

PROCEEDINGS INTERNATIONAL CONFERENCE

Local Wisdom in Global Era

Enhancing the locality in Architecture, Housing and Urban Environment

21-22 JANUARY 2011
DUTA WACANA CHRISTIAN UNIVERSITY
YOGYAKARTA - INDONESIA

In Collaboration with :

Organised by:

Department of Architecture
Faculty of Architecture and Design
Duta Wacana Christian University



Approved

A.G.U.T.G.W.

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**Edited by: Prof. Ir. Titien Saraswati, M.Arch., Ph.D.
Dr.-Ing. Wiyatiningsih, S.T., M.T.**

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INTRODUCTION

The incongruous impact of globalization towards the existence of indigenous and national resource has gained international interest. Efforts to restore the quality of the threatened environment for the living have raised concerns on finding local strategies to understand and manage the impact world widely. Unfortunately, the most common answer to this situation cannot be done only by a single discipline. In term of design, it is not enough to give solution to the problems unless we deal with the uniqueness of the social, economic, and cultural context of the local community in each country.

One of spatial characteristics of urban areas in developing countries is the emergence of slum areas and squatter settlements which are only seen partly in the urban development. These settlements are occupied by the poor working in informal sectors around the city centre. These people demonstrate great ingenuity in developing their residential neighbourhoods, organizing open spaces and constructing their houses, even though the government views them as illegal. To view the poor not as a problem requires honest and good motivation. This International Conference explores new paradigms which focuses on enhancing and fostering local knowledge and wisdom for sustainable developments in Architecture, Housing, Urban Design as well as Urban and Regional Planning.

AIM AND SCOPE

The Conference discusses and critically examines the phenomena occurred in Architecture, Housing, and Urban Developments within developing countries. Sub-themes might be related, but not limited, to the following topics:

- A. Indigenous Architecture as a Basic Architectural Design
 - The use of Local and Recycled Materials
 - Innovative Building Construction
 - Traditions and Vernacular Architecture
 - Sustainable Design and Construction
 - Indigenous Strategy for Disaster Preparedness

- B. Informal Settlements as a Basic Development for Housing Improvement
 - Self-sufficient Built Environment
 - Pro-poor Housing Policy, Planning and Efficiency
 - Parametric Computational Tools for Sustainability
 - Total Participatory and Advocacy Development Planning

- C. Harmony with Nature for Sustainable Urban Development
 - Assessment for Sustainable Urban Planning and Design
 - Man-made and Natural Environment in Harmony
 - Sustainable Urban Greenery
 - Appropriate Technology for Sustainable Built Environment

FOREWORD

It is an honour for Department of Architecture, Faculty of Architecture and Design, Duta Wacana Christian University (DWCU) at Yogyakarta, Indonesia; to be the host of CIB International Conference on Local Wisdom in Global Era. The Conference being run by the collaboration among Faculty of Architecture and Design DWCU, Institute of Technology 10 November Surabaya (ITS), International Council for Research and Innovation in Building and Construction (W110 CIB), and Nusantara Urban Research Institute (NURI). The theme "Enhancing the Locality in Architecture, Housing, and Urban Environment" provides papers and presentations on a wide range of topics indicating the breath and scope for both research and teaching within the area of architecture and the built environment.

Actually this Conference would be held on November 26-27, 2010. Due to the eruption of Merapi Volcano since October 26, 2010; especially the most dangerous eruption on November 05, 2010; the Conference has been rescheduled to January 21-22, 2011. We thank you for your kind commitment to this Conference.

These proceedings have been prepared from the papers provided by more than 60 presenters accepted from approximate 135 abstracts from about 10 countries. Finally, on behalf of the Department of Architecture, Faculty of Architecture and Design (formerly Department of Architecture, Faculty of Engineering) we thank you to all contributors to the Conference: CIB, ITS, NURI, the members of Steering Committee and Organizing Committee as well, International Reviewers, all presenters and participants, and last but not least to all members of Duta Wacana Christian University for their generous supports. Without them, this Conference would not be possible.

Prof. Ir. Titien Saraswati, M.Arch., Ph.D.

Dr.-Ing. Wiyatiningsih, S.T., M.T.

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3.1.8

VERNACULAR ARCHITECTURE IN JAKARTA AND SURROUNDINGS

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ABSTRACT

The city of Batavia as a native of Jakarta, is believed by many experts is a fusion of several ethnic groups who lived together for several centuries, such as the Sundanese, Javanese, Arabic, Balinese, Bugis, Sumbawa, Ambon, Chinese and Malays. Therefore, some cultural products including architecture also reflects the combination of these.

