

Urban Development Factors and Economic Sustainability: A Systematic Literature Review

Alqahtani, Fehaid Abdullah

Faculty of Finance and Administrative Science, Al Madinah International University,
Kuala Lumpur, Malaysia
fv13vf@hotmail.com

Said Bin Zainol

²Faculty of Finance and Administrative Science, Al Madinah International University,
Kuala Lumpur, Malaysia
said.zainol@mediu.edu.my

Abdoulrahman Aljounaidi

²Faculty of Finance and Administrative Science, Al Madinah International University,
Kuala Lumpur, Malaysia
abdulrahman.ramez@mediu.edu.my

Abstract

The process of rapid urbanisation provides significant opportunities for economic growth, which, however, do not necessarily translate into long-term economic sustainability, but depend on a variety of factors. The focus of this paper is to critically analyse the relationship between key factors in urban development (population growth, urban area expansion, infrastructure investment, economic development and traffic congestion) and economic sustainability, and also to investigate the mediating role of infrastructure quality. The paper is based on the literature that underpins a doctoral study of the city of Riyadh in Saudi Arabia, and presents a theoretically grounded explanation for the impact of urban development on sustainable economic outcomes, based mainly on the literature of sustainable development theory, infrastructure-led development perspectives, urban growth theory, the interaction between transportation and land use, institutional perspectives, and smart growth principles. The review contends that urban development is not only about the growth of population, land area, investment and economic activity. Instead, it is the ability of urban systems to transform growth pressures and investments into systems of sustainable infrastructure that is the key to sustainability contributions. Population growth could create opportunities for the labour market, as well as opportunities on the demand side, but at the same time, it puts pressure on urban systems. Likewise, spatial fragmentation and inefficiencies in infrastructure could emerge, both as a result of urban expansion, and in response to a lack of coordination. While infrastructure investment is the backbone of productivity and connectivity in general, it does not necessarily lead to sustainable results, as the quality of the infrastructure is a precondition for the sustainable economic outcomes of investment. Traffic congestion is a negative externality which can diminish productivity and raise transaction and mobility costs. Four major gaps have been identified, namely: lack of integration of several urban development factors in one single framework, lack of theorisation about infrastructure quality as a mediating variable, lack of representation of rapidly changing Middle Eastern cities in previous studies, and methodological limitations. To illustrate the suggested conceptual model, the paper claims that the quality of the infrastructure serves as a transmission mechanism between the processes of urban development and the economic sustainability. The review serves as a basis for future empirical studies, especially in fast developing cities like Riyadh.

Keywords: urban development; economic sustainability; infrastructure quality; population growth; urban expansion; infrastructure investment; traffic congestion; Riyadh; sustainable cities.

1. Introduction

The process of urbanisation has been a significant part of the current economic transition as density of population, employment, infrastructure, firms,

investment and public services, are concentrated within relatively dense spatial systems. (World Bank, 2021). Yet, the economic significance of cities also means they have a need for infrastructure

systems that can prepare for demographic and economic shifts without high social, environmental or economic costs (UN-Habitat, 2024).

There is a growing body of literature identifying urbanisation as more than just a population, built-up area, investment and economic activity. Instead, the sustainability and viability of urban form relies on the interplay between demographic change, land use, infrastructure systems, transportation, economic development and institutional capacity (UN-Habitat, 2024; World Bank, 2021). This is especially true in cities that are rapidly changing in both physical and socio-economic aspects.

The key idea that this paper is based on connects the following five dimensions of urban development: population growth, urban area expansion, infrastructure investment, economic development, traffic congestion, and introduces infrastructure quality as a mediator between these dimensions and economic sustainability. This conceptualization aligns with the latest urban literature, which highlights that the provision of infrastructure, accessibility, land use, population, and transportation systems are interdependent and do not work in isolation (Qiao & Huang, 2024; Jarrara & Al-Homouda, 2024).

This is especially true in regard to the importance of infrastructure quality, as investment expenditures do not necessarily equate to the effectiveness of an infrastructure system. A lack of new investment is not the only contributing factor to the infrastructure deficits of rapidly growing cities, nor is it a lack of investment in maintenance of existing infrastructure, UN-Habitat says. Thus, it is imperative to make an analytical separation between infrastructure investment and infrastructure quality.

This distinction forms the main theoretical argument of the present review: while the impact of urban development factors can be direct on economic sustainability, it can also happen directly on the quality and functionality of urban infrastructure.

