LOCAL WISDOM IN TRADITIONAL SETTLEMENT ARCHITECTURE IN CENTRAL SUMBA

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Abstract

Traditional societies in Central Sumba put forward philosophy and symbol in the practice of life and daily life. The construction of settlement and the making of Traditional House is considered on the basis of the belief inherited from their ancestors which is manifested in the form of the pattern of space of traditional house and the surrounding environment. This paper aims to find out what local wisdom factors influence traditional residential architecture in Central Sumba. The study findings show that people's understanding of ideological superstructure, social structure and material infrastructure influence the characteristic of traditional settlement in Central Sumba.

Keywords: *traditional settlement, lokal wisdom*

Abstrak

Judul: **KEARIFAN LOKAL DALAM ARSITEKTUR PEMUKIMAN TRADISONAL DI SUMBA TENGAH**

Masyarakat tradisional di Sumba Tengah banyak mengedepankan filosofi dan simbol dalam praktik hidup dan kehidupannya. Pembangunan permukiman dan pembuatan Rumah Adat dipertimbangkan atas dasar kepercayaan yang diturunkan dari nenek moyangnya yang termanifestasi dalam bentuk dan wujud pola ruang rumah adat dan lingkungan di sekitarnya. Tulisan ini bertujuan untuk mengetahui faktor-faktor kearifan lokal apa saja yang mempengaruhi arsitektur pemukiman tradisonal di Sumba Tengah. Temuan studi memperlihatkan bahwa pemahaman masyarakat tentang suprastruktur ideology, struktur sosial dan infrastruktur material berpengaruh terhadap karakteristik permukiman tradisional di Sumba Tengah.

Kata kunci: permukiman tradisional, kearifan lokal.

Introduction

Architecture is built to answer human need and raise the degree of better life, so that it cannot be separated from the development of culture. According to Rapoport (1969), socio-cultural factor is determinant of architectural manifestation, because there is a system of value that will guide humans in looking at and understanding the world around them. Natural and environmental condition play an important role in shaping human life of culture. Location difference, natural and cultural condition will cause difference in the expression of architectural form.

One of the result of the architectural manifestation formed to meet human need is traditional settlement. Traditional settlement is the result of physical culture, which in the traditional context is a form of expression that is closely related to the character of the community. In its growth and development settlement are

influenced by sociocultural and environmental condition. The socio- cultural value adopted by the community and the attitude of the community toward their environment is local wisdom that can underlie the community in building traditional settlement. Local wisdom is a process of identifying the potential and character of nature for the continuation of human tradition, especially in architecture (Setyabudi, Irawan, 2012)

Sumba is known as an island that still maintains cultural custom and highly respects its ancestors. The loyalty of the Sumba community to continue the culture and maintain it is also influenced by the animist belief that is still adhered to. This belief has rule and ritual that require the Sumba community to indirectly be obliged to preserve culture, among others, reflected through their traditional architectural work.

This research on traditional settlement in Central Sumba is based on an interest in the influence of local wisdom that reflects aspect of people's live towards the shape and character of the settlements made. Therefore this study aims to determine what local wisdom factor influence traditional residential architecture in Central Sumba

Metodology

The research was focused on two locations, namely Anapalu and Anajiaka village both in the West Umburatugai District of Central Sumba Regency. This research is a type of explorative-descriptive research, with a qualitative research approach, which is based on Arikunto (2002), among others characterized by emphasizing natural settings, using non Probabilities sampling, and emphasizing processes rather than results. The data are obtained based on field surveys and existing reference studies, which are then analyzed using descriptive analysis, which is trying to construct reality and cultural meaning (Soemantri, 2005). Data collection at the location of the study were also carried out observations and in-depth interviews with several local community leaders and other sources.

Local Wisdom Concept

Local wisdom is defined as a view of life and knowledge as well as a life strategy of activities carried out by local communities in meeting their needs (Alfian, 2013). The community maintains its culture in various ways. In traditional society the habit of the people from generation to generation is tradition that is maintained. Conceptual idea that lives in society grows and develops continuously in public awareness. They relate to sacred and profane life.

Local wisdom according to Ratna (2011) can be defined as a culture created by local actors through repetitive processes, through the internalization and interpretation of religious and cultural teachings that are socialized in the form of norms and used as guidelines in daily life for society. Whereas Santoso (2009), states that local wisdom as positive human behavior in the face of nature and the surrounding environment, which can be derived from religious values, customs,

ancestral advice or culture that is scientifically built in a community. Local wisdom can be understood as a local idea that is full of wisdom, and of good value, which is embedded and followed by community members.

