

## Conference Paper

# Housing Preference Transformation in Selayar Islands Regency

Yudha Pracastino Heston and Yonanda Rayi Ayuningtyas

Research and Development Office for Application of Settlement Technology, Ministry of Public Works and Housing, Jl. Laksda Adisucipto No.165 Yogyakarta. Telp/fax (0274) 555205/546978

## Abstract

The study was conducted to find out the changes in preferences of Selayar Islands Regency community from the use of stilts to landed houses. The study was conducted through the vernacular architectural exploratory method of Selayar Islands Regency in the Tanadoang Museum which uses the traditional house design of Selayar and Bitombang villages which are traditional villages that are 100-200 years old and still maintain the existence of Selayar vernacular architectural designs to present. Data collection was carried out by direct observation in the field and conducting interviews with the community regarding the preference for traditional house use to become a modern house. Existing Selayar traditional architectural design is a form of adaptation to the environment, lifestyle, and geographical conditions. There is a change in preferences for the use of traditional houses in Selayar Islands Regency, in line with the development of building structure technology and the improvement of the economic conditions of the community. The use of stilts with wood material is considered no longer economical because of the limited wood materials used.

**Keywords:** architecture, vernacular, traditional, housing, Selayar Islands.

Corresponding Author:  
Yudha Pracastino Heston  
pracastino@yahoo.com

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## 1. Introduction

Selayar Islands Regency is an area of South Sulawesi Province as an archipelago located on the southern tip of Sulawesi Island. Selayar Islands Regency has a total of 130 islands, with an area of 10,503.69 km<sup>2</sup> covering a land area of 1,357.03 km<sup>2</sup>, and an area of sea waters 9,146.66 km<sup>2</sup>. The population in 2016 was 131,605 residents [1]. In the past, Selayar Islands Regency was once a trade route to the spice center in Maluku. In the Selayar Islands, traders stop by to fill supplies until they wait for a good season to sail again. From this cruise activity, the name Selayar appears. The name "Selayar" comes from the word *cendaya* (sanskrit) which means one screen because it is said that many one-screen boats stop by this island. Besides the name Selayar, the island is named after "Tana Doing" which means place of prayer. In the past, Selayar Island became a place of prayer for sailors who wished to continue their journey both west and east, for

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the safety of their voyages. In the Amanna Gappa (17th century) law and shipping law, Selayar is referred to as a good transit place for sailing to the east and west [2].

Houses in Selayar Islands Regency are still dominated by stilt houses [3], as shown in table 1. The use of stilt houses is commonly used in several regions in Indonesia. The advantage of using a "house on stilts" is that it can adjust the room temperature faster, because there is no direct contact with the soil or concrete so that air circulation is better. But over time, difficulties in obtaining timber, and government regulations related to restrictions on timber exploitation, made the stilts house increasingly abandone[4].

TABLE 1: Housing Conditions in Selayar Islands Regency.

No	Village	Permanent	Semi-Permanent	Wooden house	Gubuk(hut)	Rumah Panggung (Stilt House)
1	Pasilambena	167	132	149	32	383
2	Pasimarannu	183	243	56	2	107
3	Buki	207	261	42	12	77
4	Bontosikuyu	62	166	38	-	97
5	Bontomanai	469	440	83	-	422
6	Benteng	2164	1056	165	-	878
7	Bontomatene	467	722	161	-	378
8	Pasimasunggu	690	878	206	-	497
9	Pasimasunggu Timur	129	392	73	-	496
10	Takabonerate	14	193	91	-	425
11	Bontoharu	54	127	57	4	238
<b>Total</b>		<b>4.606</b>	<b>4.610</b>	<b>1.121</b>	<b>50</b>	<b>4.767</b>

Source: Dinas Perumahan dan Permukiman Kabupaten Kepulauan Selayar (2017: III-36)

Selayar traditional houses in the form of stilt houses are still widely found in Selayar. The form of Selayar Island traditional house is used as a direction for the design of the Tanadoang Museum which stores items that show the history and culture of the Selayar islands. One of the villages that use the form of traditional selayar houses is Kampung Tua Bitombang. House buildings in Bitombang are estimated to be more than 500 years old. Until now, the original tradition and form of the house in Bitombang are still maintained and used as one of the attractions in the Selayar Islands Regency.

However, the use of traditional houses on Selayar Island has begun to shift, along with the development of building technology, improving the economic conditions of the community, as well as changes in people's lifestyles towards more modern ones. The study was conducted to explore the form of the Selayar Islands traditional house and identify the shift in preferences for traditional house use to modern homes.

## 2. Vernacular Architecture

A critical factor in architecture is function because architecture is a place to fulfill the needs of human activities, including natural conditions. While activities arise from human needs, both physical and psychological [5]. One of the views related to Vernacular architecture was presented by Rapoport [5], namely the vernacular as a process and vernacular as a product. As a process, vernacular architecture has no clear architect, naturally responds to the environment and the needs of residents, while as a product of vernacular architecture is very contextual.

