



Exploring Middle-Income Multi-Ownership Housing Affordability in Dhaka: A Case Study on Badda

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ABSTRACT

In the context of sustainable urban development, it is essential to resolve housing provision for the residents of Dhaka City, one of the world's swiftly expanding megacities. The substantial population growth observed in Dhaka exerts significant pressure on land resources, influencing housing prices and causing notable changes in residential neighborhoods. The government accounts for a relatively small portion of the overall housing demand, with the private sector constituting most of the housing industry. Given this context, the present study highlights the complex dynamics of the housing sector by examining the scope and extent of housing accessibility issues that afflict the middle- and lower-middle-income demographics. Increasing housing expenses compromise these income brackets' financial viability. This situation is partially attributable to suboptimal policies that inadvertently restrict housing and land development. Moreover, within the scope of housing policy formulation, the existing regulatory framework represents a significant barrier to providing adequate housing in Dhaka.

1. Introduction

Housing provides shelter or accommodation for individuals, families, or groups and includes various dwelling types like houses, apartments, and condos (Rashid, 2021). It aims to meet essential needs for shelter, safety, and comfort, encompassing convenience, amenities, and a sense of well-being for families (Cheshire, Nathan, and Overman, 2014). According to the U.N. housing policy guidelines for developing nations, housing encompasses all ancillary services and communal amenities needed for humans (Policy Guide for Housing | UN-Habitat, 2016).

Affordable housing refers to housing units financially accessible to low- and moderate-income individuals and families, which is crucial for a city's well-being; otherwise, informal housing would flourish (Stone, 2006). Dhaka, Bangladesh's capital, experiences steady growth, with the 2020 population nearing 23 million and accommodating 735,230 people yearly (Dhaka Population 2023, 2023).

Multi-ownership housing, such as multi-story apartments, is a typical residential structure in Dhaka and is increasingly popular for economic, security, management, and community reasons (Islam, 2016). However, current income trends and policy environments challenge middle-income groups' affordability (Siddika, Badhan, and Wahid, 2019).

Bangladesh lacks a specific middle-income group definition, but they comprise 45% of the population, corresponding to the 4th-8th deciles (Kamruzzaman and Ogura, 2008). Middle-income groups cover a significant portion of Dhaka's residential land (65%), with only 20% owning homes and 80% renting (Noyon and Islam, 2022). This group struggles to maintain a minimum living standard if they spend only 12% of their income on housing (Kamruzzaman and Ogura, 2008). However, middle- and lower-middle-income families in Dhaka often spend 30-40% of their monthly income on housing, leading to severe unaffordability (Chowdhury, 2013). Furthermore, administrative incapacity, insufficient

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government initiatives, and housing and planning restrictions have received little attention, hindering multi-ownership affordability (Chiu and Ha, 2018).

Badda was chosen as this paper's case study due to its location in middle-income group areas. Its mixed-use, primarily residential apartments, reflects the challenges many middle-income groups face in Dhaka (Mostafa, 2022). Examining Badda will enable a comprehensive understanding of the unique challenges middle-income groups face in Dhaka and potentially inform solutions to address these issues. This paper focuses on the lack of affordable multi-ownership housing options (homeownership and rental) for middle-income groups in Dhaka, Bangladesh, exacerbating the struggle to maintain a minimum living standard and hindering the city's overall well-being. An imprecise middle-income definition, negative legislative conditions, and limited government housing affordability programs exacerbate this issue.

The paper examines the barriers middle-income groups in Dhaka face in gaining access to affordable multi-ownership housing and investigates the Badda case study, a middle-income neighborhood serving as an example. Residents of Dhaka with a middle income require targeted solutions and policy ideas to make multi-ownership housing affordable and accessible. A case study of Badda will be used to increase the affordability of multi-ownership housing and serve as a model for similar metropolitan environments in other developing nations. It will contribute to the body of knowledge and aid policymakers and stakeholders in looking for solutions.

2. Aims and objectives

Aims:

Investigate the housing accessibility challenges that Dhaka's middle-income demographic faces, employing insights from the Badda case study to illuminate these complexities and offer feasible guidelines.