Since becoming the capital, the pace of development in the city of Jakarta has made the Betawi people uprooted from their group so that complicates communication between them. Betawi people become increasingly crowded and displaced. As a result, thousands of people moved out and divorced Betawi dispersed into the suburbs. According to Saidi (1996), the Betawi people have been trying to maintain its cultural existence. However, supporters of Betawi culture in Jakarta were increasingly depleted.

In the 1970s, the government took the initiative to create a conservation culture in the village of Batavia Condet. However, speculative development is precisely the Betawi people have been marginalized in Condet with the opening edge of this region. In the 1990s the number of people in Condet Betawi expected to live 30% is an optimistic number. Learning from this experience, the decade of 2000s the government to develop more cultural conservation at the Setu Babakan. In this effort, a new vernacular architecture was built to replace the old building, coupled with the conservation of agriculture, art and food to attract tourists.

In coastal areas, Coastal Betawi people "meet" with the Chinese and Bugis. This meeting has resulted in the Chinese style of rural vernacular architecture in the Gulf region Naga, Tangerang and Bugis fishermen in the area of Kamal Muara, North Jakarta. Meanwhile in the southern region, the Betawi hicks "meet" with people who produce vernacular architecture Sundanese house on stilts in the region Kranggan, Bekasi.

This paper is a study of vernacular architecture in five regions covering Jakarta and surrounding Bay Dragons, Kamal Muara, Condet, Setu Babakan, and Kranggan. Some aspects of the study include spatial, accessibility, looking buildings, and building ornaments.

Keywords: Architecture, Vernacular, Jakarta

I. BETAWI PEOPLE AND JAKARTA

Some experts believe that people are actually starting a newcomer Betawi in Jakarta. This ethnic group was born from a combination of other ethnic groups who were already living in Jakarta, such as people of Ambon, Arabic, Balinese, Banda, Bugis, Bima, Bali, Buton, Flores, Java, Malays, Sundanese, and Sumbawa. University of Indonesia anthropologist, Dr Yasmine Zaki Shahab MA gauge, the newly formed ethnic Betawi about a century ago, between the years 1815 to 1893.

This estimate is based on a study of demographic history of city dwellers, who pioneered the Australian historian, Lance Castles. In the Dutch colonial era, governments always do the census, which is categorized by ethnic group. In census data Jakarta in 1615 and 1815, there were people from various ethnic groups, but there is no record of the Betawi ethnic group

Tabel 1.

Jakarta Population Situation In 1615 and 1815
Source: Castle (in Siswantari, 2000)

	1615	1815
Europeans and part-Europeans	2.750	2.028
Chinese	2.747	11.854
Mardjikers	5.362	-
Arabs	-	318
Moors	6.339	119
Javanese (including Sundanese)	-	4.139
South Sulawesi groups	-	4.139
Balinese	981	7.720
Ambonese and Bandanese	-	82
Malays	611	3.155
Slaves	13.278	14.249
	32.068	47.227

In addition, the results of the census of 1893 showed a loss of some ethnic groups that previously existed. For example, Arabs and Moors, the Javanese and Sundanese people of South Sulawesi, Sumbawa people, people of Ambon and Banda, and the Malays. Recognition of the existence of the Betawi people as an ethnic group and as a social and political unit within a wider scope, namely the Dutch East Indies, newly emerged in 1923, when Moh. Husni Thamrin, community leaders established Perkoempoelan Kaoem Betawi Betawi. Also new at that time all the Betawi people realize they are a faction, that faction Betawi people.

Some analysts and researchers are unsure of the Betawi ethnic Castles above hypothesis, as Koentjaraningrat (1975), Amri Marzali (1983), Probonegoro (1987), Supardi Suparlan (1990), Shahab (1994), and Mona Lohanda (1996) (Siswantari, 2000). But there who disagree with the Castles of Ridwan Saidi, a prominent Batavia.

According to Saidi (in Siswantari, 2000) the origin of the Betawi people more emphasis on theories about language Nothofer Melayu Bern dialect of Jakarta. Bahasa Melayu originated from the Polynesian family persebarannya point comes from West Kalimantan.

