

The effect of housing policies on housing segregation in Indonesia

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Abstract. Housing segregation has occurred in urban areas in Indonesia. Spatial segregation is shown by the phenomenon of gated community and social segregation is indicated by the absence of social relations among the groups. This housing segregation endangers the unity and integrity of the community. It is far from the ideal goal in housing development, i.e. to create harmonious community. This problem can be caused by the housing policies. Therefore, this study aims to identify housing policies that affect housing segregation in Indonesia. The methods used in this study were: 1) compose the conceptual framework of the emergence of segregation based on the results of the research article review; 2) collecting policy texts in the form of laws and regulations at the national level (constitution, government regulation, and ministerial regulation) for the past ten years; 3) review and map the contents of the policies following the conceptual framework; 4) analyze the mapping and look for policies relating to segregation. The results of the policy mapping show that although there are many policies to increase housing affordability and harmonious housing (diversity and balance), there is a clause in a balanced housing policy which states that the construction of simple housing for low-income groups may not be in the same location with the moderate and luxury housing has triggered the emergence of spatial segregation. Thus, it can be concluded that housing policy influences the occurrence of housing segregation in Indonesia.

1. Introduction

Ideally, housing development is intended to create a community [1] that is a group of people who live in the same geographical area and has psycho-socio-spatial ties. These ties are the measure of a sustainable community. The members have a bond with the elements of the physical and social environment of housing. In urban social diversity in Indonesia, Jabodetabek metropolitan area/JMA (Jakarta and its surrounding cities) has high social diversity.

To ensure community sustainability needs social harmony starting from the neighborhood level. But, in reality, housing segregation occurs both spatial and social segregation. Spatial segregation is shown by the geographical separation of housings based on income levels. It creates economic homogeneity neighborhoods and housing exclusivity occurs. We can find housing for high-income, middle income, low income, and the urban poor. This spatial segregation facilitates social segregation.

Housing segregation in JMA is shown by gated communities phenomena that occur in Depok, Bogor, Tangerang [2], and Bekasi [3]. These are examples of segregation in urban scale based on social classes, which further increases social inequality [2]. Gated communities are a form of space privatization that



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triggers city fragmentation and social disintegration [4]. In Vesselinov et al. [5] gated communities as a nexus of social and spatial relations within the context of urban inequality. Even a gated community triggers fragmentation that results in conflict and violence [6].

One factor that contributed to housing segregation is policy. As mentioned by Podoprigora "Inconsistent housing policies of communities have a number of destructive consequences, including increasing differentiation in the level of socio-economic development across communities and less coherent socio-economic space of an agglomeration" [7]. In Glover et al. [8] "Many regulations also lead to unintended consequences that limit the feasibility of affordable housing and mixed-income communities". From the above statement there is a possibility that the policy influences the emergence of housing segregation in Indonesia. This study aims to identify the policies affecting housing segregation in Indonesia.

2. Housing segregation

Housing segregation can be seen from two perspectives, spatial segregation, and social segregation. Spatial segregation is from a geographical perspective, while social segregation is from a sociological perspective, i.e. the absence of interaction between social groups in a physical space [9]. While spatial segregation is a form of unequal groups' distribution in a physical space [10]. It is indicated by the spatial separation of two or more social groups (based on race, ethnicity, income, religion, etc.) at various geographical levels or spatial scales, from building scale, residential blocks, and cities to metropolitan areas. In one housing area, internal spatial segregation divides occupants into clusters. Social segregation also occurs in the same cluster.

Social segregation is caused by policies and can produce a negative impact such as community discrimination [9]. In general, social segregation can be translated as the separation of society by social factors such as race, ethnicity, religion, family structure, or socioeconomic status in a geographical area [11]. Social segregation often occurs in residential areas that allow classification or compartments of people based on their socioeconomic backgrounds.

3. Methodology

To identify housing policies that affect housing segregation in Indonesia used the following methods. The first is to build the conceptual framework that connects the main keywords related to the emergence of segregation. To choose the keywords and get the framework of the concept in question, a scientific article search and review was conducted. The second is collecting national policy texts. The scope of the policies reviewed includes policies in the field of housing that are considered related starting from the level of the law to ministerial regulations. The legislation collected is valid for the last ten years. This period relates to the validity of the enactment of the legislation, especially ministerial regulations. The third is to review all collected policies and map them according to the keywords contained in the conceptual framework. The keywords used in the conceptual framework are affordable housing, diversity and balance, and spatial and social segregation. Finally, an analysis of the policy mapping results obtained. Every policy that is located on each keyword was analyzed with other keywords to determine inconsistent policies.