Objectives:

1. Analyze Dhaka's income patterns and policies, specifically focusing on their implications for the middle-income demographic's ability to get affordable housing.
2. Utilize the Badda case study to identify potential remedies for enhancing housing affordability and quality among middle-income inhabitants.
3. Outline a fundamental strategy for leaders to enhance the availability of affordable housing alternatives for the middle-income demographic in Dhaka.

3. Literature Review

3.1. Multi-Ownership Housing And Affordability

The lack of universally accepted definitions for housing affordability and affordable housing highlights the influence of contextual factors. 'Affordability' has been a part of U.S. housing policy since the 1960s, with a household deemed affordable if its annual housing costs do not exceed 30% of its yearly income. Households spending over 30% of their income on housing are considered cost-burdened and may face difficulties meeting basic needs like food, clothing, transportation, and healthcare (Defining Housing Affordability | HUD USER, 2017). Housing affordability includes homeownership and rental affordability, centered on households' financial ability to buy or rent a home (Nwuba, Kalu, and Umeh, 2015). Homeownership affordability depends on income, savings, construction time, and education level. Rental affordability is influenced by household size, land costs, building expense inflation, current rental housing costs, and non-housing-related expenses (Yoshida and Kato, 2022).

The ratio approach and the residual stress measure are two primary methods for assessing housing affordability. The ratio approach uses a standardized percentage of income allocated towards housing costs, while the residual stress measure considers available income after housing expenses. Both methods account for variations in housing situations, geographical areas, and household structures (Borrowman, Kazakevitch, and Frost, 2014). The ratio approach is the most common measure of housing affordability (Chiu and Ha, 2018), with an extreme unaffordability ratio of 5.0 or above (Gurran and Whitehead, 2011).

Multifamily residential housing consists of multiple distinct housing units within a single or multiple buildings in one structure. A prevalent type is apartment-style housing (Siddika, Badhan, and Wahid, 2019). An apartment's interior typically surpasses a single cottage or detached home. No housing unit is separate in access, vertical circulation, service features, and structural identity leading to increased sociability and the ability to limit activities that may disturb other residents (Shared Ownership Explained: How It Works (Pacaso, 2021).

3.2. Multi-Ownership Affordable Housing in the Context of Dhaka

Housing markets in developing cities often lack affordable options and are characterized by informal housing supply due to inadequate affordable housing in traditional markets. This leads to a high house price-to-income ratio in developing countries (Chowdhury, 2013). Bangladesh, a developing nation, has made considerable

progress (The World Bank, 2023), but the middle-income group in Dhaka faces affordability issues (Rahman, 2022).

Dhaka, Bangladesh's capital, is one of the world's most densely populated areas, with 23 million residents (Dhaka Population 2023, 2023). By 2035, Dhaka is projected to be one of the largest megacities, with around 31 million people (Russell Schilling, 2016). Dhaka Metro's annual population growth rate is 4.2%, with about 750,000 people added yearly (Dhaka Population 2023, 2023).

Adopting multi-ownership housing, a typical residential configuration in Dhaka, can potentially address the issue of high demand. Around 15.5 lakh people in Dhaka own their homes, while over 90% of the population are renters. A substantial 80% of the city's 1.8 crore residents live in rented accommodations, as homeownership remains unattainable for most. Consequently, a large portion of Dhaka's population, or at least 80%, spends 60% of their income on rent. Between 2000 and 2018, there was a significant increase of 390% in the prices of flats (Noyon, 2019). Analysts assert that the rising property prices in Dhaka are linked to the city's housing deficit and the lack of government initiatives. A 2018 study found that high rental prices in Dhaka made multi-ownership housing unaffordable for many (Kumar, 2022). The house price-to-income ratio in Dhaka was 18.5 in 1993 (Hoek-Smit, 1998), and UN-HABITAT suggests a percentage of 16.7, though the source is unspecified (Chowdhury, 2013). This research's survey results indicate a significantly high ratio (18.75), far exceeding the extreme unaffordability ratio (5.0). Further, high inflation in Dhaka has made housing affordability a significant challenge for middle and low-income families (Al Hossain, 2023). Despite its importance, affordable housing has received limited attention and inadequate focus in addressing the problem.

