



Determinants of Purchase Intention for Subsidized Housing in Flood-Prone Areas: Evidence from Bekasi Regency

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ABSTRACT

The subsidized housing sector in Indonesia, implemented through the Housing Financing Liquidity Facility (FLPP) program, plays a crucial role in improving access to adequate housing for low-income households by offering affordable prices and long-term financing schemes. However, the realization of subsidized housing in Bekasi Regency has declined sharply, from 20,004 units in 2022 to 13,908 units in 2024, representing a decrease of 30.5 percent. This trend indicates a weakening of purchase intention, suggesting that affordability alone is insufficient to sustain demand.

This study aims to examine the effects of subsidized housing price, perceived flood risk, infrastructure quality, and building quality on housing purchase intention within the FLPP program in Bekasi Regency. A quantitative explanatory approach was applied using primary data collected through structured questionnaires from 100 respondents consisting of residents and prospective buyers of FLPP housing. Multiple linear regression analysis was employed to assess both partial and simultaneous effects of the independent variables.

The results indicate that subsidized housing price, infrastructure quality, and building quality have positive and significant effects on housing purchase intention. Conversely, perceived flood risk has a negative and significant effect, indicating that higher flood risk perceptions reduce buyers' willingness to purchase subsidized housing. These findings suggest that purchase intention is influenced by a comprehensive evaluation of affordability, environmental safety, and physical housing conditions. Therefore, improving flood risk mitigation and infrastructure quality, alongside maintaining affordable prices, is essential for enhancing the sustainability and effectiveness of subsidized housing programs.

INTRODUCTION

Urban development in Indonesia, particularly in Bekasi Regency, has experienced rapid growth over the past few years. As a satellite area of Jakarta, Bekasi has become a primary destination for residents seeking more affordable housing options. Population growth in Bekasi Regency continues to increase, as reported by the Central Bureau of Statistics, resulting in rising demand for housing. To address this challenge, the government introduced the Housing Financing Liquidity Facility (FLPP) program as a subsidized mortgage scheme aimed at improving access to homeownership for low-income households. Despite its strategic role, the implementation of the FLPP program in Bekasi Regency has shown a significant decline. Housing realizations fell from 20,004 units in 2022 to 17,532 units in 2023, a decrease of 12.3%, and further declined to 13,908 units in 2024, representing a 20.7% reduction. This cumulative decline of 30.5% indicates the presence of structural challenges in subsidized housing implementation that extend beyond pricing issues alone and are closely related to residential environmental (Lastiur and Septanaya 2024; Roohani Qadikolaei et al. 2024).

Housing purchase decisions are shaped by multiple interrelated factors, including housing price, building quality, and environmental conditions (Farooque, Awan, and Shafiq 2024; Granath Hansson and Lundgren 2019). In particular, perceptions of disaster risk—especially flood risk—play a crucial role in influencing housing purchase intention, as housing represents a long-term investment involving financial and safety considerations (Farida 2023). Empirical evidence shows that environmental risk perceptions in flood-prone areas such as Cibitung, Cikarang, and Muara Gembong in Bekasi Regency significantly reduce buyers' interest, even when subsidized housing is offered at relatively low prices (Admasu, Lupala, and Magina 2025; Chengu, Assen, and Gebeyehu 2025; Ebekozi and Muhammad 2025; Jonek-kowalska 2022; Kabir, Jamal, and Kairy 2024; Wilhelmsson and Warsame 2024). These findings are reinforced by evidence that only 49% of FLPP housing residents in Bekasi Regency are satisfied with drainage systems, while 33% report having experienced flooding in their residential areas (Lastiur and Septanaya 2024), highlighting flood risk as a critical deterrent to housing demand.





At the same time, housing price remains the primary attraction of subsidized housing, even when developments are located far from urban centers (Prabantoro and Syahririyadi 2024). However, this affordability advantage is often offset by indirect financial burdens. Low satisfaction with transportation costs is reported by 61% of residents, while 63% of households indicate the need for home renovations due to inadequate building quality (Oza et al. 2024). These conditions create hidden costs that reduce the perceived value of subsidized housing and weaken its attractiveness, suggesting that affordability alone does not guarantee sustainable housing demand.

The continued decline in FLPP housing realization in Bekasi Regency underscores the need for a comprehensive evaluation of barriers to subsidized housing programs. Flood risk in environmentally vulnerable areas not only generates economic losses but also erodes public trust in the safety and quality of subsidized housing. This is reflected in low satisfaction levels with green open spaces (50%) and access to public transportation (48%) (Lastiur and Septanaya 2024). If such environmental and infrastructural challenges remain unaddressed, the long-term sustainability of government housing programs and efforts to reduce housing shortages among low-income communities may be compromised.