From the various notions of local wisdom, it can be understood that local wisdom is the idea of local community based on interpretation of religious teaching so that it is wise and there is good norm, which is embedded and followed by members of community.

The discussion of traditional settlement architecture cannot be separated from the concepts of local wisdom because settlement architecture is one of the media to recognize ethnic culture in certain group of people. Understanding of traditional settlements in an area relate to an understanding of various cultural elements such as ideology, relationship system, technology, ecology and customs of the people in the area. Based on the notion of the concept of Local Wisdom as described above, a discussion of local wisdom in traditional residential architecture can be described based on the sociocultural system theory initiated by Sanderson, which consists of three basic components namely ideological superstructure, social structure, and infrastructure (Sanderson, 2011).

In the context of local wisdom that influences traditional residential architecture the three components of the sociocultural system are interrelated one and another. The ideological superstructure in the form of ideas emerges from social structures which are basically human behavior in social life that is in accordance with the conditions of infrastructure that includes technology, economics, and demography.

Traditional Settlement

Settlement is part of the environment outside protected area, both in the form of urban and rural area that function as neighborhood or residential environment and place of activity that support livelihood and livelihood (Law no.4 of 1992 concerning Housing and Settlements). From this study it can be understood that settlement is an area where a person or group of people (community) lives and has a fairly close attachment to their environment, both natural and social.

Settlement environment is a system consisting of five elements, namely (K. Basset and John R. Short, 1980, in Kurniasih):

1. Nature, includes natural resources such as topography, hydrology, soil, climate, and biological element, namely vegetation and fauna.
2. Man, includes all his personal needs such as biological, emotional, moral values, feelings, and perceptions.
3. Society, the existence of humans as a community group.
4. Shells, where human as individuals and groups carry out activities or carry out life.
5. Network, is a natural and man- made system, which supports the functioning of the settlement environment such as road, clean water, electricity, and so on.

Based on understanding above, it can be known that a settlement consists of contents, namely human being, both individually and in society and that is the physical environment of settlement, physical environment of settlement which is a place for human life and an embodiment of values, social system and community culture that forms a community as part of the neighborhood. According to Habraken in Fauzia (2006), as a community product, the form of settlement is the result of social agreement, it is not a product of people. This means that different communities certainly have different characteristics of settlements.

Amos Rapoport (1983) states that settlement can be seen as a cultural landscape, especially traditional settlement whose physical form is related to culture, where the characteristics are:

1. There is a relationship between various elements and also the nature and elements, including between the built environment and the natural environment.
2. It has distinctive characteristics and characteristics,generally containing a specific culture.
3. It is not designed by a designer. Design is a broader concept that is a manifestation and decisions and human choices, a choice among various possible alternatives.
4. There is a specific characteristic based on applicable law, reflecting the culture of the group.
5. It is a system of choice and lifestyle, including choices on how to determine material, time and symbolic sources.
6. Cultural landscape, for example settlement is a product and system of choice.
7. Conservation-preservation and cultural landscape which is a level and quality of the environment. Conservation and principles in the span of traditional culture can be applied in new designs.
8. Environmental quality, which concerns perceptions (related to psychological, socio-cultural) and standards (related to physical and environmental studies).

Natural conditions, different social and cultural environments will produce different conditions for traditional settlements, because basically traditional settlements are the result of physical culture, which reflect the character of the community. According to Sasongko (2005), traditional settlement is often represented as a place that still hold customary and cultural values that relate to belief or religion that is specific or unique to a particular society rooted in certain place beyond historical determination.

Influence Form of The Local Wisdom In Traditional Settlement Architecture In Central Sumba

The Sumba Island is geographically located at 9º-10º LS and 119º-120ºBT with an island area of ± 11,153 km². The position of Sumba Island is to the south of Flores Island and Sumbawa Island and is to the north of the Australian continent. The south and west coast of Sumba Island is an ocean off the Indian Ocean while the east is the Savu sea. Administratively, Sumba Island is currently divided into 4 Regencies, namely South-West Sumba Regency with the city center in Waitabula,

East Sumba Regency with the center of Waingapu, Central Sumba Regency with the center of Waibakul and West Sumba Regency with the city center in Waikabubak.

Traditional settlement can be described based on the sociocultural system theory which is initiated by Sanderson consisting of three basic components namely ideological superstructure, social structure, and infrastructure (Sanderson, 2011).

