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ID 1438 | INSTITUTIONAL INNOVATION OF URBAN REGENERATION IN CHINA: A COMPARATIVE STUDY OF GUANGZHOU, SHENZHEN AND SHANGHAI

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1 PLANNING TRANSFORMATION TOWARD REGENERATION PLANNING AND SUSTAINABLE DEVELOPMENT IN CHINA

China's 30 years' urbanization progress and economic growth is complicatedly interweaved with land developing policy changes featured by distinctive state-led governance (Tian, Ma, 2009). Land is not only a simple container of production for growth, but also one of the most effective financing approaches for the governments with monopolistic power to get money and fund urban development (Fan et al., 2016; He et al., 2014; Figure 1). Accompanied by the worldwide greatest population mobility from rural to cities (247 million in 2015) and the rapidest urbanization growth from 26.9% to 52.7% (Figure 2), the years from 1991 to 2012 has witnessed increasingly land expansion from 2.08×10⁴ km² to 4.57×10⁴ km², which is criticized as "expanding land urbanization ignoring quality". (Wang et al., 2014; Yang et al., 2016; Ong, 2014; China's floating population report 2016).

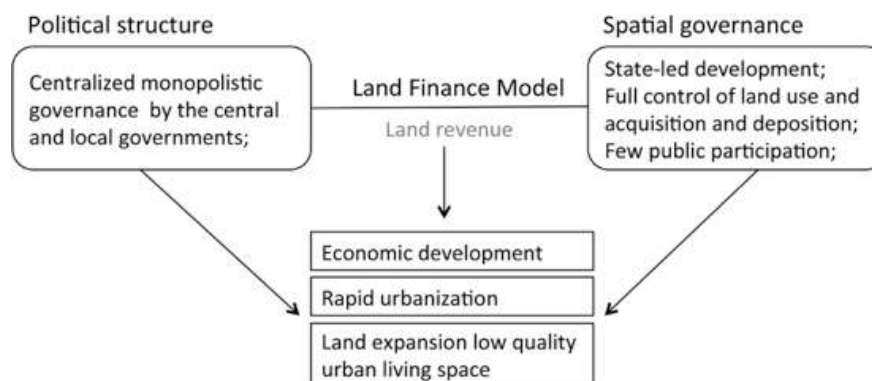


Figure 1 Logic of governance, land developing and economic development during China's reform stage

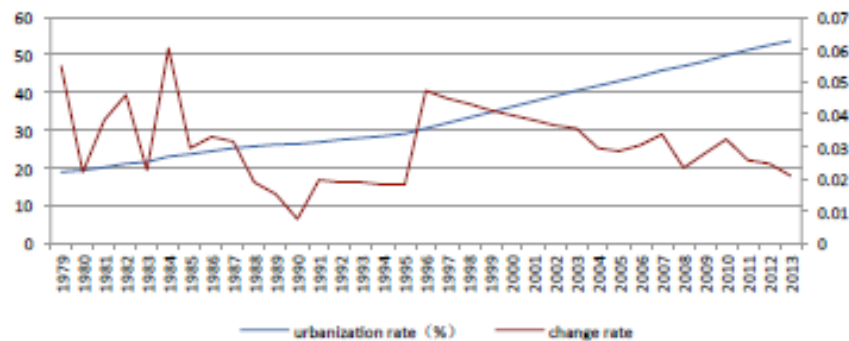


Figure 2 Urbanization and its changing rate Data source: Chinese Year Statistic Book calculated by author

This economic miracle based on land developing is exciting, quite similar to European reconstruction booming up after WWII and the urbanization marvels in other East Asian countries (World bank, 2014). However, many studies have criticized it for “draining the pond to catch the fish”, consuming too much land and creating widely distributed ghost cities. From a more profound perspective, it undermined problems such as vast public finance debt and barriers for economic shift from industry to services; the entire national economy seems “kidnapped” by the real estate market (Cai, 2017; Zhu, 2013). In response to this situation, China has been forced to revise its spatial strategies, veering towards a quality-oriented urban regeneration featured by lower growth rate, high emphasis on sustainability and formalization of institutional arrangements. In this new phase featured by the “new normal” economy, urban planning embodies a focus on structural change from expansion planning to regeneration planning by limiting horizontal urban sprawl and improving environment sustainability.

2 GENERAL DILEMMAS IN CHINESE URBAN REGENERATION

However, the space-time compression of rural-to-urban migration, industrial upgrading and urban sprawl makes Chinese urban regeneration suffer from various dilemmas like complicated property rights, lack of legal approaches for regulatory plan adjustment, and long-term informal land transactions (Hao et al., 2011; Zou, 2014; Feng, Tang, 2013), in addition to the endogenous difficulties in finance balance and consensus reaching related to multiple stakeholders (Roberts et al., 2016; Gomez, 1998; Thomson et al., 2006).

1. Complicated Land ownerships. Normally, for a developed land that is waiting for regeneration, private, collective (legal and illegal) and state-owned property ownerships formed in different historical periods always overlapped together, especially in the fringe of sprawling metropolitan area, which makes any redevelopment action very hard to put into practice. Moreover, since there are plenty of illegal settlements in urban and rural areas resulting from the contradiction between social housing shortage and massive labor migration (Ding, 2003; Liu, Zhang, 2015), urban regeneration is even a harder issue to deal with.
2. Restrictions in Land subdivision and land-use change. In term of dividing or merging developed lands for better reuse, as legislation for regeneration didn't receive serious consideration until the first decade in 21st century, the formal approach is explored for a long period, while some gratuitous lands have been transacted illegally under table. Due to the lease term constraint, no stakeholders could sell or divide the original property for better use, not to say upgrade and change the land use flexibly. The positive evolution and upgrading of lands is obviously hampered.

Faced with these institutional deficiencies (Figure 3), a wave of institutional innovations ranging from governance, legislation, to planning has been set up in recent years, which implies great shifting of regeneration institutionalization. The paper tries to systematically underline these formalized institutional arrangements in three leading Chinese cities of Shanghai, Shenzhen and Guangzhou that have initiated a pioneering and influential institutional innovation of urban regeneration in recent years. It analyzes their institutional reform from the governance and planning-making aspects, so as to the performance

evaluations to explore whether the policies are of high problem-solving capacity in vivid public sphere rather than expressions on paper (Nicholls, 2005; Zimmermann, 2015; Buser, 2013; Smith, 2013). It can provides a broad view on Chinese urban generation to help us enhance the our understanding of decision mechanism and power balancing mechanism in current China.

