

Influence Factors on Housing Development in Urban Central and Periphery in Semarang City

Comparison of Housing Development in Urban and Periphery (Case Study of Purianjasmoro Housing and BSB Housing Development)

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Abstract. Increasing population caused the city to grow denser. One of the impacts is the high change in land use to fulfill human activities including the need for housing. Housing growth will affect the development of the city, where housing developments will be followed by developments in the city's territory. This study aims to determine the factors and to compare the financing of housing development in the urban and the suburbs area in Semarang City. The research method used deductive method with quantitative analysis. The research approach used a comparative study approach, by comparing two different housing locations. In this study Puri Anjasmoro housing was sampled as housing in the urban area and BSB housing as a sample of housing on the suburb of the city (periphery area). The results of the study show that development that leads to the suburb area is actually an expensive development, with the largest allocation of development costs actually used to build new infrastructure so that it is not effective, because of the inefficient infrastructure that has been in the city center before. Housing development tends towards the suburb due to differences in land prices between the urban and the suburb, as well as the occupant's preference in choosing residential locations. Developers tend to prefer development sites in suburb areas because they are associated with a greater percentage of profits if they develop in periphery areas that have more expensive land prices. Therefore, the government should better limit the developers of housing developers who will develop housing development towards the suburb area.

Keywords: Influence factors, Central Housing, Sub-urban Housing

1 Introduction

Increasing housing needs in cities with limited land capacity affect housing growth towards to the periphery of the city [7]. The impact of the development a new housing in the periphery is the conversion of arable land in the periphery. This is in line with the statement of Budiharjo that the expansion of cities that often occurs in Indonesia is by "annexing" fertile lands in the countryside [2]. Rapid changes that occur in urban areas spread to the suburbs are often known as urban sprawl.

Development that leads to the suburb will have an impact on the sustainability of a city. For example, the impact of urban development that leads to the suburb is the reduction in land area due to being covered by buildings or asphalt, increasing the distance of travel, increasing number of dependents on private vehicles, and uncontrolled population distribution [5]. Conversely, development at the center will provide more benefits, such as:

- a. Reducing the spread of land cover by buildings or asphalt, so that the cost of making drainage channels will decrease. In addition, open field in the periphery can be used as agricultural land or wildlife habitat.
- b. Reducing development costs and infrastructure operational costs (roads, utilities, landfill, government services, schools, etc.).
- c. Increasing accessibility to the CBD area, this relates to the distribution of goods and services.
- d. Reducing transportation costs, so that it will have an impact on reducing air pollution due to motorized vehicles.

The increasing demand for housing in the city has become a profitable business opportunity for developers. It is very attractive for developers who tend to develop housing to the periphery by offering a complete range of infrastructure facilities. This is triggered by the factor of land prices in suburban areas that are relatively cheaper than in the central area. Housing developments that occur are considered to require higher development costs. Development leading to the periphery requires the construction of new infrastructure for municipal services that were previously not available in the periphery (such as roads, open spaces and other social infrastructure) [3].

The development of housing that leads to the periphery is very influential on environmental damage and the sustainability. Another problem is the emergence of new areas in the outskirts of the city that are irregular because there is no spatial planning in the area. This development is inefficient because they aren't coordinated and uncontrolled developments. Another problem is the imposition of infrastructure on consumers whose costs are included in the selling price of the house, causing house prices to become highly [8]. Such conditions are considered inefficient and require greater development funds.

Different with the development of a city located in the center of the city. Development in the urban area can be reduce costs in the provision of infrastructure and public services compared to the development of cities that are spreading or that are developing in suburban areas. This is because development in the city center will further optimize to use of service facilities that already exist in the city, so that no need new infrastructure [6].