2.Literature Review

2.1. Conceptualising Economic Sustainability

Economic sustainability relates to the capacity of an economy to sustain productive and welfare-enhancing economic activity over time without conditions that jeopardise development in the future (UN-Habitat, 2024; World Bank, 2021). In an urban

setting, economic sustainability is therefore not just about the short-term output or investment boosts, but also entails the long-term economic performance influenced by factors such as infrastructure, access, the environment, resource efficiency, resilience, and the capability of institutions to manage urban change (UN-Habitat, 2024).

This conceptualisation needs to differentiate between economic development and economic sustainability. The process of economic development is typically defined as an increase in productive capacity, employment, income, investment, business activity and structural transformation, while sustainability includes the ability to sustain such development without creating undue future economic, environmental, or social costs (UN-Habitat, 2024).

The difference is crucial for the current framework as economic development is not entangled with infrastructure deficit, congestion, environmental degradation, or spatial inequality. The World Bank (2021) highlights the direct links between demographic and urban change, infrastructure investment, and service provision, which indicate that economic and population growth should be taken into account together with the capacity of urban systems.

So that economic development can be seen as an element or a factor of urban economic performance and economic sustainability as the economy's ability over time to sustain it.

2.2. Urban Development as a Multidimensional Phenomenon

Urban development is not a single process, but rather a series of interconnected demographic, spatial, infrastructural, economic and transportation changes (World Bank, 2021; UN-Habitat, 2024). Therefore, population growth leads to increased demand for housing and services, urban expansion leads to changes in the space structure of cities, infrastructure investment brings physical capacity, economic development brings productive activity, and transportation conditions affect the accessibility and productivity of cities (Qiao & Huang, 2024; Kong et al., 2024).

The thesis also defines urban development in five aspects: population increase, expansion of urban areas, investments in infrastructure, economic

development and traffic congestion. The use of this multidimensional conceptualisation is valuable as each factor represents one aspect of the urbanisation process.

The literature indicates, however, that it is not possible to interpret those dimensions separately. In particular, the availability of infrastructure affects the geographical distribution of population and economic activity, and population growth affects the need for infrastructure (World Bank, 2021). Likewise, urban growth impacts transportation needs, and transportation infrastructure can impact later urban growth (Qiao & Huang, 2024).

The implication is that factors of urban development in interaction and coordination might be able to lead to economic sustainability, rather than a single factor.

2.3 Population Growth and Economic Sustainability

Population growth is a key factor that drives urban transformation as demographic change affects labour supply, consumer demand, housing demand, demand for public services, and infrastructure demand (World Bank, 2021). Population growth can, therefore, bring economic opportunities, as larger labour and consumer markets can bring entry into wider economic activity, but can also bring pressure on infrastructure and public services if there is insufficient capacity to expand. (World Bank, 2021).

Population growth and sustainability are therefore dependent on each other. When combined with sufficient infrastructure, jobs, public services and good urban planning, a larger population can bolster economic activity (World Bank, 2021). However, when the demand for infrastructure and services is greater than its supply, rapid population growth can exacerbate infrastructure gaps and service pressures (UN-Habitat, 2024).

Population growth is also recognized as a key urban-development driver, as Riyadh has experienced rapid population growth, leading to a higher demand for infrastructure, housing, transportation, and jobs.

Recent evidence thus confirms the view that one should not assume a positive or negative connotation to population growth. The economic impact will rely

on the ability of the urban system to absorb demographic change and transform population growth into productive economic involvement (World Bank, 2021; UN-Habitat, 2024).

2.4 Urban Area Expansion and Economic Sustainability

Urban area expansion is the physical expansion of built-up areas due to residential, commercial, industrial and infrastructure development. The link between physical expansion and sustainability is not straightforward since urban expansion can support population and economic growth and extend the reach of services to the population, but it can also lead to the expansion of infrastructure demands, travel distances, and costs associated with delivering services (Qiao & Huang, 2024).

Based on the evidence from 15 Chinese urban agglomerations during the period of 2000-2020, Qiao and Huang (2024) concluded that urbanisation sustainability is different at distinct stages of urban development and that high unsustainability of urban land use can be linked to unrestricted urban land expansion. This is significant because it contradicts the belief that larger cities are better, more economically developed, more sustainable cities.

Additional evidence for this concern comes from Riyadh. Al-Suwaidi et al. (2024) recently conducted a geospatial study that showed that the urban clusters of Riyadh grew by about 106% from 2000 to 2022, and that areas of poor environmental conditions grew significantly during the same period.

