BIoHS - Journal
Britain International of Humanities and Social Sciences Journal
| Publish : February - June - October |
E-ISSN: 2685-3868
P-ISSN: 2685-1989
http://biarjournal.com/index.php/biohs

Cities in Crisis: Exploring Discontents and Challenges of Unplanned Urban Growth in Bangladesh

Buddha Dev Biswas[1], **Shaira Matin**[2]
[1]Associate Professor, American International University-Bangladesh
[2]Senior Assistant Professor, American International University-Bangladesh
Email: bdbiswas@aiub.edu, shaira102@aiub.edu

Abstract: *Urbanization has accelerated rapidly over the past few decades in all divisional cities of Bangladesh. This paper closely examines the nature and extent of urbanization in Bangladesh, particularly in Dhaka and Chittagong the two mega cities of the country. It provides a historical analysis of migration patterns, changes in population structure, and the pressure on infrastructure, health facilities, education, electricity supply, safe drinking water in urban centres, with a special focus on the expanding slum sector. Qualitative data analysis on the scale of migration is used to model the stakes in social systems and urban architecture. A primary analysis of infrastructure deficits in transportation, housing, and public services assesses the system's limited capacity to meet current urban demands. To gauge the depth of urban discontent, sanitation, lighting, and access to food, water, and clothing in slum areas are also examined. Inspired by Ananya Roy's work, the study uses subaltern urbanism to highlight informal settlements not as urban failures rather as an alternative urban development through innovation, resistance and alternative forms of urban modernity. Finally, policy debates and urban planning prescriptions are presented to address these challenges, aiming to enhance Bangladesh's future urban development by reducing vulnerability and promoting inclusive growth. This paper contributes to the literature on sustainable urban development in rapidly developing regions.*

Keywords: *Urbanisation; Slum sector; Social systems; Dhaka; Chittagong; Bangladesh*

I. Introduction

Bangladesh faces enormous challenges resulting from globalization, particularly urbanization, which has placed significant pressure on cities like Dhaka and Chittagong. These challenges include acute housing deficits, infrastructure strains, and expanding slums, all of which threaten social cohesion and economic growth. Urbanization is one of the most influential processes shaping developing countries, and it is a decisive factor in Bangladesh, where the population is gradually shifting from rural to urban areas.

This shift is evident in the rapid expansion of Dhaka, which has grown tremendously to accommodate millions seeking better living standards. The influx of people, driven by stark disparities between widespread rural poverty and perceived urban opportunities, presents both prospects and challenges (Singh et al., 2020). While cities offer the promise of access to services and employment, they also struggle to provide adequate infrastructure. This strain has intensified demands for urban development, leading to the widespread growth of the informal sector.

Analysing the historical background of Bangladesh's urbanization, we found it to be highly dynamic. Urbanization in Africa was especially rapid and intense in the 1950s and 1960s, with urbanization rates averaging 5% per year (Islam, 2019). In Bangladesh, this growth

DOI: *https://doi.org/10.33258/biohs.v7i2.1328*

accelerated further in the 1970s following independence in 1971, leading to a sharp increase in the urban population. In 1971, only 7% of the population lived in urban areas, but this figure had nearly doubled to 11% by the late 1980s. While the growth rate slowed slightly in the 1980s, it remained above 4% per year—still significantly higher than the global average.