Another view states that vernacular architecture has two variables which are related to form and meaning [6]. Both have vernacular aspects, namely technical, cultural and environmental.

## 3. Selayar Island Traditional House

Selayar Island traditional house is in the form of the stilt house. The stilt house provides its own uniqueness in terms of the design of the building and the surrounding environment. In its development, the construction of traditional stilts poles rests on a stone or simply placed on the surface without having to be inserted into the ground. Stilts construction is intended to keep the distance the height of the floor, and the surface of the ground through the pillars/building supports [7].

### 3.1. Traditional house form

The form of the Selayar Islands traditional house is used as a directive for the building design of the Tanadoang Museum in Selayar Islands Regency as shown in Figure 1. The museum houses various kinds of historical objects such as traditional clothing, spear kris, ceramics, ancient currencies, up to the replica of traditional Selayar vessels. Traditional clothing, keris and spears and other handicrafts by kings and traditional leaders during celebrations of religious days, marriages, wars, and other traditional rituals. Ceramics and metal pieces that are believed to have originated in China as well as proof that the area used to be traffic and a stopover for world sea trade. While the replica of a traditional ship called *Lambo*, in ancient times was used as a means of sea transportation to various regions in Indonesia.

Inside the Tanadoang museum, there is a Selayar Islands traditional houses miniature. The miniature explained that the Selayar traditional house is generally a stilt house



**Figure 1:** Tanadoang Museum. Source: Documentation (2018).

built according to the concept of cosmogony, namely the macrocosm and microcosm. Microcosm is divided into three parts, i.e.; (1) the underworld, (2) the middle world, and (3) the upper world (Figure 2).

The concept at the stilt house is divided into under houses which function as livestock storage. The house is used as a family activity, and the upper part of the house is used as a family barn. The house is divided into three parts, i.e. (1) terrace, living room; (2) family room; and (3) kitchen.

The roof of the house is made of bamboo or known as *temba roof* (split bamboo). In one house usually, use 20,000-30,000 pieces of the copper roof. Also, there are also those who use thatch leaves. The roof section consists of (1) *bubungan*, (2) *timbangajara*, and (3) *tappi*.



**Figure 2:** Tanadoang Museum Detail. Source: Documentation (2018).

### 3.2. Traditional houses in Kampung Tua Bitombang

Bitombang is one of the historical heritage villages with the characteristics of traditional houses in Selayar Islands Regency. Bitombang is located in Bontobangun Village, Bontoharu District, Selayar Islands, with a distance of 7 km from Benteng City. Most houses in Bitombang have ages 100-200 years, so this village is called *Kampung Tua Bitombang* (Bitombang Old Village). Most people are farmers and carpenters, and a few

employees. The population in 2016 was 403 people from 120 families [8]. Based on an explanation on the signed in the tourist area of Kampung Tua Bitombang, Bitombang was originally founded by the ancestors of residents who fled in the 17th century for refusing the entry of Islamic religion, which formerly embraced the beliefs of mixing Hindu and animism.

This village is located on the slopes and hillsides. The house in Bitombang village was built with a tall pole, as a form of adaptation to the land contour, and according to residents, it was done to avoiding many thieves in the past. The house in Bitombang is located on a hillside, with towering poles on the back, and low on the front. Rear pillars range from 10-20 meters, and the front is only 2-3 meters [8]. People built a house starting from the selection of the *passiringang* place which means "shelter" to establish land. From this word, the word *siring* appears, under the house when a house has been built.



**Figure 3:** Frontside of Houses. Source: Documentation (2018).



**Figure 4:** Backside of Houses. Source: Documentation (2018).

For this reason, to build a house, a *Mataguri* (mahaguru) is needed. *Mataguri* is a person who is an expert in building houses, and is trusted by local residents to have the spiritual power that will fill the house that he will build [8]. This makes the tradition of building houses in this village must be followed by rituals to ask blessings for families

in the house including blessings of longevity; it is also said to be one of the reasons many villagers are hundreds of years old.

The hilly topography of the area also influences the condition of facilities and infrastructure in Bitombang Village. To access clean water, people get help distributing water from a spring on a hill that is channeled through a gravity system. As for access to sanitation, for the washing needs of the community, there is a dishwasher inside the house by taking water elsewhere. Whereas for bathing and latrines were carried out in public facilities assistance from the *Program Pembangunan Kecamatan* (PPK) or District Development Program in the form of water reservoirs and MCK located at several points in Bitombang Village.



