

Cultural Landscape Mapping: The Basis for Managing a Sustainable Future?

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Key words: Cultural Landscape and Mapping

SUMMARY

Sustainable development is argued to be closely related to the existence of custom. Unfortunately, the development planning, as well as its implementation, in Indonesia has not yet employed the custom as of its fundamentals. On the other hand, it has been proven that custom has been acted as the agent of sustainable development in Indonesia within some extent.

Cultural landscape could be of the means to, on one hand, protect the custom and, on the other hand, be the fundamental of development of Indonesia. The research highlighted in this paper was performed for answering whether cultural landscape could be the basis of sustainable development, as well as a means to protect the custom. The case study area of this research was the Province of West Java and Banten, Indonesia, in which further focused on indigenous communities of Kuta Quarter, Dukuh Quarter, Pulo Quarter and Situ Quarter.

Several forms of initial cultural landscape in the Province of West Java and Banten could be identified through this research. Moreover, up to the latest phase of this research, it is argued that sustainable development in the above described indigenous communities' areas could be achieved by means of the performance of custom and tradition. However, further researches are required in order to acquire for answering the above raised question.

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1. INTRODUCTION

Sustainable development is argued to be closely related to the existence of custom. The term sustainability has evolved from the term of harvesting regimes for specific stocks of natural resources that could be sustained over time to challenges of balancing the economic and ecological perspectives of development and acknowledging our collective responsibility of stewardship to future generations (Dale and McLaughlin, 1999). Additionally, the centre of attention of sustainable development itself is not solely on economic and environmental aspect, but also on social and cultural aspect. The latter premise is supported by The Universal Declaration on Cultural Diversity, in which stated that cultural diversity considered as the common heritage of humanity, as well as of important factors in development.

Unfortunately, the development planning, as well as its implementation, in Indonesia has not yet employed the custom as of its fundamentals. This has been verified by development problematic in relation to indigenous community such as ineffective land registration system in the Province of West Sumatera, Indonesia (see for details in Abdulharis *et al.*, 2008), and in Kasepuhan Ciptagelar, Sukabumi, the Province of West Java (see for details in Abdulharis *et al.*, 2007).

From the point of view of sustainable development, custom has been acted as the agent of sustainable development within some extent. According to Abdulharis *et al.* (2007), indigenous community of Kasepuhan Ciptagelar could maintain its food resilience for at least the next 12 years by means of the employment of its custom. Moreover, indigenous community of Kasepuhan Ciptagelar has been able to maintain its surrounding environmental carrying capacity. Due to its isolated location, this is enormously imperative for this community as the indigenous people have been solely depending on their surroundings to make a living.

Cultural landscape could be of the means to, on one hand, protect the custom and, on the other hand, be the fundamental of development of Indonesia. Cultural Landscape defines relationship between human and surrounding environment within specific period (The Cultural Landscape Foundation/TCLF, 2009). According to TCLF (2009), Cultural Landscape defines as well relationship among culture, natural resources, historical events, human's activities and even with God in various degrees.

The research highlighted in this paper was performed for answering whether cultural landscape could be the basis of sustainable development, as well as a means to protect the custom. The case study area of this research was the Province of West Java and Banten, Indonesia. The Province of West Java and Banten have gone through a distinct history compared to communities in the other part of Java Island in particular and in Indonesia in general. During the order of Majapahit Kingdom between 1293 to early 1500s, it had been able to conquest the whole part of present day Indonesia, Singapore, Malaysia, Brunei, the Philippines and East Timor, except the Province of West Java and Banten that was remained independent (Zahorka, 2007). Even Sunda Kingdom was still existed when Majapahit Kingdom was falling apart in the beginning of 1500s. See Figure 1 for the historical period of the Province of West Java and Banten. This research was further focused on four communities in Kuta Quarter, Dukuh Quarter, Pulo Quarter and Situ Quarter. These communities are nowadays considered as of stable indigenous communities in West Java and Banten. See Figure 2 for the location of the four indigenous community settlements with regards to the centres of ancient Sundanese civilisation. Due to the limited information on natural landscape before the formation of cultural landscape began, the recent geological and soil information were employed as the basis for identifying the formation of cultural landscape in the study case areas. The above information was also compared to the recent land use information. The rationale behind the formation of cultural landscape of the study case areas was further analysed.

