

# House Design Architecture Based on Bugis Ethnic the Local Wisdom of the Environmental Concept

*by* Anas Arfandi

---

**Submission date:** 20-Mar-2019 11:00AM (UTC+0700)

**Submission ID:** 1092362659

**File name:** n\_Bugis\_Ethnic\_the\_Local\_Wisdom\_of\_the\_Environmental\_Concept.pdf (190.01K)

**Word count:** 1936

**Character count:** 10233



1  
**Research Article**

## House Design Architecture Based on Bugis Ethnic the Local Wisdom of the Environmental Concept

<sup>1</sup>Muhammad Ardi, <sup>2</sup>Mithen Lullulangi\*, <sup>3</sup>Bakhrani A. Rauf, <sup>4</sup>Faizal Amir, and <sup>5</sup>Rahman Sah

<sup>1,2,3,4,5</sup>Lecturers, Faculty of Engineering, Universitas Negeri Makassar, South Sulawesi, Indonesia

The research method used in this study is qualitative research. The location of this research at the Bone, Soppeng, and wajo Regencies, located in South Sulawesi Province of Indonesia we chose the tree area because this area is a central of the Bugis tribe. Data collection by open interview for 150 people were still understand design of house based on the Bugis ethnic's local wisdom, understanding the supporting factors and obstacles for the development of visible designs, and the method used to implement design appearing to the stakeholders. A qualitative descriptive analysis technique, conducted to analyzing each variables, consisting of front of their houses, the contour of the land facing the direction higher and flat, the position facing the main road and second road, and the slope and shape of the roof, that is data selection, data presentation, analysis of interpretation, and conclusion. The results of the study showed that they built the front of their houses according to the local wisdom of the Bugis ethnic, the houses were built in such a way that the position of the house should be facing east, the contour of the land facing the direction higher and flat, the position facing the main road and second road, the slope of the roof should be 27 to 35 degrees, the shape of the roof should be saddle and shield.

**Keywords:** Architecture Design, Local Wisdom, Residential Building, Bugis Tribe.

### Background

In any society or culture, population growth plays a major role in the increase in demand for houses and residential properties. To have shelter, they require residential buildings as a means of social services (Doxiadis, 2003), According to (Indonesian Law Number 32 of 2009), concerning Protection and Management of the Environment, it is of utmost importance to maintain the environment while dwelling houses and buildings are being built. A sustainable environment will form a good diversity of ecosystems which will further create a diversity of life forms and cultural diversity (Shiva in Kuswanto, 2005) all these are linked with the local wisdom which forms an integral part of environmental ethics.

The theory underlying this research is the (Indonesian Law No.4 of 2009) concerning Housing and Settlements (Budiardjo and Djoko, 1999) which states that a house is a building that functions as a place to live and is to foster family lives living there. (Frick & Petra Widmer, 2006) explained that a residence is that which meets the

conditions of a decent life. To build residential houses that are environmentally friendly, a variety of strategies are needed so that it can accommodate human aspirations and desires, alongside paying attention to a sustainable environment. (Kuswanto and Korten, 2001)

(Tasdyanto, 2008) states that the local wisdom and environmental wisdom are ethics, norms, and behavior towards the nature contained in a community. (Hamzah, 2013), explained that local wisdom is a dynamic knowledge, developed in certain societies which are related to nature and surrounding culture that serve as a basis for humans to interact with their environment.

**\*Corresponding Author:** Mithen Lullulangi, Faculty of Engineering, Universitas Negeri Makassar, South Sulawesi, Indonesia. **E-mail:** mithen@unm.ac.id.  
**Co-Author Email:** <sup>1</sup>m.ardi@unm.ac.id,  
<sup>3</sup>bakhranirauf@unm.ac.id, <sup>4</sup>faizal Amir64@unm.ac.id  
<sup>5</sup>rahmansah.arch@yahoo.com

According to (Marfai, 2012), the characteristics of local wisdom include the ability to withstand external cultures, the ability to accommodate elements of external culture, the ability to integrate elements of external culture into indigenous culture, the ability to control and give direction to the cultural.

5

## RESEARCH METHODS

The research method used in this study is qualitative research. The location of this research at the Bone, Soppeng, and Wajo Regencies, we chose the tree area because this area is a central of the Bugis tribe. Data collection by open interview for 150 people were still understand design of house based on the Bugis ethnic's local wisdom, understanding the supporting factors and obstacles for the development of visible designs, and the method used to implement design appearing to the stakeholders. A qualitative descriptive analysis technique, conducted to analyzing each variables, consisting of front of their houses, the contour of the land facing the direction higher and flat, the position facing the main road and second road, and the slope and shape of the roof, that is data selection, data presentation, analysis of interpretation, and conclusion.

## RESEARCH RESULTS AND DISCUSSION

### 1. Architectural Form Design

Design shows that there are small, medium and large type of houses built and developed with local wisdom in the following aspects:

#### a. Based on the position of the sun

The front leads to the position of the rising sun or simply facing east. The right side view to south, the rear view to west, and the left looks northward, it is observed that there is no prohibition on Bugis ethnic about the front of the house, but if there is a choice they choose to face east. A house that has its front towards the east is defined as a house that has a good source of life for its inhabitants.

#### b. Based on soil contour

The results show that the front view of the houses has the higher contour of soil and face flat land. There is no prohibition on Bugis ethnic about the presence of houses based on the contour of the land, but if there is a choice, the Bugis will choose towards a higher land contour or flat direction. Houses in higher land contours are interpreted as houses that have a better fortune. A house that is in the flat contour of the land is believed to be a house with its inhabitants as a creation of Allah and prostration is equal before God.

