

# Urban Villages in China

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## **Abstract:**

There are two main types of land ownership in China – state owned land, and land owned by village communes. During the rapid urbanization of China in the past 30 years, state owned lands were sold and developed into high densities apartments. These apartments were built literally surrounding existing rural villages. Village lands were, however, not allowed to be developed because of its rural history. But when the villagers saw the profits of development, they simply build new apartments illegally at rates and densities even higher than those on state owned lands. By now, the political problems of these illegal developments are too large to be handled by local city governments. Hence, as we now see, there are high density apartments built by villagers right inside city centres. Very often these apartments are poorer in qualities. This paper traces the history of this development, and tries to induce property right implications on excessive land exploitation, in the absence of effective building regulation and control.

## **Keywords:**

building regulation and control, property rights, state owned land, urban villages, village communes.

## **1 Historical background**

In mainland China, there was basically a feudal land system before the Chinese Revolution in 1911. After 1911, a system of private land ownership was still, by and large, enforced by the Chinese Nationalist Party. The Communist Land Reform started in 1946. Basically in this reform, land and other properties of landlords were expropriated and redistributed. And after the Peoples' Communes and the Great Leap Forward in the 1950s, collective agricultural land ownership was established. Starting in 1978, these collective lands were assigned to individual families under Household Responsibility Contracts.

By now, there are basically three types of land ownership in China: (a) land for family village-houses (宅基地); (b) Collectives' land (集体所有土地); and (c) state owned land (国有土地). Except for a small portion of land on which family village-houses were built, lands in China were basically non-privately owned.

In December 1987, land use rights were first auctioned in Shenzhen. State-ownership rights on land were then separated from use rights; thus allowing private ownership of land use rights for a given number of years, to be bought and sold.

After 1989, the rights to develop land were decentralized - down to the local "xian" level governments. Xians in China should not be confused with counties in the west. Xians are much smaller: there are altogether 2,860 xians in China. Each is, on average, 3,000 square kilometers in area; and 0.45 million in population.

The tax sharing reform in 1994 allowed the Chinese central government a much larger share of the total national tax revenues than that of xians. But on land sales revenues, the xians share much more. In order to make up the loss, local governments started selling much more land.

The actual shares are as follow. Xians can sell land development rights to prospective developers and industrialists; and share 75% of the land sales proceeds; and the remaining 25% goes to Beijing and higher level governments. On the other hand, xians share 25% of the valued-added taxes, which are levied at 17% on any production on the land sold upon development. Xians rely on these incomes to build infra-structures and other facilities to attract even more investors. See Cheung (2009). Under this xian system, land sales income, plus subsequent value-added taxes, are the keys to government finance; and hence there is a financial dependence on land sales.

Cheung (2009) argued that the introduction of the xian economic system was the most influential economic institution contributing to China's economic success over the past twenty years. It took just 30 years for the urbanization rate to grow, from less than 20% in the early eighties, to 46% in 2009. Urban population in China is now 0.622 billion. See United Nations Statistics (2007). Together with the corresponding growth in income, house prices had increased tremendously, while cities had sprawled into rural areas.

Given this background of rapid urbanisation, the demand for housing in the cities is so large that villagers are more than willing to give up farming entirely, and start thinking of development on their farmlands. Local xian governments were able to acquire many of these farmlands and legally covert them into state-owned land on which land use rights were sold for the purpose of development. Seeing the huge profits themselves, many villagers simply refuse acquisition offers, and start planning high rises for themselves.

## **2 Urban villages**

Urban village is a special phenomenon in the mainland of China. In the amended version of Constitution in 1988 (The National People's Congress, 1988), a clear statement was made saying that, "Land use can be transferred according to the law", but apparently rural collective lands were excluded as exceptional. Originated from the rural collective land system, urban villages can then be distinguished from other non-village urban regions for their incomplete nature of property rights. Compare to state-owned urban lands, the incomplete property rights in urban villages are also called the "small" property rights, for buildings on rural lands together with the land parcels themselves are not allowed to be transferred.