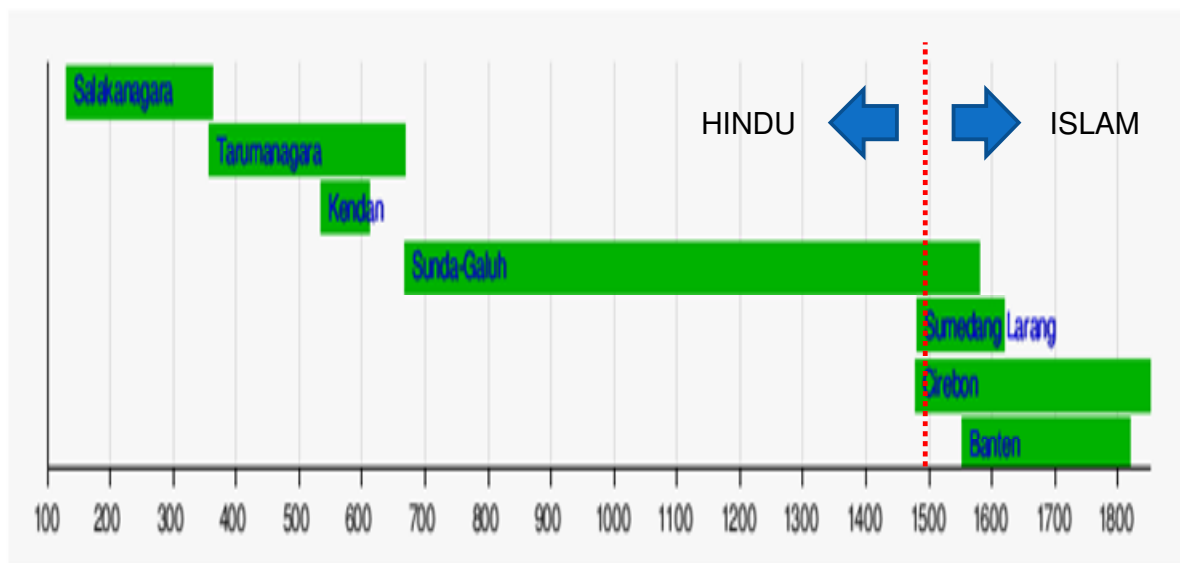


Figure 1 Historical period of the Province of West Java and Banten based on the Sundanese Kingdoms' reigns

2. PULO QUARTER

2.1 Geographic Information

Pulo Quarter is located to the west of Cangkung Temple, one of view Shiva temples survived in the Province of West Java and Banten. Cangkung Temple is located at the top of a hill among many other hills in the area and was built during the order of Pakuan Kingdom. Pulo Quarter derived its name from its prior location, which was located in the middle of Cangkung Lake, an artificial lake established under the command of Mbah Dalem Arif Muhammad, who is believed to be the ancestor of indigenous community of Pulo Quarter. In local language, the Sundanese, pulo means island. At the moment, due to the siltation process of Cangkung Lake, Pulo Quarter is no longer located in the middle of the lake.

