

Redevelopment of Inefficient Land: Policy Evolution, Guangzhou Practices and Reflections on Transformation

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Abstract

As China's urbanization shifts from rapid growth to steady development, and as urban development turns from large-scale expansion to quality improvement and efficiency gains in existing built-up areas, the redevelopment of inefficient land has become an important instrument for optimizing land-resource allocation and improving spatial governance. This paper systematically reviews the policy evolution of inefficient land redevelopment, analyzes the background and drivers of policy emergence and pilot reforms, and, drawing on Guangzhou's practices, discusses the challenges and transformation strategies for the new period. The study finds that inefficient land redevelopment has evolved through four phases: policy emergence, provincial and municipal pilots, nationwide promotion, and model innovation. The allocation of land development rights and the distribution of benefits constitute the core driving mechanism of redevelopment. In response to multiple challenges in the new period, local governments should strengthen integrated coordination, adhere to local adaptation and differentiated guidance, adopt distinct development-right allocation pathways for different redevelopment models, and promote a transformation in governance.

Keywords

Inefficient land redevelopment; policy evolution; local practice; reflection on transformation

Introduction

China's urbanization is moving from a period of rapid growth to a stage of steady development [1]. Urban development is likewise shifting from large-scale incremental expansion to the upgrading and efficiency improvement of existing space. Revitalizing inefficient stock land and promoting a transition in spatial development and use toward a more intensive and quality-oriented model have therefore become important issues in urban governance [2]. To date, the state has advanced several rounds of top-down pilots for inefficient land redevelopment. In 2023, the Ministry of Natural Resources issued the *Notice on Launching Pilot Work for Inefficient Land Redevelopment* (Natural Resources Development [2023] No. 171, hereafter "Document No. 171"), selecting 43 cities as pilots in order to promote intensive, compact, green and high-quality urban-rural development. In 2025, the *Notice on Expanding and Deepening Pilot Work for Inefficient Land Redevelopment* (Natural Resources Development [2025] No. 83, hereafter "Document No. 83") further proposed policy innovation for revitalizing inefficient land through coordinated territorial spatial planning, optimization of stock industrial and commercial land use, and related measures.

Inefficient land redevelopment is costly and involves complex property-right issues. It is often constrained by long redevelopment cycles, difficult policy pathways and hard-to-balance project economics. As a result, both local governments and market actors have limited incentives, and redevelopment in many places remains driven mainly by administrative instructions from higher levels [3]. Existing studies focus on four themes: theoretical research and pathway exploration for different types of inefficient land, such as inefficient industrial land [4-6], urban villages [7-8] and idle rural

homesteads [9-12]; spatial-pattern analysis and redevelopment strategies based on inefficient-land identification [13-15]; deeper institutional reflection on use control, property-right systems and related institutional logics [16-18]; and systematic reviews of policies and practices, including driving mechanisms [19], existing problems [20-21], implementation models [22-23] and value-added benefit distribution mechanisms [24-25]. Much of this literature is case-based and locally focused. Further work is still needed on the policy development process and driving mechanisms of inefficient land redevelopment, as well as on property-right relations and benefit distribution under different redevelopment models.

Guangzhou is one of the megacities that began systematic inefficient land redevelopment relatively early. Since being included in the first national pilot cohort in September 2023, the city has carried out a series of practical explorations around inefficient land redevelopment. Through diversified development pathways, it has promoted structural optimization, momentum conversion and quality improvement, formed demonstrative concepts and measures, and continued to advance information-based governance of stock inefficient land [26]. Guangzhou therefore offers useful experience for inefficient land redevelopment. On this basis, this study systematically reviews China's policy process for inefficient land redevelopment, uses Guangzhou as a case to discuss its practical logic, analyzes the main challenges facing redevelopment in the new period, and proposes policy recommendations for optimizing redevelopment pathways.

1 Theoretical Understanding of Inefficient Land Redevelopment

Inefficient land redevelopment usually refers to the secondary development of inefficient stock construction land through self-initiated or joint redevelopment by original rights holders, the introduction of market actors, government acquisition and reserve, and related approaches. National pilot policies have defined inefficient land differently across rounds, while local governments have also explored regional mechanisms for assessing and identifying inefficient land. In terms of implementation, inefficient land redevelopment normally begins with inclusion in a local project database. Redevelopment actors then adopt different pathways according to land type, under the incentives and constraints of local policy.

Inefficient land redevelopment involves land use, spatial restructuring, interest coordination and other dimensions. Property-right restructuring and the allocation of land development rights have therefore become central to the construction of benefit-balancing frameworks across different redevelopment models.

1.1 Initial Allocation of Land Development Rights in Spatial Governance

Land development rights mainly refer to the right to develop and build on land through changes in land use and development intensity. They form an important component of the broader bundle of land-property rights [27-28]. In incremental land development, development rights mainly refer to the right to carry out development on land, essentially an "initial development permission." The United Kingdom first introduced the concept of development rights in the *Town and Country Planning Act* in the 1940s, separating development rights from land ownership and nationalizing them. After the concept was introduced into the United States in the 1960s, the United States explored market transactions in development rights on the basis of privatized development rights, gradually forming institutional practices such as purchase of development rights and transfer of development rights.

Unlike countries with private land ownership, land development rights in China's legal system carry strong attributes of public power. Under socialist public ownership of land, China has developed a property-right configuration in which land ownership, land-use rights and land development rights can be separated [29]. Within this configuration, control over development rights is embedded in the territorial spatial planning system and the land-use control system. Local governments exercise administrative power at different stages of land approval to control development rights for specific land-use projects at the micro level, thereby separating development rights from ownership and use rights. Local governments use a series of governance tools, including detailed planning, land-supply conditions and planning permits, to define and regulate land use and development intensity for specific projects. At the planning stage, detailed planning is the statutory basis for territorial spatial development and protection, land-use control, the issuance of urban and rural construction project planning permits, and various construction activities. At the land-supply stage, land-planning conditions are specified in land-transfer contracts or allocation decisions, defining the basic obligations of land-use right holders. During land use, planning authorities supervise development and construction through construction land planning permits, construction project planning permits and related instruments.

1.2 Reconfiguration of Land Development Rights in Inefficient Land Redevelopment

Compared with incremental land development, development rights in inefficient land redevelopment involve adjustment to existing development conditions. Their essence is "the right to change existing land-use modes beyond the defined scope of land-use rights," including changes to use, development intensity and other development entitlements originally restricted by land-supply conditions [29]. Inefficient land can be state-owned or collectively owned. Its users include governments, village collectives, enterprises and individuals.

During inefficient land redevelopment, multiple rights holders seek restructuring of use rights, development rights, leasing rights and benefit rights, together with distribution of the value increment generated by redevelopment. Differentiated policies and property-right allocation methods create different patterns of land value-added benefit distribution and affect the efficiency of spatial-resource allocation. From the perspective of who leads property-right allocation, redevelopment models can be divided into government-led, original-right-holder-led and village-collective-led models. Each model uses different methods to adjust land development rights.

