International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Planning for Sports Friendly City in Indian Scenario

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Abstract
Urban environments significantly influence physical activity patterns, public health, and social interaction. In India, rapid urbanisation combined with changing lifestyles has resulted in reduced physical activity levels, contributing to rising non-communicable diseases and declining community engagement. The concept of a Sports-Friendly City addresses these challenges by integrating sports and recreational opportunities into everyday urban spaces through planning, policy, and governance mechanisms. This research examines planning strategies for developing sports-friendly cities in the Indian context by analysing international and national case studies and evaluating their performance using a composite benchmarking framework.
A qualitative and comparative methodology based on secondary data, literature review, and policy analysis is adopted. International cities such as Barcelona, London, Singapore, and Doha are examined alongside Indian examples including Ahmedabad, Bhubaneswar, and Delhi. A ten-parameter assessment framework covering land use, accessibility, connectivity, governance, sustainability, inclusivity, economic contribution, health outcomes, cultural integration, and digital systems is used to evaluate performance. The findings reveal that international cities demonstrate stronger integration of sports into urban planning due to decentralised infrastructure, active mobility networks, and robust governance structures, while Indian cities show progress in infrastructure development but lag in neighborhood-level accessibility and policy coordination.
The study proposes planning strategies focused on mandatory sports zoning, neighborhood-scale multi-use facilities, integration of active mobility, and data-driven governance. It concludes that sports-friendly urban planning can play a vital role in creating healthier, more inclusive, and sustainable Indian cities.

Keywords: Sports-Friendly City, Urban Planning, Active Living, Sports Infrastructure, Public Health, India

1. Introduction

Cities are no longer merely centers of economic production; they are living environments that shape everyday behavior, social interaction, and overall well-being. Rapid urban growth has transformed Indian cities into dense, infrastructure-driven spaces where limited public open areas and rising motorisation discourage physical activity. This shift has contributed to increasing prevalence of lifestyle-

related diseases such as obesity, diabetes, and cardiovascular disorders, making urban health a critical planning concern.

International organisations such as the World Health Organization (WHO) and UNESCO have emphasised the role of urban environments in promoting active lifestyles through frameworks such as the Global Action Plan on Physical Activity (2018–2030) and the Active Cities initiative. These frameworks highlight that physical activity should not be restricted to specialised facilities but embedded within everyday urban systems such as streets, neighborhoods, and public spaces.

The Sports-Friendly City concept emerges from this perspective, promoting an integrated approach where sports and recreation are treated as essential urban services rather than optional amenities. In India, despite initiatives such as Khelo India, Fit India Movement, and the Smart Cities Mission, sports infrastructure planning remains fragmented and event-oriented. This study addresses this gap by exploring how sports-friendly planning principles can be systematically incorporated into Indian urban planning frameworks.

2. Literature Review

International experiences demonstrate that the integration of sports into urban development can follow multiple pathways, shaped by local governance structures, economic priorities, and socio-cultural contexts. Barcelona is widely cited as a benchmark for sports-led urban regeneration, where the 1992 Olympic providing a catalyst for large-scale spatial restructuring. Strategic reuse of Olympic infrastructure, waterfront redevelopment, and integration of sports facilities with public spaces transformed underutilised industrial zones into vibrant mixed-use urban districts, embedding sports within everyday urban life rather than as isolated mega-projects.

In contrast, London exemplifies a governance-driven regeneration model, particularly through the redevelopment of brownfield land in East London following the 2012 Olympics. Strong institutional coordination, legacy planning frameworks, and long-term land-use controls ensured that sports infrastructure acted as a trigger for housing, employment, and social infrastructure, rather than short-term event-focused development. The London case highlights the importance of policy alignment, multi-level governance, and post-event legacy management in leveraging sports for sustainable urban transformation.

Singapore represents a distinct model where sports are integrated into a smart, compact, and health-oriented urban ecosystem. Rather than focusing on mega-events, Singapore emphasises distributed sports infrastructure, digital monitoring systems, and universal accessibility. Sports facilities are closely linked with active mobility networks, public housing estates, and health promotion policies, reinforcing sports as a daily urban function that contributes to public health outcomes, social cohesion, and efficient land use.

Meanwhile, Doha demonstrates a state-led, elite sports infrastructure model, characterised by large-scale investment in world-class stadiums and global sporting events. Sports development in Doha is closely tied to national branding, global visibility, and economic diversification strategies. While this approach has generated iconic urban landmarks and advanced technological innovation in stadium design, it also raises questions regarding long-term utilisation, social inclusion, and integration with everyday urban fabric.

