are used for farming. Only three *Rangkiang* are left; the rest have been damaged, and no more are left.

Apart from farming, the people of Koto Sentajo also raise buffalo. In general, buffalo can be used as auxiliary power to plow the fields; buffalo are kept in the yard, a common place for the whole Tribe. Sometimes, the community also has a private yard located on the customary land of their respective tribes. Buffaloes are used not only as livestock but also as symbols and completeness of customs in significant inter-tribe rituals. For example, the buffalo is cut and used as food, while the head must be served to the Datuk, the traditional holder. In addition, the time-division system in releasing buffalo into the fields is also regulated so as not to eat rice; the Koto Sentajo tribal custom regulates this interesting thing.

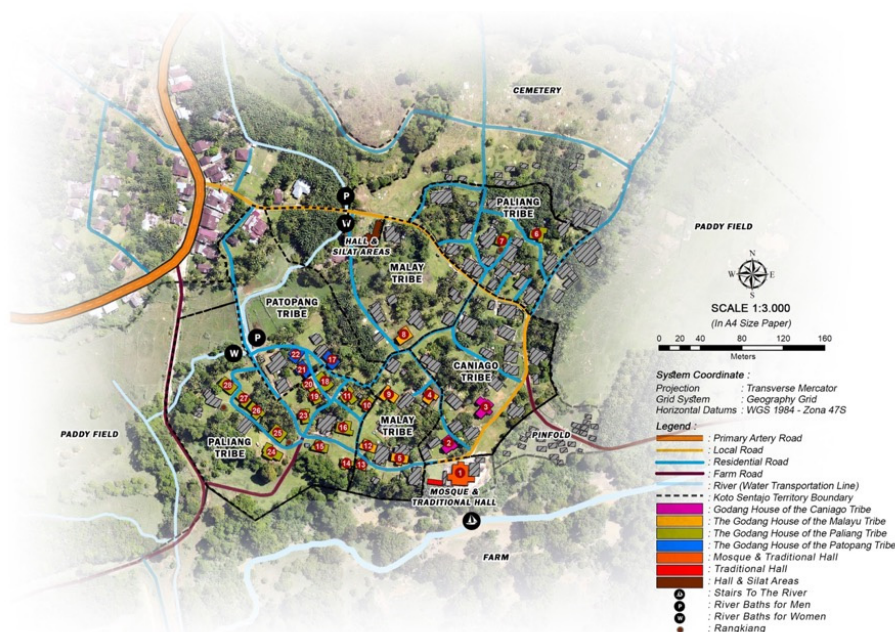


Figure 12: Physical Settings Distribution Map in Koto Sentajo

Source: Authors

In the Koto Sentajo landscape, there are also Silat Halls and Laman/Sosoran. Silat is a martial art that the people of Koto Sentajo must own. Starting from a young age, Koto Sentajo's children have learned Silat. Silat is taught at night during the month of Ramadan. The Silat is not only practicing martial arts skills but also being self-controlled in life. The rules set forth for a person in learning Silat, of course, prioritize high social aspects. Usually, during the second Eid (2 Shawwal), a Silat performance is held in this Sosoran yard.

Topian means the bank or riverbank, which serves as a place for people to get up and down when they go down using a canoe to fish, travel, or exercise in boat races. In addition to the descending banks, there are bathing ledges, totaling 4 (four) pieces, separated between men's and women's Topian. Where the bath is arranged in such a way that its use is separate. In addition, there is a burial ground as a final resting place. This burial ground is also arranged according to the existence of each Tribe. The tribal progenitors must be buried here, and their successors will be appointed again at the Rumah Godang when the progenitor dies.



