

The Architecture of Lanting House from The Perspective of Sustainable Living

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ABSTRAK: *Lanting House is a traditional Banjar house that can float and located around the river of Banjarmasin. one of the disadvantages of the lanting house is that it looks dirty and gives the river a slum impression, but this house is a cultural heritage that needs to be preserved. The purpose of this paper is to analyse the lanting house in the perspective of sustainable living whether the house can fulfil the needs of the owner and find out how to maintain it. The analytical method used in this paper is by visiting the lanting house, examining more deeply through journals, books, and also conducting interviews with lanting house users and the opinions of experts who have studied the house. The conclusion drawn in this analysis is that the lanting house cannot meet the requirements for sustainable living, because it is mentioned in the literature review that, in order to achieve sustainable living, the building or the atmosphere must be able to meet three criteria, namely environmental sustainability, economic sustainability, the Lanting House can only accommodate 4 types of rooms, namely bedroom, living room, kitchen, and bathroom. Other causes, including access from land to lanterns, clean water, sanitation, fire, and others. The lanting house must be preserved such that there will always be a lanting house. To ensure that the lanting house is recognized and still exists, the purpose and placement must be structured in such a manner that it is not as in the past. However, changes need to be made in order to satisfy the demands of the current circumstances and even in terms of the profitability of health, protection, and comfort.*

Keyword: *Architecture; Lanting House; Conservation; Sustainable living*

INTRODUCTION

Banjarmasin is a city in the province of South Kalimantan, Indonesia. The city of Banjarmasin is nicknamed the City of a Thousand Rivers; this is due to the position of Banjarmasin City, which is surrounded by various rivers, both large, medium, and small rivers. The city of Banjarmasin is divided by the Martapura River, the river that connects the city of Banjarmasin with other towns in South Kalimantan. It even connects with cities in the province of South Kalimantan. The river becomes an essential part that influences the development of Banjarmasin, including in terms of the social, cultural, and economic life of its people. The influence of this condition ultimately makes the behaviour, culture, and customs of the people of Banjarmasin City have characteristics that cannot be separated from the river. Its various activities and people's way of life are closely dependent on the river. In the past, rivers were a means for the circulation of various river transports. Ships and multiple types of boats carrying multiple necessities of life are transported by rivers. As a result of the high activity, the people on the river end up using the riverbank area as their residence. Furthermore, some take advantage of the high impact of the activities of various boats on the river as part of their source of livelihood/economy. They took the initiative to provide shelter as well as function to trade on a floating basis. This is done so that the boat

can stop by and is not hampered by tidal conditions in the river. place to trade as well as the floating residence was later called Lanting House.

Rumah Lanting is one of the cultural heritages and a type of traditional Banjar architecture. Lanting house as a shelter and business is proof that the river has an attachment to the behaviour of the people of Banjarmasin. In this case, because they are doing activities in the river. Therefore the river is the heart of its people. Unfortunately, due to the rapid growth and development which is dependent on land, the activities and various cultures of river life are neglected. The case of Lanting House that began to disappear its existence above the river around the city of Banjarmasin even along the river that connects the city of Banjarmasin with other cities in Kalimantan. At the same time, the other side of the lanting house building is a cultural heritage that needs to be preserved. (Syarief, 2016)

Another reason why the lanting house is starting to disappear is that this traditional architecture is considered simple, slum, and makes the river look dirty. Whereas it should be because the lanting house is part of the traditional Banjar architecture and also as one of the historical objects of the occurrence of the Banjarmasin city must be given more attention, and this building is obliged to preserve its existence as a historical asset. Given the importance of the architecture of the lanting house which is part of the Banjar culture, so that the lanting house is preserved and able to accompany activities according to current and future needs using the concept of sustainable living. Sustainable living is an ecological adaptation to lifestyle choices and decisions. One of the concepts of sustainable living expresses what it means to meet the current ecological, cultural and economic requirements without destroying these factors for future generations. This concept defines sustainable living in four interrelated social domains: governance, biodiversity, politics and culture. The author tries to do research related to the architectural aspects of the lanting house against the view of sustainability.