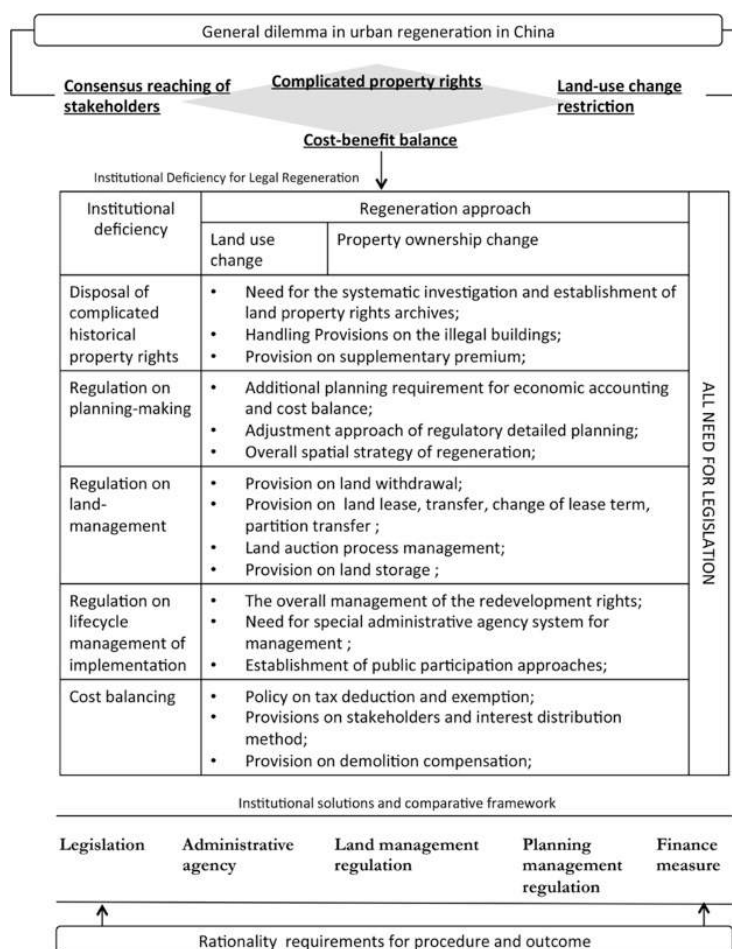


Figure 3 Dilemma, institutional deficiencies and solutions

The research is based on comprehensive understanding of the policy documents and field investigations. In the following chapters, it will firstly build a comparative analysis framework, and then goes into the deep analysis of the regenerations in Guangzhou, Shenzhen, and Shanghai. Different institutional arrangements are concluded afterward. The last section proposes some concluding remarks and suggestions for further regeneration in China.

3 INSTITUTIONAL INNOVATION OF URBAN REGENERATION IN THREE CHINESE METROPOLISES OF GUANGZHOU SHENZHEN AND SHANGHAI

3.1 COMPARATIVE FRAMEWORK

The characters of regeneration institutional arrangement is reflected from two folds, governance and planning management. In aspect of governance, administrative agency structure and legislation system sever as the foundation for performance, while other detailed management measures during the whole process also make difference to the outcome. And in the vein of planning management, new regulations involved in land use management and plan adjustment, are created by the government to deal with emerging problems in redevelopment, which is distinguished from previous new town plan. In consideration of its complexity, an analysis framework is built up as Figure 4. After direct analysis on

institutional innovation, the evaluation from aspects of legitimacy, outcome effectiveness and sustainability is also carried out.

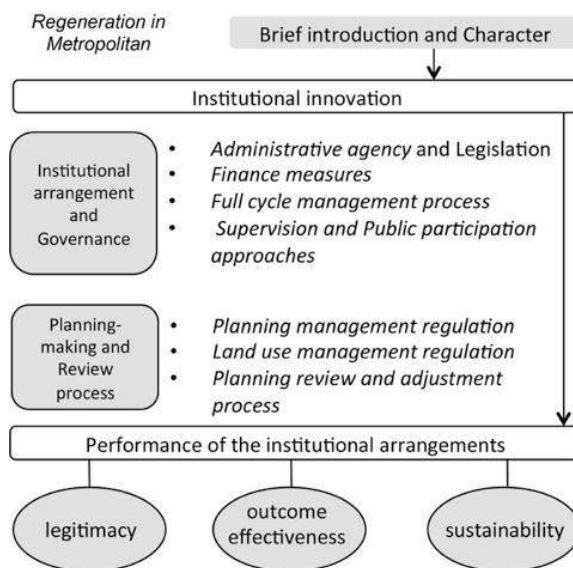
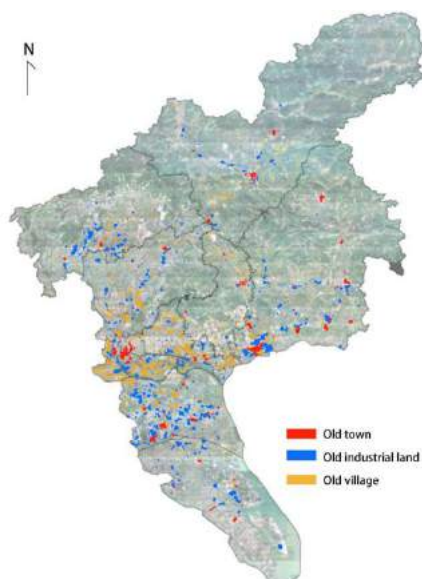


Figure 4 Analysis framework for regeneration in Metropolis

3.2 URBAN REGENERATION IN GUANGZHOU: GOVERNMENT ORIENTED

In Guangzhou, regeneration is called as “Three Olds” redevelopment¹ formulated since 2008, comprising three categories of old town, old village, and old industry area (Altrock, Schoon, 2013; Figure 5).



There are generally two modes of regenerations, the comprehensive approach (demolition-reconstruction) applied for the areas in need of overall upgrading and improvement, and small-plot generation (wei gaizao) which improves the public infrastructure and spatial quality in a small area. The total area for regeneration is up to 358.66 km², 11,182 parcels (according to the statistics of Guangzhou renewal Bureau). By July 2016, the overall completion rate is up to 10.9% (old village 14.6%; old industry land 9.6%). Regeneration in Guangzhou starts from market-oriented but transfers to government-oriented gradually by policy revision.

Figure 5 Distribution of Three Olds lands for regeneration in Guangzhou

Source: Map database for Three Olds until December 2014, Guangzhou Urban Renewal Bureau

3.2.1 INSTITUTIONAL ARRANGEMENT AND GOVERNANCE

(1) ADMINISTRATIVE AGENCY STRUCTURE AND LEGISLATION SYSTEM

In order to effectively manage the urban regeneration projects, Guangzhou established the Guangzhou Urban Renewal Bureau in 2015, which is the first urban regeneration bureau across national wide.

¹ In Dec 2008, Chinese Ministry of Land and Resources together with Guangdong Provincial Government list Guangdong Province as the trial districts of intensive land development, and endowed cities in Guangdong with legislative, policymaking power for “Three Olds”.

Urban Renewal Bureau serves as the core institution, led by the political leading group, in conjunction with other sub-district governments, systematically responsible for the regeneration management, including project declaration, regulation and policy making, and provision release, so as to coordination of involved departments. It's completely independent from Urban-rural Planning and Land Resource Bureau.

Until now, Guangzhou has released more than 20 regeneration-related policies and regulations, but no legislation yet. Among these documents, three core regulations are known simply as No.56, No.20, and "1+3" policy¹, which stipulates the specific requirements about stakeholders, planning, land auction and storage, cost-balancing measures. They settle the foundation for the institutional framework. No.56 documents was released in the first place, it gave great freedom to the developers to lead the regeneration projects, while the government served as a supervisor. During this period, the process of regeneration was very fast, because the construction need of public facilities had not been emphasized, reducing the cost of redevelopment. What's more, when the land owners realized that regeneration would create huge value-added benefits, they began to add rooftop extensions to obtain more compensations. Spatial management of regeneration became even more difficult with no strict monitoring. Considering these phenomenon, government decided to take back the leading power of regeneration by No.20, emphasizing more on public interests, facilities construction and land storage. While the 1+3 policy is more refined, obtaining experiences and lessons from the previous regeneration management, but for developers, it also more rigorous. Detailed variations from No.56 to the current policy indicates governance trend to a more strengthen state-led control with fine measurements, strictly restricting the market behaviours (Figure 6).