Nothofer (in Siswantari, 2000) argues that around the X century at the former power of population migration Melayu Tarumanegara West Kalimantan to Jakarta, via Bangka and Palembang. These migrant Malays berakulturasi with natives who came from Java, and produce generations of Malays called Java. In the XV century, they have memeluk Islamic religion and have called the Chinese diving difficult to say Islam. The Malays of Java this is the forerunner of the Betawi.

Clarified by Saidi (1994) estimated that the Hindu kingdom Tarumanegara located in the Citarum river (now Jakarta with the Donegal border) that extends up to the power wing of the Bogor region (stele Ciaruteun) and Marunda (Monument inscriptions at Kampung Batu Growing up, now Kramat Tunggak). They are then referred to as the Betawi people come from Tarumanegara kingdom.

Shahab (2000) classifies the Betawi people based on place of residence consists of: Central Batavia, Betawi edge, hicks Batavia, and Batavia Coast.

A. Indigenous Architecture as Basic Architectural Design

1. Betawi Tengah, inhabit areas near Gambir, Menteng, Senen, Kemayoran, Sawah Besar, and the Taman Sari.
2. Betawi Pinggir, inhabit the area around Market Rebo, Pasar Minggu, Pulo Gadung, Jatinegara, Kebayoran, and Mampang Prapatan.
3. Betawi Udik, inhabit the area around Cengkareng, Tangerang, Batu Ceper, Cileduk, Ciputat, Sawangan, Cimanggis, Pondok Gede, Bekasi, Kebon Jeruk, Kebayoran Lama, Cilandak, Kramat Jati, and Cakung
4. Betawi Pesisir, inhabit the region around the Bay of Dragons, Mauk, Japad, Tanjung Priok, Marunda, Kalapa, and the Thousand Islands.

Furthermore, the Betawi hicks has two types:

1. they are influenced by Chinese culture, living in the north and west of Jakarta, and Tangerang
2. they are strongly influenced by the Sundanese culture, living in the east and south of Jakarta, Bekasi and Bogor. In terms of dialect, they are known as Betawi Ora, which has the characteristics of the end of the lettered word "a" becomes "ah", eg "saya" becomes "sayah"

This study took five regions including the Gulf of Naga, Kamal Muara, Condet, Setu Babakan, and Kranggan. Thus, in addition to belonging to the Dragon Bay Coastal Betawi Betawi hicks there are also influenced by Chinese culture, namely the Chinese Beteng west of the village. Chinese Architecture Beteng this is the major target of the study. Kamal Muara is a mixture between Betawi settlement with the Bugis Coastal North Jakarta. Condet and Setu Babakan is Betawi hicks. While Kranggan is a region where there is the Sundanese and Betawi Ora.

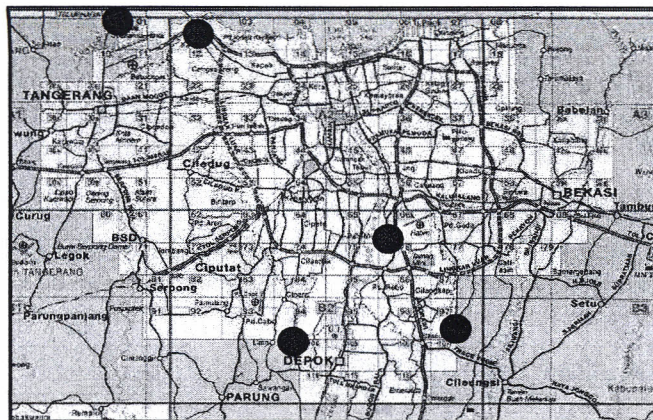


Figure 1. Distribution Research Areas

II. TELUK NAGA

Fortress Chinese people in general are farmers and living together with the Sundanese and Betawi in the Gulf coastal region Dragons. This community is located in between two villages namely "Lemo Village" and "Village Estuary." Lemo village majority of the population is rural Sundanese and Betawi Estuary is a majority.

A. Indigenous Architecture as Basic Architectural Design

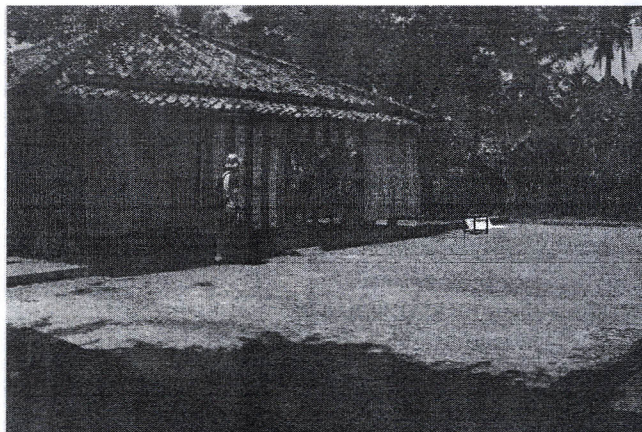


Figure 2. Houses Cina Beteng

Houses *Cina Beteng* in general is one single dwelling unit and located in front of the field / fields. Orientation of main buildings on the street and other buildings facing each other. This pattern is similar to a village in Indonesia in general.