3.3. Middle-Income Groups and Middle-Income Areas in Dhaka

The middle-income group consists of individuals or households with incomes falling within the middle range of income distribution in a specific country or region. In Dhaka, the middle class represents a significant part of the city's population, with the middle-middle income group accounting for 40% of the middle-class population and 20% of Dhaka's total population (Islam and Zahur, 2016). However, definitions of the middle class in Bangladesh vary, with some sources stating that "vulnerable non-poor" families earn between Tk35,000 and Tk70,000 monthly (Billah, 2020) and others identifying middle-class individuals as those with salaries between Tk40,000 and 80,000 (Hasan, 2021).

Middle-income individuals prefer areas like Dhanmondi, Gulshan, Banani, Baridhara, and Uttara for their well-planned infrastructure and amenities. However,

due to high land prices in these areas, developers recommend alternatives such as Rampura, Bashaboo, Goran, Mirpur, Badda Madartek, and Jigatola as more suitable options for the middle class (Islam and Zahur, 2016).

3.4. Regulatory Regime of the Housing Market in Dhaka

The housing market in Dhaka is negatively impacted by the current regulatory, legal, and funding environment, which fails to support affordable housing adequately and requires reevaluation and modification (Hashim, 2019). There is no specific definition of affordable housing or separate banking regulations addressing this issue (Asiful Islam, 2022). While the Bangladesh National Building Code (BNBC) includes provisions for low-income housing, with the BNBC 2020 containing guidelines for approved affordable housing schemes, concerns have been raised that it may unintentionally hinder affordable housing development (Sarker, Hafiza, and Shahriyer, 2019). The Imarat Nirman Bidhimala 2008, which governs construction in Dhaka, has been associated with increased construction costs, potentially affecting housing prices in the city (Islam, Afroz, and Shakil, 2020). Land registration costs in Dhaka amount to 11% of the total land price, and the Private Residential Land Project Development Regulations 2004 mandate reserving 30% of land for amenities, further limiting salable land to 55-58% due to additional reservations (Chowdhury, 2013). Policy-making efforts in Bangladesh have been criticized for insufficient research and being influenced by the narrow interests of stakeholders involved in the process (Islam and Ahmed, 2015). Regulatory, legal, and funding hurdles aggravate the Dhaka housing affordability dilemma. These factors reduce affordable housing options for low- and middle-income groups. To solve these difficulties, a complete examination and revision of laws and regulations to promote research-driven, inclusive, and stakeholder-oriented decision-making is needed.

Study Area: Badda

The Dhaka Metropolitan Area includes Badda Thana, located at 23°45' to 23°49' north latitude and 90°25' to 90°28' east longitude. It borders Khilkhet Thana to the north, Khilgaon Thana to the south, Rupganj Upazila to the east, and Gulshan, Cantonment, and Rampura Thanas to the west. Spanning 16.78 km² (6.48 sq mi), Badda has a population of 1,579,251, with 55.68% males and 44.32% females.

