Geoforum 170 (2026) 104565

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum

Market mechanisms and low-income housing patterns in the context of urban growth: study of developer behaviours in Bandung Metropolitan Area Indonesia

Anita Vitriana [a,b,*], Sara Özogul [a], Sarah Mawhorter [c], Johan Woltjer [a]

[a] Department of Spatial Planning and Environment, University of Groningen, the Netherlands
[b] Regional Agency for Research and Development, West Java Provincial Government, Indonesia
[c] Department of Economic Geography, University of Groningen, the Netherlands

ARTICLE INFO

Keywords:
Affordable housing development
Low-income housing
Developer strategies
Developer motivations
Institutional settings
Low-density urban sprawl
The Global South

ABSTRACT

The private sector dominates low-income housing provision in both the Global North and South. Compared to the Global North, formal low-income housing in the Global South typically manifests as low-density urban sprawl. This study investigates how the layered motivations and strategies of developers shape low-income housing development patterns in the Bandung Metropolitan Area, Indonesia. Semi-structured interviews with 21 developers—14 focused on subsidised housing and 7 on market housing with low-income housing experience—reveal a mix of motivations that combine economic pragmatism and socio-political considerations shaped by local embeddedness and institutional settings. Despite lower investment returns, low-income housing is perceived as a viable investment due to strong market demand, government support, and personal values. Developers' continued preference for building single-family homes represents a rational and pragmatic response to cultural preferences, regulatory conditions, and capital constraints. Amid growing urban land scarcity, developers pursue increasingly distant land parcels and employ relational strategies to sustain this development model. As a result, multifamily housing remains marginalised, while developers' decisions reinforce the trend toward smaller single-family units built farther from urban centres, exacerbating the spatial mismatch between housing and employment opportunities. This study demonstrates how market mechanisms operating within immature institutional frameworks can intensify spatial inequities rather than advance the social objectives of low-income housing. The research suggests that examining land and housing tenure systems can provide valuable insights into the persistence of low-density sprawl in such housing developments. We also recommend policy makers adopt narratives of higher-density housing to challenge such entrenched practices.

1. Introduction

The private sector has taken on an increasingly significant role in addressing the need for low-income housing in urban areas. Although private developer involvement in low-income housing provision is becoming widespread globally, their behaviour in shaping such housing and the built environment differs significantly across regions. Research suggests clear differences between low-income housing developed in the Global North and the Global South, particularly in terms of housing type and location. Compared to the Global North, formal low-income housing in the Global South more often takes the form of low-density buildings development patterns scattered across fringe locations (Coelho et al., 2022; Libertun de Duren, 2018; Liu et al., 2018), which contribute to the acceleration of urban sprawl (Amponsah et al., 2022; Chettry, 2023; Dadashpoor and Shahhoseini, 2024; Ehrlich et al., 2018; Renu and Hussain, 2019). These varying outcomes suggest that contextual settings strongly influence developer behaviour in producing such housing and shaping the built environment (Henneberry and Parris, 2013; Mwando et al., 2024; Todes and Robinson, 2020), as their practices are socially and spatially embedded (Mosselson, 2020). In this regard, the *relational work* of developers—the social efforts they make to build and maintain relationships that support development projects (Ballard and Butcher, 2020)—constitutes an essential element influencing the production of space.

While a growing body of literature has examined how developers employ relational strategies and actions in producing space across

* Corresponding author at: Department of Spatial Planning and Environment, University of Groningen, the Netherlands.
E-mail addresses: a.vitriana@rug.nl, avitriana@jabarprov.go.id (A. Vitriana).

https://doi.org/10.1016/j.geoforum.2026.104565
Received 29 July 2025; Received in revised form 20 October 2025; Accepted 24 January 2026
Available online 5 February 2026
0016-7185/© 2026 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

locations (e.g. Brill, 2022b; Domaradzka, 2022; Mouton and Shatkin, 2020), this paper extends such discussions by examining how they operate in low-income housing production in Indonesia, where such studies remain scarce. We seek to uncover how developers' motivations and strategies for building low-income housing shape specific development patterns in the built environment. In contrast to the profit-maximising behaviour of the mainstream private sector, low-income housing provision primarily aims to deliver social benefits and does not necessarily result in the highest financial returns. This underscores the need to view developers as a heterogeneous group with diverse motivations and behaviour (Coiacetto, 2000; Henneberry and Parris, 2013; Özogul and Tasan-Kok, 2020). We argue that mixed economic and socio-political motivations drive developer interest in low-income housing projects, and that within specific institutional settings, they result in distinct physical manifestations. The material environment shaped by developers does not result solely from their own interests, but also from the configurations of other actors, such as governments, finance, and civil society, (Ballard and Butcher, 2020) that shape their habitus (Mosselson, 2020). Here, developer habitus refers to a set of dispositions, motivations, and practices that shape their social actions and development process (ibid.).

Prior studies have identified developer motivations beyond economic objectives, including political support and initiatives (e.g. Brill, 2022; Paramita et al., 2023), bureaucratic incentives and approval (e.g. Butcher, 2020; Pollard, 2023), and reputational capital (e.g. Elsmore, 2020; Hyde, 2022). However, in-depth investigations into developers'socio-political motivations and practices in low-income housing provision remain limited (Butcher, 2020a), particularly in the Global South. Notable exceptions include Todes and Robinson (2020), Mosselson (2020), and Butcher (2020a, 2020b), who examined the socio-political dynamics of developers' involvement in low-income housing provision in the South Africa context. This highlights a gap in the literature, as understanding of developer strategies and actions in low-income housing provision, and their role in shaping the distinctive urbanity of the Global South, requires further investigation across different contexts.

This paper analyses developer motivations and strategies in Indonesia's low-income housing provision to understand why developers primarily build single-family homes on the urban periphery rather than multifamily housing in more central locations. As one of the most populous countries in the Global South, Indonesia has experienced rapid urban sprawl. Developers play a key role in providing formal low-income housing. The government offers subsidies to low-income homebuyers and incentives to developers willing to build low-income housing. Developers mainly focus on basic single-family homes on metropolitan outskirts, with limited multifamily options near employment centres. Although this approach has increased the formal low-income housing supply, its reliance on single-family homes has been considered less effective. Studies highlight issues such as increased distances from urban centres, higher transportation cost (Dewita et al., 2018), vacant properties (Adianto and Gabe, 2021) or property turnover—homes being rented out or resold (Fanny et al., 2020; Siswanti, 2013). Given the private sector's significant role in shaping the existing low-income housing outcomes, we aim to investigate how developers' motivations and strategies operate within this context.

Indonesia represents Global South contexts well, with a high demand for low-income housing. Sixty percent of its population currently lives in urban areas (BPS, 2024c). A higher proportion of young adults has generated substantial demand for urban low-income housing, not only for the poor, but also among young families. This study addresses two key research questions: (1) What are developer motivations for and perspectives on low-income housing provision? (2) How do these motivations influence their strategies in building such housing and shaping the built environment, particularly in terms of site selection and preferences for housing typology (single-family vs multifamily homes). To investigate developer behaviours, we focus on the Bandung Metropolitan Area (BMA), a case characterised by strong private-sector initiative. The research draws on in-depth interviews with 21 private developers, supplemented by online sources related to developer profiles and their project information. A qualitative approach is employed to explore developers' motivations and strategies in depth within Indonesia's low-income housing sector.

2. Developers' complex motivations and divergent behaviours in housing development

Developers have played an increasingly significant role in shaping the built environment, including low-income housing development. The literature suggests substantial differences in formal low-income housing patterns between the Global North and Global South, particularly in relation to housing density and urban sprawl. In the Global North, low-income housing provision—initially led by governments through public housing (Andersson and Turner, 2014; Grander, 2017; Stephens, 2013)— has largely shifted to the private sector and housing associations, often prioritising urban regeneration and densification (e.g.Geva and Rosen, 2018; Nappi-Choulet, 2006). In the Global South, developers more often construct affordable housing with varying densities in scattered, peripheral locations (Dadashpoor and Shahhoseini, 2024), due to lower land costs (Varkey and Manasi, 2019). In India, where planning 'informality' remains prevalent (Roy, 2009) affordable housing is increasingly developed as multi-storey tenements on urban fringes, often adjacent to informal settlements (Coelho et al., 2022). In China, low-income housing is often located on the outskirts of cities, characterised by scattered developments that blend high- and low-density areas (Liu et al., 2018). In Mexico and Brazil, developers usually build mass-affordable housing as multifamily walk-up apartments blocks in *peri*-urban areas (Libertun de Duren, 2018) or small single-family duplexes (González-Ochoa, 2023). While urban sprawl is increasingly employed as a strategy to address housing affordability (Ehrlich et al., 2018; Hamidi and Ewing, 2015), the expansion of low-income housing with varied intensities toward urban peripheries remains a defining feature of the Global South. Given the significant role of developers in shaping urban areas (Coiacetto, 2000), these varying development patterns reflect the outcomes of their differing motivations and behaviours.

