

Integrating Public Safety and Urban Planning for Sustainable Development of Urban Environment

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DOI: 10.29322/IJSRP.14.06.2024.p15032

Paper Received Date: 19th June 2024

Paper Acceptance Date: 21st June 2024

Paper Publication Date: 26th June 2024

Abstract

Public safety is paramount for sustainable development of urban areas and holds profound influence on the quality of life and social fabric within urban areas. City planning and design has a role in strengthening social relations between people and their sense of safety and reducing the potential opportunities for crime in urban areas. Urban planners and designers face great challenges when designing a new city, the most important of which is the security challenge of providing safety for urban areas. This paper aims to meticulously examine the intrinsic connection between urban planning and the fortification of public safety in urban areas. Through investigating how urban planning strategies intersect with crime prevention, law enforcement, and community policing initiatives, this study endeavors to showcase urban planning as a pivotal framework for enhancing public safety measures. Urban planners employ a multifaceted approach, integrating strategies aimed at reducing crime opportunities and enhancing community safety by influencing the physical, social, and economic aspects of the built environment. The symbiotic relationship between urban planning and public safety transcends mere physical security; it fosters a sense of community, nurtures social harmony, and bolsters economic vitality.

Index Terms-Public Safety, Urban Communities, Urban Planning, Urban areas, sustainable development.

Introduction

Public safety is the measures to protect the mass and to ensure their welfare and wellbeing. Public safety holds immense significance in the sustainable development of cities and urban areas, profoundly influencing the quality of life and social fabric within these environments. Urban spaces experiencing high crime rates, violence, and disorder encounter profound impediments to their sustainability. These challenges not only compromise individual safety but also stifle economic growth and hinder community development (Singh, 2019). Ensuring public safety is fundamental, serving as a catalyst for residents to thrive and businesses to flourish within urban settings. Without a secure environment, community cohesion wanes, social interactions

diminish, and access to resources becomes limited, hampering the overall vitality and sustainability of urban landscapes.

The city is the set of relations between physical elements (the physical and urban aspect) and the immaterial or invisible elements (social, cultural, and political aspects). City planning and design has a role in strengthening social relations between people and their sense of safety and reducing the potential opportunities for crime. It is conspicuous that some urban areas are safer than others, while crime is intense in some places and not others, because the design of some areas is more easily infiltrated by strangers, and there are negative spaces that inspire crime, and the weakness of natural control (Wareham, Smith & Lambert, 2015). Urban planners and designers face great challenges when designing a new city, the most important of which is the security challenge of providing safety for urban areas. There are four important elements that have a role in creating safe cities, namely: smart governance and management, proper urban planning and design, the presence of a competent police force and the provision of modern technologies.

Security threats grow in large urban areas which cause distress among the inhabitants; it raises government concern and distances investors. To decrease security threats and reduce the crime rate, there are physical and social factors that must be considered. Social factors are represented in poverty, unemployment, and the quality of life of individuals (Ross, 2018). On the other hand, environmental factors include planning and design factors in urban areas. The physical elements that impact crime rate in urban planning are street planning, land use and building density, and in urban design: public space, building height, street design, hierarchy of spaces, layout and orientation of buildings and location of entrances which has impact on the emergency preparedness of the cities.

This paper aims to meticulously examine the intrinsic connection between urban planning and the fortification of public safety in cities and urban areas. Through investigating how urban planning strategies intersect with crime prevention, law enforcement, and community policing initiatives, this study endeavors to showcase

urban planning as a pivotal framework for enhancing public safety measures. Creating safe and sustainable urban communities requires an intricate understanding of the intricate interplay between public safety and urban design. This exploration intends to illuminate this relationship, proposing actionable solutions aimed at improving community well-being and fostering urban safety.

The paper is structured to delve deeply into various facets of public safety within the scope of urban planning, emphasizing sustainable development. It starts by elucidating the profound importance of public safety in cities and urban communities, underlining its multifaceted impact on societal development and sustainability. Subsequently, it meticulously scrutinizes the roles of law enforcement in upholding public safety within the context of sustainable urban landscapes. Moreover, the paper thoroughly explores diverse crime prevention strategies within urban planning, evaluating their effectiveness and relevance in sustainable city development. Finally, it addresses the challenges encountered and proposes potential future directions to enhance public safety through innovative urban planning initiatives, focusing on the sustainable growth of cities. Towards the conclusion, this discussion localizes its relevance to Kenya, emphasizing how these global perspectives on urban safety and sustainable development can be applied and tailored to address the unique challenges faced by Kenyan cities and urban areas.

