

Typology of Rented Houses as a Former of the Sub-Urban Settlement Character

Case Study: Kalipaten Village, Tangerang, Indonesia

Salsabilla¹, Mohammad Ischak*², Ririk Winandari³, Ida Busnetty⁴

^{1,2,3}Department of Architecture, Universitas Trisakti, Indonesia

⁴Magister of Economic Science, Universitas Trisakti, Indonesia

*Corresponding Author

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Abstract— The development of the city area of Jakarta is progressing very rapidly, but the land available for residential needs is increasingly limited so that the development of the city is increasingly expanding to suburban areas. This is triggered by the emergence of new cities built by developers that cause natural growth and changes in the spatial character of the original surrounding settlements that already existed before. This study aims to examine the character of settlements around New City. The study uses descriptive qualitative methods through a settlement typomorphology approach with a focus on residential typology. The research findings obtained are that the rental house building becomes the main character of the settlement through the stair element which is the access to the rented room as well as the access separator between the rental housing function and the residential function of the rented house owner.

Keywords— suburban area, new city, original look, relying typomorphology, rental housing

I. INTRODUCTION

Sub-urban areas are lower density areas located on the outskirts of the city. This area is often interpreted as a rural-urban area. This area arose because of urban conditions that had begun to be crowded so that civilization developed in the area around the city [1]. The suburban area is usually filled with organized housing with a density that is not as high as the region area.[2].

The growth of the core area into the surrounding area, which is referred to as the urban sprawl phenomenon, has made settlements in sub-urban areas growing very rapidly to date.[3] According to [4], sprawl can be described as unplanned, spread out, low density, and unstructured development in the urban periphery [5]. One tangible form of the urban sprawl process in suburban areas is the increasing number of housing developments scattered in suburban areas, both big

cities [6][7][8], as well as medium-sized cities [9].

The growth of sub-urban areas, especially around big cities, is mostly due to the construction of large-scale settlements [10][11][12]. The construction of large-scale settlements has a direct impact on the development of the road network, and the next impact is the emergence of economic activity [13]. This spread of urban physical form causes a change in the shape of the city [14][15]. In addition, sub-urban areas are considered to have added value, such as land prices that tend to be lower and their location is quite strategic. Many developers are building housing to answer these problems.

The increasing number of planned housing developments has made the previously existing local settlement areas change because it responds to regional growth as the effect of the emergence of

planned settlements. Changes due to adjustments and responses to these economic opportunities, plus changes in territoriality because the land owned by residents in the original settlements is reduced due to part of the land having been purchased by the developer.

Fast increasing in population is a factor that adds to changes in the conditions of pre-existing settlements. This is triggered by the large number of migrant residents migrating to sub-urban areas in search of a better life. As a result, the need for land for housing becomes very high, while the existing land cannot be increased.

The growth of sub-urban areas makes land prices in the area rise [16]. Rental houses or commonly known as rented houses have emerged as an alternative to housing for the lower middle class in sub-urban areas.

The aim in this research is to identify the typology of the form of rented house and its influence on the formation of the character of unplanned settlements in Kalipaten Village, Kelapa Dua, Tangerang, where the area is included in the category of sub-urban areas.

Dense settlements are types of residential areas that are inhabited by too many people (overpopulated) in them. Dense settlements are widely spread in various parts of Indonesia. In dense settlements, there is an imbalance between the area of land and existing buildings [17]. The growth of dense settlements is caused by several factors, namely, increasing population growth, uneven population distribution, economic limitations, and increasingly soaring land prices. Dense settlements are often considered slum, dirty, and disorganized, even though there are various interesting phenomenas [18], especially in social and architectural contexts.

Dense settlements cannot be separated from unplanned settlements. Dense settlements stem from the growth of unplanned settlements. Unplanned settlements arise because of the pressure on housing needs for people who have low financial capacity. A clear characteristic of unplanned settlements is that the dwellings in them are not built according to housing standards, only modestly constructed and often inadequate. These unplanned settlements then develop into larger ones and can cause problems in the future because of their organic development.