Classic studies often framed developer behaviour in housing development primarily through an economic lens. Developers are commonly seen as profit-driven entities with risk-taking, speculative, competitive, adaptive, rational, and opportunistic characteristics (Coiacetto, 2001; Leung, 1987) aimed at maximising profits. This perspective underpins explanations of why developers often prefer prime locations, large plots on urban fringes, and exclusive housing amenities, which enable them to maximise returns Although early studies emphasised profit-maximising behaviour, later research identified satisficing tendencies among developers who prioritise process efficiency and simplification (Mohamed, 2006). The literature also suggests that the level of available capital may influence their decision-making (Coiacetto, 2007; Geva and Rosen, 2018; Wahyudi et al., 2019), leading to adaptive rationality and satisficing behaviour (Mohamed, 2006, 2009). These economic factors shape variations in developer behaviour, including their choices of submarket segments (Coiacetto, 2007; Sheng, 2002), site selection and project scope (Mohamed, 2006), risk-reduction strategies (Kosavinta et al., 2017; Mohamed, 2006; Robin, 2022), geographical focus (Charney, 2007; Coiacetto, 2000), and project integration approaches (Meijer and Buitelaar, 2023). Likewise, developers' interest in affordable housing may be driven by economic motivations, particularly the perception of large market opportunities (Sheng, 2002).

While classic literature underscores profit optimisation as the primary driver of development projects, a growing body of research highlights that diverse profit-making standards and broader socio-political motivations also shape developer interests and behaviours in producing space. Some scholars identify the political motives of

developers in forming strategic alliances to enable development projects (Brill, 2022b; Paramita et al., 2023; Shatkin, 2008), influencing and navigating planning processes (Ballard and Butcher, 2020; Mouton and Shatkin, 2020), and engaging in policy development (Leffers, 2018). Likewise, other scholars examine how developers pursue bureaucratic incentives (Pollard, 2023; Todes and Robinson, 2020; Witwer, 2007) and approval (Ballard and Harrison, 2020) through development contributions and personal relations with local authorities (Henneberry and Parris, 2013; Ruming, 2010). Meanwhile, Elsmore (2020), Hyde (2022), Rosen (2017) discuss social behaviour of developers, though debate remains over whether these actions stem from altruism or strategic reputation-building. These broader socio-political motivations may shape variations in developers' engagement in housing, including sub-profit projects that influence material outcomes in the built environment. For instance, Rosen (2017) found that mixed economic and social motivations led some developers to pursue condo projects on less desirable sites or with lower profit margins in greater Toronto, Canada. Other scholars identify a group of developers focused on urban preservation and green development, driven by ideological commitments (Alfasi and Fabian, 2008), or broader public objectives (García-Lamarca et al., 2022; Zhang et al., 2021). Similarly, developers' engagement in low-income housing has been found to respond to institutional arrangements, such as government support programmes (Pollard, 2023; Witwer, 2007) or planning approval requirements (Ballard and Harrison, 2020; Butcher, 2020a). Table 1 summarises the main economic and socio-political motivations identified in the literature.

Socio-political motivations influence the ways in which developers operate, highlighting how they adapt their strategies in response to market conditions and planning frameworks. While these layered motives may serve as strategies for accumulation, they cannot be fully explained through economic calculations (Hyde, 2022). Property markets are socially constructed, embedded in distinct local contexts, and shaped by networks of actors whose practices are guided by prevailing rules and norms (Henneberry and Parris, 2013; Todes and Robinson, 2020). Here, developers' interests are interconnected with, and often emerge from, the interests of other actors (Ballard and Butcher, 2020). In the case of affordable housing development, scholarship has shown that developers' activities are also shaped by relational work and spatial embeddedness, which in turn shape the production of such housing. This becomes clear, for instance, in research examining development practices in Johannesburg, South Africa. Todes and Robinson (2020), for example, demonstrate that state collaboration can redirect developer interests towards managed low-income rental housing, though the displacement of the poorest residents still occurs, while Mosselson (2020) emphasises that developers' adaptive, socially and spatially embedded practices produce housing outcomes that respond to local demands. Butcher (2020a) shows how greenfield developers reproduce differential and monopoly rents through land control and networks, shaping housing provision in ways that favour profitability and reinforce spatial inequalities. She also highlights how mortgage-based affordable housing is territorially constrained, limiting the spread of affordable units (Butcher, 2020b). Together, these studies show that development outcomes in Johannesburg both broaden access to housing for low-income residents and simultaneously reinforce spatial and social inequalities among those excluded from formal market eligibility. On a more abstract level, these studies underscore how developers operate as relational actors who mobilise diverse resources and engage with multiple institutions and organisations to realise their projects.

Understanding developers' relational work and the mutually constitutive conditions that shape their practices illuminates the processes through which the spaces they produce are formed (Mouton and Shatkin, 2020). This underscores how the institutional environment shapes developers' work and outcomes, reflecting their adaptive habitus in response to local demand, realities, and risk (Brill, 2022a; Mosselson, 2020). Since developer production is strongly shaped by local contexts, outcomes differ across settings, frequently reinforcing place-specific

Table 1
Developer motivations, behaviours, and development outcomes.

Motivations	Developer Strategies	Development Outcomes
Economic		
Profit making: speculative, risk-taking, opportunistic, competitive, rational, and, adaptive (Coiacetto, 2001; Leung, 1987)		
- Profit Maximisation	- highest return (Barlindhaug & Nordahl, 2018; Nappi-Choulet, 2006),	- prime location (Rosen, 2017)
	- higher-end market segment (Coiacetto, 2007),	- large-scale suburban sites (Winarso, 2002)
	- vertical integration (Meijer & Buitelaar, 2023)	- exclusive housing and amenities (Leung, 1987; Winarso, 2002)
	- long-term horizon/ staging development (Barlindhaug & Nordahl, 2018)	
- Satisficing (sub-optimal profitable)	- simplify problem and decision-making (Ro et al., 2019)	- smaller-scale lots (Leung, 1987)
	- risk-reduction (Kosavinta et al., 2017; Mohamed, 2006; Robin, 2022)	- geographical extent (Charney, 2007; Coiacetto, 2000)
	- shorter project cycle (Mohamed, 2006)	- low-density and leapfrog (Mohamed, 2006)
	- sub-market segment (Coiacetto, 2007)	
	- vertical disintegration (Meijer & Buitelaar, 2023)	
Socio-Political (contextual frameworks)		
- Political support and initiatives	- strategic alliance to enable development project (Brill, 2022b; Paramita et al., 2023; Shatkin, 2008)	- mega project development (Brill, 2022b; Paramita et al., 2023; Shatkin, 2008)
	- influence/ navigating planning (Ballard & Butcher, 2020; Mouton & Shatkin, 2020)	- spatial transformation (Ballard & Butcher, 2020; Mouton & Shatkin, 2020)
- Bureaucratic incentives and approval	- participating in government programs (Pollard, 2023; Todes & Robinson, 2020; Witwer, 2007)	- progressive low-income housing development (Pollard, 2023; Todes & Robinson, 2020; Witwer, 2007)
	- seeking and securing approval (Ballard & Harrison, 2020; Butcher, 2020a)	- development contributions (e.g. affordable homes, external/link servicing) (Ballard & Harrison, 2020; Butcher, 2020a)
	- engaging in policy process and development (Leffers, 2018)	- land use planning and legislation (Leffers, 2018)
	- personal/ informal association (Boanada-Fuchs & Boanada Fuchs, 2022; Henneberry & Parris, 2013; Ruming, 2010)	- specific geographical niche (Henneberry & Parris, 2013; Ruming, 2010)
- Reputational capital (public legacy) and/ or Altruism (and personal beliefs)	- social responsible (Elsmore, 2020; Rosen, 2017)	- rezoning (increased density for social housing) (Hyde, 2022)
	- charitable act (Hyde, 2022)	- socially mixed housing and creating thriving suburban downtowns (Rosen, 2017)
	- workforce security (Meijer & Buitelaar, 2023)	- deliver social good/ community services (e.g. social housing, education, health care, transport, parks)

(*continued on next page*)

Table 1 (*continued*)

Motivations	Developer Strategies	Development Outcomes
		(Elsmore, 2020; Hyde, 2022)
	- environmental awareness (Zhang et al., 2021) - moral commitment (Alfasi & Fabian, 2008; García-Lamarca et al., 2022)	- preservation/ regeneration project (Alfasi & Fabian, 2008) - green development (García-Lamarca et al., 2022; Zhang et al., 2021)

urban characteristics (Brill, 2022b). Building on this, our research demonstrates the dynamics of developers' motivations and strategies in low-income housing provision and their role in shaping the built environment in the Indonesian context, focusing on the Bandung Metropolitan Area (BMA)—one of the country's largest metropolitan areas. To contextualise the case study, we next outline the conditions of the low-income housing market and the broader built environment in the BMA.