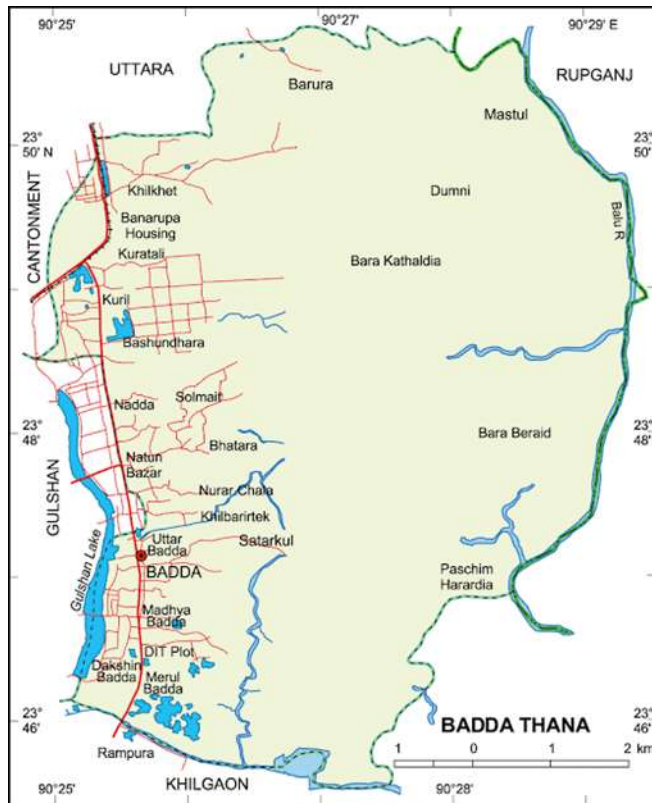


Fig. 1. Badda Thana (bdmaps, 2020)

Its literacy rate, at 58.5%, exceeds the national average of 32.4% (Badda Thana - Banglapedia, 2020). The Bir Uttam Rafiqul Islam Road is on the east, Bir Uttam A K Kandar Road is on the north, and the Hatirjheel-Begunbari project (link road) is on the west.

Badda offers various apartments for rent or purchase, differing prices and rents based on location, size, and amenities. Rental options range from BDT 500 per night to BDT 35,000 per month and 450 sq ft to 1370 sq ft. Apartments for purchase in Uttar Badda range from BDT 22,000 per month to BDT 10,000,000 (Flats for Rent in Badda, Dhaka, 2023). Educational institutions in Badda include Badda Alatunnessa Higher Secondary School, Satarkul High School, and Cambrian School and College. Badda also features various religious sites such as Uttar Badda Hajipara Jame Masjid, Khanbag Jame Mosque, Merul Badda Durga Mondir, and Buddhist Monasteries. The Badda Union provides services like a digital center, education services, security, land office, emergency calls, circulars/orders, and more (bdhousing.com, 2023).

4. Research Design

The study actively incorporates the five most prominent characteristics of a "case study" based research. (N. Groat and Wang, 2013). The current research represents an empirical investigation in Badda aimed at identifying the factors hindering multifamily housing

availability. The study establishes a causal connection between affordable multi-ownership housing, the income patterns of middle-income groups, and the regulatory framework that governs the housing market. The research draws upon various evidence sources and strives to construct a holistic theory related to unaffordable multi-ownership housing.

1. Research Design: This study employs a case study research design, focusing on a single case (Badda) examined within their real-life contexts. The present study uses "Case Studies" to reinforce the abovementioned concepts.

2. Data Collection: The research will use government reports, housing market data, etc., to determine causal linkages. Questionnaires and semi-structured interviews acquired field data.

Semi-structured interviews were conducted to allow for focused, two-way conversations. Using Creswell's data collection framework (1992), data was collected and organized from ten participants across three different Badda locations, offering a more flexible and open approach to gathering information.

The second step of the study involved a survey, informed by semi-structured interviews and prior literature. The survey had two sections: one focused on personal information and the other on barriers to decent housing. It was distributed and collected through digital and direct channels, using a Likert scale for responses. Out of 70 questionnaires sent, 31 participants took part in the research.

Theory Development: The research design phase will involve developing a theoretical framework that connects the causal relationships between affordable multi-ownership housing, middle-income group income patterns, and the regulatory framework of the housing market.

Data Analysis: The collected data will be analyzed using a triangulated approach, combining quantitative and qualitative methods to understand the findings comprehensively. of multifamily housing.

Generalization: Based on the analysis, the study will strive to formulate a holistic theory related to unaffordable multi-ownership housing that can be generalized to other contexts.

5. Respondents Detail

A comprehensive questionnaire survey was administered to the residents within the designated research area to obtain data on each household's monthly income and expenditures and elicit participants' perceptions regarding the local housing conditions. The survey instrument comprised open-ended and closed-ended queries, enabling the participants to articulate their

viewpoints and discuss pertinent issues. A substantial proportion of the respondents (63%) were categorized as middle-income (MMI), while 30% were identified as lower-middle-income, and the remaining 6% were classified as upper-middle-income; individuals who did not conform to the target demographic categories delineated in the present sample were subsequently excluded from further analysis. Among the respondents, 76% were found to reside in rented accommodations, whereas 23.3% inhabited owner-occupied dwellings. The prevalent apartment sizes ranged between 900 and 1000 square feet for lower-middle-income and middle-income groups.