No.56	No.20	1+3 policy for regeneration
<p>1.Principle: Market participation with state-led.</p> <p>2.Take the land auction markets as a tangible platform to attract overall market investment, and the stakeholders could cooperate with market to renovate in a joint venture model.</p> <p>3. Market is relatively of high degree freedom, low cost, and less restrictions.</p>	<p>1. Strengthen the principle of state-led: emphasis on planning and guidance, supplement of the public service facilities, infrastructure construction, and urban public interest.</p> <p>2 Increasingly tighten Land Policy : Land parcels should be stored firstly by the government and then release for auction. Government regulates the primary area for renewal.</p> <p>3 The premium for old industry land increases, while the compensation is lower.</p> <p>4 In order to control the total compensation costs for old village, it should be regenerated in form of cluster under the lead of state and collective group.</p>	<p>1Principle: State led, market participation.</p> <p>2.Updated provisions on various aspects with fine and clear requirement.</p> <p>3. Add "Micro regeneration" to previous "comprehensive regeneration" for the convenience of small parcels</p> <p>4.Improve data survey, expert argumentation, public consultation, illegal investigation ,land withdrawal mechanism.</p> <p>4 Re-determine the distribution of benefits to protect public and government's interest.</p>

Figure 6 Outline and variation in between No.56, No.20, and 1+3 policy

(2) FINANCE MEASURES

Measurements on cost balancing reflect governance tendentious of government-market cooperation. In Guangzhou, public facility improvement, old town refurbishing, and historical area regeneration is financed by the local public finance. The land leasing incomes are used to cover the cost of land expropriation, acquisition and storage, as well as the subsidies for the encouraged industry and hard-tobalanced projects. By contrast, for old industry land and collective old villages, with value-added potential and strong regeneration initiative, are financed by the market investments and involved self-regenerated stakeholders. Following to the principle of "state-led, market operation, public participation and win-win", governments encourages innovative financing methods by market mechanism, they try to drive more enterprises and social force to participate in urban regeneration, solving financial bottleneck by a cooperative Public-Private Partnership, for example, creative mortgage loan, innovative credit financial products.

¹ No.56: Opinions on accelerating the transformation of the 'Three Olds' (Guangzhou government (2009) No. 56); No.20: Supplement for opinions on accelerating the transformation of the 'Three Olds' (Guangzhou government (2012) No. 20); 1+3 policy: Guangzhou urban regeneration policy: overall requirement, requirement for old village, requirement for old industrial land and requirement for old town (2015.11)

(3) FULL CYCLE MANAGEMENT PROCESS

Urban Renewal Bureau will lead the boundary delineation of regeneration priority areas, like historical area, land for public space and service facility, industrial upgrading area. The lower-level district governments could also investigate the need for improvement in its jurisdiction and submit proposal for priority areas in advance. After collecting suggestions from other departments and approved by the top leading group, Urban Renewal Bureau formulates an annual regeneration plan, as well as implementation and financing plan. This plan should go through expert evaluation, public consultation, and then be released to the sub-district governments for implementation. It should be underlined that the public consultation requires a stakeholder-agreement ratio higher than 80% (Old town 90%), otherwise, the parcel cannot be listed in priority regeneration area. Annual regeneration plan serves as an outline, while the local governments then make a detailed planning for the parcels. After a successful second round consultation process among the involved stakeholders (more than 80% or 2/3), the detailed planning will be again submitted and reviewed to check whether it comply with the overall urban development strategies by Urban Renewal Bureau and the leading group. The government also propose a prior data supervision process, if the submitted plan is deviated from the prior data more than 5%; the related subjects have to explain for the reasons. While public consultation committee, villagers' consultation committee and expert consultation is applied accordingly.

3.2.2 PLAN-MAKING AND REVIEW PROCESS

(1) PLANNING MANAGEMENT REGULATION

Guangzhou government creates a "1+3+N plan system" for overall planning management. The main purpose is to determine the principles and goals of "Three Olds" regeneration, besides, detailed spatial guideline, for example, regeneration types, methods, function upgrading direction, development intensity control, facility needs, key areas for historical and cultural protection, are all included. In general, it tries to lead a Transit Oriented Development, optimizing the land use structure through the redevelopment process.

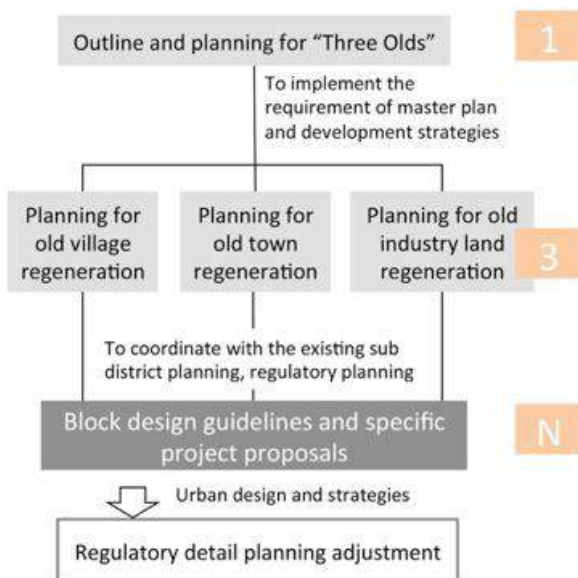


Figure 7 1+3+N planning framework

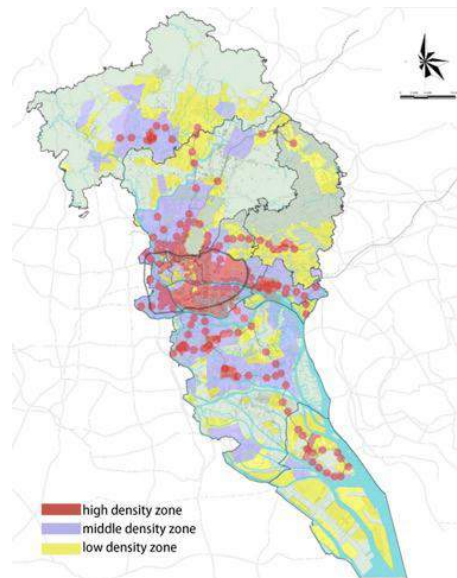


Figure 8 Density zoning according to the distance to subway and business zone
Source: planning for "Three Old" regeneration in Guangzhou (2010-2020)

(2) LAND USE MANAGEMENT REGULATION

Land use and property is the most troublesome issue. The set up of regulations on land use management is a slow but progressive process since 2008. The first issue is defining and confirming the fuzzy properties. Urban Renewal Bureau organized the sub district government to carry out detailed investigation of regeneration lands, such as household, population, historical architecture, property ownership, thus building a completed and clear status quo database of lands. For the old village, the collective economic organization or its successor should take the responsibility of clearing the land ownership and demolition of illegal buildings. If the old village is supposed to be transferred into industry or commercial land, it can hand over part of collective lands to the government, to be free from land property clean up. For the industry lands under illegal transaction, current owners could not propose regeneration until they achieve legal property right and pay for the fine.

