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Research Article

ASSESSING THE PERFORMANCE OF ECO-APARTMENT BUILDINGS IN UZBEKISTAN: A COMPARATIVE STUDY OF DESIGN STRATEGIES AND USER SATISFACTION

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ABSTRACT

This study compares design approaches and user satisfaction to evaluate the effectiveness of eco-apartment buildings in Uzbekistan. A resident survey and an assessment of the performance of the building are two of the mixed-methods research techniques used in this study. The goal of the study is to determine the best design approaches for Uzbek eco-apartment structures and to comprehend the elements that influence user happiness. The study's conclusions show that design tactics including using sustainable materials, passive design techniques, and effective building systems have a big impact on how well eco-apartment buildings operate. The research also highlights a number of elements that affect user pleasure, such as noise reduction, thermal comfort, and indoor air quality.

KEYWORDS

Eco-apartment buildings, performance assessment, design strategies, user satisfaction, Uzbekistan.

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INTRODUCTION

Building eco-apartments has become a viable option to address Uzbekistan's rising housing demand. However, in order to guarantee their long-term sustainability and occupant happiness, it is crucial to evaluate how well eco-apartment buildings operate. Therefore, the purpose of this study is to compare design approaches and user satisfaction in order to evaluate the performance of eco-apartment buildings in Uzbekistan. The study's objectives are to determine the most efficient design approaches for Uzbek eco-apartment structures and to comprehend the elements that influence user happiness.

LIMITATIONS OF THE STUDY

The performance of eco-apartment buildings in Uzbekistan is the sole focus of this study. Other building kinds or non-sustainable buildings in Uzbekistan are not covered by the research.

METHODOLOGY

A resident survey and an assessment of the performance of the building are two of the mixed-methods research techniques used in this study. The purpose of the study is to gauge how satisfied users are with different eco-apartment building features, including interior air quality, thermal comfort, and noise reduction. The building performance evaluation rates the eco-apartment buildings' sustainability and energy efficiency. Descriptive statistics, correlation analysis, and theme analysis are all used in the study to examine the data.

LITERATURE REVIEW

The idea of eco-apartment buildings, eco-apartment building design methodologies, and customer satisfaction aspects are all examined in the literature study. According to the evaluation, eco-apartment buildings must incorporate a number of design principles, such as passive design principles, sustainable materials, and effective building systems.

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The evaluation also identifies a number of elements that affect customer happiness, including thermal comfort, indoor air quality, and noise reduction.

The major part of the report presents the study's findings. The performance of Uzbekistan's eco-apartment complexes is examined in this study using metrics for client satisfaction and design principles.

According to the study, design tactics including the use of environmentally friendly materials, passive design techniques, and effective building systems have a big impact on how well eco-apartment buildings operate. The study also reveals that elements like thermal comfort, indoor air quality, and noise reduction affect occupant satisfaction in eco-apartment buildings.

RESULTS

According to the study's findings, eco-apartment buildings using environmentally friendly building materials, passive design principles, and effective building systems perform better in terms of energy efficiency and sustainability. The study also demonstrates how user happiness in eco-apartment buildings is influenced by elements including interior air quality, thermal comfort, and noise reduction. According to the study, there is a substantial relationship between user happiness and building performance, suggesting that user contentment is influenced by the performance of eco-apartment buildings.

DISCUSSION

The study's results are outlined in the discussion section, along with suggestions for more investigation and advancement. The study emphasizes how crucial it is to include sustainable design principles into eco-apartment structures in order to improve performance and user happiness. The research makes the suggestion that in order to support sustainable development, policymakers, architects, and developers give priority to sustainable design principles in eco-apartment buildings.

CONCLUSIONS

The study comes to the conclusion that eco-apartment buildings perform better in terms of energy efficiency and sustainability because they use sustainable materials, passive design techniques, and effective building systems. The study comes to the further conclusion that user happiness in eco-apartment buildings is highly influenced by interior air quality, thermal comfort, and noise reduction. Policymakers, architects, and developers are advised to give sustainable design techniques in eco-apartment buildings top priority by the study, which sheds light on the significance of evaluating the performance of eco-apartment buildings in Uzbekistan.

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