Consumer Preference for Mid-Cost Housing Based on Their Social Stratification in Special Region of Yogyakarta

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ABSTRACT: In Special Region of Yogyakarta, housing backlog is caused by supply and demand gap for mid-cost housing, limited capacity of developers, and low housing affordability for low-income people. This research aims to analyze the influence of social stratification on consumer preference for mid-cost housing on housing developments and on non-clustered housing areas as well as the desired attributes of mid-cost housing. This research employed descriptive and inductive statistics with chi-square test. Purposive sampling was employed with a sample size of 220 respondents were collected through interviews, questionnaires, observations, and literature review. The result show social stratification influences consumer preference for mid-cost housing on both areas. The desired attributes included location, physical characteristics, legal documents, neighborhood, and amenities. It is important for the local government to implement relevant policies and mortgage financing policies as well as provide supporting infrastructure and facilities for its development to ensure residential areas contribute to regional development.

Keywords: social stratification, housing attributes, consumer preference.

ABSTRAK*: Di Daerah Istimewa Yogyakarta, backlog perumahan disebabkan oleh kesenjangan pasokan dan permintaan perumahan kelas menengah, terbatasnya kapasitas pengembang, dan rendahnya keterjangkauan perumahan bagi masyarakat berpendapatan rendah. Penelitian ini bertujuan untuk menganalisis pengaruh stratifikasi sosial terhadap preferensi konsumen terhadap perumahan murah pada kawasan perumahan dan pada kawasan perumahan non-cluster serta atribut perumahan biaya menengah yang diinginkan. Penelitian ini menggunakan statistik deskriptif dan induktif dengan uji chi-square. Pengambilan sampel dilakukan secara purposive dengan jumlah sampel sebanyak 220 responden yang dikumpulkan melalui wawancara, kuesioner, observasi, dan tinjauan pustaka. Hasil penelitian menunjukkan bahwa stratifikasi sosial mempengaruhi preferensi konsumen terhadap perumahan kelas menengah di kedua wilayah tersebut. Atribut yang diinginkan meliputi lokasi, ciri fisik, dokumen hukum, lingkungan sekitar, dan fasilitas. Penting bagi pemerintah daerah untuk menerapkan kebijakan dan kebijakan pembiayaan hipotek yang relevan serta menyediakan infrastruktur dan fasilitas pendukung untuk pengembangannya untuk memastikan area pemukiman dapat berkontribusi pada Pembangunan daerah.*

Kata Kunci: *stratifikasi sosial, atribut rumah, preferensi konsumen.*

INTRODUCTION

Housing is the basic necessity of every human being. It provides a place where they spend time doing various social, communal, economic, professional, and cultural activities, as well as a place where they raise their family (Mulroy & Ewalt, 1996). According to Law No. 1 of 2011 on Housing and Residential Area, house is a building which provides a suitable place for people to live in and raise their family. It is also considered the reflection of dignity of its dwellers, and an asset for its owner. However, there are families who cannot afford to buy their own house (Detik, 2023). They instead will either rent, board at somebody's house, or reside in a house provided by their employer. To deal with this, the Ministry of Public Works and Housing constantly innovates in housing construction, aiming to reduce the existing housing backlog in Indonesia. The current housing backlog was recorded at 11 million while the occupancy backlog stood at 7.6 million. 33% out of 93% of people facing this problem fell into the low-income category (*Masyarakat Berpenghasilan Rendah*/MBR) and the remaining 60% consisted of those living in poverty. They were mostly people with low, non-fixed income (Directorate General of Housing, 2022, p. 1). The ongoing housing backlog is caused by, among other things, supply and demand gap for, in this context, mid-cost housing, limited capacity of developers, and low housing affordability for people in the lower income brackets.

As one would expect, with population growth every year and developments in every aspect of human lives comes the increased need for space to conduct activities. On the other hand, the supply of land is finite and cannot be increased as quickly as its demand (as it is inelastic). The Special Region of Yogyakarta (Daerah Istimewa Yogyakarta or DIY) covers an area of 3,185.80 km². Gunungkidul District spans 1,485.36 km² or 46.62% of the total area of DIY, making it the largest district in the province. In 2021, DIY had a population of 3,712,896. The largest was in Sleman District with 1,136,474 people (30.61%) even though the district only covers an area of 574.82 km² (18.04% of the total area of DIY). From 2010-2020, DIY saw its population grow by 0.58% in average annually, and it increased to 1.61% in 2020-2021. gentrification occurred in DIY due to uneven economic growth. in general, gentrification as a development process has a positive impact on the government due to an increasing economy, but on the other hand, small communities suffer negative impacts. The gentrification invites potential investors dislodges local people to access land, mainly due to the lower economic capacity of local people relatively compared to immigrants (Prayoga & Esariti, 2011). This phenomenon also reflected by millennials in an area in DIY that do not have access to land due to lower wage compared to the price of land (Amrozi et. al., 2021).