Within the Indian context, cities such as Ahmedabad, Bhubaneswar, and Delhi reflect emerging and hybrid models of sports-led urban development. These cases are largely driven by public–private

partnerships, smart city missions, and targeted policy interventions rather than mega-events alone. Investments in stadium precincts, sports complexes, and multi-purpose public spaces increasingly align with broader urban agendas such as economic revitalisation, youth engagement, and city branding. However, challenges persist in ensuring equitable access, long-term maintenance, and meaningful community integration.

Drawing from these international and national case studies, a comparative framework was developed through an extensive review of literature and empirical evidence. The framework identifies ten key parameters essential for evaluating sports-led urban development: land use integration, accessibility, connectivity, governance, sustainability, community use, economic impact, health outcomes, heritage integration, and digital systems. Together, these parameters provide a structured lens to assess how sports infrastructure interacts with urban form, policy mechanisms, and social outcomes, enabling comparative analysis across diverse geographic and institutional contexts.

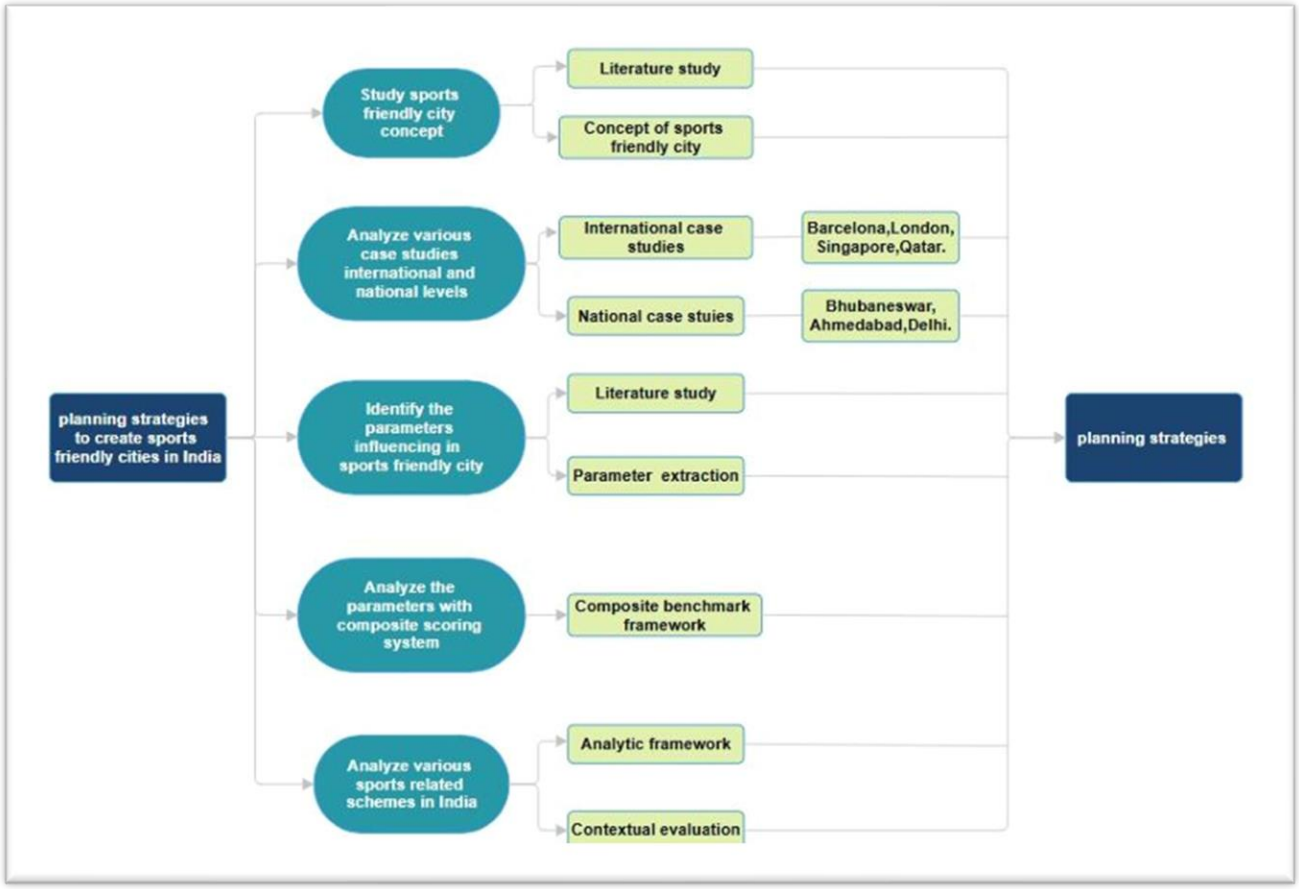
3. Research Gap

Existing literature on sports and urban development largely focuses on mega sporting events, elite infrastructure, and economic impacts, with limited emphasis on everyday accessibility and neighborhood-level integration. In the Indian context, sports planning is often examined through policy documents and sectoral initiatives, while its systematic integration within statutory urban planning frameworks remains underexplored. There is a lack of comparative assessment models that evaluate sports-friendly cities using multidimensional urban planning parameters applicable to Indian cities. This study addresses this gap by developing a composite benchmarking framework that evaluates sports-friendly urban development across land use, accessibility, governance, mobility, health, and digital systems, and by deriving transferable planning strategies relevant to the Indian urban context.