Previous studies have examined consumer preferences related to housing price and location (Hartono et al. 2022). However, limited research has explicitly linked the decline in FLPP housing realization to the interaction between subsidized pricing, perceived environmental risk, and the quality of basic infrastructure and building conditions. Most existing studies analyze these factors separately, thereby overlooking how environmental risk and housing quality may function as structural constraints that weaken the effectiveness of price-based housing subsidies.

Therefore, this study aims to analyze the effects of subsidized housing price, flood risk at housing locations, infrastructure quality, and building quality on housing purchase intention within the FLPP program in Bekasi Regency. By integrating economic, environmental, and physical housing attributes into a single analytical framework, this study provides empirical evidence explaining why price affordability alone is insufficient to sustain demand for subsidized housing in flood-prone suburban areas. The findings are expected to support more effective pricing policies, flood-resilient infrastructure development, and risk mitigation strategies, thereby contributing to the long-term sustainability of subsidized housing programs.

Based on the above background, this study formulates the following research questions:

1. How does the subsidized housing price affect housing purchase intention within the FLPP program in Bekasi Regency?
2. How does flood risk at the housing location affect housing purchase intention within the FLPP program in Bekasi Regency?
3. How does infrastructure quality affect housing purchase intention within the FLPP program in Bekasi Regency?
4. How does building quality affect housing purchase intention within the FLPP program in Bekasi Regency?
5. How do subsidized housing prices, flood risk at the housing location, and infrastructure quality jointly influence housing purchase intention within the FLPP program in Bekasi Regency?

LITERATURE REVIEW

Theoretical Framework: Theory of Planned Behavior and Perceived Risk Theory

This study is grounded in the Theory of Planned Behavior (TPB), which explains purchase intention as a planned behavioral outcome shaped by individuals' attitudes, subjective norms, and perceived behavioral control. In the housing context, TPB has been widely applied to explain homebuyers' intentions, particularly for sustainable and eco-friendly housing, where affordability, housing quality, and perceived feasibility significantly influence purchase intention (Masukujjaman et al. 2023; Mechuchep 2025). To complement TPB, this study incorporates Perceived Risk Theory, which posits that uncertainty and potential negative outcomes reduce consumers' confidence in long-term housing decisions. In flood-prone residential areas, higher perceived environmental risk weakens housing purchase intention, while adequate infrastructure quality and perceived safety can mitigate risk perceptions and reinforce intention (Yang et al. 2022).

Subsidized Housing Price

Housing price is widely recognized as a key determinant of purchase intention, particularly for low-income households that are highly sensitive to affordability constraints. Price perception reflects consumers' evaluation of whether housing prices are affordable, transparent, and commensurate with the benefits received (Chen and Wang 2023). Within subsidized housing programs, affordable pricing plays a central role in reducing financial barriers and encouraging homeownership. Empirical evidence consistently confirms the positive influence of housing price on purchase intention. (Olanrele and Akinsomi 2024) found that affordable housing prices significantly enhance purchase decisions when prices align with household income levels and installment capacity. Similarly, (Thi and Chau 2024) demonstrated that lower housing prices increase consumers' willingness to purchase residential properties, particularly among first-time buyers. However, affordability alone does not fully determine purchase intention. Consumers also assess whether housing prices are proportional to housing quality, available facilities, and location characteristics. (Chen and Wang 2023) emphasized that perceived price value suitability strongly shapes consumer evaluations and



purchasing behavior. Supporting this view, (Prabantoro and Syahririyadi 2024) showed that price suitability significantly influences purchase decisions in subsidized housing contexts in Indonesia. Moreover, price certainty and transparency reduce perceived financial risk and strengthen purchase confidence (Chu et al. 2025). Taken together, the literature suggests that subsidized housing price influences purchase intention not merely through affordability, but also through perceived value alignment and pricing clarity. Importantly, these price-related advantages may be weakened when other non-price factors, such as environmental risk or poor housing quality, undermine perceived benefits.

Perceived Flood Risk

Perceived flood risk refers to individuals' subjective evaluations of the likelihood and potential consequences of flooding in residential areas. This perception is shaped by personal or community experiences with past flooding events, the frequency and duration of inundation, perceived safety during the rainy season, and concerns regarding long-term environmental vulnerability. Given that housing represents a long-term investment closely linked to physical safety and asset value, perceived environmental risk becomes a critical consideration in housing decision-making.

Previous studies consistently indicate that perceived flood risk negatively affects housing demand and purchase intention. (Gruhl et al. 2025) found that flood-prone conditions reduce residential property attractiveness as potential buyers anticipate higher uncertainty, property damage, and future economic losses. Recurrent flooding not only diminishes perceived residential comfort but also undermines confidence in housing security and long-term livability.