3. Empirical context

Indonesia is a developing country in the Global South with a large market for urban low-income housing. The country faces a growing demand for adequate and affordable housing, driven mainly by existing low-income urban residents and young families. With a population of more than 280 million, Indonesia has a large proportion of young adults (BPS, 2022). BPS (2024a) reported that 62.95% of Indonesian residents are under the age of 40 and half begin families in their early 20s, contributing to increased demand for such housing. The country requires at least 800,000 new urban housing units annually to accommodate young families (Koto, 2020; Ministry of Public Work and Housing, 2019). These young families, with household heads typically under 40, have an average net income of IDR 3.62–7.24 million per month.[1] This income level falls within the eligibility criteria for low-income housing,[2] where the maximum income thresholds of IDR 8.5 (single) and IDR 10 million (married).[3]

Developers play an increasingly prominent role in meeting the need for low-income housing provision in Indonesia. Although self-built housing continues to dominate the housing supply, developers have been involved in low-income housing provision since the late 1970s. Their contribution has increased over time. In the past decades, the government set a target of constructing 1 million houses annually under the 'One Million Housing Program' and they have contributed to deliver more than half of this target. Between 2021–2023, developers constructed over 3,4 million housing units nationally, contributing approximately 67,8% of the annual housing supply. Of this figure, 73.24% of housing units were built for low-income households. The government provides subsidies for eligible households who buy low-income housing. The government also provides incentives for developers who are willing to build low-income housing, such as infrastructure support and regulatory relief. Notably, only about one-third of low-income housing units received government subsidies. This indicates a high level of enthusiasm among developers in addressing low-income housing demand in the urban areas of Indonesia.

The paper focuses on the BMA, which lies in the centre of West Java, Indonesia's most populous province. Located 154 km from Jakarta, the capital city of Indonesia, the BMA encompasses two urban centres: Bandung city and Cimahi city, along with three surrounding regencies: Bandung Regency, West Bandung Regency and parts of Sumedang Regency. The area covers 349,750 ha and had a population of 9.9 million in 2024, nearly one-fifth of West Java's total. Population density in the BMA urban centres have exceeded 14,000 people per km2, compared to less than 2,000 people per km2 in *peri*-urban regencies. Between 2005 and 2024, the population in urban centres grew by 11.32% while *peri*-urban regencies almost tripled this growth (BPS Jawa Barat, 2024).

The rapid population growth is accompanied by fast expansion of built-up areas, which increased from 23,290 ha in 2003 to 93,097 ha by 2023 (Purboyo et al., 2024) (Fig. 1). Of this growth, the urban centres experienced 109.15% expansion, while surrounding *peri*-urban regencies experienced nearly threefold increases, predominantly in residential zones. This rapid expansion has rendered the BMA an extensively sprawling area and the most congested one in Indonesia (Asian Development Bank, 2019). From 2020 to mid-2025, SiKumbang[4] also recorded substantial housing development in *peri*-urban regencies, with developers constructing 78,738 housing units. Only a quarter of these were categorised as commercial, while the remainder consisted of low-income housing. In contrast, developers built only 4,593 housing units in urban centres, all of which were market housing. Almost all new housing developments are in the form of single-family homes.

4. Methods

This study is qualitative in design, aimed at delving deeper into developer motivations and strategies in low-income housing development. We conducted 21 in-depth interviews with residential developers who operate in the BMA. The participants were members of residential developer associations[5] registered in SiKumbang. Two-thirds of the participants were categorised as subsidised housing developers specialising in low-income housing, while the remaining were market housing developers with experience in such projects. Primary data were collected from December 2023 to February 2024. The process began with email correspondence sent to all developer associations listed on SiKumbang. Of the 22 associations, 7 responded and provided contact information for developers who could be approached. Subsequently, we contacted these developers personally, and 21 agreed to participate in the interviews (Appendix), although representation across the 7 responding associations was uneven. The participants were business owners or senior executives. Among the participants, 3 had more than 30 years experience in the property business, 5 had 20–30 years, 9 had 10–20 years, 2 had less than 10 years, and 2 did not specify their experience. The interviews were conducted either online or in person, lasting between one and two hours per session.

The interviews focused on the developers' considerations for engaging in low-income housing development and their experiences with such projects, including constraints and strategies encountered. With participants' consent, all interviews were recorded, transcribed, and analysed. We use pseudonyms along with sequential numbers based on the interview order. Data were coded, grouped, and analysed using Atlas.ti software. The analysis utilised both deductive and inductive coding approaches. Deductive codes were derived from a literature review and included categories such as: (1) economic and socio-political motivations and (2) development outcomes variables (Fig. 2). Inductive coding emerged from the interviews, identifying developer categorisation and additional factors influencing their strategies (e.g. demand dynamics, relational work, regulation implementation).

[1] When both spouses are employed, the household income effectively doubles (BPS, 2024b).

[2] According to Minister of Public Works and Housing Decree 689/2023, the current maximum selling price for low-income housing in West Java Province is IDR 166 million

[3] Based on the Minister of Housing and Human Settlement Regulation 5/2025 on the Income Criteria for Low-Income Households and Requirements for Housing Development and Access Support (for West Java Region).

[4] A government platform for developers to register housing projects (https://sikumbang.tapera.go.id/).

[5] Residential developer associations are organisations that represent, support, and advocate for their members' interests in housing development.

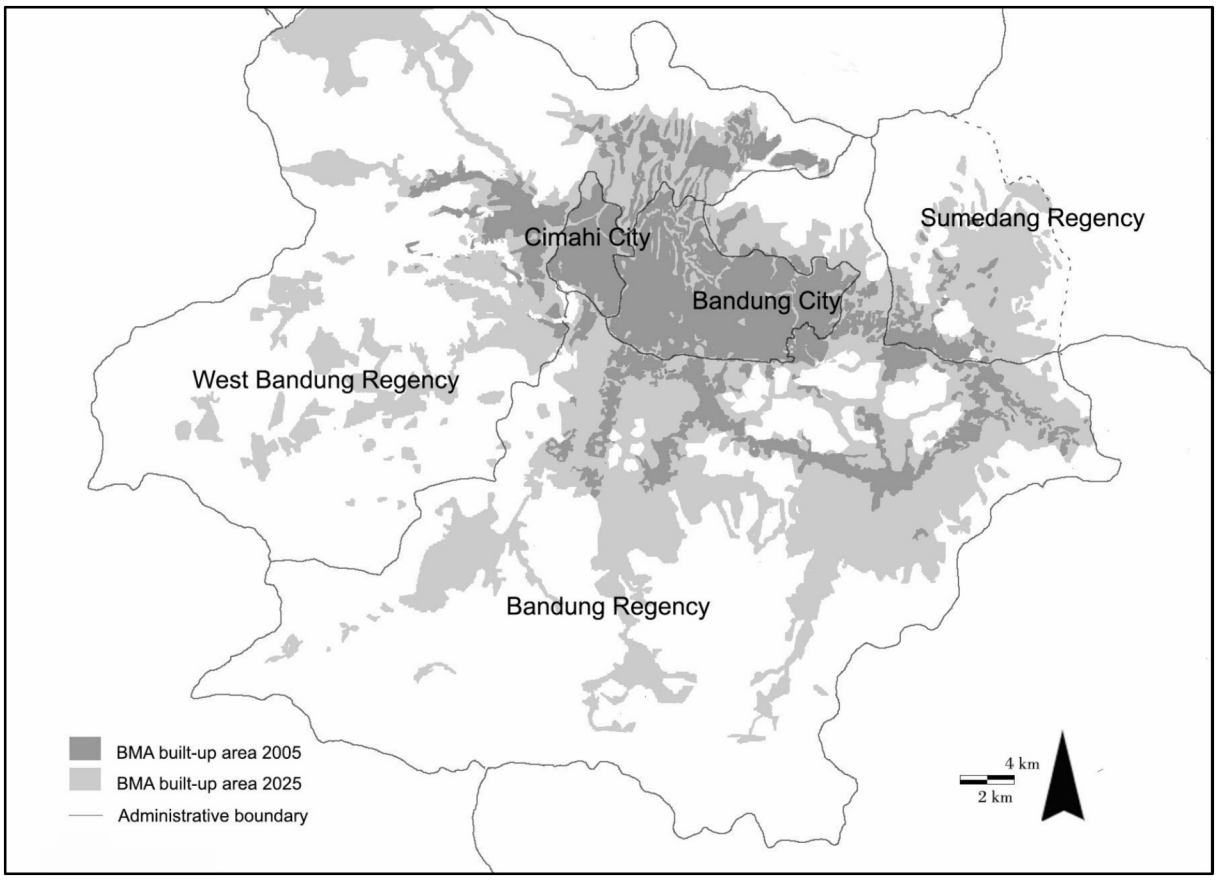


Fig. 1. Expansion of built-up areas in the Bandung metropolitan area (2005 versus 2025). Source: Base imagery from Google Maps and Google Earth (processed by authors, 2025).