In terms of form, housing can be divided into three types, namely regular housing, semi-regular housing,

and irregular housing. The housing complex developed by the developer is included in the regular housing group because it has a typical shape according to its area, an orderly orientation of the building towards the road, and is equipped with good infrastructure. On the other hand, densely populated areas are classified as irregular housing because each house can be built without a guide to the shape and orientation of the surrounding objects.

This irregularity can be influenced by the surrounding environmental conditions such as the location of the open area, the width of the circulation corridor, sunlight, vegetation, and other buildings [19]. If observed in general, the distribution of the location of houses in dense settlements is irregular. However, if studied specifically there are actually interesting unique patterns to study [20]. Although irregular, the house is the image of the occupants in it.

II. RESEARCH METHODS

2.1. Approach and Types of Research

This research was conducted by observing the data that occurred naturally (naturally) in the location without the intervention of the researcher. Then analyze the factors of the emergence of rented houses in unplanned settlements in sub-urban areas. The typology of renting is determined by categorizing the features and characteristics of the rain that the local community tends to choose. The type of research used is qualitative research.

2.2. Research Indicators

In this study, there are four factors that become the literature review, namely unplanned dense settlements, suburban, and the typology of rental houses (rented houses).

2.3. Formulating the Typology of Rented Houses

Analyzing the features and characteristics of the rented house located at the site by means of a field survey (direct observation). Image data and interview results were collected and then reviewed to group the similarities and differences of the types of existing rented houses.

III. RESULTS AND DISCUSSION

3.1. Locus of Research

The research location is located in Kalipaten Village,

West Pakulon Village, Kelapa Dua District, Tangerang Regency. Based on the pattern of formation, Kalipaten Village is included in an unplanned settlement located in a dense residential area. The position of the Kalipaten village is adjacent to the Serenade Lake Cluster in the north and borders the Oleaster Cluster and the Batavia Cluster in the south. Kalipaten village consists of 5 Neighborhood Community (N.C.). This study focuses more on the conditions of RT 02 (figure 1).

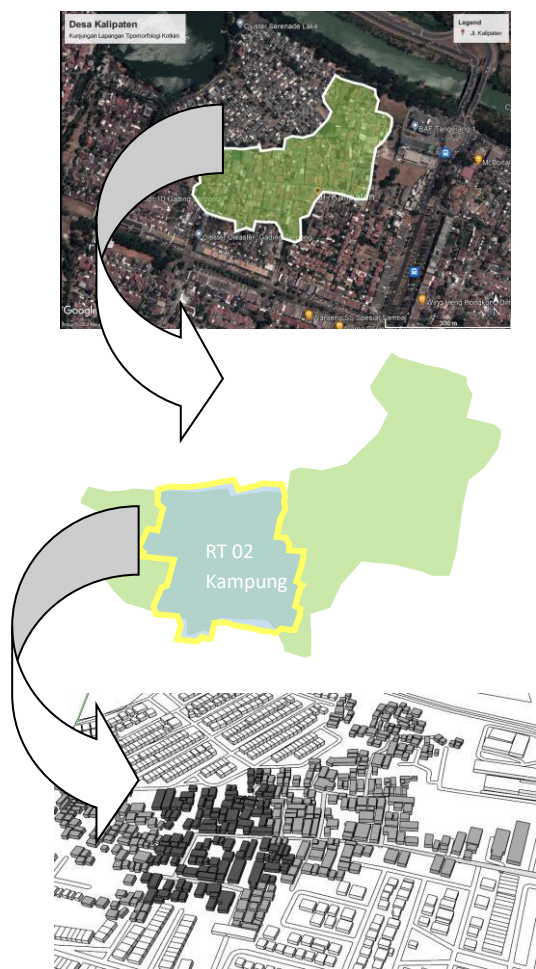


Fig.1: Locus of the research, Kalipaten Village

Kalipaten Village is an unplanned settlement in a sub-urban area (Tangerang Regency). Seen settlements with irregular spatial layout and narrow road width. Kalipaten Village, precisely in RT 02, has a population of 107 families with 120 private houses and 150 rented houses. Each contract can consist of 2 families, even up to 3 families. In one rented unit, there are 4-5 family members.