In the context of Bekasi Regency, flood risk remains a persistent environmental issue. (Chengu, Assen, and Gebeyehu 2025) documented repeated flooding occurrences in several residential areas, which adversely affect living conditions and increase residents' perceptions of vulnerability. This condition is reinforced, which reported that numerous villages in Bekasi Regency experience flood disasters annually. Furthermore, (Farida 2023) demonstrated that perceived environmental risk significantly influences consumer purchase decisions in subsidized housing developments. When perceived flood risk is high, potential buyers tend to delay or avoid purchasing decisions, even when housing prices are relatively affordable. This indicates that flood risk can offset the positive effect of price affordability, reinforcing its role as a critical inhibiting factor in housing purchase intention.

Infrastructure Quality

Infrastructure quality is a key determinant influencing housing purchase intention, particularly in subsidized housing developments located in suburban areas. Infrastructure quality reflects the adequacy and condition of basic facilities such as road access, drainage systems, transportation connectivity, and supporting public facilities. Well-developed infrastructure enhances residential comfort, accessibility, and perceived convenience, thereby increasing housing attractiveness.

Empirical studies demonstrate that infrastructure quality significantly affects housing preferences and purchase decisions. (Hartono et al. 2022) found that infrastructure availability and accessibility are major determinants of housing preferences among low-income households in Greater Jakarta. Similarly, (Hartwig and Nguyen 2023) showed that improved local infrastructure strengthens household resilience and reduces vulnerability, which indirectly enhances residential desirability. In the context of subsidized housing, infrastructure quality is closely related to perceived value and long-term livability. (Amoah 2023) emphasized that inadequate infrastructure in government-supported housing projects reduces resident satisfaction and overall housing quality. Supporting this view, (Lastiur and Septanaya 2024) found that satisfaction among residents of subsidized housing in Bekasi Regency is strongly influenced by road conditions, drainage systems, and public facilities. Furthermore, (Jonek-kowalska 2022) highlighted that infrastructure development contributes to quality-of-life improvements in suburban residential areas. Collectively, these findings suggest that infrastructure quality not only enhances daily living convenience but also mitigates perceived environmental risks, thereby strengthening purchase intention.

Building Quality

Building quality is an essential factor influencing housing purchase intention, particularly in subsidized housing projects targeting low-income households. Building quality reflects the physical condition, durability, safety, and comfort of residential units, which shape residents' perceptions of long-term habitability and value. Poor construction quality increases maintenance costs and perceived risk, ultimately reducing purchase intention.

Previous studies consistently indicate that building quality has a significant effect on housing decisions. Amoah (2023) emphasized that inadequate construction standards in government-supported housing reduce resident satisfaction and undermine housing program effectiveness. Similarly, developed a housing quality scale and demonstrated that structural integrity, material durability, and safety are key components influencing housing evaluations. In the Indonesian context, (Farida 2023) found that perceived product quality significantly influences consumer purchase decisions in subsidized housing projects. Supporting this view, (Lastiur and Septanaya 2024) reported that residents' satisfaction with subsidized housing in Bekasi Regency is closely associated with building condition and physical quality. Additionally, (Minh, Le, and Hai 2024) highlighted that perceived housing quality enhances consumer trust and strengthens purchase decisions. These findings indicate that building quality serves not only as a functional attribute but



also as a signal of long-term value and security for potential buyers.

Housing Purchase Intention

Housing purchase intention represents an individual's willingness and planned behavior to purchase a residential property based on rational evaluation and perceived benefits. Purchase intention reflects a cognitive and behavioral tendency influenced by perceptions of value, risk, quality, and affordability, making it a strong predictor of actual purchasing behavior. Prior studies highlight the central role of purchase intention in housing decision-making. (Mechuchep 2025) emphasized that consumer perceptions and preferences significantly influence housing purchase intention, particularly for residential products involving long-term financial commitments. (Sam et al. 2024) further demonstrated that purchase intention in real estate is shaped by the interaction of price, environmental conditions, and perceived quality, reinforcing its multidimensional nature. In the context of housing finance, (Kabir, Jamal, and Kairy 2024) found that purchase intention is closely related to perceived affordability and financial readiness, especially under long-term installment schemes. Similarly, (Marsila 2023) reported that perceived risk and quality significantly affect purchase intention in housing credit decisions. Overall, housing purchase intention functions as a critical dependent variable that captures consumers' integrated evaluations of economic, environmental, and physical housing attributes in subsidized housing studies.

Research Hypotheses

Based on the theoretical framework and literature review, this study formulates the following hypotheses:

H1: Subsidized housing price has a positive and significant effect on housing purchase intention.

H2: Perceived flood risk has a negative and significant effect on purchase intention for subsidized housing.

H3: Infrastructure quality has a positive and significant effect on housing purchase intention.

H4: Building quality has a positive and significant effect on housing purchase intention.