In a government-led model, the government resumes land and supplies it again, transferring the land-use right together with development rights related to use and intensity to a new user. In original-right-holder-led and village-collective-led models, the urban-rural planning authority processes applications for changes to planning conditions, reissues planning conditions and clarifies the boundaries of development rights. For differentiated redevelopment models, local governments set development-right prices through land-transfer fees, supplementary land-price payments, land value-added benefit adjustment fees and other mechanisms, thereby participating in the distribution of redevelopment-induced land value increments. Redevelopment participants share the value increment generated by changes in land use or development intensity through cooperation and negotiation, making the value of land development rights explicit and forming a pattern of shared costs and shared returns.

2 Policy Evolution of Inefficient Land Redevelopment

2.1 Development Process of Inefficient Land Redevelopment

Inefficient land redevelopment is an institutional innovation formed during China's urbanization process to address tight land-resource constraints, improve land-use efficiency and promote high-quality urban-rural development. Its evolution can be divided into four key stages: policy emergence, provincial and municipal pilots, nationwide promotion, and model innovation (Table 1).

2.1.1 Policy Emergence: Local Exploration Through Institutional Unbundling and Empowerment Incentives

With rapid industrialization and urbanization, extensive and inefficient land use became increasingly prominent. In 2007, Foshan, Guangdong Province, issued the *Decision on Accelerating the Redevelopment of Old Towns, Old Factories and Old Villages* (Foshan Government [2007] No. 68) and three related guidance documents. It proposed improving urban and rural infrastructure, upgrading urban functions and improving the urban-rural environment to meet development and livelihood needs, thereby pioneering regional exploration of stock-land revitalization.

In 2008, Guangdong Province summarized Foshan's experience with "three-old" redevelopment, sought support from the Ministry of Land and Resources, and launched a pilot demonstration province for economical and intensive land use. In 2009, Guangdong issued the *Several Opinions on Promoting "Three-Old" Redevelopment to Advance Economical and Intensive Land Use* (Guangdong Government [2009] No. 78), using institutional innovation to activate markets and revitalize stock land, thereby addressing historical problems in construction land left by earlier extensive development. In the same year, Guangzhou issued the *Opinions on Accelerating "Three-Old" Redevelopment* (Guangzhou Government [2009] No. 56) and two implementation opinions, formally launching its "three-old" redevelopment work.

This stage emerged because rapid urbanization consumed large quantities of land resources. Intensifying conflicts between land supply and demand pushed land-management policy toward economical and intensive use, prompting both the state and localities to pay attention to stock-resource revitalization. Through coordination between primary and secondary land development, "three-old" redevelopment enabled market actors to obtain primary development rights over stock land, attracted social capital into renewal, and activated the redevelopment potential of stock land through institutional unbundling and empowerment incentives.

2.1.2 Provincial and Municipal Pilot Stage: National Expansion of Provincial Pilots and Diversified Allocation Methods

In 2013, to implement the 18th National Congress requirements for economical and intensive resource use and transformation of resource-use modes, the Ministry of Land and Resources issued the *Guiding Opinions on Carrying Out Pilots for Urban Inefficient Land Redevelopment* (Land and Resources Development [2013] No. 3, hereafter "Document No. 3"). It selected ten provinces as pilots and for the first time provided policy guidance for inefficient land redevelopment.

In terms of target definition, the document specified three types of urban inefficient stock construction land eligible for pilots: land with scattered layout, extensive use and unreasonable use. In terms of policy orientation, it required governments to strengthen coordination, maintain a market orientation, adapt to circumstances, and promote four development models: redevelopment applications by original state-owned land users, redevelopment applications by rural collective economic organizations, market-

actor participation and government reserve development. These models shaped diversified approaches to allocating development rights over inefficient stock land.

2.1.3 Nationwide Promotion: Pilot Expansion and Public-Interest Constraints on Development Rights

The 2015 Central Urban Work Conference emphasized "people's cities for the people," marking a shift in urban development from a singular pursuit of scale expansion toward greater attention to human needs. In 2016, the Ministry of Land and Resources issued the *Guiding Opinions on Further Promoting the Redevelopment of Urban Inefficient Land (Trial)* (Land and Resources Development [2016] No. 147, hereafter "Document No. 147"), advancing pilots nationwide. Compared with the previous stage, the policy further standardized pilot targets, adding the restriction that land should have been identified as construction land in the Second National Land Survey. It also required stronger public facilities and livelihood projects, stipulating that a certain proportion of land should be prioritized for infrastructure, municipal facilities, public welfare projects and other public facilities in redevelopment, thereby improving public-interest constraints.

In this stage, some regions implemented redevelopment combining "high-yield uses and high floor-area ratios," greatly raising the value of development rights. Through negotiated transfer of development rights, original rights holders and market actors were given strong incentives to participate, leading to many redevelopment projects dominated by real estate development. In recent years, however, some real estate projects have affected stable and healthy market development because of broken capital chains, making the previous redevelopment mode difficult to sustain. In 2021, the Ministry of Housing and Urban-Rural Development issued the *Notice on Preventing Large-Scale Demolition and Construction in Urban Renewal Actions* (Construction Science [2021] No. 63), tightening national urban-renewal policy and requiring transformation of "three-old" redevelopment and urban renewal.

2.1.4 Model Innovation: Policy Integration and Redistribution of Legitimate Rights as the Core of New-Period Pilots

In the previous stage, excessive demolition and reconstruction in urban-village redevelopment increased social-stability risks. During the downward cycle of the real estate market, newly supplied commodity housing from urban-village redevelopment became difficult to absorb in the short term, increasing the difficulty of maintaining stable real estate market development. To eliminate safety risks and promote high-quality urban development, the *Guiding Opinions on Actively and Steadily Promoting Urban Village Redevelopment in Megacities and Large Cities* (State Council General Office [2023] No. 25, hereafter "State Council Document No. 25") were issued in 2023. The document emphasized steady, active and prudent progress, and clarified that urban-village redevelopment should proceed through legal expropriation and net-land transfer.

In the same year, the Ministry of Natural Resources issued Document No. 171, launching a new round of pilots focused on stock construction land in both urban and rural areas that had scattered layouts, extensive use or unreasonable use. The policy emphasized innovation in redevelopment policies and mechanisms in four areas: planning coordination, reserve support, policy incentives and foundational safeguards. In 2025, Document No. 83 expanded the pilot scope and further encouraged innovation in coordinated territorial spatial planning, optimization of stock industrial and commercial land use, mixed land development and compatible use conversion, and basic work support.

In terms of land-supply methods, the new stage allows coordinated primary and secondary redevelopment, and governments can determine redevelopment actors through negotiated transfer.

Early participation by market actors and flexible supply methods expanded the negotiation space of market actors, enabling them to obtain high land value-added returns. The new pilot policies require improvements in land expropriation and supply methods, clarification of standards and procedures for compensation for houses on collective land, and adherence to net-land supply. This shifts primary development rights over inefficient land back to local governments and transforms development-right allocation from "concession and decentralization" to "government coordination."

In benefit coordination, the new pilot policies use land-price tools to regulate development-right returns and encourage original rights holders and market actors to participate in redevelopment. They propose that after land-use adjustment, supplementary payments be calculated as a certain proportion of the published land price or market appraised value. They also refine the subtypes and conditions under which inefficient industrial land redevelopment does not require additional land-price payment.

