



# Productive Home Arrangement for Brick Processors Based on Community Empowerment (Case: South Bontolangkasa Village, Bontonompo Sub -district, Gowa Regency)

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**Abstract**—The Brick processing in Bontolangkasa village, Bontonompo sub-district, Gowa district is very much so that the housing arrangement of the community is irregular. The use of the house as a residence as well as a business (productive house) so that there is a lack of a circulation system, the ventilation system to the dwelling is disturbed because of the heat from burning red bricks, irregular placement of traded red bricks. The solution to the problem of structuring the housing of the brick processing community in Bontolangkasa village, Bontonompo sub-district, Gowa district, requires community empowerment, namely providing information in data collection so that the drafting of the concept of structuring productive housing for the brick processing community can be implemented. The community service applied is the provision of information in the form of data that is compared to produce distances for the placement of brick processing systems in the residential area of the community. The arrangement of productive houses based on community empowerment in the brick processing houses of Bontolangkasa village is divided into 3 types of houses: stilt houses (balla rate'), stilt and modern houses (balla tingka') and modern houses (balla batu ), brick processing containers utilizing under the house and yard.

**Keywords:** arrangement; bricks; community; empowerment; productive house.

## I. Introduction

Housing development in rural areas, whether carried out by the government, private sector or non-governmental organizations, has not been able to meet and balance the level of community demand for housing. There is even a tendency that housing development in villages is increasingly lagging behind the rate of population growth (Siswono, 1991). The increasing population will have an impact on the provision of quality housing in accordance with healthy home standards for the community as well as being used as a place of business, namely productive homes. The house can be interpreted according to the context of seeing it, as well as its function. The house is not just a building but also a context that provides

opportunities for interaction and communication activities that are familiar with the environment. Houses can also provide added value in this case income, more valuable than those that are only used as a place to live (Turner, 1972). The house is used as a productive place because it is based on the condition of the occupants in terms of increasing income by working or doing business in their own housing environment resulting in a change in function from residential to production and commercial functions (Tarigan, 2009). According to Turner in Safeyah (2004), revealed that the house as an integral part of the settlement is not a one-time physical result but is a process that continues to develop and is related to the socio-economic mobility of its inhabitants. The productivity aspect in the broad sense of the function of the house is becoming increasingly prominent in its various forms and arrangements, especially as a guarantee

of its existence and sustainability. (Silas, 1993).

Bontolangkasa Village, Bontonompo Subdistrict, Gowa Regency is one of the rural areas where the population is the main livelihood as farmers and the support is as brick processing. The brick processing area is carried out in the residential area of the population so that the arrangement between residence and place of business is not planned. The arrangement of houses for residents in the village is very necessary because the house is used as a place of residence as well as a place of business in supporting the economy of the community and also functions as a place to interact in carrying out their daily activities. It is known that brick processing is carried out in stages, namely, 1) Placement of brick material (clay/clay). 2) Soil tillage. 3) Brick molding, 4) Drying process and 5) Brick burning. This stage of brick processing is carried out in the residential area of the processing community, and this can be related to the productivity value in the residential area.

The unification of the scope of housing and brick processing in the residential area of the brick processing community in Bontolangkasa village, Bontonompo sub-district, Gowa district, requires structuring a productive housing pattern so that housing and business functions are integrated in supporting the economy of the community in general and the occupants of the house in particular. The arrangement of productive housing patterns for brick processing dwellings aims to support a humanist housing system, namely the relationship between humans, nature and the economy is a blend of traditional human philosophy concepts with natural philosophy and human needs for economic growth (Safreni, 2015). With the concept of humanist housing in the arrangement of productive house patterns in Bontolangkasa village, Bontonompo district, Gowa district, it is hoped that there will be community empowerment/community participation in providing support for the process of structuring residential patterns according to their needs.

## I. Theoretical foundation

### *Productive House*

The house can be interpreted according to the context in which it is viewed, as well as its function. The house is not just a building but also a context that provides opportunities for interaction and communication activities that are familiar with the environment (Budihardjo, 1998). This means that the house tends to make adjustments to aspects of human life. In society, a situation has developed where the house does not only act as a residence, especially in relation to its inhabitants. A house that can provide added value, in this case increasing income, is more valuable than one that is only used as a place to live. According to Turner (1972) revealed that the house has various functions and all of these functions depend on the goals to be

achieved which differ from one another depending on the place and time.