H5: Subsidized housing price, flood risk, infrastructure quality, and building quality simultaneously have a significant effect on housing purchase intention.

METHOD

Research Design

This study employs a quantitative explanatory research design to examine the causal relationships between subsidized housing price, perceived flood risk, infrastructure quality, building quality, and housing purchase intention within the Housing Financing Liquidity Facility (FLPP) program in Bekasi Regency. An explanatory quantitative approach is appropriate when the research objective is to test hypotheses and identify cause–effect relationships among variables through statistical analysis.

Hypothesis testing was conducted using multiple linear regression analysis, which allows for the assessment of both partial and simultaneous effects of multiple independent variables on housing purchase intention. This analytical method is widely applied in housing, real estate, and consumer behavior research to evaluate the influence of several predictors on behavioral intention (Hair et al. 2023).

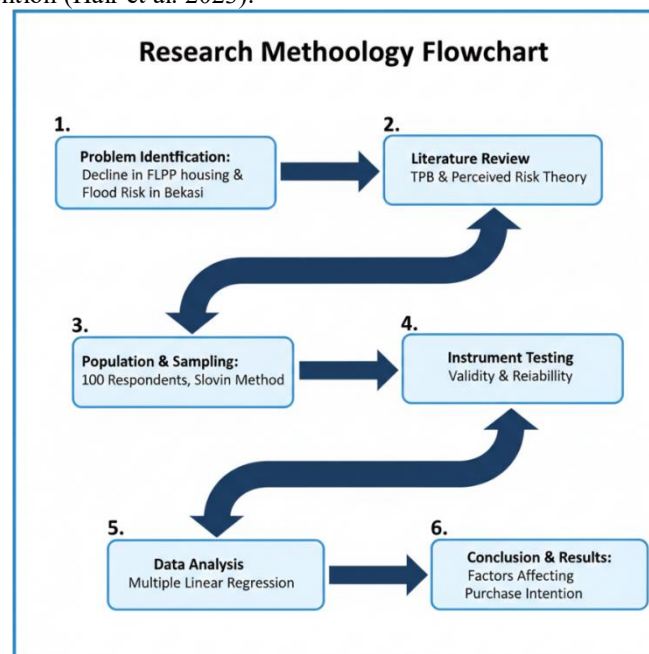


Figure 1. Research Methodology Flowchart



Population and Sample

The research population comprises residents and prospective buyers of subsidized housing under the Housing Financing Liquidity Facility (FLPP) program in Bekasi Regency, with an estimated population of approximately 10,000 housing units. Given the specific characteristics of the target population and the need to obtain responses from individuals who meet predefined criteria relevant to the research objectives, this study applied a purposive sampling technique. Purposive sampling is appropriate in explanatory quantitative research when respondents are selected based on their relevance to the variables under investigation (Creswell and J David 2023; Sekaran and Bougie 2024)

The sampling criteria were as follows:

1. Residents or prospective buyers of FLPP subsidized housing;
2. Households classified as low-income communities; and
3. Individuals residing within the administrative area of Bekasi Regency.

The sample size was determined using the Slovin formula with a margin of error of 5 percent, resulting in a total of 100 respondents. This sample size is considered adequate for multiple linear regression analysis and meets the minimum requirements for statistical power and model estimation in multivariate research (Hair et al., 2023; Sekaran & Bougie, 2024). Nevertheless, the use of purposive sampling and a relatively limited sample size may restrict the generalizability of the findings beyond the study context.

Types and Sources of Data

This study utilized two types of data:

1. Primary data, collected through structured questionnaires distributed to residents and prospective buyers of FLPP subsidized housing in Bekasi Regency.
2. Secondary data, obtained from academic journals, government reports, housing statistics, and official publications related to subsidized housing policies and flood risk conditions.

All questionnaire items were measured using an ordinal Likert scale to capture respondents' perceptions of the research variables.

Operationalization of Variables

The dependent variable in this study is housing purchase intention, measured using indicators reflecting respondents' interest in purchasing subsidized housing, willingness to apply for FLPP mortgage financing, purchase planning, and intention to recommend the housing to others.

The independent variables are operationalized as follows:

1. Subsidized housing price, measured through indicators of price affordability, suitability of installment schemes with household income, affordability of interest rates, accessibility of down payment requirements, and overall price competitiveness of FLPP subsidized housing.
2. Perceived flood risk, defined as respondents' subjective perceptions of the likelihood and potential impact of flooding in the housing area. This variable was measured using indicators including perceived frequency of flooding, adequacy of drainage systems, perceived safety during the rainy season, transparency of flood risk information, and long-term environmental safety. To ensure consistency with the research hypotheses, all measurement items were reverse-coded during data processing so that higher scores indicate lower perceived flood risk. Accordingly, higher values of this variable represent more favorable flood risk perceptions and are expected to be positively associated with housing purchase intention.
3. Infrastructure quality, measured using indicators related to road conditions, drainage infrastructure, accessibility, availability of public facilities, and transportation connectivity.
4. Building quality, assessed based on indicators reflecting physical condition, construction workmanship, material durability, safety, and residential comfort.