The residential property market in DIY is mostly determined by its location. As Sleman District has become crowded at this point, construction of housing developments has moved toward Bantul District and some even toward Kulon Progo and Gunungkidul Districts. In 2017, DIY population was concentrated in Sleman and Bantul Districts, which are part of urban areas in Yogyakarta. DIY had a population density of 1,181 people/km², with Sleman being the densest (13,007 people/km²) and Gunungkidul the least dense (491 people/km²). According to surveys, there are differences between the primary and secondary mid-cost housing market. The residential property market has experienced a decline in sales by up to 25%-30% during the COVID-19 pandemic compared to its pre-pandemic sales. Property values in the primary market, however, have increased by 10%-12% yearly, even though in the secondary market they have decreased by 20%-30% from the market value under normal conditions. Compared to 20-30 years ago, consumer preferences in housing attributes have undergone a shift. In general, the main consideration for buying a house used to be the size of the land and the building. People preferred a large lot of land and building at a relatively low price. Non-clustered housing areas (on which the houses are not constructed by a single developer, as opposed to housing developments) would meet these preferences as the land is relatively large and people may build houses and community facilities as they wish. According to Tsou and Sun (2021, p. 1), real estate has two main characteristics, which represents a consumption good and an investment good. Housing demands are influenced by a variety of factors, including household members, the stage at which the current house is in its life cycle, income, location preferences, etc. The motives of full-nest families for buying a house include their view of real estate as an investment good, meaning the buyers have a stable family structure and a degree of financial stability. Apart from that, the housing backlog problem is still a difficult issue to address. The cause of the backlog is the low absorption of existing houses.

This is also due to prices that are too expensive or difficult access to financing (Listiyarini, 2022). One of the causes of difficulty in building housing (supply side) for the community is the high price of land (Herawati, Suparjo, & Lestarii, 2023). The higher the price of land the higher the price of housing. The high price of housing cannot be afforded by local people. DIY is a clear example that the housing backlog occurs due to an increase in house prices without being matched by an increase in local people's income. High numbers of housing backlogs as well as inadequate housing for low-income are one of the Indonesian government's major concerns, especially in urban areas where the price of house is high (Hartono et. al., 2021). one of the efforts that can be made to reduce the housing backlog is that the Government must have visionary planning in the housing sector, at least in the next 10 years there will be no people who do not have decent housing, by including programs related to financing, easy access to financing and housing information for low-income people or those who do not own a home. This research attempts to identify the preferences of home consumers categorized based on their social class. This is related to the issue of difficult access to housing for people with middle to lower incomes.

At the present time, consumers tend to buy a house based on its attributes that they consider ideal, such as its location, physical characteristics, legal documents, neighborhood, amenities, proximity to public services, and so on. Fundamentally, it concerns with creating a safe, comfortable, and healthy housing environment with close proximity to public facilities and easy access. These attributes can only be obtained in housing developments. When spending their money, a consumer usually tries to buy various goods and services within their budget that will provide maximum satisfaction for them. Kotler and Keller (2012, p. 173) argued that consumer behavior is influenced by cultural, social, personal, and psychological factors. Ernst Engel suggested that if the percentage of income spent on food is more than 80% of the total expenditure, the household welfare level is extremely low. In 2020, DIY saw a better population welfare level as the percentage of non-food purchases was 58.97% of the total expenditure (Statistics Indonesia of DIY, 2021). Research conducted by Tjiputra and Sutrisno (2022, p. 75) during the pandemic showed housing types and designs, security, proximity to shopping centers, and maximum amount of loans had become the main considerations for house-hunting in full nest 1 families (young married couples with children) in response to the pandemic. Rahardi et al (2021, p. 43) opined that millennial housing preferences had been the same before and during the crisis, but there were several important considerations related to their preferences in housing investment during the crisis, such as price, mortgage term, and cash to investment ratio.

