

Characteristics and Environmental Quality of using Tribe Settlements in Kemiren

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Abstract

Kemiren Village is designated as traditional house architecture tourism village. Development has brought Kemiren Village to economic experienced growth and will affecting dynamic changes of physical settlements. Research using rationalistic-qualitative, descriptive and explorative method. Data collection conducting by field observations, interviews and documentation then to be analyzed using descriptive analysis, evaluative analysis and development analysis approach. Results from physical conditions mapping, the characteristics of settlements are highly dependent on aesthetic quality, scarcity and exceptionalness. Result from analysis, the value of cultural is 60%, while the value of environmental quality is 50%.

Keywords: Traditional Settlements, Kemiren House, Banyuwangi.

INTRODUCTION

As society that still preserves the civilization of traditional community life, Using Tribe settlements in Kemiren Village is unique because influence of kinship, religious life rituals, traditional technology, arts which are still preserved by residents by building their residential settlements, has presented architectural works of traditional settlements that visualized in unique spatial patterns arrangement in traditional community settlements.

Kemiren Village settlements were physically formed from people's houses existence in Kampung Kemiren and Kampung Talun which originally made from bamboo construction and assembled with palm fiber roof straps, then developed under influence of Chinese traditional architecture and Javanese House ornaments architecture, then gave resident's house form identical shape village house with soaring roof, with architectural ornaments added to the Javanese House.

Kemiren Village economically has grown rapidly, this condition is very beneficial for all citizens, namely by improving welfare of their lives, with growth the traditional tourism activities. Finally, citizens' innovation was born in managing potential of the community's cultural traditions and the potential of residential natural

resources to attract visits from people outside the village.

Settlements development dynamically will affect characteristics of traditional settlements decrease. So to see these conditions, it is necessary to do study to identify the uniqueness that is still owned, by identifying things what cause settlements characteristics weakening. Especially on influences elements part that strengthen settlements unique characteristics, namely from loss risk and architectural shape changes of Using Tribe settlements in Kemiren Village. So results in this study can identify Using Tribe settlements aesthetic value and quality in Kemiren Village, which can be used to find solutions and direction to preserving traditional settlements in Kemiren Village.

Using Tribe settlements is form of existence from Using Tribe community history which spread in several regions in the Banyuwangi Regency, which was finally determined as built environment, based on Decree of the Regent Head Region Level II No. 401 of 1996 as the Location of the Using Tourism Village in the District Level II Banyuwangi, where with this decision hoped that it can preserve the cultural system that was born from identity elements of Kemiren Village community tradition which is manifested from shape and function of the

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building, and space outside area. Because traditional settlements are identified from the buildings form and arrangement patterns of people's houses that are formed from the collaboration of people socio-cultural traditions then form natural settlements patterns, so this phenomenon presents the uniqueness that become settlements characteristic.

Traditional settlements that have character are formed from environment pattern and built environment structure gives community social cultural characteristic and specific economic activities, thus forming residential architectural elements that can be identified from elements shape arrangement, lines, colors, and textures that become special attributes and identities so easily recognized [2]. While culture plays role in strengthening settlements characteristics caused by existence of universal cultural elements which include religious systems and religious ceremonies, social systems and organizations, knowledge systems, languages, arts, livelihood systems, and technological and tools [3]. Because the presence of culture in traditional settlements is a human efforts visualization to maintain the sustainability of their lives by managing natural resources and surrounding environment potential. Because characteristics of traditional settlements are authentic values that still owned visually from elements existence to make up settlements, so to assess them it is necessary to map them physically, based on cultural and environmental qualities.

MATERIAL AND METHOD

This research was conducted with the rationalistic-qualitative method, namely research method by field observations and interviews, which were designed descriptively with historical and typological approaches. In this research also carried out exploratively. In the rationalistic-qualitative research method, the researcher becomes the main instrument, the researcher conducts in-depth and detailed interviews, by continuing do repeated checks to get accurate results on developments, and changes that are expected to occur [4].

Meanwhile, to analyze obtained data, the analysis is done descriptively, evaluatively and developmentally, which refers to results of the process in obtaining data by mapping environmental conditions of residential areas in Kemiren Village by dividing into four zonations, then do cultural meaning assessment and do environmental settlements quality assessment.