All variables were operationalized using indicators adapted from established housing and consumer behavior studies to ensure content validity and construct validity.

Data Collection Techniques

Data were collected using the following techniques:

1. Questionnaire surveys, administered both directly and online to residents and prospective buyers of FLPP subsidized housing in Bekasi Regency.
2. Literature review, conducted to strengthen the theoretical foundation, research framework, and interpretation of findings.

All research procedures were carried out in accordance with principles of validity, reliability, and research ethics.



Data Analysis Techniques

Quantitative data were analyzed using multiple linear regression analysis to examine the partial and simultaneous effects of subsidized housing price, perceived flood risk, infrastructure quality, and building quality on housing purchase intention. The analysis included descriptive statistics, classical assumption tests (normality, multicollinearity, and heteroscedasticity), hypothesis testing using t-tests and F-tests, and evaluation of the coefficient of determination (R^2). Statistical analysis was conducted using appropriate software to ensure accuracy and reliability of the results.

Validity and Reliability of Instruments

Instrument validity was assessed through content validity and construct validity testing. The reliability of the research instrument was evaluated using Cronbach's Alpha, with a minimum acceptable threshold of 0.70, indicating that all measurement items demonstrated satisfactory internal consistency and reliability.

Research Location, Time, and Ethics

The study was conducted in Bekasi Regency, a suburban area characterized by rapid urban development and recurring flood risk, and one of the primary implementation areas of the FLPP subsidized housing program. Data collection was carried out from March to April 2025, followed by data analysis and report preparation from May to June 2025. All research activities adhered to ethical research principles, including informed consent, respondent confidentiality, and the use of data solely for academic purposes.

Research Model

The empirical research model illustrates the direct relationships among the study variables, in which subsidized housing price, perceived flood risk, infrastructure quality, and building quality serve as independent variables influencing housing purchase intention as the dependent variable within the FLPP subsidized housing program in Bekasi Regency.

RESULT

Results and Discussion

Following the distribution of questionnaires to 100 respondents related to FLPP subsidized housing in Bekasi Regency, data on respondent characteristics were obtained as follows:

Table 1. Respondent Characteristics

Category	Detail	Frequency	Percentage (%)
Age (Years)	21–30	28	28.0%
	31–40	42	42.0%
	41–50	20	20.0%
	Above 50	10	10.0%
Total		100	100%
Occupation	Private-sector employee	48	48.0%
	Laborer/Daily worker	22	22.0%
	Self-employed	15	15.0%
	Civil servant	10	10.0%
	Others	5	5.0%
Total		100	100%
Housing Status	Prospective FLPP homebuyers	55	55.0%
	Current FLPP residents	45	45.0%
Total		100	100%

Based On The Results Of The Analysis Of Respondents' Characteristics, It Is Found That The Majority Of Respondents Are In The 31–40 Years Age Group, Accounting For 42.0%, Followed By Respondents Aged 21–30 Years At 28.0%, Those Aged 41–50 Years At 20.0%, And Respondents Aged Over 50 Years At 10.0%. This Age Distribution Indicates That Most Respondents Are In Their Productive Age, Where Individuals Generally Have Stable Economic Conditions And Stronger Readiness In Making Housing Purchase Decisions, Particularly For Subsidized Housing Through The Flpp Program. In Terms Of Occupational Background, Most Respondents Are Employed As Private-Sector Employees, Representing 48.0% Of The Sample. This Is Followed By Laborers Or Daily Workers At 22.0%, Self-Employed Workers At 15.0%, Civil Servants At 10.0%, And Respondents With Other Types Of Occupations At 5.0%. This Occupational Composition Reflects The Characteristics Of Low-Income Households (Mbr), Which Are The Primary Target Group Of The Subsidized Housing Policy, Thereby Aligning Well With The Focus Of This Study On The Flpp Housing Program In Bekasi Regency. Furthermore, Based On Housing Ownership Status, 55.0% Of Respondents Are Prospective Buyers Of Flpp Subsidized Housing, While The Remaining 45.0% Are Current Residents Of Flpp Housing Units. This Condition Indicates That Respondents Consist Not Only Of Individuals Who

Are Considering Purchasing Subsidized Housing But Also Of Those Who Already Have Direct Experience As Occupants. Therefore, The Characteristics Of Respondents In This Study Are Considered Representative And Relevant For Analyzing The Effects Of Subsidized Housing Prices, Perceived Flood Risks, Infrastructure Quality, And Building Quality On The Purchase Intention Of Flpp Subsidized Housing In Bekasi Regency.