**Figure 13:** Byre/Buffalo Stable, Rice Fields, and Pastureland at Koto Sentajo  
**Source:** Authors



**Figure 14:** Map of the Pekandangan (cage) area in Koto Sentajo  
**Source:** Authors





**Figure 15:** Cemeteries, Baths (Riverbank) and Catching Fish (Kuantan River) at Koto Sentajo  
**Source:** Authors

### 3.7 Timeline Map of Rumah Godang Construction Process

The existence of the Rumah Godang in Koto Sentajo has been around for a very long time. Madiyusman (2020) Monti of the Patopang tribe said that in 1999, a Swiss student named Andreas Polly study estimated that the Rumah Godang in Koto Sentajo existed since the 1700s. Apart from these estimates, it is more than hundreds of years old, based on Dutch records about the Koto-Koto settlement on the Kuantan River. Efforts to repair, reconstruct, renovate, and build a new Rumah Godang are recorded in the information submitted by the community. In 2004, there was a process of renovating the Rumah Godang of one of the tribes; the renovation changed the shape of the Rumah Godang, which was initially built into a grounded house on a cement floor. Traditional stakeholders do not recognize this because customary provisions have regulated the Rumah Godang, so two years later, it was reconstructed in 2006 and can be reused in community settings. In 2008, there was also the reconstruction of the Rumah Godang after replacing all the house components because the old house could no longer accommodate the existence of the tribal community. The redevelopment was carried out where the original house was demolished.



**Figure 16:** Timeline Map of the House Construction Process in Koto Sentajo  
**Source:** Authors

In 2016, there was assistance from the Ministry of Social Affairs for 6 (six) housing units. This assistance was given to renovate, replace the roof, repair the walls, and repaint. The renovation was carried out on six houses representing each Tribe. However, it is regrettable that the renovation changed some of the original parts of the Rumah Godang (Faisal et al., 2018). Therefore, in 2021- 2022, a new Rumah Godang will be constructed following customary rules, starting from the beginning until the house is used. This development uses the tribal community's self-help funds and natural resources from customary forests. The whole process is part of the effort to preserve the environment built by the Koto Sentajo community.



**Figure 17:** Godang House Renovation Process from time to time in Koto Sentajo  
**Source:** Faisal, et al, 2018

### 3.8 The Cultural Activities of the Koto Sentajo Community

In addition to the landscapes described in the Koto Sentajo settlement, the community of Koto Sentajo also does cultural activities as a group. This activity in the neighborhood is still going on to this day. This action takes place in the space that we mapped. The Koto Sentajo community's cultural heritage is a unique part of its many visible and intangible parts and the physical details covered in the pictures above. The intangible aspects are the culture of the Koto Sentajo community itself, such as Rayo Kaduo ( 2 Shawwal), Silek Pendekar Batuah (material art), Pacu Jalur (boat race), and other celebrations; activities of daily life, such as farming, fishing, raising livestock, and farming; customary law activities, which involve customary stakeholders (ninik mamak) in balancing and regulating life; and activities in using prohibited forest products (Sulistiyani et al., 2020).

**Table 1:** Koto Sentajo Community Cultural Activity

**Source:** Author

Activity Group	Activity Type	Timeline	Location
Celebration Together	Building Rumah Godang;	Incidental	Tribe Land at Koto Sentajo
	Tribute prayers, namely the Doa Padang, for a successful planting season.	Planting season	Rice fields
	Eid Prayer	Every year	Mosque
Festival	On the second day of the Eid Fitr Festival, several cultural	Every year	Koto Sentajo

