

Upgrading Urban Renewal Planning for More Efficient Implementation in a Time of Economic Transformation

- A case study of Yanshan Lu in Shekou Area, Shenzhen City

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In the past decade, China has been encountering both rapid urbanization and urban renewal. In southeastern China, where the economy has been much more prosperous than other parts of the country, developing vacant land or agricultural land for urban purposes is still the main method for urban development. Nonetheless, an increasing number urban renewal projects have been started in city centers, urban villages, old industrial zones and old residential areas.

At the government policy level, urban renewal is designated as an important measure of whether land is being used intensively or not. Most of China's arable farmland is located in the central, eastern and southern parts of the country, where the economy is comparably more prosperous than other parts. In those areas, the rapid economic growth and urbanization over the last three decades has consumed vast amounts of agricultural land. Because of the shortage of land, stimulating economic growth often lies at direct odds with protecting arable land. Therefore, intensive use of land has become central in recent land policies formulated at the central, provincial and local levels. Urban renewal in existing built-up areas is becoming another important urban development mode in addition to urban expansion on vacant land or agricultural land. However, urban renewal is very difficult to implement smoothly in both the plan-making and urban construction phases. In some cases, urban renewal projects were suspended several years into plan-making process. Social problems resulting from mandatory demolition of houses and resettling the habitants are often reported in the press. Thus, the question of how to improve the efficiency and implementation of the urban renewal plan has become common for some cities.

Shenzhen is one of the earliest special economic zones in China. More than ten years ago, several urban-villages renewal projects were proposed by developers to the Shenzhen municipal planning authorities. It was impossible for planning authorities to approve them because the proposals' PAR (Plot Area Ratio) figures and building area figures were much higher than the same figures in the area's statutory plan and higher than the PAR maximums stated in the Shenzhen Planning Standards and Guidelinesⁱⁱ. Thus, urban renewal planning did not proceed smoothly at that time. However, in the past two years, Shenzhen planning authorities and urban planners have explored new ways to draw up urban renewal plans to meet demands for development. The Yanshan Lu Area Urban Renewal Plan in

Shekou is one of the pilot cases, and the plan has been two years in the making. The plan-making process on the plan has overturned the traditional plan-making methodology and measures of value. Recently, Shenzhen Municipality has approved the Yanshan Lu Area Urban Renewal Plan.

1 Why urban renewal in Shenzhen?

Located in the Pearl River Delta immediately north of Hong Kong, Shenzhen city has grown from the Shenzhen Special Economic Zone (SSEZ). Designated as a special economic zone in 1979, SSEZ which is one of the four earliest special economic zones in China covers the southern part of the former Bao'an County. SSEZ, totaled 375km² in 1979, and was expanded to 1,956km² in 2010 to cover the entire administrative territory of the former Bao'an County. Shenzhen has developed from an exporting industrial zone at the beginning of 1980s to a modern town. By 2010, Shenzhen had grown to a super-city with a total population of 10.35 million, more than 34 times larger than the 300,000 that Bao'an County had in 1979. Shenzhen's total population is almost 1.5 times that of neighboring Hong Kong.

1.1 Transform Shenzhen's main form of land development from greenfield development to development via urban renewal.

The rapid urban development of Shenzhen over the last three decades has been accompanied by economic and population growth and urban expansion. a Due to consideration of topographic features, arable land protection, water resources protection, natural resources protection and other issues, only 950 km² of the city's total land area of 1,953 km² is designated as land allowed for urban purposes. By 2010, the built-up area totaled approximately 810km², making the allowable land remaining urban purposes is about 90 km². The remaining potential urban land cannot support Shenzhen's future development for the coming five years, much less for a longer time period. Shenzhen's potential urban land supply is almost fully exhausted. What can Shenzhen do to sustain its development in the future? The land shortage is a critical problem to be solved. Finding more potential urban land and meeting the demands for development are crucially important for Shenzhen. Shenzhen city government realized the crisis as early as in 2002. At that time, Shenzhen city government expected to increase potential urban land by annexing parts of neighboring cities, such as Dongguan and Huizhou. Due to complex political issues and extreme competition among the Pearl River Delta Cities, Shenzhen failed to annex any neighboring land. Thus, Shenzhen was left with no other choice except to switch from extensive expansion using vacant and agricultural land to an intensive redevelopment of already urbanized land.