Furthermore, Silas (1993) stated that housing development by the community generally departs from the concept of housing which is basically *developmental* and departs from the *housing beyond home approach*, which means a pattern that provides dynamism in integrating housing needs with opportunities to raise resources (Maslow, 1998). The upside is the integration from home with the opportunity to raise a wide variety of resources. The aspect of productivity in the broad sense of the function of the house is becoming increasingly prominent in its various forms and structures, especially as a guarantee of its existence and sustainability. One of the conceptual reasons is in terms of function, namely that the house should have a productive function and not just as a residence, a house that is only used as a residence will be difficult to maintain its existence. In general, the concept of home and work is included in the social and cultural dimensions. Basically the house is owned by the individual in which it is directly reflected in how the individual responds to his surroundings and how the occupants adapt it, including those related to the economic position of the occupants.

### *Community Empowerment*

Community empowerment is one of the community's involvement in a government, private or self-help business that aims to create solutions to the environment in society in general. According to Rapoport (1981) he was the first to introduce the term *empowerment* in the context of community mental health. Rapoport said that an easy way to understand empowerment is to imagine conditions where there is no empowerment, namely in conditions of alienation, *powerlessness* (whether actual or just feelings), helpless, unable to help oneself, lose the ability to regulate or control one's own life. . From his research, Kleffer (1984) concluded that empowerment has three intersecting and related dimensions, namely:

Development of a more positive self-concept

Construction of a more critical and analytical understanding of the social and political environment

Harvest individual and group resources for social and group action

According to Pranaka and Moeljarto (Empowerment: Concept, Wisdom and Implementation, 1996:12) states that empowerment *is* basically formed by the idea of placing humans more as subjects than their own world. In the empowerment process, one of the emphasis is on the process of giving or transferring some power, strength or ability to the community, so that individuals in the community become more empowered. This community empowerment process is often referred to as community development, so that people can build and develop themselves based

on their abilities or known as *Community Based Development*. To further strengthen the empowerment process that supports community independence, the form of management organization also comes from the community called *Community Based Organization*.

#### Activity

The process of implementing Community Service is in the form of planning the concept of structuring productive housing for brick processing based on community empowerment in Bontolangkasa Village, Bontonompo District, Gowa Regency, South Sulawesi Province, which is carried out based on the needs of the local community. This activity offers methods or ways to solve problems, namely:

##### Data collection

Ways to get as much data as possible according to the object of the problem, namely;

##### Literature Analysis

This literature analysis is carried out by searching for the required data through text books, scientific works in the form of the results of

previous studies/research, journal articles, pictures of settlements in accordance with SNI standards. This is so that community service partners have a theoretical basis or perception about what will be observed.

##### Field Analysis

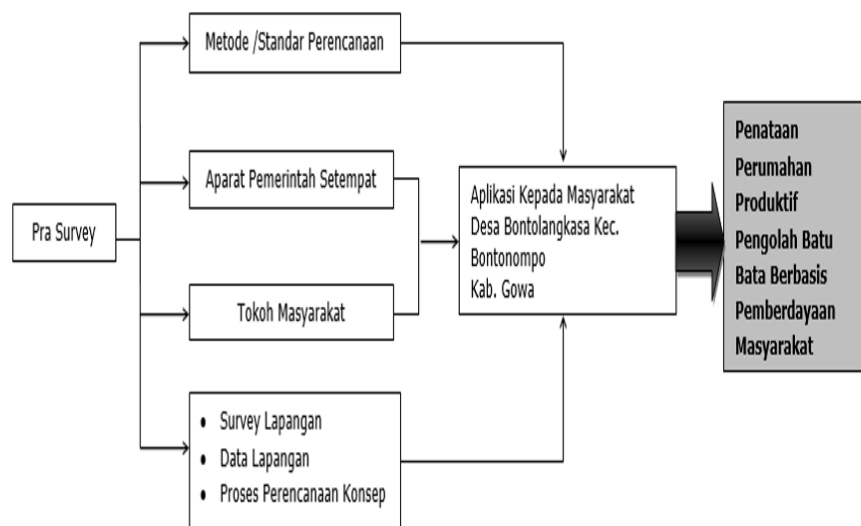
Field analysis was carried out using several approaches, including;

a) Observation, namely direct observation at the location of service to cultural characteristics, people in rural areas who work as bricklayers.

b) Interviews, namely holding questions and answers to several informants, both the community, non- formal institutions and government agencies.

c. Field Note, namely by recording all the things that were found both data about informants/ respondents, rural characteristics, social and cultural communities, ongoing activities, and so on.