For cultural meaning assessment are analyzed based on criteria approach: aesthetics, rarity, uniqueness, equality, historical role, and region strengthening image [1]. Meanwhile, to assess environment quality, analyzed based on environment quality technical standards, such as format of settlements identification in Appendix II in the Minister of Public Works and Housing of Republic of Indonesia Regulation No. 2 / PRT / M / 2016, i.e. with ten components of residential quality parameters, including: building conditions, environmental road conditions, drinking water supply conditions, environmental drainage conditions, wastewater management conditions, waste management conditions, and fire protection conditions.

Data Collection

This research was carried out in September and October 2019, Using Tribe neighborhood in Kemiren Village, Glagah District, Banyuwangi Regency, East Java Province. To obtain primary data, it was conducted by field observation, through interviews with key figures from Kemiren Village community, in addition to primary data was obtained from field documentation. Whereas secondary data was obtained through literature study and archived document literacy from related institutions. In order to obtain valid data regarding environmental conditions of Using Tribe settlements in Kemiren Village accordance with the time of the study.

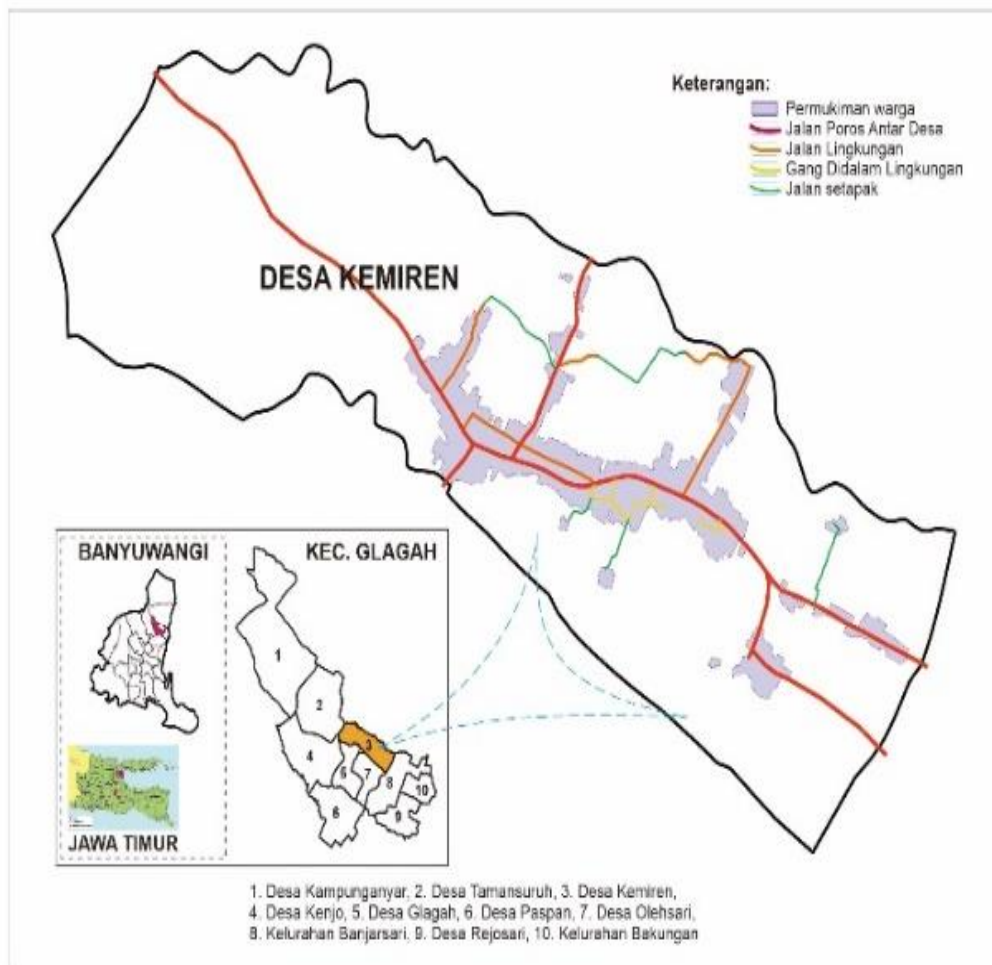


Figure 1. Research Location in Kemiren Village

RESULT AND DISCUSSION

Development of Using Tribe Settlements in Kemiren Village

Residents of Using Tribe settlements in Kemiren Village are generally relatives by big families. This condition is caused by residents tradition who are very reluctant to make a new home out or away from big family residences, especially away from parents' homes. Most new residents live separately from big families when they are forced to, because they do not have yard that can be built into new home. And if they have to separate, they still try to find new yard closest to their families, so that conversion of agricultural land or gardens around the area becomes solution for residents to make new yard, and then bring their entire extended families to live together there. The development of the new environment will continue to be followed by other brothers who want to build houses for their newly married children.