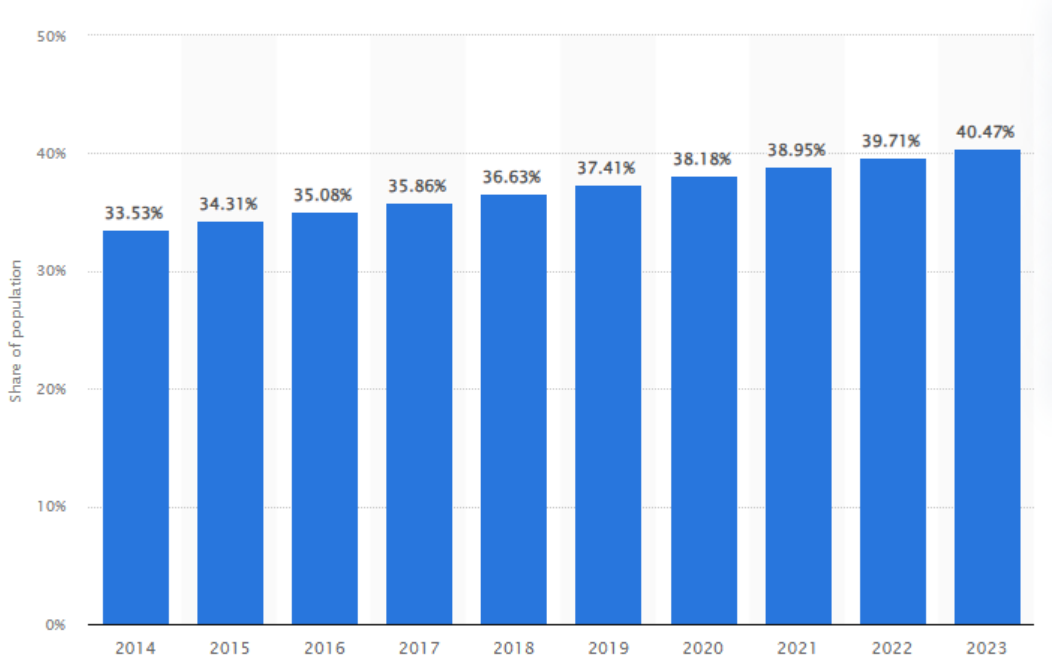

Figure 1. Share of the urban population Bangladesh 2014-2023
(Source: Statista, 2024)

Statista Research Department (2024) projection indicate that the percentage of the urban population in Bangladesh total population will increase by 0.8% in 2023 (Islam, 2019). Consequently, the urban population share reached its peak in 2023 at 40.47%. However, it is important to note that this share has been steadily increasing in recent years.

The justification for analyzing urbanization-related discontent in Bangladesh lies in the need to manage the negative impacts of Rapid City expansion on social structures and transformations. Urban population growth has led to an increase in slum areas, overcrowding of social facilities, and adverse environmental effects. Assessing these challenges provides valuable insights into necessary policies for sustainable urbanization (Marvuglia et al., 2020). Developing practical recommendations for expanding and improving infrastructure can create better living and business conditions in urban environments, ultimately contributing to national development goals and enhancing the quality of life for urban residents.

II. Review of Literatures

As stated by Islam (2019), Bangladesh is one of the most densely populated countries in the world; however, there is a stark contrast between urban and rural areas. The country currently has a population of over 160 million people and covers an area of 147,000 square kilometres. However, the majority of the population resides in rural areas, and the nation remains primarily agricultural. The rate of urbanization has been relatively slow and gradual, with only about 28% of the population becoming urbanized by 2011. Nevertheless,

population density stands at approximately 1,100 persons per square kilometre. This means that despite the urban population reaching 43 million in 2011, the majority still lived in rural areas (Bangladesh Bureau of Statistics, 2011).

The rate of urbanization in Bangladesh is comparatively high, driven primarily by the pursuit of better income and living conditions in the two major cities, Dhaka and Chittagong. Despite the economic opportunities that urban areas offer, rural-to-urban migration is overburdening city infrastructure, further reducing available housing and straining water and sanitation systems. According to Ahani & Dadashpoor (2021), urbanization transforms nearly all aspects of a society's socioeconomic character. People migrate to urban centers in search of economic opportunities, leading to an influx that surpasses the cities' capacity to provide essential services such as shelter, food, water, and healthcare. As a result, urban poverty is increasing, with many new residents ending up in slums or informal settlements that lack adequate housing and access to basic services. This has widened socioeconomic disparities within the urban population, highlighting the social consequences of economic development in the country.

Furthermore, the rapid expansion of the urban skyline is significantly transforming agricultural land into residential and commercial use, which threatens long-term sustainability—not only in terms of food security but also through biodiversity loss. Another challenge is the blurring of boundaries between urban and rural areas, with peri-urban spaces falling outside clear management and planning categories. As stated by Bibri et al. (2020), there is a pressing need to develop viable strategies for city development to address these challenges. Effective policy interventions must accommodate the growing urban population while simultaneously improving living standards and promoting sustainability. Community engagement in planning, along with gender-sensitive policies and innovative mechanisms, is essential for effectively mitigating socio-economic impacts.

The implications of these findings are clear: Integrated strategies for urban development are a crucial and timely issue that must prioritize fairness and sustainability. According to Cattaneo et al. (2022), policies must address the socio-economic realities of urban populations and work to reduce existing inequalities.