The stages of implementing community service in Bontolangkasa village, Bontonompo sub-district, Gowa district begin with a pre-survey, namely preparing a location survey with the aim of developing a concept planning method plan.



**Figure 1.** Scheme of the Stages of Community Service Implementation in Bontolangkasa Village

The data on the needs of the brick processing community are obtained from government officials, community leaders who are applied to the community who have a supporting profession as brick processors which ultimately produce the concept of structuring a productive housing pattern, namely the house is used multifunctionally as well as a place of business to support its economy.

#### Community empowerment

1. Community understanding of productive housing, this is analyzed descriptively so that understanding of the pattern of productive housing arrangement for the type of house on stilts, houses on stilts / modern and modern types of houses is associated with the habits of residents or brick

processing in utilizing their dwellings.

2. The community's understanding of houses that are used multifunctionally, namely dwellings and places, is analyzed descriptively on the socio-cultural and socio-economic aspects of the community.

3. The role of institutions/individuals in implementing the concept of structuring productive housing patterns can be for the brick processing community in Bontolangkasa village, Bontonompo sub-district, Gowa district.

4. The concept of community empowerment in the arrangement of productive housing is also adapted to the habits of the people who work as supporting professions as brick processors and

adapted to the allotment of rural areas.

Community empowerment is carried out by partners/implementers of this activity, starting with area identification by approaching the community, namely data on community needs for house arrangement by processing bricks in one area of their residential environment by digging and analyzing problems (Koentjaraningrat, 1998). From digging and analyzing the problem and then providing information to the community in meeting their needs.

#### External Target

The external targets that will become the object of the implementation of community service activities are;

Conducting outreach to community service partners, in connection with the importance of implementing productive housing arrangements for people who have a supporting profession as brick processing in Bontolangkasa village, Bontonompo sub-district, Gowa district.

Increasing public awareness to organize the residential environment to be more orderly, neat, beautiful and also provide a function as a residence as well as a place for brick processing businesses that can support the economy of its inhabitants and meet the standards of killing settlements in rural areas.

Provide opportunities for the community to



participate in making the concept of structuring productive housing patterns. community in the form of providing input/suggestions through socialization.

The results that will be disclosed are the concept of structuring productive housing patterns in rural areas, which directly involve the community, community leaders and local government officials so as to produce community empowerment to improve the community's economy in meeting their needs.

#### Reflection

The implementation of community service in Bontolangkasa village, Bontonompo sub-district, Gowa district begins with:

#### Area Identification

The brick processing settlement/housing is in the middle of Bontolangkasa village, Bontonompo sub-district, Gowa district. Many people in this village have supporting jobs as brick processors, while the main occupations of the people are farmers, civil servants, teachers, masons and construction workers. Another feature of this location is that the brick processors buy their material from other villages in Gowa district which have natural resources, namely clay. This means that SDA (Natural Resources) in the form of clay does not exist in the residential area of Bontolangkasa village (Darmawan Denase, 2015).

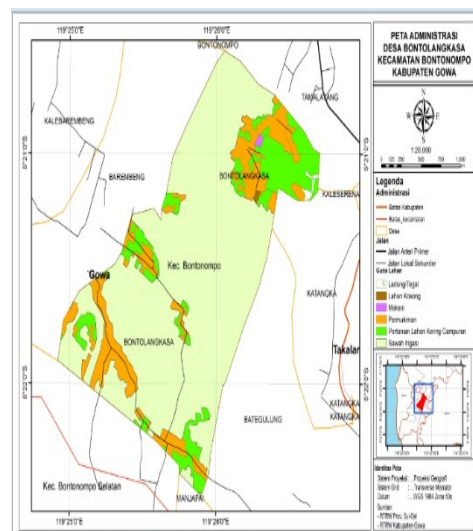


Figure 2. Map of Gowa district and map of Bontonompo district (Gowa in Figures, 2020).

The area of Bontolangkasa village is  $\pm 2.45$  km<sup>2</sup> with a total population density of 1,127 per km<sup>2</sup>, this village has a tropical climate with irrigated rice fields. Bontolangkasa Village is located at an altitude above sea level of 19.00% with an area of 2.45 km<sup>2</sup> and is a plain area. The distance from Bontolangkasa Village to the sub-district capital is  $\pm 1$  km and the distance to the district capital is  $\pm 18$  km. Percentage of population 0.07% (Gowa in Number, 2019).