Space Patterns of Using Tribe Settlements

Residents space pattern of Using Tribe settlements in Kemiren Village was formed naturally both with linear pattern following the road lane also formed by formation pattern of the residents themselves who gathered residence by extended their family in one-yard environment. Resident's orientation apart from following house path, also oriented to the big family yard environment, also influenced by kinship system.

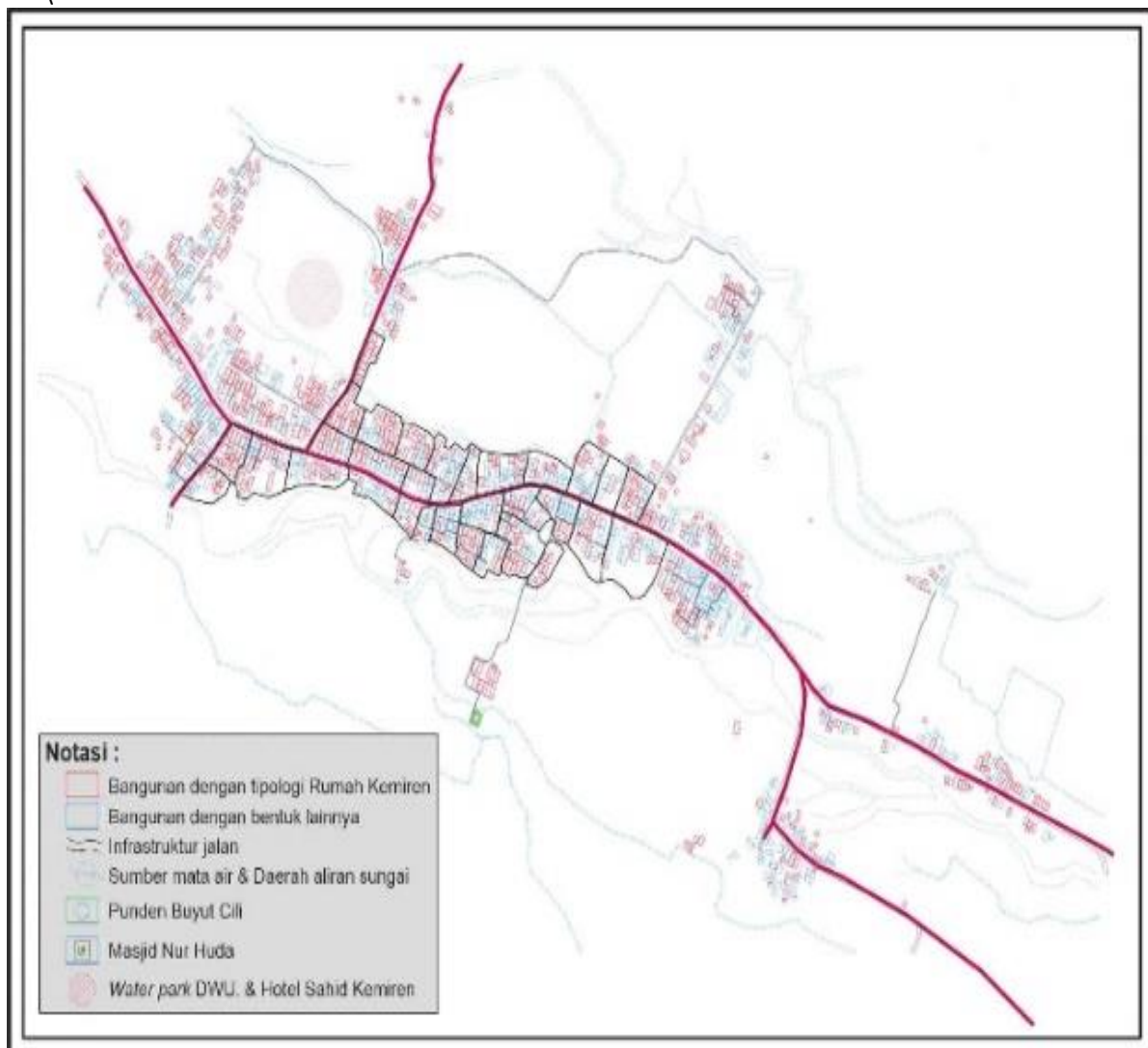


Figure 2. Settlements Spatial Pattern in Kemiren Village

Physical and Non-Physical Aspects that forming Settlements

Yard

In determining land choice for plots of yard, residents strongly consider location near to river flow and springs, so the location of the plots generally has land topology follows existing land contours. Because Kemiren Village located between foothills of Mount Ijen with a height of 144 m-above sea level, flanked by Sobo river in the south, and Golong river in the north, this area extends from west to east, with total land area $\pm 38,641.38 \text{ ha} / \text{m}^2$.