4. Methodology

The study adopts a qualitative and comparative research design based on secondary data sources, including policy documents, government reports, academic literature, and published statistics. International and Indian case studies were analysed using a composite benchmarking framework developed from identified parameters. Each case was evaluated using a scoring system to assess relative performance and identify strengths, gaps, and transferable strategies relevant to the Indian urban context.

Figure 1: Methodology



The composite benchmarking framework was derived through synthesis of global active city guidelines, international case study indicators, and Indian planning policies. Each parameter was assessed qualitatively and comparatively based on documented evidence, spatial planning approaches, governance mechanisms, and reported outcomes. The scoring approach enables structured comparison across diverse urban contexts while remaining adaptable to data constraints commonly observed in Indian cities.

5. Results and Discussion

The composite scoring analysis indicates a marked contrast between international and Indian case studies in terms of overall performance across the identified parameters. International cities consistently achieve higher scores, primarily due to the decentralisation of sports infrastructure, which enables equitable spatial distribution and everyday access at the neighbourhood level. This is further reinforced by strong institutional coordination across urban planning, transport, health, and sports agencies, ensuring that sports development is embedded within broader urban policy frameworks rather than treated as a standalone sector.

Table 1: Comparative Scoring of Sports-Friendly City Parameters

Parameter	Barcelona	London	Singapore	Qatar	Bhubaneswar	Ahmedabad	Delhi
1. Land Use & Urban Integration	5	5	4	4	3	3	3

Parameter	Barcelona	London	Singapore	Qatar	Bhubaneswar	Ahmedabad	Delhi
2. Accessibility & Transport Connectivity	5	4	5	4	3	4	3
3. Governance & Institutional Framework	4	5	5	4	3	3	3
4. Environmental Sustainability	4	5	4	4	3	3	3
5. Social Inclusion & Community Use	5	4	5	4	3	4	3
6. Economics & Financial Sustainability	4	4	4	4	3	4	3
7. Legacy & Regeneration	5	5	4	4	3	3	3
8. Digital & Smart Systems	4	4	5	4	3	3	3
9. Health & Active Living	5	4	5	4	3	3	3
10. Heritage & Cultural Integration	5	4	4	4	3	4	3
Overall Score (Average)	**4.6**	**4.6**	**4.5**	**4.0**	**3.2**	**3.3**	**3.0**

Comparative Performance Analysis of Sports-Friendly City Parameters

The comparative scoring assessment highlights clear variations in the performance of international and Indian cities across the ten identified sports-friendly city parameters. Barcelona and London record the highest overall average scores (4.6), reflecting their long-standing integration of sports within urban planning frameworks. These cities demonstrate strong performance in land-use integration, accessibility, governance, legacy regeneration, and health-oriented active living, supported by decentralised sports infrastructure and robust institutional coordination. The reuse of Olympic legacy assets and strong alignment between transport, public spaces, and community facilities significantly contribute to their high scores.

Singapore follows closely with an average score of 4.5, exhibiting consistently high performance in accessibility, digital and smart systems, social inclusion, and active living. Its compact urban form, neighbourhood-level facility distribution, and data-driven governance enable widespread participation and efficient management of sports infrastructure. Although its legacy regeneration score is slightly lower than Barcelona and London, Singapore's emphasis on health-centred planning and smart systems compensates for this limitation.

Qatar (Doha) achieves a moderate-high overall score of 4.0, driven primarily by strong investment in large-scale infrastructure, event hosting capacity, and sustainability measures. However, comparatively lower scores in community use and accessibility indicate a more centralised and elite-oriented model, with limited everyday public engagement when compared to European and East Asian examples.

Indian cities-Bhubaneswar (3.2), Ahmedabad (3.3), and Delhi (3.0)-demonstrate noticeably lower overall scores across most parameters. While these cities show progress in infrastructure provision,

economic sustainability, and social inclusion through flagship projects and national programmes, gaps are evident in land-use integration, decentralised accessibility, governance coordination, and digital systems. The relatively uniform scores across parameters suggest that sports planning in Indian cities remains largely project-based rather than embedded within comprehensive urban planning frameworks.