Table I: For this research, distinct income categories in Dhaka were identified.

Income Class	Frequency	Monthly Earnings Range (BDT)	Flat size (Sq Ft)	Percent
Lower-middle income	9	20,000–35,000	700-900	30.0%
Middle-middle income	19	35,001–70,000	1000-1300	63.33%
Upper-middle income	2	70,000+	1300+	6.66%

Table II: Distribution of questionnaire sample sizes by kind of residence

Ownership Structure	Frequency	Percentage
Owner-inhabited	7	23.33%
Rental	23	76.66%
Total	30	100%

6. Discussion

6.1. The Nature And Scope of Dhaka's Housing Affordability Issues

The complex relationship between housing affordability and dwelling expenses is closely connected to two critical factors: housing costs and household income. Assessing affordability varies across social and economic settings, with no universally agreed-upon approach to determining housing accessibility. Consequently, no uniform strategy exists. This section examines the primary and secondary data collected from the study participants mentioned in the preceding section, providing a deeper analysis of the affordability factors associated with homeownership.

A. Affordability Problems in Homeownership

Homeownership constitutes a pivotal aspect of a satisfactory living standard (United Nations, 2009). The field research conducted in this study reveals that 76% of

the population resides in rented accommodations within the area under investigation. Various factors contribute to this phenomenon, such as pricing patterns and components associated with residences in the research locale. Furthermore, metrics like house-price-to-income ratios, the proportion of post-housing income required to cover minimal living expenses, down-market penetration, and others can be assessed. Depending on the developer's reputation, apartment prices may vary significantly within the same building. The Hatirjeel development project has a pronounced impact, propelling apartment prices to surge nearly 100% over the past decade. The average apartment spans 1,000 square feet, with prices extending to BDT 12,000 per square foot (Field Survey).

B. The uneven price components of apartment units

The field survey reveals numerous ancillary expenses impede affordability aside from elevated apartment prices. For instance, customers must account for registration fees, utility connection charges, transfer fees, and the property's base price. The parking space cost is frequently excluded from the apartment price, necessitating separate payment by the purchaser. Registration expenses are determined by the bid value for five components of each apartment section, encompassing stamp duty, capital gains tax, registration fee, VAT, and municipal fee, with individual amounts payable for each element—service connection costs for each unit amount to approximately BDT 150,000, beyond the registration fee. Moreover, customers are obligated to pay a conversion tax under the '1984 Income Tax Ordinance.

C. Measuring homeownership affordability

The findings reveal that households in Bangladesh typically earn a monthly income ranging from BDT 25,000 to 70,000, with the median income for survey participants falling between BDT 40,000 and 50,000. Housing expenses pose a significant challenge for lower- and middle-income families, necessitating allocating 40% to 50% of their monthly earnings. Consequently, the minimal standard of living only fulfills the most rudimentary needs of children, who may lack recreational activities and adequate education, among other essential aspects. The expenditure on housing fluctuates between 40% and 50%, rendering homeownership an unattainable goal given the current income trends.

Table III: Distribution of questionnaire sample sizes by kind of residence in Badda

Income BDT (Month)	Frequency	Expenditures on a Household	Percentage
20,000–35,000	9	10,000-19,000	50%-55%
35,001–70,000	19	20,000-25,000	35%-40%
70,000+	2	20,000-25,000	25%-30%

Table IV: Distribution of questionnaire sample sizes by kind of residence in Badda

Income BDT (Month)	Frequency	Associated non-housing Expenditures	Percentage
20,000–35,000	9	10,000–15,000	40%–45%
35,001–70,000	19	15,000–30,000	40%–45%
70,000+	2	25,000–35,000	35%–50%

Furthermore, the average price of a 1,000 sqft apartment in this region ranges from 5 to 6 million BDT. When juxtaposing the annual income (BDT 300,000 to 840,000) with the apartment price ratio, the resulting variation spans from 8 to 20, significantly exceeding the acceptable threshold of 3.0. Consequently, the distorted market dynamics render homeownership virtually unattainable for the middle-income population.