The problem is, owning residential property with ideal attributes, such as location, physical characteristics, neighborhood, legal documents, amenities, proximity to public services, etc., in a housing development requires consumers to have the ability and willingness to pay for such attributes. However, the cost is relatively high while the budget is often restricted. This research aims to analyze the influence of social stratification on consumer preference for mid-cost housing on housing developments and on non-clustered housing areas as well as the desired attributes of mid-cost housing. To overcome the housing backlog, it is necessary to understand consumer preferences, especially for mid-cost housing. categorization of social strata helps in identifying locations that are preferred by middle and lower class This research was conducted in hopes that policy makers in housing and residential area sector may create safe, healthy, and comfortable neighborhoods both in urban and rural areas; local government as a stakeholder may provide the public with supporting infrastructure and facilities in residential areas, such as road and transportation, clean water, and public services; the general public may be encouraged to manage their budget to own mid-cost housing based on the desired physical characteristics thereof.

Peter and Olson (2013) defined consumer behavior as "the dynamic interaction of affect and cognition, behavior and environmental events by which human beings conduct the exchange aspect of their lives" (p. 3). According to Kotler and Keller (2012, p. 173), there are several factors that may influence purchasing decisions: 1. cultural factors, i.e. culture, sub-culture, and social class; 2. social factors, i.e. reference groups, family, roles and status; 3. personal factors, i.e. age, occupation, economic situation, personality, and lifestyle; 4. psychological factors, i.e. motivation, perception,

learning, and memory. There are elements consumers pay attention to and consider in order to make purchasing decisions, which are product selection, brand selection, dealer selection, purchase time, purchase amount, and payment method (Kotler and Keller, 2012, p. 192). The consumer decision making process is critical in purchasing behavior. It is important to identify segmentation of consumers as well as the benefits which the consumer seeks (Patwardhan, Flora, and Gupta, 2010: 57). According to Gherasim, 2013), social classes can be identified by several characteristics. The same social class individuals have similar behaviors; therefore it can be derived into similarity of preference.

Real estate analysis requires land analysis. Land provides the foundation for human socioeconomic activities, and it is a tangible physical commodity and a source of wealth. Experts in law, economics, sociology, and geography shared a common understanding of land attributes (The Appraisal Institute, 2020, p. 9): each parcel of land is unique in its location and composition; land is physically immovable; land is durable; land supply is finite; and land is useful to people. Social class is also determined by various variables such as occupation, income, wealth, education, and etc). Members of similar social class share common values and ways of thinking, speaking and behaving (Abraham, 2011). Therefore, consumers interact mostly with people of their own social class so that each class has about the same values and patterns of behaviors.

Estimation of housing demand is determined by population, employment, and households in an area. Property productivity and market share analyses both identify physical characteristic, location, legal document, and design/amenity attributes of a subject property. They concern with questions such as how will the productivity of specific attributes of property attract real estate users? how many people can afford to pay for such specific attributes? how many are willing to pay for such attributes? (Fanning, 2014, p. 631-632). housing demand is also influenced by a multitude of factors, including economic, demographic, and social determinants. Economic factors such as housing booms and busts, labor market opportunities, and college attendance have been shown to impact housing demand (Charles et al., 2018). Additionally, market tightness, which reflects the ratio of vacant homes offered for sale/rent to those seeking to buy/rent, is a mechanism through which demand or supply changes affect housing prices (Horn & Merante, 2017).

Hypothesis development. Consumer preference is related to how they make choices. They try to attain goods they want to buy at various price levels to obtain maximum satisfaction within the budget constraint or certain budget. Chaoyan & Chaipinchana (2022) study the purchase decision og middle class consumers in Nanning housing market. The study found that design, land utilization, air circulation, water supply, and electricity, and building material become the consideration. In Saudi Arabia, Opoku & Muhmin (2010) also found that majority of respondents prefer the small house to duplex or apartment, and despite their limited incomes the majority prefer buying over renting. Low-income consumers rank the most important housing attributes including financial considerations, private living space, and aesthetic aspect. In term general goods, Triwijayati, Wijayanti, Pradipta (2019) using chi-square technique found that social class is linked with the purchase of several items, while income level correlates with all items of products and services that are used. Consumer choice depends not only on their restricted budget, but also on their preference for such goods (Mankiw, Quah, and Wilson, 2014, p. 463). According to the theory of consumer behavior and factors that influence purchasing decisions, consumers in general tend to buy a house based on its attributes, including physical characteristics, location, legal documents, and designs/amenities. High-income consumers tend to buy a house with different attributes from those in the lower income brackets. They have greater ability and willingness to pay for specific attributes (for example, good location and neighborhood) than low-income consumers. In developing the hypothesis regarding housing development and non-clustered housing areas, there is no previous research or literature that explains it explicitly. This is related to the conditions and culture of residential housing development which are quite different in Indonesia and other countries. Hypothesis 1: Consumer preference for mid-cost housing on housing developments based on its attributes is not influenced by (independent of) their social stratification. Hypothesis 2: Consumer preference for mid-cost housing on non-clustered housing areas based on its attributes is not influenced by (independent of) social stratification.