3.2. Changes of Density of the Area

The borders of Kalipaten Village based on the latest map in 2022 (figure 2) remain the same as in 2012 (figur

3). This shows that the area of the Kampung has not decreased but the number of dwellings in it has increased. What is clear is how the environmental conditions around the village have undergone significant changes. The increasing number of planned housing complexes built on the edge of the village makes the current existence of the village appear to be excluded, even though its existence existed earlier than the new housing



Fig.2 : The borders of Kalipaten Village based on the latest map in 2022



Fig.3 : The borders of Kalipaten Village based on the map in 2012

3.3. Building Density

The distribution of housings in Kalipaten Village is depicted. Compared to ten years ago, the number of dwellings in Kalipaten Village and its surroundings has increased considerably. This indicates that the population in the village has increased rapidly. The rapid population growth has resulted in changes in building density (figure 4). The density of buildings is dominated by the very significant increase in the number of houses after the emergence of the new town of Gading Serpong in the 1990s.



Fig.4: The building density in Kalipaten village based on the map in 2022

3.4. Road as a Building Orientation

Kalipaten Village has an organic road pattern. The main access route for the village is located across the middle of the village (figure 5). The main road is linear in irregular shape, starting from the highway to the east. The more into the area, the main road has decreased in size and turned into a neighborhood road. The main road is the main orientation of the existing houses. From the main road, a new neighborhood road system is formed around it which continues to spread in various directions. The other houses then have an orientation towards the formed neighborhood road.



Fig.5: The Road pattern in Kalipaten Village based on the map in 2022

3.5. Rented House Types

Currently, Kampung Kalipaten has a population of immigrants who are more than local residents. Migrants are usually those who have just started a family or who want to settle there temporarily. In contrast to the immigrants who are on average young, the local natives are on average middle-aged to old. At the time of the research, about 10% of the residents of RT 02 were elderly in their 80s.

The majority of rented houses are inhabited by young immigrants with an average job as laborers and entrepreneurs. Some residents are trying to open their own SMEs (Small Medium Enterprises) on the terraces of their rented units, such as basic food stalls, sewing services, and salons.

Residents rented houses from outsiders. Most of the land owners and rented buildings are residents from outside the village. Almost all types of rented rooms have a floor plan as shown in Figure 6. The floor plan consists of; front terrace, a bedroom, kitchen and bathroom in the back. The floor plan measures 6 x 3 m and the front terrace is 1.5 m wide. The unit circulation extends backwards without a partition to the kitchen, on the left or right (figure 6).



Fig: One-story Rented House Floor Plan

Almost all types of rented rooms have a floor plan as shown in Figure 9. The floor plan consists of; front terrace, a bedroom, kitchen and bathroom in the back. The floor plan measures 6 x 3 m and the front terrace is 1.5 m wide. The unit circulation extends backwards without a partition to the kitchen, on the left or right.

The rented houses spread out of the area of research locus (figure 7)

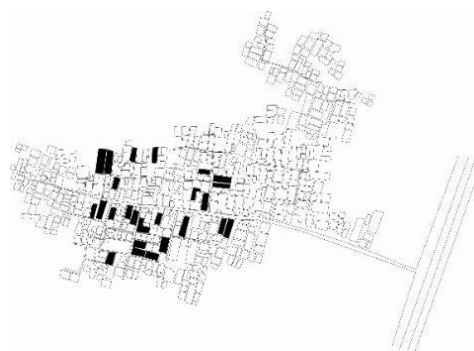


Fig: Distribution of the researched rented house

In this area, there are two types of rents that are the most common and inhabited by the villagers. In addition, in this typological analysis, the elements that are considered include the arrangement of mass, doors, terraces, windows, and additional functions that exist in the rented house. There are two types rented house:

a. Landed rented house

This type of rental is a residential building that has one floor. Usually this type consists of three to five units arranged in parallel. This type of rental was one of the first types to appear. The front view consists of a dead or opened door and window in front of it (figure 7). This type of rented house has a price range of IDR 600,000 – IDR 700,000 per unit.