Previous studies on urban villages are mostly in Chinese. There are two categories, one is focusing on the urban villages as a small society and tries to discuss it using a sociological perspective, the other is focusing on economic analysis, especially on benefits/costs analysis. The former includes the new society issue by Lan (2003), and the self-help housing issue for temporary migrants by Chan, Yao, and Zhao (2003). The latter includes the institutional change analysis by Li and Meng (2004), the public interest analysis by Wang and Ren (2009), the urban village renewal analysis by Liang and Cai (2009), the property rights analysis by Jiang and Wang (2002), and a general economic analysis by Zhou (2007). The only paper with a topic close this study is by Gu and Zou (2002). In their study, they calculated the total rent receivable for urban villages in Guangzhou and their nearby non-villages estate. The comparison shows that urban villages are less efficient for the reason of rent dissipation. However, a fatal defect of their study is that the comparison was between total rents, instead of per floor rents. Since urban villages are much lower in terms of height, such comparison is simply imprecise. Nevertheless, even using their data, the comparison of per floor rents still supports the argument.

## **3 High densities in urban villages**

The urban village case provides a rare example demonstrating both a production change and a possible contract change induced by incomplete rights. The land use pattern in urban villages is completely different from nearby non-village estates in terms of the higher densities, measured by the site coverage (SC), and the lower rents. The higher densities indicate a possible overdevelopment problem and the lower rents indicate possible rent dissipations. Table.1 shows the

site coverage values and the estimated per square foot rent per month for six urban villages in Shenzhen in comparison with nearby non-village residential estates (TR--Total Rent).

Non-village estates are normally under site coverage controls, for example,  $\leq 0.25$  for multiple floor residential buildings in Shenzhen (Shenzhen Land and Planning Council, 1997, 2004, and 2007). It is normally believed that such regulations, if set right, can confer property rights and reduce transaction costs. However, if set inappropriately, certain rent losses can be induced. In Shenzhen's case, planning regulations are set as unified metrics, regardless of location difference, which implies that a possible underrate problem, especially for locations in urban centres. However, the total rent collectable psf of land for most urban villages is still lower than non-village estates, showing that, except for a few central locations, more severe rental losses can be expected for urban villages. The planning regulations are thus playing a controversial role similar to a double-edged sword. Once, as a first element, rights are delineated, voluntary exchange can resolve externalities, if and only if there is no or minimum transaction cost. Furthermore, rules and laws specifying detailed metrics based on theoretical deduction or empirical analyses or both can be set as secondary tools to reduce disputes and smooth transactions. Hence, planning regulations can be so classed as facilitators, but only if such metrics--site coverage or plot ratio--can be set properly across each location. Without the initial rights setup, it seems no way to specify any detailed rules and accordingly, marked case 1, there must be unavoidable excessive land exploitation and value losses, as we have seen in urban villages. However, if the metrics are set inappropriately for all or some locations even with well set initial rights, they may still put unnecessary restrictions on profitable development and thus value losses, which can be even worse than case 1, as we have observed in a few central locations, marked case 2. If the metrics can be set properly for each location with initial rights well set (case 3), then as we have observed, non-village estates can bring more rental income not only in terms of total collectable rent, but also in terms of rent per floor unit of land, thereby surely more superb than the other two cases.

Similar patterns can also be found in Guangzhou and Xi'an, which represent the other two main cities with large amount of urban villages. Table. 2 shows the situation for five urban villages in Guangzhou and Table. 3 shows the situation for Xi'an.

The density pattern can be clearly identified using satellite images (free online). Map.1 is an example showing the difference between Gangsha in Shenzhen and its nearby non-village estates.

#### **4 The cost of assembly**

Land owned by village collectives can be viewed as a common property which, in theory, is subject to common exploitation and therefore rent dissipation. See Gordon (1954) and Cheung (1974). It is, however, not conclusive that the profits per square foot of the site area in urban villages are higher or lower. That will depend on a number of other factors including: the height of the buildings constructed, and the cost of construction. In Tables 1, 2, and 3, comparable examples of similar building heights and qualities are chosen to simplify the analysis.

Comparing to nearby housing developments, it is, however, clearly observed that (a) the densities of urban villages (SC) are much higher; and (b) the rent collected per square foot built floor area are much lower. However, comparing the two columns labelled as Total Rent (TR psf) in each Table, there is rental dissipation but not distinctive. The differentials in rent depends more on the densities allowable by law.