As urbanization in Bangladesh accelerates, its ecological impacts have worsened significantly, emerging as major threats to sustainable development. This scholarly review aims to demonstrate that environmental conditions in Bangladesh's major cities are becoming increasingly hostile due to rapid urbanization and unchecked industrial growth. As stated by Manisalidis et al. (2020), air pollution has reached hazardous levels, primarily due to emissions from motor vehicles and industries. Additionally, water resources are severely contaminated due to improper disposal of industrial waste and human sewage, posing serious health risks and compromising the well-being of urban residents. Furthermore, the rising population density and urban expansion in cities such as Dhaka and Chittagong have led to a significant decline in green spaces.

This loss not only eliminates habitats that support biological diversity but also weakens other urban ecosystem services, such as urban microclimates that help mitigate the effects of heat islands and poor air quality. Additionally, there is a significant lack of compliance with existing environmental laws designed to counteract the detrimental effects of urbanization. According to Lihua et al. (2020), the lack of an effective framework for environmental governance in urban planning has several critical implications. They emphasize the need for

restrictive environmental statutes that are properly legislated and implemented to reduce pollution and curb uncontrolled urbanization. Furthermore, they suggest adopting green technologies in the construction sector and promoting sustainable practices in future urban development. The authors also advocate for a comprehensive approach to urban environmental governance that involves the government, private sector stakeholders, and community participation.

According to Gong et al. (2020), such collaborative efforts are crucial in developing effective solutions to the pressing environmental challenges caused by urbanization. The governance structures responsible for managing urban growth in Bangladesh are deeply strained by issues affecting urban planning and overall development. As highlighted in South Asian Urban Affairs, these challenges stem from a governance framework that is fragmented, opaque, and lacks accountability for urban life quality and infrastructure project performance. According to Karmaker et al. (2023), governance challenges significantly hinder effective city management in Bangladesh's major cities, particularly Dhaka. In many cases, multiple agencies are tasked with governing urban areas, yet they suffer from poor coordination and jurisdictional confusion. This results in inefficiencies in resource allocation and policy implementation. Such disconnections contribute to severe infrastructural gaps and an inability to execute critical urban development projects, including the construction of roads, sewage systems, waste disposal facilities, and improvements in water supply.

Many organizations' plans and decisions are significantly hindered by bureaucratic procedures and political influence, which interfere with strategic planning for urban development. This results in the enforcement of policies that not only lack a clear strategy but also fail to adequately address issues such as urban sprawl, congestion, and inadequate housing. According to Vela-Jiménez et al. (2022), these governance deficits are not only a barrier to sustainable urban development but also contribute to the worsening of social and economic inequalities in urban areas

2.1 Theoretical Framework

The study uses subaltern urbanism, inspired by the works of Ananya Roy and others, to provide a critical lens through which to examine the lived realities and agency of marginalized urban populations, particularly those inhabiting informal settlements. This theory challenges the deficit-focused narratives that often portray slums and informal sectors as failures of urban development. Instead, it highlights these spaces as sites of innovation, resistance, and alternative forms of urban modernity (Roy, 2011).

a. Core Tenets of Subaltern Urbanism in the Bangladeshi Context

1. Urban Informality as a Space of Agency

The burgeoning slum areas in Dhaka and Chittagong, often stigmatized as zones of deprivation, are reimagined through subaltern urbanism as hubs of economic ingenuity and community-driven solutions. Residents navigate systemic exclusions by creating informal economies, self-organized housing, and networks of mutual aid to address infrastructural deficits such as housing, water, and sanitation

2. Counter-Narratives to Urban Deficits

Urbanization in Bangladesh is often framed in terms of its challenges: overpopulation, inadequate infrastructure, and environmental degradation. Subaltern urbanism reframes these issues by emphasizing the systemic inequalities that drive these conditions while

foregrounding the resilience of marginalized communities. The focus shifts from viewing slums as problems to understanding their potential for transformative urban policies.

3. Resistance through Urban Praxis

Slum dwellers in Bangladesh actively resist their marginalization by engaging in grassroots movements, advocating for policy changes, and utilizing public spaces to assert their rights. These acts of resistance align with the subaltern urbanism ethos, showcasing how marginalized communities contest and reshape urban power structures

b. Relevance to Themes in Urban Bangladesh

1. Migration and Urban Growth

The influx of rural migrants into Dhaka and Chittagong illustrates the spatial and economic inequalities that define subaltern urbanism. These migrants are often forced into informal settlements, where they construct alternative urban futures through informal housing and economies.