	activities are observed, including the:		
	<p>Pilgrimage to the Grave,</p> <p>Partaking in a communal meal at Godang's house, and Engaging in the practice of Silat or Martial Arts.</p> <p>Participating in the Pacu Jalur or Boat Race.</p> <p>Enjoying the traditional music performance known as Randai.</p>	<p>Before Ramadhan and Eid Fitr (every year)</p> <p>Eid Fitr (every year)</p> <p>Ramadhan Night and Eid Fitr (every year)</p> <p>Independent Day or every year</p> <p>Incidental</p>	<p>Cemetery Land at Koto</p> <p>Traditional House</p> <p>Sosoran / Pondam hall.</p> <p>Kuantan River</p> <p>Every Spcae at Koto Sentajo</p>
Daily life Activity	<p>Herding Buffalo</p> <p>Farming</p> <p>Traditional Fishing</p> <p>Cooking Traditional Food</p> <p>Traditional Medicine</p> <p>Riverbank Bathing</p> <p>Jumat Prayer</p>	<p>Every day</p> <p>Every day</p> <p>Every day</p> <p>Incidental</p> <p>Incidental</p> <p>Every day</p> <p>Every week</p>	<p>Byre/Buffalo Stable and Pastureland.</p> <p>Rice Fields</p> <p>Kuantan River</p> <p>Godang House</p> <p>Kenagorian Sentajo</p> <p>Riverbank/Small River</p> <p>Mosque</p>
Customary Law Activities	<p>Inauguration of Cultural Leader</p> <p>Entered of Tribe Marriage</p> <p>Pay Customary Fines</p> <p>Circumcision</p> <p>Inter-tribal Dispute</p> <p>Deliberation</p>	<p>Incidental</p> <p>Incidental</p> <p>Incidental</p> <p>Incidental</p> <p>Incidental</p>	<p>Godang House</p> <p>Godang House</p> <p>Godang House</p> <p>Godang House</p> <p>Godang House</p> <p>Hall</p>
Forest Activities	<p>Making Jalur (Boat): Pulling Logs from the Forest, Heating the Boat, and Pulling the Boat to the River.</p> <p>Harvest Honey from the Forest.</p> <p>Chopping Wood for Building and Bridge.</p>	<p>Incidental</p> <p>Incidental</p> <p>Incidental</p> <p>Incidental</p>	<p>customary forest</p> <p>Koto Sentajo</p> <p>Kuantan River</p> <p>Customary forest</p> <p>Customary forest</p>



The residential landscape of Koto Sentajo is characterized by the presence of tangible and intangible activities that its inhabitants actively pursue. These activities are strategically included in cultural maps embedded within the physical environment. These cultural activities are vital as they stem from a harmonious community. The activities presented herein are succinctly summarized and systematically classified according to the primary undertakings of the Koto Sentajo community, as delineated in the subsequent tabular representation.



Figure 18: Map of the social, economic, and cultural activities at Koto Sentajo  
Source: Authors



#### 4. Conclusion

The quality of Koto Sentajo's Saujana represents the quality of the natural and cultural space surrounding it. An understanding of the Historic Urban Landscape (HUL) approach implemented in the Koto Sentajo mapping process is based on identifying layers linked to natural and cultural values, both scale and unscale, involving all actors involved in the settlement. Mapping culture and nature in this historic urban landscape approach is a new paradigm that covers a complex conservation effort. This mapping is done by equalizing the scale, dividing maps related to the natural and cultural landscape, and making a matrix of cultural activities. The Koto Sentajo mapping is divided into landscape mapping, road network map, land contour map, tribal land area map, map of the existence of the Rumah Godang, map of physical settings, and timeline map of the development process. Furthermore, the identification of cultural products is outlined in a matrix that divides these activities into groups of joint celebrations, activities of daily life, customary law activities, and activities in forest management.

The overall result of this research is expected to be a recommendation that can be developed for further research, both natural and cultural landscape elements. These maps become necessary layers of information for indigenous peoples (users), conservationists, policy-makers, and the public as part of developing knowledge. These results can be displayed on the Koto Sentajo community website (<https://wisatakotosentajo.com>). Furthermore, the results of this mapping are used for the next HUL step, namely participatory planning. Where this participatory planning involves consultations between stakeholders to reach a mutual agreement in determining the values of the life of the Koto Sentajo community along with the attributes and values contained therein that must be preserved and carried for future generations, this mapping is also an example of efforts to conduct studies using HUL as an approach to traditional settlements or settlements in Indonesia. The Koto Sentajo mapping is hoped to impact future development and conservation efforts positively.

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