Hydrological and geological aspects are considered by residents in managing their land, areas that have flatter area are printed into rice fields with gravity techniques by damming rivers on higher ground and utilizing water from large springs that are channeled through local ditches.

Building mass

The residents house form of Using Tribe in Kemiren Village is identified with crocogan house structure, tikel, and baresan, then additional space in front of house is called patio, while additional space on left or right side of the house is called ampog.

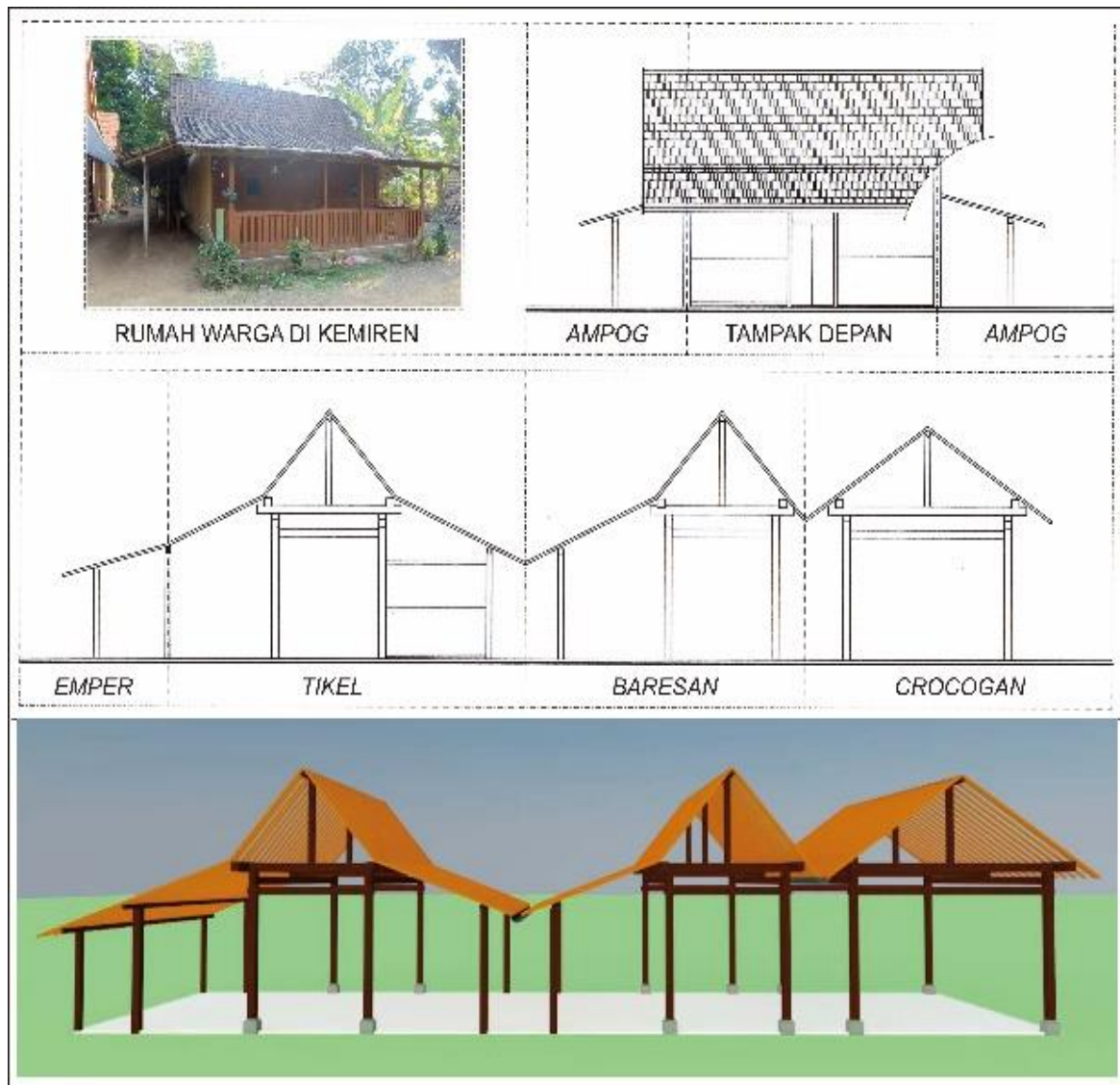


Figure 3. Composition of Kemiren Houses

Using Tribe house before vernacular developing, initially had special characteristics, namely bamboo building with little ventilation, such as existence of very minimal windows, so house only has a front door and a back door on left or right side home as circulation in and out buildings.

After all this time, Using Tribe people house was finally affected by Javanese House architectural ornaments, by use of gebyog

ornaments in partitions in living room and in front house facade, such as use wood carving accessories with Kuwung motif, slimpetan, sling doors, and giving winds on threshold above the front door.