2. Infrastructure Deficits and Environmental Justice

Subaltern urbanism critiques the systemic neglect that exacerbates infrastructural deficits in slums. It calls for participatory urban planning processes that prioritize the needs and voices of slum dwellers in addressing critical issues such as water access, sanitation, and transportation

3. Slums as Sites of Innovation

The informal settlements in Bangladesh are not merely zones of exclusion but spaces where marginalized populations innovate to meet their daily needs. From collective water-sharing systems to makeshift housing solutions, these practices exemplify the creativity and resilience central to subaltern urbanism

c. Policy Implications of Subaltern Urbanism in Bangladesh

1. Inclusive Urban Governance

Subaltern urbanism advocates for governance models that integrate the voices of slum dwellers into urban planning processes. This involves decentralizing decision-making and fostering partnerships between governments, NGOs, and local communities.

2. Recognition of Informal Economies

Policies must recognize and support informal economies as legitimate contributors to urban development rather than criminalizing them.

3. Sustainable and Equitable Infrastructure Development

Investments in infrastructure must prioritize the needs of marginalized communities, ensuring equitable access to essential services such as water, housing, and transportation.

4. Environmental Sustainability and Resilience

Subaltern urbanism emphasizes the need for urban policies that address environmental vulnerabilities while enhancing the resilience of slum communities to climate-related risks.

III. Research Methods

This research adopts an inductive approach, a widely recognized academic research method that relies on observation and interaction for data collection and theory development. The inductive method is flexible, enabling the researcher to adjust the scope and focus of the study based on emerging patterns and data. It facilitates the refinement of research ideas and hypotheses while aiding in the identification of underlying patterns in the project (Leatherbee & Katila, 2020). As is typical in data-driven analyses, once the data has been gathered, it becomes meaningful when applied to theoretical frameworks and used to predict outcomes. This approach underscores the complexity of the issue under investigation and provides a robust foundation for establishing a coherent research strategy.

Interpretivism is a sociological philosophy that allows the researcher to focus on the social dimensions of a phenomenon, utilizing qualitative data as opposed to quantitative data. This approach embraces a variety of research methods and definitions, emphasizing cultural commonalities and values, and promoting the acceptance of diverse organizational cultures (Da Veiga et al., 2020). By responding to and integrating secondary data, interpretivism offers distinct insights and facilitates deeper understanding through feedback and interaction.

The exploratory research design is employed when there is limited prior knowledge of the topic, with the primary goal of developing new ideas and laying the groundwork for future studies. This design is instrumental in generating hypotheses and theories that can spur novel insights in a specific area of inquiry. A key reason for adopting an exploratory, qualitative approach is to investigate complex issues, such as data protection and cybercrime in the adult entertainment industry (Khan et al., 2024). The subjective nature of qualitative data emphasizes the importance of addressing the central research problem.

The research is grounded in empirical findings, which are derived from both primary and secondary data collection methods. For this study, secondary data collection is utilized, encompassing online research, case studies, and literature reviews. Secondary data provides a valuable resource for generating hypotheses, thus streamlining the data collection process and reducing the overall workload (Ottaviani Aalmo et al., 2023). Exploratory research typically relies on secondary data, a key advantage of this design that allows for efficient and cost-effective data gathering while maintaining accuracy.

Thematic analysis is a qualitative method used in secondary research to identify patterns and themes within the collected data, thereby expediting the analysis process and reducing time consumption (Dhanaraj et al., 2021). In this study, thematic analysis was applied to categorize a wide range of journals, articles, and online surveys.

Purposeful sampling is a technique in which participants are selected based on specific characteristics or attributes, ensuring that the sample accurately represents the population. This sampling method enhances the relevance and depth of the collected data, making it well-suited for the specific needs of the study. However, it is important to note that purposeful sampling has limitations in terms of generalizability and may carry the risk of biased participant selection, which could potentially influence the study's results.

Research Ethics

The researcher utilized credible sources, including books, newspapers, articles, journals, websites, and other reliable materials. To ensure the inclusion of the most up-to-date information, only sources published between 2020 and 2024 were considered.