Spatial pattern of the Chinese house Beteng this unique is that there is a wide yard, either in front or behind the house. On the front is generally used for drying agricultural products and activities on the terrace used occupant activities. While at the rear, there is the back porch, barn, and a bathroom / WC outside.

Building materials used in general is a local materials such as bricks, wood and bamboo. Bricks used as a terrace floor, wood used for walls and roof construction. While bamboo is used as a wall for storage.

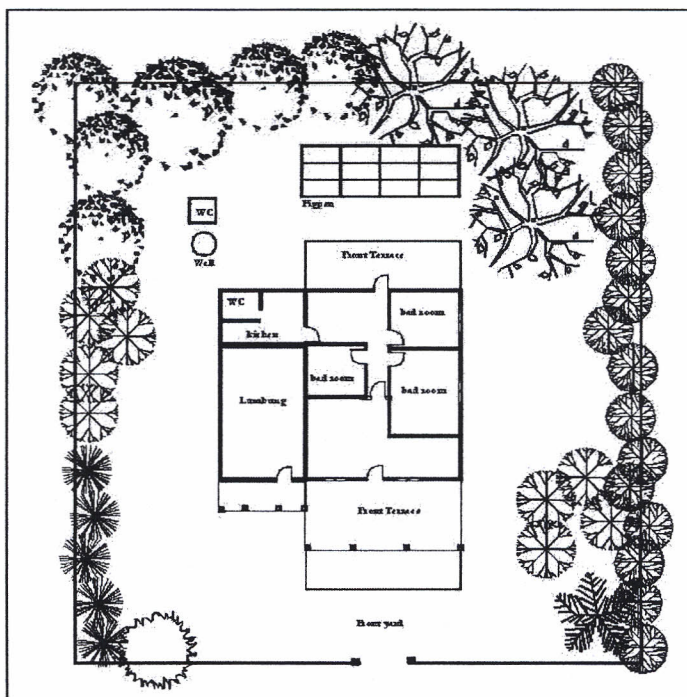


Figure 3. Plan House Cina Beteng

In the facade of the building, a typical Chinese ornaments are also presented, but the colors generally follow the colors used in building materials.

III. KAMAL MUARA

Kamal Muara is a fishing village. Formerly a village of Batavia with ponds which has now become the property of people outside the village. The arrival of the Bugis people since the 1960s, making this village is inhabited by the Bugis and Betawi, each of which is estimated to reach 40%. Both these groups live side by side, select a different location to reside. Betawi people prefer to live in the "land", while the Bugis people preferred to stay at the water's edge, either edge of the sea or rivers. This closeness is very linked to the Bugis livelihoods as fishermen and farmers green mussel.

Bugis village orientation was also followed rivers. Two features of the mosque to the instructions from the village of Bugis. However, the traditional home architecture Bugis has become increasingly rare. This is caused by several things. First, practical reasons such as activities in the field of fisheries. Bugis house berbentung stage became lower because of the green mussel waste backfill activities. Second, the preferred construction material not easily found on the market, such as wood Nibung be imported from Lampung. Third, the second generation prefer to stay at home made from the wall.

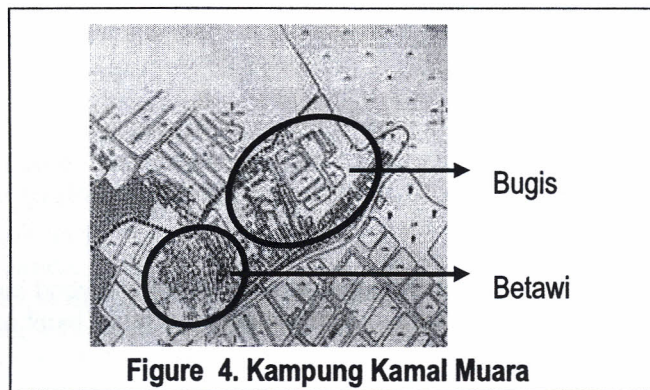


Figure 4. Kampung Kamal Muara

Dividing the space (zoning) horizontally at Bugis house generally consists of Private, Semi Private, and Semi-Public. Because it is a stage house, the entrance through the staircase and into the space that is named tamping. From here there are tamping into the living room door. A guest who are not relatives are only allowed to be here. While in the private, all the walls are separated by a curtain.