#### c. Based on the position of the road

There are houses with the front view facing the main highway and some facing the second highway. If the main highway is at the south position, then the front view faces south, the right side view faces west, the rear view faces north, and the left side view faces east. The house that faces the main highway and the second highway is interpreted as a house that has a huge fortune to be befalling on its occupants continuously.

#### d. Based on the formality and shape of the roof

Few houses are having the slope of the roof as 27 to 35 degrees and few having the shape of the roof as saddle and shield. Houses having a roof slope of 27 to 35 degrees are interpreted as safe, clean and comfortable. A house with a saddle-shaped roof or shield is interpreted as a symbol of peace, honesty, and safety.

### 2. Supporting and inhibiting factors for the development

Supporting factors for the development of visible design, which was analyzed from the 150 samples, were affordable selling prices based on the economic strata of the Bugis people. The Bugis tribe who are still concerned with their local wisdom as well as choosing a residential location or house, the front of the house, the shape of the house, the roof used and the slope of the roof, also prefer to build their houses in locations that are safe against flooding, not in areas where land dispute is common, owning land for development of houses and open land, having clean water, and electricity. It simply means that Bugis people do not want to have problems with nature and their social environment.

### 3. Inhibiting factors

The inhibiting factors in development of visible design include those in Bugis ethnic who do not care about their local wisdom, loss of identity-related to the house due to the influence of technology, social environment, and physical environment. This applies when the location is not safe against flooding, construction of houses on a disputed land, does not own land for the development of greenhouses and open land, without clean water and electricity.

### 4. The methods used to apply architectural form design

#### a. Socializing the development of architectural form design

It was shown that socialization of design development was apparent to stakeholders who can understand the visible design that has been developed based on the local wisdom of the Bugis people.

2

### b. Provide explanation about local wisdom

It was shown that the explanation of the local wisdom contained in development of design seemed to the stakeholders who could understand the meaning of the local wisdom contained in each and every part of design development.

### c. Provide explanation on a healthy housing environment.

An explanation of a healthy housing environment to the stakeholders was given and are able to understand clearly the meaning of local wisdom related to a healthy environment.

### d. Collaborate with stakeholder

It was shown the collaboration with consultants planning, housing developers, and stakeholder communities, the stakeholders were able to understand the meaning of local wisdom contained in each house, starting from the front, right, back view, left view, roof slope, and roof shape.

## CONCLUSION

We can therefore conclude that the development design of front view Bugis type small, medium and large houses based on the local wisdom and Bugis ethnic, from the position of the house facing east, from the contour facing towards a flatter direction, from position of the road facing main highway and second highway, the slope of roof starts from 27 to 35 degrees, and shape of roof to be saddle and shield.

The Supporting factors for the development design of the Bugis ethnic houses were, affordable selling prices. There are still Bugis ethnic concerned with their local wisdom, land availability for the development of greenhouses and open land, road facilities, clean water, and electricity. While the inhibiting factors are, Bugis people who left their local wisdom on account of the location being in a disputed land, prone to flooding, no land available for the development of greenhouses and open land, bad road facilities, non-availability of clean water and electricity.

## REFERENCES

- Budiharjo, Eko and Djoko Sujarto. (1999) *Kota Berkelanjutan*. Bandung: Alumni.
- Doxiadis, Constantinos A. (2003). *An Introduction To The Science Of Human Settlements-Ekistics*, London: Hutchinson.
- Frick, Heinz and Petra Widmer. (2006). *Membangun, Membentuk, Menghuni*. Yogyakarta: Kanisius.
- Hamzah, M. (2013). *Pendidikan Lingkungan, Sekelumit Wawasan Pengantar*. Bandung: Refika Aditama.
- Kuswartojo, Tjuk. (2005). *Perumahan dan Permukiman di Indonesia. Upaya Membuat Perkembangan Kehidupan yang Berkelanjutan*. Bandung: ITB.
- Marfai. (2012). *Pengantar Etika Lingkungan dan Kearifan Lokal*. Yogyakarta: UGM Press.
- Tasdyanto, (2008). *Kearifan Lingkungan Budaya Indonesia*. Yogyakarta: Kementerian Negara Lingkungan Hidup.
- Undang-Undang RI. No 32 Tahun (2009) Tentang Perlindungan dan Pengelolaan Lingkungan Hidup.
- Undang-Undang RI. Nomor 4 Tahun (1992) Tentang Perumahan dan Permukiman

Accepted 9 November 2018

**Citation:** Ardi M, Lullulangi M, Rauf BA, Amir F, Sah R (2018). House Design Architecture Based on Bugis Ethnic the Local Wisdom of the Environmental Concept. *International Research Journal of Architecture and Planning*. 3(2): 060-062.



**Copyright:** © 2018. Ardi *et al.* This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are cited.

# House Design Architecture Based on Bugis Ethnic the Local Wisdom of the Environmental Concept

---

## ORIGINALITY REPORT

---

7%

SIMILARITY INDEX

6%

INTERNET SOURCES

1%

PUBLICATIONS

1%

STUDENT PAPERS

---

## PRIMARY SOURCES

---

1

[premierpublishers.org](https://premierpublishers.org)

Internet Source

2%

2

[www.scribd.com](https://www.scribd.com)

Internet Source

1%

3

[es.scribd.com](https://es.scribd.com)

Internet Source

1%

4

Submitted to Coventry University

Student Paper

1%

5

A Y Koswara, P G Ariastita, K D M E Handayeni, N Farikha. "Typology of slum settlements in Keputih sub district", IOP Conference Series: Earth and Environmental Science, 2018

Publication

1%

6

[insightsociety.org](https://insightsociety.org)

Internet Source

1%

---

---

Exclude quotes      On

Exclude matches      Off

Exclude bibliography      On