



Factors of Social Conditions on The Influence of Housing Distribution Patterns in Tasikmalaya City

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ABSTRACTS

Social interaction in each housing is formed by the closeness of the space between houses, so that the pattern of housing distribution allows for differences in social conditions. The purpose of this study is to analyze the social condition factor on the influence of housing distribution patterns in the City of Tasikmalaya. This study uses the method of multiple regression statistics with research variables, namely housing distribution patterns, population growth, population density, the ratio of accessibility support facilities, the ratio of health facilities, the ratio of educational facilities and the ratio of economic facilities. Based on the results of social conditions have an influence on the pattern of housing distribution. This study has a multiple regression coefficient between several variables, namely 0.744, which means that there is a correlation between all variables X simultaneously with variable Y. The threshold value of the coefficient is 0.5 so that if it is more than that, it has a strong correlation. A strong correlation is related to social condition variables, namely population, population density, accessibility, health facilities, educational facilities and economic facilities.

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1. INTRODUCTION

Tasikmalaya city is located in a strategic position geographically. This city is passed by the southern ring provincial road which is usually passed by transportation between the two provinces, namely West Java and Central Java. This condition causes the City of Tasikmalaya to be included in the transit area, resulting in social interactions that result in regional development and development. Tasikmalaya City is a city that continues to grow and develop, both physically and in the behavior of its people. Of course, the social conditions of an area can be affected by physical development (Herdiana, 2018). The location aspect is very influential on a construction site such as housing (Grimm et al., 1996; Mitchell, 1996).

Based on the National Spatial Plan (RTRWN), Tasikmalaya City is included in the East Priangan Development Area (WP) in the leading sectors of agriculture, plantations, fisheries, tourism, processing industries, handicraft industries and mineral mining. In addition, the Regional Spatial Plan (RTRW) for West Java Province describes that the City of Tasikmalaya is directed as a Regional Activity Center (PKW) with integrated infrastructure, as well as a center for the development of the craft industry, trade and services. Cities with strategic locations can lead to sustainable development of housing patterns (Widodo & Sunarti, 2019; Sapci & Shogren, 2018).

Development conditions lead to an increase in conditions of social needs which result in housing construction (Indarto & Rahayu, 2015). The addition of population results in an increase in the need for residential land (Jauhari & Ritohardoyo, 2013) such as housing, because housing is a basic human need (Maharani, 2015). Housing development certainly greatly influences socio-economic conditions (Nasaruddin et al., 2019; Turner, 1967).

Housing is an aspect of physical development that is assumed to change social conditions in the area (Setiowibowo et al., 2020). The pattern of distribution of housing is one of the parameters in social life. The pattern of distribution of settlements discusses the nature of the distribution of settlement groups as a unitary unit which can be divided into several categories such as elongated, circular, parallel, arranged in a row (Martin et al., 2019), spread and clustered (Turner, 1968). Settlement patterns will certainly form communication patterns between neighboring communities, giving rise to different social conditions in each region.

In its implementation, there are several factors that influence social conditions on housing patterns (Yambo et al., 2022; Hetts et al., 1992), namely population growth, population density, the ratio of accessibility support facilities (Fitria, 2011; Granath & Lundgren, 2019), the ratio of health facilities, the ratio of educational facilities and the ratio of facilities economy. Residents are of course people who inhabit an area, which requires residential areas such as housing. The addition and density of the population led to the addition of housing developments, thus forming a pattern of distribution of housing. This pattern will certainly have an impact on other social aspects such as accessibility, health, education and the economy, resulting in changes in social conditions (Wang & Murie, 2000; Raynor, 2018). Housing development is usually associated with RTRW conditions and is affiliated with service functions and social activities (Yunita & Sari, 2019; Yeung & Howes, 2006).

Tasikmalaya City is one of the cities with significant housing development. Addition and population density became the trigger for housing development. Social interaction in each housing is formed by the closeness of the space between houses, so that the pattern of housing distribution allows for differences in social conditions. Based on the explanation above, this study aims to examine the factors related to the influence of housing distribution patterns on social conditions in the City of Tasikmalaya. This research will be very useful in sustainable development by paying attention to physical and social aspects.