To examine the effect of policy on housing segregation, we map the role of each policy into two groups, facilitates or inhibits segregation. By using policy analysis methods, various policies are reviewed and their effects are interpreted and categorized into policies that facilitate or inhibit affordability, diversity, balance, and spatial segregation.

4. The effect of housing policies on housing segregation in Indonesia

To filter and map the content of housing policies were used the keywords in the conceptual framework consisting of affordability, diversity, balance, and segregation as shown in Figure 1.

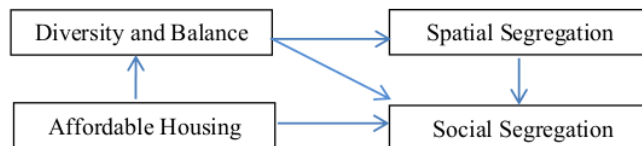


Figure 1. Policy conceptual framework for housing segregation.

Affordability affects diversity and balance as well as social segregation. Furthermore, diversity and balance affect spatial and social segregation. In segregation itself, spatial segregation influences social segregation. The explanation is in the following description.

4.1. Affordable housing

Affordable housing is a type of house with a lower price than the market price, intended to meet the needs of low-income people [12]. If a household spends more than 30% of its income on housing can be said it facing affordability problems [13]. Indonesia accommodates affordable housing by providing simple type houses. As stated in Minister of Public Works, and Minister of Public Housing [14], the simple type houses are houses built on 54 – 200 square meter land.

The land price for affordable housing must have a level so it can be affordable for people with low incomes. If the standard type of simple house has been planned but the price of land is high, then the price of the house will not be affordable. Low land price is an important element in providing affordable housing. Successful provision of affordable housing can prevent housing segregation if combined with policies that encourage diverse housing types in the same area.

4.2. Harmonious housing: Diversity and balance

A harmonious housing policy is an effort to create social diversity and balance. The balanced community suggests a degree of positive social interaction and a degree of social cohesion [15]. Diversity and balance are base elements in the social mix [16]. Mixed and balanced housing goals must be guaranteed in territorial space at the scale of buildings, districts, cities, and conurbations.

In urban planning, diversity is interpreted as a mixture of usage and class or ethnic-racial heterogeneity [17]. Mixed-income communities have recently been used to combat socio-spatial segregation and to prevent new clusters formation from displaced households [18]. For this, it is illustrated in the conceptual framework in the form of arrows from balance to spatial segregation and social segregation. See Figure 1. In Indonesia, it is known as balanced occupancy. In environments where the social mix has developed 'organically' over time, the social mix is more likely to be a positive phenomenon [19]. This is like what happened in the urban kampong. This can be a foundation for the development of inclusive, sustainable, and cohesive communities [20]. The social mix idea can be implemented in various ways, even in areas under the same jurisdiction, urban, economic, and cultural context [21].

In Indonesia, there is a balanced housing policy. According to this policy, a residential area built with certain compositions of simple, medium, and luxury houses, or in the form of public flats and commercial flats [22]. Two of the objectives of this policy are to achieve harmony among various groups of people and to create a harmony of living spaces both socially and economically. In this policy, housing development is directed to create social diversity. The purpose of this policy is appropriate but it cannot be implemented.

4.3. Analysis

There were 114 regulations in the housing sector had reviewed to see the pattern related to housing segregation. The regulations include laws, government regulations, and ministerial regulations. Based on the conceptual framework, the contents of the policies are mapped based on their contribution to facilitating, inhibiting, and not related to affordability, diversity, balance, and spatial segregation.

Regulations that are not related at all to all keywords dropped. The policies reviewed result is summarized in Table 1. The numbers in parentheses indicate the number of policies involved.

Table 1. Summary of policies contribution.

Content of the Policy	Contribution		Total
	Facilitate	Inhibit	
Affordability	77%	23%	100% (13)
Diversity	77%	23%	100% (15)
Balance	100%	0	100% (2)
Spatial Segregation	60%	40%	100% (5)

Based on Table 1, the majority of policies facilitate or contribute to affordability, diversity, and balance, even to spatial segregation. The kind of policies that contribute to facilitating affordability are housing funding liquidity facilities; aid for infrastructure, facilities, and utilities of public housing; hold credit/financing in the ownership; housing construction assistance funds; etc. Meanwhile, the policies that inhibit affordable housing realization is the revocation of regulations regarding affordable housing. It will be difficult for low-income groups to obtain housing if the regulation is revoked.

