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The Regeneration of Forgotten Architectural Space, A Design for Sustainable Architectural Development (Case Study: Industrial Spaces in Tabriz)

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Abstract
By increasing awareness of environmental challenges and the need to move toward sustainable development, urban regeneration and recycling and adaptive reuse of forgotten architectural spaces has emerged as an important solution. Even this process can lead to reduce the need for demolition and new construction and it also provides opportunities to preserve historical identity, optimization of resource consumption, and enhance social interaction. In the meantime, the regeneration of forgotten industrial spaces can play a significant role in regenerating decayed urban areas and expanding the sustainable architectural. The aim of this research is to present a practical and locali model for the regeneration of abandoned industrial spaces in Tabriz that can contribute to sustainable urban development and sustainable architecture while taking into account the climatic and cultural conditions of the region. This study is a descriptive-analytical and applied and has been conducted using a mixed-method approach(qualitative and quantitative).The findings also indicated that one of the most significant challenges in the regeneration of industrial spaces is the change in the mindset of the community and urban policymakers. To address this challenge, this research suggests some solutions such increasing public awareness, enacting supportive regulations, and organizing training workshops.

Keywords: **Sustainable Architecture, Regeneration of Industrial Spaces,Tabriz, Sustainable Development.**

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Extended Abstract

Introduction

In recent years, the rapid growth of urbanization and industrial development in many cities worldwide has led to the gradual loss of function and neglect of architectural spaces, particularly industrial sites. This trend has not only resulted in the proliferation of urban decay and the inefficient use of resources but has also had adverse consequences for the environment and urban communities. The city of Tabriz, as one of Iran's significant industrial and historical centers, contains a significant number of abandoned and forgotten industrial spaces which, despite their substantial potential, currently play a marginal role within the urban fabric. By increasing awareness of environmental challenges and the need to move toward sustainable development, urban regeneration and recycling and adaptive reuse of forgotten architectural spaces has emerged as an important solution. Even this process can lead to reduce the need for demolition and new construction and it also provide opportunities to preserve historical identity, optimization of resource consumption, and enhance social interaction. In the meantime , the regeneration of forgotten industrial spaces can play a significant role in regenerating decayed urban areas and expanding the sustainable architectural. The aim of this research is to present a practical and locali model for the regeneration of abandoned industrial spaces in Tabriz that can contribute to sustainable urban development and sustainable architecture while taking into account the climatic and cultural conditions of the region. This study, with an analytical approach and case study will examine the role of regenerating these spaces in improving urban quality of life and protecting the environment.

Data and Method

This study is a descriptive-analytical and applied and has been conducted using a mixed-method approach (qualitative and quantitative). The main objective of this research is to investigate and analyze the regeneration of abandoned industrial spaces in Tabriz through the approach of sustainable architectural , and to propose practical solutions for their redevelopment. Statistical Population and Sampling Statistical Population: The statistical population includes abandoned industrial spaces located in Tabriz which include historical and old factories and workshops. Sampling: Using a purposive sampling method, 10 abandoned industrial spaces with specific characteristics (including historical value and potential for regeneration) were selected as samples.

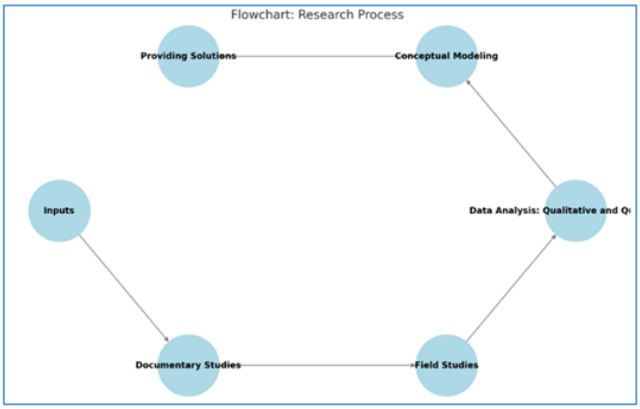

Figure1: Conceptual Model of the Research Methodology
Source: Authors

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Results and Discussion

The findings indicate that although the regeneration of abandoned industrial spaces in Tabriz presents significant challenges, a comprehensively and sustainable approach can help preserve the city's cultural identity and enhance urban sustainability. In this context ,using modern design methods and green technologies, these spaces can become valuable resources for improving the quality of urban life.

Conclusion

The results show that theses spaces in Tabriz have significant potential to adapt to modern needs and strengthen urban sustainability. These findings were analyzed and evaluted based on the principles of sustainable architecture including reuse of existing resources, reduction of structural waste, and increased social cohesion. The findings also indicated that one of the most significant challenges in the regeneration of industrial spaces is the change in the mindset of the community and urban policymakers. To address this challenge, this research suggests some solutions such increasing public awareness, enacting supportive regulations , and organizing training workshops. Finally, this research emphasizies the connection between sustainable architecture and the generation of abandoned spaces demonstartes that by adopting comprehensive and multidimensional approach these spaces can be used as valuable resources for enhancing urban sustainability.

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