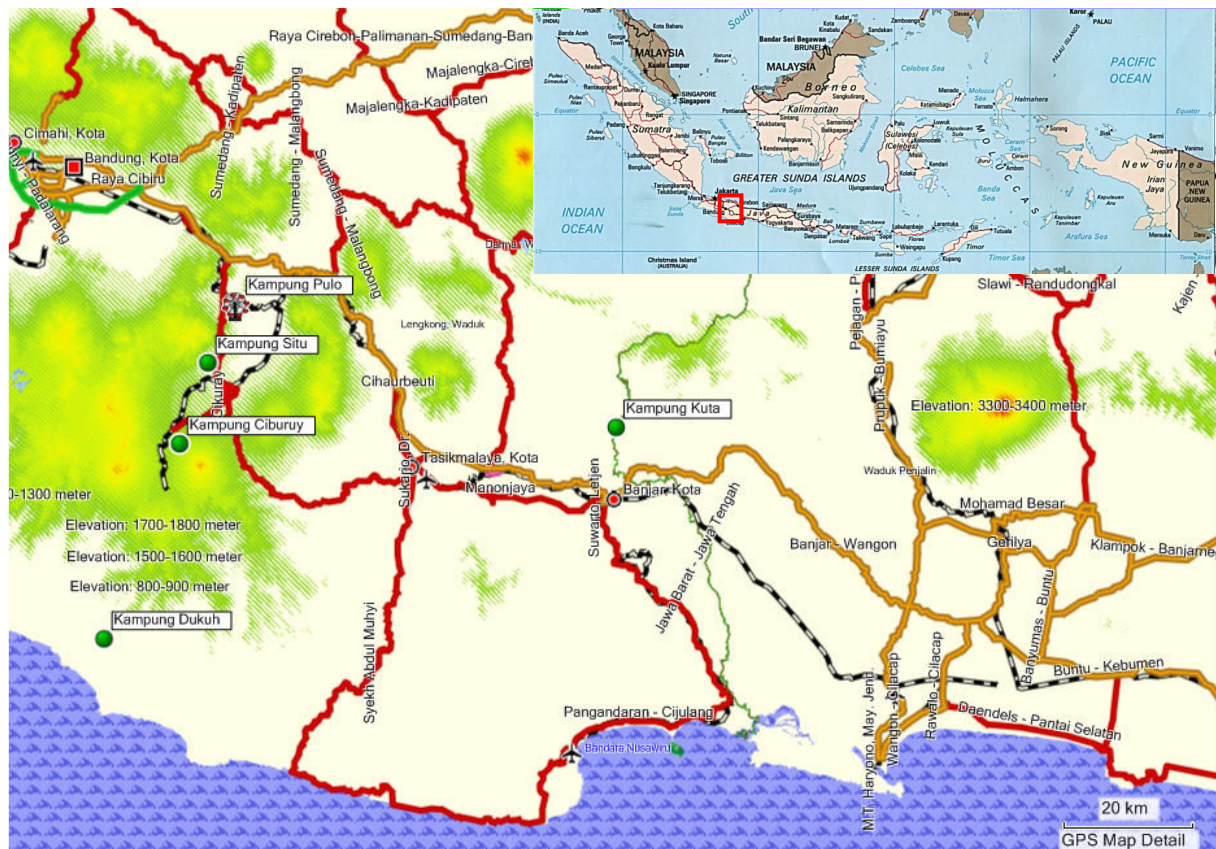


Figure 2 The position of study case areas with regards to the centres of Sundanese ancient civilisations

The geological structure of Pulo Quarter and its surroundings is basically made of young volcanic rock. Young volcanic rock is also served as the basic materials of soil in the area. At the moment, the quarter is surrounded by primary tropical forest.

2.2 Historical Information

Even though Pulo Quarter is located within a close distant to Cangkuang Temple, the religion of indigenous community of Pulo Quarter is Islam. This could be traced back to its ancestor who was believed acted as an Islamic missionary. However, the influence of local culture, which was mainly affected by Hindu religion and culture, could still be identified.

2.3 Community Structure

The number of household in Pulo Quarter is limited to six households. At the moment, there are 21 citizens of Pulo Quarter. The main means of living is agriculture, in which also supported by poultry industry in the household level. Moreover, souvenir industry in household level has also been arisen due to the increasing amount of incoming tourist in the area. The highest education of Pulo Quarter's citizen is high school, while there are citizens who did not graduate from elementary school.