While land supply has undergone a shift change after No.20 policy. Before No.20, the markets could transact lands directly with the stakeholders by negotiation, but afterward all the state-owned lands should be firstly stored by the government, and then bid in a unique land market. Collective-owned lands may choose to keep the ownership or transfer to state-owned lands, the latter one could sell tenure to markets, or be redeveloped cooperatively by village collective economic organization and developers. If one parcel land involves with multiple property ownership, it should be summarized as one subject representing for all, realized by signing a group legal contract or share value evaluation. In addition, lands inside and outside the regeneration boundary are equally displaced in the principle of voluntary.

3.2.3 PERFORMANCE OF THE INSTITUTIONAL ARRANGEMENTS

By the above flexible and comprehensive arrangements, formal and legal approach for regeneration is realized in Guangzhou. Its regulation system is based on the clarity of original fuzzy property rights, providing possibilities for different kinds of transaction approaches comply with the existing planning framework. However, in the exploration stage, the policy changes very quickly and it still cannot be confirmed as a rigid legislation. In response to the changing policy, outcome effectiveness shows different features taking No.20 document as a turning point. The first stage before No.20 is featured by rapid redevelopment with high market participation enthusiasm, and lots of invests entered into regeneration. Developers firstly choose the lands with clear property right which are easy access to redevelopment, moreover, the government still didn't realize the importance of public facilities, which led to inadequate infrastructure and public good supply, fragmented regeneration without consideration of the overall spatial structure. After adjusting the requirements on facility construction, rigid storage policy of land and an overall regeneration planning, the prophase approval procedures become complex. In addition, regulatory detail plan adjustment, consensus of multi-stakeholders is hard to achieve, which at last end by extension of the project period and the interests is partially shared with the state, so markets get fewer added value and gradually loses initiatives. Regeneration in Guangzhou experiences a turning from market-oriented to state-led implementation. The outcome effectiveness is not so satisfied in the second stage due to a rigid control by government. Current land storage policy is like a deformed land finance mode with less sustainability. With difficulty in carrying out projects, Guangzhou is now trying to explore policy reforms to promote market participation.

3.3 URBAN REGENERATION IN SHENZHEN : MARKET-ORIENTED

Urban regeneration in Shenzhen is classified as three types of comprehensive renovation, functional change, demolition and reconstruction. The process is obviously market-oriented, encouraging the property owner or other subjects to conduct self-regeneration. Since 2009, more than 330 villages are regenerated. In 6 years, the number of regeneration units announced in draft plan has reached to 379 parcels.

Only in 2014, the total lands for redevelopment accumulated to 210.59 hm², accounting for 36% of the annual land supply, with an investment of more than 40 billion (RMB). From 2011 to 2014, urban regeneration has provided 129,300 units affordable housing for the city (Table 1).

Year	Supply plan/10 thousand	Completion rate	Implementation of the previous year/10 thousand	Completion rate
2015	1.8 (Plan)	--	2.7 (Plan)	--
2014	3.11	110.7%	5.81	116.20%
2013	2.76	110.40%	4.27	141.40%
2012	2.39	120%	1.8	180%
2011	--	--	1.05	105%
Total	8.26		12.93	

Table 1 Shenzhen affordable housing supply (2011-2014)
 Source: Shenzhen affordable housing supply plan and the implementation of the previous year

3.3.1 INSTITUTIONAL ARRANGEMENT AND GOVERNANCE

(1) Administrative agency structure and Legislation system Shenzhen urban regeneration department is under the lead of Shenzhen municipal planning and Land Resources Committee (Municipal Oceanic Administration), responsible for organization, coordination and supervision of regeneration projects (Figure 9). Such subordination relationship avoids the approval lag by division in-between departments, making it easy to carry out.



Figure 9 Urban regeneration agency structure in Shenzhen

Urban regeneration unit (chengshi gengxin danyuan) is regarded as an innovative and successful tool for project management. All regenerated parcels will be listed as a unit, and after the declaration and approval, it could replace the previous statutory plan under the protection of law. Similar to Guangzhou, Shenzhen also created a regulation system instead of legislation, ranging from detailed technical standards to regulations (Table 2), these documents regulate the rules for regeneration, methods for property clean up, premium sharing ration, so as to related affordable housing supply ratio, preferential policies on innovative industry, the latters are first creative attempts at a nationwide scale. Among these regulations, Shenzhen urban regeneration measurement regulation and detailed rules for implementation are two core documents integrating the others as a whole, illustrating for distribution of interests and operation process.

Regulations	Legislation of Shenzhen urban regeneration (in process)
Management Rules	Shenzhen urban regeneration measurement regulation
Operational guidelines	Detailed rules for implementation of the Shenzhen urban regeneration
Technical standards	Rules for urban regeneration unit planning approval
Related policies	Guidelines for demolition property clean up
	Guidelines for the reconstruction of urban regeneration land ownership
	Guidelines for the planning of Shenzhen urban regeneration unit planning
	Technical standards for premium sharing ratio in urban regeneration
	Technical standards for Shenzhen urban regeneration unit planning
	Technical standards for the implementation of low carbon ecological objectives in urban regeneration unit planning
	Policy on improving the innovative industry land supply
	Policy on management of housing for innovative industry

Table 2 Regulation system for urban regeneration in Shenzhen by author

(2) FINANCE MEASURES

Compared to other metropolises in China, the available land resource is relatively limited in Shenzhen (976km², 1772 km² in Guangzhou), so the revenue from innovative industries rather than the land premium income is the primary source for public finance. Now faced with the difficulties for regeneration financing, Shenzhen chooses to mainly dependent on the market and the property owners themselves. It's actually the best solution for historical reason. Due to great shortage of affordable housing supply during the rapid development, a large number of informal residencies, also called urban villages, distributed widely in the city, 70% of which are illegal buildings. With the extremely heavy burden of these unclear-property clearances, the government has no choice but resort to market-oriented approach to fill the long existing loophole. From the other vein, market investments with initiative for potential regeneration interests, could also provide enough public service facilities, public space and social housing for this growing young city.

(3) FULL CYCLE MANAGEMENT PROCESS

Full cycle management process in Shenzhen urban regeneration is similar to Guangzhou. The procedures could be divided into five main processes, boundary delineation of urban regeneration unit, detail planning for regeneration unit and its approval, implementation plan-making, contract signing, plan permission approval and implementation (Figure 10). Among the three types regeneration, demolition and reconstruction takes the largest ratio, of which the coordination time is longer, but the land value-added profit is larger. There are still some defects in the current arrangement, like no mandatory demolition law, lack of detailed requirement for the coordination process, such as no standard transaction price, no forced sale requirement for the original property owners. Accompanied by the soaring housing price, the formulation of one unique subject for one unique regeneration unit becomes quite difficult. The original property owners could ask for a super high compensation or unacceptable real estate replacement requirements, thus delaying the coordination time and forcing developers to trade higher than the market price. The other property right owners who have signed the transfer contract may at last break the contract. In practice, a lot of urban regeneration are delayed or even canceled because of the last few households that don't agree with the relocation compensation and resettlement agreement.