1.2 Improve public facilities and civil infrastructure to stimulate urbanization in the less developed areas of Shenzhen.

Before the SSEZ was expanded to encompass the entire city's territory in 2010, most investment in the city, no matter from government or private sources, had been funneled into areas of the former SSEZ. Abundant investment, together with plenty of human resources and efficient urban management, has transformed the former SSEZ into a prosperous and active urban district over the last three decades. Powerful urban development strategies and a rational hierarchy of plans did much to develop

the former SSEZ into an urban district with sufficient public facilities, infrastructure and city appearance. Meanwhile, the area of the city that lay outside the SSEZ had a great number of illegal housing structures, factory buildings, inadequate public facilities, incomplete civil infrastructure and an inefficient urban management, and so hasn't been developed as fast as the SSEZ area. The disparities between the former SSEZ and the outer fringe area in many aspects, such as the economy, public services, urban management, social development and city appearance etc., are too large and may hinder the entire city's future development. Speeding-up the urbanization of the outer fringe area is the key measure to reduce the urbanization gap. Providing sufficient public facilities and infrastructure, such as schools, kindergartens, hospitals, parks, road network, water sanitation facilities, power plants, fire and rescue stations and municipal pipe networks etc., is the most important task for the government. Most of the facilities and infrastructure are planned to be built in currently crowded, congested and disordered urban villages and industrial areas. Only urban renewal will be able to provide suitable parcels to meet the needs for the infrastructure and public facilities.

1.3 As industry restructures and upgrades, use urban renewal to meet the new requirements for land.

Shenzhen's rapid economic growth and prosperity, which has benefited from smart industry selection and powerful industrial policies from the government, has been accompanied by continuous restructuring and upgrading of those industries. In the process of industrial upgrading, the current pillar industries of Shenzhen city are gradually forming. Shenzhen's industrial development, which started from the low value-added processing of materials and assembling of supplied components ("sanlai yibu") industriesⁱⁱⁱ in the early 1980s, has been symbolized by the hi-tech industry since 1990s, and the logistics industry and creative industry since 2000s. Facing the grim outlook for developable urban land, it is important for Shenzhen to retain a supply of sufficient and suitable industrial space to accommodate any necessary future industrial upgrading. Functionally reusing some old factory buildings or reconstructing old industrial parks can make sense.

2 What problems and difficulties does urban renewal face in Shenzhen?

Since the beginning of the 2000s, some urban renewal planning projects have been launched by Shenzhen planning authorities and developers as well as enterprises holding land-use rights. Urban planners have encountered many problems and difficulties in the plan-making process, even though they had already recognized that plans for newly-developed areas and those for urban renewal areas have many differences. The plan-making process for most of the urban renewal projects consumed much more time than for newly developed areas. In some cases, the process dragged on so long that some urban renewal projects were even suspended.

2.1 Difficulty resolving and prioritizing the varied aims of the renewal and demands of the many stakeholders

In an urban renewal project, there are often dozens, hundreds, or even thousands of interested parties who possess land-use rights of different durations^{iv}. Who can propose an urban renewal project? Is it the government, land-use rights holders, or

developers who have yet to obtain the land use rights? All three types of parties are possible. However, the demands of these parties are varied and often even in conflict. It is hard but very important for urban planners to clarify the varying aims of the urban renewal and to define the complicated demands of the stakeholders. Otherwise, it is not easy to find the right direction and formulate a practical way to make an effective urban renewal plan.

2.2 Difficulty collecting necessary, accurate and timely data

Although hard to believe, it is difficult to gather adequate, accurate and timely data for urban renewal plan-making. The special mechanism whereby land ownership is detached from paid land-use rights, together with rigid policies concerning the transfer of land-use rights, stimulate an “underground land market”^v full of illegal land-use rights transfers. It results in unclear information, such as who may be the lawful possessor of the land-use rights of a land parcel. Moreover, inefficient city management leads to cumbersome or even non-existent data sharing among government planning authority, land management authority, housing authority and other related departments. However, accurate and timely cadastre data and building information are critical for the financial evaluation of any renewal plan.