Custom and local wisdom are basically upheld by means of customary rules expressed by taboos. Customary leader called *Kuncen* is appointed for not only maintain the performance of customary rules but also ensuring the sustainability of the community, as well as its custom and local wisdom. Taboos are told for generations by means of fairy tales or myths. There are five taboos applied in Pulo Quarter, which are restriction to domesticate four-leg animal, work and pilgrimage on Wednesday, play big gong and build house with a prism-shape roof. Those who violated the taboos are sanctioned by social inclusion, but most of the time superstitions act as the only tool within the scope of customary rules enforcement. Besides taboos, there are customary ceremonies, which were originated from local culture, on every events related to the life of people in this community, such as marriage, pregnancy, delivery of baby, death, the whole agricultural process, establishment of house and cleaning the relics.

Indigenous community of Pulo Quarter is a matrilineal society. To be appointed as the *Kuncen*, one should not only be a wise person but also be the husband of the older female in this quarter. Moreover, the citizen of this quarter is allowed to marry to those who live outside the quarter. However, to keep with the limitation of household number, each newly married couple should leave the quarter. The couple could return to the quarter when the wife inherits her parent's property. The property is mostly inherited to the older daughter in the family. In the case of absence of daughter in a family, the family should adopt a daughter from its relative to be the heiress for maintaining the family line.

2.4 Spatial Structure

Within its extent, in which as large as 0.5 hectare, there are six houses and a *surau*, small mosque. The houses are lining in two rows and symmetrically built to each other. The houses have rectangle-shape and were laid alongside the West-East axis. The average size of the houses there is 13.20 x 8.35 m². The houses are facing another house in another row within the same column. All houses have *Julang Ngapak*-shape of the roof, which is the

traditional shape of the house's roof in West Java and Banten area. *Julang Ngapak* was designed to avoid the infiltration of rainwater to the ceiling. See Figure 3 for the view of Canguang Lake from Pulo Quarter, as well as Figure 4 and 5 for the mosque and a house in Pulo Quarter. Moreover, due to the restrictions to play gong or to make noises, artistry and sport are least developed.



Figure 3 The view of Canguang Lake from Pulo Quarter



Figure 4 The mosque of Pulo Quarter

2.5 Cultural Landscape Formation

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Located in the middle of West Java and Banten area, the latest natural landscape of Pulo Quarter and its surroundings was formed after an event of volcano eruption, which is exhibited within the recent geological formation. This hilly area was highly forested. This could still be seen from the present land use.

During the reign of Pakuan Kingdom, Cangkuang Temple was built at approximately 8th century. However, not until the arrival of Mbah Dalem Arif Muhammad the fundamental changes of landscape took place. Mbah Dalem Arif Muhammad built dikes that, in return, lead to the formation of Cangkuang Lake.



Figure 5 A house in Pulo Quarter

3. SITU QUARTER

3.1 Geographic Information

Situ Quarter is located at valley of Mount Guntur near Garut, West Java. At the moment, all of settlement area of this quarter is situated above fish ponds. Situ Quarter is bordered by a highly forested area to the North. The geological formation is characterised by reef limestone, while the basic substance of soil in this area is volcanic materials. The average annual temperature of the area is ranged between 100 and 300, with the precipitation rate as low as 715 mm per year.

3.2 Historical Information

Situ Quarter acquired its name from the existence of the number of fish pond in area, in which adjacent to each other and formed a lake. *Situ* in Sundanese means lake. Situ Quarter was initially established in the 20th century, particularly after the establishment of four stage

houses by four citizen of neighbouring quarter, Naringgul Quarter. The establishment of the stage houses were preceded by the acknowledgement from the owners of fish ponds to maintain it and build houses around the fish ponds. During 1950s, there were already 10 houses built above the fish ponds, with their entrances facing the dikes that bounded each fish pond, which is acted as the only way to get to the house. More relatives of the Situ Quarter citizens were coming and, to date, there are 24 households live in 20 houses above fish ponds and 2 other built at the surroundings of the fish ponds. The extent of fish ponds in this quarter is ranged between 0.5 and 1.5 hectare.