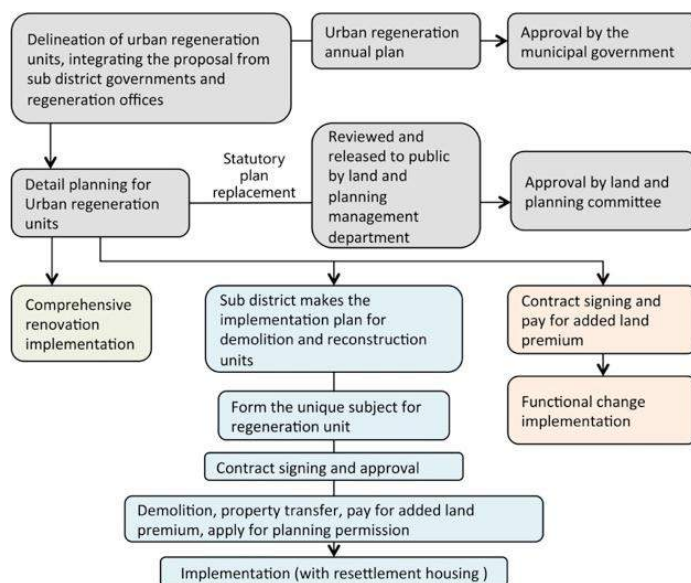


Figure 10 Planning and implementation process for urban regeneration units in Shenzhen

3.3.2 PLAN-MAKING AND REVIEW PROCESS

(1) PLANNING MANAGEMENT REGULATION

Planning management for urban regeneration is successfully connected with the existing planning system by urban regeneration unit (Figure 11), which could replace the statutory plan and break the constraint of illegalization. The special planning for urban regeneration is based on comprehensive research about the environmental condition development, the overall spatial structure and existing functional clusters` distribution. It could be divided into three kinds of regions, namely comprehensive service zone, environmental sensitive zone and industrial agglomeration zone (Figure 12). According to the distance to subway station and existing centers location, a density zoning and priority classification are created for development intensify management, in order to improve land use efficiency, public facilities and protect the environmental resource with clear sequence.

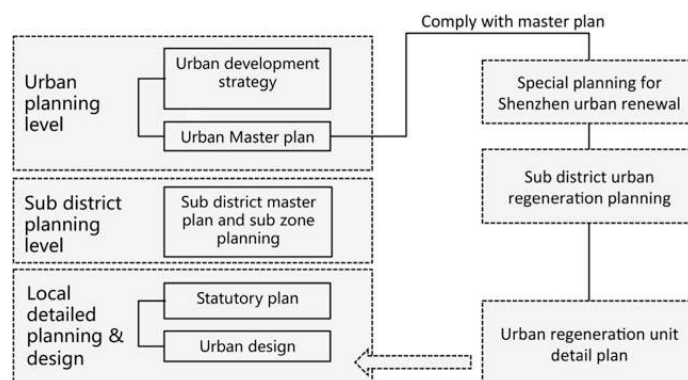


Figure 11 Urban regeneration framework in Shenzhen

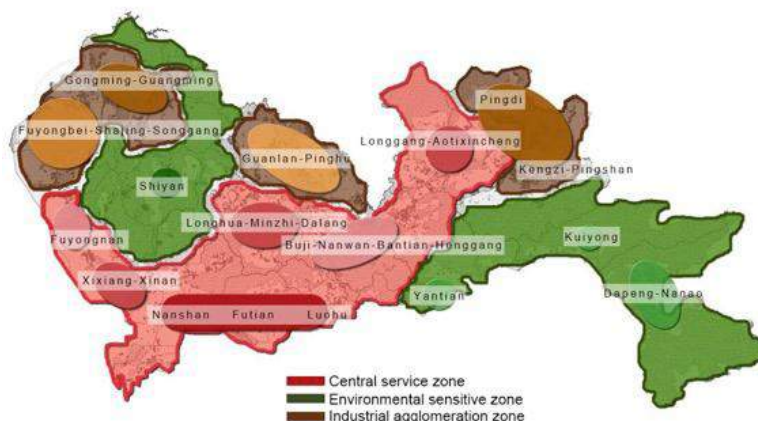


Figure 12 overall spatial structure for urban regeneration Source: research on Shenzhen urban regeneration strategy

Shenzhen is a city with high-density population, so the government also tries to lead a Transit Oriented Development mode to create a livable and efficient city. The areas within 500m to subway station or to the existing urban centers are taken as the key areas to provide public facilities and affordable housing through regeneration, within which the three olds are all required to renovate. In addition, density zoning also reflects the idea of TOD model, the closer to subway station, the permitted density is higher. Besides, Shenzhen tries to become a global city by upgrading its industry, encouraging innovation industry and attracting high-skill people from the world. It tries to enhance the control of ecological boundary taking this good regeneration opportunity, therefore, old industry land and villages, are planned to clean for a better open space (Figure 11, Figure 12, Figure 13; Table 3).



Figure 13 Industrial land within 500m of the central area and the transit station source: as above



Figure 14 Industrial land within the ecological land boundary source: as above

Categories	Aim	Target land type and location (km ²)	Area (km ²)
Demolition and reconstruction or Functional change	Construction of public facilities	Industrial land within 500m of the central area and the transit station, 15 km ²	
	Commercial, residential real estate redevelopment	Old villages within 500m of the central area and the transit station, 14 km ²	
		Industrial land within 500m of the central area and the transit station, 15 km ²	> 60
Comprehensive renovation	Industrial building, lands redevelopment	Mix use area, 6 km ²	
		Industrial building in Industrial Park, 10 km ²	
Ecological restoration	Improve the public service facilities; environmental remediation	Old residential, 8 km ²	
		Old village 36 km ²	> 130
		Industrial land 86 km ²	
Ecological restoration	Restoration of ecological green space	Old villages within the ecological land boundary, 6 km ²	
		Industrial land within the ecological land boundary, 13~29 km ²	> 19

Level	Zoning	Basic FAR	Limit
1	I\II	3.2	≤ 6.0
2	III	2.8	≤ 5.0
3	IV	2.2	≤ 4.0
4	V	1.5	≤ 2.5
Location	Distance to subway station	Subway categories	Normal station
	(m)		
	0-200	+0.60	+0.40
	200-500	+0.40	+0.20