Table 1 Evolutionary Trajectory of China's Major Policies on Inefficient Land Redevelopment

Stage	Year	Policy Measures
Policy emergence (2007-2012)	2007	Foshan, Guangdong: <i>Decision on Accelerating the Redevelopment of Old Towns, Old Factories and Old Villages</i> and three related guidance documents (Foshan Government [2007] No. 68).
Policy emergence (2007-2012)	2009	Guangdong: <i>Work Plan for Building a Pilot Demonstration Province for Economical and Intensive Land Use</i> (Guangdong Government Telegram [2009] No. 16).
Policy emergence (2007-2012)	2009	Guangdong: <i>Several Opinions on Promoting "Three-Old" Redevelopment to Advance Economical and Intensive Land Use</i> (Guangdong Government [2009] No. 78).
Provincial and municipal pilots (2013-2015)	2013	<i>Guiding Opinions on Carrying Out Pilots for Urban Inefficient Land Redevelopment</i> (Land and Resources Development [2013] No. 3).
Nationwide promotion (2016-2022)	2016	<i>Guiding Opinions on Further Promoting the Redevelopment of Urban Inefficient Land</i> (Land and Resources Development [2016] No. 147).
Nationwide promotion (2016-2022)	2018	<i>Notice of the Ministry of Natural Resources on Improving the Mechanism Linking Incremental and Stock Construction Land</i> (Natural Resources Regulation [2018] No. 1).
Nationwide promotion (2016-2022)	2021	<i>Regulations for the Implementation of the Land Administration Law of the People's Republic of China</i> (2021 revision).
Nationwide promotion	2021	<i>Notice on Preventing Large-Scale Demolition and Construction in Urban Renewal Actions</i> (Construction Science [2021] No. 63).

Stage	Year	Policy Measures
(2016-2022)		
Model innovation (2023-present)	2023	<i>Guiding Opinions on Actively and Steadily Promoting Urban Village Redevelopment in Megacities and Large Cities</i> (State Council General Office [2023] No. 25).
Model innovation (2023-present)	2023	<i>Notice on Launching Pilot Work for Inefficient Land Redevelopment</i> (Natural Resources Development [2023] No. 171).
Model innovation (2023-present)	2025	<i>Notice on Expanding and Deepening Pilot Work for Inefficient Land Redevelopment</i> (Natural Resources Development [2025] No. 83).

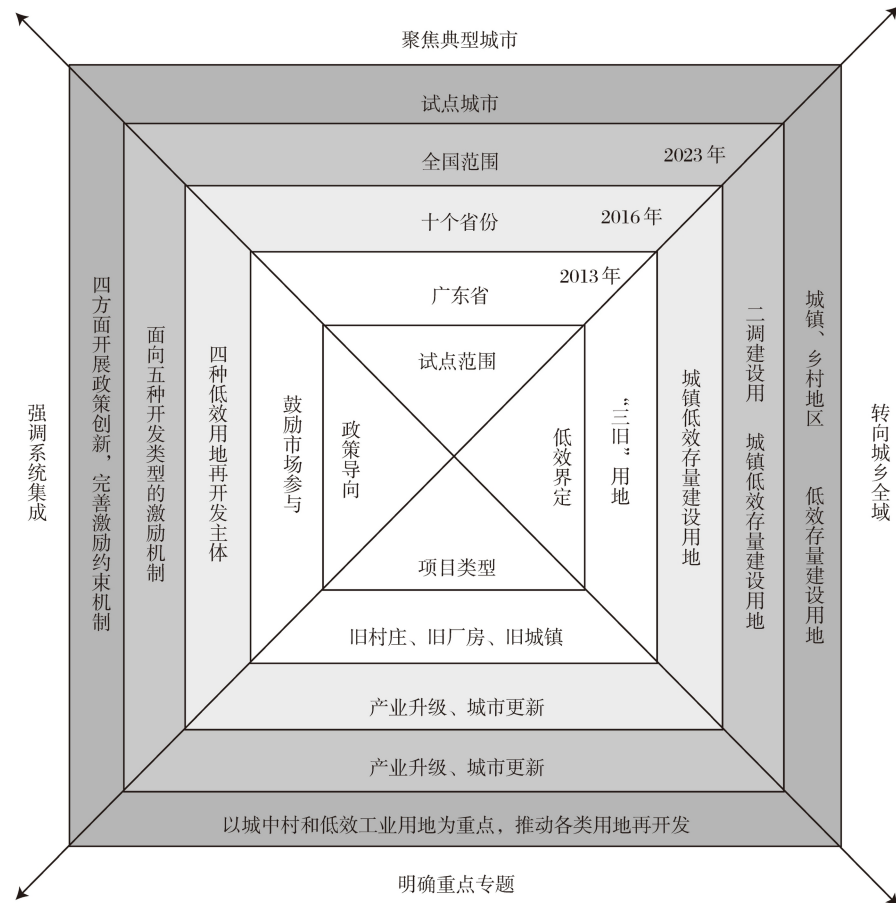


Fig. 1 Trends in the Evolution of Pilot Policies for Inefficient Land Redevelopment

2.2 Policy Evolution Trends

Looking back over the policy history of inefficient land redevelopment, its connotations have become more refined and expanded, while its objectives have become more focused and explicit. The new round

of redevelopment, while concentrating on typical cities and key thematic areas, extends the definition of inefficient land to the whole urban-rural territory, and emphasizes system integration and model innovation across planning, reserve mechanisms, actor incentives and basic safeguards (Fig. 1).

2.2.1 Shift Toward the Whole Urban-Rural Territory

Against the backdrop of territorial spatial planning reform, redevelopment increasingly considers the development and use of inefficient stock territorial space across the entire territory. Document No. 3 in 2013 identified three characteristics of inefficient land: scattered layout, extensive use and unreasonable use. Document No. 147 in 2016 refined the applicable scope as "construction land identified in the Second National Land Survey." Since 2019, the Party Central Committee and the State Council have required the establishment and supervision of a unified territorial spatial planning system. Territorial spatial governance has therefore expanded from urban space to all territorial space and all elements, further driving a transformation in the governance logic of inefficient land redevelopment.

Document No. 171 in 2023 marks a watershed: redevelopment targets shifted from urban inefficient land to inefficient land across the whole territory, and the development orientation shifted from promoting urbanization to high-quality urban-rural integration. In the new period, inefficient land redevelopment must coordinate and optimize urban and rural resources, promote two-way flows of urban-rural factors, and enhance the intensive use and value of urban-rural resources.

2.2.2 Emphasis on System Integration

The policy content has evolved from focusing on "who develops," to "what is developed," and then to "how development is carried out." Document No. 3 in 2013 proposed four types of redevelopment actors: original state-owned land users, rural collective economic organizations, market actors and government. Document No. 147 in 2016 emphasized mechanism construction for five types of inefficient land redevelopment, including original state-owned land-user redevelopment, urban-village collective construction land redevelopment, industrial transformation and upgrading to optimize land-use structure, contiguous redevelopment, and construction of public facilities and livelihood projects.