Results of Research Instrument Testing

Validity Test Results

The validity test was conducted using the Pearson Product Moment correlation with the criteria that the calculated correlation coefficient (r-count) must be greater than the r-table value (0.197) and the significance value must be less than **0.05**. The test results indicate that all statement items for the variables of subsidized housing price, Perceived Flood Risk, infrastructure quality, building quality, and home purchase intention meet the validity criteria. Therefore, all questionnaire items are declared valid and appropriate for use in this study.

Table 2. Validity Test Results

Variable	Number of Items	r-count Range	r-table	Sig. Value	Validity Status
Subsidized Price (X1)	5	0.512 – 0.781	0.197	< 0.05	Valid
Perceived Flood Risk(X2)	5	0.498 – 0.754	0.197	< 0.05	Valid
Infrastructure Quality (X3)	5	0.536 – 0.802	0.197	< 0.05	Valid
Building Quality (X4)	5	0.521 – 0.789	0.197	< 0.05	Valid
Purchase Intention (Y)	5	0.548 – 0.831	0.197	< 0.05	Valid

Source: Processed SPSS Output, 2025

Reliability Test Results

Reliability testing was conducted using the Cronbach's Alpha method. The results show that all research variables have Cronbach's Alpha values greater than or equal to 0.70, indicating that the research instrument is reliable and consistently measures the intended constructs.

Table 3. Reliability Test Results

Variable	Number of Items	Cronbach's Alpha	Reliability Criteria	Reliability Status
Subsidized Price (X1)	5	0.823	≥ 0.70	Reliable
Perceived Flood Risk(X2)	5	0.801	≥ 0.70	Reliable
Infrastructure Quality (X3)	5	0.847	≥ 0.70	Reliable
Building Quality (X4)	5	0.832	≥ 0.70	Reliable
Purchase Intention (Y)	5	0.865	≥ 0.70	Reliable

Source: Processed SPSS Output, 2025

Results of Descriptive Analysis

This section presents the descriptive analysis results describing respondents' perceptions of the research variables related to FLPP subsidized housing in Bekasi Regency.

Table 4. Respondents' Perceptions of Subsidized Housing Price (X1)

Subsidized Price (X1)

Indicator	Total Score	Ideal Score	Mean
Affordability of house price	360	500	3.60
Suitability of installments with income	350	500	3.50
Interest rate affordability	370	500	3.70
Down payment affordability	340	500	3.40
Overall price competitiveness	355	500	3.55
Total	1,775	2,500	3.55 (71%)

Source: Processed SPSS Data, 2025

Based on Table 4, respondents' perceptions of the subsidized housing price variable (X1) are categorized as moderately high, with a total score of 1,775 out of an ideal score of 2,500 (71%). Most respondents perceive FLPP house prices, installment schemes, and interest rates as relatively affordable and aligned with their income levels. However, the affordability of down payments receives a comparatively lower score, indicating that initial payment requirements still pose challenges for some low-income households. Overall, price remains a key attraction of FLPP housing, although further policy refinement is needed to enhance affordability.



Table 5. Respondents' Perceptions of Perceived Flood Risk (X2)
Perceived Flood Risk(X2)

Indicator	Total Score	Ideal Score	Mean
Frequency of flooding in the area	280	500	2.80
Quality of drainage system	290	500	2.90
Flood risk information transparency	270	500	2.70
Safety perception during rainy season	260	500	2.60
Long-term environmental safety	275	500	2.75
Total	1,375	2,500	2.75 (55%)

Source: Processed SPSS Data, 2025

Table 5 shows that respondents' perceptions of Perceived Flood Risk (X2) are relatively unfavorable, with a total score of 1,375 out of an ideal score of 2,500, equivalent to 55 percent. This moderate–low mean score indicates that respondents perceive flood risk as relatively high in FLPP subsidized housing areas. The lowest mean value is observed for safety perception during the rainy season (2.60), followed by flood risk information transparency (2.70) and long-term environmental safety (2.75). These indicators reflect respondents' concerns regarding personal safety, environmental vulnerability, and uncertainty related to flooding conditions. Although the drainage system indicator records a slightly higher mean score (2.90), this does not offset overall flood-related concerns. Respondents continue to perceive flooding frequency and long-term environmental safety as problematic. These findings confirm that flood risk remains a negative environmental attribute that may reduce residential comfort and undermine buyers' confidence. Consequently, Perceived Flood Risk constitutes an important constraint on housing attractiveness. Higher perceived flood risk has the potential to weaken home purchase intention, even when subsidized housing prices are considered affordable.