Figure 1. Lanting house on the banks of the Martapura river, Banjarmasin City in 1854.
(Source: https://www.wikiwand.com/id/Rumah_Lanting)

LITERATURE REVIEW

Banjarmasin city owing to the many rivers in the city Banjarmasin. About 40% of the city area consists of broad rivers and rivers that intersect each other, including the Martapura river. Martapura River is a river that separates the city of Banjarmasin into two parts. Moreover, it plays a significant role and becomes the lifeblood of the people of Banjarmasin city. (Afdholy, 2017),

Economic activities of society that along the river's route rely on each region's potentials which it passes. They're doing Trade by distributing goods from the place of origin to the town, or vice versa, using the river path. Others take advantage of the river as

a source of life, catching and selling fish on land. These types of society are then chosen to live on the river bank by providing shelter on the water. (Zain & Putro, 2019),

The term "lanting" originates from the Banjarese language (South Kalimantan) it means a raft of arranged bamboos. People decide to develop their houses on the water and live there for various reasons, for example, because they do not own land or because their job relates to rivers such as fisheries and water transport. Lanting settlements can be found in a variety of areas with large rivers such as the Kapuas, Barito, Mahakam, and Kahayan rivers in Kalimantan. (Lubis et al., 2019)

Lanting house has a basic rectangular space plan, situated along the length of the river to mitigate the impact of the water current on the building framework. The scale is not wide due to the load-bearing bamboo base. It consists of three main rooms: dining space, bedroom and kitchen; facing the river and the ground, has links on all sides; the presence of a deck facing the river and the land, one facing the river, serves as a swimming place, while the other faces the land as a laundry area. In this style of configuration, the living room is multifunctional, with views to both the river and the ground. (Dahlani et al., 2015)



Figure 2. Rumah Lanting

(Source: <http://berita.baca.co.id/34758765>)

Sustainable development is to reconcile economic growth, social progress, sustainable use of natural resources, maintain the ecological balance, and ensure living conditions now and in the future. The concept of sustainable development summarized as creating a healthy environment, a vibrant economy, social welfare, and an active community. Nevertheless, the negative impact of people's activity on the environment in which the buildings constructed and updated must be minimized. (Drejeris & Kavolynas, 2014)



Figure 3. Sustainable Living Criteria

(Source: Samaratunga & Daniel, 2013)

Sustainable living has many aspects: Starting from the economy, healthy environment, social progress, and being able to provide activities in the future. So this is what causes the lanting house to start disappearing because it can't provide that, but it is not only a sustainable problem that causes the lanting house to start disappearing. In this study, I want to examine this problem. Whatever influences the disappearance of this house, limit it by only examining the environment where they live whether it can be categorized as sustainable living or not.

METHODOLOGY

This study uses qualitative research methods, using a theoretical study about the history of lanting house and the criteria of sustainable living so it will be easier for the researcher to formulate the basic aspect of the topic of paper which will later be analyzed, compared, and arrange the data obtained through data reduction, and finally the conclusion.

Data obtained by collecting from journals, observations directly to rumah lanting that located along the martapura river to know the condition of the house, doing an interviews with residents of lanting houses to know how it feels to live in that house and finally doing an interview with architects who are experts in lanting houses to know how the views and suggestions to the the house so that it can be maintained again because it is a cultural heritage. The instrument that will be used for this research is to use notes to write down the data that has been obtained, and also the camera to obtain data about the environment and situation of the current lanting house.

RESEARCH QUESTIONS

1. How is the condition of the architecture and the environment of rumah lanting ?
2. How do people live in a lanting house?
3. Can the lanting house meet the owner's needs?
4. How is the lanting house from the perspective of sustainable living?
5. Is there a way that we can preserve the lanting house?

RESULT AND DISCUSSION

Data collection was carried out on December 12th, 2020 at 10.30 am using a boat to the lanting houses which are scattered around the Martapura River and Barito River the trip is done using a chartered boat. The specific location where the Lanting House is located is in the area of the Sasirangan Village and also on Bromo Island.