State Council Document No. 25 in 2023 required scientific preparation of urban-village redevelopment plans, multiple channels for raising redevelopment funds, efficient and comprehensive land-resource use, and integrated handling of different stakeholders' claims. It also called for stronger policy support for urban-village redevelopment, active innovation in redevelopment models, encouragement of private capital participation, development of new business forms, and sustainable operation. Document No. 171 in 2023 addressed difficult issues from the previous pilot round, including planning coordination, financing and benefit distribution, and proposed 14 innovative measures to improve incentive and constraint mechanisms and form an integrated policy system. Document No. 83 in 2025 further added innovation measures for optimizing stock industrial and commercial land use, mixed development and compatible use conversion.

3 Guangzhou Practices in Inefficient Land Redevelopment

As a megacity included in the first cohort of the new round of pilots, Guangzhou has transformed its redevelopment approach based on years of "three-old" redevelopment experience and current changes in the economic environment. It now places more emphasis on overall coordination, local adaptation and differentiated guidance. In 2024, Guangzhou issued the *Several Measures of Guangzhou to Support Inefficient Land Redevelopment, Benefit Enterprises and Residents, and Promote Economic and Social*

Development (Trial) and the *Work Guidelines for Models and Pathways of Inefficient Land Redevelopment in Guangzhou (Trial)* (Guangzhou Planning and Natural Resources [2024] No. 26), together with 11 guidelines and the *Implementation Opinions on Supporting Huadu District in Promoting Inefficient Land Redevelopment Through the Redevelopment of Village-Town Industrial Clusters (Trial)*. These documents establish a "1+X+N" policy system for inefficient land redevelopment, providing planning and land support across the project life cycle, including investigation and evaluation, special planning, redevelopment models and pathways, land-use mixing and compatibility, land supply, land-price calculation and land replacement.

Guangzhou adopts different implementation pathways and benefit coordination mechanisms for different redevelopment models. For projects that do not involve ownership transfer or affect urban planning, it continues to encourage market-led self-redevelopment. For projects involving ownership transfer and affecting urban public facilities, it adopts government-led "land reserve and land preparation." Land preparation refers to a process in which, within a government-designated area, state-owned enterprises raise funds, assist the territorial government in expropriation, compensation and resettlement, construct supporting facilities such as roads, water supply, power supply, gas, drainage, communications, lighting, greening and land leveling, and then transfer the land uniformly to the government reserve. According to redevelopment actors, inefficient land redevelopment can be divided into three types: government-led, original-right-holder-led and village-collective-led. Table 2 summarizes the main property-right changes involved.

Table 2 Main Property-Right Changes in Typical Inefficient Land Redevelopment Models

Redevelopment model	Land ownership	Practice pathway	Main property-right changes during redevelopment
Government-led	State-owned or collective	Government ecological restoration and public-interest land construction	Land-use rights shift to the government.
Government-led	State-owned or collective	Government reserve and transfer (including state-owned enterprise land preparation)	After redevelopment, land becomes state-owned if it was originally collective; ownership changes, and state-owned construction land-use rights shift to market actors or state-owned enterprises.
Government-led	State-owned or collective	Public transaction of redevelopment rights and state-owned enterprise coordination	Development and use rights are transferred to market actors or state-owned enterprises under coordinated arrangements.
Government-led	State-owned or collective	Government book-entry reserve	Part of the rights shift to market actors; village collectives receive land-

Redevelopment model	Land ownership	Practice pathway	Main property-right changes during redevelopment
			transfer shares or allocated properties depending on arrangements.
Original-right-holder-led	State-owned or collective	Self-revitalization by original rights holders	No transfer of ownership, land-use rights or real-property rights is involved.
Village-collective-led	Collective	Leasing of collective construction land	Use rights shift to market actors during the lease term and revert to the original rights holder after expiry; no change in real-property registration is involved.
Village-collective-led	Collective	Transfer of collective construction land plus allocated construction	Use and property rights shift to market actors during the agreed term and revert after expiry; real-property registration changes are involved.

3.1 Redevelopment Models and Their Challenges

3.1.1 Government-Led Model: Misalignment of Claims Between Government and Original Rights Holders in Property-Right Restructuring

In government-led redevelopment, the government obtains land-use rights through expropriation, acquisition or resumption, and then allocates land-use and development rights through transfer or allocation. Four submodels can be identified. First, in ecological restoration and public-interest land construction, the government uses fiscal funds for primary land development, adjusts land use to green space or public facilities, restricts the development rights of the parcel, makes up for public-service deficits and improves the urban ecological environment. Second, in government reserve and transfer or state-owned enterprise land preparation, the government or land-preparation actor pays expropriation and primary development costs, adjusts development rights such as land use and development intensity, and transfers the land again to obtain primary development returns. Market actors obtain secondary development returns through transfer or lease of use rights, while original rights holders receive compensation. Third, in public transaction of redevelopment rights and state-owned enterprise coordination, the government introduces market actors and state-owned enterprises into multi-level linked development, sharing value increments from development rights. Fourth, in book-entry government reserve, the government reserves collective land, signs book-entry reserve agreements with village collectives, publicly transfers the land, and the village collective receives a share of land-transfer revenue together with ownership and use rights over allocated properties, sharing value increments with the government.

Government-led redevelopment faces heavy fiscal burdens and difficult property-right negotiations. The government's acquisition of ownership and use rights is the basic precondition for redevelopment. Yet

in property-right restructuring, the interests of government and original rights holders are often misaligned, resulting in high reserve costs, high transaction costs and long bargaining cycles.

During collective land expropriation, village collectives tend to raise compensation demands because land ownership carries a bottom-line function for livelihood security and because they seek to offset expected future returns lost through the loss of ownership. Historical redevelopment practices in which compensation standards increased from one village to another have also created high-return expectations among villagers, making agreement more difficult. From the local government's perspective, limited general budget support makes it hard to finance the property compensation needed for large-scale inefficient land renewal. At the same time, affected by changes in land-market supply and demand, transaction prices in the primary land market may fall below expectations, reducing land-transfer revenue and making it difficult to cover reserve and development costs, thereby affecting the financial balance.