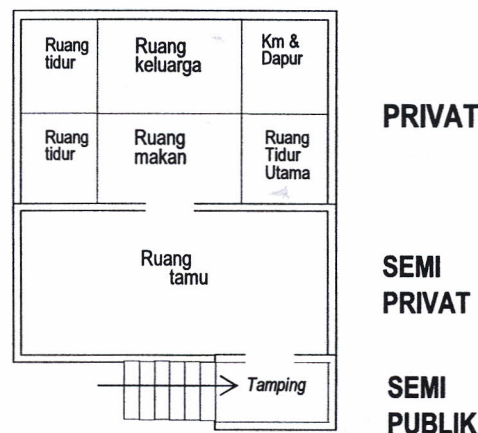


Figure 5. Zoning Bugis House

On the division of space vertically, Bugis people in Kamal's house is generally still divided into three parts, namely *Rakkeang*, *Ale bola* and *Awa bola*

In architecture Bugis, *Rakkeang* generally used for storage and *Ale ball* for occupancy. However, the Bugis houses in Kamal Muara *Awa* storage space is at a ball, because *Rakkeang* generally does not

work. Several openings in the side of the building and the building looks better air circulation functions as well as some of them have a distinctive ornament.

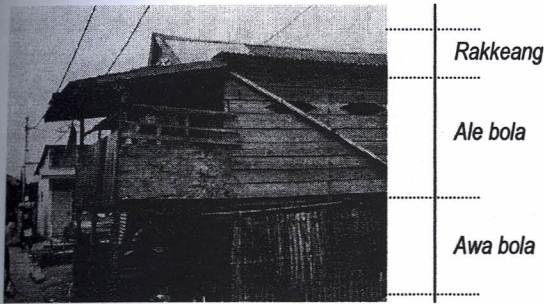


Figure 6. Vertical Pattern Bugis House

IV. CONDET AND SETU BABAKAN

Condet and Setu Babakan are two areas that have similarity in terms of conservation of Betawi culture. Condet developed since the 1960s, while the Setu Babakan developed since the 1990s. Condet failure suspected to be an important step in the development of Babakan Setu.

Condet is an area located in District Kramat Jati, East Jakarta Municipality. Region used to be the area of fruits, especially salak lanseum Condet and then used as well as preserve the Betawi culture preservation of fruits by decree (SK) Jakarta Governor Ali Sadikin numbered D.IV-115/e/3/1974 issued for strengthen an area of 18 228 hectares as the area of cultural heritage which includes Village batuampar, Balekambang, and Kampungtengah. Reason Bang Ali 30 years ago is because 90 percent of people who lived in Batavia Condet is genuine. With maketh Condet as a cultural reserve, the government and build roads Condet Kingdom, which connects the region with Cijantung Cililitan. Ease of access is coupled with the vagueness and lack of supervision resulted in the concept of cultural heritage of this region as it grows like a normal residential area. Administration time to a status-quo of the region in 1986 because of rapid housing development.

Consequences of failure in Condet, Batavia township in Setu Babakan, Srengseng Sawah, Sub Jagakarsa, South Jakarta and was initiated as a new area of cultural heritage. Setu Babakan initial momentum developed as a cultural heritage area was pioneered on September 13, 1997 at the event "A day at Setu Babakan". When it held various competitions, such as decorating contest getek, canoe races, competitions of fruit, vegetables and cooking competitions tamarind. Once this momentum, several Betawi cultural activists trying to involve the various institutions to develop this area. Department of Agriculture to plant tree seedlings, while the Department of Fisheries and sowing the seeds of hundreds of fish. The road to this area was also improved. In the end, the Governor issued Decree No. 9 years old in 2000 by the Provincial Government of DKI Jakarta, which makes the Setu Babakan as Betawi culture of conservation.