The brick processing housing combined with the brick processing plant makes the arrangement of the community's residential environment irregular, such as:

The brick place is very close to the vehicle circulation system.

The location of the brick processing site is not close to the well water source, making it difficult for the brick molding system.

The drying area is located in the yard of the house.

The distance between the burning place is very close to the dwelling so that the heat from the

burning fire can interfere with activities in the house.

A storage area for burnt bricks for trading.



Figure 3. Residential conditions that are attached to the brick processing site

With the above conditions that unite residential areas with productive land in processing bricks, a productive housing arrangement concept is needed in the brick processing area in Bontolangkasa village, Bontonompo sub-district, Gowa district.

information on the limit of productive land in the residential neighborhood of brick processing in the village. The information provided by the brick processing community in Bontolangkasa village, Bontonompo sub-district, Gowa district, is in the form of:

Type of brick processing house

The distance between the house and the brick processing site.

#### Provision of information

The provision of information in question is

Tabel 1. Data awal jarak rumah dan tempat pengolahan batu bata di desa Bontolangkasa.

Pengolahan Batu Bata	Type Rumah					
	Balla Rate'		Balla Tingka'		Balla Batu	
	Jarak	Letak/Posisi	Jarak	Letak/Posisi	Jarak	Letak/Posisi
Material	0 m	samping rumah	1 m	samping rumah	1 m	samping rumah
Pengolahan & pencetakan	0 m	1/2 kolong rumah	1m - 1,5 m	samping rumah	1m - 1,5 m	samping rumah
Pengeringan	1 m	belakang rumah	1m - 1,5 m	belakang rumah	1m - 2 m	samping rumah
Pembakaran	1m-2m	belakang rumah	3m	belakang rumah	2m-3m	belakang rumah
Penyimpanan	0 m	1/2 kolong rumah	0 m	1/2 kolong rumah	1m	samping rumah

Table 1. shows the distance between the types of houses in the village of Bontolangkasa which is divided into 3 types, namely: 1) House on stilts (*Balla Rate*) , 2) House on stilts and modern / stone under the house (*Balla Tingka*), 3) Modern house (*Balla Batu*). . The distance between the house and the brick processing is very close so that from a health perspective (air conditioning during combustion is quite disturbing), the circulation system in the yard area and roads in the village is very disturbing. So it takes a house arrangement that can function as a residence as well as a place for brick processing in supporting the economy of the community.

#### Arrangement

Structuring is the arrangement of the location of the house with a brick processing site in order to achieve placement standards according to the rules set by the relevant parties. The stages of arrangement are carried out in a way:

Data collection in the field that leads to location identification so that the placement of the plan is in accordance with the spatial layout of the housing and settlements in the village.

b. Analyzing the community's needs for a pattern of productive housing that is adapted to the habits of the community in utilizing their house as a residence as well as a place of business in processing bricks.

c. Conceptualizing the planning of productive

housing arrangements in South Bontolangkasa, Bontonompo District, Gowa Regency.

This solution is carried out by making

comparisons at the location of community service activities and analyzing the needs of people who have supporting jobs as brick processors in Bontolangkasa village, Bontonompo sub-district, Gowa district.

Tabel 2. Hasil komparasi data awal jarak rumah dan tempat pengolahan batu bata di desa Bontolangkasa.

Pengolahan Batu Bata	Type Rumah					
	Balla Rate'		Balla Tingka'		Balla Batu	
	Jarak	Letak/Posisi	Jarak	Letak/Posisi	Jarak	Letak/Posisi
Material	3 m	samping rumah	3 m	samping rumah	3 m	samping rumah
Pengolahan & pencetakan	0 m	1/2 kolong rumah	1m - 2m	samping rumah	2 m	samping rumah
Pengeringan	2 m	belakang rumah	2 m	belakang rumah	3 m	samping rumah
Pembakaran	5m-7m	belakang rumah	5m-7m	belakang rumah	5m-7m	belakang rumah
Penyimpanan	0 m	1/2 kolong rumah	0 m	1/2 kolong rumah	2m	samping rumah

The results of the analysis above show that there are similarities in the distance between the brick processing facilities of the 3 (three) types of houses, namely: *balla rate'*, *balla tingka'* and *stone balla types* such as the distance between the placement/storage of material/raw bricks, which is 3 (three) meters. is on the side of the house. The brick processing site for the *balla tingka'* and *stone balla types* in Bontolangkasa village is located next to the house with a distance of 1m – 2m. The drying area is behind the house for the *balla rate'* and *balla tingka'* types with a distance of 2 meters. The burning area is 5m -7m behind the house for the three *balla types* . Meanwhile, the storage area for

bricks after burning for marketing purposes, namely for the *balla rate'* and *balla tingka'* types, is under the house.