2.3 Difficulty balancing technical requirements and financial goals

According to the Shenzhen Urban Planning Ordinance, the main contents of an urban renewal plan (technical indexes, layout, land use, public facilities, road network and civil infrastructure etc.) should both meet the technical requirements of the Shenzhen Urban Planning Standards and Guidelines and be consistent with the upper-level statutory plans. In Shenzhen, most urban renewal projects are invested by developers who have financial profit as an over-riding goal. A project's profit largely increases as plot ratio, and thus building area, increases. Developers usually expend a lot of energy trying to increase the technical indexes of plot ratio and buildable area, while hoping to ignore costs required to solve potentially serious issues including inadequate public facilities, increased traffic, and sufficient car parking. A common problem is that the technical indexes (e.g. building area and plot area ratio of parcels) are based on developers' financial requirements and therefore exceed those of the Shenzhen Urban Planning Standards and Guidelines and the upper-level statutory plans. Keeping a balance between the government's technical requirements and developers' financial demands is much harder to do than to say.

2.4 Difficulty coordinating the varied demands of the direct stakeholders.

The interested parties of an urban renewal project—including government authorities, developers, businesses and individuals—usually have other varied demands, beyond the financial. Developers focus on the lowest cost and highest profit. The government's desires are much more complicated, such as higher land prices, improved public facilities, an enhanced city appearance, high GDP, and an attractive investment environment. Individuals desire better and more affordable living conditions. The multiple demands of the stakeholders often conflict with each other and can easily confuse urban planners. Coordinating the varied demands is difficult at best for the planners, especially when the negotiating mechanism is inefficient.

3 What can be done to improve urban renewal planning?

3.1 Apply an open and equitable negotiation platform

The traditional top-down planning methodology does not provide enough time and opportunity for satisfactory negotiation—not only in regards to balancing technical requirements with financial goals, but also in meeting all other demands of the direct stakeholders. Urban planners should play the role of coordinator to organize negotiations throughout the various planning stages. To establish an open, equitable and transparent negotiation platform is an efficient way to realize the objectives of coordination. Such a platform is helpful to survey the redevelopment aims of the direct stakeholders, to reduce the possible disparity of demands between the interested parties, and to establish common and acceptable redevelopment goals.

3.2 Expand the analytical scope of an urban renewal plan

In a traditional urban planning process, financial evaluation has often not been necessary. But the complexity of an urban renewal project—such as balancing diverse stakeholder demands and meeting technical requirements—makes it necessary to make cost-benefit analysis and financial evaluation a part of the planning process, thereby expanding the scope of the planning process. Cost-benefit analysis and financial evaluation are important tools that can help refine a project's spatial planning and layout.

4 A case study: The urban renewal plan of the Yanshan Lu, Shekou area of Shenzhen

The negotiation platform in the planning process mentioned above is explored in the urban renewal plan of Yanshan Lu area. The final draft of the plan acquires the acceptances from most of parties-interested. Most direct stakeholder accepted and were satisfied with the final draft of the Yanshan Lu plan.

4.1 The Yanshan Lu area

The 2.34 km² Yanshan Lu area is located in Shekou, one of the earliest industrial parks, developed when China started its reform and opening up in the 1980s. After three decades of rapid development and the industrial upgrading and restructuring, Shekou has grown into an international area symbolized by a concentration of culture and creative industries, sophisticated businesses, and a multitude of commercial and leisure activities. Hundreds of businesses are located in the Yanshan Lu area, which has only 5% of its land vacant and undeveloped.

The ownership of land use rights in the area is quite clear. The land use rights of 80% of Yanshan Lu's land area are held by the Shekou Industrial Zone Management Committee, a branch of a large state-owned company. The land parcels of the remaining 20% are held by various business, government departments, and individuals.