Table V: Distribution of questionnaire sample sizes by kind of residence

Income BDT (Annual)	Apartment Price BDT	Income to Price Ratio (Accepted Globally)	Income to Price Ratio (Current)
3,00,000–8,40,000	50,00,000 - 60,00,000	2.5–3.0	7.5–20

Furthermore, the empirical investigation ascertained that the price of 1 khata (720 sqft) land in the study area fluctuates between BDT 5 million and 8 million (Field Survey). The analysis of survey data reveals that the land-price-to-income ratio for the middle-income demographic in this region spans from 9.5 to 26.6. Consequently, a middle-income household must allocate 10 to 26 years of financial resources to procure 720 square feet of land.

Table VI: Distribution of questionnaire sample sizes by kind of residence

Income BDT (Annual)	The average price of serviced land/Katha (720 sqft)	Income to Price Ratio (Current)
3,00,000–8,40,000	50,00,000 - 80,00,000	9.5–26.6

D. Affordability problems in rental housing

Owing to the exorbitant costs and challenges associated with purchasing property in Dhaka, the middle class predominantly relies on rental accommodations (Bikroy, 2022). The rental affordability literature posits that the standard criterion for developing countries entails allocating 25–30% of initial rental income toward housing expenses, inclusive of utilities. The term "housing cost-burdened" is applied to households that expend more than this specified proportion. A family is deemed "severely cost-burdened" if their housing expenditures surpass half their monthly income (Gurran and Whitehead, 2011).

Without formal rental records, the median rent-to-income ratio is 45–50%, indicating that a family with a median monthly income of BDT 40,000 must allocate 50% of their earnings to rent. Consequently, this situation can be characterized as "severely cost-burdened." As a result, the middle-income demographic grapples with maintaining a modest standard of living after covering rental costs. Housing affordability concerns have been further exacerbated by the persistent escalation in building material prices over the past several decades. Empirical analyses reveal that the expense of essential construction materials has nearly doubled or quadrupled within the preceding decade.

6.2. Housing Affordability: Policy Dynamics' Supply-Side Factors

By analyzing Badda's policy environment, the research will investigate the supply-side factors contributing to affordability concerns. One could argue that the regulatory framework acts as a 'gatekeeper' for the availability of buildable land, which is crucial for the housing supply. A rigorous regulatory framework imposed by planning bureaucracies may result in 'stochastic control of growth,' described as a scenario in which rules govern the presence, timing, or size of housing construction in unpredictable ways that might alter the housing system (Cornell et al., 2020).

In addition, one may argue that the government's efforts to ensure a sufficient supply of low-cost housing necessitate the implementation of existing legislative standards. Numerous legislation and statutes are now in force in Dhaka to govern the housing and land markets, including the following: Dhaka Metropolitan Development Plan (DMDP), Dhaka Imarat Nirman Bidimala 2008, Bangladesh National Building Code (BNBC) 2020, The Private Residential Land Project Development Rule 2004.

A. Controlling urban growth - an unsuccessful policy instrument

Modern urban growth control measures may be implemented through zoning laws, green belt legislation, creative growth policies, growth limitations, building permit caps, development moratoriums, and residential subdivisions. Apart from zoning regulations, Dhaka does not have other urban development management mechanisms. It is unexpected and has exacerbated the problem by imposing unnecessary restrictions on residential home builders and developers.

However, the survey concluded that Badda's common zoning restrictions are ambiguous and have no discernible influence on the availability of residential land and kinds of development. Additionally, no provision is made for inclusionary zoning. In fact, due to legislative changes and even illegal conversion, many of the communities along

the route have become mixed-use, which is one of the key drivers of increased land and house costs in those areas. Dhaka's Detailed Area Plan (DAP) proposes Seventeen alternative land use zones (Chowdhury, 2021). According to the DAP, most of the property is designated for residential use. Residential density, size, or height are all unrestricted variables. However, the Floor Area Ratio (FAR) imposes indirect limits on building density (FAR).