Physical expansion may thus generate environmental and infrastructure stresses even if it is built alongside economic and demographic development (Al-Suwaidi et al., 2024), as is the case in Riyadh.

Therefore, the sustainability impacts of urbanization spread do not just rely on the city's growth rate but are also dependent on the ways in which urbanization is planned, linked, provided, and incorporated into existing urban systems (Qiao & Huang, 2024; Jarrara & Al-Homouda, 2024).

2.5 Infrastructure Investment and Economic Sustainability

Infrastructure investments are spending and resource reallocations that go into transportation, utilities, communication systems, public facilities

and other physical systems that are necessary to sustain urban economic activity. Economic activity relies on the systems that facilitate the movement of people, goods, information, energy, and services, which means infrastructure is important (UN-Habitat, 2024).

Recent empirical evidence backs the link between infrastructure and economic performance. Based on a panel data sample of 256 cities in China over the period 1999–2019, Kong et al. (2024) found positive impacts of transportation and information infrastructure on urban productivity and the role of economic agglomeration and labour mobility as key mechanisms.

Numerous studies have shown that the impact of infrastructure is not just on physical infrastructure, but on the aspects of accessibility, agglomeration, labour mobility, connectivity and productivity (Kong et al., 2024).

In the same line, World Bank (2025) states that investments in resilient and low carbon cities' infrastructure can enhance the functionality of critical infrastructure, boost productivity, create job opportunities, and contribute to urban sustainability.

But infrastructure investment does not necessarily equal infrastructure quality. UN-Habitat (2024) in particular mentions the lack of new investment and poor maintenance of existing infrastructure as factors that contribute to infrastructure gaps in fast-growing cities.

This distinction gives an important rationale to the addition of infrastructure quality as a mediator.

2.6 Infrastructure Quality as a Mediating Mechanism

The quality of infrastructure is a measure of the reliability, availability, efficiency, maintenance and ability of infrastructure systems to deliver services to households and businesses. The thesis of the quality of infrastructure is the performance of transportation networks, utilities and public services.

There is evidence in the literature to suggest that the quality of the infrastructure is not necessarily equal to the amount that has been spent. Even in the face of a city's increasing investment, the quality of infrastructure services can be still low due to maintenance problems, inequitable access, lack of

coordination, and lack of effective implementation (UN-Habitat, 2024).

The example of Riyadh makes it apparent that there is a difference here. Al-Muafa et al. (2026) noted that the new mass-transit network in Riyadh enhances accessibility in the corridors, however, it has limited wider sustainability impacts due to first and last mile challenges, harsh climatic conditions, institutional fragmentation, and the reliance on private vehicles.

The evidence is especially relevant for the proposed mediation framework, as it shows that urban outcomes do not necessarily follow from the presence of infrastructure. Rather, infrastructure should be accessible, connected, operationally effective and properly integrated with land use and transportation systems (Al-Muafa et al., 2026).

Infrastructure quality can therefore be theorized to be the link between urban-development pressures and economic sustainability:

Urban development → infrastructure demand → infrastructure quality → economic outcomes.

This mechanism offers better theory than an infrastructure investment-only model.

2.7 Economic Development and Economic Sustainability

City economic development plays a crucial role in urban transformation, since it focuses firms, jobs, investments, innovation and markets (World Bank, 2021). Economic-development and economic-sustainability however should not be synonymous.

Economic development can provide more income, employment, business activity and investment but sustainable development needs to ensure that the economic gains are long term and that they do not produce infrastructure, environmental and social costs that limit the future potential for development (UN-Habitat, 2024).

Current infrastructure research evidence shows this separation. Kong et al. (2024) report that transportation and information infrastructure boosted urban productivity suggesting that infrastructure can help with more desirable economic growth via agglomeration and labour mobility channels.

It is implied that economic development can bring sustainability when the economic expansion is accompanied by efficient infrastructure, connectivity, resilience and the urban planning of appropriate (World Bank, 2025; UN-Habitat, 2024).

Economic development therefore could be viewed as an urban-development factor and as a key mechanism by which cities develop their economic capacity, and economic sustainability as the longer-term sustainability of a city's economic capacity.

2.8 Traffic Congestion and Economic Sustainability

Traffic congestion is a condition in which the number of vehicles using the transportation system is in excess of the capacity of the system, resulting in delays, longer travel times, higher fuel use and lower mobility efficiency.

Economics of congestion have been reported for urban situations. While the economic impact of congestion is varied, a recent study of congestion costs in Medellín in the year 2024 estimated the costs at about US\$375.7 million per year, with the impacts of journey delays significant.