1. Factor of Ideological Superstructure

The ideological superstructure is patterned way, in which way the members of the community think, make concept, judge and feel something, which include several elements: general ideology, local religion, science, art and literature (Sanderson, 2011). General ideology refers to the characteristic of belief, characteristic of value, and characteristic of norm that apply to a society. Local religion refers to beliefs and common values relate to supernatural powers which are generally considered to be able to directly interfere with human life without being bound by time (at any time) and place (anywhere). Science is a series of techniques for gaining knowledge based on observation and experience. Art is symbolic impressions or expressions that have aesthetic and emotional value for a society. If art in this sense is more physical, literature which is basically also symbolic impressions but is verbal (oral and / or written). Mite and legend are parts of literature that live in the society (Sanderson, 2011). Based on the understanding of the ideological superstructure above, the manifestation of the influence of local wisdom in terms of culture in the form of ideology, knowledge of the local community, religion and belief in traditional residential architecture in Central Sumba can be seen from the characteristics of Sumba residents' homes, especially Traditional Houses or Traditional Houses .

From the result of observation and interview conducted with the leaders of the local indigenous community, it can be seen that the house for the people of Central Sumba is not just a house to live in, but also a description of certain social functions. This can be seen from the differences in the functions and names of Kabisu. Kabisu is a term for a large family. In Central Sumba and West Sumba it is called Kabisu while in East Sumba and South-West Sumba it is called Kabihu.

Houses in Sumba are generally in groups of villages, where houses in the villages are collection of one or several sub-tribes (sub-kabisu). Sumba Villages spread out and locate in accordance with the geographical conditions in which the villages locate, whether on the fields or hills, on the center island or on the coast.

The Sumba people still respect the Ancestral Spirit (*Marapu*). The most of Sumba people's livelihoods are closely related to Marapu's understanding. Marapu is also interpreted as something of a miraculous power that can manifest in various forms of objects, animals and humans. In honor of Marapu-Kabisu, each of the kabisu has an ancestral spirit in the village (praingu), where Kabisu asks for advice and help. The intermediary in the relationship between people and Marapu is a small basket or box placed under the ridge beam. The object is usually called *Marapu* too. The object is closely related to Marapu's understanding. *Marapu* is also interpreted as something of a may be moved down only on special events and with special ceremonies as well. Aside from Marapu-Kabisu, each family (part of the

Kabisu) has *Marapu - a family* that is also kept under a roof top in a family home.

The Sumba people in a settlement culture has 3 types of houses, namely:

1. Traditional House (Uma Bakul) which functions as the center and the beginning of life, all ritual activities take place in this house.
2. Hamlet house as a place to live everyday.
3. The Garden House as a place to live when gardening or planting.

Uma Bakul is a large house as the center of Kabisu, as a place to worship Marapu and as a place of residence from Ina Ama (mother- father) or the residence of the king. The shape of the roof of Uma Bakul's house is higher compared to the surrounding houses. The typical shape of the roof, relatively high and in accordance with the dimensions of the house can create beauty that is easily recognizable from a distance (Zumthor, 1998). Roof construction is associated with large spans in order to protect wind and rain. In different geographies, dwellings include roofs, reflecting local knowledge, technology and the local environment (Ohno and Xihui,2008).

Figure 1: Uma Bakul Anapalu
Source:Author, 2018

At this time not all families have the three houses, the families under the Kabisu mostly live in the Hamlet located around the Traditional House. Whereas houses located outside the Kampung neighborhood called *Rumah Kebun* are usually owned by families that have higher mobility because of their work or activities.

Figure 2: *Rumah kebun* (garden house)
Source: Author,2018

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Sumba traditional house is a stage with wooden structures. hierarchically vertically, house can be divided into 3 major parts, namely:

1. Lei Bungan (under house), which is used as a livestock shelter.
2. Rongu Uma (second level), as a place to live everyday.
3. Uma Daluku (tower or attic) which consists of two parts, top and bottom. The upper part (Hindi Marapu) is the residence of Marapu which is present in the form of a sacred heirloom.

Horizontal plan for Traditional Houses in Central Sumba and also Traditional Houses in Sumba consist of:

1. The main room (katonga) used to receive guests,
2. Bedroom (koro),
3. Kitchen (rabuka) located in the middle of the building.

The Circulation Pattern in the Central Sumba Traditional House building consists of two doors at the front of the house. On the left side of the front is a door that can only be passed by men / guests, while the other side is a door for women.