2. METHODS

This research was conducted in the City of Tasikmalaya which consists of 10 districts. Tasikmalaya City is a city with quite dynamic development and growth. Housing development in Tasikmalaya City has widened to the city boundary area, so research on housing distribution patterns on social conditions is very suitable to be carried out in this city. This study uses multiple regression statistical methods. In this study there is one Y variable and six X variables as shown in table 1 below:

Table 1. Research Variable

RESEARCH VARIABLE	
VARIABLE Y	VARIABLE X
Housing Distribution Pattern	X_1 = Population Increase X_2 = Population Density X_3 = The ratio of accessibility supporting facilities to the total population X_4 = Health facility ratio X_5 = Educational facility ratio X_6 = Economic facility ratio

Settlement distribution patterns were analyzed using on-screen digitization, sourced from data from the Public Works and Spatial Planning Office. The data was validated by means of a field survey in each district. Data on population growth, population density, accessibility, health facilities, educational facilities and economic facilities are accessed through the Central Bureau of Statistics for 2021. The dependent variable is analyzed quantitatively to determine the value of the factors that influence the distribution pattern of settlements. The factor of the pattern of distribution of income to social conditions was analyzed using multiple regression, with the following formula:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_n X_n + e$$

Based on the translated formula that Y = dependent variable or response variable, X = independent variable or predictor variable, α = constant, β = slope or estimated coefficient. Circumstances when the values of the regression coefficients b_1 and b_2 are:

- (i) has a value of 0, so there is no effect of X_1 and X_2 on Y
- (ii) is negative, then there is a reverse relationship between the independent variables X_1 and X_2 and the dependent variable Y
- (iii) is positive, then there is a unidirectional relationship between the independent variables X_1 and X_2 and the dependent variable Y

3. FINDING AND DISCUSSION

3.1. Population Growth and Population Density

Based on an analysis of the population of the City of Tasikmalaya, the population increased by 12.70% from 2010 to 2020. Data analysis showed that Bungursari District was the area with the highest population increase, namely 31.62%, while the lowest increase was Tawang District with 4.71%. Population growth opens opportunities for the need for housing development. The high population growth in Bungursari District is directly proportional to the number of housing, namely 35 housing locations.

The population of Tasikmalaya City is not spread evenly and is concentrated in only a few sub-districts. Kawalu District is the sub-district with the highest population, namely 96.78 thousand people, but has a low population density, because it has an area of 42.33 km² and a population density of 2,286 people/km². The districts with the densest population are Cihideng District, Cipedes District, and Tawang District. Cihideng District has a population of 71.95 thousand people in an area of 5.45 km² with a population density of 13,202 people/km². When compared, the population of Cihideng District is less than Kawalu District, but the area of Cihideng District is narrower, so that Cihideng District is the District with the highest population density.

3.2. Accessibility

Accessibility is one of the needs in population mobilization. This aspect determines the location of housing developments. The better the access, the greater the demand for housing development. The sub-districts in Tasikmalaya City generally have fairly good access, and there is almost no inequality. In accordance with field conditions, that the wider the District, the longer the road access. Kawalu District has a road length of 71.143 km and Tamansari District has a road length of 61.571 km. Cihideng Subdistrict and Tawang Subdistrict are subdistricts with a small area, so they have short roads, namely 33,087 km and 36,455 km. The district with the shortest road is Purbaratu District with a road length of 27.976 km.

Consideration of accessibility in social conditions, namely population density. Tamansari District has the highest ratio in terms of low population density and long access conditions, so that accessibility in Tamansari District is better served, such as road facilities, compared to other kematan. Calculation of ease of accessibility needs to consider the ratio of road length and area. The wider an area, the longer road sections are needed for easy access to each area. Kawalu and Tamansari sub-districts can be examples of the need for longer accessibility. This condition causes the pattern of housing in these locations is still clustered.

3.3. Health Facilities

Each sub-district in Tasikmalaya City is equipped with the availability of health centers and supporting health centers. Almost all puskesmas in Tasikmalaya City have more than one puskesmas. The number of residents certainly determines the number of health centers when referring to Permen HAM Number 34 of 2016 concerning the criteria for Regency/City areas, namely the right of health criteria for the community is 1 health center for 16,000 residents. If the value is <16,000 then the ha of public health has a good value, whereas if the value is > 16,000 then the ha of health has a bad value. Cipedes sub-district shows a value of <16,000, which means that the available puskesmas facilities have met the community's needs. Health facilities are one of the considerations in housing development. Health facilities are part of primary social needs. Based on the analysis, Tasikmalaya City still needs to increase the number of puskesmas facilities, because all sub-districts show a ratio value of > 16,000.

3.4. Educational Facilities

In general, the availability of educational facilities is in accordance with the needs of community services. The smallest ratio is in Bungursari District which shows a comparison between the number of facilities and needs. The population in Bungursari District is large, so if it is adjusted to educational facilities, it is considered insufficient. Educational facilities are a parameter in housing development. Educational facilities are part of the social condition

variable. The more social conditions, the better the social conditions. Education is part of lifelong learning, so it will be very suitable for the implementation of humans as social beings. The housing distribution pattern is usually associated with educational facilities, so it will greatly affect social conditions.