Economic efficiency can also be impacted by congestion as time spent in traffic is time that is not available for productive activity (Estimating traffic congestion cost uncertainty, 2024) and delays can also lead to higher logistics and operating cost.

Private-vehicle dependence, traffic congestion, transportation accessibility, and public transportation integration with land-use planning are all significant factors of the city's sustainable urban-development challenge, which is most relevant to Riyadh (Jarrara & Al-Homouda, 2024; Al-Muafa et al., 2026).

In fact, recent transportation research carried out by the city of Riyadh shows that transportation infrastructure development not only affects accessibility but can impact all aspects of urban development, including land-use, economic development, population change, and road-network efficiency (2026 Riyadh transportation study).

So, congestion should be seen as an indicator of the interaction between population growth and land-use structure, infrastructure capacity and economic activity.

2.9 Infrastructure Quality and Economic Sustainability in Riyadh

The city of Riyadh is of particular interest in its infrastructure quality as the city is undergoing significant transformation through infrastructure development, transportation investment, urban expansion and economic diversification (Alsayer et al., 2025).

The recent studies describe the transformation of Riyadh as a large-scale high-cost investment project in the context of Saudi Arabia Vision 2030 and major infrastructure development (Alsayer et al., 2025).

Riyadh Municipality's urban sustainability strategy explicitly ties together the four elements of infrastructure coverage, project planning, efficiency in project construction, quality in infrastructure operations and maintenance, and economic sustainability.

In addition, Riyadh Municipality, in 2025, enacted urban planning regulations that call for the completion of infrastructure before construction started in approved developments, such as roads, lighting, water, sewage, electricity, and telecommunications.

The developments support the academic premise that infrastructure quality should be taken into account, given that the success of urban development is dependent in part on the availability, completion, accessibility and functionality of infrastructure.

Recent studies also show that the construction of the urban areas in the city of Riyadh has been accompanied by considerable changes in the environmental conditions, as the clusters of urban constructions have increased significantly between 2000 and 2022 (Al-Suwaidi et al., 2024).

Hence, the city of Riyadh is an informative empirical case study to examine the role of infrastructure as a key mediator that translates urban development to sustainable economic outcomes.

3. Critical Synthesis of Previous Literature

The literature shows that demographic change, spatial expansion, infrastructure, economic activity and transportation are mutually dependent elements of urban development (World Bank, 2021; UN-Habitat, 2024).

But past studies have tended to focus on single aspects of urban development. For instance, Qiao and Huang (2024) study the relationship between urban land expansion, population dynamics and urbanisation sustainability, and Kong et al. (2024) study the relationship between transportation and information infrastructure and urban productivity.

In the same way, the factors of walkability, urban expansion, public transportation, infrastructure and urban transformation were investigated separately in recent studies in Riyadh (Jarrara & Al-Homouda, 2024; Al-Suwaidi et al., 2024; Al-Muafa et al., 2026).

This fragmentation opens the door to the possibility of an integrated model that takes into account demographic, spatial, infrastructural, economic and transportation aspects.

Most importantly, there is literature that suggests that infrastructure can serve as a linkage between urban conditions and economic and sustainability outcomes. Agglomeration and labour mobility can boost productivity with the help of transportation infrastructure (Kong et al., 2024), and the ease of access and connectivity to transportation infrastructure can affect the sustainability impacts of Riyadh's transit transformation (Al-Muafa et al., 2026).

The literature thus warrants a study of infrastructure quality as an intervening mechanism, in addition to being another independent variable.

4. Research Gaps

12.1 Empirical Gap

There has been a body of research on individual population-infrastructure, population-investment, population-transportation, and population-economic relationships, but less research has tried to combine these in a comprehensive explanation.

The thesis notes that this integration is one of the big gaps to be examined and investigated in the context of Riyadh, and especially the study of urban development in relation to infrastructure quality at the same time.

12.2 Mediating-Mechanism Gap

Recent studies show that infrastructure influences productivity, accessibility, mobility, and sustainability, and the literature is not as advanced in addressing infrastructure quality as an intervening variable between a host of urban development variables and economic sustainability (Kong et al., 2024; Al-Muafa et al., 2026).