B. Controlling urban growth - an unsuccessful policy instrument

Land-use planning is the best way to go regarding the future use of property in the public interest and reducing conflicts with land use. To address the city's chronic housing shortage, the present land-use policy in Dhaka, known as the Dhaka Area Plan (DAP), calls for additional land areas appropriate for residential development. The plan lacks a solid geographical emphasis and a defined vision for meeting the anticipated population growth. Rather than that, it predicts enormous suburban land tracts without considering infrastructure or related consequences such as land speculation and occupation. This property speculation has already started in most key road frontage properties. Almost 37% of the examined area has been converted to mixed-use and 15% to commercial sections along Bir Uttam Rafiqul Islam Avenue (JICA & DTCA, 2016).

Additionally, land development rights are not limited and remain landowners' property. However, no incentives are provided to landowners or developers to build affordable housing units. Consequently, no single project constructed in this region has favored affordable housing throughout the last decade. As discussed in this section, Dhaka's land-use rules failed to leverage development rights control to solve the city's housing demands, especially in this region.

C. Development rules act as a deterrent to the development of affordable housing

Dhaka's residential land development and building regulation is governed by two key legislations: the Private Residential Land Project Development Rule 2004 and the Dhaka Megacity Building Rule 2008. To build affordable housing, developers must apply to the RAJUK urban planning committee for setback relaxation, road width, floor area ratio, and total land coverage. This rule, however, is impractical since it is not an optimal criterion for middle-income group categories. Badda covers around 62 acres or 31 hectares and has a population of about 70000 people at a density of about 1130 persons per acre. According to it, under the Regulations 2004, Private Residential Land Project Development must retain at least 30% of the total land area in any land development project in Dhaka, which is particularly unsettling in light of the current circumstances.

A residential construction project in the Badda region must be at least two hectares in size (5 acres) according to

the Private Residential Land Project Development Rule of 2004. Given the land supply, pricing, and market demand, they are developing this region entirely for high-income, mixed-use, or commercial buildings. As previously mentioned, 70% of the entire land may be sold, with a minimum of 30% left aside for infrastructure and utilities. In addition, the land development legislation sets a density limit of 700 people per hectare, which is almost half the current population. Setbacks are often essential to safeguard streetscapes and provide a sense of continuity. A large portion of the land must be preserved to meet setback requirements. 70% of plots studied are between three and five Khatas, while the majority are fewer than ten Khatas. According to this rule, only 2,250 square feet of a 3,600-square-foot may be used for development. This equates to around 33% of a standard five Katha plot's land area relinquished to meet setback requirements. In order to retain density and supply affordable housing at the same time, it is just not viable from an economic standpoint.

D. Planning permission process and Substantive impediments of Building Code and Standards

Residential unit planning authorization in Dhaka is complex and requires many administrative processes. The field investigation revealed that Badda has a complicated and lengthy planning permission process like Dhaka. About 65% of respondents said the process took one to two years.

Builders and developers have detailed this long and challenging procedure. The approval procedure is a crucial element affecting this area's housing market. Delays in the approval process contribute to an increasing imbalance between housing supply and demand, affecting housing prices. For low- and middle-income people, Bangladesh's Building Code reduced several laws for minimum quality housing and abolished the necessity for minimum floor space, but it did not reduce building quality criteria.

The national housing policy places a premium on locally obtained and affordable construction materials and is opposed to cost-cutting goods and technology. By placing such constraints on alternative materials, even if the national building code does not explicitly ban them, the code discourages their usage. Only government authorities or public agencies can determine the number and location of such settlements and the layout of units inside the settlement under a master plan. Houses shall not exceed 400 units with an average of five people per unit and a maximum of 20 meters high (6 stories).