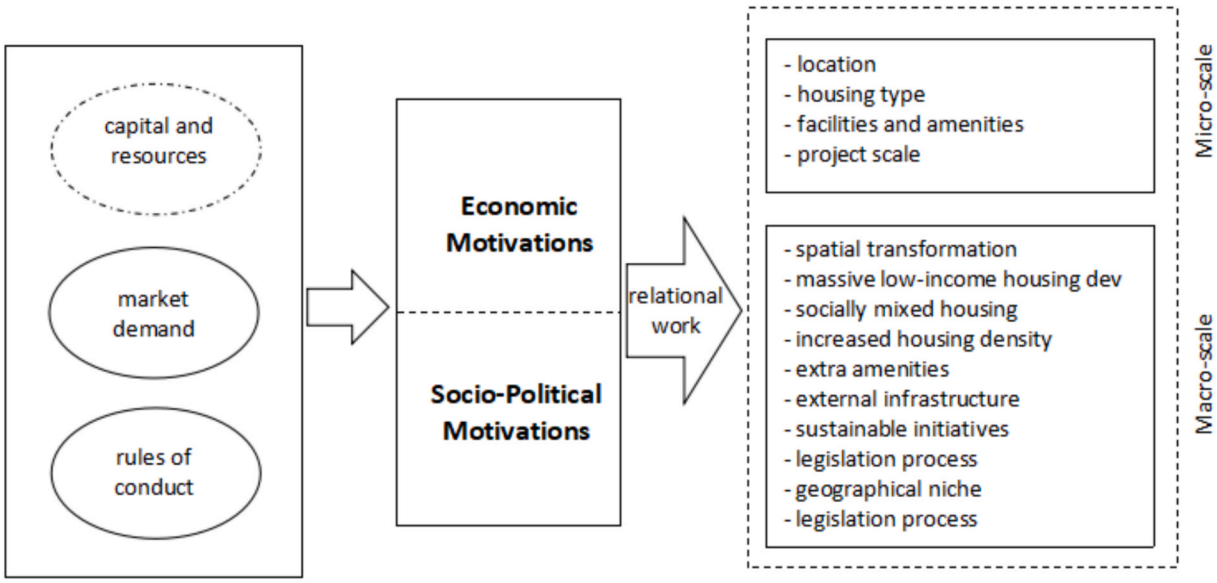


Fig. 2. The relationships between developer motivations and development outcomes.

Based on the interviewees, property developers in Indonesia are commonly categorised according to their target market: market housing for lower-middle to upper-income and subsidised housing for low-income households. These categorisation shaped our analysis of developer motivations and strategies in low-income housing provision within the BMA.

Secondary data was also collected through internet searches to gather information on developers' profiles and their projects. Using desk-based research, we mapped the locations of their projects over the past 10–20 years, focusing on project size, housing type and density, and geographic distribution. Triangulation is constrained by limited public data, as developers are not obliged to report publicly. Few maintained

websites, and publicly available information is generally limited to basic project details for marketing purposes. We acknowledge the limitations of information triangulation, particularly regarding company resources. However, as this study focuses on developers' motivations and includes disclosure of financial considerations underlying their decisions, the data are considered to provide meaningful insights, even if they may not fully capture all aspects of developers' actual practices.

5. Developer motivations and strategies in providing low-income housing in Bandung metropolitan area

This section examines developer motivations by focusing on both economic objectives and socio-political factors. It then considers how these interconnected motivations may influence developer strategies in shaping development outcomes.

5.1. Developer motivations for developing low-income housing development within the BMA

Developer motivations for providing low-income housing in the BMA stem from a combination of economic and socio-political interests, emphasising lower-risk investment and broader socio-political objectives. Their initial statements for being interested in low-income housing business are diverse: large market opportunities (D4, D13, D15, D16, D19, D21), participation in government programs (D3, D8, D10, D11), supporting low-income communities in accessing adequate and affordable housing (D1, D2, D5, D20), secure investment (D7, D17, D18), business opportunities (D9, D14, D12), and rapid capital turnover (D6).

Despite varied initial statements, deeper discussion with developers indicates low-income housing is a relatively low-risk sector. Some subsidised housing developer participants reveal that government support has contributed to a sense of security in this business. They choose to specialise in low-income housing because it enables sustained operations with relatively low capital investment. As D3 explained, *'We can stay in this business for 30 years because it does not require significant capital.'* Though less profitable, it is considered measurable due to its shorter cycle and rapid turnover. This also explains why many newcomers in the property industry use low-income housing as a stepping stone to enter the property market. As D21 revealed *'I started in property development 15 years ago with a small low-income housing project on half a hectare of land. Now I've expanded to 8 locations, and my current project has included market housing.'* In contrast, market housing developers' involvement in low-income housing projects is frequently driven by emerging opportunities, such as access to suitable land (D9, D10, D18) or partnership offers (D12, D14). Nevertheless, market housing developer participants consider low-income housing projects as a potential reserve. Besides serving as a fallback during slow market housing sales (D9, D18), these projects also help fulfil inclusionary housing obligations when required (D14).[6]

The prominence of social motivations was also highlighted by some developers regarding their involvement in low-income housing provision. Several participants expressed their idealism in participating in government programs and assisting communities in need (D1, D3, D5, D8, D9, D10, D14). Despite rising challenges—such as increased competition, land scarcity, and stricter regulations— many stated that providing low-income housing not only offers a sense of personal satisfaction but also aligns with their core values (D11, D12, D20). As D11 explained '*When I talk with my colleagues, one key to success is having good intentions, because the land belongs to Him. I've seen some of my friends succeed because they enjoy giving back, and one way they do that is by continuing to build low-income housing, even though they've switched to the commercial (housing) business*.' This indicates that developers' motivations for low-income housing provision extend beyond purely financial reasoning. While economic motives may drive their decision to engage in low-income housing development, they also believe that altruistic efforts—through their awareness and commitment to supporting underprivileged communities—can yield indirect benefits for their business.

5.2. Developer strategies in providing low-income housing

This sub-section examines developer strategies through the dimensions of relational work and the production of the built environment. We integrate participant perspectives with observations of their project profiles to analyse how developer behaviours influence development outcomes.

Relational-work of developers

Developer involvement in low-income housing provision in the BMA suggests strong ties to local embeddedness and engagement with other stakeholders. Despite market factors, these local ties influenced some developers to focus on the BMA for their projects. Some participants stated that being native to the region and familiar with its cultural and environmental context facilitated their business operations. As D2 explained, '*Our main goal is to develop our hometown. Plus, investing isn't easy—if I, as a developer, try to invest in a place where I don't live, it's really hard to break into the market*.' Meanwhile, two of the seven developers, who began the business outside the BMA, had different experiences when entering the low-income housing market in the regions. Despite its strategic position, one participant faced difficulties selling a small, well-located parcel near a provincial road. In contrast, another participant, originally from Bandung but operating outside the region, viewed the BMA market as part of a broader regional expansion and experienced relatively positive outcomes. These contrasting outcomes illustrate how local embeddedness can significantly shape developers' perspectives and success in low-income housing development in the area.

Several developers also noted that specialisation in specific geographical niches enhances networking with local governments. Frequently working in the same area may facilitate the administrative process, as developers become familiar with local procedures. While licensing procedures are expected to follow national government regulations, practical differences often exist between local governments. D10 reflects this relationship *'The licensing process isn't always smooth, it sometimes has to back-and-forth. But, I've built a good relationship with the people there, allowing me to resolve issues relatively quickly.'* Some participants noted that strong relationships with governments may also facilitate regulatory improvements. D8 highlighted that streamlining licensing regulations for low-income housing was initiated as a proposal from housing associations. In contrast, none had been involved in the process of spatial changes or land-use transformations. One of participants, serving as an active officer in the developer association, emphasised that he nor his associates have been or should be involved in such processes due to potential conflicts of interest and biased spatial planning.

Besides good relations with the government, participants emphasised the importance of strong ties with peers. Increased competition in sales and land acquisition has led some developers to form partnerships. These partnerships take formal or informal forms and typically occur between senior and novice developers (D10), large with small/local developers (D11), and developers with landowners, contractors, or marketers (D3, D13, D15, D20). As D3 explained, *'We've been able to stay in the business because we collaborate with others who bring land to the table.*' Nevertheless, D16 further noted that this B2B relationship is not always easy to implement, as it can sometimes lead to disputes. This highlights the dynamics of relational work among developers, emphasising the need for rational and adaptive behaviour in an increasingly competitive low-income housing market.

Production of the built environment

[6] According to Law No. 1 of 2011 on Housing and Settlement Areas, inclusionary housing provision (the balanced housing rules) is mandated. However, its implementation has not yet been strictly enforced.