Housing developments that occur in the Semarang city are indicated to point towards the outskirts of the city. Semarang city has a fairly dense population. The indications of a horizontal expansion of the city, for example the development of Bukit Semarang Baru (BSB) located in Mijen District. Mijen Subdistrict is an expansion of the urban area of Semarang City, as a result many previously existing agricultural and plantation lands turned into built-in areas. BSB area provides various kinds of urban facilities to support activities as a "new city".

In contrast to the construction of Puri Anjasmoro Housing located in the city center. Housing in the city center tends to reduce costs in providing infrastructure and public services by increasing accessibility and reducing travel costs, compared to the spread of urban developments. Housing development like this will utilize underutilized land or space in the city [1].

Housing construction in the city center does not require to construct of new infrastructure, so it will increase efficiency in the use of public service facilities [5]. The construction of housing in the city center is cheaper when compared to the construction of housing in the suburbs. The study aims to examine the factors that influence the construction and to compare the financing of housing in the center and suburbs of the city with a case study in Puri Anjasmoro Housing Development and BSB Housing in Semarang City.

2 Method

This study uses the deductive method with quantitative analysis. The research approach used is a comparative study approach, by comparing two different housing locations located in the urban and suburbs. The main variables of this study are factors that influence housing development and compare the financing in the center and suburbs of the city. Research data is obtained directly from interviews with informants, both with developers and residents of housing.

The observation unit in this study is housing in Semarang city which is in the center and suburbs area. Housing in the city center is Puri Anjasmoro, and in the suburb is Bukit Semarang Baru (Figure 1). The selection of the two housing locations because this housing is included in the large-scale housing in Semarang city, where located at the urban and suburbs area. Therefore, this location is suitable to see the difference in the cost of housing construction, because of its different location.

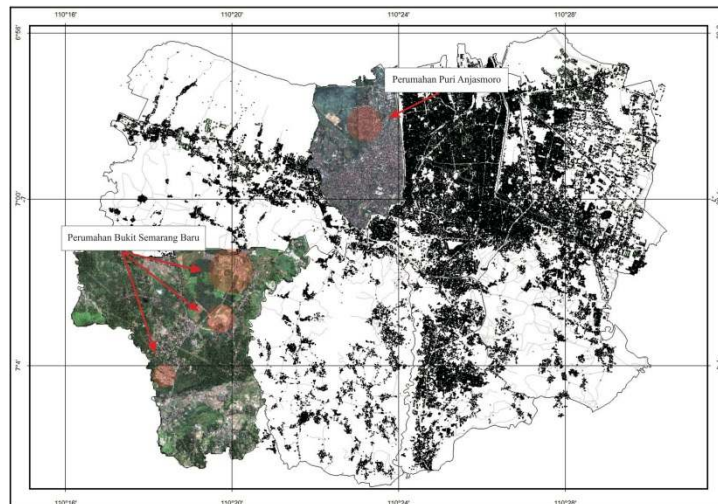


Figure 1. Research Location

The analysis unit is a comparison of the factors that influence and compare the financing housing development of Semarang city in different locations, in the city center or urban area and in the periphery or suburb area.

3 Result and Discussion

3.1 Development of Semarang City Housing

The increasing activities in the trade and industry sector in Semarang city, making housing needs increase every year. That is business opportunities for the developers are competing to build housing in Semarang city. Previously, the business property in Semarang city was considered less attractive, but along with the decline in bank interest rates, it made business more attractive to developers (www.rumah123.com, 2007).

The construction of housing in Semarang City is spread in various ways, from those located in the urban to the suburb area. This is because developers in Semarang city are optimistic about the positive growth in the property sector in this city. In this research, Puri Anjasmoro Housing and BSB Housing will be explained as a representation of housing developed in urban and suburban locations.

3.2 Comparison of Development of Puri Anjasmoro Housing and BSB Housing

Puri Anjasmoro located in West Semarang District. This housing developed since the Government's policy through the Indonesian Presidential Instruction No. 13 of 1976 concern to development of the West Semarang region with one of its provisions is the development expansion of large-scale areas and settlements in the North-West Semarang District. This housing stands in 90 hectares. Puri Anjasmoro housing was developed by PT Indo Perkasa Usahatama.