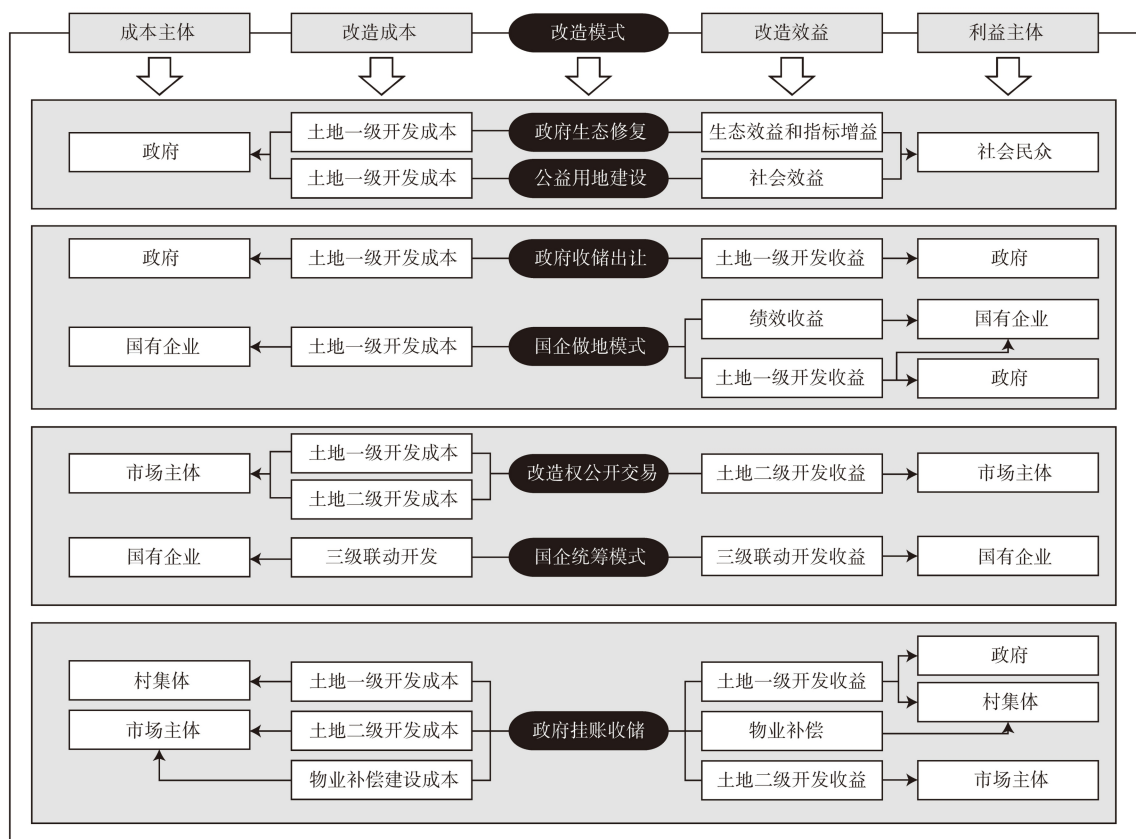


Fig. 2 Benefit Structures of Four Government-Led Inefficient Land Redevelopment Models

3.1.2 Original-Right-Holder-Led Model: Rational Imbalance Between Redevelopment Costs and Value-Added Benefits

The defining feature of original-right-holder-led redevelopment is that, while retaining the original rights holder's land property rights, the government grants a certain scope of development rights. This allows the rights holder to increase development intensity through demolition and reconstruction or to adjust building functions through renovation, thereby obtaining land value-added benefits. Two implementation pathways can be identified. First, inefficient residential, commercial and service land

can be redeveloped through "supplementary land-price payment for stock land." The government calculates the land-transfer fee according to project use and newly added floor area, and the original rights holder pays the supplementary fee to acquire development rights for higher intensity. This is essentially a paid transaction in land development rights. Second, inefficient land redeveloped from "industrial to industrial" can use a "land-price exemption" approach. Guangzhou allows additional floor area generated by "industrial-to-industrial" redevelopment of stock land without further land-transfer payment. The core logic is that the government concedes development-right returns in order to mobilize property-right holders, guide urban industries toward higher value-added sectors prioritized by the region, and support industrial upgrading and high-quality urban development.

For original rights holders, the key to redevelopment decisions lies in their rational assessment of redevelopment costs and land value-added benefits. If costs are too high and returns too low, rights holders lack incentives. For inefficient residential land, old neighborhoods built long ago with inadequate public facilities have urgent redevelopment needs, but residents are often middle- and low-income groups or retirees, making it difficult to raise funds. In some old neighborhoods, rental rates are high and residents and registered households are separated, weakening willingness to pay for redevelopment and services. For inefficient industrial land, rights holders are often small and medium-sized private enterprises with weak cash-flow capacity, limited development experience and low willingness to bear risks. These conditions reduce willingness to redevelop. In addition, inefficient industrial areas often contain many parcels without independent land occupation and with multiple property-right holders, further increasing the difficulty of self-revitalization.

3.1.3 Village-Collective-Led Model: Low-End Industrial Lock-In Under Property-Right Market Failure

In village-collective-led redevelopment, collective construction land remains collectively owned. Government control over development rights is therefore mainly implemented through planning permits to ensure conformity with territorial spatial planning and land-use control. The basic pathway is that, under compliance with laws, regulations and planning, the village collective transfers the use rights and development rights of collective construction land to market actors for an agreed period. Market actors pay land-use prices or rents to the village collective, and the collective economic organization recovers the relevant rights upon expiry.

There are two main transaction methods. The first is land leasing: the village collective leases rural collective commercial construction land to a market actor for a fixed period, and the latter undertakes development, construction and operation while paying rent periodically. The second is a "transfer plus allocated construction" model: the village collective transfers collective construction land to an enterprise and receives a one-off land-use payment. The enterprise builds replacement properties for the collective and leases them back. During construction, the village collective pays construction fees to the enterprise in phases, linked to commencement, topping-out, completion and real-property registration. After completion, the village collective obtains sustained income through agreed rents.

In this model, enterprises as investors seek stable and substantial returns, while village collectives seek long-term and stable income through property-right transactions. Both sides' profit-oriented behavior can induce market failure. Misallocation of land-use and development rights may produce a negative cycle in the industrial ecosystem and crowd out high-growth, innovative and high-quality firms. On one hand, village collectives may be constrained by short-term thinking, focusing on rent levels rather than project quality and lacking consideration of regional industrial layout and project development potential.

On the other hand, some developers adopt a real estate-style model, relying on high-intensity, homogeneous construction and rapid subleasing or transfer to recover capital, while neglecting the quality and sectoral fit of introduced firms. This leads to inefficient use of redevelopment resources.

3.2 Guangzhou's Innovative Exploration of Inefficient Land Redevelopment

3.2.1 Government-Led Model: Coordinated Allocation of Development Rights to Release Land Value in the Songxi Area

The Songxi Area of Luochongwei in Baiyun District covers 213.15 ha and contains 2.9808 million m² of existing buildings. Old state-owned factories and village settlements are interwoven, and the area suffers from low-end industries, low land-use efficiency, mixed traffic and congestion. It is Guangzhou's first urban-village redevelopment project started under the model of "legal expropriation plus net-land transfer." To achieve high-quality development, the area adopted a state-owned enterprise land-preparation model, with Guangzhou Bay Area Xin'an Urban Development Investment Co., Ltd. as the land-preparation actor.

The Songxi redevelopment releases land value through coordinated allocation of development rights. It uses external capital to share cost pressures, expands financing channels and coordinates property-right restructuring. In practice, the district government organizes the definition and filing of the land-preparation scope, conducts basic data surveys and verification, prepares and approves land-preparation and detailed planning schemes, formulates an implementation plan, carries out expropriation, compensation and resettlement, cancels original property rights after compensation, and transfers eligible land into the reserve before supply.

This model helps address the high initial cost and long negotiation cycle typical of government-led redevelopment. By introducing a state-owned enterprise as the land-preparation actor, the government can coordinate development rights and value-added benefit distribution more flexibly, while guiding the project toward intensive and efficient spatial use.