Related to diversity, we can find three types of housing regulated by the constitution. Existing policies were mapped if they inhibit or facilitate the creation of a variety of housing types both in its area or price. As much as 77% of policies are facilitating the diversity of housing types. One example of facilitating regulation is the balanced housing policy. The regulations that inhibit the realization of diverse housing to be in one location are Ministerial Regulation Number 07 the Year 2013 and Number 10 the Year 2012 about Balanced Housing. One of its articles mentioned that the simple houses "may not be in one stretch" with the medium and luxurious house. It is the cause of spatial separation for low-income housing and creates segregation based on income level and subsequently making social segregation.

Besides diversity, housing needs to balance the proportion among the types that represent various groups in society. The balanced proportions in various spatial scales will guarantee its diversity, so diversity and balance must always be combined to avoid segregation. There is no specific policy that mentions or governs to balance housing proportion adjusted to social groups in the community. We only identify regulations that push the formation of balanced housing which rigidly regulates proportions of the simple, medium, and luxury houses in a ratio of 3:2:1 without referring to the existing conditions of group proportions in the society.

The occurrence of "social segregation" is influenced by the policies that support the creation of spatial segregation. There are more policies that facilitate spatial segregation (60%). Although there is a housing balance policy, there are deficiencies in it regarding the location of the different types of houses. Following the objectives, social mix and balance should start at the neighbourhood level. In this level, face to face interaction manifested, and the interaction among different groups can be realized. In the policy of not being bound by this location problem, so this policy can be the cause of spatial segregation, which in turn causes social segregation. These results confirm that although there is a policy about balanced housing only regulates in terms of numbers, it does not regulate in spatial terms which starts at the neighbourhood level. In the balanced housing policy, the term "not in one stretch" indicates that it explicitly leads to spatial segregation between types of housings, especially the types intended for low-income groups. This policy produces the highest impact on housing segregation in Indonesia.

5. Discussion

In the practice of providing housing, private developers are more interested in targeting middle to upper-income families. The result is gated community clusters were formed everywhere. Clusters' development caused spatial segregation in housing.

The little collaboration in providing housing between the government and the private sector makes it difficult in controlling the implementation of a balanced housing policy. Although private developer required following a balanced housing policy, there is a mistake in the policy that open up opportunities to provide housing for various groups, not in the same stretch. This policy weakness is used by private developers to develop only the medium and luxury housing so that in Indonesia housing segregation actually occurs, with no interaction among various groups. Each group lives independently, does not interact with other groups. Social segregation appears both in the provision of housing and in the provision of other facilities such as shopping centers, schools, and etc.

Based on the conceptual framework that links housing policy with housing segregation, we can understand that affordable housing policy is vital because it has a great influence on the realization of social segregation, diversity, and balance. This policy needs to be spatially supported by various policies that would prevent spatial segregation. In this case, balanced housing policy should be directed at the dimensions of diversity, balance, and spatial integration simultaneously, not just on the proportion of occupancy of low, middle, and upper-income groups. The term "not in one stretch" is the subject of failure in housing segregation prevention. To prevent housing segregation, diversity and balance dimensions must be fulfilled, starting from the neighborhood to the metropolitan scale.

The phenomenon of gated communities is clear evidence of housing segregation, both on spatial segregation and social segregation perspectives. The gated community problem can be inhibited by issuing policies that would support affordable housing with diversity and balance factors. Given that many policies have already been issued to support affordable housing, the focus should be shifted to implementation effectiveness. So, the research on the effectiveness of existing policies is highly required.

Various studies have shown that to ensure the success of affordable, diverse, and balanced housing, other policies outside the housing sector are needed, for example, policies regarding land. Various choices of urban land management models can be assessed to maintain the availability of land for housing development to achieve the expected level of diversity and balance.

Another policy to make a balanced housing policy manifest is cross-subsidies. This policy can support low-income raising its affordability. But it has not yet been implemented. Cross-subsidies housing policy is directed to keep the low-income adjacent to the various groups in the same location.

In detailed spatial planning in urban areas, it is time to be carefully accommodated about the placement of various diverse housing groups on the neighbourhood scale in depth so that they can truly represent a picture in proportion to the picture at the city level.

6. Conclusion

Housing segregation in Indonesia is influenced by interactions among policies that facilitate affordability, diversity & balance, and spatial segregation. The strongest influence that creates housing segregation is the existence of policies facilitating spatial segregation even though the number of these policies is relatively at the lowest number. Detailed spatial planning, zoning regulation techniques, cross-subsidies as well as keeping the price of land reachable are important spatial policies that would help to suppress housing segregation in Indonesia.