Table 6. Respondents' Perceptions of Infrastructure and Building Quality (X3 & X4)
Infrastructure and Building Quality

Indicator	Total Score	Ideal Score	Mean
Road accessibility	330	500	3.30
Availability of public facilities	320	500	3.20
Quality of clean water system	340	500	3.40
Building material durability	335	500	3.35
Construction workmanship quality	325	500	3.25
Total	1,650	2,500	3.30 (66%)

Source: Processed SPSS Data, 2025

The descriptive results indicate that infrastructure and building quality are perceived as moderate, with an average score of 3.30 (66%). While basic infrastructure such as roads and water supply is considered adequate, concerns remain regarding construction quality and long-term durability. These issues may lead to additional maintenance or renovation costs for homeowners, reducing the overall attractiveness of FLPP housing.

Table 7. Respondents' Perceptions of Home Purchase Intention (Y)
Purchase Intention (Y)

Indicator	Total Score	Ideal Score	Mean
Interest in purchasing FLPP housing	370	500	3.70
Willingness to apply for FLPP mortgage	360	500	3.60
Preference for FLPP over non-subsidized housing	355	500	3.55
Recommendation to others	345	500	3.45
Intention to purchase within the next year	350	500	3.50
Total	1,780	2,500	3.56 (71%)

Source: Processed SPSS Data, 2025

The purchase intention variable (Y) records a total score of 1,780 out of 2,500, with an average value of 3.56 (71%), indicating a relatively high intention to purchase FLPP housing. Affordable prices and accessible financing schemes are the primary drivers of interest. However, concerns related to flood risk and infrastructure quality may influence final purchase decisions. Therefore, improving environmental safety and housing quality is essential to sustaining and increasing demand for FLPP subsidized housing in Bekasi Regency.

Results of Classical Assumption Tests

Classical assumption tests were conducted to ensure that the multiple linear regression model satisfies the requirements of the Best Linear Unbiased Estimator (BLUE). The normality test results indicate that the Asymp. Sig. (2-tailed) value is 0.200, which exceeds the significance level of 0.05. This confirms that the residuals are normally





distributed and that the normality assumption is fulfilled (Ghozali, 2020). The multicollinearity test shows that the Variance Inflation Factor (VIF) values for Subsidized Housing Price (X1) and Perceived Flood Risk(X2) are 1.234 and 1.456, respectively, with tolerance values of 0.812 and 0.687. Since all VIF values are below the critical value of 10 and tolerance values exceed 0.10, it can be concluded that there is no multicollinearity problem among the independent variables. Furthermore, the heteroscedasticity test results indicate significance values of 0.215 for X1 and 0.312 for X2, both of which are greater than 0.05. This finding suggests that the regression model does not suffer from heteroscedasticity and that the variance of the residuals is constant across observations. The summary of the classical assumption test results is presented in Table 7. Overall, these results confirm that the regression model meets all classical assumption requirements and is appropriate for further hypothesis testing.

Table 7. Classical Assumption Test Results

Test Type	Indicator	X1	X2
Normality	Asymp. Sig. (2-tailed)	0.200	–
Multicollinearity	VIF	1.234	1.456
	Tolerance	0.812	0.687
Heteroscedasticity	Sig.	0.215	0.312

Source: Processed SPSS Data, 2025

Hypothesis Testing Results

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the effects of subsidized housing price (X1), perceived flood risk (X2), infrastructure quality (X3), and building quality (X4) on housing purchase intention (Y) in FLPP subsidized housing in Bekasi Regency.

Table 8. Multiple Linear Regression Results

	Unstandardized Coefficients (B)	Std. Error
(Constant)	7.845	1.234
Subsidized Housing Price (X1)	0.482	0.095
Perceived Flood Risk(X2)	0.312	0.078
Infrastructure Quality (X3)	0.268	0.082
Building Quality (X4)	0.295	0.087

Dependent Variable: Home Purchase Intention

Source: Processed SPSS Data, 2025

The regression results indicate that subsidized housing price (X1) has a positive and significant effect on housing purchase intention, suggesting that higher perceptions of affordability increase buyers' willingness to purchase subsidized housing. Infrastructure quality (X3) and building quality (X4) also show positive and significant effects, indicating that improvements in basic infrastructure and construction quality strengthen housing purchase intention.

The regression coefficient for perceived flood risk (X2) is positive (B = 0.312). Although the coefficient appears positive, this result confirms that higher perceived flood risk reduces housing purchase intention, as the perceived flood risk variable was reverse-coded during data processing so that higher scores represent lower levels of perceived flood risk. Therefore, lower flood risk perception (i.e., safer environmental conditions) significantly increases buyers' intention to purchase FLPP subsidized housing. Conversely, higher perceived flood risk weakens purchase intention, even when housing prices are relatively affordable.

Overall, these findings indicate that housing purchase intention toward FLPP subsidized housing is determined not only by economic affordability, but also by perceptions of environmental risk and physical housing quality.