Here are some things that distinguish the two regions

4.1. Accessibility and Conservation

Condet accessibility in the region had been the enclave of closed and in the development and cultural preservation became an open area. With the construction of access roads through the region consisting of three villages (Balekambang, Central and Kampung Batu Ampar) This resulted in the influx of immigrants in recent decades even more dominant in number. Balekambang villages situated along the river Ciliwung is the most populated area of the Betawi people in Condet. But in the 1990s, their number reaching 25% is considered as the numbers are too optimistic. Betawi people in the region

comprising Kambang Bale Village, Batu Ampar, and Middle Village are in the minority. According to the 2000 census, the number of residents in the area Betawi Condet only 1.5% of the total population in the region. As a result, the Betawi people rarely found homes with pristine architecture. From visual observation, researchers found only three houses whose condition is still original.



Figure 7. Architecture Betawi *Asli* in Condet

Learning from Condet, Setu Babakan is the government's initiative to preserve Betawi culture in general. Houses inhabited by residents in the area restored to original Betawi house. In addition to homes, agriculture, processing of traditional foods (culinary), dance art, textiles, and etc. all of which developed into cultural tourism and education.

Accessibility to these areas is more difficult than Condet region. There is only one connecting road and no public transportation to enter this area. Setu (lake) to the end of the route to this region, and pledged an open space for tourism purposes.

4.2. Zone

There are several zones in the original house Betawi, which is the main zone (for a family residence), the zone of support (for relatives), gardens and ponds (Syafwandi et al., 1996). Both in Setu Babakan and there Condet main zone and zone support. However, gardens and ponds are still more prevalent in the Setu Babakan compared Condet.

4.3. Building Type

There are three types of Betawi style buildings: joglo, warehouses, and bapang (Syafwandi et al., 1996). In Setu Babakan, the type most often found Joglo.

4.4. Ornament

Some ornaments comparison of the two regions which are presented on ventilation, windows, doors and fences are presented in the following tables.

V. KRANGGAN

Kranggan is a township in the city of Bekasi, Bogor regency bordering areas. In this village can still be found traditional houses shaped house on stilts. Called the house on stilts because the building houses a number of pillars propped up, with the distance between the ground floor and averaging about 50 centimeters.

Traditional houses in Kampung Kranggan have varied roof forms and functions of each room in the house. At least there are three forms of roof houses on stilts which now remains in Kampung Kranggan, ie roof pyramid model, the model jure, and the model ngapak looming. Roof of the pyramid model and a cursory jure similar, but the roof has no ampig pyramid model, or cover the front and rear

are made of woven bamboo. Ngapak roof shaped like a towering model of a house roof joglo, with the top of taper.

At this stage the house generally has three core room, which is shaped los den, a bedroom, and used the back room or storage area heirloom rice called pangkeng or pandaringan. Besides these three rooms, equipped hall stage house addition, or Paseban, which serves as a place to relax or receive visitors.

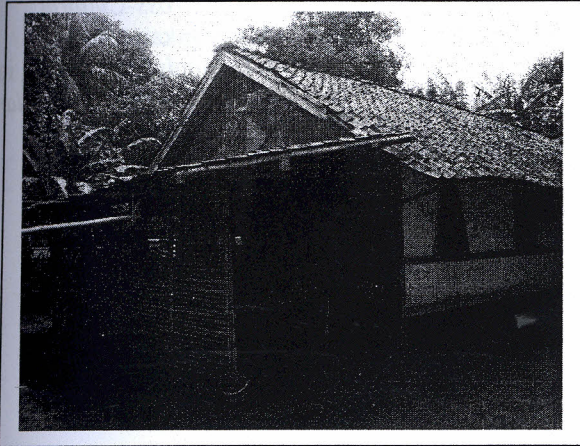


Figure 8 Houses Stage House Kranggan

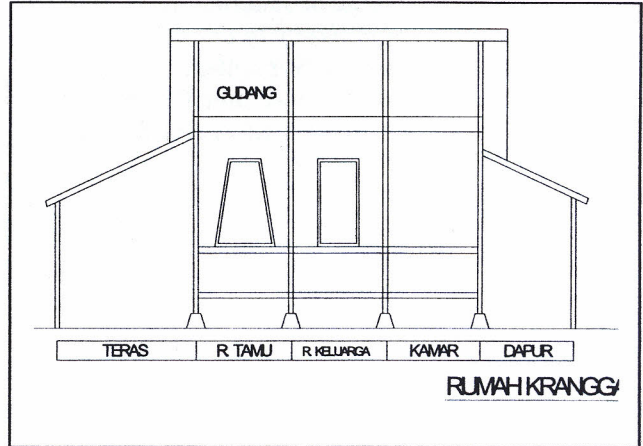


Figure 9. Section House Kranggan

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