Urban Design and Public Safety

Design of the built environment of cities and towns as well as creating places is the basic contents of urban design. Quality of public safety of space environment is the basic goal and the major factor deciding the success of urban design. The field of urban design has long been paying attention to the safety of urban space environment (Kaizhen C & Jianguo W, 2009). Through urban infrastructure construction and reconstruction of distinct living environment, the urban design tends to improving hygienic quality of space environment and alleviates the pandemic disasters that are likely to create great hit to the urban public safety.

With the overall optimization of urban space environmental quality as the objective, modern urban design, although covering safety quality of space environment, is deficient in design principles, strategies, and methods for safety. For example, overall consideration of and comprehensive countermeasures to disaster prevention, disaster reduction, safety refuge, and safety defense as well as psychological and behavioural safety are absent from specific space environmental design and project design (Zhang H, Dai Shenzhi, 2005). It is very necessary to introduce the angle of view and content of urban design to the urban space safety planning. Therefore, urban design should take active care of the safety property of urban space environment, take urban public space as main objective, carry out comprehensive design of and research into urban space environmental safety.

There is need also to explore ideas and methods of urban design based on urban public safety so as to make it the connection and transition between urban safety planning and building safety design. The urban design based on public safety is hereby

temporally called safety based urban design. Safety-based urban design cares about actual spatial safety experience and safety quality. The basic connotation refers to the design and organization of exterior space of cities and physical environment carried out for the purpose of realizing urban public safety, which is the specification and visualization of urban safety planning content and the process of “shape forming” of the structural outline of urban safety planning in the specific urban physical space as well as provides research framework and methods of practice for specific space safety design.

Public Safety and Urban Planning

Urban planning is a multifaceted discipline dedicated to optimizing the functionality, sustainability, and livability of urban spaces. It strives to design cities that accommodate diverse needs, fostering cohesive and thriving communities (Fang & Yu, 2017). At the core of urban planning lies public safety, a fundamental pillar shaping the trajectory of urban development. Its influence permeates various dimensions of city life, profoundly impacting the socioeconomic fabric of urban spaces. High crime rates and prevalent insecurity deter potential residents, businesses, and investors, negatively impacting property values and limiting economic activities (Kamalipour, 2023). Conversely, safe urban areas attract community engagement, business investments, and enhance property values, fostering an environment conducive to urban development. Moreover, effective safety measures within urban planning not only ensure physical safety but also nurture psychological well-being, encouraging social interactions and utilization of public spaces, thereby contributing to vibrant and sustainable communities.

Crime’s profound impact on urban dynamics is evident in various facets of community life. High crime rates lead to disinvestment and social isolation, hindering community cohesion and engagement among residents (Ross, 2018). Fear of crime disproportionately affects vulnerable populations, exacerbating social disparities by limiting access to essential services and public spaces. The integration of public safety measures within urban planning is pivotal for fostering resilient, vibrant, and livable cities. Strategic urban planning prioritizing public safety creates a foundation for sustainable community development by enhancing safety through measures like improved lighting, surveillance systems, and well-designed public spaces (Madanipour, 2021). Collaborative efforts among urban planners, law enforcement agencies, and policymakers are essential for devising comprehensive strategies that fuse safety with broader urban development objectives.

Moving towards the local perspective of Kenya, the significance of public safety in urban planning takes on even greater importance. Kenyan cities grapple with unique challenges including rapid urbanization, infrastructural limitations, and socio-economic disparities. Integrating public safety within urban planning frameworks becomes imperative to address these challenges and foster sustainable city growth in Kenya. Strategies tailored to the local context, such as community-oriented policing initiatives and infrastructural improvements, will play a pivotal role in enhancing safety, community engagement, and economic development within Kenyan urban areas.