IV. Results and Discussion

4.1 Theme one: Urban Migration Dynamics and Demographic Transitions

This theme primarily addresses migration to urban areas, with a specific focus on the two major cities of Bangladesh: Dhaka and Chittagong. It examines the underlying factors that drive migration from rural areas to urban centers, including employment opportunities, educational facilities, and access to quality healthcare. A critical aspect of this process is the identification of demographic changes that accompany such movements, particularly the reconfiguration of age and gender structures in cities (Törnberg, 2021). Additionally, the research will explore the societal consequences of these demographic trends, which may, in turn, influence family structures and housing patterns in these cities. By identifying migration patterns and comparing them with changes in demographic characteristics, this theme will provide a comprehensive analysis of how urbanization shapes the population and social dynamics in Dhaka and Chittagong.

Furthermore, the theme will assess the future implications of these demographic changes for urban design and policymaking. It will explore how cities adapt to these shifts and the evolving nature of urban populations (Des Roches et al., 2021). This thematic analysis will provide valuable insights into the changes needed in structures, processes, and systems to better support and improve the lives of people living in urban spaces amidst ongoing demographic shifts.

4.2 Theme two: Evaluation of Existing Urban Infrastructure and its Capacity to Support Population Growth

This theme thoroughly examines the capacity of existing infrastructure in both Dhaka and Chittagong to adequately accommodate their growing populations. Given these changes, it is essential to assess whether the current infrastructure—including housing, public transport, water supply, and sanitation—can effectively meet the increasing needs of citizens during this period of rapid urbanization. This inquiry will identify significant deficiencies in infrastructure and the gap between the capacity of major cities and their corresponding populations (Kumar et al., 2020). The goal of the research is to highlight the demand for infrastructural changes by analyzing the current layouts of metropolitan areas. For instance, it will assess how effectively transport services meet the daily mobility needs of residents and whether the existing housing stock can accommodate the growing urban population. Additionally, factors such as the availability of essential services like clean water supply and the efficiency of waste management will be evaluated to determine their capacity to improve the overall health standards within the community.

The overall purpose of this theme is to provide planners and policymakers with the necessary information regarding the inadequacy of urban infrastructure, aiding their decisions on future development projects. It will develop policy frameworks for implementing improvement measures to ensure the robust performance of urban systems that can support future population growth (Datola, 2023). Ultimately, this thematic analysis will contribute to the design of effective and sustainable growth policies for African cities.

4.3 Theme three: Conditions and Developments in Urban Slum Areas

This theme explores the availability and quality of living facilities, as well as the infrastructure issues in the slum areas of Dhaka and Chittagong. It aims to provide an in-depth analysis of how essential human necessities, including shelter, hygiene, and water, are being addressed in these densely populated residential areas. The study will identify various shortcomings in the physical facilities of housing, including the lack of basic infrastructure, amenities, and structural stability, all of which jeopardize the health of slum residents. Furthermore, the theme will evaluate the preparedness and effectiveness of sanitation facilities in preventing the spread of diseases and maintaining hygiene. The availability of clean water and its connection to living standards and sanitation will also be discussed in detail (Bayu et al., 2020). This part of the research will highlight significant deficits in services and infrastructure that increase the vulnerability of slum dwellers to environmental and health risks.

In addition to providing descriptive social summaries of the communities, the research will also examine potential policy strategies, community involvement, and improvement measures aimed at enhancing existing living conditions (Wallerstein et al., 2020). To achieve this, both governmental and non-governmental programs will be assessed, and alternative methods for improving living standards in these areas will be explored.

4.4 Theme four: Urban Migration Dynamics and Demographic Transitions

The theme titled 'Urban Migration Dynamics and Demographic Transitions' is focused on understanding the nature of migration to urban areas such as Dhaka and Chittagong. It examines the rationales for migration, including employment and education opportunities, as well as the impact on the demographics of these cities. This theme explores how migration has affected the physical layout of the cities, family and social roles, and relationships, and how society—and consequently, the cities—may be reconfigured in response to the changing demands of communities. The assessment also aims to identify the broader impact of migration policies on physical planning and infrastructure development, informing urban structure, policy-making, and sustainable urban management (Huang et al., 2020). The theme specifically compares the current state of infrastructure in Dhaka and Chittagong, evaluating the capacity of existing systems to accommodate the growing number of people moving into the cities.