While the original component Using Tribe Residents' House which is still maintained today is use walls made from woven bamboo with Gedeg Pepel and Gedeg Langkep motifs.



Figure 4. Development of Kemiren's House Facade

Settlements Circulation

In general, Kemiren residents circulation space marked by gates and road corridors. Circulation space in the Kemiren Villagers residential environment formed from building mass units

that develop naturally, which form circulation space from lane of the neighborhood road, the aisles between the houses that connect between the residents houses, neighborhood group where other residents live, and every day routine activities places.

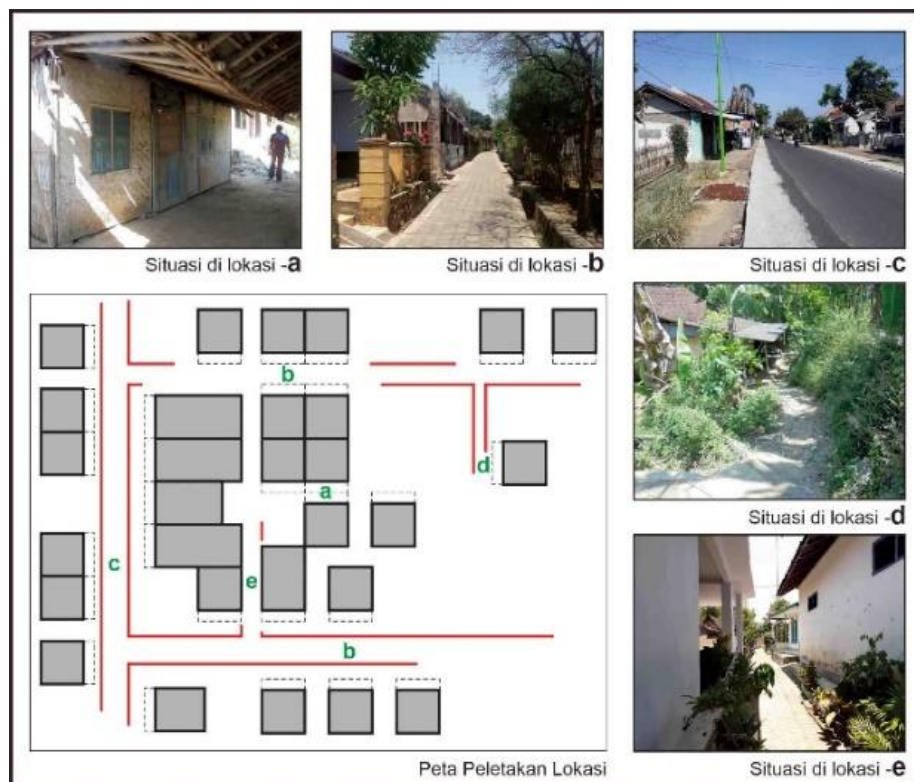


Figure 5. Circulation Room Situation Simulation

Community Traditions and Culture

Folk art which is ritual part and religious system, its existence is ritual part activities and community traditions as form of appreciation for community traditions and culture that have been passed down by Kemiren villager ancestors who have been hereditary, such as Kemiren Barong art and jaran kecak finally gives influence to the villagers when they have ceremony intent.