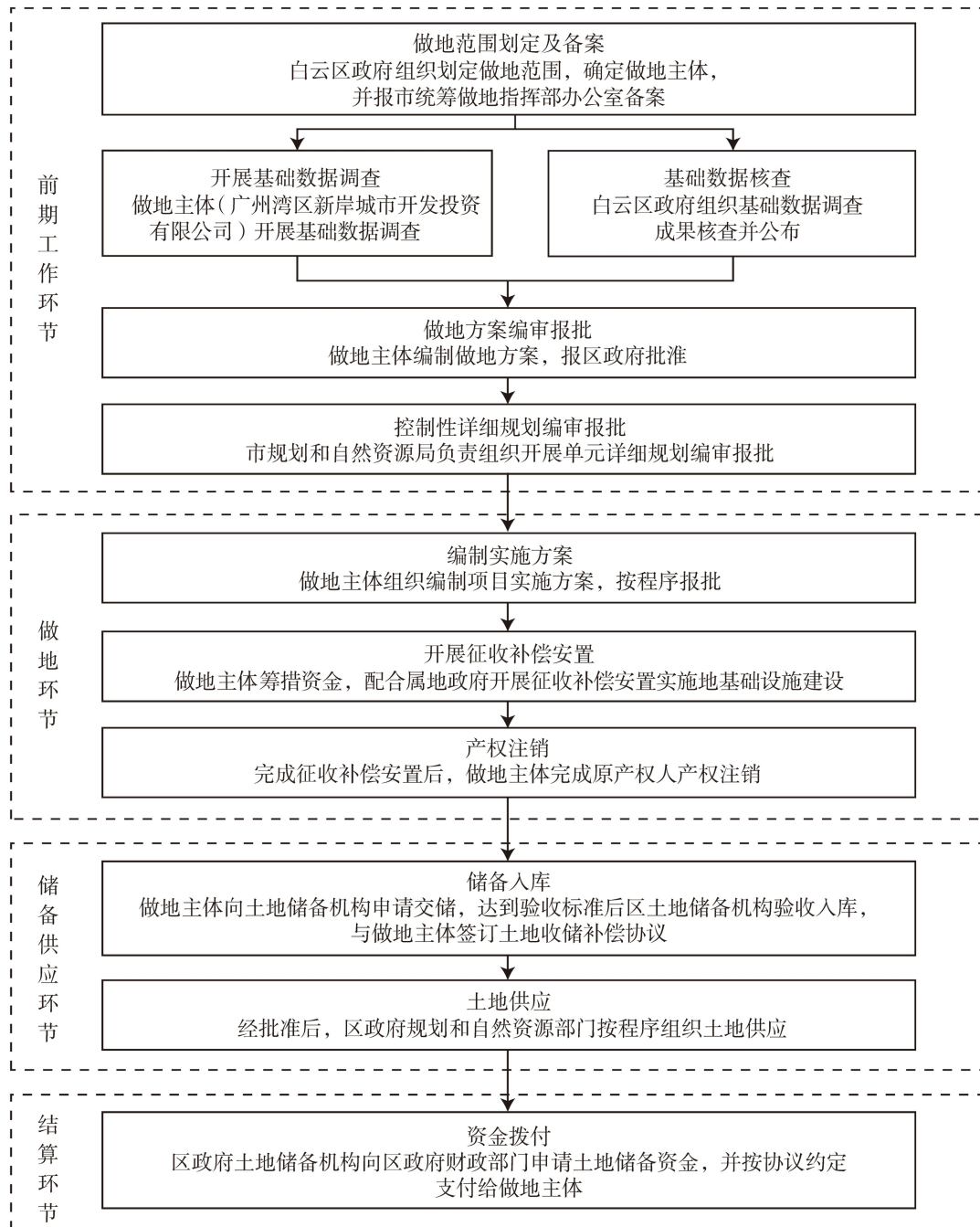


Fig. 3 Land Preparation Process Led by State-Owned Enterprises in the Songxi Area of Luochongwei

3.2.2 Original-Right-Holder-Led Model: Development-Right Benefit Concessions Enabling Self-Initiated Renewal at No. 2 Qun Street

The self-initiated renewal project at No. 2 Qun Street in Huadu District covers 342.4 m², with a building area of 1,726.64 m². It is a five-storey mixed-structure building with 25 households. Faced with a poor living environment, safety hazards and inadequate public services, the owners jointly bore redevelopment costs, contributed at a standard of 4,600 yuan/m² for demolition of unsafe structures

and reconstruction, and entrusted a district state-owned enterprise to carry out demolition and construction (Fig. 4).

To encourage self-redevelopment by property-right holders, the government subsidized 50% of actual engineering construction costs and awarded subsidies to owners equal to 50% of actual paid housing property maintenance funds, thereby addressing the long-term maintenance problem of old neighborhoods without special maintenance funds. At the same time, the additional residential floor area was charged land-transfer fees based on a corrected benchmark residential land price for the same location, substantially reducing the financial burden of owners. After redevelopment, the water, electricity and gas infrastructure of No. 2 Qun Street was comprehensively upgraded, two indoor elevators were added, the fire-safety system was improved, the stair spacing increased from 0.9 m to 1.2 m, housing value rose by 1.6 times, and the government saved around 50% of fiscal expenditure. The project thus achieved a win-win pattern of benefits for property-right holders, fiscal savings for government and improved spatial quality.

The core bottleneck in self-redevelopment of inefficient residential land is the mismatch between redevelopment returns and costs. Development rights, as a key carrier of land value-added benefits, directly determine the feasibility of redevelopment pathways. In the No. 2 Qun Street project, the government moderately conceded returns from changes in development intensity through a combination of land-price concessions and fiscal subsidies. This strengthened redevelopment willingness and optimized the pathway for self-redevelopment of inefficient residential land. Under normal conditions, additional floor area on transferred land would require land-transfer fees based on market-appraised floor land price. To encourage inefficient residential land redevelopment, the *Guidelines for Land-Price Calculation in Inefficient Land Redevelopment in Guangzhou (Trial)* (Guangzhou Planning and Natural Resources [2024] No. 26) clarified that, where inefficient residential land is redeveloped through demolition and reconstruction under relevant rules, discounted incentives may be used to encourage property-right holders to redevelop voluntarily and promote optimized allocation of development rights. In practice, Huadu District also explored long-term and stable channels for raising property-service funds by subsidizing housing maintenance funds and engineering costs in certain proportions.