**Figure 5:** Public Facilities of Clean Water and Sanitation in Bitombang Village. Source: Documentation (2018).

Based on the interview with one of the residents who made a living as a carpenter, in building a house in Bitombang village, there was still a culture of *gotong-royong* (cooperation). The development process begins with appointing one of the residents as a coordinator. In the construction process, assisted by all citizens, both men, women, and children. With this cooperation system, building a house frame only takes 3-4 days. However, the process of building houses in Bitombang before and now has changed; the construction of houses at the moment is mostly using experienced carpenters [8].

The material used as a pillar of the house is *bitti / holasa* wood with a durability of up to hundreds of years. Holasa wood that will last a long time is holasa wood that is 20-30 years old. While roofing material varies, using *rumbia* leaves, woven bamboo, and current developments have used asbestos and zinc. The development of material use was also seen on the walls in several houses in Bitombang, which initially used wooden boards to use zinc.

The rooms function consists of a family room which also functions as a living room, a room with an average number of 2-3 rooms, and a kitchen. Under the house, as a warehouse and garage, as shown in Figure 7.



**Figure 6:** Wall and roof material variation used. Source: Documentation (2018).



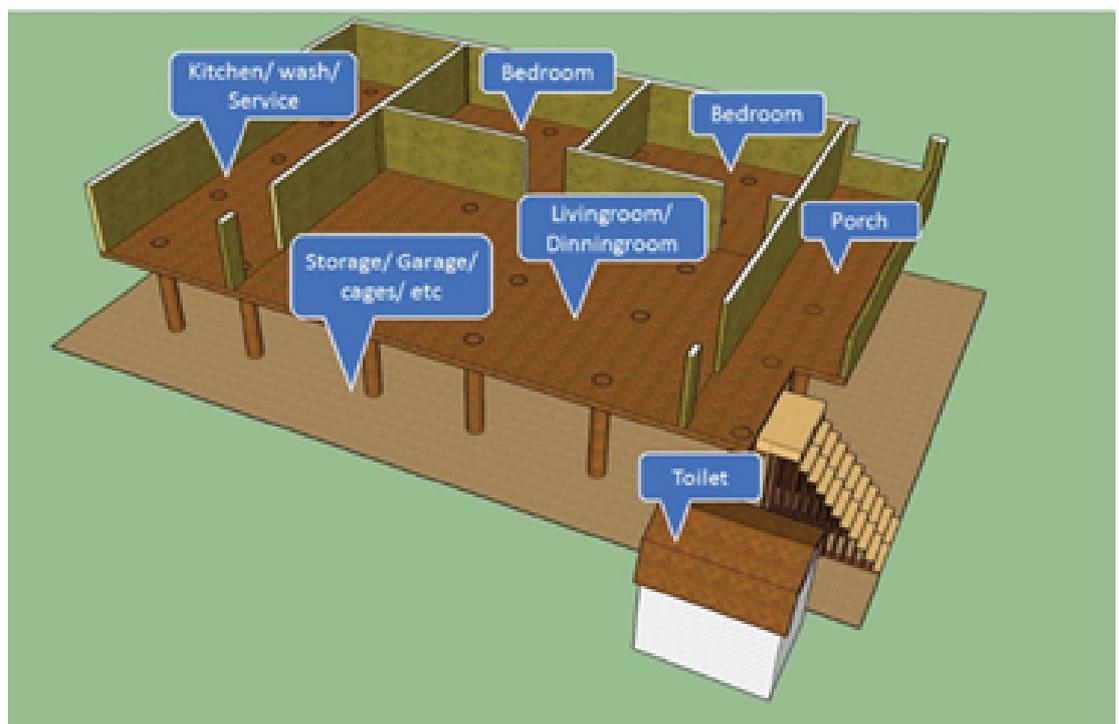
**Figure 7:** Interior and Exterior Function. Source: Documentation (2018).

## 4. Research Methods

The research method uses the explorative method. The explorative method is used to explore the vernacular architectural forms of Selayar Islands District, and its application in Kampung Tua Bitombang as well as homes in urban areas that still apply the concept of stilt houses and their modifications. The analytical method used is a descriptive qualitative analytic method. The qualitative method is used to describe the data obtained in the field. Analytical descriptive is a method by describing and analyzing at the same time. In its compilation, interviews were also conducted with community leaders regarding the direction of the shift in the application of vernacular architecture in Selayar Islands Regency.

## 5. Results

Based on traditional house forms that still exist today, it can be shown that the beginning of the space pattern of the Selayar Islands traditional house is an open house with no baffle, except for servicing purposes, i.e., the kitchen and laundry and storage of foodstuffs. While for bathing purposes washing latrines is on the lower floor, which is a development condition from what was originally done traditionally, by opening a hole in the field or a river or sea.