References

- [1] Tjahjono G 2008 Problems with designing simple flats (Permasalahan perancangan rumah susun sederhana milik (Rusunami)) *Paper presented in the Workshop on: Implementasi Kebijakan Penyelenggaraan Pembangunan Rumah Susun di Kawasan Perkotaan.*
- [2] Azis R F 2008 *The phenomenon of gated community in urban areas (Fenomena Gated Community di Perkotaan)* (Depok: Thesis, Faculty of Engineering University of Indonesia)
- [3] Diningrat R A 2015 Large-scale spatial segregation of housing: case study of the new town of Kota Harapan Indah (KHI) Bekasi (Segregasi spasial perumahan skala besar: studi kasus kota baru Kota Harapan Indah (KHI) Bekasi) *J. PWK.* 26(2) 111-29

- [4] Hendrastomo G 2012 The potential for conflict behind the emergence of a gated community (Potensi konflik dibalik munculnya komunitas berpagar (gated community)) *SOCIA* **11**(1) 31-41
- [5] Vesselinov E, Cazessus M and Falk W 2007 Gated communities and spatial inequality *J. of Urb. Affair* **29**(2) 109-27
- [6] Blakely E J and Snyder M G 1997 *Fortress America: gated communities in the United States* (Washington DC: Brookings Institution Press)
- [7] Podoprigrora Y, Volchkova I, Danilova M and Ufimtseva E 2018 Housing sector development insocio-economic space of agglomeration *MATEC Web Conf.* **143** 04001
- [8] Glover R L, Carpenter A and Duckworth R 2017 Developing inclusive communities: challenges and opportunities for mixed-income housing *FRB Atlanta Community and Economic Development Discussion Paper (01-17)*
- [9] Wulangsari A 2014 Typology of settlement segregation based on settlement factors and patterns Solo Baru, Sukoharjo (Tipologi segregasi permukiman berdasarkan faktor dan pola permukiman di Solo Baru, Sukoharjo) *J. Pemb. Wilkot.* **10**(4) 387-99
- [10] Fitra H and Pradoto W 2014 The influence of social behavior to the emergence residential segregation in Sleman Regency D.I Yogyakarta *J. Pemb. Wilkot.* **10**(3) 235-47
- [11] Timberlake J M and Ignatov M D 2014 Residential Segregation *Sociology* DOI:10.1093/obo/9-78019-97563840116
- [12] Gabriel M, Jacobs K, Arthurson K, Burke T and Yates J 2005 Conceptualising and measuring the housing affordability problem *National Research Venture 3: Housing affordability for lower income Australians Research Paper No. 1*
- [13] Downs A 2004 *Growth Management and Affordable Housing: Do They Conflict?* (Washington DC: Brookings Institution Press)
- [14] Joint Decree of Minister of the Interior, Minister of Public Works, and Minister of Public Housing No. 648-381 of 1992, 739/KPTS /1992, and 09/KPTS/1992 about Guidelines for the Development of Housing and Settlements with a Balanced Housing Environment
- [15] Cole I and Goodchild B 2000 Social mix and the 'balanced community' in British housing policy – a tale of two epochs *GeoJournal* **51** 351-61
- [16] Brouant J P 2006 Social cohesion and land use law: is there a place for legal regulation in France? *Land Use Law, Housing and Social and Territorial Cohesion* 59-65
- [17] Fainstein S S 2005 Cities and diversity: should we want it? Can we plan for it? *Urb. Affairs Review* **41**(1) 3-19
- [18] Galster G 2013 *Neighborhood social mix: Theory, Evidence, and implications for policy and planning*. Policy, planning and people: Promoting justice in urban development (United States: University of Pennsylvania Press) pp 307-36
- [19] Morris A, Jamieson M and Patulny R 2012 Is social mixing of tenures a solution for public housing estates *IEEE* **1**(1) 1-20
- [20] Arthurson K 2002 Creating inclusive communities through balancing social mix: a critical relationship or tenuous link? *Urb. Plcy. & Rsrch.* **20**(3) 245-61
- [21] Arthurson K 2012 *Social mix and the city: Challenging the mixed communities consensus in housing and urban planning policies* (Collingwood: CSIRO publishing)
- [22] Minister of Public Housing of the Republic of Indonesia Regulation Number 10 of 2012 regarding Organization of Housing and Settlement Area with Balanced Residence

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