Table 3 Regeneration strategy and target lands for improvement Source: as above

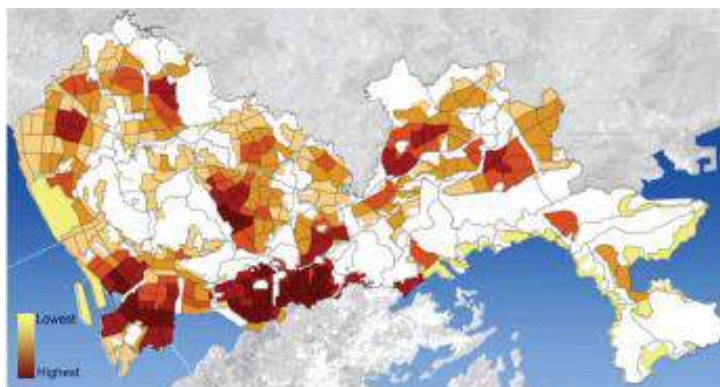


Figure 15 Density zoning for Shenzhen urban regeneration

(2) LAND USE MANAGEMENT REGULATION

For land use management, the key problem is the 70% illegal lands. While creative policies and regulations are generated as effective tools for the government to re-define the land development right and make the difficult illegal land regeneration possible with the help of developers (Figure 16). The government makes a platform for all the stakeholders. Collective village organization owing lands with illegal property less than 40% (before 2014, 30%) could hand over 20% land to the government, and then transfer the 80% lands to the developers, obtaining compensation and legal housings. While the developer could conduct regeneration after handing over 15% lands for public use with government’s approval, thus through the game of redevelopment right, everyone gets the benefits they want. However, it also causes some problems like interest group, irrational game from information asymmetry and super high house price for citizens. The government set up a disguised way for the legalization of illegally lands, expanding collective land rights to non-collective and non-indigenous villagers through policy, but the legitimacy is worthy of reflection. In general, under the condition of clear property rights, the market can better transact interests, achieving balance of interests and promoting social equity. But in Shenzhen, although it seems protect the collective interests, but it actually causes great spillover of land added value and possible injustice.

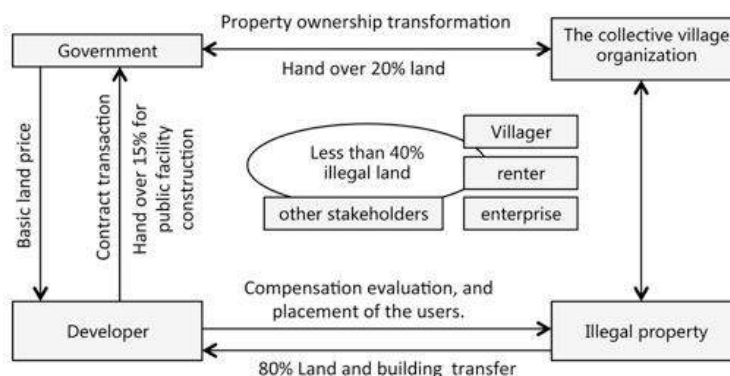


Figure 16 "15+20" property clearance and regeneration approach for old villages with less than 40% illegal land and multiple stakeholders in Shenzhen by author Refer to: Liu, Zhang, 2015.

3.3.3 PERFORMANCE OF THE INSTITUTIONAL ARRANGEMENTS

Regeneration in Shenzhen is relatively fast, following the rules of legalization and marketorientation. Rather than focusing on profits from regeneration, it pays more attention to facility supply and affordable housing construction, to provide attractive environments for high-end labors to settle down. Based on the statistic of regeneration unit drafts, the redevelopment process is growing steadily. Markets could positively involve in the process, with less intervention from the government. Agreements could be achieved between stakeholders and market directly, reducing the transaction costs. The government serves as a night watcher relay on market’s initiative, underlining the important indicators for spatial governance, like FAR, proportion of affordable housing, and the land ratio for public use. Compared to

Guangzhou, the government is weak but efficient, with enough finance provided by developers and more possibility for society participation. Not only the local state, but also the stakeholders themselves, could carry out urban regeneration according to their needs. Thus, the financial burden is divided among all the stakeholders. Public finance will not have too much pressure to resort for land premium compared to state-led Guangzhou (Figure 17). However, in the long term, this full market-oriented regeneration may eventually lead to heavy burdens for the citizens due to the increasing living cost generated. And for illegal property, the policies permit fully market-oriented compensation, acquiescing the legalization process of illegal. But this defect may cause inequality and leave hidden dangers to the further. Too large developing volumes create heavy burden to infrastructure construction, and the space gentrification is less inclusive for the society gradually, especially the renters or migrants who have no rights, are totally forgotten by the policies (Tian et al., 2015). What's more, the touchiest question for the next generation is, who is able to afford another round urban regeneration cost much higher than the current one?

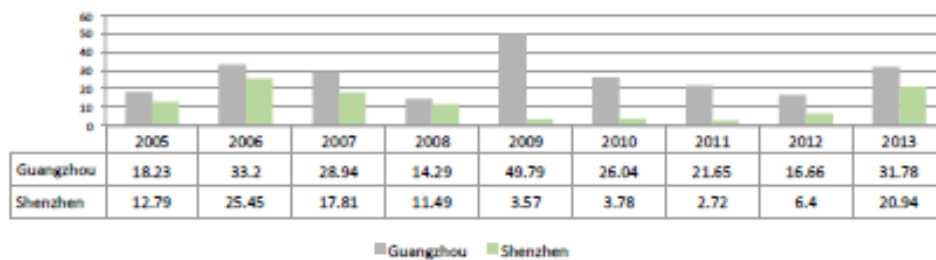


Figure 17 The proportion of the land premium income to the total state fiscal income in Guangzhou and Shenzhen

3.4 URBAN REGENERATION IN SHANGHAI: ECLECTIC APPROACH

Shanghai used to have a glorious history of industrial development, leaving not only amounts of heritages, but also plenty of outdated lands for regeneration, the output value of which is declining with the upgrading process of innovative industry (4.9 billion/km² in 2011). In addition, a large number of industrial lands are distributed scattered in suburban¹ (Zheng, Lu, 2015). The overall spatial structure towards a livable global city is waiting for adjustment. Faced with the bottleneck mentioned in section 2, industrial land regeneration could only be realized very slowly in an informal way. Meanwhile, the last two decades also witness large-scale demolition and reconstruction of the old residential buildings (about 112 million m² are demolished, while 747 million m² are reconstructed² with high FAR). Gradually, the limited lands are subject to high development intensity, while livelihood is kidnapped by real estate. We are pity for the disappearance of historical features at this stage. After a lasting reflection, Shanghai start to explore institutionalized urban regeneration respect for land transfer legalization, historical protection, vitality simulation and facility optimization.

3.4.1 INSTITUTIONAL ARRANGEMENT AND GOVERNANCE

(1) ADMINISTRATIVE AGENCY STRUCTURE AND LEGISLATION SYSTEM

Urban regeneration in Shanghai is charged by regeneration office under the Municipal Planning and Land Resource Management Department, similar to Shenzhen. Shanghai also take the concept of “urban regeneration unit” to connect with the original regulatory detailed planning. Until now, the set up of regulation system is still on the march. Measures for the implementation of urban regeneration in Shanghai (short as Measures in Shanghai in the following) sheds light on principles and a general framework for regeneration. It is supported by detailed rules for implementation and relevant industrial land use transfer measurements. Measures in Shanghai put great emphasis on public interests in this stage of spatial improvement, requiring for regional public facility supply and need assessment report following the overall

¹ accounted for 36.4% of the total suburban lands

² Source: Statistics Yearbook of Shanghai, from 1995 to 2014

planning; all the public elements, including public facilities, open space, infrastructure, cultural facilities, linkages, should be concluded into a implementation list as mandatory for regeneration.

(2) FINANCE MEASURES

In this process, FAR award is used as a primary bargaining tool for the government to solve finance obstacle. The FAR of historical area is strictly controlled, while increase for other areas must base on the increase of public facility and open space (Table 4). All the spontaneous regeneration subjects have the obligation of public facility construction inside his property. Therefore, regeneration costs are mostly covered by the market investment. Mix use transformation is encouraged except for non-residential land.