**Figure 8:** Illustration of TheSpace Pattern and Function of Selayar Traditional House. Source: Analysis (2018).

Selayar stilt house that has existed for a long time, can be explained based on the results of a field survey, is a form of adaptation to natural conditions (at the beginning), namely residents who work as sailors, sea fishermen, or live by the sea, then shift inland, which then shows the existence of the stilt house as an imitation of the perception of the house. Also, adaptation to natural conditions, related to the condition of the amount of rain and strong winds, so that it requires space above, to avoid excessive moisture while other needs are to anticipate animals entering the house.

The house model used by the residents of Selayar island includes a simple form because it only divides the space into three, i.e., public, semi-public and private areas. Based on the results of the interview, it was found that initially there were no divides inside the house to divide into bedroom spaces so that only large areas and back

were used as kitchens and other service needs. The shape of the structure used at the beginning is a wooden structure with a bolt-free connection. The use of wood materials is based on consideration of the availability of local materials that existed in the past. Until now there are still many residents who apply the stilts house with Selayar vernacular architecture design. The following is a picture of a stilt house that is still used in Selayar Islands Regency, in its original form:



**Figure 9:** Compilation of Current Forms of Application Selayar Traditional House. Source: Documentation (2018).

However, along with the development of lifestyle and the need for space, there are modifications to the original shape of the Selayar stilts house. Modifications to the shape of the stilts house can be seen from the buildings in the Benteng Urban Area and its surroundings. The stilt house was built into a two-story building with semi-permanent houses, the bottom of the house was built with concrete walls and the second floor still retained wood material. The following is a compilation of changes in shape and materials use of stilt house in Selayar Islands Regency:

In Patikarya Village, a coastal village in Selayar Island and located 20 minutes from Benteng, currently still dominated by wooden stilts houses, reaching up to 70% of houses. However, there was a change in the community preference from the use of stilts houses. According to Mr. Hikmatul's statement, the Patikarya village apparatus, which stated that the people's choice for residential use of the stilts house had changed into a "rumah batu" or "stone" house that means permanent house, as quoted:

*" There are changes in economic conditions; there is an increase in income, or many also use bank loans to build houses. The process of change began from building a permanent house behind the stilt house first, and then*



**Figure 10:** Compilation of Current Forms Modification of Shape and Material Used in Selayar Island. Source: Documentation (2018).

*gradually building a family room until the next to dismantle the stilt house. People prefer to use “stone” houses” (Hikmatul, 2018)*

The opinion was then supported by the statement of Mr. Gunawan, an employee of Selayar Islands Regency’s Office of Public Works and Housing, who stated:

*“Because stilt house is high maintenance, we must replace the walls every year, because it is exposed to splashes of water then moist and there are termites” (Gunawan, 2018)*

And Mr. Hikmatul added:

*“Unlike “stone” houses that do not need to do renovations every year, wooden houses must do renovations every year, whether on the roof, walls or floors” (Hikmatul, 2018)*

Initially, the wood does not buy to build a wooden stilt house, the initial construction costs are only for the cost of cutting the wood, but the wooden stilt house has a maintenance cost every year. In Patikarya Village, they stated a “stone” house uses just by employees (civil work), entrepreneurs, or traders, so it depends on the economic conditions.

Based on the fact, there was a shift in user preferences along with the modernization of the building structure. Changes in the function of space and a shift in preferences for residents from the stilts house to landed houses that are permanent homes are motivated by the high cost of maintaining a house on stilts, which must be replaced by one part each year.

Shifting preferences for habitation is a form of adaptation, adoption, or negotiation between something old and new. Improving the economic condition of the community is one of the things that support changes in the residential preference of Selayar Islands Regency residents. Initially, the stilts house was the main choice because wood materials were easy and cheaper to get. But along with the limited wood material, which causes high prices for timber, the cost of building and maintaining a house on stilts is no longer cheap.

## 6. Conclusion

The Selayar traditional stilt house is a form of vernacular architecture whose existence has for some time undergone a shift in its process and product needs. The process shift is related to the fact that stilts houses are no longer the main choice in the present, because of the high cost of maintaining wood materials, for example for walls that must be repaired every 5 to 10 years. The shift of products related to houses built in the present has been dominated by landed houses, and made from brick walls so that the sustainability of vernacular architecture on stilts is currently not very visible.

The change of the stilt house was carried out by the community gradually building a “stone” house part by part, as well as directly. Rational considerations regarding the function of space and the price of building materials are the determinants of decision making

The lack of understanding and meaning of the vernacular architectural value of the house on stilts, making decision making on the selection of stage architecture forms is not a preserved cultural form at this time. This condition is seen in the *kampung* area of Selayar Island which has begun to dominate the site; this can happen one of them because characteristics of the Selayar community that is open to other cultural interactions.

The policy brief that can be taken is by creating a cultural heritage area as well as the *Kampung Tua Bitombang*, to make the value and meaning of each stage of the growth of the existing local architectural culture.

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