In this analysis, housing, transportation, water, and sanitation standards are assessed to identify existing or potential shortcomings that could hinder the sustainability of these cities. By focusing on the lack of preparedness, this theme provides invaluable information for urban designers, government officials, and policymakers to improve infrastructural capacity (Therrien et al., 2020). It also outlines strategic interventions needed to expand urban infrastructure and meet the sustainable development needs of the burgeoning population, particularly in the context of urban sprawl. The theme further addresses the status and changes in urban slum areas of Dhaka and Chittagong, focusing on critical concerns such as housing, hygiene, and access to clean water.

Urbanization in Dhaka and Chittagong has led to challenges such as deteriorating urban infrastructure and the growth of slum living conditions. Migration pressures test the limits of available housing, mobility, and basic services such as shelter, transportation, and lighting. The situation in slums remains largely unchanged, with poor access to clean water and sanitation exacerbating the spread of diseases. Addressing these challenges requires inclusive urban planning and politically driven measures for sustainable development.

4.5 Discussion

The findings from this study offer crucial insights into the multifaceted challenges faced by Dhaka and Chittagong as they undergo rapid urbanization. The migration dynamics and demographic transitions highlighted in Theme One underscore the significant push and pull factors driving rural-to-urban migration, such as employment opportunities, better education, and improved healthcare services. However, these demographic changes also bring substantial shifts in the social structure of the cities, influencing family dynamics, housing needs, and population density. As migration continues, the age and gender reconfigurations in urban populations, along with the shifting social roles, require adaptive urban planning to ensure that these evolving needs are met effectively (Jaren et al., 2022).

Theme two, which evaluates the capacity of urban infrastructure in Dhaka and Chittagong, demonstrates that the current systems are struggling to accommodate the growing populations. The lack of adequate housing, public transport, sanitation, and clean water services represents a critical vulnerability in the face of rapid urban growth. This theme highlights the pressing need for strategic urban planning, which not only addresses immediate deficiencies but also anticipates future demands. Policymakers and urban planners must prioritize infrastructure improvements to ensure sustainable urban development and minimize the negative impacts of population pressures, such as congestion and resource scarcity.

Furthermore, the analysis in Theme three draws attention to the precarious living conditions in urban slums, where infrastructure deficits jeopardize the health and well-being of residents. Slum areas in both Dhaka and Chittagong are marked by inadequate housing, poor sanitation, and limited access to clean water. These conditions exacerbate the risks of disease outbreaks and hinder overall quality of life for slum dwellers. The research suggests that while governmental and non-governmental programs are in place, their effectiveness remains limited due to insufficient implementation and coordination. Therefore, comprehensive strategies that integrate community involvement, policy reforms, and sustainable infrastructure development are vital to improving the living standards of these marginalized populations.

Finally, the cumulative findings from these themes indicate that urban migration, infrastructure capacity, and slum conditions are inextricably linked. As migration pressures increase, so too does the strain on urban infrastructure. Without substantial investment in urban systems and a focus on inclusive urban planning, the cities of Dhaka and Chittagong may face long-term challenges in sustaining urban growth and ensuring equitable development.

V. Conclusion

In conclusion, the rapid urbanization of Dhaka and Chittagong presents both opportunities and challenges. The findings from this research illustrate that while migration to urban areas offers economic and social benefits, it also places immense pressure on existing infrastructure, especially in the context of housing, transport, sanitation, and clean water access. The demographic shifts accompanying migration further complicate urban planning efforts, requiring adaptive strategies that address both the immediate and long-term needs of these growing populations (Raza et al., 2023).

For policymakers and urban planners, the study emphasizes the need for comprehensive, forward-thinking approaches that prioritize infrastructure development,

equitable resource distribution, and sustainable urban management. Moreover, addressing the issues faced by slum dwellers must be a central focus of urban development policies to ensure that marginalized communities are not left behind in the process of urbanization. To ensure the SDG goals particularly SDG11(sustainable cities and Communities), Bangladesh requires inclusive urban planning with renewed emphasis to create sustainable and well-planned cities.

Ultimately, addressing the multifaceted challenges outlined in this research requires coordinated efforts across government, civil society, and the private sector. Only through inclusive and politically driven urban planning can instil hope to mitigate the adverse impacts of urban migration and ensure the future generations thrive in healthy, well-served urban environments.

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