12.3 Contextual Gap

Many urban sustainability studies have been conducted in existing urbanisation contexts, but

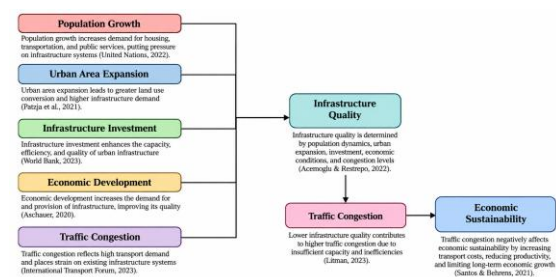
cities in the Gulf are undergoing rapid urbanisation and need more context-specific research as they are characterized by high levels of infrastructure investments, urban transformation, climate challenges, and unique institutional structures (Al-Rashid et al., 2025; Alsayel et al., 2025).

12.4 Methodological Gap

According to the comments of the thesis examiner, the comparison of previous research should be more clearly presented with regard to methodology and mediation analysis should be strengthened, not just based on direct-effect relationships. This helps in developing an integrated structural model that can estimate both the direct and indirect relations.

5. Conceptual Framework and Research Hypotheses

The literature supports the following conceptual structure:



The theoretical reasoning is that the pressure, opportunity, and resource needs caused by urban development and the quality of the infrastructure are factors of determining how sustainable an economic outcome is when urban processes are converted to it. (World Bank, 2021; UN-Habitat, 2024).

The model therefore permits two analytical pathways:

Direct pathway:

Urban Development Factor → Economic Sustainability

and

Indirect pathway:

Urban Development Factor → Infrastructure Quality → Economic Sustainability.

This mediation approach is supported by the evidence that infrastructure contributes to productivity, for example, through agglomeration,

labour mobility, accessibility and connectivity. (Kong et al., 2024).

6. Discussion

In general, the results show that creating an urban area does not lead to economic sustainability. Based on the evidence from Riyadh, the growth in population, infrastructure investment, economic development, and traffic congestion have significant relationships with economic sustainability, but physical urban expansion does not show a significant direct relationship. More importantly, the quality of infrastructure acts as a mediating factor in four of these relationships, highlighting the critical role of infrastructure quality as a pathway by which urban development can impact sustainable economic outcomes.

The growing literature confirmed that sustainable urban development is not only about amount of development, but also about how efficiently, how easily, how resilient, how integrated and how good development is supported by systems (UN-Habitat, 2024; World Bank, 2025). This is especially true in the case of Riyadh, which is undergoing significant changes due to large-scale urban-development projects and infrastructure initiatives (Alsayel et al., 2025).

Thus, the main purpose of this study is to propose the concept of infrastructure quality as a critical transmission mechanism between urban development and economic sustainability. The findings offer a basis for future research to go beyond single-city, cross-sectional and perception-based analyses to more longitudinal, comparative, spatial, mixed-method and data-integrated analyses. Such extensions would enable the relationships identified in Riyadh to be explored in other Saudi and international urban contexts, and offer a greater understanding of the speed at which the economies of rapidly changing cities can move toward sustainable urban development.

7. Future Research

In general, the results show that creating an urban area does not lead to economic sustainability. Based on the evidence from Riyadh, the growth in population, infrastructure investment, economic development, and traffic congestion have significant relationships with economic sustainability, but physical urban expansion does not show a significant direct relationship. More importantly, the quality of infrastructure acts as a mediating factor in four of these relationships, highlighting the critical role of infrastructure quality as a pathway by which urban development can impact sustainable economic outcomes.

The growing literature confirmed that sustainable urban development is not only about amount of development, but also about how efficiently, how easily, how resilient, how integrated and how good development is supported by systems (UN-Habitat, 2024; World Bank, 2025). This is especially true in the case of Riyadh, which is undergoing significant changes due to large-scale urban-development projects and infrastructure initiatives (Alsayel et al., 2025). Thus, the main purpose of this study is to propose the concept of infrastructure quality as a critical transmission mechanism between urban development and economic sustainability. The findings offer a basis for future research to go beyond single-city, cross-sectional and perception-based analyses to more longitudinal, comparative, spatial, mixed-method and data-integrated analyses. Such extensions would enable the relationships identified in Riyadh to be explored in another Saudi and international urban contexts, and offer a greater understanding of the speed at which the economies of rapidly changing cities can move toward sustainable urban development.

8. Conclusion

The reviewed literature demonstrates that urban development is a multidimensional process involving demographic, spatial, infrastructural, economic, and transportation changes (World Bank, 2021; UN-Habitat, 2024). Population growth can expand economic potential while increasing infrastructure demand; urban expansion can accommodate economic activity while generating spatial and environmental pressures; infrastructure investment can improve productivity and connectivity while requiring effective maintenance and management; economic development can increase economic capacity without necessarily guaranteeing long-term sustainability; and traffic congestion can impose measurable economic costs

(Qiao & Huang, 2024; Kong et al., 2024; UN-Habitat, 2024).