Settlements Conditions Analysis Based on Cultural Meanings and Environmental Quality

Land Use Transfer

Apart from land use transfer, in addition to influencing settlements superiority

characteristics, it also affects deterioration environment quality around residential areas. Problems in land use transfer that occur in Kemiren Village area are influenced by two factors, namely:

To open new land from part of agricultural land because residential areas are no longer available. While the second is to build tourism support facilities such as restaurants, tourist facilities, and hotels that use agricultural land which is located in the Kemiren Village axis.

Physical Conditions Mapping and Kemiren Village Environmental Potential

Based on arranged environment zoning, four zonations are determined, namely:

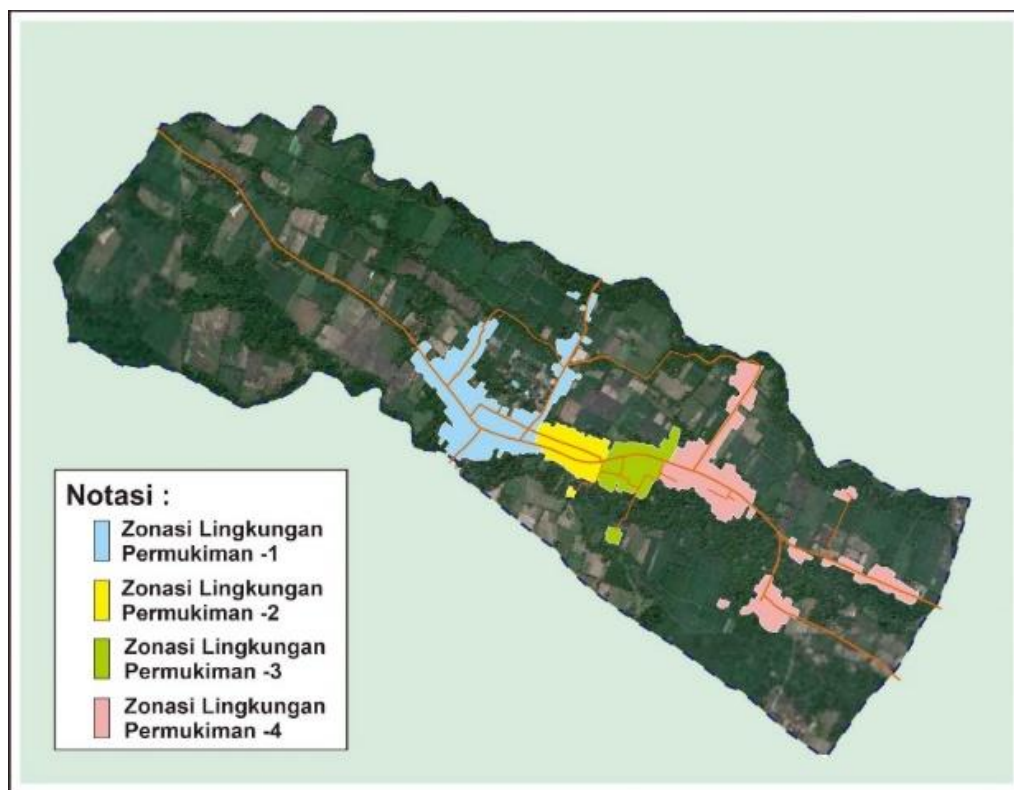


Figure 6. Map of Kemiren Village Environmental Zoning

Zoning-1: covers environment of Dusun Kerajan RW. 2, and RW. 3.,

Zoning-2: covers environment of Dusun Kerajan RW. 1.,

Zoning-3: covers environment of Dusun Kedaleman RW. 4., and

Zoning-4: covers environment of Dusun Kedaleman RW. 1, RW. 2, and RW. 3

From mapping results, it is known that existence of Kemiren Houses is very vital

component, so that every loss of its units will certainly have an extraordinary influence that makes Using Tribe in Kemiren Village traditional settlements lose their identity, because Kemiren House has an element of strengthening the aesthetic value, rarity, uniqueness, and equality, this condition is caused by existence of an ancient Kemiren House which is diminishing due by influence of modern architecture development. With residential space pattern grows naturally, as well as with many old houses from wooden

construction with bamboo walls, the condition is not maintained and heavily damaged parts, as well as with very dense residential environment condition with most still slums, due lack of supporting infrastructure and environmental facilities, then making this residential area very vulnerable to become slums.