Bukit Semarang Baru (BSB) located in Mijen District. This housing stands in 1000 hectares. BSB was developed by PT Karyadeka Alam Lestari. The development area is divided into 2 locations. In the southern part is the Jatisari development area, the land used is 137.5 hectares and in the northern part of the Mijen development area, the area used is 730.9 hectares. The boundary of project land with outside properties in the form of roads, rice fields and river flows. Bukit Semarang Baru is built on hills offer an integrated new city concept that is environmentally, built with various urban facilities can support the activities of residents. All support facilities are provided in the BSB housing area.

The following are the results of a comparative study of the factors that influence the construction of housing and compare the financing in the center and suburbs area, with the case study in the Puri Anjasmoro and BSB presented in table 1.

Table 1. The Comparison of Puri Anjasmoro Housing and BSB Housing

No	Variable	Housing	
		Puri Anjasmoro	Bukit Semarang Baru
1	Transport infrastructure	Only building neighborhood roads.	Building environmental roads and secondary arterial roads of \pm 6 m and \pm 26 m wide
2	Physical infrastructure	Making drainage channels, electric transformers.	Build a system for treating wastewater, clean water and PLN substations.
3	Public facilities	Build public facilities, such as: <ol style="list-style-type: none"> 1. Commercial areas (shop houses and shops). 2. Place of worship 3. School 4. Hotels 5. Gas stations 6. Park 	Build public facilities, such as: <ol style="list-style-type: none"> 1. Commercial area 2. Sports facilities 3. Place of worship 4. School 5. Park 6. Modern Market 7. Gas stations 8. West Makapolres 9. Funeral
4	Land	Located on the shore of the coast with a coastal reclamation	Located on rubber plantation land and uses a dam system to

	project and using a polder system to avoid puddles due to rising sea levels. The orientation of Semarang city is,	reduce the rate of water. The orientation of the city of Semarang is:												
	1. 2.5 km from the city center (Tugu Muda)	1. 10 km from the city center (Tugu Muda)												
	2. 2 km from Tanjung Mas port	2. 13 km from Tanjung Emas port												
	3. 2 km from Ahmad Yani airport	3. 7 km from Ahmad Yani airport												
	4. 4 km from Tawang Station	4. 13 km from Tawang Station												
	5. 0 km from Jalan Raya Semarang - Jakarta	5. 6 km from Jalan Semarang-Jakarta												
5	Housing	Residential areas in housing are equally designed with a balanced concept (1: 3: 6), which consists of small type houses, medium type houses, and luxury type houses.												
6	Licensing	Management of the area managed by TMD (town management deviation). Permits granted include a Building Construction Permit (Ijin Mendirikan Bangunan=IMB), permission to change the design before being approved by the government before being recommended through TMD.												
7	Financing	Management of the area management deviation (TMD) managed area, starting from plot calculation, building design, to drainage systems and utilities, so that the area becomes more organized and more orderly.												
	<ul style="list-style-type: none"> ▪ Infrastructure: - Trasportation - Physical ▪ Environmental Facilities ▪ Land ▪ Housing Devlp. ▪ Licencing 	<table border="0"> <tr> <td>6,87%</td> <td>4,57%</td> </tr> <tr> <td>0,00%</td> <td>3,38%</td> </tr> <tr> <td>10,80%</td> <td>61,84%</td> </tr> <tr> <td>0,31%</td> <td>0,15%</td> </tr> <tr> <td>81,01%</td> <td>30,00%</td> </tr> <tr> <td>1,00%</td> <td>0,06%</td> </tr> </table>	6,87%	4,57%	0,00%	3,38%	10,80%	61,84%	0,31%	0,15%	81,01%	30,00%	1,00%	0,06%
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4 Discussion

From the results of the study, it can be seen that housing built on the suburb area has the consequence of building new urban facilities. As a result, the biggest development costs is used to build housing facilities infrastructure, not to build housing units. The construction of new infrastructure in this suburban housing area caused inefficient of budget during housing construction, because there were additional costs incurred to support suburban housing.