4.2 Why conduct urban renewal in the Yanshan Lu Area?

Shekou is currently facing major opportunities for its future development. As part of greater Qianhai—China's future pioneering development area and one of the planned twin centers of Shenzhen city—Shekou's location is much more significant and strategic than before. Moreover, in order to speed up Shekou's industrial upgrading, a provincial-level technology park specializing in the internet industry will be located in

the Yanshan Lu area. The technology park is expected to be a catalyst for the redevelopment of the Yanshan Lu Area.

On the other hand, serious traffic problems in some parts of the area are hindering the area's further development and industrial upgrading. A few old factory buildings are in disrepair. Furthermore, the amount of open and green space and number of small-scale commercial and service centers are inadequate to provide for the entire area. The urban renewal of the Yanshan Lu Area is therefore necessary to enhance the urban environment and speed up the development of the provincial-level internet technology park.

4.3 Development goals and strategies

It is planned that the Yanshan Lu Area will develop into an international town-like area possessing a prosperous economy, high-end urban services, unique shopping streets, and sufficient open spaces and parks.

In order to attract more internet industry enterprises and related creative industry enterprises to the Yanshan Lu Area, it is important to renovate the old factory buildings into unique office buildings with industrial-chic, loft-like spaces. Secondly, a high-end and active urban lifestyle will be realized by enhancing the provision of urban services and increasing the number of open spaces and parks. Thirdly, a low-carbon town will be realized through a series of measures such as developing a multi-modal public transportation system consisting of metro lines, buses and a pedestrian/bicycle network and creating a complete recycling system. To enhance the international character of the area, planning strategies include increasing the number of international-standard schools, hospitals, shopping malls and residential buildings and organizing a wide variety of culture activities, sport games and leisure activities.

4.4 Characteristics of the planning process used

4.4.1 A multi-authority-joined planning team

How the Yanshan Lu planning most differs from other planning projects in that its special planning team consisted of a joint planning organizer, a multidisciplinary team of experts and other participants, such as affected land-use right holders. The joint planning organizer included the Shenzhen government planning authority and Shekou Industrial Zone Management Committee, the largest land-use rights holder in the area; usually the planning organizer is just the city's planning department or just the developer and not both. The multidisciplinary team of experts consisted of urban planners, financial analysts, landscape designers, transportation engineers and civil engineers.

4.4.2 An efficient negotiation mechanism

The Shekou Industry Zone Management Committee led in organizing a multi-tier negotiation platform in which the joint planning organizer, expert planning team, and the other land-use rights holders could keep open lines of communication through both regularly and irregularly planned meetings. During the planning process, the planning team investigated the diverse development aims of the stakeholders, explained planning ideas, responded to suggestions, and exchanged planning ideas with the Shenzhen government. It seems that the plan-making process still was not as

efficient as the plan making process for an undeveloped area, due to the many meetings and presentations and more than ten rounds of drafts. However, the final plan was satisfactory for not only the Shenzhen city planning authority, but also for most land-use right holders.

4.4.3 A less rigid, more flexible plan

To meet the changing market demands and spatial needs of future industrial upgrading, the total area was divided first into three main units. Then the 54ha of land slated be demolished and cleared land was divided into ten sub-units. After calculating the total market demand for built space in the project area, the plan then specified the amount of building area and necessary public facilities, infrastructure, open spaces, parks and ecological corridors to each sub-unit. Compared to designating and adhering to a series of quantitative technical indexes (plot area ratio, building density, building area amount, land usage and building height etc.) this urban renewal plan retained valuable flexibility.

4.4.4 Consideration of paid transfer of land development rights among different land-use right holders

To fulfill the technical requirements while also achieving the financial goals and a good urban environment and street appeal the government preferred to develop some of the land parcels into lower density block with a low plot area ratio. But it was impossible to balance the cost-benefits within the parcel and protect legal land development right. The plan suggested considering a paid transfer of land development rights among some of the different land-use rights holders through negotiation in the planning process. Such a strategy exceeds what the current urban planning ordinances so far explicitly allow. The plan has only recently been approved by the city, therefore paid transfer of land use rights have so far not occurred, but may occur in the future.