3.3 Community Structure

The citizens of Situ Quarter are all Muslims. For maintaining their religion, on every Tuesday night Qur'an recitation has been performed at the house of quarter leader. Furthermore, Haji Amir is also acknowledged by the citizen of this quarter as their respected spiritual leader. Besides their obedience to perform all Islamic rituals, the people still believe in the existence ghosts such as *ririwa*, *jurig*, *dedemit* and *kunti*, as well as good and bad days. They therefore put their activities within the scope of their belief. As they believe that on every Monday and Thursday night the ghosts come out from their place, nobody will stay out of their home within that period. They also performed some activities such as naming the new-born baby, working, building or moving the house and performing wedding within their good days. Moreover, in Situ Quarter, taboos have also been applied as a part of the performance of their local wisdom. Those taboos are:

- The restriction to whistling up to one hour after the sunset as this will provoke the tiger to come to the quarter
- The restriction to behave inappropriately while swimming at the natural hot water pools in Cipanas, the nearby tourism location
- The restriction to perform *wayang golek* show, a puppet show originated from Sundanese culture, around the tourism objects in Cipanas
- The restriction to consume white-flowered gourd as it will give those who consume it a bad luck.

Besides the superstitious-related knowledge, the people of this quarter have also a good knowledge on:

- Fisheries, from planting the fish to harvesting it
- Agriculture, especially for defining the beginning of cropping and harvesting season
- Traditional medicines for curing light disorders such as stomach ache and headache
- Modern technology, such as radio, television and so forth.

The people of Situ Quarter are also active within the formal and informal organisation. Differing from Pulo Quarter, artistry and sport are well-developed in this quarter as there is no taboo related to the performance of artistry and sport, except for the restriction to perform *wayang golek* show around Cipanas.

3.4 Spatial Structure

As previously mentioned, all houses in this quarter are facing the dikes that separated one fish pond to another. Therefore the Situ Quarter settlement has a linear pattern. See Figure 6 for houses in Situ Quarter, Figure 7 for the view to one of the fish ponds and Figure 8 for the dikes delimiting a fish pond.



Figure 6 **The houses in Situ Quarter**



Figure 7 **The view of a fish pond from one of the houses in Situ Quarter**

3.5 Cultural Landscape Formation

Due to its geological structure, the formation of the area was mostly influenced by the subduction process in Indian Ocean along the southern belt of Indonesian archipelago. The area was initially a seabed until it was raised due to the subduction process. There is evidence of the lava flooding in this area as the basic substance of soil is volcanic materials.

The initial natural landscape of was a quite wide, plain valley surrounded by highly forested area. Cipandak River is passing through this area, which provides the area with enough water supplies. Therefore in the beginning of 20th century the fish ponds were started to be established. The characteristic of the area that is ideal for supporting fish farming has been contributed to the achievement of the present situation of Situ Quarter.



Figure 8 A dike and a house in Situ Quarter

4. DUKUH QUARTER

4.1 Geographic Information

Dukuh Quarter is located within the administrative area of Cijambe Village, District Cikelet, Municipality of Garut. Dukuh Quarter height is 390 m above sea level and situated at the slope of Mount Dukuh. Even though this quarter is quite isolated, it is however well-connected to the main road.

The geological structure of area of Dukuh Quarter comprises of Tufa and Brexi. The substance of soil is volcanic material. Moreover, this is a heavily forested area.

4.2 Historical Information

The ancestor of indigenous community of Dukuh Quarter is Syekh Abdul Jalil, who was a spiritual leader in Sumedang, West Java, during the occupation of Mataram Hindu Kingdom on 17th century. Due to the conflict with Ranga Gempol, the Regent of Sumedang at that moment, Syekh Abdul Jalil decided to retire from the position and finally founded a settlement in which at the moment called Dukuh Quarter.

The origin of Dukuh Quarter's name could basically be traced back from its history. *Dukuh* in Sundanese means sit down, which has been employed as well as the symbol of settling down. Moreover, *dukuh* could also become a symbol of obedience and adamant on upholding tradition and custom inherited from their ancestors.