Using Tribe Settlements Characteristics in Kemiren Village

Using Tribe settlement characteristics in Kemiren Village are formed from combination of natural conditions with basic elements

settlements, namely physical and non-physical aspects factors. Where natural conditions are influenced by climate and land topography, then physical aspects factors are influenced by residential space pattern units with presence of residential units owned by distinctive structural form with fusion of Chinese Traditional House architecture combined with variety of Javanese House ornaments, and non formations physical formed from community traditions influence and culture as most fundamental element in influencing people's mindset in their daily lives.

Table 1. Using Tribe Settlements Characteristic in Kemiren Village

No	Characteristic	Field Conditions
1	Climate	Tropical with average temperatures around 22-26 ° C.
2	Land	Lland topography formed from alluvial plains located on hillside of Mount Ijen.
3	Settlement Space Pattern	Formed linearly following village and environmental lanes.
4	House Shape	Kemiren's house still uses traditional construction technology, with variety of distinctive ornaments.
5	Circulation Room	Formed naturally by following formation of mass units
6	Population	Residents still part of Blambangan people who still live in Banyuwangi.
7	Tradition and Culture	Rituals and religions are part of community life, work as farmers, and live in kinship and neighborhood ties.

Table 2. Settlements Cultural Meaning Mapping

No	Criteria	Field Conditions
1	Aesthetics	There are many building masses with new shapes, styles and structures that are not in accordance with Kemiren House building forms typology, because houses existence in conformity with Kemiren House is one that characteristics reinforces community settlements of Using Tribe in Kemiren Village. So that if Kemiren Houses existence replaced by new forms dominance, it will have an effect to decline quality of settlements visual appearance.
2	Rarity	<ul style="list-style-type: none"> Using Tribe Settlements in Kemiren Village was formed naturally, but shape of the residential space pattern was mostly formed by rapid arrangement and uniform, thus presenting settlements appearance that have special characteristics, because building houses of residents existence whose shapes and facades are uniform, where conditions is rarely found in traditional community settlements in other regions. Existence of ancient family-owned house building Alm. Mbah Sarko became a reference for Kemiren House architecture.
3	Uniqueness	More than fifty percent of the residential neighborhood in the Kemiren Village was formed by building masses group with building shape in accordance with roof shape and appearance Kemiren House facade, but potential for sustainability in the future will be disrupted by the ancient Kemiren House building condition whose age is over 50 years old. with damaged condition, this condition will become threat to preservation Using Tribe settlements area in Kemiren Village, because it has risk to losing the uniqueness potential.
4	Equality	<ul style="list-style-type: none"> Kemiren House architecture development is synonymous with influence of traditional Chinese house building patterns and Javanese houses. The influence of traditional Chinese house architecture can be seen from saddle roof construction form which rests on wooden column in house main structure, as well as front door placement on house side in the middle of the wall, thus affecting house spatial arrangement pattern which is symmetrical.

		While the influence of Javanese house architecture can be seen from the development of using wooden gebyog and wooden panels carved ornaments with Javanese motifs.
		<ul style="list-style-type: none"> The influence of traditional Chinese houses and Javanese houses architecture is due to the Kemiren House early history, which used to be an old wooden house built in form of ticles imported from other villages, especially from the Rogojampi, Singojuruh, Kabat and surrounding areas.
5	The Role of History	The existence of Buyut Cili punden is sign of life in the past around Kemiren Village area which is considered to have a connection with history of Blambangan Kingdom people spread in some areas in Banyuwangi Regency, so that later became forerunner to Using Tribe community existence in Kemiren Village.
6	Region Strengthen Image	Settlements have three perfect values from all five aspects (aesthetics, rarity, uniqueness, equality, and historical role).

