Editorial

Strategies for Sustainable Urban Development—Exploring Innovative Approaches for a Liveable Future

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Cities are the engines of economic growth, but they are also the source of many environmental and social challenges. The increasing urbanisation trend and the associated rise in energy consumption, greenhouse gas emissions, waste generation, and social inequality have raised the urgency to develop sustainable urban strategies. Sustainable urban development is not only concerned with reducing environmental impacts but also creating liveable, healthy, and inclusive cities that enhance the well-being of their residents.

This Special Issue presents a diverse set of topics that address various aspects of sustainable urbanisation. It covers different dimensions of green buildings, rail transportation, land-use efficiency, energy consumption, innovation management, heritage preservation, digital technologies, and behaviour change. These topics are relevant to the current urban sustainability discourse and have the potential to contribute to the development of practical and effective strategies for sustainable urban development.

The works presented in this Special Issue are intended to provide researchers, practitioners, policymakers, and students with a comprehensive and up-to-date perspective on sustainable urban development. A total of ten original research studies were published, offering empirical evidence, theoretical insights, and practical recommendations that can inform and inspire sustainable urban strategies. The Special Issue's interdisciplinary and international scope reflects the complexity and diversity of urban sustainability challenges and opportunities.

Fu et al. [1] examined the impact of green building schemes on the well-being of occupants, an important yet underexplored dimension of urban sustainability. Despite the growing popularity of green buildings, existing studies tend to focus on technical aspects rather than the impact on occupants. The authors conducted a systematic review of current research to develop a conceptual framework that links green building features with six dimensions of occupant well-being, including both subjective and objective aspects. The study demonstrated that green features can positively affect occupant well-being in various ways, such as improving indoor air quality and reducing noise pollution. The authors recommended that future green building development and empirical research take a more occupant-oriented perspective to maximise the potential benefits of green buildings. This paper contributed to the emerging discourse on sustainable urban development by providing a new perspective on the role of green buildings in promoting occupant well-being.

Tordai and Munkácsy [2] studied the relationship between real estate prices and distance from metro or commuter railway stations. Previous studies on this topic were limited due to the heterogeneity of real estate. In this study, the researchers analysed data on panel flats in Budapest, which were built with uniform technology between the 1960s and 1990s, and therefore represent a highly homogeneous real estate type. Using linear regression, the study reported a statistically significant relationship between real estate prices and distance to the nearest station, with a 1% decrease in prices for every additional

five minutes of travel time to the nearest station. These findings have potential implications for value capture policies aimed at increasing the viability of urban railway projects.

Chen et al. [3] investigated green land-use efficiency (GLUE) in the Yellow River Basin (YRB), an ecologically fragile area and an important ecological functional area, using the super-efficiency SBM model and Tobit regression model to analyse influencing factors. The results revealed a spatial pattern of "high in the west and low in the east" for GLUE, and an overall annual increase in efficiency values, although differences exist among various areas and types of resource-based cities. Economic development and population growth significantly impact GLUE, highlighting the importance of improving social and public services to ensure regional green and low-carbon transformation and development. The study concluded that improving the efficiency of low-efficiency regions or cities is crucial for enhancing regional GLUE.

Xie et al. [4] presented a new method for identifying and classifying urban functional areas using a multimodal deep learning approach with an attention mechanism. Urban functional areas are essential spatial units for urban planning and management. The complexity of urban land use makes it challenging to identify these areas using only remote sensing images. This study proposed a method that combines remote sensing data and social perception data to identify functional areas. The remote sensing images, points of interest, and building footprint data were divided into block-based target units, and a two-branch convolutional network was used to extract remote sensing image features and social perception data features. Features were then sequentially extracted along two separate dimensions to generate an attention weight map for the identification and classification mapping of urban functional areas. The method was tested on the Ningbo dataset, and the results showed that the proposed method outperforms traditional methods, with an accuracy above 93%. This study provided a reference for the classification of urban land use and data support for urban planning and management.

Jo and Kim [5] aimed to identify the factors affecting electrical energy consumption in urban buildings and to analyse their influence at both global and local scales in Seoul, Korea. Multiscale geographically weighted regression (MGWR) was employed to explore the impacts of urban characteristics such as population and household characteristics, outdoor temperature, green and water areas, building area according to usage, and construction age. The findings indicated that these factors significantly affect the energy consumption of buildings, and their effects vary spatially and regionally. The study provided important insights into the spatial distribution and patterns of urban characteristics and their influence on energy consumption reduction in buildings. This research has significant implications for policy-makers and urban planners seeking to promote eco-friendly policies and sustainable energy practices in cities.