An alternative view is to include the cost of assembly as a substantial entrance fee to develop the land legally. A typical village may consist of hundreds of families. Getting them all to agree to a scheme of acquisition offered by the local government is an enormous task. More often, the price offered to acquire a piece of farmland is often far too low compared to the potential profits to development the site.

According to the Alchian-Allen Theorem (see Umbeck 1980), imposing a substantial entrance fee to the consumption of a good would result in either the consumer (a) not paying the entrance fee at all; or (b) paying the entrance fee but consumes a much better quality product. In cases of the urban

villages, apparently the costs of assembly are too high compared to the foreseeable profits of selling the site to the local government or to developers. Given a high cost of assembly, it would also be very costly for one villager to negotiate with all his neighbouring villagers to agree that everybody would build less, thus enabling a better environment. An agreement of this kind is hardly enforceable. Hence, despite of the risk for being prosecuted, villagers may build up to the highest possible density, leaving minimum common spaces in between, and thus resulting in much lower rentals. This situation could be dealt with using game theories, but for the time being, the high cost of enforcing a low density agreement is sufficient for our purpose.

A testable implication of this view, of assembly cost, is that individual blocks within the urban village development were owned and sub-divided by village families even before construction. The urban village constructed as a whole can be viewed merely as a means to enjoy economies of scale by hiring one a single contractor. Such subdivisions are largely consistent with the facts of ownership, although the legality of such ownership is questionable.

## 5 Figures and Tables

Table.1 Comparison between six urban villages and nearby estates in Shenzhen

Urban Village	SC	Rent psf	T R psf	Compare to	SC	Rent psf	T R psf
Gangsha	0.50	2.3225	1.17	Shenda Garden	0.23	4.2734	0.98
Baishizhou	0.55	2.3225	1.27	World Garden	0.40	3.9947	1.60
Shazui	0.53	2.0438	1.09	Haojing Haoyuan	0.31	3.5302	1.11
Xinzhou	0.49	2.0438	0.99	Xinzhou Garden	0.30	3.6231	1.09
Baole New Estate	0.47	1.1148	0.52	Panlong Estate	0.33	2.8799	0.95
Songzai Garden	0.54	0.5574	0.30	Richuyinxiang	0.27	2.3225	0.63

Table.2 Comparison between five urban villages and nearby estates in Guangzhou

Urban Village	SC	Rent psf	T R psf	Compare to	SC	Rent psf	T R psf
Tianhe	0.61	2.4154	1.48	Shanghe Estate	0.35	5.574	1.97
Shipai	0.57	1.858	1.06	Dongyuan	0.33	3.9018	1.30
Pingan	0.60	1.1148	0.67	Pingan Street	0.34	3.0657	1.04
Luo	0.52	1.1148	0.58	Longzhu Garden	0.32	2.9728	0.94
Datang	0.55	0.929	0.52	Jude	0.23	2.4154	0.55

Table.3 Comparison between five urban villages and nearby estates in Xi'an

Urban Village	SC	Rent psf	T R psf	Compare to	SC	Rent psf	T R psf
Changlepo	0.61	0.4645	0.28	Rongde Garden	0.20	2.0438	0.41
Dengjiapo	0.69	NA	NA	Yangguang	0.33	1.858	0.62
Tangjia	0.66	NA	NA	Xijing Residence	0.29	1.7651	0.51
Zaoyuan	0.75	0.58063	0.43	Zaoyuan Estate	0.27	1.5793	0.43
Jiangjiawan	0.70	NA	NA	Huaqing Garden	0.27	1.1148	0.30



Map.1 The satellite image showing the differences in densities between Gangsha (red) and its nearby estate Shenda Garden (green)

## 6 Conclusions

In this paper, we had introduced the background for urban villages in China. We also observed that these villages are often built in higher densities, but rented out for much lesser incomes. Further studies are needed to determine the level of rent dissipation under common ownerships. We also find that assembly cost and the risk of being prosecuted are key factors in determining whether villagers would develop the land illegally for rental incomes. Detailed data on rental and project data are necessary for the verifications of alternate hypotheses explaining the high development densities in urban villages.

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