The examination of development strategies are categorised into three development outcomes: 1) spatial transformation and locational choice, 2) housing type and density, and 3) project scope and infrastructure provision.

a. Spatial Transformation and Locational Choice

Low-income housing provision in the BMA shows a trend of rapid expansion, increasingly extending toward exurban zones. Participants indicated that such developments now reach nearly 40 km from the city centre. D14 described this trend: '*Low-income housing provision just keeps moving outward. Back in the 1990s, it was in Margahayu Raya (9 km), then it spread to Cibiru (15 km). By the 2000s, it reached Rancaekek (22 km) —lots of my friends started low-income housing businesses there. By 2015, it had moved to Cicalengka (30 km), and now it's already reached Nagreg (40 km).*' Due to price restrictions on low-income housing, developers must find land within their budget. This has forced them to look for affordable land increasingly in the 3–4 outer rings of the BMA, where the prices are lower, moving progressively toward rural areas.

The increasing distance of affordable housing from urban centres has led developers to adopt various strategies for site selection in low-income housing projects, including following infrastructure development trends, optimising the build coverage ratio (BCR), and targeting nearby captive markets. The BMA has higher land elevation in the northern and some western part, which limits BCR to a small percentage. Most developers avoid these areas and prefer in the eastern and southern part (as shown in Fig. 3) to maximise BCR utilisation, in addition to the infrastructure development trends that are also directed toward these areas. Infrastructure development plans, particularly highways (D2) and commuter lines (D13), have made a significant contribution to low-income housing sales. Since many low-income housing areas are located farther from urban centres, many developers often adopt a captive market strategy during the site selection process, targeting local demand such as industrial workers employed nearby. As D19 explained: '*I never look for land without first securing local potential consumers. The captive market comes first; once we have that, we proceed with development. If there is no local captive market, we don't want it—it's too risky, especially now.*' Here, developers strategically acquire land near industrial zones or along commuter lines to capture both onsite demand and potential buyers from the city center.

While both strategies are important in determining site selection, some developers do not consider them as absolute requirements—seeing them instead as potential market advantages—as long as the site is accessible by motorised transport. Despite increasing difficulty in finding affordable land and the locations being far from the urban centres, developers believe there is still significant demand for low-income housing, even in remote locations. D12 emphasised this observation: '*Low-income housing in BMA has now expanded to the border of Bandung and Garut Regencies (more than 40 km), but even there, people are still willing to buy.*' D12 further explained that distance does not seem to be a concern for the low-income housing consumers, as long as they are able to own single-family homes. This point is reinforced by D11: '*Subsidised housing is still thriving in the BMA because consumers prefer (single-family) subsidised housing, even if it's 30 km from Bandung. They can still use motorcycles. This is also why vertical low-income housing hasn't worked out.*'.

b. Project Size and Infrastructure Provision

Our developer participants managed low-income housing projects of varying sizes, ranging from less than 1 ha up to 50 ha. The ratio of housing units to buildable land varies across projects, reflecting differences in land size, permit requirements, and developers' initiatives to provide additional amenities. Larger sites tend to allocate a greater

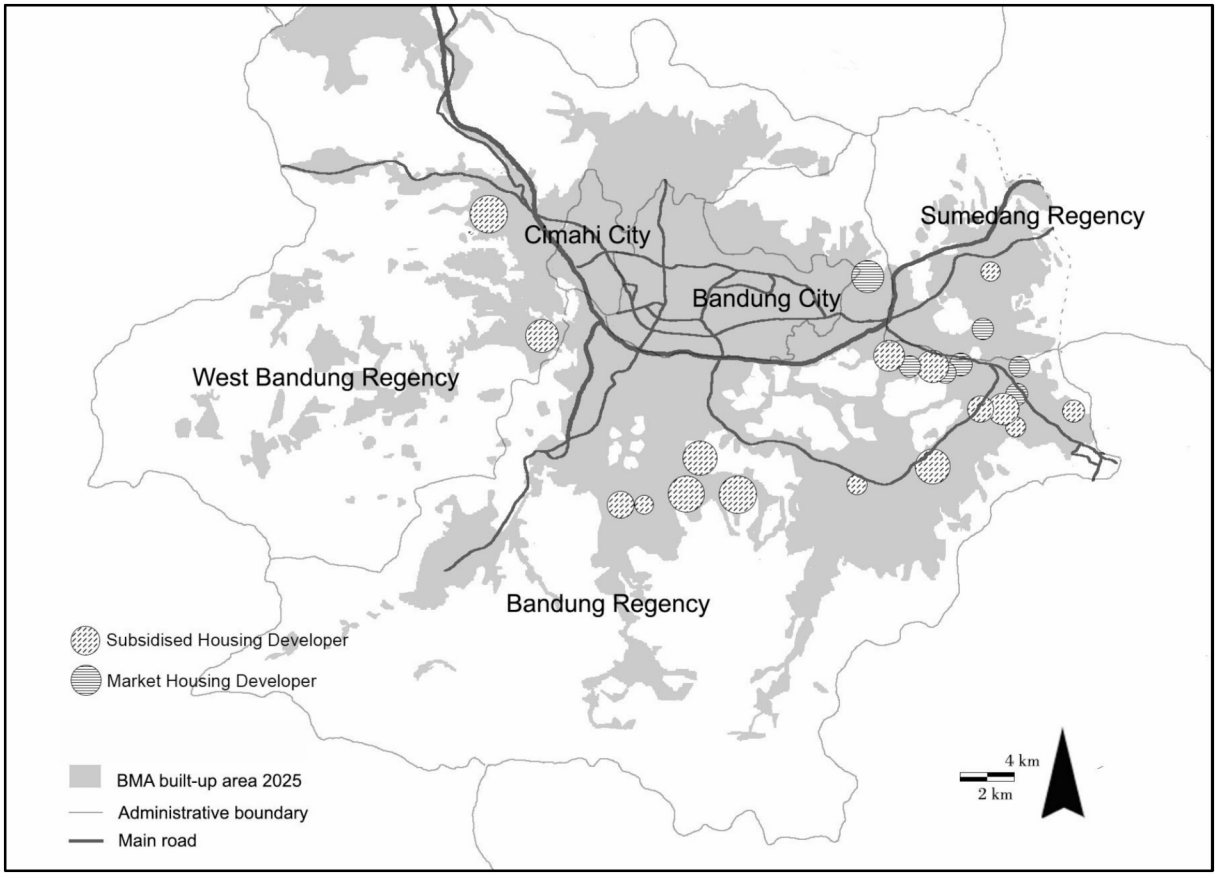


Fig. 3. Distribution of low-income housing projects developed by the developer participants. Source: Base imagery from Google Maps and Google Earth (processed by authors, 2025).

proportion of land to public spaces, whereas smaller developments often prioritise buildable plots. For instance, one participant developing a 0.8-hectare subsidised housing site—of which nearly 50% has been completed—planned 76 units with minimal public space, including roads, drainage, and limited green areas. In contrast, another participant with a 35-hectare site—whose project is nearing completion after more than 10 years of development—constructed 2,200 units complemented by public amenities such as a mosque, sports field, parks, a community hall, and even commercial facilities like a minimarket.

Larger projects are not only associated with a staged development process but also with a prolonged process of land assembly. Well-capitalised and long-standing subsidised housing developers often pursue larger projects and engage in longer-term land banking. This pattern excludes market housing developers, whose low-income projects are occasional. However, both developer groups often adopt a mixed development model combining low-income and lower-middle-income housing. Since government subsidies are limited to low-income housing, lower-middle-income housing falls under the market housing category. D8 noted that these commercial lots, typically located at corners or along main roads, often comprise about 5–15% of the project area, and in some cases, up to 30% (D3, D15). Most developers implement staged development, with commercial lots typically constructed in the final phase.

Besides generating additional income for developers, commercial lots within low-income housing projects also function as cross-subsidies for the provision of additional extra infrastructure. Many developers, especially those managing larger lots, provide additional on-site infrastructure such as wider roads, extra amenities, and shared facilities for the surrounding neighbourhood (Fig. 4). D8 reveals, '*Why do we allocate part of the low-income housing development land for commercial purposes? Because the infrastructure and facilities we provide there are quite adequate. As if they buy low-income housing but also get commercial infrastructure. The cross-subsidisation happens there.*' Some participants noted that this behaviour benefits both customers and developers. As D15 remarked, '*Providing facilities for consumers is a responsibility. We're not just selling housing, we're selling a home for them. They need to feel comfortable living there. Once they're comfortable, they'll tell their relatives to buy housing there.*' This illustrates developers' ability to strategically leverage opportunities and initiatives that generate both social value and positive business outcomes.

c. Housing Type

Most low-income housing constructed by developers in the BMA consists of small, attached single-family homes. The government sets the minimum standard for formal low-income housing units at 21 m^2 on a 60 m^2 plot,[7] reduced from the previous standard of 36 m^2 on the same plot size.[8] However, most developers build units that exceed this minimum, such as 22/60 m2 units with one bedroom, and 27/60 or 30/60 m2 units with two bedrooms. Developers typically price the largest subsidised housing units at the government ceiling price (IDR 166 million since 2024), with smaller units sold at roughly IDR 15 million less. Participants indicated efforts to enhance their products by providing slightly larger units or improved construction quality compared to the standard. As D1 stated, '*Actually, the government's standards for low-income housing aren't too high. But if you look at (our projects), what we build could be considered "subsidised housing plus".*' D15 noted further, '*According to regulations, the dividing wall between units could be just a single wall. But we don't. Each unit has its own wall.*' Regarding this behaviour, D6 explained that maintaining compliance with standards remains a priority, not only to ensure the residents' comfort, but also because any construction issues ultimately affect their reputation. Fig. 5 illustrates examples of low-income housing units constructed by developers in the BMA.