4.3 Community Structure

All citizens of Dukuh Quarter are Muslims, who have been practicing tasawwuf. Besides Islamic rituals, indigenous community of Dukuh Quarter is also practicing customary rituals such as pilgrimage to the grave of Syekh Abdul Jalil on every Saturday. Moreover, Dukuh Quarter has also been applying taboos as a means to govern the society.

This community at the moment is lead by customary leader called *Kuncen*. Within the performance of its tasks, *Kuncen* is supported by two *Lawang*, *Kuncen*'s assistant. Within the scope of customary matters, *Kuncen* cooperates with the elders for maintaining tradition and custom inherited from this community's ancestor, as well as for resolving internal conflicts. Furthermore, *Kuncen* cooperates with formal government leaders in formal governance extent, while, for religious matter, *Kuncen* cooperates with *Habib*, who is believed to be the direct descendent of Prophet Muhammad SAW.

The number of citizen of Dukuh Quarter is 416, comprises of 55 households. The composition of woman and man is 40% and 60%. The highest education level is elementary school, while most of the citizens of Dukuh Quarter pursue Indonesia's conventional Islamic education in *pesantren*, in which literally means the place for those who are learning Islam in depth, after or even before finishing elementary school education. Artistry is not well-developed in this quarter due to the belief that it will lead to infidelity.

4.4 Spatial Structure

Due to its tilted location, the quarter is terraced. On each terraced, there existed a row of houses which is laid alongside West-East axis. The houses are adjacent to each other. See Figure 9 for the houses in Dukuh Quarter. There are two mosques, each of them allocated for specific gender. Moreover, public toilets are spread all around the quarter.



Figure 9 Houses in the terraced Dukuh Quarter

4.5 Cultural Landscape Formation

The natural landscape of Dukuh Quarter area was formed when the area was lifted due to the subduction process in Indian Ocean. This is due to the existence of Tufa rocks, which is mainly comprises of eggshells and seashells deposit. The natural landscape was further changed due to the volcano eruption. The area was heavily forested, which can still be seen in the recent land use.

The natural landscape was transformed into cultural landscape during 17th century, especially after the arrival of Syekh Abdul Jalil in the present location of Dukuh Quarter. The landscape was terraced in order to cope with the tilted terrain.

5. KUTA QUARTER

5.1 Geographic Information

Kuta Quarter is situated under the administrative area of Karangpaninggal Village, District of Tambaksari, Municipality of Ciamis. This quarter's location is isolated from its neighbouring quarters as it is located in a valley bounded by vertical rock cliff. Having an approximate extent of 70 hectares, almost half of the customary territory is considered as forbidden forest.

The soil is considerably fertile but the geological structure is unstable. The geological formation was developed as the result of old volcano activities. The basis substance of soil is volcanic materials.

5.2 Historical Information

Kuta Quarter derived its name from its location in deep valley, 75 meters in depth, in which surrounded by vertical rock cliff and hills. In Sundanese, *Kuta* means wall fence. The ancestor of indigenous community of Kuta Quarter is Raksabumi, who was the messenger of King of Cirebon. It is believed that King of Cirebon was given a vision by his ancestor, Prabu Ajar Sukaresi who was the King of Galuh Kingdom, to preserve the place where Kuta Quarter is located at the moment as Prabu Ajar Sukaresi used to stop by in the area during the process on the establishment of Galuh Kingdom.

Another version of history of Kuta Quarter is that this quarter was established by Ambu Raksa Bima Kalijaga, the messenger of Prabu Siliwangi, the King of Sunda Kingdom, who was performing the task for establishing Galuh Kingdom in the area. Due to some reason, Ambu Raksa Bima Kalijaga relocated the centre of Galuh Kingdom to Karangkamulyan, while Aki Batasela from Solo, West Java, was appointed to lead Kuta Quarter. Aki Batasela was accompanied by Aki Bumi, Abmu Raksa Bima Kalijaga's follower from Cirebon. It was believed that only Aki Bumi could arrive in Kuta Quarter, while Aki Batasela could only reach Cibodas Quarter and stayed there. Aki Bumi was immediately appointed as *Kuncen* of Kuta Quarter. After his decease, the descendants of Aki Bumi, namely Aki Dano, Aki Maena, Aki Surabangsa and Aki Rasipan, were consecutively appointed to be Kuta Quarter's Kuncen. After the era of Aki Rasipan, the descendants of him have been automatically appointed as *Kuncen*.