Figure 4. (A). Sasirangan Village (First Lanting Area),
(B). Bromo Island (Second Lanting Area)
(Source: Google Earth)

1. Lanting Typology

From this trip the writer discovered several typologies of lanting around the river, the first is lanting for living, namely traditional lanting, the second type of lanting for business, here lanting is used as a place to sell products and also a place to live, the last is the modern lanting that has been developed into another function and its form is also different from the vernacular of a lanting house.

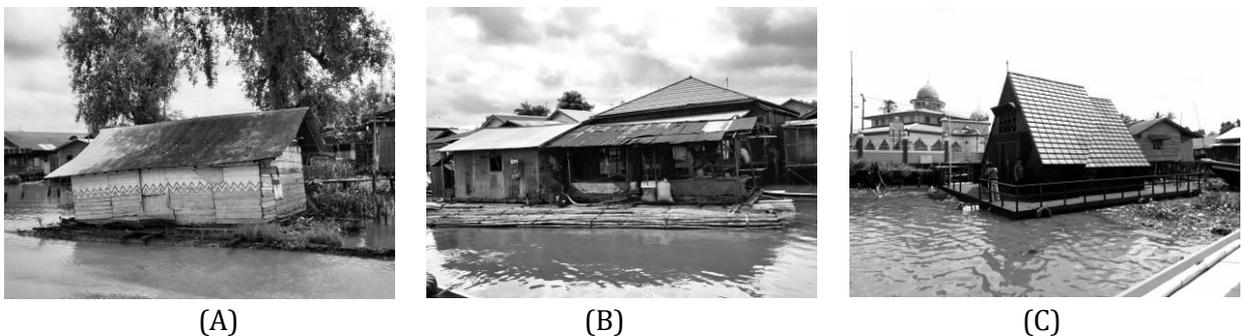


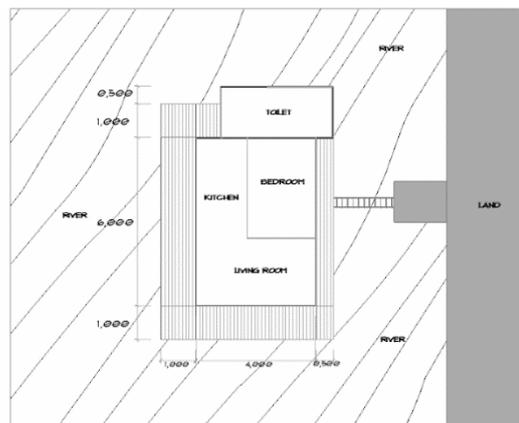
Figure 5. (A)Lanting House for Living, (B) Lanting for Business, (C)Modern Lanting
(Source: Author)

In this area, there are several lanting houses that are still occupied by the community and some are damaged and neglected, here the writer conducted interviews with people who live in the lanting house. The informants are Pak Sujarno and Bu Tati, they have lived in the lanting for 30 years and lanting is a legacy from generation to generation from their family. here the researcher asking about what it feels like to live in a lanting, the answer is that living in a lanting gives it mixed feelings sometimes it hurts sometimes it's comfortable, the problem that occurs is garbage from the river which is stuck in his lanting from the observation itself the condition of the environment quite dirty there is rubbish that floats around the house. for the experience of living on the lanting is the feeling of sleeping floating in the water, for its own space this lanting can only accommodate 4 activities,

namely the living room, kitchen, bedroom, and finally the Bathroom. The land connection there is a small bridge that connects to the mainland, the bridge can only support one person at a time. Pa sujarno said that the government already tried to help by renovating the house by giving a new barrel for the house to float and giving a new paint job for the house. The hope from pa sujarno is that a lanting houses can be developed more.