5 Conclusions and findings

In the era of urban renewal, plans to bring about the renewal are becoming more and more common in Chinese cities. Yet both government urban planning authorities and planners need to update planning standards, and methodology in a manner suitable for urban renewal projects. Nonetheless, an urban renewal project usually involves many important and complex issues. The project may be further asked to solve a series of pressing urban problems such as traffic bottlenecks, a shortage of public facilities and infrastructure, and a poor urban environment and living conditions. Compared plan for a greenfield area, an urban renewal plan is much more difficult to draw-up. Meanwhile, an urban renewal plan that can be implemented is so critical yet difficult because there are so many different stakeholders acting in a game theory manner, where each is trying to maximize their own perceived benefits.

To improve the chances of actually implementing the finalized urban renewal plan, plenty of changes should be explored and expected throughout the planning process. The idea of drawing-up a perfect layout that won't need to be altered for another 50 years should be abandoned as overly idealistic. Instead, planners should always be thinking about implementation when creating the plan. Establishing an efficient

negotiation platform, enhancing the flexibility while reducing the rigidity of an urban plan, and innovating planning strategies are valuable measures to be explored. Of course, against the backdrop of the social and economic transformation that is occurring in China, there are more problems to be solved that could further improve urban plan implementation, such as establishing a more transparent decision-making mechanism.

ⁱ The Statutory plan is the fourth level of the five-level- urban planning system in Shenzhen. From top to bottom, the five-level planning system includes the Citywide Comprehensive Plan, Sub-regional Plan, District Plan, Statutory Plan and Detailed Plan. The city of Shenzhen is divided into more than 200 statutory plan zones which are each 3-10 km² in size. Each zone's statutory plan is drawn up by the city planning authorities and approved by Shenzhen Urban Planning Board which is headed by the Mayor. The Planning Authorities are required to approve urban construction applications based on the approved statutory plans. Normally, the application of urban construction projects (including urban renewal projects) cannot be approved if the PAR, building area, or other figures exceed those of the related statutory plan.

ⁱⁱ The *Shenzhen Urban Planning Standards and Guidelines* is issued by Shenzhen Municipality. It consists of 19 chapters which are standards and guidelines for urban land use, building ordinances, public facilities, civil engineering etc. Plan-making, application approval and urban construction are required to be in accordance with *Shenzhen Urban Planning Standards and Guidelines*.

ⁱⁱⁱ The “sanlai yibu” (三来一补企业) or Enterprises of Three Import and Compensation Trade is a “shorthand for enterprises that process imported raw materials, manufacture products according to imported samples, assemble imported parts and those that repay loans for imported equipment and technologies with products. Emerging in the coastal area in the late 1980s, all these enterprises export their products abroad. By taking the processing fee, they become the major force in the processing trade, which forms a big proportion in the country's total trade volume. They played a key role in fostering the development of China's trade.” (chinadaily.com.cn/language_tips/news/2008-10/22/content_7130947_3.htm, accessed June 2012)

^{iv} In accordance with the Land Law, Property Law and related ordinances, the ownership of all land resources and parcels are state-owned in urban areas and collective-owned in rural areas. Land-use rights for a specified duration can be transferred to developers and businesses for compensation. In accordance with the Land Law, duration of land-use rights differs among residential, commercial and industrial land from (70, 40 and 50 years respectively). The purchasers of units within buildings on those parcels obtain the shared land-use right accompanied with building's ownership. For an urban renewal project with residential, commercial or industrial parcels, there are often many land-use right holders and building ownership holders possessing land use rights of different durations.

^v In accordance with the Land Law, collective-owned land is only can be used by village collectives and its rural inhabitants to build houses and village collective-operated factories. However, some developers and industrial enterprises purchase collective-owned land from the villages to build residential buildings, factories and warehouses etc., because it has become increasingly difficult for small enterprises to obtain state-owned land from government land management authority. Moreover, it is quite possible that the land-use rights of collective-owned land could be transferred again and again to other enterprises and individuals. These land-use right transfers are outside the control of the government land authority. Thus, an underground land market has arisen.

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