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Structural Comparison and Development Trend Analysis of Policy New Districts and Ordinary New Districts in Urban Renewal (Taking Qianhai and Xiongan as Examples)

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Abstract. Urban renewal has entered a new stage where stock development is as important as quality improvement. At this stage, the urban renewal in policy new towns and ordinary new districts shows clearly distinguishable structural differences in terms of institutions, resources, and implementation. This study selects Qianhai and Xiongan as cases of policy new towns, and selects Bao 'an of Shenzhen and the main urban area of Baoding as ordinary new towns with the same geographic location, level and development period. The core focus of the study is the difference of urban renewal between policy new areas and ordinary new areas and which path will the next renewal take. Many documents indicate that policy-based new areas, leveraging their policy advantages, can shorten the decision-making process and gather information. In contrast, ordinary new areas have deficiencies in information acquisition and departmental collaboration, and urban renewal in these areas is prone to fluctuations and restrictions. For this purpose, we propose a differentiated urban renewal path centered on information governance, providing operational guidance for transitioning from pilot experience to large-scale promotion.

Keywords: Urban Renewal, Spatial Planning and Governance, Scalable Pathways

1. Introduction

The research on urban renewal is becoming increasingly rich, no longer confined to physical space transformation but also covering issues such as institutional capacity, data governance, social equity, and climate resilience. The research by Roberts et al. [1] reminds us that the key to the success of renewal lies in whether the governance structure can transform multiple goals into an executable portfolio of projects and establish an effective feedback mechanism. Leary et al. [2] further pointed out that the essence of urban renewal has gone beyond the scope of a single construction project. In China, policy new towns bear the burden of both institutional experimentation and demonstration diffusion, typically endowed with a more intensive policy "toolkit" and greater capabilities for resource and element allocation, juxtaposed with ordinary new districts operating under "normal" regimes of governance. Zhuang et al. [3] revealed that a major contradiction in urban renewal in China lies in the mismatch between policy tools and local realities, which often leads to similar forms of renewal with different effects. In response to this research gap, this paper aims to analyze

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the structural differences and common trends presented in urban renewal between policy-driven new towns and ordinary new districts. Starting with "differences in urban renewal information between policy new districts and ordinary new districts", we attempt to address three questions: In what dimensions are the differences between the two types of new districts mainly manifested? What common trends were shown in Qianhai, Xiongan, and the main urban areas of Bao 'an and Baoding during similar time periods? How can we build scalable and differentiated renewal paths in the future to avoid the risks of a one-size-fits-all approach?

2. Analysis and discussion

2.1. Core concept definition versus control sample comparison

Policy new towns usually refer to regional development platforms that have national or provincial strategic authorizations, enjoy special institutional arrangements in planning, management, and factor flows, and have institutional innovation as a clear goal. The OECD [4] research on local development and urban governance suggests that the advantage of the special policy space stems from the selective strengthening of rules and the centralization of resource allocation. Ordinary new districts often promote renewal within the existing administrative and financial framework and rely on conventional planning approvals, budget constraints, and project-based management. In terms of information convergence and cross-sectoral collaboration, the ability is usually limited. Turok [5], in discussing the long-term performance of urban regeneration, noted that without institutional learning mechanisms and knowledge accumulation across projects, renewal practices can easily fall into the trap of short cycles and repetitive inputs. We selected Qianhai and Xiongan, two representative new urban areas of stock renewal and incremental planning policy, as samples, and Bao 'an in Shenzhen and the main urban area of Baoding as control samples for ordinary new urban areas. This is the result of taking into account comparable levels, similar time Windows, and geographical and industrial correlations, to focus more on differences in institutions and governance structures rather than simply urban size or location factors.

2.2. Preliminary analysis framework: structured comparison of floating information differences in urban renewal

The floating information variance in urban renewal refers to differences in the cost of obtaining, update frequency, sharing scope, and verifiability of key information, such as land ownership status, demographic characteristics, industrial carrying capacity, risk exposure, and financial and capital constraints, throughout the renewal cycle. These differences continue to affect the quality of decision-making throughout multi-agent negotiations and portfolio optimization. From the perspective of complex urban systems, Batty et al. [6] pointed out that the key to urban transformation lies in the coupling among institutions, space, networks, and information, and information, as the medium connecting these elements, which will change the speed of feedback and the way errors accumulate. In a review of resilience assessment, Sharifi [7] emphasized that the lack of a measurable, traceable information system would weaken governance's adaptability, leading to the dilution of resilience goals during project implementation. Based on these perspectives, an analysis of information variance was conducted from a five-directional framework.