3.5. Economic Facilities

Economic facilities are basic human facilities to meet their needs. The existence of economic facilities, apart from being a means to meet the needs of the population, economic facilities can also be used as the development of basic parameters for regional development. The housing distribution pattern is associated with economic facilities. Communities usually consider economic facilities to live. Economic facilities can be a place for social interaction, so that social conditions are greatly affected by economic facilities.

In this study, the existence of economic facilities is indicated by the existence of traditional markets and modern markets. The availability of traditional markets and modern markets in Tasikmalaya City is not evenly distributed. Several districts in Tasikmalaya City do not yet have their own traditional markets, so they need to reach out further to traditional markets. This condition is the same as modern markets whose locations are equally uneven. Economic facilities in Tasikmalaya City are still concentrated in the City Sub Region.

3.6. Social Conditions Affect The Pattern of Housing Distribution

Based on the results of social conditions have an influence on the pattern of housing distribution. In practice, the social condition variable is limited not entirely. Influential factors include population growth, population density, accessibility, health facilities, educational facilities and economic facilities. This condition is concluded based on the calculation of the correlation and regression table below:

Table 2. Variable Analysis Results

Variable Analysis Results							
Subdistric	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆
Bungunsari	1,099	31,62	3,416	0,4832	0,1033	0,4856	0,6524
Cibeureum	1,085	12,01	3,730	0,4331	0,2206	0,7007	0,0130
Cihideung	0,759	0,59	13,202	0,4823	0,1166	0,8892	0,0437
Cipedes	1,093	8,81	9,022	0,9274	0,2929	1,0816	0,0225
Indihiang	0,958	21,05	5,301	0,7703	0,2493	0,5984	0,0166
Kawalu	0,699	13,95	2,286	0,9888	0,2641	1,0424	0,0139
Mangkubumi	0,923	14,92	4,079	0,5400	0,1430	0,6230	0,0306
Purbaratu	1,028	16,4	3,514	0,4859	0,0869	0,5211	0,0174
Tamansari	0,742	22,19	2,083	1,0229	0,1495	1,1131	0,0332
Tawang	0,904	-4,71	8,706	0,4470	0,1471	0,7479	0,0123

The variables in the table are tested using multiple regression on the basis that the distribution of housing patterns influences social conditions, so that in housing development, supporting factors are needed, namely population growth, population density, accessibility, health facilities, educational facilities and economic facilities. Data analysis was tested with multiple regression statistics to take into account the relationship of social condition variables

that influence the housing distribution index in each sub-district in Tasikmalaya City. The results of data analysis on the influence of social condition variables are as follows:

Table 3. Multiple Regression Coefficients of Influence Between Variables

Multiple Regression Coefficients of Influence Between Variables				
Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0,774	0,599	0,203	0,18325

Based on the results, it shows that the multiple regression coefficient between several variables is 0.744, which means that there is a correlation between the entire X variable simultaneously with Y variable. The threshold value of the coefficient is 0.5 so that if it is more than that, it has a strong correlation. This condition can be concluded that the social condition factor has an influence on the pattern of housing distribution. The social conditions in question are population growth, population density, accessibility, health facilities, educational facilities and economic facilities.

4. CONCLUSION

Based on an analysis of the population of Tasikmalaya City, it has experienced a population increase of 12.70% from 2010 to 2020. Population growth opens up opportunities for the need for housing development. The high population growth in Bungursari District is directly proportional to the number of housings, namely 35 housing locations. Accessibility is one of the needs in population mobilization. This aspect determines the location of housing developments. The better the access, the greater the demand for housing construction and the better social conditions.

Health facilities are one of the considerations in housing development. Health facilities are part of primary social needs. Based on the analysis, Tasikmalaya City still needs to increase the number of puskesmas facilities, because all sub-districts show a ratio value of > 16,000. In general, the availability of educational facilities is in accordance with the needs of community services. The smallest ratio is in Bungursari District which shows a comparison between the number of facilities and needs.

Economic facilities are basic human facilities to meet their needs. The availability of traditional markets and modern markets in Tasikmalaya City is not evenly distributed. Several districts in Tasikmalaya City do not yet have their own traditional markets, so they need to reach out further to traditional markets. Based on the results of social conditions have an influence on the pattern of housing distribution. This study has a multiple regression coefficient between several variables, namely 0.744, which means that there is a correlation between all variables X simultaneously with variable Y. The threshold value of the coefficient is 0.5 so that if it is more than that, it has a strong correlation. A strong correlation is related to social condition variables, namely population, population density, accessibility, health facilities, educational facilities and economic facilities.

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