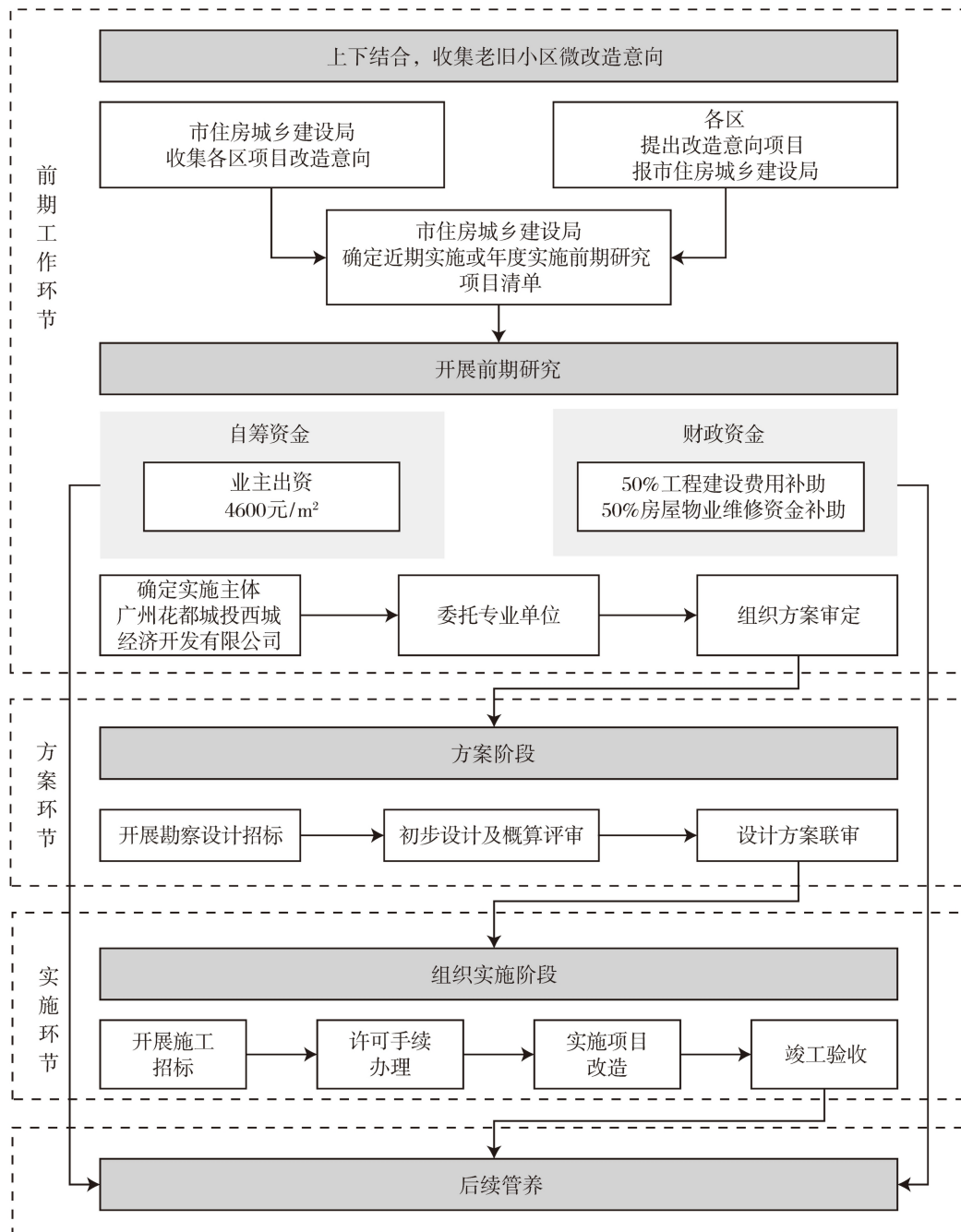


Fig. 4 Implementation Process for the Self-Initiated Renewal Project at No. 2 Qun Street

3.2.3 Village-Collective-Led Model: State-Owned Enterprise Empowerment and Property-Right Restructuring in the Redevelopment of Tangmei Village Reserved Land

Tangmei Village Economic Cooperative Union in Xintang Town, Zengcheng District, holds about 349 mu of reserved village land designated for commercial use, which had long been used inefficiently. Tangmei Village used a state-owned enterprise as a key bridge and relied on the rural collective asset transaction platform to carry out self-initiated investment attraction for its reserved land. A wholly owned state-owned enterprise established by Xintang Town signed a 40-year land lease with the village collective to

obtain land-use rights. The enterprise then subleased the land to Mingda (Hong Kong) Company, which was responsible for developing the Aeon Mall Mingguhui project with a total floor area of about 870,000 m². After completion, the property was subleased to Aeon Group for operation and management. Aeon Group is building it into a large, high-end and modern commercial complex with advanced industrial clustering, clear functional zoning, a strong overall environment and regional competitiveness. The first-year rent is 18.38 million yuan, increasing by 10% every five years, with cumulative rent reaching 1.051 billion yuan over the 40-year lease term.

In the village-collective-led model, the village collective is the user of the reserved land and holds land-use rights and planning-defined development rights. However, limited investment-attraction capacity and operational experience make it difficult to convert potential development rights into actual value. The Tangmei project mobilized all parties through property-right restructuring, protecting the village collective's core rights while using the resource-integration capacity of a state-owned enterprise and the professional operation advantages of a branded enterprise. This promoted efficient land revitalization, activated industrial functions and upgraded business formats.

Compared with other village-collective self-attraction projects, the advantage of the Tangmei reserved land redevelopment lies in the state-owned enterprise's bridging role, which connects the village collective with high-quality external firms and optimizes the allocation of development rights. This helps resolve the problems of weak industrial level and low project quality in village-collective-led inefficient land redevelopment. First, unified leasing by a state-owned enterprise transfers reserved land-use rights to the relevant state-owned enterprise. Second, the state-owned enterprise serves as coordinator between the village collective and the market, facilitating the transfer of use and development rights, introducing strategic partners and branded developers, building a high-quality project and promoting regional industrial upgrading.

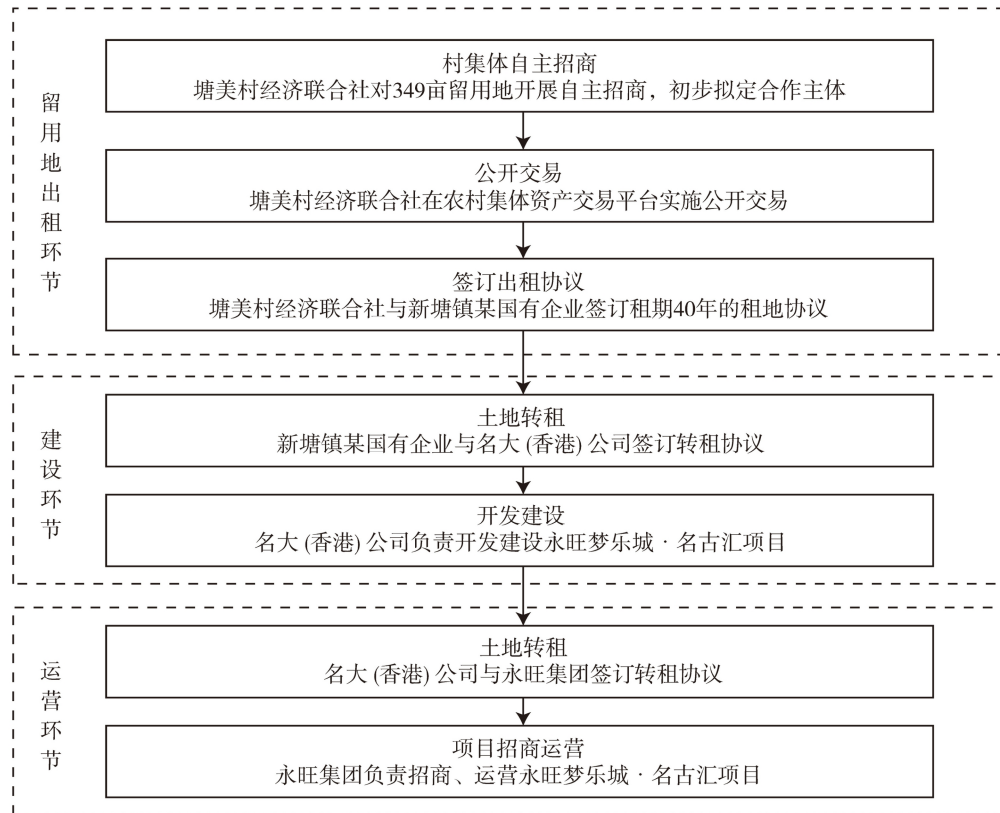


Fig. 5 Implementation Process for the Redevelopment of Reserved Land in Tangmei Village