While participants expressed strong concerns about single-family housing development, they held a pessimistic view toward multifamily housings. All participants agreed that, beyond requiring stronger financial capacity, there is still limited demand for multifamily housing in the BMA, even among higher-income groups. Some developers noted frequent apartment unit conversions to alternative uses. D2 observed, '*I've seen that multifamily housing is still hard to sell. Even the existing ones often aren't occupied by the owner. Some even turned into hotels or rentals.*' Similarly, a developer who had previously collaborated with a public enterprise shared that their attempt to develop affordable multifamily housing in the BMA's urban centre failed due to difficulties in attracting buyers. According to the developers, Indonesia's housing market continues to be dominated by a strong preference for owner-occupied single-family housing as a first home.

Ownership security is not the only reason for the limited development of affordable multifamily housing. D2 noted that price ceilings are significantly higher than those for single-family homes. As a result, no developers have been willing to invest in multifamily affordable housing in the BMA for over the past five years. One participant who had undertaken several projects in the capital region shared additional challenges in developing multifamily housing. Complex and lengthy approval procedures combined with the negative responses from surrounding neighbourhoods, remain obstacles for developers. While multifamily housing could potentially yield higher returns, such projects are viewed as high-risk, both because of their capital and the persistent lack of demand. The latter is the primary concern for developers in running their business. As D9 remarked, '*If (only) there were consumers, we might consider it (to build multifamily housing). We could manage the capital if there's a market for it. That factor can make the business viable.*'

6. Discussion and concluding remarks: understanding layered developer motivations and strategies in providing low-income housing in the Bandung Metropolitan Area

This research examines the complex motivations and strategies of developers engaged in low-income housing development within the Global South context. Drawing from the literature, we identify two key motivations that may drive developer involvement in such provision: (1) economic and (2) socio-political. Situated within the specific contextual setting of a dynamic Global South case—Bandung Metropolitan Area, Indonesia—this study demonstrates how developer motivations and strategies play roles in shaping particular patterns of low-income housing development.

Developers in the BMA simultaneously leverage business opportunities in subsidised housing while contributing to the provision of housing for low-income groups. Driven by mixed economic and socio-political motivations, this reflects a form of financialisation with social benefits. Developers are able to provide affordable housing with additional facilities alongside single-family homeownership models, often adjacent to market housing. In this sense, the urban forms produced by real estate projects can be understood as the material manifestation of developers' values in combination with other interests (Ballard and Butcher, 2020). Here, developers' pursuit of profitability avoids challenging market demand, for example by building alternative types of housing structures. Instead, developers manage risk by acquiring more distant land, building reputational capital through project quality and external contributions (Elsmore, 2020; Hyde, 2022), and leveraging relational networks (Brill, 2022a; Henneberry and Parris, 2013). In doing so, developers enhance their network reputation within the industry, including social capital with local authorities and peers. These hyperlocal connections are essential for navigating bureaucratic processes and strengthen their capacity to manage project risks, particularly in securing increasingly scarce affordable land. This capacity is

[7] According to the Minister of Public Works and Housing Decree 587/2019 (as last amended by the Minister of Public Works and Housing Decree 689/2023).

[8] According to Minister of Housing and Regional Infrastructure Decree 403/2002 and SNI 03–1733-2004.



Fig. 4. Wide roads and shared facilities built by developers in the low-income housing estates (source: authors).



Fig. 5. Low-income housing units built by developers in the BMA (source: authors).

especially crucial in the Indonesian context, where developers also act as investors and thus bear risks throughout the entire development process, from planning approvals to construction and market responses. Such practices reflect a habitus that shapes developers' work, whereby they internalise both explicit and tacit rules, forming ways of thinking and acting appropriate to the particular context (Ballard and Harrison, 2020).

Developers in our case are shaped by competing dynamics and agendas, adapting their strategies to the demands and realities of local embeddedness. While skilled at mobilising socio-political capital, they face persistent challenges from entrenched cultural preferences for single-family homeownership, and consequently, the forms they produce reflect not only profitability but also strategies to manage risk within these expectations. In practice, developers operate pragmatically, adjusting to regulations and minimising risks to achieve optimal returns (Brill and Raco, 2021), which, in our case, is realised through the construction of increasingly small, single-family housing farther from urban centers. Here, low-income housing provision primarily serves as a vehicle for individual sales, adding value through land assembly rather than the building themselves—a pattern also observed in India (Searle, 2014; Shatkin, 2014). Developers act as key drivers of spatial development, capitalising on investment opportunities.

On the other hand, governments remain less active in generating public value through planning, focusing instead on administrative or managerial functions and market facilitation (Robin, 2022). These institutional arrangements, heavily skewed toward single-family housing, further limit local governments' capacity to regulate, capture urban land value, and constrain developer-led innovation. Through this case, we observe spatial inequalities similar to those in Western settings, although the underlying mechanisms differ: in Western contexts, reliance on private-led developments and land value capture often produces homogenised urban forms, reinforcing spatial inequalities (Brill and Robin, 2020), whereas in our case, state's failure to implement land value capture, resulting in low-density urban sprawl that pushes low-income housing away from urban centers.

Our case reflects the fact that the combination of high demand for urban low-income housing and limited land availability renders the shift toward multi-family housing unavoidable. However, this trajectory cannot be assumed to mirror Anglo-Saxon patterns in a straightforward way (Shatkin, 2008). In the Global South, stronger urbanisation pressures—rooted in distinctive socio-historical contexts and institutional informality (Roy, 2009)—combined with neoliberal adoption tend to produce urban growth that is dynamic yet uneven (Shatkin, 2008). Within this setting, developers can be empowered as key transfer agents, not only through financialisation but also in promoting new housing ideology—a set of ideas, values, and norms that shape how housing systems are perceived, organised, and legitimised— (White and Madden, 2024).

In contexts where single-family homeownership is deeply entrenched, the ideology is rooted in, and reinforces people's preferences, government policies, and market practices toward this housing model, while limiting the adoption of multi-family housing. Such

ideological shifts suggest that conceiving new multifamily housing models entails not only physical or financial arrangements but also the construction of narratives and social legitimacy. Transformation, therefore, should involve challenging dominant narratives and promoting alternative values such as flexibility, efficiency, community, and affordability. It also entails aligning these values with design, ownership, finance, and supportive policies, particularly in relation to land and housing tenure systems.

This research contributes to broader discussions on how complex developer motivations and strategies shape particular development patterns, especially in low-income housing provision. In the Global South, where rapid and often uneven urban expansion is common, our findings highlight the need for further scholarly engagement with the spatially and socio-politically embedded nature of developers' practices to understand how these may generate varied urban development outcomes. Such engagement can reveal how more socially beneficial urban outcomes might be achieved across different contexts. We also encourage policymakers to consider developer motivations and strategies when formulating low-income housing policies, as this can enhance policy effectiveness. At the same time, we acknowledge the limitations of our sample, since participants may not fully represent the broader developer population due to challenges in securing interview approvals. While this study focuses on developer motivations and strategies, future research should examine how housing and land tenure systems influence the entrenched housing culture of low-income communities. Such understanding is essential for exploring the potential transition from a single-family to a multi-family housing ideology.

Funding

The research was supported by Indonesia Endowment Fund for Education (LPDP), under Ref. No. 202204223008404.

CRediT authorship contribution statement

Anita Vitriana: Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Sara Özogul:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Sarah Mawhorter:** Writing – review & editing, Supervision, Conceptualization. **Johan Woltjer:** Writing – review & editing, Supervision, Conceptualization.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Financial interest: Anita Vitriana has received research support from Indonesian Endowment Fund for Education (LPDP). Non-financial interest: Anita Vitriana is an employee of the West Java Provincial Government in Indonesia.

Acknowledgement

We extend our heartfelt appreciation to the individuals who participated in this research. We also sincerely thank the anonymous reviewers for their thoughtful and constructive feedback, which significantly improved the quality and clarity of this paper.