The above hypotheses were tested using chi-square test of independence to determine whether social stratification influences consumer preference when buying a house based on its attributes on

housing developments and on non-clustered housing areas. The consumers' decisions on choosing and buying a house on a housing development or on a non-clustered housing area may be dependent on or independent of their social stratification.

METHODS

The operational definitions used to measure research variables according to Law No. 1 of 2011 on Housing and Residential Area are as follows: 1. house: a building which provide a suitable place for people to live in and raise their family. It is also considered the reflection of dignity of its dwellers, and an asset for its owner; 2. housing development: a group of houses in a residential area, both in urban and rural areas, with infrastructure, facilities, and public services provided to meet requirements for habitable housing conditions; 3. residential area: part of the environment outside protected areas, both in urban and rural areas, in which people live and conduct activities that support their livelihood; 4. infrastructure is the basic, physical services in a neighborhood necessary for meeting certain standards to create a decent, healthy, safe, and comfortable housing environment; 5. facility: any service or equipment in a neighborhood provided to support social, cultural, and economic activities and the development thereof; 6. public service: a supporting service appropriate for neighborhoods; 7. property attribute: an inherent characteristic of a property, such as location, physical characteristics, legal documents/amenities, neighborhood, etc.; 8. mid-cost housing: a 60m²-270m² house with facilities such as AC, electricity, internet network, clean water etc. The quality is above standard, but it uses local building materials; 9. consumer social stratification: the grouping of consumers based on their average monthly income (in IDR million); 10. low-income consumers are those with an average monthly income of less than IDR5,000,000.00 (stratum III); 11. middle-income consumers are those whose average monthly income is between IDR5,000,000.00-IDR19,999,000.00 (stratum II); 12. high-income consumers are those with an average monthly income of IDR20,000,000.00 or higher (stratum I).

Purposive sampling was used as the primary data collection technique with a sample size of 220 respondents. purposive sampling was used because the design in this study categorizes respondents based on social strata or social class. The data were collected through interviews, questionnaires, observations, and literature review (Sugiyono, 2013, p. 130, 135, 138). This study used descriptive and inductive statistics with chi-square test for data analysis and hypothesis testing. Descriptive analysis of modes was used to determine the attributes of mid-cost housing preferred by the consumers. The variables were tested using test of independence to determine whether the consumers' social stratification influences their housing preference based on its attributes on housing developments and non-clustered housing areas. Two-way classification was employed to classify the individuals in the sample, displayed in a contingency table consisting of two rows (r) and three columns (c) (Subagyo and Djarwanto, 2010, p. 212-214). The hypothesis testing was conducted by comparing the calculated χ² and the table χ². H0 is accepted if χ² ☐ χ² α; (r-1)(c-1) while H0 is rejected if χ² > χ² α; (r-1)(c-1). The χ² calculation is as follows:

$$\chi^2 = \sum_{i=j}^{r} \sum_{j=i}^{k} \frac{\left(n_{ij}-e_{ij}\right)^2}{e_{ij}} \dots\dots\dots\dots (1) \qquad e_{ij} = \frac{(n_i.)(n.j)}{n} \dots\dots\dots\dots (2)$$

nij = actual frequencies
eij = expected frequencies

RESULTS AND DISCUSSIONS
Overview of mid-cost housing consumers in DIY
The mid-cost housing consumers were mostly middle-income people (stratum II, average income per month is between IDR5 million–IDR19.99 million), standing at 52.7%. From the analysis of the modes, most of the consumers worked as civil servants (36%) and private employees (29%), while the rest worked in various businesses. 58% lived in households of 3-4 people, and they mostly used motorbikes (61%), cars (28%), and other modes of transportation (11%) for doing activities. Their motivation for home buying varied, mostly for their own dwelling (58%), long-term investment by leasing (33%), and

the rest were for other purposes (9%). The price range for mid-cost housing varied greatly, starting from IDR500 million to IDR1-2 billion. 73% of the consumers preferred lower mid-cost housing with a price range of less than IDR500 million (exclusive of tax, etc.), 22% preferred houses valued at IDR500 million-IDR1 billion, and only 5% of them preferred IDR1-2 billion houses. Realistically however, homeownership requires a large amount of money as a house is a highly valuable asset. Accordingly, not everyone can afford to buy a house by cash. In terms of the payment methods, 46% of the consumers bought a house with a mortgage (*Kredit Pemilikan Rumah* or KPR). 32% of them paid by installments and 22% paid by hard cash.