Table 3. Settlements Environment Meaning Mapping

No	Criteria	Field Conditions
1	Building Mass	<ul style="list-style-type: none"> Building mass in residential environment is formed naturally so that it is very difficult to find order within each group of residential neighborhoods, because environmental conditions seem more dense and irregular. Building quality in settlements is generally influenced by age of the building. Because most of buildings are old-age buildings, many houses need repairs.
2	Environmental Road	<ul style="list-style-type: none"> There are some houses in every neighborhood group that are not directly connected to road network, even though only small roads. So to fill the circulation space, residents use aisles between neighboring houses. Roads quality, small roads and environmental roads, has generally been hardened by paving. While circulation space form use aisles between residents' houses, road surface still dirt road form.
3	Clean Water Supply	Clean water availability for settlements benefit very adequate, both in quality and quantity, because in Kemiren Village there are many springs. Meanwhile, to flow water from spring into residential area, most of the residents have formed HIPAM group, and some others have made a self-supporting independent water pipeline network.
4	Environmental Drainage	<ul style="list-style-type: none"> Environmental drainage feasibility in settlements is still lacking attention, because many are found to be clogged, not maintained, and not connected to larger network system. In dense residential environment, most still do not have drainage channels, because the rain flow and dirty water is channeled directly to vacant land around the residential environment.
5	Wastewater Treatment	Until now, socialization of healthy MCK program to change residents behavior who use the river into public latrines is still big challenge, because residents are still very reluctant to build toilet bathrooms in their homes. So that the river and the spring is still become main sanitation facility for residents.
6	Waste Management	<ul style="list-style-type: none"> Waste management by residents is quite good, this is indicated by trash bins existence around house and environment, although awareness to sort between types of waste has not been done. To deal with the waste problem, the village has prepared equipment and officers to transport waste to the waste shelter, but waste final processing and utilization has not been managed properly.
7	Fire Protection	The problem of handling fire risk in dense residential environment is still very common to the public, so that anticipatory efforts have never been made.

Based on mapping results above, cultural significance and settlements environmental quality assessment results on in Kemiren Village as follows:

Table 4. Cultural Meaning Assessment

No	Description	Value
1	Aesthetic	50%
2	Rarity	70%
3	Uniqueness	50%
4	Equality	70%
5	Role of History	50%

6	Region Strengthening Image	70%
Average value of cultural meaning		60%

Table 5. Environmental Quality Assessment

No	Description	Value
1	Building Mass	50%
2	Environmental Road	50%
3	Clean Water Supply	70%
4	Environmental Drainage	50%
5	Wastewater Treatment	30%
6	Waste Management	30%
7	Fire Protection	0%
Average value of environmental quality		40%

Based on analysis results, cultural average value is relatively high at 60%, which is obtained based on conclusions from mapping table of cultural meaning, but closely watched aesthetic potential and uniqueness will continue to decrease with threat value decrease due Kemiren Houses reduced number, especially those that are more than 50 years old, so there is risk value reducing on settlements characteristics in the future.

Whereas based on environmental quality assessment, settlements environmental conditions in Kemiren Village have inadequate quality, because index value below 50%, it can be potentially damage the elements that forming settlements aesthetic quality, because based on cultural meaning assessment and environmental quality assessment, existence of rarity, uniqueness, and equality of Using Tribe in Kemiren Village settlements environment area is very vulnerable to damage risk more quickly if settlements quality cannot be managed properly.

CONCLUSION

Cultural Meaning and Environmental Quality

Average value of cultural meaning on 60%, Kemiren Houses existence is main component to determines indicators scores magnitude of aesthetic value, rarity, uniqueness, and equality. Thus risk of decreasing Kemiren House units is truly serious threat to preservation Using Tribe settlement in the future. Whereas with environmental quality score below 50%, it shows that settlements quality is still very low and needs serious attention.

So efforts taken in preserving Using Tribe settlements in Kemiren Village, must be in line to maintain characteristics existence and to improve infrastructure and environmental facilities, so that purpose of preservation can include conservation goals and efforts to improve environmental quality in traditional settlements that are dynamically threatened from change flow.

Recommendation for other studies

Based on research results that has been done, this study description can only explain traditional form and residents house construction of Using Tribe in Kemiren Village which is influenced by traditional Javanese and Chinese house forms, but in this study has not been able to reveal clearly how is original form of Using Tribe Houses, although there are basic elements of Using Tribe house which are still preserved in Kemiren House. So that suggestions for other research in order to

continue to research more about shape, typology, and cosmology of Using Tribe Houses building.

Recommendation for Kemiren Village community

All potentials within settlements environment, both existence of Kemiren Houses and other potential natural and artificial settlements are gifts and inheritance intellectual property that must be jointly cared by entire community, because at this time many architectural ornaments are being used, then give result obscuring the initial form of Kemiren House.

Recommendation for government agencies

Conservation and environment quality improvement program of residents' settlements is worthy to re-evaluation, especially in the old Kemiren Houses preservation activities owned by residents, because based on study results, this activity does not have clear reference in guiding craftsmen in carrying out rehabilitation work, so that activity from craftsmen subjective perceptions, then it will bring up many interpretations about Kemiren House. Thus, the authorities (government) must have prepared technical guidelines regarding Kemiren Houses preservation form.

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