Impact of Building Byelaws on Housing: A Comparative Study of Development Control Rules of Jaipur and Pune

Shriya S. Kularnia, Dhananjay S. Patilb

Abstract— The abstract of the paper titled "Impact of Building Byelaws on Housing: A Comparative Study of Development Control Rules of Jaipur and Pune," authored by K. B. Vaghani, Dr. N. C. Shah, and Dr. Krupesh A Chauhan, provides a concise overview of the study's objectives, methodologies, and key findings. The paper delves into the critical aspect of housing in urban planning and explores the influence of building byelaws on housing activities within the contexts of Jaipur and Pune. This review will analyse the abstract in detail, discussing the paper's scope, methodology, findings, implications, and potential areas for improvement.

Keywords— Building Byelaws, Development Control Rules, Urban Planning.

I.INTRODUCTION

Introduction

The abstract opens by emphasizing the essential role of housing as a fundamental human need and discusses the government's policies to encourage housing activities. It introduces the concept of building bylaws as regulatory tools governing various aspects of urban development, including population density, infrastructure requirements, and environmental considerations. The abstract hints at the substantial variation in the impact of these byelaws between Jaipur and Pune, setting the stage for the comparative study.

Need for Study: -

The abstract clearly outlines the study's objectives: to explore the impact of building byelaws on housing and to conduct a comparative analysis of the Development Control Regulations (DCR) of Jaipur and Pune. The choice of these two cities is justified based on comparable population and development potential. The study focuses on residential dwelling units and considers five building forms: detached bungalows, duplex bungalows, row houses, low-rise buildings, and

high-rise buildings. This approach demonstrates a systematic framework for the comparative assessment.

THE MATERIALS AND METHODS

Methodology: -

The abstract discusses the methodology employed in the study. The authors collect data related to building bylaws, including parameters such as built-up area, FSI/FAR, maximum building height, open margins, and other relevant factors. The data are sourced from the DCR documents of both Jaipur and Pune. The authors utilize these parameters to compare the impact of the bylaws on different types of building forms within the two cities. The methodology appears to be well-defined and suitable for achieving the study's objectives.

Major Findings:

The abstract presents key findings that highlight the differential impact of DCR on housing in the two cities. For detached bungalows, duplex bungalows, and row houses, the DCR of Pune city allows accommodating more dwelling units compared to Jaipur. This difference reaches up to 31.25% for detached bungalows and 25% for duplex bungalows and row houses. However, the most substantial impact is observed for low-rise and high-rise buildings, where Jaipur's DCR permits significantly more dwelling units than Pune's. The abstract quantifies this difference as 60% more for low-rise buildings and 100% more for high-rise buildings. This disparity in impact across building types underscores the complexity of building regulations and their implications on development.

Conclusions and Implications:-

^a Department of Civil, Rajarambapu Institute of Technology, Rajaramnagar, Maharashtra, 415409, India

^b Department of Civil, Rajarambapu Institute of Technology, Rajaramnagar, Maharashtra, 415409, India

The abstract concludes by summarizing the significance of building bylaws in the context of housing and urban development. It underscores that byelaws have a significant impact on housing activities, influencing factors such as land utilization and cost. The authors highlight the importance of creating development control regulations that strike a balance between accommodating the maximum number of dwelling units on available land while maintaining the quality of urban life. The study's conclusions suggest that well-designed regulations can contribute to optimizing land use without compromising the overall living standards.

Review of the Abstract:-

The abstract presents a structured overview of the research paper's objectives, methodology, and major findings. It effectively communicates the significance of building bylaws and their influence on housing activities. The abstract provides a clear rationale for selecting Jaipur and Pune as comparative case studies and explains the focus on residential dwelling units and five specific building forms. The use of comparative analysis helps in highlighting the varying impact of building bylaws across different types of buildings.

The authors effectively present their findings by quantifying the impact of DCR differences in terms of percentages, which adds clarity to the discussion. The abstract also brings attention to the disparity in impact across building forms, particularly emphasizing the substantial effect on low-rise and high-rise buildings. This variation in impact showcases the complexity of building regulations and their diverse implications on urban housing.