The majority of the consumers (68%) preferred to buy a plot of land and build their own house, considering they could choose a good or suitable location with an affordable land price and build a relatively large sized house. Another consideration was with the same budget they could own a relatively large plot of land and a large house in which they could live together with their children and grandchildren. 22% of them preferred to buy a new house on a housing development or a non-clustered housing area, while the remaining 10% preferred buying a second-hand/pre-owned house. Buying a house as a fixed asset, as it turns out, cannot be done without careful consideration for most people, unlike buying other goods. They need time to think this through so that they can get their ideal house. Based on the sample, only 9% bought a house in less than 1 year (in 2022). 23% of them said they did the purchase in 1-2 years. Most of the consumers (with mode of 37%) needed approximately 3 years before buying a house, while the others (31%) needed more than three years (see Appendix 3).

The influence of social stratification on consumer preference when buying a house

For hypothesis testing, this research used chi-square test of independence to see whether social stratification influences consumer preference when buying a house based on its attributes on housing developments and non-clustered housing areas. With significance level α = 0.05; df (2-1)(3-1); table χ^2 = 5.991, while the calculated χ^2 is shown in Table 1 as follows:

Table 1. The Relationship between Social Stratification and Consumer Preference When Buying a House on Housing Developments and Non-Clustered Housing Areas

	High Income	Middle Income	Low Income	Number of Consumers
Housing Developments	Actl: 10 Exp: 4.96	Actl: 45 Exp: 41.13	Actl: 23 Exp: 31.91	78 (35%)
Non-Clustered Housing Area	Actl: 4 Exp: 9.04	Actl: 71 Exp: 74.87	Actl: 67 Exp: 58.09	142 (65%)
Number of Consumers	14 (6.4%)	116 (52.7%)	90 (40.9%)	220 (100%)

Source: Processed primary data (Appendix 1)

$$e_{ij} = \frac{(n_i.)(n.j)}{n}$$

$$e_{11} = \frac{(78)(14)}{220} = 4.96; \quad e_{12} = \frac{(78)(116)}{220} = 41.13; \quad e_{13} = \frac{(78)(90)}{220} = 31.91;$$

$$e_{21} = \frac{(142)(14)}{220} = 9.04; \quad e_{22} = \frac{(142)(116)}{220} = 74.87; \quad e_{23} = \frac{(142)(90)}{220} = 58.09;$$

$$\chi^2 = \frac{(10-4.96)^2}{4.96} + \frac{(45-41.13)^2}{41.13} + \frac{(23-31.91)^2}{31.91} + \frac{(4-9.04)^2}{9.04} + \frac{(71-74.87)^2}{74.87} + \frac{(67-58.09)^2}{58.09} = 12.35$$

Since the calculated χ^2 was 12.35 and greater than the table χ^2 {α = 0.05; (2-1)(3-1)} which was 5.991, the hypothesis was rejected, meaning that the consumer preference when buying a house based on its attributes on housing developments and non-clustered housing areas is significantly affected by (dependent on) social stratification. The result consistent with the done by Moghimi & Jusan (2015) where the priority of housing attribute preferences is influenced by customer perception, indicating that different social classes may prioritize housing attributes differently. Krivo & Kaufman (2004) also found the ability to obtain more financially and socially advantageous housing is strongly

influenced by the social and historical situations of racial and ethnic groups. Consumer housing preferences are influenced by social class. Middle-class families, for example, exhibit a preference for urban residential locations, indicating a link between social class and housing choices Karsten (2006). Additionally, housing exterior and facade play a role in describing the social class, aesthetic preferences, and personality traits of consumers (Mulyano et al., 2020). Furthermore, According to Table 1., out of 220 consumers from all stratification (high, middle, and low income), 65% preferred to live on non-clustered housing areas, while the 35% preferred housing developments. There were several considerations for living on housing developments, including better, safer, and more comfortable neighborhoods; similar housing designs; more reserved interaction between neighbors; socioeconomically more homogeneous; and less social activities in the neighborhood. Living on non-clustered housing areas was preferable for some of them as the price was relatively cheaper; the plot and the house were larger in size; neighbors were more socially connected; operating costs were lower; and housing designs were more diverse (see Appendix 2). Further analysis revealed that the high-income consumers (with average monthly income of IDR20 million or higher) who preferred mid-cost housing were only 6.4%. This proves that the market share leans toward high-cost housing. Mid-cost housing was mostly preferred by the middle-income consumers (52.7%), while the low-income ones amounted to 40.9%.