Firstly, there are significant differences between policy new areas and ordinary new areas in terms of the sources of information and the clarity of ownership rights. The planning and industrial information sources in Qianhai are diverse, and the ownership boundaries are relatively clear. In

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contrast, in Xiongan, the territorial space, infrastructure, etc., are mostly under uniform jurisdiction, and ownership is more concentrated. For instance, as a new area, information on industries, population, update units, and property rights in Bao'an District is scattered across streets, various departments, and market entities, resulting in inconsistent information content, and there is also a significant difference in the frequency and timeliness of updates. The update frequency and timeliness of Qianhai and Xiongan are higher, and they conduct information updates based on the master plan and phased construction plans, with a regular update rhythm and strong verification efforts on key nodes. Information updates in Bao'an District often coincide with the initiation and advancement of individual projects, and the district-level rolling updates have obvious deficiencies. The update rhythm of information in Baoding's main urban area is significantly affected by the financial situation and the maturity of projects, and update work is prone to intermittent issues. In terms of information-sharing mechanisms and cross-departmental collaboration, policy-based new areas have stronger cross-departmental collaboration capabilities, greater institutionalization of cross-departmental sharing, and data that is more easily aggregated within teams or platforms, thereby forming a feasible, comprehensive view. Ordinary new areas rely on temporary coordination to promote cross-departmental sharing, and the problems of repeated reporting and information islands are more prominent. Finally, in terms of the decision feedback cycle and adjustment flexibility, the governance gap between the two types of new areas is further reflected. The decision feedback cycle of Qianhai is shorter, enabling rapid adjustments to project combinations and related indicators in response to policies and market changes; Xiongan conducts feedback work based on phased evaluations, and decision adjustments are more flexible. The decision-making cycle in Bao'an District and Baoding is longer, and project adjustments are significantly affected by approval and funding constraints and are also often constrained by dual considerations of fiscal budgets and vested interests.

2.3. From institutional supply and governance structure: differences in the feedback cycle of urban renewal information

Differences in institutional supply will directly affect the cycle of information decision-making feedback. In a comparative study of governance mechanisms, Kwon et al. [8] noted that institutional pilot zones typically reduce information transmission losses among departments through mechanisms such as delegation of authority, parallel approval, and task force governance, thereby improving the efficiency of planning, screening, and optimization updates. Both Qianhai and Xiongan policy new towns are more likely to serve as a basis for unified goals and consistent approaches across departments in governance. In a review of digital governance, Zhang et al. [9] argued that the effectiveness of digital governance depends on whether data sharing and accountability structures are aligned, and that simply building an information platform does not automatically achieve synergy. In ordinary new districts, such as Bao 'an and the main urban areas of Baoding, they promote updates within the conventional governance structure, and their information mostly comes from scattered surveys, project applications, and statistics. Cross-departmental sharing is often constrained by inconsistent authorities, standards, and performance evaluations, leading to different key factual determinations across departments such as planning, finance, and housing and urban-rural development for the same renewal area, which affects the ability to update and identify risks.

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2.4. Spatial structure and functional organization: gaps in project renewal capabilities

Differences at the spatial organization level often manifest as disparities in project renewal capabilities. Papa et al. [10] noted in the TOD and renewal study that the synergy between transportation and land use can enhance the comprehensive benefits of renewal, but this requires long-term financial guarantees and cross-sectoral coordination as preconditions. Policy new towns are more likely to implement rail transit, public Spaces, industrial facilities, and public service facilities in phases, using unified indicators. Qianhai places greater emphasis on reorganizing embedded public Spaces and industrial carriers in its stock renewal, while Xiongan emphasizes a cluster structure and flexible reservation in its incremental planning. Both tend to carry medium - and long-term development goals through systematic spatial structures. [11] If carbon constraints are not incorporated into the spatial structure index, green targets can easily be diluted during project execution. Ordinary new districts are more likely to be affected by the real estate market cycle and short-term fiscal constraints in their spatial organization. They may face problems such as insufficient functional mixing or lagging public space supply. They rely more on cross-project coordination capabilities, which are closely related to information sharing and feedback mechanisms.