Overall, the analysis reveals that higher-performing cities are characterised by integrated land-use planning, neighbourhood-scale accessibility, strong governance mechanisms, and active mobility networks. In contrast, Indian cities require a shift from event-centric and infrastructure-driven approaches toward inclusive, decentralised, and policy-integrated sports-friendly planning models to improve overall performance.

A key contributing factor to higher international performance is the integration of sports facilities with active mobility networks, including walking and cycling infrastructure. Such integration enhances accessibility, encourages routine physical activity, and maximises utilisation beyond event-based functions, thereby strengthening health outcomes and social inclusion.

In contrast, Indian cities demonstrate notable strengths in hosting major sporting events and delivering large-scale sports infrastructure, often driven by state-led investment, public–private partnerships, and city-branding objectives. These interventions have successfully positioned cities on national and international sporting platforms and contributed to short-term economic and symbolic gains.

However, the analysis reveals persistent limitations in neighbourhood-level accessibility, where sports facilities remain spatially concentrated and less integrated with residential areas. Gaps are also evident in inclusive design, particularly in accommodating women, children, elderly populations, and persons with disabilities. Additionally, long-term governance integration remains weak, with limited mechanisms for post-event legacy planning, inter-departmental coordination, and sustained community use. As a result, the full potential of sports infrastructure as a tool for inclusive and sustainable urban development in Indian cities remains underutilised.

5.1 Key findings indicate that:

- Accessibility and proximity of facilities strongly influence participation rates.
- Governance and policy integration are critical for sustaining sports infrastructure.
- Active mobility networks enhance everyday physical activity beyond formal sports participation.
- Digital systems improve facility management and user engagement.

Based on the analysis, the study proposes planning strategies including:

- Mandatory sports zoning within master plans.
- Development of neighbourhood-scale multi-use sports facilities.
- Integration of walking and cycling networks with recreational spaces.
- Strengthening institutional coordination and public–private partnerships.
- Adoption of digital platforms for facility management and participation monitoring.
- Linking sports planning with public health and social inclusion objectives.

5.2 Policy Implications

The findings of this study highlight the need for explicit recognition of sports and recreation as essential urban infrastructure within Indian planning policies. Incorporating mandatory sports zoning within master plans can ensure spatial equity and long-term land reservation for recreational use. Urban local bodies should align sports planning with public health, transport, and environmental departments to promote integrated implementation. National initiatives such as the Smart Cities Mission and Khelo India can be strengthened by embedding neighbourhood-scale accessibility criteria and post-event

legacy planning mechanisms. These policy directions can enable Indian cities to transition from event-centric sports development to inclusive, health-oriented urban systems.

5.3 Limitations

The study relies primarily on secondary data sources, including published reports, policy documents, and case study literature, which may limit the depth of local-level behavioural insights. Primary surveys on facility usage, user perception, and participation patterns were not conducted. Additionally, the assessment framework adopts a qualitative scoring approach, which, while effective for comparative analysis, may benefit from further quantitative validation in future research. Despite these limitations, the study provides a robust planning-oriented framework applicable to diverse Indian urban contexts.

6. Conclusion

Developing sports-friendly cities necessitates a fundamental shift from event-centric and infrastructure-heavy models towards inclusive, accessible, and every day-oriented sports planning. The findings underscore that an overemphasis on mega-events and iconic facilities, while symbolically and economically significant, often limits broader community engagement and long-term urban benefits. Instead, embedding sports infrastructure within neighbourhoods, public spaces, and mobility networks enables regular participation and equitable access across socio-economic groups.

By integrating sports within statutory urban planning frameworks, Indian cities can more effectively respond to pressing public health challenges, including sedentary lifestyles and rising non-communicable diseases. Sports-friendly planning also contributes to social cohesion by activating public spaces, fostering community interaction, and promoting inclusive urban cultures. When aligned with land-use planning, transport systems, and environmental strategies, sports infrastructure enhances the functional and experiential quality of cities, thereby improving overall urban liveability.

The study demonstrates that sports-friendly planning should be understood not merely as a recreational or sector-specific intervention, but as a strategic component of sustainable urban development. It has the potential to generate multi-dimensional benefits spanning health, equity, economic vitality, and environmental sustainability. Consequently, mainstreaming sports within urban planning policies and governance mechanisms is essential for Indian cities seeking resilient, healthy, and inclusive urban futures.

Acknowledgement

The author sincerely expresses deep gratitude to **Assistant Prof. Geetha A**, Assistant Professor, School of Architecture and Planning, Government Engineering College, Thrissur, for her constant guidance, encouragement, and valuable support throughout this work.

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