Unlike housing in the urban area. The biggest development costs is used to build housing units and environmental roads, not to build new infrastructure. This is because, the urban housing is close to the public infrastructure which built by the city government, so that the housing in urban area not issue a large allocation of funds to build infrastructure in a residential environment.

Overall, the construction of housing in the suburbs area shows the capital costs incurred in the construction of larger housing, as well as the biggest development costs to build infrastructure. This makes development on the suburb area an extravagant development and ineffective occurs in the construction of infrastructure. The difference in designation costs can be seen in the following figure 2.

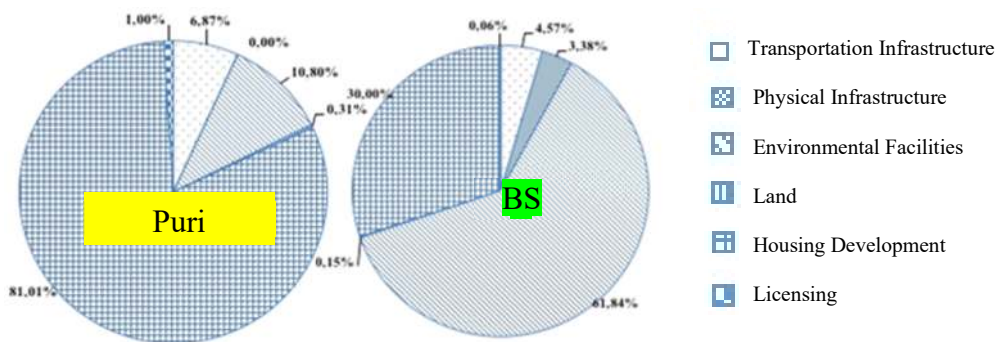


Figure 2. Comparison of Financing in Puri Anjasmoro Housing and Housing BSB

However, developers tend to prefer housing development in suburban areas. This is because (1) there are differences in land prices where the price of land at the urban and at the suburb area, causes developers to develop housing on the suburb area, (2) the presence of occupant preferences related to differences in tastes and needs of consumers in choosing housing locations.

The results of the study also show that development that leads to the edge is not only considered wasteful in the construction of new infrastructure, but also considered to have a negative impact on the environment. The results of the study show that suburban housing is building new infrastructure, this indicates there has been an increase of land area used for buildings and asphalt when build new infrastructure. This results in an increasingly reduced water infiltration area in the soil.

From the interviews with residential residents, it can be seen that residents of suburban housing need further distance to work locations, compared to urban housing residents. The farther distance to get to the work location, the more fuel used, so there is an increase in fuel use. The direct impact of increasing fuel consumption is an increase air pollution caused by gas emissions of motor vehicles.

In addition to having a negative impact on the environment, outward development also increases greater spending, especially on transportation costs. Residents in suburban housing, incur greater transportation costs compared to urban housing residents. From the results of the

study, residents of housing in the urban area will be more benefit by transportation costs, because of the closer working distance.

5 Conclusion

Development in the suburb area is an expensive development, with the largest allocation budget used to build new infrastructure. The construction of housing to the suburb is due to differences in land prices between the urban and the suburb, as well as the preferences of residents in choosing residential locations. The difference in land prices causes developers to tend to develop locations in the suburb or periphery. This relates to the percentage of profits that will be gained if developing housing in the suburb area compared to develop in the urban area which has more expensive land prices.

From the discussion, can be recommended as follows: that there needs to be strict regulation in limiting residential areas, so that the permission to build a residential area is not easy to obtain for developers.

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