4 Reflections on Transformation and Policy Recommendations

4.1 Reflections on Transformation

At present, urban development is shifting from incremental expansion to stock upgrading and efficiency improvement. Inefficient land redevelopment is becoming institutionalized and normalized. Its objectives have shifted from addressing "urban diseases" and extensive land expansion to promoting high-quality urban-rural development. During the historical period of a booming real estate market, some regions greatly released market vitality by transferring secondary development returns to original rights holders and market actors, achieving certain reform results. However, existing redevelopment pathways now face a systematic weakening of driving forces. During market adjustment, cash-flow balancing models centered on land-transfer revenue are difficult to sustain. Since 2023, to transform urban-rural development modes and promote intensive, compact, green and high-quality development, the Ministry of Natural Resources has launched a new round of inefficient land redevelopment pilots.

The key to promoting inefficient land redevelopment is the rational allocation of land development rights. This includes not only defining the degree to which development rights are realized by adjusting land use and setting development intensity, but also allocating development-right benefits among redevelopment actors, including government, original rights holders, village collectives and market actors, so as to distribute land value-added benefits reasonably. Guangzhou's differentiated redevelopment models show that difficulties in allocating development-right benefits can lead to

multiple governance dilemmas. In government-led models, imbalance between development-right compensation and transfer revenue can impose excessive fiscal burdens. In original-right-holder-led models, low development-right returns weaken redevelopment incentives. In village-collective-led models, development-right benefits may flow to low-quality industrial projects, causing misallocation of spatial resources.

In the new period, inefficient land redevelopment must build a collaborative and shared benefit-distribution mechanism on the basis of comprehensively considering government fiscal balance, project economic feasibility and future development sustainability. It should create new redevelopment pathways that coordinate short-term factor supply with long-term competitiveness.

4.2 Policy Recommendations

Under the shift in the goals of the new round of urban development, the positioning of inefficient land redevelopment has changed from "using stock resources to increase land-transfer revenue" to "using the optimization and integration of spatial resources to enhance overall urban competitiveness." This places greater emphasis on urban efficiency governance and government coordination. Local practice must therefore guide original rights holders, village collectives and market actors to participate actively in co-creating urban value, on the basis of stronger government coordination.

First, from the perspective of improving overall development rights and interests, government-led models should reshape financial balancing mechanisms. Based on area-level development problems and needs, and combined with basic data surveys, governments should assess project economic feasibility, optimize spatial functions and development intensity, and identify the best combination of constraints such as demolition-construction ratio, construction scale and building height. Compensation standards should be clarified, and asset preparation, allocation and operation strategies should be proposed by category to form a value-added sharing pattern. Financing channels should be broadened through special loans for urban-village redevelopment, central budget funds and special bonds. Industrial investment funds and other instruments should be explored to support redevelopment of inefficient industrial land and construction of industrial carriers. Financial institutions should be guided to strengthen support for redevelopment and innovate relevant financial products and services.

Second, by improving development-right allocation, cost-reduction pathways should be explored for original-right-holder-led models. Land-price calculation rules should be optimized. For inefficient industrial land obtained through transfer or allocation, where only industrial or warehousing floor area is increased, additional land-transfer fees may be waived. For new residential floor area generated by redevelopment of inefficient residential land, land-transfer fees may be charged at a certain proportion of the benchmark residential land price for the same location. To address the cost-return problem in self-redevelopment of inefficient residential land, fiscal incentives should be added on the cost side, including subsidies for housing property maintenance funds and other engineering costs, as well as support for subsistence-allowance households, military personnel and other entitled groups. On the revenue side, old neighborhood stock resources should be coordinated, inefficient spaces activated, professional operators introduced, and operating service formats such as community life services and parking inserted, thereby achieving long-term sustainable returns.

Third, with adjustment of benefit-right distribution as the core, the industrial-entry review mechanism for village-collective-led models should be restructured. Industrial investment-attraction access mechanisms should be improved to ensure that use and development rights over collective inefficient

land conform to regional industrial-development positioning. On the basis of clear overall regional industrial requirements, a tiered review mechanism for the introduction of industrial projects on collective inefficient land should be established. Functional departments should conduct industrial assessments based on regional resource endowments, existing industrial conditions and planning orientations. Local state-owned enterprises should be encouraged to carry out unified development, construction, investment attraction and management of collective inefficient land. Their platform advantages in connecting high-quality enterprise resources should be used to prioritize the spatial needs of advanced manufacturing, strategic emerging industries and modern services, and to cultivate new quality productive forces through transformation and upgrading.

5 Conclusion

In the stock era, inefficient land redevelopment is essentially a core process in which multiple actors collaboratively share land development rights and benefit rights. Through property-right restructuring and benefit distribution, the value of land assets is made explicit. In the face of governance problems during the transition period, improving governance capacity through more systematic and refined institutional design has become an important task in the new round of redevelopment.

The academic contribution of this study lies in its use of land development rights and property-right economics to analyze policy evolution, local practice and the development dilemmas of different redevelopment models. It provides a new analytical framework for understanding the deeper logic of inefficient land redevelopment and offers a theoretical basis for institutional innovation during the transition period. In the new period, the key is to balance government public objectives, market-capital logic and the asset claims of original rights holders through institutional design. Accordingly, redevelopment institutions should establish multiple development pathways and reasonable benefit redistribution models suited to different project types, thereby enhancing the willingness of different actors to participate. While policy and resource support should be used to stimulate market vitality, government guidance and control over planning, development control and construction supervision must also be strengthened, so as to create a stable institutional environment and clear development expectations.

This study still has limitations that require further exploration. First, it does not provide sufficient comparative analysis of different governance models, nor does it use quantitative analysis to verify differences in efficiency and equity among government-led, original-right-holder-led and village-collective-led models. Future research can build a comparative framework for multiple models, quantify performance differences, and focus on how property-right clarity, benefit distribution ratios and policy-tool combinations affect development efficiency. Second, this study does not fully discuss how regional differences shape institutional design. Future research can examine regional differentiation, for example by comparing the logic of institutional innovation in the Yangtze River Delta and Pearl River Delta, and by tracking implementation outcomes through typical cases.

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