Conversely, residence is permitted into public facilities or affordable housing usage. Because Shanghai didn't have the special rights given by the Ministry of Land and Resources, it could not balance industrial regeneration costs by property owners' self operation. Therefore, the bottleneck is still in the position. One creative approach is to get added land values by substitution from collective to state-owned land (Tian et al., 2015), but this's just a drop in the ocean for the total number.

Condition	Provide public space			Provide public facility	
	Provide independent public space and transfer the property to government	Provide independent public space and open to public use, but cannot transfer the property to government	Open public space to public use for 24 hours, but cannot provide independent public facility and transfer the property to government, for example, public corridor, ground floor	Provide public facility and transfer the property to government	Provide public facility but cannot transfer the property to government
FAR Award	2 times as the original FAR	1 time as the original FAR	0.8 time as the original FAR	1 time as the original FAR	0.5 time as the original FAR

Table 4 additional floor areas Award for commercial land

Note: the above award is for space within the outer ring, for space outside the outer ring, the reduction coefficient is 0.8. To provide underground public facilities, the reduction coefficient is 0.8. To provide both public facility and space, there's another reduction and award ratio.

(3) FULL CYCLE MANAGEMENT PROCESS

As mentioned in above, Shanghai didn't get the "privilege" for experimental innovation of land system, so the current so called "regeneration" could be regarded as an integration of the previous work. The policy seems to have an intention but no strong strength in all aspect regulation. For example, full cycle management process in Shanghai is relatively simplified compared to Guangzhou and Shenzhen. The procedures could be divided into three main processes, regional assessment, urban regeneration implementation plan, planning permission approval and implementation (Figure 18), in which the current policy document could only highlight the regional assessment process, while the detailed provisions on management is less included (following the previous policy instead). Regional assessment report emphasis on public interest, requiring on detail investigation, demand and needs list of public elements.

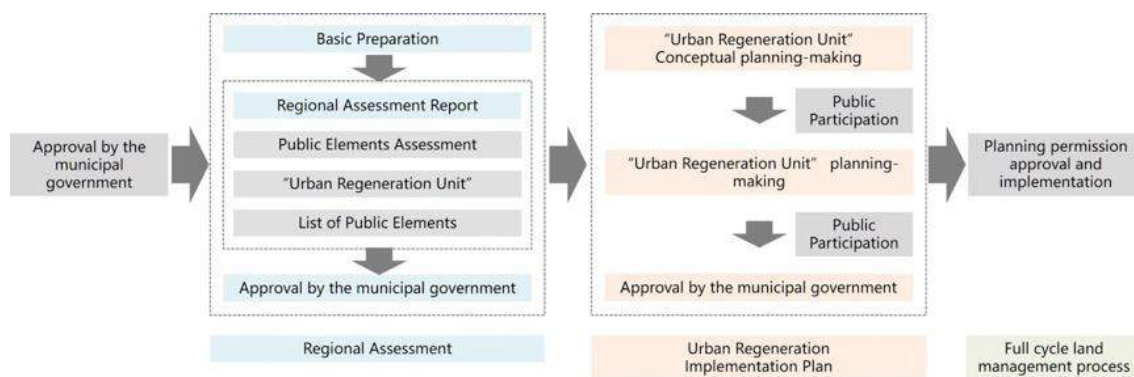


Figure 18 Planning and implementation process for urban regeneration units in Shanghai

3.4.2 PLAN-MAKING AND REVIEW PROCESS

(1) PLANNING AND LAND USE MANAGEMENT REGULATION

At present, the plan of Shanghai urban regeneration has not yet been published officially. There is only a regeneration vision towards four directions, which includes Sharing community, Innovation industrial park, Charming cityscape, and Leisure network. Reflecting the coordination of the regeneration plan and the master plan is still in progress, that urban regeneration unit is the only connection for currently. So the regeneration process is actually going under the table instead of being led by an overall planning. The units' conceptual planning-making, implementation planning-making, approval is controlled by planning department, quite similar to other non-regeneration projects. For land use management, the legalization process blocks the path of informal regeneration, Land transfer period of the urban renewal project may be re-agreed according to the specific circumstances of the project progress. Among them, The use term should deduct the used period from its original use nature and cannot exceed the longest use term regulated by government; the land use term shall be consistent with the original contract if the change of land-use is not involved; The re-agreement use term shall not exceed the corresponding maximum use term regulated by government. While the benefits maybe that it provide an exit approach for historical land.

3.4.3 PERFORMANCE OF THE INSTITUTIONAL ARRANGEMENTS

Although regeneration institutionalization in Shanghai is still in process, it still shows more rationality after 20 years' experience and lessons. The concept and principle are inclined to public services and interests, instead of economic one. However, from the perspective of legal system construction, it is lack of a specialist bureau for management. In addition, due to heavy construction load, regeneration subjects feel inactive for upgrading, and the process will slow down. Cost-balancing dilemma remain as a trouble. Besides, organic community regeneration is not reflected in these physical improvements. In current semi-mature stage, Shanghai is facing a longer period challenge in general. More innovative policies and more freedom for bottom-up efforts are needed for a more livable and creative international metropolis.

4 DISCUSSIONS AND CONCLUSION

These three metropolitan governments form their own strategies to cope with the complexities of dilemmas, taking into account the characteristics of development, historical property rights, and industrial updating needs. The institutional innovation and differentiation indicate the different modes of the state as controller (Guangzhou), supervisor (Shanghai), and promoter (Shenzhen), thereby resulting in different trajectories featured in efficiency and effectiveness. From Table 5, we could have a brief understanding of these three different modes. In Guangzhou, the government withdraws the land by storage gradually, sharing most added values with by property owners, while this path-dependent approach has a negative impact on the initiate of market. Shenzhen gives full freedom to the market by legalization of illegal land, land property transfer and intensify development; by this way, it provides enough public facilities to the city. While Shanghai could only realize this aim by FAR award due to no special land policy permitted by the central government. The common ground is the public participation under the control of the government,

requirement for market to provide public goods, which finally realize the optimization of urban image, public facilities optimization, but also widely space gentrification. Besides, in Guangzhou and Shenzhen, the real estate market has become the biggest beneficiaries, achieving great amounts of economic benefits and profit in quite a short time, which is similar to the housing boom from 1970 to 1980 in Europe. Once the government loses control in the coming years, this will finally damage the real economy and social stability. It's not wise to repeat the history again. With the increasing land value and compensation cost for urban regeneration, we need a more careful and accurate institutional arrangements to eliminate the loopholes and think over the profound influence on our cities.