Partial Test (t-test)

The partial test was conducted to examine the individual effect of each independent variable on home purchase intention.

Table 9. t-test Results

Variable	t-value	Sig.
Subsidized Housing Price (X1)	4.512	0.000
Perceived Flood Risk(X2)	3.215	0.002
Infrastructure Quality (X3)	2.984	0.004
Building Quality (X4)	3.106	0.003

Source: Processed SPSS Data, 2025

The t-test results indicate that all independent variables have t-values greater than the t-table value (1.656) and significance values below 0.05. This confirms that subsidized housing price, Perceived Flood Risk, infrastructure quality, and building quality each have a statistically significant partial effect on home purchase intention. Specifically,



Perceived Flood Risk significantly influences purchase intention, with higher perceived flood risk reducing buyers' willingness to purchase FLPP subsidized housing.

Simultaneous Test (F-test)

The simultaneous effect of all independent variables on home purchase intention was examined using the F-test.

Table 10. F-test Results

Model	Sum of Squares	F-value	Sig.
Regression	450.876	32.456	0.000
Residual	850.123		
Total	1,301.000		

a. Dependent Variable: Home Purchase Intention

b. Predictors: Subsidized Housing Price, Perceived Flood Risk, Infrastructure Quality, Building Quality

Source: Processed SPSS Data, 2025

The F-test results show that the calculated F-value of 32.456 exceeds the F-table value of 3.07, with a significance value of 0.000, which is below the 0.05 threshold. This indicates that all independent variables simultaneously have a significant effect on home purchase intention.

Coefficient of Determination

The coefficient of determination was used to assess the explanatory power of the regression model.

Table 11. Coefficient of Determination (R²)

Model	R	R Square	Adjusted R Square
1	0.612	0.374	0.360

a. Predictors: X1, X2, X3, X4

b. Dependent Variable: Home Purchase Intention

Source: Processed SPSS Data, 2025

The Adjusted R Square value of 0.360 indicates that 36.0 percent of the variation in home purchase intention can be explained by subsidized housing price, Perceived Flood Risk, infrastructure quality, and building quality. The remaining 64.0 percent is influenced by other factors not included in this study, such as accessibility, transportation costs, socio-economic conditions, and policy implementation aspects.

DISCUSSION

The results of this study indicate that housing purchase intention toward subsidized housing under the Housing Financing Liquidity Facility (FLPP) program in Bekasi Regency is shaped by an integrated evaluation of economic affordability, environmental conditions, and physical housing quality. Subsidized housing price remains a significant determinant of purchase intention, confirming that affordability plays a crucial role in reducing financial barriers and encouraging long-term homeownership among low-income households.

However, perceived flood risk emerges as a critical environmental constraint that weakens the attractiveness of subsidized housing. Lower perceived flood risk is associated with higher purchase intention, while higher perceived flood risk significantly reduces buyers' willingness to purchase subsidized housing, even when prices are relatively affordable. This finding suggests that concerns regarding safety, residential comfort, and long-term asset security play a decisive role in housing decisions, particularly in flood-prone suburban areas such as Bekasi Regency.

In addition, infrastructure quality and building quality have positive and significant effects on purchase intention. Adequate road access, effective drainage systems, and the availability of public facilities enhance residential convenience and help mitigate environmental risk perceptions. Good construction quality further increases buyers' confidence by reducing concerns related to maintenance costs and long-term habitability. Overall, the findings highlight the need for subsidized housing policies that integrate price affordability with flood risk mitigation, infrastructure development, and building quality standards to ensure program sustainability.

CONCLUSION

This study concludes that housing purchase intention toward subsidized housing under the Housing Financing Liquidity Facility (FLPP) program in Bekasi Regency is significantly influenced by subsidized housing price, perceived flood risk, infrastructure quality, and building quality, both partially and simultaneously. Housing affordability remains an important driver for low-income households, as it determines financial accessibility and the feasibility of long-term homeownership.

However, perceived flood risk—measured through reverse-coded indicators reflecting perceived flood safety—emerges as a critical constraint on housing purchase intention. Higher perceived flood risk reduces buyers' willingness to purchase subsidized housing, even when housing prices are relatively affordable, highlighting the importance of



environmental safety considerations in flood-prone areas.

In addition, adequate infrastructure and good building quality strengthen housing purchase intention by enhancing residential comfort, safety, and perceived value, while reducing concerns related to future maintenance costs. Overall, the findings indicate that purchase intention toward subsidized housing is shaped by a multidimensional evaluation of economic affordability, environmental risk, and physical housing quality. Therefore, the sustainability of subsidized housing programs requires integrated policies that combine price affordability with flood risk mitigation, infrastructure improvement, and strict enforcement of building quality standards.

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