5.3 Community Structure

The number of citizen of Kuta Quarter is 355, comprises of 178 women and 177 men. There are 157 households in Kuta Quarter nowadays. Only 33 of them had formal education. In general, the citizens of Kuta Quarter make their living from agriculture, either as the owner of the field or the agricultural worker. Differing from indigenous communities previously described, the community of Kuta Quarter are keeping with the modernisation, which could be seen from the establishment of electricity line and the ownership of electronic equipments.

Islam is the only religion of citizen of Kuta Quarter. However, the custom of this quarter is affected by Hinduism and Animism. Myths were developed for governing the society. Moreover, indigenous community of Kuta Quarter has a good knowledge on fisheries, agriculture, medicine and modern technologies. This community has also been employing good day calculator for directing their activities, particularly which is related to space and time.

Indigenous community of Kuta Quarter is lead by customary leader called *Kuncen*. In relation to the formal governance, formal head of quarter and head of village have also been appointed by the formal government.

Artistry has been well-developed in this quarter. Traditional artistries such as *tayub* and *ronggeng*, as well as modern artistries, could be found in this quarter. However, it is not allowed to perform *wayang golek*.

5.4 Spatial Structure

The settlement areas are spreading within the flat areas of customary territory of Kuta Quarter, while each settlement area comprises of several houses.

5.5 Cultural Landscape Formation

The natural landscape of Kuta Quarter was formed due to the old volcanic activities. Differing from the formation of natural landscape of previously described indigenous communities, the area of Kuta Quarter was exposed already for a long time. Due to the volcanic activities, the soil in this quarter is fertile. Moreover, it is estimated that the natural latest natural landscape was formed due to the tectonic activities, in which let the area to be a Graben.

Up to now, the conversion of natural landscape into cultural landscape has only been occurred within a half of Kuta Quarter's territory.

6. CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Several forms of initial cultural landscape in the Province of West Java and Banten could be identified through this research. By means of the employment of geological, soil type and land use data, the formation of the latest natural landscape could be estimated. The estimated natural landscape was further employed to reveal the process of conversion of the natural landscape into the initial cultural landscape of the Province of West Java and Banten.

Up to the latest phase of this research, it is argued that sustainable development in the above described indigenous communities' areas could be achieved. This has been proven by the existing of the indigenous communities described from above. All of those indigenous communities have been able to maintain environmental carrying capacity of their surroundings. The performance of custom is argued to be of the important achievements on cultural aspect of sustainable development. Last by not least, even though most of indigenous communities are formally defined as living under the poverty line, they have however been able to earn their living and are considerably living above their own poverty standard.

6.2 Recommendation

In order to answer the question whether cultural landscape study could be the basis for promoting a sustainable future, it is recommended to pursue following researches:

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- A more time-depth cultural landscape research, which acquires contribution from not only the surveyor profession but also from geologist, anthropologist, archaeologist and so forth. Through this recommended research, it is expected to acquire the exact time frame of the formation of the natural landscape, as well as the cultural landscape of the Province of West Java and Banten
- Cultural landscape research in urban areas. By means of this research, it is expected that the further processes regarding the changes of cultural landscape in the Province of West Java and Banten could be identified.

By performance of the recommended researches from above, the time-depth cultural landscape changes ranging from the formation of natural landscape to the latest cultural landscape formation could be identified. These could further be employed for projecting the future based on the past and present development, as well as to define the course of action for achieving the sustainable development objective of the Province of West Java and Banten.

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