(A)



(B)

Figure 9. (A) Pak Sujarno Lanting, (B) Lanting House Floor Plan. (Source: Author)



(A)



(B)



(C)



(D)

Figure 11. Lanting House Interior: (A) Living Room, (B) Bedroom, (C) Kitchen, (D) Bathroom. (Source: Author)

2. Lanting House According To The Expert Perspective

Data collection followed by interviewing an expert who is an architect who had discussed the city of Banjarmasin, his name is Ir. Subhan Syarief, he had observed and written a lot of criticism about the city of Banjarmasin which was usually covered in newspapers and he happened to discuss the lanting house in his book titled "*Jika (aku) menjadi walinya (kota)*" from the results of the interview I had done I asked about things related to the Lanting house. And the data that I have been able to get is this based on my research question the first one is that the architectural condition or environment of the lanting house is very apprehensive because it is not maintained and not developed according to the times, and responds to the need for a more complex space such as a private

room (bedroom), a toilet that meets health requirements, and does not pollute the environment, he said that lanting house is actually can fulfil the needs if only for a place to rest or trade, but if used as a place to build a family is still far from expectations. It can be seen that in current conditions, the lanting house will indeed be difficult to develop, but when viewed from the socio-cultural aspect of river life, the continuity of the lanting house is very necessary. According to him, a way to maintain the existence of lanting house so it does not disappear is that the lanting house must be able to accommodate more complete activities, not only as a floating shelter or just a place to trade. In the future, the lanting house must be able to function in addition to these functions, for example, being a floating restaurant/cafe, promotion of certain institutions, for example (offices, bank, puskesmas), as a floating hotel, a local handicraft shop, etc, and certain area is needed to be used as a lanting house area. These areas can be located in the meeting centres between rivers. can be seen in the illustration below

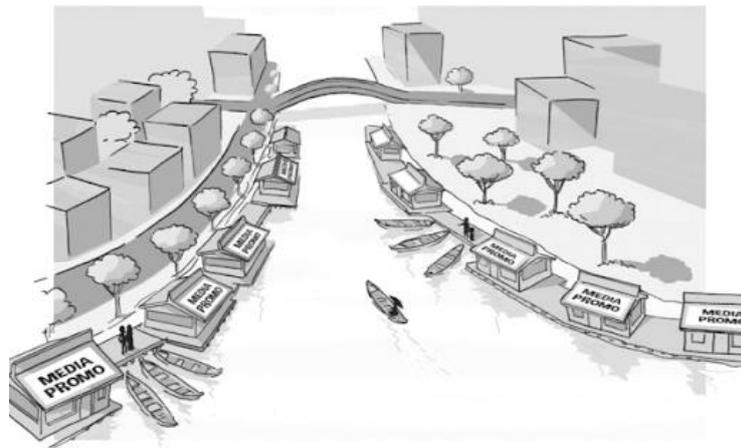


Figure 11. Illustration of Lanting House
(Source: Syarief, 2016)

CONCLUSION

From the observations that have been obtained, the condition of the lanting house is not suitable for housing, it is related to reasons, including the environmental condition of the lanting house is inadequate because of the garbage stuck in the lanting house, access from land to the lanting house which can only support one person, clean water, sanitation (toiled, etc.), fire, and other aspects. From that it can be concluded that the lanting house cannot meet the criteria for sustainable living because in the parameters mentioned in the literature review it is stated that to achieve sustainable living, the building or environment must be able to meet three criteria, namely Environmental Sustainability, Economic Sustainability, and also Social sustainability. For this reason, lanting house cannot be considered as a housing for a family but can still be considered a place to sell products and also a rest area.

On the other side of the local architecture, the lanting house must be maintained so the lanting house can still exist. In order for the lanting house to be accepted and still exists so the function and placement need to be arranged so that it is not like in the past. But adjustments need to be made so that they can fit the needs of the present conditions and also in terms of the feasibility of health, safety, security, comfort, the transformation of

functions is important. This includes placing only in certain areas on the river which will increase the visual existence of the area. For example in areas that are often seen by the public.

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Rumah Lanting <http://berita.baca.co.id/34758765>