The literature consequently supports a shift from viewing urban development primarily through quantity and scale toward examining quality, connectivity, accessibility, efficiency, resilience, and institutional coordination (UN-Habitat, 2024; Al-Muafa et al., 2026).

For Riyadh, this distinction is particularly important because the city is experiencing major infrastructure and urban transformation under Vision 2030, while recent research simultaneously identifies opportunities and challenges involving transportation, urban expansion, accessibility, environmental conditions, and infrastructure integration (Jarrara & Al-Homouda, 2024; Al-Suwaidi et al., 2024; Alsayel et al., 2025).

The principal theoretical gap is therefore not whether infrastructure matters, but how infrastructure quality mediates the relationship between different dimensions of urban development and economic sustainability. This provides a defensible basis for the proposed research framework.

Reference

- [1] Al-Muafa, M. H., Maniruzzaman, K. M., & Alqahtany, A. M. (2026). Beyond infrastructure: Climate-constrained transit transition and urban sustainability in Riyadh. *Sustainability*, 18(16), 8145.
- [2] Al-Rashid, M. A., Zweynert, M., & Alarabi, S. (2025). Sustainable urban transitions in the post-COVID-19 pandemic era: Insights from Saudi urban leaders. *Journal of Urban Technology*.
- [3] Alsayel, A., Fransen, J., de Jong, M., & Almatar, K. M. (2025). Riyadh: King of gigaprojects—Can Riyadh's dramatic place rebranding realize path-breaking and profound urban transformations? *Cities*, 106022.
- [4] Jarrara, O. M., & Al-Homouda, M. (2024). Sustainable urban development in Riyadh: A projected model for walkability. *Urban Design International*, 30, 398–421.
- [5] Kong, Q., Li, R., Jiang, X., Sun, P., & Peng, D. (2024). Has transportation infrastructure development improved the quality of economic growth in China's cities? A quasi-natural experiment based on the introduction of high-speed rail. *Research in International Business and Finance*, 62, 101726.
- [6] Qiao, W., & Huang, X. (2024). Assessment of urbanization sustainability and its driving factors in Chinese urban agglomerations: An urban land expansion–urban population dynamics perspective. *Journal of Cleaner Production*, 449, 141562.
- [7] UN-Habitat. (2024). *World cities report 2024: Cities and climate action*. United Nations Human Settlements Programme.
- [8] World Bank. (2021). *Demographic trends and urbanization*. World Bank.
- [9] World Bank. (2025). *Banking on cities: Investing in resilient and low-carbon urbanization*. World Bank.
- [10] Al-Rashid, M. A., Zweynert, M., & Alarabi, S. (2025). Sustainable urban transitions in the post-COVID-19 pandemic era: Insights from Saudi urban leaders. *Urban, Planning and Transport Research*, 13(1), 2482825.
- [11] Alsayel, A., Fransen, J., de Jong, M., & Almatar, K. M. (2025). Riyadh: King of gigaprojects can Riyadh's dramatic place rebranding realize path-breaking and profound urban transformations? *Cities*, 163, 106022.
- [12] Jarrar, O. M., & Al-Homoud, M. (2024). Sustainable urban development in Riyadh: A projected model for walkability. *International Journal of Urban Sustainable Development*, 16(1), 398–421.
- [13] Pandey, B., Brelsford, C., & Seto, K. C. (2025). Rising infrastructure inequalities accompany urbanization and economic development. *Nature Communications*, 16, 1193.
- [14] Qiao, W., & Huang, X. (2024). Assessment of the urbanization sustainability and its driving factors in Chinese urban agglomerations: An urban land expansion–urban population dynamics perspective. *Journal of Cleaner Production*, 449, 141562. <https://doi.org/10.1016/j.jclepro.2024.141562>
- [15] United Nations Human Settlements Programme (UN-Habitat). (2024). *World cities report 2024: Cities and climate action*. United Nations. <https://doi.org/10.18356/9789211065602>
- [16] Wang, C., Liu, S., Feng, T., Liu, Y., Liu, Y., Hu, Z., Yang, L., Niu, Q., & Mao, X. (2024). Is the assessment approach of Sustainable Development Goal 11.3.1 justified? Evidence from the drivers of future urban land use efficiency. *Journal of Cleaner Production*, 444, 141147.