In the settlements in Central Sumba there is a house that is used as a place of worship, which is called as *"Rumah Ula Ndapata Ungu-Panongu Ndapa Kelangu"*, which means an uninhabited house and unsupported stairs. The house is physically small but "invisibly" the house is a "big" house. Inside the house there are 2 jars and heirloom gold. The first jar is used to find water in the river that will be moved in the second jar. If the water that is transferred is abundant, it means that there will be a lot of rainfall, if the spilled water is lacking and cannot fulfill the second jug, it means that the rainfall in that area is small. (Kapita, 1976).

Figure 3: "Rumah Ula Ndapata Ungu- Panongu Ndapa Kelangu"
Souce:Author, 2016

2. **Factor of Social structure**

   Social structure is basically an actual human behavior that arises in relations among each other and in their relations with the natural environment (biophysics). As states by Sanderson (2011), social structure in this sense

consists of several elements, namely family, kinship, politics, education. Political elements in social structure refer to organized way of a society in maintaining law, internal rule and individual relationship, including controlling social conflict (Sanderson, 2011). Organized way like this can develop to a traditional village government system. This village government is very important, because it has power and it is able to play the power attached to it to create social order, including social order in the management of various resources.

Architecture is intended for everyone, created by using all human intellectual abilities to meet human needs both as individual, group and as a society. Architecture is closely related to the sensitivity of human culture. Sumba Traditional House is a representative of human intelligence and the wisdom of the Sumba community in architecture

The manifestation of the influence of local wisdom in terms of the social structure of traditional residential architecture in Central Sumba can be seen from the characteristics of the residential houses of Sumba as well as their relation to existing form of kinship. In making settlement, the people of Sumba adhere to mutually agreed rules, according to their kinship system. The community adheres to the matrilineal kinship system and brings this feature into the construction of settlement architecture.

The position of Uma Bakul makes it possible to see the conditions and activities of the surrounding houses. With this position, Ima (chief of culture) can find out if there is house that does not do cooking activities in the kitchen, so that the house will be visited and know what problems are being faced to be given help / assistance. This is a reflection of local wisdom that emphasizes the prioritization of kinship interest that pay attention to the need or problem of other relative.
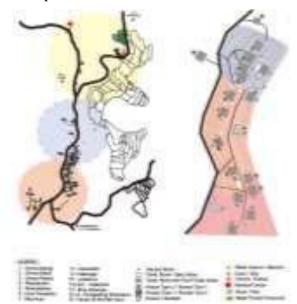

Figure 4:Map of Praikatondo
Source: IFSL, 2018

The kinship element that prioritizes togetherness and equality is also reflected in the existence of traditional house architecture that has wide public space for interests along with the layout of the house in parallel.

3. Material Infrastructure Factors

Material infrastructure consists of elements: technology, economy, ecology, demography (Sanderson, 2011). Technology consists of information, tool, and technique that human use to adapt to the environment in a wide meaning. Humans are able to process and utilize environmental resource to meet their economic need.

The manifestation of the influence of local wisdom in terms of material infrastructure towards traditional settlement architecture in Central Sumba can be seen from the characteristics of the site plan of Sumba houses. The site plan settlement of Central Sumba adjusts the contour of the existing land. If the land is flat, the houses face to the open space in the middle as a public area called Natara. Whereas if the land is contoured then the location of the house adjusts to the existing contours. Natara, often used as one of the traditional ceremonies / rituals or as a place to put grave stones.

Traditional settlements in Central Sumba are built in a settlement (paraingu) located on a hill, which is a infertile land. This is a wisdom in the use of land so that fertile land can be used as an agricultural or plantation area.

Figure 5: Map of Anajiaka village
Source: IFSL,2018

Figure 6: Anajiaka Village on hill
Source:Author, 2018

The use of Megalith as grave stone for several bodies is also local wisdom related to the use of land, because by using stones it will save space or land.

Figure 7: Megalith
Source: Author, 2018

Conclusion

Local wisdom is a reflection of valuable experience from traditional architecture. Traditional settlement is the design of architectural indigenous people who has local cultural value and belief. Local wisdom factors that influence the characteristi of traditional settlement in Central Sumba are: (1) ideological superstructural factor in the form of belief, characteristic of value, and characteristic of norm believed and adhered to by the community; (2) social structure factors in the form of kinship relations, and customary leadership prevailing in the community; (3) material infrastructure factor in the form of an understanding of the material and methods of its use, the economic conditions of the community, and the natural conditions understood by the community in Central Sumba.

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