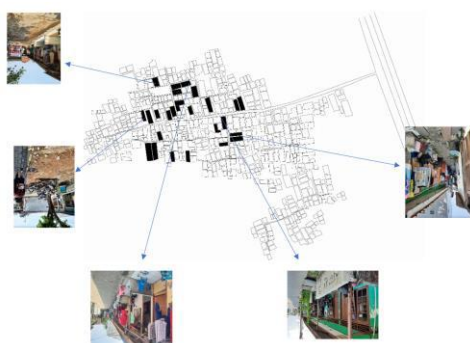
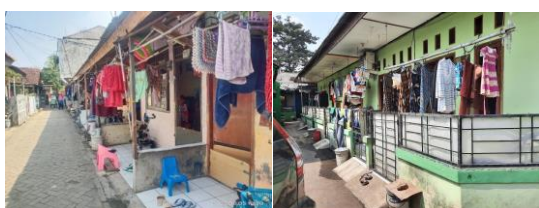


Fig.7. Landed rented house type and its distribution

The landed house is one of the most common types of residential designs found in the study area. This type is located on a single floor site with a floor plan of approximately 6 x 3 m per unit. This type is widely inhabited because the rental price is affordable.

In this type, the terrace is used as an area for motorbike parking and drying clothes. In some houses, terraces and living rooms are converted into SMEs (Small Medium Enterprises) rooms to support the family economy like as grocery shops, cold drinks shop, mini salon, barbershop, and vegetable shop (figure 8).



Fig.8. Multi function of landed rented house type

b. Multi-storey cluster rented house

This type of rental is a one-story residential building. In this type, the rented houses are placed like multi-storey flats with one to two building masses facing each other. One cluster can consist of up to more than 20 units (figure 8). This type of rented house has a price range that tends to be higher for up to ± Rp. 1,500,000 per unit

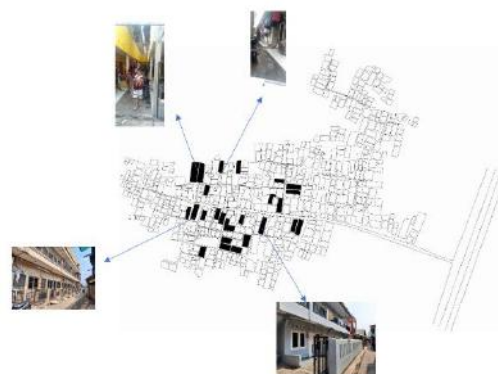


Fig.8. Multi-storey cluster rented house and its distribution

A multi-storey cluster rented house is a type of dwelling in which the houses are arranged in terraces such as flats. This type has a floor plan that is more or less the same as the type of tread (landed). In the view there is one door and one to two windows. The corridor from the rented house is in the front with a single loaded – open corridor. Compared to the previous type, the multi-storey rented house looks neater and cleaner. This can be caused by two factors, namely the age of the building which is not old and good maintenance

There is something unique about clusters of multi-storey rented houses, namely the placement of the

circulation ladder outside the unit. Placing stairs like this happens in various locations. There are three types of staircase location in the building (figure 10), that are: a. staircase slacing in the front, b. staircase placing by the building side, c. staircase placing in the building corridor



Fig.9. Types of staircase location at the building

The placing of the stairs in the outdoor space is due to the typology of the existing rented houses, namely complete residential units, not just rooms (boarding houses). Placing the stairs outside also facilitates mobility for the occupants of the rented house. However, there are still many staircase designs that do not meet the safety and comfort standards of the stairs. It can be seen from the steepness of the ladder optrade and the width of the stairs that are too narrow.

IV. CONCLUSION

The increasing number of planned housing developments as a result of the development of the establishment of planned settlements in sub-urban areas has left local residential areas excluded. Population growth and soaring land prices make the situation even more complex. On the other hand, residents need residential land for housing. Kampung Kalipaten experienced this phenomenon and as a result the number of dwellings was getting denser. Density of

settlements also occurs due to the community's need to live in places whose economic conditions are starting to develop (sub-urban areas) so that it attracts many newcomers.

Broadly speaking, in Kampung Kalipaten there are two types of housing, namely private residences and rented houses. There are two typologies of rented houses, namely landed houses and multi-storey rented houses. Of the two typologies of rented houses, each has a different variation. There are rented houses whose rooms have been converted into SME units as well as multi-storey rented houses whose stairs are in an outdoor space. The existence of rental houses is very dominant, making rental houses the main element forming the settlement character in Kampung Kalipaten as the embodiment of the sub-urban area.

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