	Guangzhou	Shenzhen	Shanghai
Financing mode	Land storage for finance; mostly dependent on Market investment;	Dependent on Market investment;	Market investment and public finance;
Governance mode	State-led and market operation;	Market-oriented;	State-led and market operation;
Legitimacy	Independent agency; relatively completed regulation systems but no legislation;	Relatively completed regulation systems but no legislation;	Regulation systems is set up gradually;
Authentic participation by stakeholders	Process participation in form is high, but controlled by the government;		
Public interest	Emphasis on historical protection;	Emphasis on ecological area, affordable housing;	Strongly emphasis on facility, historical protection and ecological area;
Effect on Industry	Require the market to provide according to the supply need;		
Accountability	Land prize increase;	Relatively high and free, but Controlled by the government; openness to interest intermediation;	
Outcome effectiveness	Relatively slow with property clearance, TOD development;	Fast with affordable housing and ecological land optimization, property clean up, TOD development, and increased urban density and pressure for public facilities;	Slow with historical area protection, green space, public facilities, linkage optimization, and Suburban land control;
Common effectiveness	Historical area protection; City image optimization; land price rise; public service facilities optimization;		
Sustainability	The mode of finance is a alienation of previous land finance	Better finance mode but resulting in high living pressure for citizen due to historical property;	Sustainable bout faced with the difficulties to execute
	High space gentrification, not inclusive for low-income group		

Table 5 Comparison of regeneration of the three metropolises

Due to the rapid expansion in previous stage, metropolises have been immersed in problems such as traffic congestion, environmental pollutions, inadequate facilities and irrational industrial structure. These complex “disease” forced the governments to carry out innovative urban regeneration as “medicine” for optimization. Institutional arrangements are taken to deal with the contradiction between long-term benefits and short-term high costs, to weigh the pros and cons and avoid straitened circumstances. The content description and practice comparison of market-oriented, government-oriented, and eclectic modes of governance together reflect some core principles and unhealthy hints in metropolises` regeneration governance in China.

4.1 GOALS AND PRINCIPLES: OPTIMIZATION AND IMPROVEMENT OF URBAN ENVIRONMENT RATHER THAN MAKING A BIGGER CAKE

Regeneration is originally meant to optimize the land use structure, improve sustainability, and provide space for industrial updating. However, the results sometimes turn out to be an interesting phenomenon featured by vertical growth in the post-Land Finance era, that governments get benefits from high intensive redevelopment instead of monopoly of land premium, misleading regenerations to make a even bigger cake for stakeholders who focus on interests rather than real needs of the city. It's important to jump out of the circle of expansion and land finance, taking full consideration of social inclusive, green development, spatial justice and resource sustainability. Regeneration should be a new phase of giving rather than deprivation and vertical urban sprawl. Therefore, to achieve a diversified, high-quality regeneration, principle and goals should be clarified and followed.

4.2 BOTTOM LINE: SUPPLY OF PUBLIC FACILITIES AND FAIR ALLOCATION OF INTERESTS AMONG GROUPS

The government is supposed to responsible for public facility supply and coordinating multiple interests no matter it's a dominator or not. Public interest is the bottom line, involved in public service, infrastructure, and social justice. Policy allowing for deprivation will lead to social segregation, gentrification, so as to polarization between the rich and poor, that the gain cannot make up for losses for the entire city's balanced development. Rules for implementation by the three cities Guangzhou, Shenzhen and Shanghai, all underline the importance of public realm, so as to the historical areas. Guangzhou and Shanghai also emphasize on the control of developers, land market, and actors' behaviors to reduce speculation; While Shenzhen even formulates specific provision to regulate the assorted affordable housing construction. In the previous rapid expansion tide of the cities, it is difficult to rationally forecast the demand of infrastructure and public service facilities, leaving a center-periphery structure featured by intensive facility agglomeration in the center, while the periphery is quite insufficient. Therefore, institutional arrangements should put public facility optimization and supplementation in first, finding elastic approaches flexible for the resilient needs of city.

4.3 CORE ISSUE: COST AND BENEFITS

The core issue to influence actors' participation is cost and benefits. The institutional arrangements should match against the requirements of urban regeneration. Policymaking could directly regulate the allocation of profits among developers, city-state, and individuals. Subsidies policy can promote the initiative by actors, while policy with excessive deprivation will slow down the process. The governments have an option to increase long-term industrial tax income by providing affordable lands for companies, or obtain short-term land incomes for public finance, which is not sustainable in the long run. In other words, policies are valve to control the participators and speed of urban regeneration. In addition, institutional arrangements should also play a restricted role to limits the markets' hitchhiking, speculation and other behaviors damaging the public interests. Though less intervention and weak control of real estate by policies in Shenzhen, a significant rise in housing prices inevitably occurred, leading to a high living cost for all the citizens. Therefore, effective supervision and penalty is necessary for unreasonable speculation (Chen, 2012).

4.4 ENDOGENOUS BARRIERS: THE GOVERNMENT'S ROLE AS RATIONAL ECONOMIC MAN

In the game of interests balance, the government itself also has the attribute of rational economic man, as an endogeneity. In order to accumulate for public finance, the government is inclined to domain the allocation of interests and gets benefits from selling storage land. The balance of interest between governments and markets will raise the threshold for market investment and increase the costs. For example, the government-oriented mode in Guangzhou emphasizing on land storage, has limits the speed

of regeneration process. In this case, the government doesn't not maintain neutrality but involve too much, focusing on short-term profits rather than long-term return.

4.5 DEMOCRACY AND PUBLIC PARTICIPATION: TRADE-OFFS AND RISKS

Democracy and public participation are challenges we will face in the near future. In the process of regeneration, coalition of stakeholders, market and society coalition, government and market coalition, could theoretically reduce the transaction costs, accumulate positive social benefits, and achieve a win-win goal (Yuan, 2015). The establishment of trust among stakeholders could be realized by both formal and informal institutional arrangements. However, there still are risks for failure due to the internal inequality and power imbalance. Therefore, the adoption of public participation requires deep understanding of the local situation, culture and historical background. In addition, the democracy quality of regeneration should be considered in the decision-making process of facility construction, willingness evaluation, and allocations of profits. The approach to keep accountability should be unfolded from the black box. Current public involvements are passive and LESS-effective, resulting in less consideration of local needs and social feedbacks.

Institutional arrangements for regeneration in Chinese metropolises are still in its infancy, many featured problems vary from place to place have not been recognized and excavated, requiring for constantly experiment and exploration to deepen the understanding. In order to develop more effective governance, we need to further strengthen the legalization and distinguish the advantage and disadvantage of marketorientation principles, paying attention to democratic process. The power structure is seeking for approaches to activate all possible resources, and promot the process of institutional reform and democratization in China.

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ID 1442 | COMPARISON OF TWO URBAN DEVELOPMENT’S MODELS AND REDEFINITION OF URBAN PLANNERS’ ROLE-- A CASE OF YUZHONG DISTRICT, CHONGQING, CHINA

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ABSTRACT: Urban planning’s aim is to seek social equity, to achieve social goals through the development of spatial manipulation and management system in the face of market economy and government ideology. In the face of the complex urban planning, planners should be targeted to the big city and small town planning, which should be strictly controlled at the macro level, planners and government should be the leading force and actively advocate all fields of the city to cooperate together. When it comes to the community and village level, residents can be encouraged to participate in the community’s planning to their initiative, and the planners and government can formulate a series of rules and regulations to guide them appropriately, in order to create more local characteristics of the environment. Planners should have the basic quality of the space aesthetics , also need to consider the principle of market economy and social operation’s mechanism behind the space, finding an association between market rules and social relations and spatial structure, to make planning policy and management regulations to achieve a better tomorrow through the improvement and adjustment of city spatial entity.