The desired attributes of mid-cost housing

Physical attributes of a house include plot size, building size, design, number of stories, building facility, garden, etc. These attributes will differ depending on the type of the house. The main attributes of high-cost housing are without a doubt different from those of mid- and low-cost housing. High-cost housing usually has a plot size of more than 500m² and a building size of over 300m², with two or more stories, equipped with luxurious gardens, a security guard post, expensive facilities, and other complementary facilities (swimming pool, lounge, paved neighborhood street, garage for cars, etc.). The preferred attributes of mid-cost housing varied widely. In fact, the diversity of these attributes can be seen from the varied types of mid-cost housing itself, consisting of lower to upper mid-cost housing. Table 2 below shows the results of the analysis of the modes conducted to see the consumers' most preferred housing attributes.

Table 2. Modes of the Consumers Preferred Mid-Cost Housing Attributes in DIY (%)

Attribute	Detail	Mode (%)
1. Location	Suburban residential areas	43
	Rural residential areas	41
	Urban residential areas	16
2. Physical Characteristic	Plot size of 100-149m²	31
	Building size of 105-149m²	33
	One-story house	58
	Facilities: electricity, landline phone, and access to the internet	29
	Design: modern minimalist architecture	70
3. Legal Document	Land Ownership Certificate (*Sertifikat Hak Milik* or SHM)	93
4. Neighborhood	Non-clustered housing areas: Larger plot and building	27
	Housing developments: Better, safer, and more comfortable neighborhoods	51
5. Amenity	Facilities in the neighborhood (making it safe, comfortable, healthy, and socially connected)	36
	Large public green spaces	24
	Wide neighborhood streets	22

Attribute	Detail	Mode (%)
	Great impression of the neighborhood	18
	Proximity to public services (5-14 km)	94

Source: Appendix 2

According to similar research on consumer preferences in residential property, in general the preferred attributes included location, physical characteristics, legal documents, neighborhoods, and amenities. Prior research suggest that consumer preference toward residential property include strategic location (proximity to various facilities), physical characteristics, accessibility, structural attributes, financial factor, ownership, infrastructure, payment methods, credibility of developers, neigborhood and housing design. (Krisnaputri and Salim, 2021; Kurniawan et al., 2020; Pudjiwidyastuti, Setijanti, & Ratna, 2016; Sukereman et al., 2021; Putri et al., 2016; Sugiarto, 2019).

CONCLUSIONS

Based on the analysis and discussion, this study yielded the following conclusions: (1) the consumer preference when buying a house based on its attributes on housing developments and non-clustered housing areas is greatly influenced by (dependent on) their social stratification/class; (2) out of 220 consumers from all stratification (high, middle, and low income), majority respondents preferred to live on non-clustered housing areas, while the remaining chose to live on housing developments; (3) the high-income consumers who preferred mid-cost housing were only 6.4%. This proves that the market share leans toward high-cost housing. Mid-cost housing was mostly preferred by the middle-income consumers (52.7%), while the low-income ones amounted to 40.9%; (4) there were five housing attributes preferred by the consumers: a) for location, the consumers from all stratification preferred to live in suburban residential areas; b) the modes of the physical attributes preferred by the consumers were modern minimalist architecture and one-story house; c) in terms of legal documents, the consumers preferred a house with a Land Ownership Certificate; d) for neighborhood, the mode of better, safer, and more comfortable neighborhoods; e) in terms of preferred amenities, respondents chose proximity to public services with a distance of 5-14 km. Mid-cost housing has a wide range of types, and the physical and non-physical housing attributes also vary considerably. Mid-cost housing is actually comprised of upper to lower mid-cost housing, but this study did not specify the type thereof further.

The policy implications in this study

(1) arrangement of safe, comfortable, healthy and prosperous residential areas, according to the preferred attributes, both in housing developments and non-clustered housing areas; (2) in order that residential areas may contribute to regional development, it is of the utmost importance for the local government to implement land policies, provide supporting infrastructure and facilities for residential area development, and adopt KPR financing policies

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