2.5. Land and capital mechanisms: double constraints on capital and land dependence

The land and capital mechanism is subject to the dual constraints of capital and land dependence. Weber [12] 's research suggests that urban corporatism drives local governments to organize urban development through land value capture and assetization strategies, and renewal decisions are thus more dependent on expected information about future returns. Policy new towns have richer toolkits, such as industrial funds, policy funds, and securitization of infrastructure-like assets, which enable them to promote comprehensive renewal over longer periods. But Aalbers [13] cautioned us that financialization amplifies the logic of asset returns, leading to the revaluation of public targets as tradable cash flows. Ordinary new districts are more likely to rely on land sales and short-term financing. Chen et al. [14] on land finance and local debt mechanisms noted that economic downturns compress public service investment. Under capital constraints, renewal projects may tend to choose types that can recover funds quickly, exacerbating underinvestment in social equity and construction. In contrast, Bao 'an may face more tension between industrial space renewal and capital preference, while the main urban area of Baoding needs to deal more with the issue of fiscal sustainability in the renewal of old districts. Both scenarios require including risk information from capital mechanisms in renewal decisions and establishing auditable cost-benefit disclosure rules.

3. Future urban renewal pathways: replicable to scalable differentiated renewal based on pilot experience

The key to the future path lies in translating the pilot experience into scalable modules to form an updated combination that can be implemented in different types of new districts. UN-Habitat [15] emphasizes that sustainable urbanization requires governance capacity and inclusiveness at the core of urban policies, and that renewal strategies should serve long-term improvements in quality of life rather than short-term construction expansion. A study by van den Berg et al. on innovation zones and renewal governance suggests that industrial-oriented renewal, if it ignores inclusiveness and housing pressure, can undermine urban competitiveness and trigger social backlash. Bibri et al. [16] emphasized in their review of smart sustainable cities that digitalization, low-carbon, and social

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goals need to be coordinated through institutional design, or they will fall into a pile of separate technologies. Therefore, we propose a future direction of urban renewal that focuses on "information governance capacity" and "renewal type". Qianhai corresponds to high synergy capacity stock renewal, Xiongan corresponds to high synergy capacity incremental renewal, Bao 'an is closer to a mixture of medium synergy capacity stock and industrial renewal, and the main urban area of Baoding is closer to medium and low synergy capacity stock renewal. The "tool mismatch" problem proposed by Zhuang [17] et al. for policy-driven new towns should focus on speeding up approvals rather than calibrating fairness and resilience; for ordinary new districts, the focus should shift from imitating high standards to building bottom-line capabilities and progressive digitalization. With this path from pilot simulation to promotion, we are expected to achieve a middle-level institutional design from pilot exploration to systematic promotion.

4. Conclusion

Overall, the new policy towns have greater advantages in terms of spatial organization, public services, and digital governance. In contrast, ordinary new towns, under the constraints of governance and budgetary restrictions, have multiple, scattered information sources with limited sharing, insufficient cross-departmental collaboration, and are more prone to fluctuate with market and fiscal cycles. The shortcomings of current urban renewal practices mainly lie in simply replicating the methods of policy new towns, ignoring information-sharing capabilities and resource differences, resulting in "incompatibility" issues for ordinary new towns. However, both types of new towns also exhibit a common trend: the goals of fairness, resilience, and low-carbon are becoming the core of the renewal work.

Looking to the future, for policy new towns, the focus of renewal should be on housing, accessibility of public services, carbon emissions, and environmental issues. Establish a cross-departmental data governance and evaluation system. Ordinary new towns are better suited to prioritize basic public services and community consultation, develop progressive renewal and risk-controllable financing structures, and establish unified data standards and simplified indicators, thereby strengthening dynamic supervision and public participation. Ultimately, the experience of policy new towns can be better extended to ordinary new towns, promoting urban renewal from pilot exploration to systematic promotion and long-term governance.

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