Ethical approval

The research was approved by the Research Ethics Committee of the Faculty of Spatial Sciences, University of Groningen, under approval no. 2023-08, dated 17 April 2023. All participants provided informed consent for the interviews, in accordance with ethical research procedures.

Appendix. List of Participants

Subsidised housing developers	D1, D2, D3, D4, D5, D6, D7, D8, D13, D15, D16, D17, D20, D21
Market housing developers	D9, D10, D11, D12, D14, D18, D19

Data availability

The interview data that support the analysis of this study are not publicly available due to confidentiality agreements and ethical considerations.

References

Adianto, J., Gabe, R.T., 2021. Determinants of vacant subsidized house in Greater Metropolitan Jakarta Area, Indonesia. J. Hous. Built Environ. 36 (4), 1813–1830. https://doi.org/10.1007/s10901-021-09828-x.

Alfasi, N., Fabian, R., 2008. Ideological developers and the formation of local development policy: the case of inner-city preservation in tel aviv. J. Urban Aff. 30 (5), 489–505. https://doi.org/10.1111/j.1467-9906.2008.00415.x.

Amponsah, O., Blija, D.K., Ayambire, R.A., Takyi, S.A., Mensah, H., Braimah, I., 2022. Global urban sprawl containment strategies and their implications for rapidly urbanising cities in Ghana. Land Use Policy 114, 1–15. https://doi.org/10.1016/j.landusepol.2022.105979.

Andersson, R., Turner, L.M., 2014. Segregation, gentrification, and residualisation: from public housing to market-driven housing allocation in inner city Stockholm. Int. J. Hous. Policy 14 (1), 3–29. https://doi.org/10.1080/14616718.2013.872949.

Asian Development Bank, 2019. Fostering Growth and Inclusion in Asia's Cities: Theme chapter of ADO 2019 Update. https://www.adb.org/adou2019.

Ballard, R., Butcher, S., 2020. Comparing the relational work of developers. Environ. Plan. A 52 (2), 266–276. https://doi.org/10.1177/0308518X19893684.

Ballard, R., Harrison, P., 2020. Transnational urbanism interrupted: a Chinese developer's attempts to secure approval to build the 'New York of Africa' at Modderfontein, Johannesburg. Environ. Planning A 52 (2), 383–402. https://doi.org/10.1177/0308518X19853277.

Barlindhaug, R., Nordahl, B.I., 2018. Developers' price setting behaviour in urban residential redevelopment projects. J. Eur. Real Estate Res. 11 (1), 71–86. https://doi.org/10.1108/JERER-03-2017-0014.

Boanada-Fuchs, A., Boanada Fuchs, V., 2022. The role of real estate developers in urban development. Geoforum 134, 173–177. https://doi.org/10.1016/j.geoforum.2022.05.009.

BPS, 2022. Analysis of Indonesia's Population Profile. Badan Pusat Statistik Indonesia. https://www.bps.go.id/.

BPS, 2024a. Statistical Yearbook of Indonesia. Badan Pusat Statistik Indonesia. https://www.bps.go.id.

BPS, 2024b. The Average Monthly Net Wage/Salary of Workers/Employees by Age Group and Type of Occupation. https://www.bps.go.id.

BPS, 2024c. Welfare Indicators 2024 (Vol. 53). Badan Pusat Statistik Indonesia. https://www.bps.go.id.

BPS Jawa Barat. (2024). Population by Age Group and Sex in West Java Province 2023. Badan Pusat Statistik Provinsi Jawa Barat. https://jabar.bps.go.id.

Brill, F., 2022. Governing investors and developers: analysing the role of risk allocation in urban development. Urban Stud. 59 (7), 1499–1517. https://doi.org/10.1177/00420980211017826.

Brill, F., 2022b. Playing the game: A comparison of international actors in real estate development in Modderfontein, Johannesburg and London's Royal Docks. Geoforum, 134(June 2018), 197–204. https://doi.org/10.1016/j.geoforum.2018.05.015.

Brill, F., Raco, M., 2021. Putting the crisis to work: the real estate sector and London's housing crisis. Polit. Geogr. 89, 1–9. https://doi.org/10.1016/j.polgeo.2021.102433.

Brill, F., Robin, E., 2020. The risky business of real estate developers: network building and risk mitigation in London and Johannesburg. Urban Geogr. 41 (1), 36–54. https://doi.org/10.1080/02723638.2019.1637211.