E. Badda: affordability issues with rental housing

One of the significant reasons that middle- and lower-middle-income families cannot reside in low-cost, informal settlements in Dhaka is the dominant social environment. As a result, individuals must pay rent that exceeds their

means, which is prevalent in the researched area. Even if they live in this place for social reasons, over 95% of respondents in this study had suffered severely burdened housing rent. According to the survey, a lower-middle-income family spends over 50% of its earnings on rental expenditures, while a middle-middle-income family spends nearly 40% on apartment rent. The Rent Control Act of 1991 has no particular provision regulating rent. When asked if they had any formal agreement with the homeowner, practically all responded negatively.

F. Respondents Views Toward the Housing Affordability Problems

The study's findings were supported by interviews and surveys that found various challenges affecting Badda's housing affordability. Most respondents asserted Dhaka's economic importance and centralized facilities act as a "pull factor," attracting people from across the country and resulting in migration to Dhaka. About 70% said they chose to live in Badda because of its geographic advantages for work. The survey found that 50% of respondents believe inefficient government institutions and a lack of government effort hinder affordable home construction. Many respondents indicated that a lack of knowledge of home loans and finance companies complicates the procedure. Land price hikes and scarcity also affect housing affordability.

Table VII: Several factors are exacerbating Badda's housing crisis.

Causes	Frequency	Percentage
Inefficient government agencies and a lack of effort to provide affordable housing	10	50
Insufficient housing loan availability and modest financing institution expertise	5	25
The high property prices	4	20
Other Causes	1	5
Total	20	100

7. Guidelines for Solving Housing Affordability Issues in Dhaka, with Emphasis on Badda

01. **Comprehensive Urban Planning:** Comprehensive Urban Planning requires a complete evaluation and updating of the urban master plan, especially in fast-growing places like Badda, due to expected population expansion. Establishing and refining zoning restrictions to accommodate various housing types and ensuring affordability across income levels are essential to this process.

02. **Financial Solutions:** Public-private partnerships (PPP) to fund affordable housing projects, housing finance institutions to offer flexible loan schemes for low- and

middle-income groups, and financial literacy programs are needed for comprehensive urban planning. These efforts will promote affordable housing alternatives for a wide range of society by equipping people with the knowledge and resources to make educated housing market decisions.

03. **Policy and Regulatory Reforms:** In comprehensive urban planning, several crucial measures must be taken. These include reevaluating building laws to promote sustainable, locally sourced, and economically feasible construction materials. Revising the Rent Control Act, which protects tenants from exploitation and compensates landlords, is also intended. Land use limitations are essential to reduce speculative landholding and minimize artificial land value inflation.

04. **Affordable and Inclusive Housing Projects:** A comprehensive urban development strategy aims to enable the government and private developers to work together to create affordable housing for middle-class individuals. It also encourages mixed-income and multi-ownership housing, which promotes inclusion by housing people of different incomes. Community land trusts are a strategic way to regulate and supervise land use to meet middle-class demand for housing.

05. **Capacity Building:** To achieve improved urban development strategies, it is imperative to use a holistic strategy towards capacity building. This entails training government personnel in housing departments to ensure their knowledge and awareness of global best practices. In a similar vein, the provision of training sessions aimed at builders and developers in sustainable and economical construction approaches serves to foster a comprehensive approach towards advancing the cause of efficient urban development.

8. Conclusion

The housing affordability dilemma in Badda manifests the various challenges faced by Dhaka, highlighting restrictions in urban planning, financial resources, and policy implementation. The housing sector has had challenges arising from imbalances between supply and demand and escalating rental prices, which can be attributed to bureaucratic delays in issuing planning permits. Although the national housing policy and building regulations are designed with commendable intentions, they appear to impede innovation and hinder cost-effective development.

The relevance of affordability rules increases as Dhaka continues to attract migrants as a result of its robust economic activity. A range of varied solutions have been proposed to tackle the housing challenges in Badda and Dhaka effectively. These solutions include comprehensive urban planning, financial innovations, legislative changes, inclusive housing programs, and capacity-building initiatives. Collaboration between governmental and business entities is crucial in establishing an urban

environment where access to housing is regarded as an inherent entitlement rather than a privilege.

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