#### Concept of Productive Housing Arrangement Based on Community Empowerment

Arrangement of housing for processing bricks in shaping their occupancy into productive homes, namely houses that function as both residential and brick business premises in Bontolangkasa Village, Bontonompo District, Gowa Regency. The concept applied in the arrangement of productive housing in the village involves the brick processing community, namely in the form of responses, activity patterns, habits and lifestyle of the people.

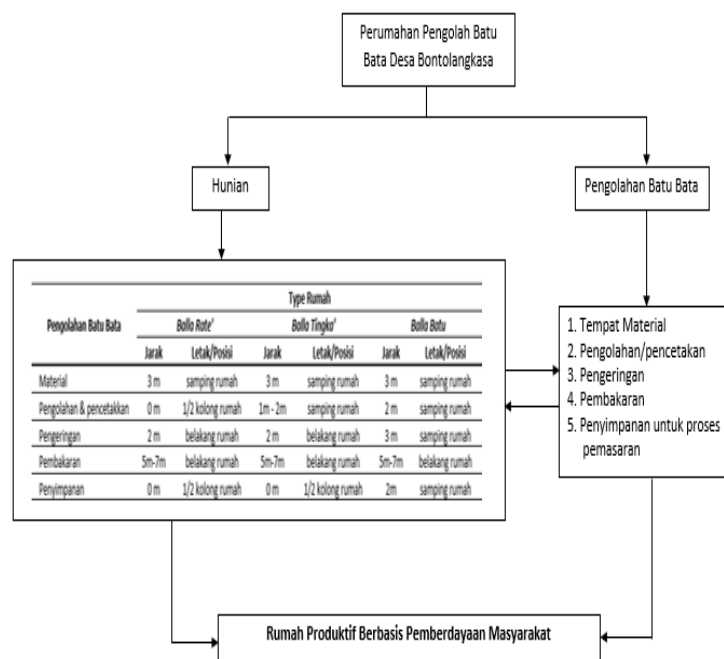


Figure 4. Community Empowerment-Based Productive Housing Arrangement Concept in Bontolangkasa Village



The arrangement of productive housing for residential brick processing in Bontolangkasa village, Bontonompo sub-district, Gowa district requires specific arrangements related to habits, activities in functioning the dwelling as well as a place to process bricks to support the household economy as well as adjustments to the lifestyle of brick processing associated with age. / age, level of education and the main job of brick processing. In this arrangement, a direct response from brick processors is needed so that the community empowerment system in this community service activity can be carried out properly. The results of this service activity are:

The shape of the brick processing house in Bontolangkasa village is divided into 3 (three) types, namely: stilt houses (*balla rate'*), stilt and modern houses (*balla tingka'*) and modern houses (*balla batu'*).

The brick processing site is located in the residential area, which is to use the yard as a place to process bricks.

Containers for processing bricks in the area of the house include: places for materials/raw materials, manufacture/printing, drying, burning and storage or ready to be marketed.

Type of house on stilts (*balla rate'*) the distance of materials/raw materials is 3m on the side of the house, processing/printing is under the house under the house, the brick drying area is behind the house with a distance of 2m, the burning area is 5m – 7m behind the house and storage section under the house.

Type of house on stilts and modern (*balla tingka'*) the distance of materials/raw materials is 3m on the side of the house, processing/printing is on the side of the house with a distance of 1m – 2m, the brick drying area behind the house with a distance of 2m, the burning area 5m-7m on the side of the house. behind the house and storage in the under the house.

Type of modern house (*balla batu'*) material/ raw material distance is 3m on the side of the house, processing/printing is on the side of the house with a distance of 2m, brick drying area on the side of the house with a distance of 3m, burning area 5m-7m behind the house and storage area next to the house at a distance of 2m.

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