Yin et al. [6] studied the significance of digital green innovation management for sustainable urban development, with a particular emphasis on the prefabricated construction enterprises (PCEs). The authors proposed a conceptual partner selection framework for the digital green innovation management of PCEs towards urban building 5.0. The framework system was built based on the integration of symbiosis theory and six analysis methods, resulting in a 3W1H-P framework. The dual combination weighting method was used to avoid any subjective or objective deviation in attribute weight and time weight. Empirical research was conducted to verify the reliability and practicability of the framework system and selection model. The study concluded that the proposed framework system and selection model can assist PCEs in selecting joint investment partners for digital green innovation projects, contributing to sustainable urban development.

Konbul and Yanalak [7] discussed the importance of preserving culturally and historically significant buildings, while also acknowledging the economic losses that landowners may face due to restrictions on development rights. The lack of compensation for these losses can result in social injustice and can even lead to the destruction of unlisted historic buildings for redevelopment. Traditional methods of compensation, such as expropriation and property exchange, have not been successful in addressing this issue. The article

suggested that transfer of development rights (TDR) could be a viable option in Turkey, and outlines a step-by-step methodology for implementing a TDR program from a land management perspective. The methodology was tested and validated through interviews with 18 professionals from related sectors, and the results have the potential to benefit both property owners and preservation efforts in the country.

Zhang and Zhou [8] explored the impact of digital policies and technologies on in-situ urbanisation patterns in China, which is a topic that has been largely overlooked in the existing literature. The study adopted a law and policy research approach to conduct the phenomenon presentation, institutional analysis, and limitation interpretation. The authors of the study argued that the digitalisation of the countryside has drastically changed the traditional in situ urbanisation process, which is termed as in situ urbanisation 2.0. The study identified three reasons why rural digitalisation reform has triggered in situ urbanisation 2.0, namely historical legitimacy, performance legitimacy, and socially sustainable reproduction. However, the study highlighted the double dilemma of overreliance on technological change in the in situ urbanisation 2.0 process, which requires legislative and policy adjustments. The study concluded by proposing four recommendations for action to address these dilemmas, thereby contributing to the literature on sustainable urban planning and rural digitalisation reform.

Li et al. [9] investigated the ways in which the global hospitality industry faces the challenge of managing energy and reducing carbon intensity due to growing environmental concerns and significant energy consumption in hotel buildings. One potential strategy to achieve sustainable hotel operation and maintenance is by activating guests' energy-conservation behaviours. However, the psychological mechanism of hotel building energy-conservation intention and the roles of personality traits remain inadequately investigated. This study used a modified theory of planned behaviour (TPB) to examine the impact of guests' extraversion levels on their hotel building energy-conservation behavioural intention. The study reported that extraversion negatively affects perceived behavioural control but positively impacts personal norms, both of which significantly contribute to guest energy-saving intention. Past behaviour positively moderates the effects of extraversion on subjective norms and personal norms. The research contributed to the hospitality and tourism management literature by shedding light on the influence of guests' personality characteristics on their pro-environment intentions during their stays in hotel buildings. The findings can drive the hotel building energy management forward through actionable and effective energy-conservation interventions and enhanced guest satisfaction.

The academic study by Xu et al. [10] investigated the impact of city–county consolidation on enterprises' earnings management through the theoretical transmission mechanism of intensified competition in the enterprise market. Using a difference-in-differences method on data from 1999 to 2006 of industrial enterprises, the authors determined that city–county consolidation promotes the use of earnings management and intensifies downward earnings management behaviour. Additionally, non-state-owned enterprises are more motivated to implement earnings management than state-owned enterprises. However, the impact of city–county consolidation on earnings management is only significant for enterprises affiliated with counties, not for those affiliated with central, provincial, or municipal governments. These findings provided important empirical evidence for optimising administrative divisions to improve national governance capacity in urbanisation development.

In conclusion, this Special Issue provides valuable and multifaceted insights into the complexities and diversities of sustainable urban development. The diverse range of topics covered in this Issue yields valuable insights into the opportunities and challenges presented by sustainable urbanisation. The collection of articles underscores the importance of sustainable urban strategies that consider not only environmental issues, but also social, economic, and health factors. This highlights the need for a holistic and integrated approach to sustainable urban development.

The editors would like to sincerely thank all the authors who contributed their work to this Special Issue. Their expertise and knowledge have made this publication a comprehensive and insightful reference for researchers, practitioners, policymakers, and students contributing to sustainable urban development. We express our special appreciation to the peer reviewers for their valuable contribution in providing constructive feedback and enhancing the quality of the presented works.

The editors hope this Special Issue will contribute to a better understanding of sustainable urban development and inspire practical and effective strategies for creating liveable, healthy, and inclusive cities for all.

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