



Analysis of Factors Affecting Development Inefficiency a Spatial Planning Approach (Case Study: Ilam Province)

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Abstract

Background and Objective: Regional development in many parts of the country faces challenges such as spatial inequalities, weak infrastructure, and planning inefficiencies, and Ilam Province is no exception. In such conditions, spatial planning, as a scientific approach to organizing space, can play an effective role in improving development efficiency. The main objective of this research is to investigate the impact of different dimensions of spatial planning on regional development inefficiency in Ilam city

Methodology: This study is applied-developmental in terms of objective and descriptive-analytical in nature. The required data were collected using a researcher-made questionnaire based on environmental-physical, social, economic, and institutional indicators. For data analysis, the Structural Equation Modeling (SEM) method and AMOS software were employed, and the model's fit was evaluated using standard indices. Furthermore, Cronbach's alpha was used to measure the reliability of the instrument, and factor loadings and related tests were utilized for construct validity.

Results and Findings: Research findings indicate that various dimensions of Spatial Planning have a significant impact on reducing the inefficiency of regional development. Among these, the environmental-physical dimension has the most significant impact, while the institutional dimension has the least direct impact, although its indirect effects are noteworthy. Furthermore, the overall construct of Spatial Planning demonstrated a strong positive influence on improving regional development. The results suggest that attention to the principles of Spatial Planning, strengthening infrastructure, upgrading services, and improving the quality of governance can pave the way for more balanced development in Ilam province.

Keywords: Spatial Planning, Regional Development, Spatial Inequality, Ilam.

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EXTENDED ABSTRACT

Introduction

This land, as one of the most important spatial applications, is used to regulate the balance between population, activities and internal space, and its main goal is to achieve balanced and sustainable development at different geographical levels. In Iran, the issue of land planning has been given attention for the past decades. However, in practice, many development programs have been implemented in a fragmented manner and without spatial coordination, which has led to the intensification of regional inequalities and the concentration of resources in certain regions. Meanwhile, the western regions of the country face more development challenges than other regions due to specific geographical, economic, and political conditions. Ilam Province, as one of the western border provinces of Iran, despite having significant capacities in the natural, human and geopolitical fields, continues to face problems such as unemployment, weak infrastructure and migration. This situation indicates a gap between the potential capacities and the actual development status in this region; in other words, the lack of compliance of development policies with the principles of land planning is one of the main reasons for the continuation of relative underdevelopment in this province.

Methodology

The nature of this research is applied-developmental and its methodology is based on description and analysis. To collect information, written sources as well as field research (through questionnaires) were used. 30 questionnaires were distributed as a sample among the statistical population (population and research). To ensure the validity of the questionnaire, experts' opinions were obtained on transparency, accuracy, and analyses. The reliability of the measurement tool was verified by calculating Cronbach's alpha coefficient at 0.78, which is within the desired range. The key indicators examined in this research included: institutional, economic, social, and environmental-physical indicators. AMOS software was used to statistically analyze the data obtained from the questionnaires.

Results and Findings

Descriptive findings related to the demographic characteristics of the respondents show that the mix of gender samples is somewhat mixed, with males (61.6%) more than females (38.4%). This difference can be further activated in social and economic contexts and also attributed to field studies, making them more prominent. In terms of marital status, more than half of the surveyed individuals (55.9%) were married, indicating a social stability among the respondents. In contrast, 44.1% of the individuals were single, which could reflect different perspectives on urban issues and environmental needs. Examining the age structure shows that the 20-30 age group accounted for the most with 39.7%. This indicates the dominance of the young population in the sample under study. This highlights the importance of considering the needs, preferences, and behaviors of this age group in the urban planning and policy-making process. In contrast, people over 50 years of age had the lowest presence with a share of 2.3 percent, which could indicate a more limited participation of the elderly in completing the questionnaire. In terms of

education level, the highest share was for those with a bachelor's degree (45.7 percent), which indicates a relatively adequate level of education among the respondents. This could help increase the accuracy and validity of the responses. On the other hand, those with a doctorate degree had the lowest share with 2.5 percent, which is consistent with the general structure of society. In terms of employment status, the highest frequency is for people with self-employment (27.9%), which indicates the significant role of this type of activity in the city's economic structure. In contrast, retirees have the lowest share with 4.4%, which is probably due to the reduced willingness or opportunity of this group to participate in field research. Also, the study of residence history showed that a large part of the respondents have a residence history of between 10 and 20 years in the city. This indicates that most people have significant lived experience of the urban environment and are able to provide a more accurate assessment of the conditions of services, infrastructure, and quality of life. Overall, the demographic characteristics of the sample represent a relatively young, dynamic, and well-educated population. Such a combination can help increase the accuracy of the analyses and the validity of the results, and show that the research findings are based on the perspectives of active and involved groups in the city's social and economic structure.

Conclusion

The results of this study showed that spatial planning, as a comprehensive approach to organizing space and optimally allocating resources, plays a fundamental role in reducing the inefficiency of regional development in Ilam province. Structural equation model analysis indicates that the different dimensions of spatial planning, especially the environmental-physical dimension and then the social dimension, have the greatest impact on explaining the development status and reducing spatial inequalities. These findings are consistent with the theoretical foundations of regional development; where classical and modern theories of regional development emphasize the importance of equitable distribution of services, strengthening infrastructure, restoring internal capacities, and responding to local needs. Theories such as "center-periphery" and "growth pole" also show that the concentration of infrastructure and services in specific locations leads to the intensification of inequalities and the formation of unbalanced development; a matter that the results of this research also confirm in the case of Ilam province. Based on the data obtained, weakness in infrastructure, inequality in access to services, migration, reduction of social capital, unemployment and economic constraints are among the most important factors that have exacerbated the inefficiency of regional development. In such circumstances, land use planning can, by providing a structured framework, guide the development path from the current incoherent situation to more balanced and sustainable development. The results of the analyses show that applying land use planning principles and strengthening related institutional mechanisms not only improves spatial and social efficiency, but can also be an important step towards managing migration, increasing investment, improving infrastructure, and improving the quality of life of citizens. From a practical perspective, the findings of this study are of particular importance for planning and executive institutions. Organizations such as the governorate, the Planning and Budget Organization, municipalities, and service providers can use the results of this research to adjust their development programs in a way that focuses on strengthening infrastructure in less-privileged areas, reducing spatial inequality, improving public services, and strengthening social capital. Also, organizations in charge of land planning, such as the Ministry of Roads and Urban

Development, can use these results to review planning plans and guide investments on a regional scale. This research can also be the basis for formulating endogenous development policies; policies that use local capacities to provide the basis for sustainable growth and reduce external dependence. Finally, it can be said that the accurate and scientific implementation of land planning, along with strengthening public participation and local governance, can pave the way for balanced development, reducing spatial and social gaps, and improving productivity in Ilam province. The results of this research emphasize that regional development will be efficient when accompanied by scientific understanding of the spatial structure of the region, its potential capabilities, and the real needs of the community. Therefore, continuing research in this area and incorporating its results into practical planning is a fundamental necessity for the future development of the province.

Declarations

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Authors' Contribution

Authors contributed equally to the conceptualization and writing of the article. All of the authors approved the content of the manuscript and agreed on all aspects of the work declaration of competing interest none.

Conflict of Interest

The authors declare no conflict of interest.

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