Law Enforcement in Urban Public Safety

Law enforcement stands as a linchpin in ensuring public safety within urban communities, entrusted with upholding the law, investigating crimes, and ensuring the safety of residents (Tumalavicius, Ivanciks, & Karpishchenko, 2016). As a visible symbol of authority, police departments are integral to the urban fabric, responsible for maintaining law and order, responding to emergencies, and executing crime prevention programs. Their primary goal in urban settings extends beyond reacting to crimes; it encompasses proactive engagement in preventive measures to deter criminal activities and foster community safety.

Urban law enforcement encounters a plethora of challenges and opportunities within metropolitan settings. Resource constraints, heightened crime rates in densely populated areas, and addressing multifaceted socioeconomic issues beyond crime present complex challenges (Wareham, Smith & Lambert, 2015). Moreover, fostering trust in marginalized neighborhoods plagued by historical tensions and perceptions of unfair treatment poses a significant challenge. However, opportunities arise from community-oriented policing, fostering positive interactions, and leveraging innovative technologies for crime prevention and data-driven decision-making. Collaborative efforts between law enforcement agencies and local communities hold promise for enhancing safety and building trust.

Effective law enforcement strategies in urban areas require a comprehensive approach. Prioritizing community-oriented policing strategies, emphasizing relationship-building and partnerships with local communities, has demonstrated effectiveness in bolstering safety and trust (O'Reilly, 2017). Implementing problem-oriented policing, targeting specific issues contributing to crime has proven successful in reducing crime rates. Additionally, leveraging technology, such as predictive analytics and surveillance systems, aids in crime prevention and resource allocation, bolstering the efficiency of law enforcement efforts.

Successful law enforcement initiatives in urban planning highlight effective strategies. For instance, the implementation of the "Broken Windows" theory in New York City led to significant crime rate reductions by focusing on minor offenses and promoting community order (Kelling & Wilson, 1982). Similarly, the Boston Gun Project in the 1990s effectively reduced gun violence by employing a focused deterrence strategy, collaborating with law enforcement, social services, and community groups, resulting in a substantial decline in gun-related crimes. These initiatives underscore the importance of collaborative, targeted, and community-engaged approaches in achieving successful outcomes in urban law enforcement and public safety.

In the Kenyan context, law enforcement's role in urban public safety assumes increased significance. Kenyan urban areas grapple with unique challenges such as rapid urbanization, emerging crime patterns, and strained resource allocation. Tailoring law enforcement strategies to address these specific challenges is crucial for fostering safer urban environments and

sustainable city growth in Kenya. Localized community engagement initiatives, technology adoption, and strategic collaborations will be vital to adapt and effectively address urban safety concerns within Kenya's diverse urban landscape.

Crime Prevention Strategies in Urban Planning

Crime prevention within urban planning encompasses purposeful structuring of urban spaces and communities to mitigate criminal activities by addressing environmental, social, and design-related factors. Urban planners employ a multifaceted approach, integrating strategies aimed at reducing crime opportunities and enhancing community safety by influencing the physical, social, and economic aspects of the built environment. Strategically designing and managing urban spaces allows planners to create environments discouraging criminal behavior, fostering safety, and ensuring security for residents and visitors.

A range of crime prevention techniques is applicable in urban areas, spanning environmental design strategies to social interventions. Crime Prevention Through Environmental Design (CPTED) principles focus on natural surveillance, access control, territorial reinforcement, and maintenance, aiming to create environments minimizing criminal opportunities. Social interventions, including community engagement programs, youth outreach initiatives, and educational campaigns, address crime root causes by fostering social inclusion, providing opportunities, and promoting positive community interactions. Technological advancements such as smart surveillance systems and predictive analytics aid crime prediction and prevention by offering real-time monitoring and data-driven decision-making to law enforcement agencies.

Successful crime prevention strategies in urban planning have been globally implemented, showcasing the effectiveness of various approaches. The redesign of public spaces, leveraging CPTED principles to enhance visibility, access control, and natural surveillance, has resulted in reduced criminal activities in multiple urban areas (Sohn, 2016). Social programs focusing on community engagement and youth development, like the Harlem Children's Zone in New York City, effectively reduced crime by offering comprehensive support to at-risk youth, encouraging education and community involvement. Additionally, targeted law enforcement strategies, like hotspot policing in high-crime areas, have led to decreased crime rates, demonstrating the effectiveness of focused law enforcement efforts in crime prevention.