Butcher, S., 2020a. Appropriating rent from greenfield affordable housing: developer practices in Johannesburg. Environ. Plan. A 52 (2), 337–361. https://doi.org/10.1177/0308518X19895278.
Butcher, S., 2020b. Creating a gap that can be filled: constructing and territorializing the affordable housing submarket in Gauteng, South Africa. Environ. Planning A 52 (1), 173–199. https://doi.org/10.1177/0308518X19885391.
Charney, I., 2007. Intra-metropolitan preferences of PROPERTY developers in greater Toronto's office market. Geoforum 38 (6), 1179–1189. https://doi.org/10.1016/j.geoforum.2006.12.009.
Chettry, V., 2023. A critical review of urban sprawl studies. J. Geovisualization Spatial Anal. 7 (2), 1–13. https://doi.org/10.1007/s41651-023-00158-w.
Coelho, K., Mahadevia, D., Williams, G., 2022. Outsiders in the periphery: Studies of the peripheralisation of low income housing in Ahmedabad and Chennai, India. Int. J. Housing Policy 22 (4), 543–569. https://doi.org/10.1080/19491247.2020.1785660.
Coiacetto, E., 2000. Places shape place shapers? Real estate developers' outlooks concerning community, planning and development differ between places. Plan. Pract. Res. 15 (4), 353–374. https://doi.org/10.1080/02697450020018790.
Coiacetto, E., 2001. Diversity in real estate developer behaviour: a case for research. Urban Policy Res. 19 (1), 43–59. https://doi.org/10.1080/08111140108727862.
Coiacetto, E., 2007. Residential sub-market targeting by developers in Brisbane. Urban Policy Res. 25 (2), 257–274. https://doi.org/10.1080/08111140701344833.
Dadashpoor, H., Shahhoseini, G., 2024. Defining urban sprawl: a systematic review of 130 definitions. Habitat Int. 146, 1–14. https://doi.org/10.1016/j.habitatint.2024.103039.
Dewita, Y., Yen, B.T.H., Burke, M., 2018. The effect of transport cost on housing affordability: experiences from the Bandung Metropolitan Area, Indonesia. Land Use Policy 79 (August), 507–519. https://doi.org/10.1016/j.landusepol.2018.08.043.
Domaradzka, A., 2022. The un-equal playground: Developers and urban activists struggling for the right to the city. Geoforum, 134(February 2019), 178–186. https://doi.org/10.1016/j.geoforum.2019.01.013.
Ehrlich, M.V., Hilber, C.A.L., Schöni, O., 2018. Institutional settings and urban sprawl: evidence from Europe. J. Housing Econ., 42(January 2017), 4–18. https://doi.org/10.1016/j.jhe.2017.12.002.
Elsmore, S., 2020. Strategies of responsibilization: development contributions and the political role of property developers. Urban Geogr. 41 (3), 389–408. https://doi.org/10.1080/02723638.2019.1677989.
Fanny, S., Muliana, R., Firdaus, A., 2020. Effectiveness of subsidised housing programs implementation for low-income communities in Pekanbaru City (case of study: Tenayan Raya District) Septia. Jurnal Saintis 20 (02), 101–109. https://doi.org/10.25299/saintis.2020.vol20(02).5710.
García-Lamarca, M., Anguelovski, I., Cole, H.V.S., Connolly, J.J.T., Pérez-del-Pulgar, C., Shokry, G., Triguero-Mas, M., 2022. Urban green grabbing: residential real estate developers discourse and practice in gentrifying Global North neighborhoods. Geoforum 128, 1–10. https://doi.org/10.1016/j.geoforum.2021.11.016.
Geva, Y., Rosen, G., 2018. The regeneration deal: developers, homeowners and new competencies in the development process. Geoforum 96 (January), 10–20. https://doi.org/10.1016/j.geoforum.2018.07.011.
González-Ochoa, D.J., 2023. Policy-induced suburbanization: mass-produced housing and location choices in Tijuana, Mexico. Housing Policy Debate 33 (3), 681–698. https://doi.org/10.1080/10511482.2021.2001671.
Grander, M., 2017. New public housing: a selective model disguised as universal? Implications of the market adaptation of Swedish public housing. Int. J. Hous. Policy 17 (3), 335–352. https://doi.org/10.1080/19491247.2016.1265266.
Hamidi, S., Ewing, R., 2015. Is sprawl affordable for Americans?: Exploring the association between housing and transportation affordability and urban sprawl. Transp. Res. Rec. 2500 (2500), 75–79. https://doi.org/10.3141/2500-09.
Henneberry, J., Parris, S., 2013. The embedded developer: using project ecologies to analyse local property development networks. Town Plan. Rev. 84 (2), 227–249. https://doi.org/10.3828/tpr.2013.13.
Hyde, Z., 2022. Giving back to get ahead: Altruism as a developer strategy of accumulation through affordable housing policy in Toronto and Vancouver. Geoforum, 134(January 2018), 187–196. https://doi.org/10.1016/j.geoforum.2018.07.005.
Kosavinta, S., Krairit, D., Khang, D.B., 2017. Decision making in the pre-development stage of residential development. J. Property Investment Finance 35 (2), 160–183. https://doi.org/10.1108/JPIF-05-2016-0030.
Koto, Z.S., 2020. From GNPSR to the one Million Houses Program. In Ekonomi Politik Program Sejuta Rumah: Membangun untuk Siapa? (the Political Economy of the one Million Houses Program: Building for Whom?). HUD Institute, pp. 1–229.
Leffers, D., 2018. Real estate developers' influence of land use legislation in the Toronto region: an institutionalist investigation of developers, land conflict and property law. Urban Stud. 55 (14), 3059–3075. https://doi.org/10.1177/0042098017736426.
Leung, H.L., 1987. Developer Behaviour and Development Control. Land Development Studies 4 (1), 17–34. https://doi.org/10.1080/02640828708723921.
Libertun de Duren, N.R., 2018. Why there? Developers' rationale for building social housing in the urban periphery in Latin America. Cities, 72(August 2017), 411–420. https://doi.org/10.1016/j.cities.2017.10.006.
Liu, Y., Fan, P., Yue, W., Song, Y., 2018. Impacts of land finance on urban sprawl in China: the case of Chongqing. Land Use Policy 72 (January), 420–432. https://doi.org/10.1016/j.landusepol.2018.01.004.
Meijer, R., Buitelaar, E., 2023. What drives developers? Understanding vertical (dis) integration strategies in the land development process. Land Use Policy, 131 (January 2022), 1–8. https://doi.org/10.1016/j.landusepol.2023.106718.
Ministry of Public Work and Housing, 2019. Performance Report of The Ministry of Public Work and Housing 2018 (pp. 1–81). Indonesian Ministry of Public Work and Housing.
Mohamed, R., 2006. The psychology of residential developers: lessons from behavioral economics and additional explanations for satisficing. J. Plan. Educ. Res. 26 (1), 28–37. https://doi.org/10.1177/0739456X05282352.
Mohamed, R., 2009. Why do residential developers prefer large exurban lots? Infrastructure costs and exurban development. Environ. Planning B: Planning Des. 36 (1), 12–29. https://doi.org/10.1068/b33120.
Mosselson, A., 2020. Habitus, spatial capital and making place: Housing developers and the spatial praxis of Johannesburg's inner-city regeneration. Environ. Plan. A 52 (2), 277–296. https://doi.org/10.1177/0308518X19830970.
Mouton, M., Shatkin, G., 2020. Strategizing the for-profit city: the state, developers, and urban production in mega Manila. Environ. Plan A 52 (2), 403–422. https://doi.org/10.1177/0308518X19840365.
Mwando, S. M., Mooya, M. M., & Musvoto, E. (2024). A Systematic Review of Locational Decisions of Property Developers Sam. In E. K. Gavu & C. Okoro (Eds), AfRES 2024 Conference Proceedings (Issue September, pp. 159–172). African Real Estate Society. https://doi.org/10.15396/afres2024-017.
Nappi-Choulet, I., 2006. The role and behaviour of commercial property investors and developers in French urban regeneration: the experience of the Paris region. Urban Stud. 43 (9), 1511–1535. https://doi.org/10.1080/00420980600831692.
Özogul, S., Tasan-Kok, T., 2020. One and the same? a systematic literature review of residential property investor types. J. Plan. Lit. 35 (4), 475–494. https://doi.org/10.1177/0885412220944919.
Paramita, A.A., Winarso, H., Hudalah, D., Syabri, I., 2023. Path dependency and development impacts of megaproject: a case study of north Jakarta Bay Reclamation. Int. J. Sustain. Dev. Plan. 18 (11), 3477–3490. https://doi.org/10.18280/ijsdp.181113.
Pollard, J., 2023. The political conditions of the rise of real-estate developers in French housing policies. Environ. Planning C: Politics Space 41 (2), 274–291. https://doi.org/10.1177/23996544221129125.
Purboyo, A.A., Kurniawan, A., Muta, L., 2024. Analisis Spasial Temporal Perubahan Tutupan Lahan di Kawasan Perkotaan Cekungan Bandung berbasis Google Earth Engine (Spatio-Temporal Analysis of Land Cover Change in the Bandung Basin Urban Area Using Google Earth Engine). Jurnal Pendidikan Geografi Undiksha 12 (2), 251–260. https://doi.org/10.23887/jjpg.v12i02.75526.
Renu, S.K.T., Hussain, T.P.R.S., 2019. A literature review on urban sprawl in developed and developing countries. J. Adv. Res. Social Sci. & Humanities 6 (7), 1–7.
Ro, S.H., Gallimore, P., Clements, S., Fan, G.Z., 2019. Herding behavior among residential developers. J. Real Estate Financ. Econ. 59 (2), 272–294. https://doi.org/10.1007/s11146-018-9675-y.
Robin, E., 2022. Performing real estate value(s): real estate developers, systems of expertise and the production of space. Geoforum 134, 205–215. https://doi.org/10.1016/j.geoforum.2018.05.006.
Rosen, G., 2017. Toronto's condo-builders: development approaches and spatial preferences. Urban Geogr. 38 (4), 606–625. https://doi.org/10.1080/02723638.2016.1179426.
Roy, A., 2009. Why India cannot plan its cities: informality, insurgence and the idiom of urbanization. Plan. Theory 8 (1), 76–87. https://doi.org/10.1177/1473095208099299.
Ruming, K.J., 2010. Developer typologies in Urban renewal in Sydney: Recognising the role of informal associations between developers and local government. Urban Policy Res. 28 (1), 65–83. https://doi.org/10.1080/08111140903356403.
Searle, L.G., 2014. Conflict and commensuration: contested market making in India's private real estate development sector. Int. J. Urban Reg. Res. 38 (1), 60–78. https://doi.org/10.1111/1468-2427.12042.
Shatkin, G., 2008. The city and the bottom line: Urban megaprojects and the privatization of planning in Southeast Asia. Environ Plan A 40 (2), 383–401. https://doi.org/10.1068/a38439.
Shatkin, G., 2014. Contesting the Indian City: Global Visions and the Politics of the Local. 38 (January), 1–13. https://doi.org/10.1111/1468-2427.12039.
Sheng, Y.K., 2002. Housing, the state and the market in Thailand: Enabling and enriching the private secto. J. Hous. Built Environ. 17 (1), 33–47.
Siswanti, D.D., 2013. Pengendalian Kepemilikan RSH Subsidi di Kelurahan Meteseh Kota Semarang. Jurnal Pembangunan Wilayah & Kota 9 (2), 194–204. https://doi.org/10.14710/pwk.v9i2.6536.
Stephens, M., 2013. Social Housing in the United Kingdom. In: Chen, J., Man, Y., Stephens, M. (Eds.), The Future of Public Housing. Springer, Berlin Heidelberg, pp. 199–213. https://doi.org/10.1007/978-3-642-41622-4.
Todes, A., Robinson, J., 2020. Re-directing developers: new models of rental housing development to re-shape the post-apartheid city? Environ. Plan A 52 (2), 297–317. https://doi.org/10.1177/0308518X19871069.
Varkey, A.M., Manasi, S., 2019. A review of peri-urban: definitions, land use changes and challenges to development. Urban India 39 (1), 96–111.
Wahyudi, A., Liu, Y., Corcoran, J., 2019. Generating different urban land configurations based on heterogeneous decisions of private land developers: an agent-based approach in a developing country context. ISPRS Int. J. Geo Inf. 8 (5), 1–19. https://doi.org/10.3390/ijgi8050229.
White, T., Madden, D., 2024. Housing ideology and urban residential change: the rise of co-living in the financialized city. Environ. Plan A 56 (5), 1368–1384. https://doi.org/10.1177/0308518X241230446.

Winarso, H., 2002. Access to main roads or low cost land? Residential land developers' behaviour in Indonesia. Bijdragen Tot De Taal-, Land- En Volkenkunde 158 (4), 653–676.

Witwer, M. (2007). An Untapped Resource: Encouraging Private Sector Engagement in Affordable Housing (Research Series: Cities, Policy & Planning, pp. 1–110). University of Calgary. www.ucalgary.ca/cities.

Zhang, G., Zhang, Y., Tian, W., Li, H., Guo, P., Ye, F., 2021. Bridging the intention–behavior gap: effect of altruistic motives on developers' action towards green redevelopment of industrial brownfields. Sustainability (Switzerland) 13 (2), 1–16. https://doi.org/10.3390/su13020977.