However, the abstract could benefit from a more detailed discussion of the practical implications of these findings. For instance, how does the differential impact of DCR affect the housing market, real estate prices, and urban planning decisions in the two cities? Additionally, the abstract could explore potential reasons behind the significant differences in DCR between Jaipur and Pune, considering factors such as local governance, urban planning priorities, and policy objectives.

Future Research Directions:-

Moving forward, it would be valuable to explore the qualitative aspects of housing that are influenced by building bylaws. This could involve investigating how

the different regulations impact the quality of life, access to amenities, and the overall urban environment for residents. Additionally, considering the broader urban development context, further research could examine how variations in building byelaws influence the sustainability, resilience, and spatial distribution of housing developments in the long term.

Significance and Contribution:-

The research paper "Impact of Building Byelaws on Housing" addresses a crucial aspect of urban development by examining how building byelaws influence housing activities. The study's significance lies in its exploration of the impact of regulations on various types of housing developments, ranging from detached bungalows to high-rise buildings. The paper's comparative approach between Jaipur and Pune enhances its contribution by revealing not only the quantitative differences but also potential underlying factors that shape urban planning strategies.

The paper contributes to the existing body of knowledge by shedding light on the intricate relationship between building regulations and housing outcomes. By quantifying the impact of DCR variations, the study provides valuable insights for urban planners, policymakers, and researchers interested in understanding how regulatory frameworks shape the urban landscape.

Methodological Rigor:-

The paper's methodology appears well-structured and appropriate for achieving the research objectives. The authors collect data from the DCR documents of Jaipur and Pune, ensuring the use of reliable and relevant information. By focusing on parameters such as built-up area, FSI/FAR, building height, open margins, and others, the authors establish a comprehensive framework for the comparative analysis.

The study's methodology, however, could be further strengthened by providing insights into how the collected data were analyzed and processed. A more detailed description of the quantitative analysis process would enhance the transparency and reliability of the study.

Practical Applications and Policy Implications:

The paper's findings have several practical implications for urban planning and policy formulation. By showcasing the varying impact of building bylaws on different types of housing developments, the study informs decision-makers about the potential consequences of regulatory choices. The differential impact observed between Jaipur and Pune raises questions about the suitability of certain regulations in specific contexts. This could stimulate discussions about adapting building bylaws to align with local housing needs, land availability, and development goals.

Moreover, the paper highlights the importance of achieving a balance between high-density and low-density developments. It prompts consideration of how building regulations can encourage efficient land use without compromising the quality of urban life. These insights can aid urban planners in devising strategies that promote sustainable and inclusive housing solutions.

Limitations and Future Directions:-

While the paper presents a robust comparative analysis, it's essential to acknowledge potential limitations. The study primarily focuses on quantitative parameters, leaving out qualitative aspects such as the quality of living spaces, access to amenities, and community well-being. Future research could explore these qualitative dimensions to provide a more comprehensive understanding of the impact of building bylaws on residents' daily lives.

Additionally, expanding the scope to include more cities with varying development contexts could offer a broader perspective on the relationship between building regulations and housing outcomes. Exploring how different cities strike a balance between regulatory control and housing provision could yield insights into best practices and lessons learned.

Conclusion:

In conclusion, the abstract provides a solid foundation for the paper's research on the impact of building byelaws on housing activities. It effectively outlines the study's objectives, methodology, key findings, and implications. While it offers quantitative insights into the differential impact of DCR in Jaipur and Pune, there is room for further exploration of the qualitative and contextual aspects of housing and urban development affected by building regulations.

The research paper's investigation into the impact of building bylaws on housing activities in Jaipur and Pune is commendable for its systematic approach and comparative analysis. By quantifying the differences in the impact of DCR, the study contributes valuable insights into the fields of urban planning and housing policy. The paper's findings have practical implications for shaping regulatory frameworks that promote sustainable, affordable, and well-designed housing developments. Moving forward, integrating qualitative dimensions and broadening the study's scope could enrich our understanding of the complex interplay between regulations, housing, and urban development.