The integration of environmental design principles within urban planning significantly contributes to crime prevention. By considering street layout, lighting, building design, and public space management, planners influence the safety and security of urban environments. Designing public spaces for natural surveillance, ensuring well-lit areas, creating pedestrian-friendly zones, and enhancing visibility substantially contribute to reducing crime opportunities. Collaborative efforts involving urban planners, architects, law enforcement, and local communities play a pivotal role in creating environments deterring criminal activities while fostering aesthetically pleasing and livable urban landscapes (Singh, 2019). Transitioning to the local context of Kenya, crime prevention strategies in urban planning

take on heightened importance. Adapting strategies such as fostering local partnerships and implementing solutions customized to Kenya's urban landscape will be pivotal in enhancing urban safety and fostering sustainable city growth within the country.

Challenges and Future Directions

Implementing public safety measures within urban planning encounters various challenges. Limited resources and funding often impede the implementation of comprehensive safety strategies, especially in disadvantaged or under-resourced communities. Additionally, the complexity of urban environments with diverse populations and infrastructure poses a challenge in creating uniform solutions. Resistance or lack of community cooperation at times impedes the effectiveness of safety initiatives. Moreover, the dynamic nature of crime patterns and the emergence of new criminal activities necessitate adaptable and evolving strategies (Tumalavicius et al., 2016). Addressing these challenges demands innovative, context-specific, and collaborative approaches that consider the unique characteristics of each urban area.

To overcome challenges and enhance public safety in urban areas, collaborative efforts between multiple stakeholders are pivotal. Engaging the community in planning and decision-making processes fosters ownership and commitment, leading to more effective and sustainable safety initiatives. Adequate resource allocation and funding, especially in areas with higher safety needs, are critical for implementing and sustaining safety measures. Embracing a data-driven approach through technology and evidence-based practices enables more informed decision-making, facilitating resource allocation where most needed. Additionally, fostering partnerships between law enforcement, urban planners, local government, community organizations, and residents can lead to comprehensive and effective safety strategies.

Future trends in urban planning and public safety are expected to integrate innovative approaches and emerging technologies. Smart city concepts, incorporating data analytics, artificial intelligence, and sensor-based technologies, will significantly impact urban safety. Predictive policing models, utilizing advanced analytics and machine learning, will continue evolving, enabling law enforcement agencies to anticipate crime hotspots and patterns for proactive interventions. Furthermore, integrating environmental sustainability into urban planning, alongside safety considerations, will be crucial for resilient and eco-friendly urban landscapes. Promoting walkable cities, bike-friendly infrastructure, and the use of green spaces not only enhance urban livability but also contribute to a safer and more secure environment.

Conclusion

The significance of public safety within urban planning is indisputable, forming the bedrock for fostering sustainable and cohesive urban communities. Its pervasive impact extends across all facets of life, influencing economic growth, community well-being, and individual quality of life. Ensuring public safety not only secures environments but also stimulates community

engagement, investment, and social cohesion—crucial elements for the dynamic development and vibrancy of urban spaces.

Throughout this exploration of the intricate relationship between urban planning and public safety, the paper has unveiled the multifaceted roles of law enforcement, and crime prevention strategies in shaping urban environments. Delving into the challenges, opportunities, and successful approaches in implementing safety measures, it underscored the importance of collaborative, data-driven, and community-involved strategies to enhance public safety within urban areas.

The symbiotic relationship between urban planning and public safety transcends mere physical security; it fosters a sense of community, nurtures social harmony, and bolsters economic vitality. Leveraging innovative methods, technology, and community participation, urban planners and law enforcement agencies can craft secure, inviting, sustainable, and resilient urban environments. The ongoing dedication to integrating public safety within the core of urban planning remains paramount for the continued development of livable, safe, and prosperous communities, particularly as urban areas evolve and expand.

In considering the context of Kenya, the importance of public safety within urban planning gains increased significance. Kenya's urban landscapes confront unique challenges stemming from rapid urbanization, diverse community dynamics, and localized safety concerns. By adopting collaborative, innovative, and sustainable strategies, Kenya can address these challenges, fostering safer, more resilient, and thriving urban environments for its residents.

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